sinergie
italian journal of management

Università Ca'Foscari Venezia

SIMA
Società Italiana di MANAGEMENT

SINERGIE-SIMA 2018 CONFERENCE

Transformative business strategies and new patterns for value creation

Full Papers

Ca' Foscari University, Venice
Department of Management - San Giobbe, Cannaregio 873

14-15 June 2018

Referred Electronic Conference Proceeding della Sinergie - Sima 2018 Conference
Transformative business strategies and new patterns for value creation. Full Papers
Venice, 14-15 June 2018
Ca' Foscari University, Venice

ISBN 97888943937-0-5

I Referred Electronic Conference Proceeding sono pubblicati *online* sul portale di Sinergie
http://www.sinergiejournal.it

© 2018 FONDAZIONE CUEIM
Via Interrato dell'Acqua Morta, 26
37129 Verona
www.cueim.it

sinergie
italian journal of management

Università Ca'Foscari Venezia

SIMA Società Italiana di MANAGEMENT

Convegno Sinergie - Sima 2018

Transformative business strategies and new patterns for value creation

14-15 June 2018

Referred Electronic Conference Proceeding

Full Papers

a cura di

Claudio Baccarani, Marco Frey, Gaetano M. Golinelli, Alberto Pastore e Tiziano Vescovi

Conference chairs

GAETANO M. GOLINELLI	*Sapienza Università di Roma*
CLAUDIO BACCARANI	*Università di Verona*
ALBERTO PASTORE	*Sapienza Università di Roma*
MARCO FREY	*Scuola Superiore S. Anna di Pisa*
TIZIANO VESCOVI	*Università Ca' Foscari Venezia*

Coordinamento scientifico

MARTA UGOLINI	*Università di Verona*
GENNARO IASEVOLI	*Libera Università Maria SS. Assunta LUMSA, Roma*
FEDERICO BRUNETTI	*Università di Verona*

International coordination

ANGELO A. CAMILLO	*Woodbury University, Los Angeles, USA*
SANDRO CASTALDO	*Università Bocconi, Milano*
STEFANO BRESCIANI	*Università di Torino*

Comitato scientifico

FRANCO CALZA	*Università di Napoli Parthenope*
MICHELE CANO	*University of the West of Scotland, UK*
LAURA COSTANZO	*University of Southampton, UK*
BO EDVARDSSON	*Karlstad University, Svezia*
MARIANGELA FRANCH	*Università di Trento*
ERNESTINA GIUDICI	*Università di Cagliari*
GIAN LUCA GREGORİ	*Università Politecnica delle Marche*
MICHAEL HAENLEIN	*ESCP Europe of Paris, Francia*
CHARLES HOFACKER	*Florida State University, USA*
AMEDEO MAIZZA	*Università del Salento*
CARMELA ELITA SCHILLACI	*Università di Catania*
ALFONSO VARGAS-SÁNCHEZ	*University of Huelva, Spagna*
SALVIO VICARI	*Bocconi Università di Milano*
ROBERTO VONA	*Università di Napoli Federico II*

Comitato organizzatore locale

TIZIANO VESCOVI	*Università Ca' Foscari Venezia*
MONICA CALCAGNO	*Università Ca' Foscari Venezia*
FRANCESCA CHECCHINATO	*Università Ca' Foscari Venezia*
STEFANO MICELLI	*Università Ca' Foscari Venezia*
MICHELE TAMMA	*Università Ca' Foscari Venezia*

Redazione

FEDERICO BRUNETTI	*Università di Verona*
PAOLA CASTELLANI	*Università di Verona*
NICOLA COBELLI	*Università di Verona*
ELENA GIARETTA	*Università di Verona*
CHIARA ROSSATO	*Università di Verona*
FRANCESCA SIMEONI	*Università di Verona*
FEDERICO TESTA	*Università di Verona*
VANIA VIGOLO	*Università di Verona*

Redazione scientifica e organizzativa

ANGELO BONFANTI (Coordinatore)	*Università di Verona*
FABIO CASSIA	*Università di Verona*
LAURA CIARMELA	*Sinergie*
ADA ROSSI	*Sinergie*
ANNALISA ANDRIOLO	*CUEIM*

La Direzione e il Comitato Scientifico del Convegno di Sinergie sono riconoscenti ai Referee che hanno collaborato al processo di *peer review* dei *paper*

TINDARA ABBATE	*Università di Messina*
BARBARA AQUILANI	*Università della Tuscia*
VALERIA BELVEDERE	*Università Cattolica Sacro Cuore*
MICHELLE BONERA	*Università di Brescia*
GUIDO BORTOLUZZI	*Università di Trieste*
STEFANO BRESCIANI	*Università di Torino*
ANTHONY BUONO	*Bentley University*
MARIA ROSITA CAGNINA	*Università di Udine*
MONICA CALCAGNO	*Università Cà Foscari*
LUIGI CANTONE	*Università di Napoli Federico II*
ANTONELLA CAPRIELLO	*Università Del Piemonte Orientale*
FEDERICA CECCOTTI	*Sapienza Università di Roma*
CORRADO CERRUTI	*Università di Roma Tor Vergata*
ANDREA CHIARINI	*Università di Ferrara*
FRANCESCO CIAMPI	*Università di Firenze*
ALESSANDRA COZZOLINO	*Sapienza Università di Roma*
FRANCESCO CRISCI	*Università di Udine*
MONICA CUGNO	*Università di Torino*
MAREK ĆWIKLICKI	*Cracow University of Economics*
DANIELE DALLI	*Università di Pisa*
PATRIZIA DE LUCA	*Università di Trieste*
GIACOMO DEL CHIAPPA	*Università di Sassari*
MANLIO DEL GIUDICE	*Link Campus University*
VALENTINA DELLA CORTE	*Università di Napoli Federico II*
FRANCESCA FAGGIONI	*Università di Roma Tre*
MONICA FAIT	*Università del Salento*
ALBERTO FALINI	*Università di Brescia*
MARIA ANTONELLA FERRI	*Universitas Mercatorum*
VINCENZO FORMISANO	*Università di Cassino e del Lazio Meridionale*
MARIANGELA FRANCH	*Università di Trento*
LORIS GAIO	*Università di Trento*
MARCO GALVAGNO	*Università di Catania*

BARBARA GAUDENZI	*Università di Verona*
FRANCESCO IZZO	*Università degli Studi della Campania Luigi Vanvitelli*
BEATRICE LUCERI	*Università di Parma*
PIERPAOLO MAGLIOCCA	*Università di Foggia*
ANTONIO MAJOCCHI	*Università di Pavia*
VITTORIA MARINO	*Università di Salerno*
MICHELA CESARINA MASON	*Università di Udine*
AURELIO MAURI	*Libera Università di Lingue e Comunicazione IULM*
ALESSANDRA MAZZEI	*Libera Università di Lingue e Comunicazione IULM*
GAETANO MICELI	*Università della Calabria*
LAURA MICHELINI	*Università Lumsa di Roma*
ROBERTA MINAZZI	*Università dell'Insubria*
ARABELLA MOCCIARO LI DESTRI	*Università di Palermo*
ANDREA MORETTI	*Università di Udine*
FRANCESCA NEGRI	*Università di Parma*
COSTANZA NOSI	*Università Lumsa di Roma*
ANDREA PACI	*Università di Firenze*
GIOVANNA PEGAN	*Università di Trieste*
LUCA PELLEGRINI	*Libera Università di Lingue e Comunicazione IULM*
ANNA CLAUDIA PELLICELLI	*Università di Torino*
TONINO PENCARELLI	*Università di Urbino Carlo Bo*
ALESSANDRA PERRI	*Università Cà Foscari*
FRANCESCO POLESE	*Università di Salerno*
ANGELO PRESENZA	*Università Del Molise*
TOMMASO PUCCI	*Università di Siena*
ANDREA QUINTILIANI	*Università Telematica Pegaso*
ANTONIO RENZI	*Sapienza Università di Roma*
ANGELO RIVIEZZO	*Università Del Sannio*
MARCO ROMANO	*Università di Catania*
STEFANIA ROMENTI	*Libera Università di Lingue e Comunicazione IULM*
MARCELLO SANSONE	*Università di Cassino e del Lazio Meridionale*
FRANCESCO SCHIAVONE	*Università di Napoli Parthenope*
ALFONSO SIANO	*Università di Salerno*
PAOLA SIGNORI	*Università di Verona*
PIERPAOLO SINGER	*Università di Salerno*

ANTONIO TENCATI	*Università di Brescia*
PIERPAOLO TESTA	*Università di Napoli Federico II*
MARIAPINA TRUNFIO	*Università di Napoli Parthenope*
ANNALISA TUNISINI	*Università di Urbino*
MARIA VERNUCCIO	*Sapienza Università di Roma*
DONATA VIANELLI	*Università di Trieste*
MILENA VIASSONE	*Università di Torino*
AGOSTINO VOLLERO	*Università di Salerno*

Al Lettore,

questo volume accoglie i *full paper* del Convegno Sinergie-Sima 2018 *Transformative business strategies and new patterns for value creation*, Università Ca' Foscari, Venezia, 14-15 giugno 2018.

Di norma, la trasformazione di un settore prende il via dall'adozione di una nuova tecnologia. Tuttavia, ciò che rende possibili cambiamenti importanti di un settore è un modello di business che connetta la nuova tecnologia con un bisogno di mercato, in modo da creare una nuova combinazione nel processo di creazione del valore.

Lo scopo del Convegno è discutere dei modelli di business "trasformativi" e delle necessarie evoluzioni strategiche come sfide per la gestione dell'impresa nel prossimo futuro, creando relazioni tra studiosi, diffondendo la conoscenza in campo economico-manageriale e promuovendo il contributo degli studiosi italiani al dibattito internazionale sui temi del management.

Claudio Baccarani, Marco Frey, Gaetano M. Golinelli, Alberto Pastore, Tiziano Vescovi

Cari Lettori e Convegnisti,

il call for paper del Convegno Sinergie-Sima 2018 ha previsto la possibilità di presentare *extended abstract* oppure *full paper*. In totale sono pervenuti in redazione 115 *extended abstract* e 45 *full paper*.

Per gli *extended abstract*, la valutazione dei contributi ricevuti è stata operata dal Comitato Scientifico in base alla coerenza con il tema del Convegno e/o con gli studi management secondo i Gruppi Tematici SIMA, alla chiarezza e alla rilevanza (anche potenziale) dei contenuti proposti.

Per i *full paper*, la procedura di valutazione dei contributi è stata condotta secondo il meccanismo della *peer review* da parte di due referee anonimi, docenti universitari ed esperti dell'argomento, scelti all'interno dell'Albo dei Referee della rivista *Sinergie*.

In particolare, i referee hanno seguito i seguenti criteri nella valutazione dei contributi:

- chiarezza degli obiettivi di ricerca,
- correttezza dell'impostazione metodologica,
- coerenza dei contenuti proposti con il tema/track del convegno e/o con gli studi management,
- contributo di originalità/innovatività,
- rilevanza in relazione al tema/track del convegno e/o agli studi management,
- chiarezza espositiva,
- significatività della base bibliografica.

L'esito del referaggio ha portato a situazioni di accettazione integrale, accettazione con suggerimenti e non accettazione. In caso di giudizio discordante la decisione è stata affidata alla Direzione Scientifica. Ogni lavoro è stato poi rinviato agli Autori completo delle schede di referaggio per la valutazione delle modifiche suggerite dai referee, verificate in seguito dalla Redazione della rivista *Sinergie*.

A seguito del processo di valutazione sono stati accettati 29 *full paper* e 115 *extended abstract*, pubblicati in due distinti volumi. In questo volume dedicato ai *full paper*, i contributi sono articolati nelle seguenti *track*:

TRACK DEL CONVEGNO

- Strategy between theory and practice
- Strategia tra teoria e pratica
- Rethinking strategy: strategic engagement for value creation
- Business models evolution: technology and beyond
- L'evoluzione dei modelli di business tra big data e tecnologia
- **Marketing strategies to create customer value**
- Business strategies for a better world
- Competition and collaboration in business
- La prospettiva del consumatore al valore
- Decision support systems, networks and strategy
- Crowdfunding as a new business model

TRACK SIMA

- Innovation and technology management
- Tourism and culture management
- Sustainability
- Small and family business
- Marketing & Communication

Tutti i *full paper* di questo volume sono stati presentati e discussi durante il Convegno e pubblicati *online* sul portale della rivista Sinergie (***www.sinergiejournal.it***).

Nel ringraziare tutti gli Autori per la collaborazione ci auguriamo che questo volume contribuisca a fornire un avanzamento di conoscenze sui modelli di business "trasformativi" e sulle necessarie evoluzioni strategiche come sfide per la gestione dell'impresa nel prossimo futuro.

La Direzione e il Comitato Scientifico

INDICE

TRACK - STRATEGY BETWEEN THEORY AND PRACTICE

A new perspective on factors influencing the development of dynamic capabilities
PREM SAGAR MENGHWAR, ANTONIO DAOOD — PAG. 3

Factors influencing the creative process and culinary innovation. Highlights from Michelin-Rated Chefs
TINDARA ABBATE, ANGELO PRESENZA, FABRIZIO CESARONI, MARTA MELEDDU, LORN SHEEHAN — " 21

TRACK - STRATEGIA TRA TEORIA E PRATICA

Disastri naturali e resilienza d'impresa: uno studio applicativo nel retail
ELISA MARTINELLI, GIULIA TAGLIAZUCCHI — " 35

TRACK - RETHINKING STRATEGY: STRATEGIC ENGAGEMENT FOR VALUE CREATION

Open innovation: a pathway toward open strategy?
ENRICO ANGIONI, MORENO FRAU, LUDOVICA MOI, FRANCESCA CABIDDU — " 53

The silent revolution affecting digital and physical stores
FEDERICA CABONI, ANGELA DETTORI, ERNESTINA GIUDICI — " 71

La decisione 'critica'. (In)capacità informativa nell'era delle ICT
FRANCESCO POLESE, CARLO ALESSANDRO SIRIANNI, LUCA CARRUBBO, ANTONIETTA MEGARO — " 87

TRACK - BUSINESS MODELS EVOLUTION: TECHNOLOGY AND BEYOND

Towards the digital business model: A holistic overview from an SME
VERONICA SCUOTTO, FRANCESCA SERRAVALLE, ALAN MURRAY, MILENA VIASSONE — " 109

TRACK - L'EVOLUZIONE DEI MODELLI DI BUSINESS TRA BIG DATA E TECNOLOGIA

Capacità dinamiche e modello di business: ri-definizione di un modello di analisi per l'impresa commerciale
MARCELLO SANSONE, ANNARITA COLAMATTEO, MARIA ANNA PAGNANELLI — " 123

TRACK - MARKETING STRATEGIES TO CREATE CUSTOMER VALUE

The desiderata and the reality of patient empowerment: a tale of two strategies
ROCCO PALUMBO, PAOLA ADINOLFI, CARMELA ANNARUMMA, ROSALBA MANNA, GABRIELLA PISCOPO — " 135

TRACK - BUSINESS STRATEGIES FOR A BETTER WORLD

Enhancing impact evaluation systems to support strategic decision making and value creation processes in social enterprises
VALENTINA CASTELLO, PAOLA OLIMPIA ACHARD, ANTONINA DI BERARDINO PAG. 151

TRACK - COMPETITION AND COLLABORATION IN BUSINESS

Collaborative innovation types and performance of firms: insights on consumer innovation
BEATRICE ORLANDO, ALESSANDRO DE NISCO, GIUSEPPE SANCETTA " 167

Identifying and assessing the breadth of open innovation practices: the impact on innovation performance
GABRIELE SANTORO, ALBERTO FERRARIS, STEFANO BRESCIANI " 185

TRACK - LA PROSPETTIVA DEL CONSUMATORE AL VALORE

Alterazione dei dati e intenzione d'acquisto: il ruolo dell'immagine di marca e dell'autostima
GIUSEPPE BERTOLI, BRUNO BUSACCA, ALESSANDRO CALZETTI " 201

TRACK - DECISION SUPPORT SYSTEMS, NETWORKS AND STRATEGY

Big data sources for green strategy implementation
FRANCESCO CALZA, ADELE PARMENTOLA, ILARIA TUTORE " 219

Entrepreneurship in innovative artistic production. Insights from the Italian context
MARTHA FRIEL, ANGELO MIGLIETTA, GIOVANNA SEGRE " 233

TRACK - CROWDFUNDING AS A NEW BUSINESS MODEL

It's not what you say, it's how you say it: avoiding uncertainty in crowdfunding pitch
FRANCESCA DI PIETRO, FRANCESCA MASCIARELLI " 247

TRACK - INNOVATION AND TECHNOLOGY MANAGEMENT

Un modello di supporto alle decisioni territoriali tra analisi dei "sentiment" e consonanza sistemica
SERGIO BARILE, IRENE FULCO, FRANCESCA LOIA, PIETRO VITO " 257

TRACK - TOURISM AND CULTURE MANAGEMENT

How to rise above the crowd? The promotion of an unknown destination in the tourism market
ANGELO PRESENZA, GIAN LUCA CASALI, CARLO MARI, MICHELE MODINA " 277

TRACK - SUSTAINABILITY

Sustainability in footwear industry: a big data analysis
FRANCESCO POLESE, MARIA VINCENZA CIASULLO, ORLANDO TROISI, GENNARO MAIONE PAG. 295

Scelte strategiche e pratiche ambientali nelle PMI alberghiere. Verso un nuovo modello di business sostenibile
FEDERICA BUFFA, MARIANGELA FRANCH, UMBERTO MARTINI, ALESSIO TAMANINI " 311

TRACK - SMALL AND FAMILY BUSINESS

Modes of organizational learning in entrepreneurial firms: lessons from the Open Factory network
ELENA GIARETTA, FEDERICO BRUNETTI, ANGELO BONFANTI, PAOLA CASTELLANI " 331

Innovative family startups for value creation
MELITA NICOTRA, CARMELA ELITA SCHILLACI, MARCO ROMANO " 345

TRACK - MARKETING & COMMUNICATION

L'evoluzione delle relazioni tra agenzia e cliente nel communication network. La prospettiva dei partner di comunicazione
FEDERICA CECCOTTI, MARIA VERNUCCIO, ALBERTO MATTIACCI " 365

TRACK - STRATEGY BETWEEN THEORY AND PRACTICE

A new perspective on factors influencing the development of dynamic capabilities
PREM SAGAR MENGHWAR, ANTONIO DAOOD

Factors influencing the creative process and culinary innovation. Highlights from Michelin-Rated Chefs
TINDARA ABBATE, ANGELO PRESENZA, FABRIZIO CESARONI, MARTA MELEDDU, LORN SHEEHAN

A New Perspective on Factors Influencing the Development of Dynamic Capabilities

PREM SAGAR MENGHWAR* ANTONIO DAOOD •

Abstract

Objectives. *The dynamic capability framework has got the wide attention of prominent scholars because of its importance in providing sustainable competitive advantage. Yet, researchers have less focused on the development process of dynamic capabilities. This study investigates the role of organizational factors, more specifically organizational culture and leadership, in the development of dynamic capabilities.*

Methodology. *This is a qualitative research study that involved comparative case study analysis. Semi-structured interviews were used in data collection. Based on original data collected through 21 interviews (13 from company A and 8 from company B), we analyzed what drove the development of dynamic capabilities in two quite different cases.*

Findings. *It was found that research on the development of dynamic capabilities needs a holistic approach as organizational factors are interrelated and interdependent. On the basis of this, we have drawn number of conclusions and proposed a conceptual model which is based on three propositions. First, dynamic organizational culture is positively related to firm's capacity to develop dynamic capabilities. Second, dynamic leadership has a significant role in creating dynamic organizational culture. Third, dynamic leadership plays a vital role in the development of dynamic capabilities.*

Research limits. *The model has been developed upon evidences coming from a limited number of case studies, therefore, results must be interpreted with caution.*

Practical implications. *This paper will act as guide for managers' and leaders' in creating dynamic culture within the organization and developing dynamic capabilities.*

Originality of the study. *The originality of the study lies in the fact that it proposes a new model, revealing the traits of dynamic organizational culture and dynamic leadership, the two organizational factors influencing firm's capacity to develop dynamic capabilities.*

Key words: *competitive advantage; dynamic capabilities; leadership; organizational change; organizational culture*

* Ph.D. Candidate in *Innovation and Growth* - Sapienza University of Rome
e-mail: prem.menghwar@uniroma1.it

• Ph.D. Candidate in *Management* - Sapienza University of Rome
e-mail: antonio.daood@uniroma1.it

1. Introduction

Decades of empirical and theoretical research in the field of strategic management has been done on the challenging and important question *"how can firms achieve and sustain competitive advantage?"*. Yet, such a question is still the center of focus for many management researchers. There are four main paradigms in the field of strategic management about competitive advantage: the first is Industrial Organization Theory (IO) and second is Strategic Conflict Approach, third is Resource Based Theory (RBV or RBT) and fourth is Dynamic Capabilities Framework. Advocates of IO theory argue that firm can gain competitive advantage if it has a stronger position in the market in comparison with competitors (Porter, 1986). Porter's model is an effective tool for evaluating the potential profitability of an industry and for measuring where power lies in the industry. For example, airline industry is not particularly attractive because of high fixed financial cost, greater power of both customers and suppliers, and intense competition among airline companies that further reduces the profitability of the industry. All these factors make it less attractive than other industries. For example, retail industry is more attractive because of low fixed cost, less supplier's power, less competition, and low buyer's power (Grant, 2010).

Strategic conflict approach is derived from game theory models and it emphasizes on effectiveness through strategic investments, signaling, and pricing strategies (Helfat *et al.*, 2007; Eisenhardt and Martin, 2000). In contrast to this, proponents of Resource Based Theory believe that competitive advantage lies in the activities or capabilities which are valuable, rare, inimitable and non-substitutable (Barney, 1991; Barney *et al.*, 2011; Prahalad and Hamel, 1990). Barney *et al.* (2011) state that a firm can achieve competitive advantage when its activities generate economic value, and, specifically, only few competing firms in the industry involved in similar activities. These models explain how a firm can gain and sustain competitive advantage in stable market conditions, however, they failed to explain how a firm can perform better in highly uncertain markets. The complementary framework developed by Teece and fellows widely known as dynamic capabilities framework address this gap. Teece *et al.* (1997) argue that a firm's capacity to (a) sense opportunities and threats, (b) seize opportunities and managing threats, and (c) ability to maintain, reshape, and configuring existing capacities play a pivotal in role in gaining competitive advantage and, most important, in sustaining it in rapidly changing environment.

Reviewing the literature reveals that dynamic capabilities framework received wide popularity in the literature, however, also has been criticized for being vague and lack empirical evidence (Schilke, 2014). Advocates of the dynamic capabilities framework themselves suggest that more work is needed on understanding the relationship between organizational factors and the development of dynamic capabilities (Teece, 2007; Pisano, 2015). In this direction, the need for *"fine-grained case studies of firms who have sustained advantage over time in dynamic environments"* (Ambrosini and Bowman, 2009, p. 46) has been made explicit. This study addresses this gap by analyzing how factors such as leadership and organizational culture affect the evolution of dynamic capabilities, contributing a conceptual model derived from the analysis of two case studies. The main objective of this study is synthesized by the following question: What is the role of organizational factors in the development of dynamic capabilities?

Advocates of framework presented multiple definitions of dynamic capabilities, which created confusion among scholars. Similarly, researchers have defined several types of culture and many types of leadership, each with its own pros and cons. To avoid further confusion, we introduce two new terms, namely dynamic culture and dynamic leadership. We believe making these clarifications will reduce incertitude and will improve the understanding of the role of organizational culture and organizational leadership in the evolution of dynamic capabilities.

This study contributes to the literature in three different ways: first, it introduces simple constructs, namely dynamic culture and dynamic leadership, and clarifies the interrelations between them to avoid further confusions; second, it proposes a new conceptual model that explores the role of these two factors in the development of dynamic capabilities; third, it constitutes an empirical contribution consisting in a comparative case study analysis on two quite different organizations.

2. Literature review

Starting from the fact that a capability is the ability to perform a given activity, a dynamic capability should qualify as such if the ability to perform that activity is maintained under changing conditions. Scholars by far agree on the difference between ordinary and dynamic capabilities: *'defining ordinary or "zero-level" capabilities as those that permit a firm to 'make a living' in the short run, one can define dynamic capabilities as those that operate to extend, modify or create ordinary capabilities'* (Winter, 2003, p. 1). Collis (1994) emphasizes the contrast between the two concepts by naming ordinary capabilities as static. Zahra *et al.* (2006) name ordinary capabilities as substantive capabilities. Some scholars also refer to ordinary capabilities as first-order capabilities, and, consequently, they explain dynamic capabilities as capabilities of higher-order (e.g. Collis, 1994; Schilke, 2014). Teece (2014) prefers to keep the distinction simple between ordinary and dynamic capabilities as he does not see much gains in distinguishing further typologies. Regardless of the identification of different orders, in principle everybody agrees with Winter (2003) that dynamic capabilities are extension of ordinary capabilities. There are multiple and distinctive definitions offered by advocates of the dynamic capability framework. Table number 1 list the main definitions.

Tab. 1: Key definitions of dynamic capabilities

Author	Definition
Teece *et al*. (1997)	*"The firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments"* (p. 516)
Eisenhardt and Martin (2000)	*"The firm's processes that use resources-specifically the processes to integrate, reconfigure, gain and release resources-to match and even create market change. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die"* (p. 1107)
Rindova and Taylor (2002)	*"The evolution of dynamic capabilities* [arise at] *two levels:* [1] *a micro-evolution associated with the "upgrading" of the organization's management capability in terms of staffing key positions with more experienced and skilled managers and redefining responsibilities at different levels of the organizational hierarchy, and* [2] *a macro-evolution associated with developing new competencies in order to respond to changing customer demands*" (p. 6).
Zahra and George (2002)	*"Dynamic capabilities are essentially change-oriented capabilities that help firms redeploy and reconfigure their resource base to meet evolving customer demands and competitor strategies"* (p. 185).
Zollo and Winter (2002)	*"A dynamic capability is a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness"* (p. 340).
Winter (2003)	*"Those that operate to extend, modify or create ordinary (substantive) capabilities"* (p. 991).
Sapienza *et al.* (2006)	"*Dynamic capabilities reflect a firm's capacity to reconfigure its capabilities to adapt to its environment" (p.915).*
Zahra *et al.* (2006)	*"the abilities to reconfigure a firm's resources and routines in the manner envisioned and deemed appropriate by its principal decision-maker"* (p. 918).
Helfat *et al.* (2007)	*"The capacity of an organization to purposefully create, extend, or modify its resource base"(p.1).* *"The concept of dynamic capability includes the capacity of a firm to identify the need or opportunity for change, formulate a response to such a need or opportunity, and implement a course of action"* (p.2).
Wand and Ahmed (2007)	*"a firm's behavioral orientation constantly to integrate, reconfigure, renew and recreate its resources and capabilities and, most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage"* (p.10).
O'Reilly III and Tushman (2008)	*"Dynamic capability can be seen as a set of actions (or routines) taken by senior management that permit the enterprise to identify opportunities and threats and reconfigure assets (people, organizational architectures, and resources) to adapt to these" (pp .196-197).*
Lee and Kelly (2008)	*"set of practices aimed at enabling novel approaches for assembling and integrating resources to achieve innovative outcomes" (p.156).*
Teece (2017)	*"Strong dynamic capabilities will generally mean strong (relative to competitors) in all relevant areas of sensing, seizing, and transforming"* (p.43).

Source: our elaboration

The concept of dynamic capability includes the capacity of a firm to identify the need or opportunity for change, formulate a response to such a need or opportunity, and implement a course of action (Helfat *et al.*, 2007). Hence, a dynamic capability is not the capacity of spontaneous reaction to changes (Winter, 2003), but it entails the ability to reconfigure firm's resources, in the way envisioned by the decision-makers, to adapt to such changes (Zahra, 2006; Helfat *et al.*, 2007). In this regard, the literature recognizes that the organization who has ability to understand the market dynamics, possess ability to develop and improve existing competencies can gain and sustain competitive advantage (Wand and Ahmed, 2007; Teece *et al.*, 1997; Bessant, 2003; Eisenhardt and Martin, 2000; Helfat *et al.*, 2007).

Eisenhardt and Martin (2000) believe that dynamic capabilities are useful in stable as well as uncertain environment. On the contrary, other prominent scholars believe that the benefits a firm obtains from dynamic capabilities depend not only on the efficacy of the underlying organizational and managerial processes, but also on the context in which the capabilities are employed (Barreto, 2010). The contextual organizational element is, by definition, represented by the organizational culture.

2.1 Organizational culture

Organizational culture is one of the key factors in the development of dynamic capabilities as well as in gaining competitive advantage (Teece, 2007; Zahra *et al.*, 2006). Significance of the organizational culture lies in the fact that its dimensions are central in all aspects of organizational life. Organizational culture affects innovation, employee behavior, and corporate unity, thereby having an invaluable role in the development of dynamic capabilities (Teece, 2007).

Richard Perrin defines organizational culture as *"the sum of values and rituals which serve as 'glue' to integrate the members of the organization"* (Watkin, 2013, p.1). The role of organizational culture is to allocate, mobilize and exploit resources by providing support in motivating employees, decision making, and building modern management systems (Barney, 1991; Helfat *et al.*, 2007). In other words, *"for better or worse, a corporate culture has a major impact on a company's ability to carry out objectives and plans"* (Schwartz and Davis, 1981, p. 47).

Organizational culture based on values such as team work, trust, respect, and diversity empower team work and enhances creativity (Helfat and Peteraf, 2003). The CEO of Oticon Lars Kolind said that the best strategy for achieving long term competitive advantage would be to create a work environment that unleashed individual ability (Gould, 1994).

Morgan (2006) believes organizations are mini societies which have their distinctive patterns of culture and subculture. For example, some organizations like HP believes in working together. Some other firm's culture emphasizes an individualistic approach and motivation through fear, for instance ITT (Morgan, 2006, p. 126). However, some organizations *"may be highly fragmented, divided into groups that have different aspirations"* (Morgan, 2006, p. 129), such that one group focuses on working together while another one believes in individualism and competition.

An organizational learning culture "*enables an organization to anticipate and adapt to dynamics of a changing environment"* (Bates and Khasawneh, 2005, p. 98). The culture of an organization qualifies as a learning one when organizational members recognize the value of learning and when it drives them to adopt a learning approach to their activities (Tracey *et al.*, 1995). The learning culture facilitates continuous learning through team work, discussion among employees on key issues as well as reward on achievements (Morgan, 2006).

Denison and Mishra (1995) argue that organizational culture can be studied as an integral part of firms' adaptability. Autio *et al.* (2000) argue that the development of dynamic capabilities requires flexibility and adaptability of a firm, which, according to them, depend on the degree of openness of the organization's culture. The organizational culture which facilitate dialogue, discussion and constructive debate among employees facilitates adaptability and the development of dynamic capabilities (Autio *et al.*, 2000). For example, Netflix cultivate nine core principles and skills in its employees: *"judgment, communication, impact, curiosity, innovation, courage, passion,*

honesty, and selflessness" (Reeves and Deimler, 2013, p.25). Netflix's culture foster freedom at work in order to attract creative people and, most important, to provide a culture where entrepreneurial skills can nurture (Reeves and Deimler, 2013).

Dimensions of organizational culture such as trust and openness among employees, challenge and involvement, participation of low ranked employee in key decision making, support and space for new ideas, freedom to take decisions and debate within employee on key issues enhance innovation (Bessant, 2003). All these factors of open organizational culture provide important support in evolution of dynamic capabilities (Bessant, 2003).

Gonzalez and Melo (2017) did a quantitative study on the Brazilian automotive industry and found that learning culture is the most vital construct in the development of dynamic capabilities. They argue that characteristics of learning culture such as delegation of responsibilities, participation of employees from all ranks in decision making, encouraging risk taking approach, and empowering creative activities within the organization play a significant role in the progression of dynamic capabilities (Gonzalez and Melo, 2017).

Birkinshaw and Ridderstrale (2017, p. 47) believe that the present era is all about adhocracy, which is opposite to bureaucracy in the sense that *"it is more about a new mindset than ticking boxes"*. Characteristics of adhocratic culture, such as emphasis on taking initiatives, doing new things, and taking risk (Birkinshaw and Ridderstrale, 2017), may lead to development of dynamic capabilities.

Barney (1986) believes organizational culture is composed of different interrelated aspects which are firm specific. Moreover, certain key aspects of firm are embedded in organization's culture and difficult to copy for competitors and this social complexity is important in securing the competitive advantage (Barney, 1986).

Cultural diversity is also significant in the development of dynamic managerial capabilities (Peteraf and Reed, 2007), which Adner and Helfat (2003, p. 1012) define as *"the capabilities with which managers build, integrate, and reconfigure organizational resources and competences"*. As said by Gould (1994) diversity in organizational culture is key to innovation. Diversity is important, keeping in mind that effective organization is the one having strategic fit with strategy, resource and organizational culture (Cameron and Quinn, 2006). In sum, an open and diverse learning culture based on trust, respect and shared vision is recognized to be a key factor in the development of dynamic capabilities. In this paper we will refer to such culture as dynamic organizational culture, which is defined as creative context which is built on shared set of values and practices, evolving in nature, and where organizational skills can nurture.

Morgan (2006) recognizes that the culture of an organization is largely influenced by its leadership style. For instance, Bill Hewlett and Dave Packard established their company Hewlett Packard (HP) around a culture of teamwork and valuing people. In contrast to this, the culture of International Telephone and Telegraph (ITT) under the leadership Harold Geneen was focused on competition and accountability because founders enforced strong control mechanisms and high accountability system (Morgan, 2006, p. 129). Schein (as cited in Ashforth *et al.*, 2016, p. 28) believes an employee *"internalize his or her values/beliefs regarding the organization"* through personal identification with the leader, who represents the impersonation of values and behaviors expected by the organization.

2.2 Leadership

Leadership is one of the fundamental aspect of organization because of its key determinant of the survival of the organization (Robbins *et al.*, 2008). Leadership is defined as power or ability to lead other people (Merriam-webster.com, 2016). The role of leadership is crucial in developing and enacting dynamic capabilities (Zahra *et al.*, 2006). More specifically, leadership's entrepreneurial capabilities (i.e. ability to reshape organizational resources) and managerial abilities (i.e. integration skills) have vital importance in the evolution of dynamic capabilities (Zahra *et al.*, 2006). Indeed, it might be the case that an organization possesses dynamic capabilities, but if its leadership fails to

exploit these capabilities it could go out of market (King and Tucci, 2002; Salvato, 2003).

The seminal work of Rosenbloom (2000) shows that leadership plays a pivotal role in the development process of dynamic capabilities. Characteristics of effective leadership, such as setting a clear vision, motivation capability, ability to deal with transition situations by breaking old rules and setting new ones are important in the development of dynamic capabilities (Rosenbloom, 2000). For example, NCR (National Cash Register) was founded in 1884 as first mechanical cash register company, however, presently famous as computer hardware, software company which is leader in multiple technological products such as Bar code scanners, automated teller machines, bar code scanners and check processing systems (Rosenbloom, 2000). In this long journey of NCR, entrepreneurial and managerial capabilities of employee played vital role in transformation of a cash registering company into a technological company (Rosenbloom, 2000). The company survived in different critical situations because leadership has potential to break existing routines, ability to deal with challenging situation and devising new strategies to meet the market requirements (Rosenbloom, 2000).

Further, the groundbreaking role of Steve job in Apple's success constitute a prominent example of how one person's vision, commitment, and entrepreneurial skills might drive the exploration of new markets and the design of new rules of the game (Teece, 2007).

Additionally, Kolind's role in transforming the family owned company, Oticon, into entrepreneurial organization (Gould, 1994) is a notable example of leadership. This showed how one leader can make great differences. Kolind's strong leadership skills and managerial capabilities did not only change the organizational structure, but they created a completely new dynamic culture within the organization that helped the organization to perform better in long run (Gould, 1994).

Leadership's vision to plan ahead or the ability to effectively sense changes from external environment, taking risks and developing a new strategy sets the foundation for the development of dynamic capabilities (Helfat *et al.*, 2007). Moreover, organizations with similar resources possess various dynamic capabilities and exploit them differently, because development and exploitation depend on leader's ability and vision (Aragón-Correa and Sharma, 2003).

Eisenhardt and Martin (2000) argue that new product development is a type of dynamic capability and leadership's cognitive skills, especially leader's creativity, play a pivotal role in developing new products. Similarly, Zahra et el. (2006) believes dynamic capabilities are dependent on the leaders within the firm and on their respective roles in the innovation process. Similarly, Gonzalez and Melo (2017) argue that the effectiveness of dynamic capabilities strongly depend upon human resources enacting them.

Contemporary research on the dynamic capability framework believes that dynamic managerial capabilities, as defined earlier, play a vital role in development of dynamic capabilities (Helfat and Martin, 2014). In particular, the concept of dynamic managerial capabilities *"helps to explain the relationship between the quality of managerial decisions, strategic change, and organizational performance"* (Helfat and Martin, 2014, p.1). Helfat and Martin (2014, p. 1) reviewed the existing empirical and theoretical articles from 1980 to 2013 published in famous international journals and propose *"that managers differ in their impact on strategic change and firm performance and that differences in managerial cognition, social capital, and human capital lead to different outcomes"*. Thus, it is recognized that intrinsic dimension of the managerial role of leaders determines the ability of the latter in developing and enacting dynamic capabilities.

In sum, the leadership that favors the development of dynamic capabilities is the one that possesses both managerial and entrepreneurial skills and know the art of exercising one of them as situation demands (i.e. adaptability). In this paper, we refer to the leadership showing these traits as dynamic leadership. We define dynamic leadership as a type of leadership that is proactive, emergent as well as evolving in nature, anticipating change, and capable of fostering dynamism in the organization. Further, dynamic leadership is characterized by adhocracy, team orientation, and inclusion.

3. Criticism on Dynamic capabilities

Dynamic Capabilities framework has received the wide attention of scholars from different fields such as strategy, entrepreneurship and innovation. Advocates of the framework believe that it plays a vital role in competitive advantage. However, opponents have questioned and criticized the framework.

Researchers have criticized the dynamic capabilities framework for being vague and tautological because it does not explain the procedure through which resources contribute in gaining competitive advantage (Winter, 2003). Others argued that the framework lacks empirical evidence (Priem and Buttler, 2000) and it uses multiple definitions that makes it confusing (Winter, 2003).

Further, some others criticized Teece's views about dynamic capabilities on the grounds that it has generalized 'capability' as a firm's ability to perform a certain activity without differentiating between first order capabilities and dynamic capabilities of higher order (Amit and Schoemaker, 1993). Similar to this, other researchers argued that dynamic capabilities lack or have weak micro foundations explaining how individual ability can be leveraged to dynamic capability (Felin *et al.*, 2012). Moreover, advocates of the framework have much focused on defining the term, understanding its role in competitive advantage, however, less focused on fundamental gaps in the framework (Pisano, 2015).

Advocates of the dynamic capabilities framework themselves suggest that more work is needed on understanding the relationship between organizational factors and the development of dynamic capabilities (Teece, 2007; Pisano, 2015). In this direction, the need for *"fine-grained case studies of firms who have sustained advantage over time in dynamic environments"* (Ambrosini and Bowman, 2009, p. 46) has been made explicit. This study addresses this gap by analyzing how factors such as leadership and organizational culture affect the evolution of dynamic capabilities, contributing a conceptual model derived from the analysis of two case studies.

4. Research Methodology

The research method used for this study follows qualitative research method through comparative case study design. One of the reason to select the case study approach was that multiple methods of data collection can be used to perform an in-depth analysis of the case, such as semi-structured interviews, archival record, and progress reports (Yin, 2003). We used case studies of two different organizations to conduct comparative analysis. Cohen *et al.*, (2013) argues that case study method is appropriate for observing the aspects of a firm, a process or a community. Yin (2003) believes that case studies are useful in answering questions like "how "or "why". He defines a case study as *"an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident"* (Yin, 2003, p. 13). Following this line of reasoning, we adopted the case study method to investigate the two aspects (organizational culture and leadership) of these organizations and to analyze their role in development of dynamic capabilities.

The primary source of data collection were semi-structured interviews, which were conducted to critically analyze and further explore the problem by randomly asking a set of critical questions. This method is also useful in finding the reasons and opinions of different managers about the same question (Ghauri and Grønhaug, 2005). Semi structured interviews with open ended questions not only allow a deep understanding of the problem but they are also useful in exploring variables which are difficult to measure statistically (Ghauri and Grønhaug, 2005). In these cases, variables such as organizational culture, leadership and dynamic capabilities are latent variables. Further, as this research is exploratory in nature and it investigates new dimensions, the data collection through semi-structured interviews was particularly suitable.

Structured questions were asked to derive the elements to develop the proposition, and then schematize in the proposed conceptual framework. The main research objective was divided into

two sub research questions, which were operationalized through the following interview questions. Table 2 shows the interview protocol used in this study.

Tab. 2: Interview Protocol

Factors affecting the development of dynamic capabilities	
Research Question	**Interview Questions**
What is the role of organizational culture in the development of dynamic capabilities?	*1. What do you think about culture in general?* *2. Could you briefly describe the culture of your organization?* *3. In your opinion, which key factors influence the culture of the organization?* *4. What efforts did you make to create an open culture in the organization?* *5. How do you see role of organizational culture in meeting internal customer demands?* *6. Do you think culture of the organization plays a significant role in performance of the organizations?* *7. Could you please walk me through the process or could you please give me an example that gives me an idea that culture is key factor in organizational performance?*
What is role of managers and leaders in the development of dynamic capabilities?	*8. What do you think about the role of managers and leaders in organizational culture?* *9. How do you see role of leadership in managing change?* *10. How do you see the role of managers in organizational performance?* *11. What do you think about role of leadership in managing external threats and availing opportunities?* *12. What are the core strengths of the organization; Culture, leadership or both?*

Source: our elaboration

Interviews were corroborated by a secondary data gathering process, based on the collection of documentary material with respect to the involvement of higher management in organizational culture and in the development of dynamic capabilities. Furthermore, archival records (financial reports and documents such as progress reports and customers' surveys report) were used to collect insights. In addition to this, we also conducted interviews with customers to know their opinion about the performance of the organization.

To get diversified and comprehensive perspective, employees from all ranks were interviewed (Strauss and Corbin, 1994). In total, 21 interviews were conducted during a period of seven months which included 12 interviews from Italo (3 senior level managers in marketing and strategy department, 5 middle level managers from marketing and strategy department, and 4 front line employees), and 9 interviews from Deedmob (2 founders, 3 senior level managers, and 4 junior level employees (trainees and ambassadors). Each interview took approximately 30 to 40 minutes. During the interview, notes were taken, and few participants allowed to record their interviews to facilitate the note-taking process. The extant literature related to innovation and dynamic capabilities, briefly exposed in the literature review part, was used as the starting point for the preparation of the interviews.

In this study, content analysis method outlined by Strauss and Corbin (1994) was used to analyze the transcripts developed from the interviews. The main aim to conduct content analysis was *"to objectively and systematically identify specified characteristics of messages"* (Holsti, 1969, p.14). Content analysis was done to categorize collected data into categories and sub categories. For example, on analyzing the recorded statements about dynamic culture, we found that most of statement could fit into subcategories such as type of culture, way to create dynamic culture, employees' role in creating dynamic culture, advantages and disadvantages of the different types of culture with respect to performance of the organization. Beside this, when content analysis was performed on Nvivo software, basic techniques such as word repetitions, text search queries, and key-indigenous terms were used to analyze the transcripts of the interviews.

4.1 Case selection criteria

The primary analysis revealed that companies operating in uncertain environments or highly competitive markets require dynamic capabilities to offset external challenges. Keeping this in view, we selected a large company which is working in a volatile market and easily approachable. Further, in order to conduct comparative analysis, aim was to find a small company working in stable but competitive environment. From a large number of companies initially identified, Italo, the first Italian private high-speed railway company of Europe, and Deedmob, a small Dutch volunteer organization were selected under the following criteria:

Tab. 3: Selection criteria for the two cases

Selection criteria for company A	Selection criteria for company B
1. A company working in an uncertain environment; 2. A large company that has good track record managing change.	1. A company working in a certain environment and competitive market; 2. A small company which is continuously developing new products or successful for being creative and flexible.

Source: our elaboration

Italo was selected because company is working in an uncertain environment. The company has filed a case in the European of court of justice claiming that the incumbent engaged in anti-competitive practices despite the liberalization of the market (Ntvspa.it, 2016). At the time of the case selection, the company was performing well and expanding, despite it was reported that, at the beginning, company has taken huge debt and was about to go bankrupt. This shows that company possess some strong internal capabilities that ensured its survival in uncertain environment. Further, Italo reformed organizational structure thrice (from project based to product based, and then to a hybrid structure) and its business plan (reformed from quality services in limited cities to an expansion strategy throughout Italy). The fact that this company developed these capabilities to offset external challenges made it the most appropriate for this study.

To conduct the comparative analysis, Deedmob was selected because it is a small and young company working in a certain environment. The company had established the first technical platform for volunteers in Holland and was expanding in other countries. This company demonstrated to have dynamic capabilities mainly by managing to completely reform its main product (the web platform) to make it easier and user friendly, thereby gaining an advantageous position over competitors.

4.2 Brief description of the two selected cases

Italo, company A, is the first Italian private high-speed train company of Europe founded in 2007 by a group of Italian entrepreneurs. Moreover, Italo is also the first company in the world which uses Alstom AGV high-speed trains. Italo has been established by the group of renowned Italian entrepreneurs and friends Luca di Montezemolo, Diego Della Valle, Gianni Punzo, and Giuseppe Sciarrone. The company is currently working in all major cities of Italy and it has also launched the high-speed bus service project “Italo bus” in partnership with a German bus company.

Deedmob, company B, is an Amsterdam based social start-up for volunteering. The mission of the organization is to strengthen society by increasing the impact of volunteering through using the newest technology and strategic partnerships with the private sector. They do this by offering an online platform which makes it very easy for people to find volunteering opportunities in their area, in addition to giving charities cutting-edge technical tools to manage their volunteers and maximize social impact.

5. Findings and Results

5.1 The Role of organizational Culture in the Development of Dynamic of Capabilities

Grant (2010) states that commitment to values and principles have always influenced organizational performance, *"shared values among employees are the key factors of excellence at workplace"* (p. 26). Most respondents highlighted that culture of the company is based on values which includes customer care, trust, quality, knowledge sharing, and technology. Founders and senior management played significant role in creating and fostering dynamic corporate culture. Company's policy to give in-house trainings to employees, then giving promotions and reward on performance has built the relationship of trust. Moreover, employees feel satisfied at workplace hence actively participate in fulfilling external customer's expectations.

> *'For me organizational culture of Italo is based on value such as trust, respect mutual learning and customer care. One of the key aspect is that these values are not merely written but enshrined in day to day practices, no matter which department, branch office or head office you work in. I joined this company as customer care assistant, then got three years of training in their field of strategy and on successful completion of training rewarded with increased responsibilities, promotions and reward where I am today. Training enhanced my managerial and strategic skills, while reward on hard work and dedication enhanced my loyalty with the organization. In short, we grow together' (Middle Manager - Strategia e Sviluppo Prodotto, company A).*

Additionally, another senior level respondent from strategy department shared:

> *'The culture of the organization is a learning culture, based on values which includes customer care, quality, trust and teamwork'. This culture promotes voluntary involvement of employee in problem solving. Regular formal and informal departmental and cross departmental meetings has nurtured this culture. Furthermore, management monitor weather these values are practiced by all employees are not. For example, according to recent customer satisfaction survey, customer satisfaction level ranges in between 8.9 - 9.2 at a scale of 10' (Senior Manager-Strategia e Sviluppo Prodotto, company A).*

> *'In our opinion culture of Deedmob is based on two key values trust and welfare, we do not only think about the welfare of community but also of our employees and partners. We all have the same goal and working together is the best way to achieve it, hence, we all are united under the umbrella of mission; serving the community' (Trainee-Marketing Department, company B).*

Furthermore, respondents shared perspective that diversity of worker and healthy competition (dialogue and debate) has led to creation of learning culture. It took six years to establish this culture, Italo's project started in 2006 and operation begin in 2012. From the beginning founders took all important measures to create strong culture. Firstly, company established strategic partnerships with Alstom, EATALY, Medusa, Alpitour world, as working with different companies enhanced diversity and provided an opportunity to learn for its young employees.

To provide passengers, the excellent on-board service, the company established a Training School (Scuola di Ospitalità). In this school the company didn't only trains employees about their role but also educated them about values and vision of the company so everybody in the organization respect these values and strive together to achieve the company's vision.

> *'I believe in Deedmob organizational values are basic building blocks and vision is derived from these values. For instance, in general volunteer organizations follow traditional model however, we wanted to be dynamic in order to be agile. We built this organization on values like creativity, dedication, efficiency and honesty. Being direct and creative is an added value which makes us faster and effective' (Founder-Marketing Department, company B).*

> *'In my opinion organizational culture is a crucial factor for personal as well as organizational growth. It is not important that value must be written and posted on walls, however, organizational values must*

be enshrined into the culture so act as a guiding principle' (Middle Manager-Technical Department, company B and Senior level manager-marketing department, Company A).

'In Deedmob I work in a technical department, here, we all have specific roles like working on distinct aspects of application such as designing, programming etc. we don't take each other opinion or discuss in the beginning to be efficient. I believe there is tradeoff between being efficient and creative.' (Senior Manager-Marketing Department, company B).

As the quotations above indicate, company's culture is dynamic because it provides contextual support to all employees to learn new skills and continuously improve. Organizational culture which is based on values such as quality, customer care and trust positively affect team work, employee behavior and these characteristics of the culture facilitate development of dynamic capabilities (Teece, 2007). Beside this, it was found that culture of the organization has components of a great culture which includes vision, values, practices, people, narrative and place, these factors unable organization to respond market changes effectively (Coleman, 2013). The work of Gonzalez and Melo (2017) also shows that organizational culture provides contextual support in the development of dynamic capabilities.

The company's training school has vital role in creating culture of team work and giving quality service. Furthermore, in both cases strategic partnerships with several companies created diversity in the organization. This finding is consistent with the views of Kolind that diversity bring creativity within the organization in other words "best strategy for achieving long term competitive advantage would be to create a work environment that unleashed individual ability" (Gould, 1994). In this culture employee's feel comfortable which enhance creativity, takes organizational ownership and initiatives to fulfil customer demands.

In addition to this, respondents shared their views on recruitment policy and impact on company's culture. *In the beginning, company had two options a) hiring the experienced employees from market by offering them high wages b), hiring fresh graduates and giving trainings to them. The Italo's founder preferred second option to create a unique culture of commitment and excellent service*. School of hospitality was established which has trained 700 employees. Hiring young personals, offering them competitive salary and capacity building program facilitated development of dynamic culture. Beside this, giving multiple roles to employee and job rotation policy had positive impact on creating learning culture.

Some other senior respondents said, *'hiring experienced employee from other organization could have created fragmented culture'* because they bring experience and values of other organization. Beside this, because of unfair competition company was under severe crises and one option was reducing the level of the services or downsizing of the employees to reduce the cost. However, rather than going for this traditional option company designed new business plan and convinced banks to lend more debt. This costly option was preferred to maintain loyal relationship with employees and make them feel 'company care'.

It was revealed from the above quotations that companies' policy to hire fresh graduates, giving them professional trainings as well as organizational environment where these skills can nurture and reward on performance led to creation of learning organization. This finding is consistent with Morgan's (2006) views that hiring employees from different organization can lead to creation of fragmented culture.

Beside this, it was also found that both organization are young and there are no well-developed routines, hence, there were no major barriers faced in creating dynamic culture. Additionally, in case of Italo organization faced difficulties at earlier stage because of sudden changes in external environment, hence, to survive in the market company reformed its organizational structure and reconfigured its strategic policies. Similar to this, Deedmob primarily developed online platform, afterwards kept reforming it by making it user friendly, safe, and secure. It was done with the help of customer reviews, dialogue and debate within the organization and team work. It's worth highlighting here that the "*ability to change product development routines or existing routine would*

be a dynamic capability" (Zahra *et al*.,2006, p.951). Moreover, in crises time organizational policy to take more debt in order to maintain trust and ensure quality service rather than following traditional policies like reducing number of employees or to compromise on quality has proved that organization practice and respect its cultural values. Additionally, in case of Deedmob it was found that smaller companies can be efficient and dynamic at the same time. For instance, in technical department employees had assigned tasks and were more focused on efficiency. On the contrary, marketing department has flat structure to respond quickly to queries and maintain effective communication with different partners.

It can be derived from the above discussion that organization culture is one of the crucial factor in the development process of dynamic capabilities. It was found that if culture of the organization is based on shared values such as trust, respect, team work, diversity, and integration, these characteristics of the culture empowers voluntary involvement of employees, leads to nurturement of skills, and ultimately better performance. For the sake of easiness, we repeat that "the ability of an organization to change existing routine is considered as dynamic capability" (Zahra *et al.*, 2006). For example, suppose that there are two organizations, X and Y, operating in a competitive market with the aim to reform existing system of the organization to gain competitive advantage. Further, assume that both organization have the same resource base, however, organization X has dynamic culture and organization Y has a closed culture. In this hypothetical situation, organization X has more chances to effectively change existing internal system, because reconfiguring the organizational routines or the system in general, which is a type of dynamic capability, requires contextual support of dynamic organizational culture. In contrary, organization Y will find it more difficult to reform its existing system because it lacks the support of organizational culture. In the case of company Y, existing routines and capabilities are more resistant to change than those in company X. As said by Autio *et al.* (2000) development of dynamic capabilities involves flexibility and adaptability and degree of flexibility depends on openness of organization's culture. Therefore:

> *P_1: Dynamic organizational culture is positively related to firm's capacity to develop dynamic capabilities.*

5.2 The Role of Leadership in the Development of Dynamic of Capabilities

One of the key topic discussed throughout the history of organizational management is role of leadership in the success of the organization. It is widely believed that role of the higher management is vital in creating innovative and successful organization (Coleman, 2013).

In response to the question regarding role of organizational employee in dynamic capabilities respondents from both organization shared their perspective that, one of major strength of company is that company is young and got young talent, the newly graduated students are more ambitious and creative. New people bring ideas, expertise and has no well-developed routines.

Furthermore, 'Higher management of the company engage with middle and front-line employee, delegate responsibility and maintained accountability'. Giving distinct roles help in assessing capabilities and rotation of employee is effective way to bring creativity in the organization.

> *'In my opinion, higher management's key strength is that it leads from the front. Beside this, company's leadership is transformational and possess conflict negotiation skills hence managed to negotiate with banks and also with competitor in gaining excess to main stations' (Senior Manager- Strategia e Sviluppo Prodotto, company A).*

> *'I personally believe as a cofounder and leader I have more responsibility than anyone else. My day to day actions such as motivation and dedication, behavior with staff members, partner organizations and ambassadors will decide fate of this organization' (Founders, Marketing and technical Department, company B).*

In addition to this, some other higher management employees indicated that 'founders of the company are visionary and experienced'. Company's business model is not new, However, the way it is organized is unique and another major difference people who are executing it. Management didn't only buy high speed trains but had a leading role in creating agile system within the organization.

Some middle level managers revealed that managers of the company empower subordinates to learn by assigning challenging tasks or giving them distinct roles. They have constantly discussed with all employees about their expectations, problems and outcomes.

Some respondents across front line level said management doesn't only ask for suggestion but give due importance to valuable suggestions and incorporate in company's strategy. Working in this company make me feel that *'I can do something, we are part of the team'*. Supervisors empower them: *'You are not the simple employees, who will sit on chair and always work on computer but motivates us to have debate and dialogue'.*

Furthermore, Employee from the marketing department said' Italo's training policy has profound impact on developing leadership and managerial skills of employee. The people in this department got one or more years of training, beside this they worked at stations or in branch office as well. The staff working in head office is well trained and experienced, moreover, doing different jobs made them flexible. Italo's policy to hire young people and extensive training program is key in success. One of the respondents said:

> *'Great leaders create new leaders, and this is what founders of the company did'. They have produced new leaders within the company' (Middle Manager - Strategia e Sviluppo Prodotto, company A).*

> *'In general, Dutch organizations has flat structure, in the case Deedmob, organization is small, so we have more chance to interact with them. On the basis of this little experience, I can say both founders are visionary and talented, they know art of guiding and getting work done from us' (Trainee and Senior Manager-Marketing and technical Department, company B).*

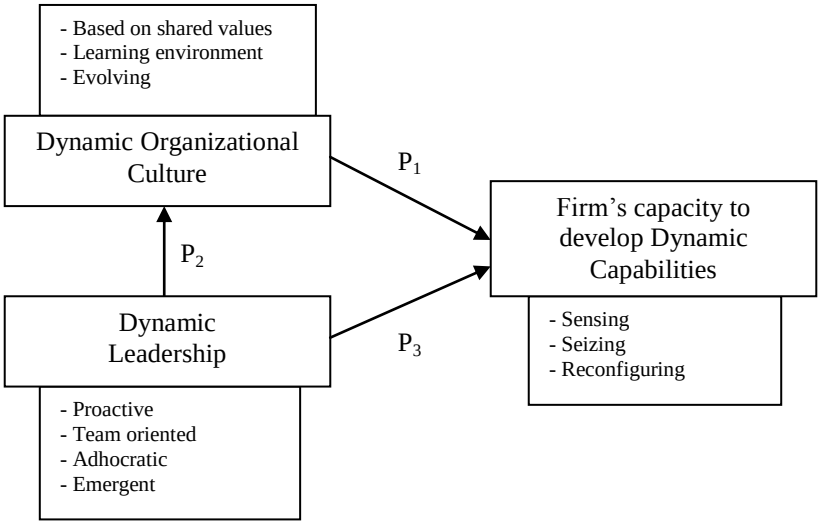
Our second finding has greater affinity with Rosenbloom (2000) work that vision of leaders, their ability to deal with transition situations by breaking old rules and setting new rules is important in development of dynamic capabilities. Beside this, Helfat *et al.* (2007) found that role of leaders and managers in the dynamic capabilities is to create markets and orchestrate resources. In both cases, vision and leadership skills of founders had played key role in seizing the opportunity for example in first case, leadership grabbed an opportunity that arose from liberalization of the market in the Italy. In the second, Founders felt there is a need of effective platform which could connect volunteers and organizations. In the first case, company's higher management took several key decisions in the time of crises which proved that leadership is dynamic and not traditional. Firstly, they created a strong organizational culture. Secondly, company was in crises due to uncertainty in the market and had limited budget to survive for 3 to 4 months, higher management potential to deal with challenging situations and ability to effectively sense changes from external environment, taking risks and developing a new expansion strategy set the foundation for the development of dynamic capabilities as well as the better performance of the organization in the long run (Helfat *et al.*, 2007).

Based on above discussion, we propose the following:

P_2: Dynamic leadership is positively related to dynamic organizational culture.
P_3: Dynamic leadership is positively related to firm's capacity to develop dynamic capabilities.

The three main propositions are synthesized in the conceptual framework displayed in Figure 1, which explicates the relationship among dynamic organizational culture, dynamic leadership, and firm's capacity to develop dynamic capabilities.

Fig. 1: Factors influencing the development of Dynamic Capabilities: A conceptual model



Source: own elaboration

6. Conclusions

The overall aim of this study was to explore the role of organizational factors in the development of dynamic capabilities. In past, researchers have less studied the role of underlying organizational factors in the development of dynamic capabilities (Teece, 2017; Pisano, 2015). Hence, the comparative analysis of two cases led to the development of three main propositions, from which a model has been built.

Firstly, we analyzed the relevant literature on the organizational factors influencing the development of dynamic capabilities. This resulted in the identification of two main variables, namely dynamic organizational culture and dynamic leadership. Dynamic organizational culture is built on shared set of values, evolving in nature, and where organizational skills can nurture. While dynamic leadership is characterized by specific traits, namely proactive, team oriented, adhocratic and emergent. Secondly, we analyzed the two different cases to understand the role of dynamic organizational culture and dynamic leadership on firm's capacity to develop dynamic capabilities. We propose that dynamic organizational culture provides contextual support in firm's capacity to develop dynamic capabilities, as the former unleashes the creative potential of individuals, fosters employee involvement as well as empowerment, and promotes trust-based work relationships. Further, we propose that dynamic leadership is positively related to firm's capacity to develop dynamic capabilities. Our second finding has greater affinity with the argument of Teece (2014; 2017) and Helfat *et al.*, (2007) that the role of leaders and managers in the development of dynamic capabilities is to create markets and orchestrate resources. In the first case study, a group of Italian entrepreneurs saw an opportunity emerged from liberalization of railway market and captured it by orchestrating resources which led to creation of this company. Similarly, in the second case study, three Dutch friends founded Deedmob to introduce a new platform to connect volunteers and organizations. In a year, this small organization has connected thousands of volunteers with 250 big organizations who has difficulty in finding right volunteers. Nobody imagined connecting volunteers would be a way to earn profits and help society. This new market emerged because founders has ability to deal with uncertainties ascribable to the fact that they show the traits of dynamic leadership. Third, dynamic leadership is positively related to dynamic organizational culture. The visionary role of the founders and the higher management showing dynamic leadership's traits significantly contributed to the establishment of a dynamic culture in the both organizations, a culture wherein employees' feel motivated, they take initiatives, and they actively participate in seizing opportunities and mitigating threats.

The main conclusion and lesson that are drawn from this study is that the higher management's and leadership's roles are critical in creating dynamic organizational culture and establishing decentralized structure that supports the evolution of dynamic capabilities. Furthermore, organizational factors are interdependent but have distinctive role in creation of dynamic capabilities. Organizational culture ensures effective communication and employees involvement which is important in sensing the competitors' behavior and changes in the market. Organizational culture also plays vital role in motivating the employees, empowering team work, and supports creativity which leads to seizing opportunities and configuration of resources. Finally, employee's willingness and ability are significantly important in assets orchestration. Term refers to optimal configuration of all resources and capabilities which is important in development of dynamic capabilities (Helfat *et al*., 2007). These results take us to the conclusion that two are the main organizational factors influencing the development of dynamic capabilities. As a consequence, a more holistic approach is needed to understand the development of dynamic capabilities since these organizational factors are interrelated and interdependent.

7. Research limitations

Although some effective measures were taken to ensure quality and reliability of this study, still there are some limitations. Firstly, due to time and resource constraint limited number of interviews were conducted from two companies, which limits the possibility of generalization of findings. Secondly, in qualitative studies executives share views based on their personal experience and beliefs towards dynamic capabilities which limits the reliability of findings. Finally, multiple definitions of dynamic capabilities and vagueness of the concept pose difficulties to executives in understanding the framework which restrict credibility of findings.

8. Directions for further research

This study paves different avenues for further research. Firstly, dynamic capabilities framework is emerging model and less empirical evidence available done on fundamental weakness of this model therefore there is need to conduct research on this topic in different industries and countries. Beside this, future studies might also explore relationship among various factors of organization such as substantive capabilities, entrepreneurial activities and integration capability, Total Quality Management and role of these factors in building dynamic capabilities.

References

ADNER R., HELFAT C.E. (2003), "Corporate effects and dynamic managerial capabilities", *Strategic Management Journal*, vol. 24, n. 10, pp. 1011-1025.

AMBROSINI V., BOWMAN C. (2009), "What are dynamic capabilities and are they a useful construct in strategic management?", *International Journal of Management Reviews*, vol. 11, n. 1, pp. 29-49.

ASHFORTH B.E., SCHINOFF B.S., ROGERS K.M. (2016), ""I identify with her", "I identify with him": Unpacking the dynamics of personal identification in organizations", *Academy of Management Review*, vol. 41, n.1, pp. 28-60.

AUTIO E., SAPIENZA, H., ALMEIDA J. (2000), "Effects of age at entry, knowledge intensity, and imitability on international growth", *Academy of Management Journal*, vol. 43, n. 5, pp. 909-924.

BARNEY J.B. (1986), "Organizational culture: can it be a source of sustained competitive advantage?", *Academy of Management Review*, vol. 11, n. 3, pp. 656-665.

BARNEY J.B. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, vol. 17, n. 1, pp. 99-120.

BARNEY J.B., KETCHEN D.J., WRIGHT M. (2011), "The future of resource-based theory revitalization or decline?", *Journal of Management*, vol. 37, n. 5, pp. 1299-1315.

BARRETO I. (2009), "Dynamic Capabilities: A Review of Past Research and an Agenda for the Future", *Journal of Management*, vol. 36, n. 1, pp. 256-280.

BATES R., KHASAWNEH S. (2005), "Organizational learning culture, learning transfer climate and perceived innovation in Jordanian organizations", *International Journal of Training and Development*, vol. 9, n. 2, pp. 96-109.

BESSANT J.R. (2003), *High-involvement innovation: Building and sustaining competitive advantage through continuous change*, John Wiley & Sons, Chichester.

BIRKINSHAW J., RIDDERSTRALE J. (2017), "Let's hear it for adhocracy", *London Business School Review*, vol. 28, n. 2, pp. 45-47.

BOSSIDY L., CHARAN R., BURCK C. (2011), *Execution: the discipline of getting things done*, Random house, London.

CAMERON K.S., QUINN R.E. (2006), *Diagnosing and changing organizational culture: Based on the competing values framework*, Jossey-Bass, San Francisco.

COHEN L., MANION L., MORRISON K. (2013), *Research methods in education*, Routledge, New York.

COLLIS D.J. (1994), "Research note: how valuable are organizational capabilities?", *Strategic Management Journal*, vol. 15, n. S1, pp. 143-152.

FELIN T., FOSS N.J., HEIMERIKS K.H., MADSEN T.L. (2012). "Microfoundations of routines and capabilities: Individuals, processes, and structure", *Journal of Management Studies*, vol. 49 n.8, pp. 1351-1374.

ARAGÓN-CORREA J.A., SHARMA S. (2003), "A contingent resource-based view of proactive corporate environmental strategy", *Academy of Management Review*, vol. 28, n. 1, pp. 71-88.

EISENHARDT K. (1989), "Building Theories from Case Study Research", *Academy of Management Review*, vol. 14, n. 4, pp. 532-550.

EISENHARDT K.M., MARTIN J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, vol. 21, n. 10-11, pp. 1105-1121.

GHAURI P.N., GRØNHAUG K. (2005), *Research methods in business studies: A practical guide*, Pearson Education, Harlow.

GOULD R.M. (1994), "Revolution at Oticon A/S: The Spaghetti Organization", in Dutta S., Manzoni J.F. (Eds.) (1999), *Process Re-engineering, Organizational Change and Performance Improvement* (pp. 1-16), McGraw-Hill, London.

GRANT R.M. (2010), *Contemporary strategy analysis and cases: text and cases*, John Wiley & Sons, Chichester.

HELFAT C.E., FINKELSTEIN S., MITCHELL W., PETERAF M., SINGH H., TEECE D., WINTER S.G. (2007), *Dynamic capabilities: Understanding strategic change in organizations*, Blackwell, Oxford.

HELFAT C., PETERAF M. (2003), "The dynamic resource-based view: capability lifecycles", *Strategic Management Journal*, vol. 24, n. 10, pp. 997-1010.

HOLSTI O.R. (1969), *Content analysis for the social sciences and humanities*, Addison-Wesley, Reading.

KING A., TUCCI C. (2002), "Incumbent Entry into New Market Niches: The Role of Experience and Managerial Choice in the Creation of Dynamic Capabilities", *Management Science*, vol. 48, n. 2, pp. 171-186.

LEE H., KELLEY D. (2008), "Building dynamic capabilities for innovation: an exploratory study of key management practices", *R&D Management*, vol. 38, n. 2, pp. 155-168.

MERRIAM-WEBSTER.COM. (2016), Definition of LEADERSHIP. [online] Available at: http://www.merriam-webster.com/dictionary/leadership [Accessed 6 Jul. 2016].

MORGAN G. (2006), *Images of organization*, Sage Publication, California.

NTVSPA.IT. (2016). NTV, Nuovo Trasporto Viaggiatori. [online] Available at: http://www.ntvspa.it/ [Accessed 27 Jun. 2016].

O'REILLY III C.A., TUSHMAN M.L. (2008), "Ambidexterity as a dynamic capability: Resolving the innovator's dilemma", *Research in organizational behavior*, vol. 28, n. 1, pp. 185-206.

PETERAF M., REED R. (2007), "Managerial discretion and internal alignment under regulatory constraints and change", *Strategic Management Journal*, vol. 28, n. 11, pp. 1089-1112.

PISANO G.P. (2015), *A Normative Theory of Dynamic Capabilities: Connecting Strategy, Know-How, and Competition*, Harvard Business School Technology & Operations Mgt. Unit Working Paper, (16-036).

PORTER M.E. (1996), *What is strategy?*, Harvard Business School Publishing, Boston.

PRAHALAD C.K., HAMEL G. (1990), *The core competence of the corporation*, Boston, pp. 235-256.

REEVES M., DEIMLER M. (2013), *Adaptability: The New Competitive Advantage*. Own the Future: 50 Ways to Win from the Boston Consulting Group, pp. 19-26.

RINDOVA V., TAYLOR, S. (2002), "Dynamic capabilities as macro and micro organizational evolution", *Robert H. Smith School of Business-Smith Papers Online*, vol. 1, n. 11, pp. 1-11.

ROBBINS S.P., DECENZO D.A., COULTER M.K. (2008), *Fundamentals of management: Essential concepts and applications*, Pearson Prentice Hall, Upper Saddle River.

ROSENBLOOM R.S. (2000), "Leadership, capabilities, and technological change: The transformation of NCR in the electronic era", *Strategic Management Journal*, vol. 21, n.10-11, pp. 1083-1103.

SAPIENZA H.J., AUTIO E., GEORGE G., ZAHRA S.A. (2006), "A capabilities perspective on the effects of early internationalization on firm survival and growth", *Academy of Management Review*, vol. 31, n. 4, pp. 914-933.

SALVATO C. (2003), "The Role of Micro-Strategies in the Engineering of Firm Evolution", *Journal of Management Studies*, vol. 40, n. 1, pp. 83-108.

SCHILKE O. (2014), "On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism", *Strategic Management Journal*, vol. 35, n. 2, pp. 179-203.

SCHWARTZ H., DAVIS S.M. (1981), "Matching corporate culture and business strategy", *Organizational Dynamics*, vol. 10, n. 1, pp. 30-48.

STRAUSS A., CORBIN J. (1994), "Grounded theory methodology", In DENZIN N.K., LINCOLN Y.S. (Eds.) *Handbook of Qualitative Research* (pp. 273-285), Sage Publications, Thousand Oaks.

TEECE D.J. (2014), "The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms", *The Academy of Management Perspectives*, vol. 28, n. 4, pp. 328-352.

TEECE D.J. (2007), "Explicating dynamic capabilities: the nature and micro foundations of (sustainable) enterprise performance", *Strategic Management Journal*, vol. 28, n. 13, pp. 1319-1350.

TEECE D.J. (2017), "Business models and dynamic capabilities", *Long Range Planning*, vol. 51, n. 1, pp. 40-49.

TEECE D.J., PISANO G., SHUEN A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, vol. 18, n. 7, pp. 509-533.

TRACEY J.B., TANNENBAUM S.I., KAVANAGH M. J. (1995), "Applying trained skills to the job: The importance of the work environment", *Journal of Applied Psychology*, vol. 80, n. 2, pp. 239–52.

WANG C.L., AHMED P.K. (2007), "Dynamic capabilities: A review and research agenda", *International Journal of Management Reviews*, vol. 9 n. 1, pp. 31-51.

WINTER S.G. (2003), "Understanding dynamic capabilities", *Strategic Management Journal*, vol. 24, n. 10, pp. 991-995.

YIN R. (2003), *Case study research*, Sage Publications, Thousand Oaks, Calif.

ZAHRA S.A., SAPIENZA H.J., DAVIDSSON P. (2006), "Entrepreneurship and dynamic capabilities: a review, model and research agenda", *Journal of Management Studies*, vol. 43, n. 4, pp. 917-955.

ZOLLO M., WINTER S.G. (2002), "Deliberate learning and the evolution of dynamic capabilities", *Organization science*, vol. 13, n. 3, pp. 339-351.

Factors influencing the creative process and culinary innovation. Highlights from Michelin-Rated Chefs

TINDARA ABBATE[*] ANGELO PRESENZA[•] FABRIZIO CESARONI[♠]
MARTA MELEDDU[**] LORN SHEEHAN[**]

Abstract

Obiettivi. *Il paper analizza la creatività e l'innovazione nello specifico contesto dei ristoranti di alta cucina. Il lavoro indaga i fattori che influenzano il processo creativo nelle attività di creazione dei piatti e, di conseguenza, esplora i principali fattori legati a chef, staff ed atmosfera all'interno del ristorante.*

Metodologia. *L'analisi empirica utilizza una Principal Component Analysis (PCA) basata su dati primari attraverso la somministrazione di un questionario ad un campione di 132 chef stellati italiani.*

Risultati. *Lo studio evidenzia tre fattori-chiave che stimolano la creatività. Il primo fattore interno-individuale riflette l'inclinazione personale dello chef alla creatività. Il secondo fattore è costituito dalle fonti esterne allo chef che possono migliorare o limitare la creatività. Infine, il terzo fattore comprende componenti contestuali come la necessità di vagliare la sostenibilità finanziaria e di controllare i costi.*

Limiti della ricerca. *Il lavoro si concentra sul contesto italiano. Ciò significa che un possibile limite può essere rintracciato nel perimetro della ricerca circoscritta ad un singolo contesto*.

Implicazioni pratiche. *Il paper si conclude con un set di suggerimenti relativi alla capacità di gestione per sostenere i processi di innovazione che trasformano le idee in nuove e desiderabili esperienze culinarie per il posizionamento competitivo dei ristoranti di alta cucina.*

Originalità del lavoro. *I risultati evidenziano come l'approccio alla creatività influenzi lo sviluppo delle innovazioni culinarie, che alla fine portano alla performance finanziaria dei ristoranti.*

Parole chiave: *Chef; Creatività; Guida Michelin; Alta cucina; Innovazione; Ristoranti*

Objectives. *Creativity and innovation in haute cuisine restaurants are explored. The paper seeks to understand what influences the creative process in culinary activities and, consequently, explores factors linked to chefs, staff, and restaurant environments.*

Methodology. *The empirical analysis utilizes a Principal Component Analysis based on primary data obtained from a survey of 132 Italian Michelin Stars Chefs.*

Findings. *Three key factors were found to stimulate creativity. The within-individual factor reflects the chef's personal inclination for creativity. The second factor consists of external sources beyond the individual chef that can significantly enhance or constrain creativity. Lastly, an important practical factor encompasses contextual components such as the need to consider financial sustainability and cost control.*

Research limits. *The paper is focused on the Italian context. This means that a possible limit can be viewed in the perimeter of the research circumscribed to a single context.*

Practical implications. *The paper concludes with a suggested set of management capabilities to support the success of innovation efforts that transform novel ideas into new and desirable culinary experiences for competitive positioning in haute cuisine restaurants.*

Originality of the study. *Results aid in understanding how the approach to creativity influences the development of culinary innovations, which ultimately lead to the financial performance of restaurants.*

Key words: *Chef; Creativity; Haute Cuisine; Innovation; Michelin Guide; Restaurant*

[*] Associate professor of *Management* - University of Messina
e-mail: abbatet@unime.it
[•] Assistant professor *of Management* - University of Molise
e-mail: presenza@unimol.it
[♠] Associate professor *of Management* - University of Messina
e-mail: fcesaroni@unime.it
[**] Assistant professor *of Political Economy* - University of Sassari
e-mail: mmeleddu@uniss.it
[**] Full professor of *Strategy* - Dalhousie University
e-mail: Lorn@dal.ca

1. Introduction

Creativity is largely conceptualized as the production of ideas that are original or novel or useful (Amabile, 1996; Shalley *et al.*, 2004) and as having the potential to create value to the firm (George, 2007). Contributions to a firm's products and/or services are considered novel when they have distinctive and original features relative to what is already present in the firm, and they are useful when they are relevant to the strategy of the firm (Cummings and Oldham, 1997).

In the literature concerning creativity, it is consistently argued that creative ideas are effectively precursors of innovation (e.g., George, 2007). Managing creativity in order to generate, develop, accelerate and improve innovation is the key managerial challenge for every firm, especially as they have to perform in the face of increased competition (Stierand *et al.*, 2016). Consequently, firms are increasingly forced to be creative and to introduce innovative products/solutions or innovation in process/organization/marketing (Damanpour, 1987) in order to ensure sustained competitive advantage (Lampel *et al.*, 2000). In this respect, Cohendet and Simon (2015, p. 6) assert that "embodying creative leadership, reinventing customer relationships, engaging customers as individuals and communities, building operational dexterity, empowering employees, amplifying innovation through partnerships, and unlocking a sense of community within the organization, are some of the emerging priorities put forward to transform existing organizations into creative and resilient businesses".

A global study of CEOs by IBM, cited by Nikravan (2012), concluded that creativity is now the most important leadership quality for success in business, outweighing competencies such as integrity and global thinking. While in the past creativity may have been perceived as an optional feature of leadership, today it is no longer optional because leaders who lack creativity are unlikely to move their organizations into the future (Sternberg, 2007). This is particularly critical for cultural industries (e.g., literature, music, visual arts, etc.). They are designed to generate and exploit new ideas and knowledge that are originated in individual or team creativity (i.e., DeFillippi *et al.*, 2007). In this sense, within the context of cultural industries also haute cuisine, observed as a form of artistic expression (Slavich *et al.*, 2014) and as the high end of restaurant industry, has to explore and generate continuous flow of novel ideas and solutions, by combining symbolic, sensory and experiential content with traditions, creative methods, technique and knowledge (Messeni Petruzzelli and Savino, 2015).

Haute cuisine has been defined as a "crafts industry composed of professional organizations in which chefs typically undergo long and arduous practical training that involves the development of their five senses for the purpose of professional cooking" (Gomez *et al.*, 2003, p. 107). In 2010, the United Nations Educational, Scientific, Cultural Organization (UNESCO) formally acknowledged haute cuisine as a creative and cultural industry by adding the French gastronomic meal to its "Representative List of the Intangible Cultural Heritage of Humanity".

Even though haute cuisine restaurants and their chefs are a limited proportion of the overall restaurant sector (roughly 0.5%), they assume a relevant role as benchmarks for others (Ottenbacher and Harrington, 2007). Their economic and cultural importance is underpinned by their value-creation through aesthetic and symbolic work (Svejenova *et al.*, 2007) which makes haute cuisine heavily reliant on the reputation, craftsmanship and personal creativity of their chefs (Balazs, 2002).

In haute cuisine, creativity has been contemplated as a relevant strength to build a competitive advantage through innovation (Ottenbacher and Harrington, 2007). It is strongly based on the chef, its capacity to bring novelty to the market (Capdevila *et al.*, 2015), to develop new languages and methods/practices in the culinary profession (Albors-Garrigós *et al.*, 2018) and to organize time, dedicated space and team work/resources (Svejenova *et al.*, 2007). By extension, extraordinary dishes are an important opportunity for demonstrating the chef's excellence and defending their competitive position in the field of international gastronomy (Bouty and Gomez, 2013). Additionally, due to the increasing competitiveness in the sector, chefs are under pressure to generate original dishes, menus and ingredients for their customers, by seeking and developing memorable and extraordinary gastronomic experiences. In this respect, Ottenbacher and Harrington

(2007, p. 3) suggest that "chefs must be able to adapt and evolve if they want to be successful in the short- and long-term". This situation seems particularly likely for the chefs of fine-dining restaurants, recognized as the leaders of innovation in culinary products and services (Stierand and Lynch, 2008). Haute cuisine chefs can be described as being "extraordinary chefs" (Stierand and Dörfler, 2012) because they develop new ideas and/or combinations of existing ingredients, apply new processes/techniques, develop culinary scientific approaches, exploit new talent and continuously experiment (Fauchart and von Hippel, 2008; Arboleya *et al.*, 2008; Braun and Ihl, 2013). These observations imply that most of the success of haute cuisine restaurants depends on the chefs' creativity, recognizing that heterogeneous components - both within the individual and outside the individual - have an impact on their creative process (Amabile, 1983, 1996). Notwithstanding this recognition, there is considerable controversy surrounding the factors and origins of creativity in haute cuisine (Capdevila *et al.*, 2015; Lane and Lup 2014; Messeni-Petruzelli and Savino 2014; Stierand and Lynch 2008; Svejenova *et al.*, 2007; Gomez *et al.*, 2003).

With this in mind, the paper aims to fill this gap in literature. Specifically, it intends to investigate the main factors that influence the creative process in the haute cuisine segment and, consequently, to explore other related factors linked to chefs, team works and the restaurant's environment.

Two are the main reasons that support the choice of the context of creativity in the haute cuisine. First, haute cuisine assumes a relevant role in defining and influencing trendsetting and quality standards for the culinary industry when it comes to culinary innovations (i.e., Surlemont and Johnson, 2005; Harrington, 2004). Additionally, haute cuisine segment is nowadays highly institutionalized (Gomez and Bouty, 2011) and mainly internationalized (Svejenova *et al.*, 2007). Even though haute cuisine restaurants and their chefs represent a relatively small proportion of the gastronomy sector, their growing economic and socio-cultural dimensions are mainly dictated by their differentiation in terms of innovation into products and services, and also their capacity to create value for developing an inimitable competitive advantage. Second, the ability to generate such differentiated aesthetic and symbolic haute cuisine is largely reliant on the reputation, craftsmanship and personal creativity of chefs. The chefs are expected to have a basic knowledge, open-minded curiosity about the foods, cooking technique from around the word and of all different cultures.

The paper is organized in the following sections. First, the paper introduce the concept of creativity and the main dimensions that have an influence on the creative process in the context of haute cuisine. Then, there is a description of the research methodology and the sample. In the fourth section, findings are analyzed and discussed. In the fifth section, conclusions are underlined. At the end, the paper presents theoretical and managerial implications and proposes suggestions for future research.

2. Theoretical background

2.1 Creative process and haute-cuisine chefs

Creativity has been generally acknowledged as a relevant foundation of value creation in contemporary organizations and environments (Amabile *et al.*, 1996). Creativity has been studied across several disciplines including social sciences, psychology, economics, education and the creative and cultural industries. Creativity has been conceptualized as "the production of novel and useful ideas" (Amabile *et al.*, 1996, p. 1155) and it can occur at different stages and with regard to a large variety of topics, from products and services, to processes, structures, work and tools (George, 2007).

Amabile (1983, 1988, 1996) claims that creativity is variously influenced by three within-individual components: domain-relevant skills (i.e., expertise, knowledge, technical skills, intelligence, etc. in the relevant domain or domains), creativity-relevant processes (i.e., cognitive

style, personality processes characteristics that are conducive to novel thinking, risk-taking, and taking new perspectives on problems), and task motivation (i.e., the intrinsic motivation to engage in the activity out of interest, enjoyment, passion, personal sense of challenge). Specifically, individuals are generally most creative when they feel motivated mainly by the passion, interest, enjoyment, satisfaction, and challenge of the work (Amabile, 1988).

While individual creativity is the most relevant element for organizational innovation, "it is not, by itself sufficient" (Amabile, 1988, p. 125). Beyond the individual, the external social environment can serve to stimulate or deter intrinsic motivation and creativity - a sense of positive challenge in the work itself, working in collaborative teams, and having appropriate mechanisms to encourage the development of new ideas. Therefore, creativity may be seen as a confluence of a wide variety of components that is highest when an intrinsically motivated individual with high domain expertise and high skill in creative thinking works in an environment designed to stimulate and to sustain creativity (Amabile, 1996).

Research has traditionally distinguished two generic types of creativity: the everyday creativity inherent in the average person (Richards, 2007), and the creative genius linked to talents in certain fields (Simonton, 1997). From this perspective, haute cuisine may been described as a creative industry (Svejenova *et al.*, 2013; Messeni Petruzzelli and Savino, 2015). Creative industries are defined as those that have "their origin in individual creativity, skills and talent, and which have the potential for wealth and job creation through the generation and exploitation of intellectual property" (DCMS, 2001, p. 5). In haute cuisine, the necessity of linking creativity, innovation and competitive advantage is becoming more relevant because creativity is now seen as crucial to obtaining the highest levels of distinction - the second and third Michelin stars.

Lampel *et al.* (2000) assert that creativity in gastronomy can be used to introduce novelty for product differentiation and/or to develop a market innovation that may defy current norms and practices. New dishes are the result of novel and atypical combinations, where old ingredients and innovative or familiar techniques are mixed to create new combinations and unusual recipes that are constantly changing, and require working very long and often anti-social hours (Capdevila *et al.*, 2015). The result is substituting, combining, and modifying different ingredients of a particular dish and typically cooking several versions of it (Svejenova *et al.*, 2010).

This process highlights how the activity is extremely iterative and fluid. It requires effort and energy to screen, test, and validate activities and processes. The screening activity consists of the selection of different criteria, such as product quality, availability, seasonality, fit with the personal style of cooking, cost, pricing strategy, balance of the dish itself and fit with the rest of the menu, maintenance of standards, etc. Finally, testing, experimentation and validation are iterative activities that result in accumulating knowledge and ultimately determine the value based on customer acceptance.

Several different factors influence the process of nurturing creativity. Certain of these factors are directly connected to the chef, while others are related to the ecosystem in which the chef exists (Ottenbacher and Harrington, 2007; Pedersen, 2012; Vargas-Sanchez and López-Guzman, 2015). Therefore, chefs make use of personal experience, appropriate methods and techniques, as well as competences and capabilities to generate the idea for a new dish in their mind and utilize tacit knowledge to produce it. The development of new dishes, recipes and menus requires intuitive thinking, technical knowledge, cooking techniques, going beyond the rules and accepted processes, experimenting and searching for the best or better ingredients, making adjustments based on experimental results, and accepting mistakes and failures. These realities of creativity mean that successful products must be continually adjusted and improved by considering the chef's knowledge, accumulated experiences, and complementary technical skills (Ottenbacher and Harrington, 2007).

Albors-Garrigos *et al.* (2013, p. 2) assert that "these chefs usually have their own space and time for creativity and rely on networking with an extensive social context", underscoring the importance of external sources and actors for information and inspiration that lead to innovative activities. Various other researchers have also emphasized the impact of external factors on the

culinary creativity process. For example, Harrington (2004) described, inter alia, the influence of customer and competitor behaviors on culinary innovations. Among the plethora of sources, most often cited is the involvement and interaction with customers (listening to their needs/preferences) as well as restaurant staff, colleagues, and also suppliers of raw materials and ingredients (Bockelmann and Braun, 2014; Paris and Lang, 2015). In addition, feedback can be obtained from presentations at gastronomy and culinary conferences, exhibitions and trade fairs. Gomez and Bouty (2009) add that there are chefs who base their inspiration on collaborating with scientists resulting in new textures and combinations of ingredients.

3. Research methodology

3.1 Sample

The research setting is Italian haute cuisine, as defined by the Michelin Red Guide. The success of fine-dining restaurants is institutionally defined according to the restaurants' ratings by major guidebooks (Rao *et al.* 2003). Of these guidebooks, the famous Michelin Red Guide is internationally acknowledged as the most thorough (Ottenbacher and Harrington, 2010), and is recognized as one of the most important culinary book (Bouty and Gomez, 2013). It is a series of annual publications addressing tourism and gastronomy, and represents the largest global benchmark for assessing the quality of restaurants and hotels at national and international levels (Di Stefano *et al.*, 2015). In detail, the Michelin Guide provides a well-written description of each restaurant and a variety of other symbols to give readers insights into an establishment's ambiance, type of cuisine, specialty dishes, wine list, complementary services, etc.

Obtaining a Michelin star rating is a sign of creativity, quality and innovation, and it is considered one of the top achievements a chef can attain. In particular, the star symbols judge only what is on the plate, meaning quality of products, mastering of flavors and cooking, personality of the cuisine, value for the money and consistency of what the restaurant offers to its customers both throughout the menu and the year. Michelin star ratings are valued by the most relevant stakeholders, including restaurant owners, customers and critics (Durand *et al.*, 2007). The number of stars awarded assesses the chef's quality of craftsmanship (Svejenova *et al.*, 2010). For this reason, the Michelin rating (expressed on a one - to three-star scale) can dramatically affect the reputation and economic well-being of a restaurant (Woodward and Stierand, 2014). Stars are given to the restaurant and not to the chef. However, the success of the restaurant depends largely on the chef's work. Hence, when a chef leaves a restaurant, the stars are "suspended" until the next examination by the Michelin experts. A major criterion for awarding stars to a restaurant is "renewal" - the ability to offer creative and new recipes on a regular basis. The study of Michelin star chefs, is therefore akin to focusing on chefs who have engaged in frequent innovation as part of their professional success (Fauchart and von Hippel, 2006). The focus on the chef is regardless of whether he/she was the owner of the restaurant or an employee.

3.2 Measures

The empirical analysis is based on primary data obtained from a survey of 132 Italian Michelin Star Chefs. In this context, Michelin status works as a proxy for a chef's successful generation and implementation of creative ideas. In fact, Michelin's criteria for awarding stars are originality or the individual signature dishes of a chef, together with consistent high quality. Thus, these criteria refer to both creativity and successful implementation of creative ideas (Lane *et al.*, 2014).

To enhance external validity, the questionnaire was pretested at two levels. The first level of pretesting was conducted sequentially by three academic experts in the field of hospitality. The second level of testing was based on feedback from one Italian 3-star Michelin Chef. Feedback

from the chef was obtained iteratively in two separate interviews (ranging from 20 to 40 minutes each).

The survey was addressed to the chefs of Michelin Star restaurants, with a cover letter explaining the purpose of the study. The analysis was conducted from January to May of 2016. In January, an email was sent to all the chefs listed in the Italian Michelin Red Guide. After one month, those that had not replied were contacted directly by phone.

As the 2016 Guide includes 334 chefs (http://www.scattidigusto.it/2015/12/10/guida-michelin-2016-tutte-le-stelle-dei-migliori-ristoranti-italia/), the sample (of 132 chefs) represents 39.5% of the entire population of Michelin Chefs in Italy. Within the sample, 88% are male and 12% are female; 40% of the respondents are between 40 and 49 years old; 33% are over 50 while chefs under 40 comprise the rest (27%) of the sample. The Michelin star rating of the chef sample is as follows: 83% have one star; 11% have two stars; and 6% have three stars.

The questionnaire was developed and administered in Italian, the mother tongue of the target chefs. It consists of two parts. In the first part, the questions are designed to provide a demographic profile of the chefs (such as age and gender) and their Michelin rating (number of Michelin stars and the year of assignment of the first star). In the second part, questions are related to factors influencing the creative process and are presented as statements to which respondents indicated their level of agreement using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Appendix 1 provides a summary of the statements used in the survey.

3.3 Data Analysis Procedure

To determine the main factors that influence the creative process in culinary activities, a Principal Component Analysis (PCA) was performed on the items related to two groups - idea generation and idea transformation. The items identified for each group were selected based upon a literature review and interviews with experts in the field (academics and chefs).

The idea generation group is comprised of 16 items (Appendix 1) that measure the main dimensions of the idea generation stage using a Likert rating scale from 1 (strongly disagree) to 5 (strongly agree). An example item is “Awareness about who we are and who we want to be”. Four items specifically measure personal opinion regarding the characteristics of the idea generation process. An example item is “the creative process is spontaneous and informal”.

The idea transformation group consists of 6 items. These items are also measured using a Likert rating scale from 1 (strongly disagree) to 5 (strongly agree). An example item is “the relationship with suppliers is a priority”.

PCA is a mathematical procedure that seeks to convert a set of correlated variables into a set of values of linearly uncorrelated variables called principal components. This technique is widely used in data processing and dimensionality reduction (Hair *et al.*, 1989). PCA redistributes all variance into orthogonal components where each principal component is a linear combination of all the original variables. PCA reorganizes variance into a new set of components that is equal to the number of original variables. The first component is a linear combination of variables, which maximizes component score variance and, therefore, captures most of the variance. In this study, PCA is employed using a varimax rotation method.

4. Results and discussion

The empirical analysis reveals the main factors that foster activities, actions and behaviors leading to a continuous flow of novel and useful ideas that can be turned into valuable and innovative products/services/solutions or procedures/methods and processes. The understanding of these factors is useful for managing the innovation processes of a firm and serves as a mainspring for the beginnings of innovation.

The PCA analysis, performed using STATA Version 14.1, identified eight components, all of them reporting eigenvalues greater than one. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (to establish the adequacy of the components extracted) was calculated. The KMO is an index (between 0 and 1) that indicates the proportion of variance among the variables that might have common variance. A value between 0.50 and 1.00 implies a satisfactory analysis (Kaiser, 1974). The computed index of 0.72 indicates that the analysis was satisfactory. However, in this analysis, only the first three variables (components) are retained and extracted as they displayed acceptable Cronbach's alpha levels (employed to test the internal consistency of each factor).

The three components display alphas between 0.6 and 0.77 meaning that the items have good internal consistency.

The proportion of total variance explained describes the relative weight of each factor in the total variance and the cumulative variance indicates the amount of variance explained (Escoffier and Pagès, 1988).

As Table 1 illustrates, the three components accounted for 31% of the total variance. The first factor, accounting for 11% of variance, has been labelled "within-individual components", as it consists of items related to the chef's contribution in terms of personal knowledge, skills and behaviour. The second factor, "external sources/outside components" (explaining 10% of the variance), includes items related to the interaction between the chef and external sources such as customers and suppliers. The third factor, "environmental/contextual components" (also explaining 10% of the variance), contains attributes related to the company management as well the business environment.

Tab. 1: Factors contributing to the creative process

	Variable Contribution	**Variance explained % (proportion)**	**Cumulative Variance % (cumulative)**	**Cronbach's alpha**
Component 1: Within-Individual Components		0.11	0.11	0.77
I am aware about who I am and who I want to be	0.37			
My creative process is spontaneous and informal	0.54			
My creative process is influenced by my personal characteristics (emotional status, curiosity, observation)	0.46			
Component 2: External Sources/Outside Components		0.10	0.21	0.60
In creating new products I often start by trying to improve existing products	0.43			
My relationship with suppliers is a priority	0.32			
The testing of a new product, through trial and error, is imperative	0.36			
The accumulated learning and experience from customers and their behavior is essential	0.55			
Component 3: Environmental/Contextual Components		0.10	0.31	0.65
I think that financial sustainability is achieved with cost control. In creating new products I often start by trying to improve existing products	0.57			
I think that the willingness to utilize a variety of techniques is important	0.47			
I think that it is important to adapt to the current situation (e.g. the economic crisis)	0.35			

Source: our elaboration

According to respondents, the most important factors contributing to the creative process are related to the within-individual components. These are expressed in terms of awareness about themselves and their personal characteristics (emotional status, curiosity, observation, etc.) that lead to a spontaneous and informal creative process.

The contribution of the external sources/outside components reveals the importance of interaction with customers (to test new products) and suppliers and identifies the importance of the analysis of existing products. The latter is seen as a fundamental step in proposing new products for the market. Lastly, the environmental/contextual component assumes a relevant and very practical role. Specifically, respondents attach importance to financial sustainability as well as the availability of adequate techniques. Another basic requirement captured in this component is the need to consider external conditions, such as the economic crisis, that may precipitate the need to pursue different strategies.

In summary, it is important to note that the three components are almost equally important in explaining the overall variance. Therefore, these components and the respective items contained within them are all important in influencing the creative process in haute cuisine.

5. Conclusions

The paper is focused on creativity in haute cuisine restaurants. It is inspired by the belief that creativity is a basic source for innovation processes in haute cuisine activities. The goal has been to explore the main factors influencing the creative process of Michelin starred chefs and ultimately culinary innovation.

The empirical analysis reveals three main factors that affect creativity very differently. These three factors are viewed by chefs as important antecedents to a continuous and sustainable flow of novel and useful ideas that generate the innovative dishes, services, and technical procedures necessary for success in a challenging market where consumers are increasingly sophisticated, discerning and demanding.

The three factors are found to be nearly equally important. Slightly more important than the other two is the within-individual factor, which captures the chef's personal contribution to creativity in terms of relevant knowledge and creative-thinking skills, observation, ability (e.g. divergent thinking), personality (e.g. self-esteem), motivation, emotional state, values, and social influences (e.g. rewards). Most important from the within-individual factor, is that the creative process is kept spontaneous and informal allowing for unconstrained thinking and experimentation.

Another factor, external sources/outside components, confirms that creativity is enhanced or constrained by different items/components beyond the individual chef. This is consistent with the assertion of Amabile (1983, 1996) and Shalley *et al.* (2004) that the surrounding environment (e.g. the interactions between the individual and the social context as well as the physical environment) importantly increases or inhibits creativity. An important component of the external environment factor is the receptivity of customers to the innovative ideas/products. While seemingly obvious, respondents stress that understanding receptivity to a new dish (innovation) requires accurate analysis and interpretation of customer behavior. Also important externally, perhaps more incrementally, is the analysis of ways to improve existing products or combinations of products/services. Finally, the interactions and relationships with diverse suppliers are described as catalysts in the early stages of idea creation and development. In fact, these external parties are viewed as direct or indirect sources of information and knowledge that contribute to the generation of ideas and ultimately lead to new and improved products, services or ways of doing things.

The last factor, environmental/contextual components, represents the need to monitor financial sustainability and control costs. Without this significant analysis, even innovative ideas/products which are well-received by customer target groups and by haute cuisine critics, may not be financially viable to develop, implement, and consequently sell. This also leads to the consideration of the availability of adequate techniques to produce a particular innovation.

6. Theoretical and practical implications

The present research contributes to the existing literature in two ways. First, it extends knowledge regarding how creativity is influenced by different factors in cultural and creative industries. More specifically in the restaurant sector and broader hospitality industry, creativity is increasingly attracting the interest of scholars because it is recognized as crucial for maintaining a strong position in the market that must be sustained over time. This is also consistent with the findings of Presenza *et al.* (2017) where successful innovation processes are shown to arise from a trial-and-error approach, which is only possible if the chef has a genuine entrepreneurial spirit. In this sense, entrepreneurial spirit refers to the drive towards identifying business opportunities and persistently taking risks to pursue them.

Second, it contributes to the academic debate on creativity and innovation in haute cuisine activities. It suggests key factors that effectively stimulate actions and behaviors leading to a continuous flow of novel and useful ideas that can be turned into innovations. Moreover, it empirically identifies factors that have a significant influence on chef creativity allowing for experimentation with original dishes aimed at providing valuable culinary experiences to customers. These findings are aligned with those of Amabile (1983, 1996) who, in other settings, finds that the creative process is influenced by within-individual components, the surrounding environment, and external components.

The results have straightforward implications for managerial capabilities. Specifically, managers must be capable of understanding both the influence of individual characteristics and environmental context as having the potential to either hinder or foster creativity. That is, managers should pay attention to the influence of individual-context interaction on individual creativity. For example, managers should give chefs the time, resources and mandate to constantly experiment. This allows the restaurant to fully benefit from the chefs personal talent, creativity and desire to innovate.

Managers should also encourage and facilitate interactions and relationships between the chef and other restaurant staff as well as with external parties such as suppliers and critics. These interactions are seen as fundamental to gaining exposure to new ideas and information that lead to innovation and the creation of novel combinations of products, services, and experiences. Thus it is important for managers to facilitate an organizational culture within the restaurant that encourages spontaneity, free thinking, and communication.

7. Limitations and future lines of research

The study has limitations that offer scope for further research. The analysis is limited to the Michelin Star Chefs of Italy. Therefore, further research on haute cuisine in various and different countries could be useful to understand the geographic generalizability of the observed patterns and findings and to avoid size bias. Additional research could also include other hospitality sectors and the broader creative and cultural industry in order to assess the generalizability across industries as to what stimulates creativity and innovation processes and, consequently, the success of organizations in these settings.

References

ALBORS-GARRIGOS J., BARRETO, V., GARCÍA-SEGOVIA P., MARTÍNEZ-MONZÓ J., HERVÁS-OLIVER J. L. (2013), "Creativity and innovation patterns of haute cuisine chefs", *Journal of Culinary Science & Technology*, vol. 11, n. 1, pp. 19-35.

ALBORS-GARRIGÓS J., MARTINEZ MONZO J., GARCIA-SEGOVIA P. (2018), "Knowledge dynamics as drivers of innovation in Haute Cuisine and culinary services", Industry and Innovation, vol. 25, n. 1, pp. 84-111.

AMABILE T.M. (1983), "Social psychology of creativity: A componential conceptualization", *Journal of Personality and Social Psychology*, vol. 45, n. 2, pp. 997-1013.

AMABILE T.M. (1988), "A model of creativity and innovation in organizations", *Research in Organizational Behavior*, vol. 10, n. 1, pp. 123-167.

AMABILE T.M. (1996), *Creativity in context*, Westview Press, Boulder, CO.

ARBOLEYA J.C., OLABARRIETA I., ADURIZ A.L., LASA D., VERGARA J., SANMARTÍN E., ITURRIAGA L., DUCH A., MARTÍNEZ DE MARAÑÓN I. (2008), "From the Chef 's Mind to the Dish: How Scientific Approaches Facilitate the Creative Process", *Food Biophysics*, vol. 3, n. 2, pp. 261-268.

BALAZS K. (2002). "Take One Entrepreneur: The Recipe for Success of France's Great Chefs". *European Management Journal*, vol. 20, n. 3, pp. 247-259.

BOCKELMANN L., BRAUN A. (2014), An Individual Perspective on Open Innovation Capabilities in the Context of Haute Cuisine. Paper presented at the Druid Society Conference, 16-18 June, Copenhagen. Retrieved March 2, 2016, from http://druid8.sit.aau.dk/acc_papers/pqa69332kg08ihfey5gvxafo8yvn. pdf

BOUTY I., GOMEZ M.L. (2013), "Creativity in Haute Cuisine: Strategic Knowledge and Practice in Gourmet Kitchens", *Journal of Culinary Science & Technology*, vol. 11, n. 1, pp. 80-95.

BRAUN A., IHL C. (2013), The mixed blessing of openness in creative industries? The case of European chefs de cuisine. Paper presented at the Druid Society Conference, 17-19 June, Barcelona. Retrieved March 2, 2017, from http://druid8.sit.aau.dk/acc_papers/vm0hn20bgbonurrfn9fqyed76101.pdf

CAPDEVILA I., COHENDET P., SIMON L. (2015), "Establishing New Codes for Creativity through Haute Cuisine", *Technology Innovation Management Review*, vol. 5, n. 7, pp. 36-44.

COHENDET P., SIMON L. (2015), "Introduction to the Special Issue on Creativity in Innovation", *Technology Innovation Management Review*, vol. 4, n. 7, pp. 5-13.

CUMMINGS A., OLDHAM G.R. (1997), "Enhancing creativity: Managing work contexts for the high potential employee", *California Management Review*, vol. 40, n. 1, pp. 22-38.

DAMANPOUR F. (1987), "The Adoption of Technological, Administrative, and Ancillary Innovations: Impact of Organization Factors", *Journal of Management*, vol. 13, pp. 675-88.

DEFILLIPPI R., GRABHER G., JONES C. (2007), "Introduction to Paradoxes of Creativity: Managerial and Organizational Challenges in the Cultural Economy". *Journal of Organizational Behavior*, vol. 28, pp. 511-521.

DCMS (Department for Culture, Media and Sport) (2001). Creative Industries Mapping Document 2001 Department for Culture, Media and Sport. Retrieved March 2, 2017, from
http://www.culture.gov.uk/Reference_library/Publications/archive_2001/ci_mapping_doc_(2001)

DI STEFANO G., KING A.A., VERONA G. (2015), "Sanctioning in the wild: rational calculus and retributive instincts in gourmet cuisine", *Academy of Management Journal*, vol. 58, n. 3, pp. 906-931.

DURAND R., RAO H., MONIN P. (2007), "Code and Conduct in French Cuisine: Impact of Code Changes on External Evaluations", *Strategic Management Journal*, vol. 28, n. 5, pp. 455-472.

ESCOFFIER B., PAGES J. (1988), *Analyses factorielles simples et multiples. Objectifs, méthodes et interprétatio*n. Dunod, Paris.

FAUCHART E., VON HIPPEL E. (2008), "Norms-based Intellectual Property Systems: The Case of French Chefs", *Organization Science*, vol. 19, n. 2, pp. 187-201.

FAUCHART E., VON HIPPEL E. (2006), Norms-based intellectual property systems: the case of French chefs. MIT Sloan School of Management, Working Paper 4576-06. Retrieved March 2, 2017, from http://web.mit.edu/evhippel/www-old/papers/vonhippelfauchart2006.pdf

GEORGE J.M. (2007), "Creativity in organization", *Academy of Management Annals*, vol. 1, n. 1, pp. 439-477.

GOMEZ M. L., BOUTY I., DRUCKER-GODARD C. (2003), "Developing knowing in practice: Behind the scenes of haute cuisine", in D. Nicolini, S. Gherardi, D. Yanow (Eds.), *Knowing in organizations: A practice based approach* (pp. 100-125), ME Sharpe, New York.

GOMEZ M.L., BOUTY I. (2009), "Unpacking Knowing Integration: A Practice-based Study in Haute Cuisine", *ESSEC Working paper*. Retrieved March 2, 2017, from https://halshs.archives-ouvertes.fr/hal-00554745/document

GOMEZ M.L., BOUTY I. (2011), "The emergence of an influential practice: food for thought", *Organization Studies*, vol. 32, n. 7, pp. 921-940.

HAIR J.F., ANDERSON R.E., TATHAM R.L. (1989), *Multivariate Data Analysis*, MacMillan Publishing Company, New York.

HARRINGTON R.J. (2004), "Part I: The Culinary Innovation Process, a barrier to imitation", *Journal of Foodservice Business Research*, vol. 7, n. 3, pp. 35-57.

LAMPEL J., LANT T., SHAMSIE J. (2000), "Balancing Act: Learning from Organizational Practices in Cultural Industries", *Organization Science*, vol. 11, n. 3, pp. 263-269.

LANE C., LUP D. (2014), "Cooking under Fire: Managing Creativity and Innovation in Haute Cuisine", *Paper* presented at the Druid Society Conference, 16-18 June, Copenhagen. Retrieved March 2, 2017, from http://druid8.sit.aau.dk/acc_papers/0nucok7940qo2xq5b5jvn5clej0m.pdf

MESSENI-PETRUZELLI A., SAVINO T. (2014), "Search, Recombination, and Innovation: Lessons from Haute Cuisine", *Long Range Planning*, vol. 47, n. 4, pp. 224-238.

MESSENI-PETRUZZELLI A., SAVINO T. (2015), "Reinterpreting tradition to innovate: the case of Italian haute cuisine", *Industry and Innovation*, vol. 22, n. 8, pp. 677-702.

NIKRAVAN L. (2012), "Why creativity is the most important leadership quality. Chief Learning Officer", Retrieved March 2, 2017, from http://www.clomedia.com/articles/why-creativity-is-the-most-important-leadership-quality

OTTENBACHER M.C., HARRINGTON R.J. (2007), "The Innovation Development Process of Michelin-Starred Chefs", *International Journal of Contemporary Hospitality Management*, vol. 19, n. 6, pp. 444-460.

OTTENBACHER M.C., HARRINGTON R.J. (2010), "Strategies for achieving success for innovative versus incremental new services", *Journal of Services Marketing*, vol. 24, n. 1, pp. 3-15.

PARIS T., LANG G. (2015), "Managing Collective Processes in the Creative Industries: Insight from Perfumery and Haute Cuisine", *Global Business and Organizational Excellence*, vol. 35, n. 1, pp. 67-76.

PEDERSEN L.B. (2012), *Creativity in Gastronomy. Exploring the connection between art and craft*, Copenhagen Business School, Copenhagen.

PRESENZA A., ABBATE T., VARGAS-SÁNCHEZ A., HARRISON T. (2016), "Creativity and Innovation: The Case of Haute Cuisine", *International Journal of Entrepreneurship and Innovation Management*, DOI: 10.1504/IJEIM.2016.10001114

PRESENZA A., ABBATE T., CASALI G.L., PERANO M. (2017), "An innovative approach to the intellectual property in haute cuisine", *International Journal of Hospitality Management*, vol. 65, pp. 81-88.

RAO H., MONIN P., DURAND R. (2003), "Institutional Change in Toque Ville: Nouvelle Cuisine as an Identity Movement in French Gastronomy", *American Journal of Sociology*, vol. 108, n. 4, 795-843.

RICHARDS R. (2007), "Everyday creativity: Our hidden potential", in R. Richards (ed.), *Everyday creativity and new views of human nature* (pp. 25-54), American Psychological Association, Washington, DC.

SHALLEY E.C., ZHOU J., OLDHAM G.R. (2004), "The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here?", *Journal of Management*, vol. 30, n. 6, pp. 933-958.

SLAVICH B., CAPPETTA R., SALVEMINI S. (2014), "Creativity and the Reproduction of Cultural Products: The Experience of Italian Haute Cuisine Chefs". International Journal of Arts Management, vol. 16, n. 2, pp. 29-41.

SIMONTON D.K. (1997), "Creative productivity: A predictive and explanatory model of career trajectories and landmarks", *Psychological Review*, vol. 104, pp. 66-89.

STERNBERG R.J. (2007), "Creativity as a habit", in Ai-Girl Tan (Ed.), *Creativity A handbook for teachers* (pp. 3-25). World Scientific Publishing, Singapore.

STIERAND M., DÖRFLER V. (2012), "Reflecting on a phenomenological study of creativity and innovation in haute cuisine", *International Journal of Contemporary Hospitality Management*, vol. 24, n. 6, pp. 946-957.

STIERAND M., LYNCH P. (2008), "The Art of Culinary Innovations", *Tourism and Hospitality Research*, vol. 8, n. 4, pp. 337-350.

STIERAND M., BOJE D., FEULS M., HALEY U., DÖRFLER V. (2016), "Towards a theory of organizational constraints on entrepreneurship, play, and creativity", *Paper* presented at BAM 2016, Newcastle upon Tyne, United Kingdom.

SURLEMONT B., JOHNSON C. (2005), "The role of guides in artistic industries: The special case of the "star system" in the haute-cuisine sector", *Managing Service Quality: An International Journal*, vol. 15, n. 6, pp. 577-590.

SVEJENOVA S., MAZZA C., PLANELLAS M. (2007), Cooking Up Change in Haute Cuisine: Ferran Adrià as an Institutional Entrepreneur", *Journal of Organizational Behavior*, vol. 28, n. 5, pp. 539-561.

SVEJENOVA S., PLANELLAS M., VIVES L. (2010), "An Individual Business Model in the Making: a Chef's Quest for Creative Freedom", *Long Range Planning*, vol. 43, pp. 408-430.

SVEJENOVA S., SLAVICH B., ABDEL-GAWAD S. (2013), "Business models of creative entrepreneurs, the case of haute cuisine chefs", in Jones C., Lorenzen M., Sapsed J. (Eds.), *Handbook of Creative Industries* (pp. 1-13). Oxford University Press, Oxford.

VARGAS-SANCHEZ A., LOPEZ-GUZMAN T. (2015), "Contemporary management and innovation: Learning from the gastronomy sector", *Journal of Food, Agriculture & Environment*, vol. 13, n. 1, pp. 132-138.

WOODWARD K., STIERAND M. (2014), "Stars war: Conflicts between chefs and restaurant guides", in Pantelidis I. (Ed.), *The handbook of hospitality* (pp. 227-236), Sage, London.

TRACK - STRATEGIA TRA TEORIA E PRATICA

Disastri naturali e resilienza d'impresa: uno studio applicativo nel retail

ELISA MARTINELLI, GIULIA TAGLIAZUCCHI

Disastri naturali e Resilienza d'impresa: uno studio applicativo nel retail

ELISA MARTINELLI[*] GIULIA TAGLIAZUCCHI[•]

Abstract

Obiettivi. *Il contributo studia il tema della resilienza d'impresa ai disastri naturali, verificando l'impatto di alcune principali determinanti sulla capacità di resilienza di un campione di piccoli imprenditori commerciali al dettaglio colpiti dal sisma 2012 verificatosi in Emilia.*

Metodologia. *La ricerca è stata svolta somministrando un questionario strutturato ad un campione di imprenditori commerciali colpiti dal sisma. I dati raccolti sono stati elaborati applicando una regressione multipla di tipo gerarchico .*

Risultati. *Le evidenze empiriche mostrano che tutte le determinanti indagate hanno un impatto significativo e positivo sulla capacità di resilienza degli imprenditori al dettaglio. Primario appare l'effetto della capacità di orientamento al mercato e della resilienza individuale. Variabili di controllo quali genere, età e titolo di studio non influenzano le evidenze emerse, tranne il possesso della laurea.*

Limiti della ricerca. *L'articolo si pone come un primo lavoro di tipo esplorativo. Studi futuri potrebbero utilmente estendere l'analisi ad altri antecedenti, quali ad esempio una diversa dotazione di risorse e competenze dei retailer esposti ad un evento critico di tipo naturale.*

Implicazioni pratiche. *Una più approfondita conoscenza delle determinanti della resilienza organizzativa permette alle imprese commerciali di meglio valutare su quali fattori investire e di quali conoscenze/capacità dotarsi per fronteggiare eventi imprevisti. Oltre ad implicazioni manageriali, lo studio offre spunti di riflessione di public policy.*

Originalità del lavoro. *Il tema della resilienza d'impresa ai disastri naturali trova limitata applicazione negli studi di management sulla piccola impresa e in particolare in quelli di retail. Poche sono poi le ricerche empiriche e prevalentemente di tipo qualitativo. Il paper intende pertanto contribuire a colmare tali gap, riportando i risultati di un primo lavoro quantitativo.*

Parole chiave: *resilienza; disastri naturali; impresa commerciale al dettaglio; sisma.*

Objectives. *The paper is aimed at studying entrepreneur' resilience to natural disasters, verifying the impact of some main determinants on the resilience capacity of small retailers hit by the 2012 Emilia earthquake.*

Methodology. *The research consisted in administering a structured questionnaire to a sample of small retailers hit by the earthquake. Data was processed applying a hierarchical multiple regression.*

Findings. *Findings show that all the investigated constructs exert a significant and positive effect on the resilience capacity of small retailers. The major impact is exerted by market orientation and individual resilience. Control variables like gender, age and education do not exert any effect, apart from the possession of a graduate degree.*

Research limits. *The paper consists in a preliminary work, explorative in nature Next studies should consider further organisational resilience antecedents, such as different configurations of retailers' resources and competences.*

Practical implications. *A deeper knowledge on the organisational resilience antecedents can enable small retailers to better evaluate their investments and understand with which kind of abilities/competences they should be equipped in order to front natural disasters. Managerial implications are complemented by public policy suggestions.*

Originality of the study. *The study of entrepreneurs' resilience to natural disasters is limited in the management literature on small firms, particularly as concerns retailing. Empirical research lacks too, apart from a small number of qualitative studies. Our paper aims at filling in these gaps, reporting the preliminary findings of a quantitative survey.*

Key words: *resilience; natural disasters; small retailers; earthquake.*

[*] Associato di *Economia e Gestione delle Imprese* - Università di Modena e Reggio Emilia
e-mail: elisa.martinelli@unimore.it.

[•] Dottoranda XXXI ciclo, corso di dottorato in Lavoro Sviluppo ed Innovazione - Università di Modena e Reggio Emilia
e-mail: giulia.tagliazucchi@unimore.it

1. Introduzione

I disastri naturali sono eventi distruttivi di crescente manifestazione in tutto il mondo, che non hanno risparmiato la nostra penisola. È noto dalla cronaca come l'Italia manifesti una crescente fragilità ambientale, con alluvioni, inondazioni, terremoti, e altri eventi naturali che stanno colpendo con maggior frequenza e incisività. In particolare, nel periodo 2002-2017 l'Italia è stata colpita da 9 forti calamità naturali che si stima, sulla base di dati forniti della Commissione Europea, abbiano provocato danni per un totale di 49,9 miliardi di euro (AdnKronos, 2017). L'impatto e la vastità di tali catastrofi sono variabili: se, fortunatamente, non sempre causano perdite di vite umane, il tessuto economico e sociale rimane fortemente deturpato, con danni ingenti alle attività economiche ed alle comunità colpite. A livello micro, infatti, i disastri naturali rappresentano una minaccia potenzialmente imprevedibile e onerosa per la continuità delle operazioni di un'impresa e per la sua sopravvivenza. Ad oggi, gli studi che analizzano gli effetti dei disastri naturali sulle piccole imprese sono ancora limitati (Chang e Falit-Baiamonte, 2002; Dahles e Susilowati, 2015; Deitch e Corey, 2011; Kroll *et al.*, 1990; Liu *et al.*, 2012; Parker *et al.*, 2009; Webb *et al.*, 2000), e solo in minima parte la letteratura accademica si è occupata nello specifico delle attività commerciali, nonostante il ruolo centrale di tale settore nei processi di ripristino dopo un evento catastrofico (Baker *et al.*, 2007; Liu *et al.*, 2012). Infatti, se un facile accesso ai servizi commerciali è dato per scontato nella quotidianità, il ruolo del settore retail è cruciale durante i periodi di crisi, in quanto attore in grado di fornire supporto e primo aiuto (Peterson *et al.*, 2010). Analizzando i limitati contributi che si sono occupati della resilienza e dell'impatto dei disastri naturali sul retail e, più nello specifico, sulle piccole imprese che svolgono attività di commercio al dettaglio, si evidenzia come le conseguenze siano di varia natura: effetti e danni diretti sull'attività; danni indiretti e cambiamenti nei comportamenti d'acquisto e della domanda, a causa delle mutate condizioni e preferenze di una comunità colpita da un disastro naturale. Inoltre , le modalità con cui gli imprenditori commerciali al dettaglio reagiscono e si adattano alle mutate condizioni del territorio colpito inevitabilmente influiscono sui percorsi di sviluppo dell'impresa.

In questo contesto, il presente contributo intende studiare il tema della resilienza d'impresa ai disastri naturali, verificando l'impatto di alcune principali determinanti sulla capacità di resilienza di un campione di imprenditori commerciali al dettaglio colpiti dal sisma avvenuto in Emilia nel 2012. La forza distruttiva mostrata dal sisma, le caratteristiche del territorio colpito e gli incisivi effetti sul tessuto economico e commerciale rendono tale disastro naturale un interessante caso di studio.

Tramite una survey con questionario strutturato, lo studio si propone di verificare come le capacità tipiche che dovrebbero contraddistinguere un retailer, ovvero capacità di vendita e di orientamento al mercato, il grado di resilienza individuale e il sostegno del capitale sociale vadano ad impattare sulla capacità di resilienza degli imprenditori commerciali al dettaglio. Sebbene disastri naturali di immediato impatto distruttivo (Cutter *et al.*, 2008), come terremoti, uragani, inondazioni, richiedano una risposta repentina; solo successivamente si può valutare se un individuo, un territorio, una comunità o un'organizzazione erano preparati per farvi fronte (Bharma *et al.*, 2011) e hanno agito in maniera resiliente. Riteniamo quindi di fondamentale importanza valutare a cinque anni di distanza le azioni messe in campo dai soggetti che, colpiti da una calamità naturale, hanno agito con prontezza e resilienza, continuando la propria attività di business e, in taluni casi, migliorandola. . Ne derivano implicazioni non solo di tipo manageriale, ma anche di public policy, di guida alle istituzioni che dovrebbero supportare lo sviluppo di capacità adeguate di prevenzione e risposta a questo tipo di calamità.

Il presente lavoro si compone in questo modo: dopo aver analizzato la letteratura sulla resilienza ed i disastri naturali, gli studi sulla resilienza nel settore del retail, il quarto paragrafo presenta il modello e le ipotesi di ricerca, il quinto la metodologia adottata. Successivamente, si presentano e discutono i risultati dell'indagine e, in chiusura, le conclusioni e le limitazioni dello studio condotto.

2. Resilienza e disastri naturali

La letteratura accademica che si occupa dell'impatto delle catastrofi naturali ha iniziato solo di recente a porre le imprese al centro dell'analisi (Zhang *et al.*, 2009), evidenziando come le piccole imprese siano solitamente quelle più duramente colpite, a causa della maggior incidenza dei danni diretti e indiretti causati dalla calamità (Webb *et al.*, 2000; Alesch *et al.*, 2001).

Un disastro naturale, infatti, produce un effetto diretto sulle attività economiche, provocando danni fisici agli stabilimenti, ai beni strumentali e alle attrezzature, intaccando parzialmente o totalmente le scorte ed i prodotti stoccati. Tendenzialmente, tali danni diretti, se ingenti, possono portare alla sospensione dell'attività, anche per tempi prolungati, mettendone a rischio la permanenza sul mercato. Il verificarsi di una calamità naturale potrebbe anche comportare l'interruzione di servizi esterni fondamentali, tra cui le linee di comunicazione, le forniture di gas, acqua ed elettricità, le infrastrutture logistiche e di trasporto (Tierney, 1997; Wasileski *et al.*, 2011; Zhang *et al.*, 2009). Inoltre, numerosi e variabili possono essere gli effetti indiretti, determinati dalla reazione della comunità e del territorio a tale avversità - si considerino a titolo esemplificativo gli effetti migratori della popolazione, che tendenzialmente è portata a lasciare i territori colpiti. La ripresa di un'attività di business appare quindi come non scontata.

Secondo Alesch *et al.* (2001), affinché si possa parlare di ripresa è necessario che un'attività presente in un territorio colpito da un disastro naturale, permanga sullo stesso per un tempo significativo dopo l'evento distruttivo e che tale permanenza sia associata ad una condizione di profitto in linea con le mutate condizioni economiche, quindi non necessariamente ai livelli pre-disastro. La ripresa di un'attività, tuttavia, non sempre è sinonimo di attività resiliente, sebbene in termini generici, tale termine è usato per indicare la capacità che caratterizza sistemi, individui e organizzazioni in grado di resistere, reagire e recuperare davanti ad un evento critico che ne metta a rischio stabilità e funzionamento, minimizzandone gli effetti (Linnenluecke, 2017; Sutcliffe e Vogus, 2003, Williams *et al.*, 2017). In ambito organizzativo, tuttavia, la resilienza non può essere solo interpretata come capacità di recupero al fine di ritornare ad uno stato preesistente, così come la prospettiva ecologica (Holliing, 1973) e poi quella socio-ecologico sistemica hanno sostenuto (Walker *et al.*, 2004). L'agire resiliente, infatti, dovrebbe anche essere volto a sfruttare sfide e criticità per accrescere le proprie risorse e capacità. In tal senso, la resilienza implica la possibilità di sviluppare nuove competenze e creare nuove opportunità (Sutcliffe e Vogus, 2003; Lengnick-Hall e Beck, 2003Lengnick-Hall *et al.*, 2011; Martinelli *et al.*, 2017), configurandosi come capacità di relazionarsi dinamicamente con l'ambiente di riferimento (Williams *et al.*, 2017); capacità che ha a che fare non solo con la risposta e l'assorbimento delle variazioni, ma anche con il mantenimento, il recupero e la costruzione ex-novo di risorse e competenze. Agire in maniera resiliente non solo minimizza l'impatto di eventi negativi come i disastri naturali, ma è fondamentale per assicurare la continuità dell'attività e, soprattutto, rinnovarla e migliorarla rispetto allo stato d'essere prima dell'insorgere della criticità (Kantur e İşeri Say, 2012).

In ambito manageriale, diversi studi hanno tentato di individuare le dimensioni della resilienza. Tra questi, Kantur e İşeri Say (2012), teorizzano un modello integrato in cui la resilienza organizzativa, definita sulla base delle dimensioni precedentemente proposte da Bruneau *et al.* (2003) - *Robustness*, *Redundancy*, *Resourcefulness*, *Rapidity*, ha quattro antecedenti specifici: la consapevolezza dei punti di forza e di vulnerabilità dell'organizzazione; il grado di coinvolgimento degli attori all'interno dell'impresa e di impegno collettivo nella ricerca di soluzioni creative; la capacità di sfruttare le risorse tangibili e intangibili al fine di trasformare condizioni avverse in nuove opportunità di crescita; l'azione pro-attiva nello sviluppo di soluzioni innovative in risposta ad un evento critico.

3. Resilienza nel settore retail

Dall'analisi della letteratura sulla *retail resilience* si evince la mancanza di contributi specifici sulla capacità di resilienza a livello di impresa al dettaglio, soprattutto in contesti di disastro

naturale. Si tratta infatti di un comparto di imprese, che mostra una maggiore vulnerabilità rispetto ad altri settori produttivi (Wasileski *et al.*, 2011; Webb *et al.*, 2002). Precedenti studi hanno infatti evidenziato come i settori della vendita al dettaglio e dei servizi presentano tendenzialmente un andamento peggiore rispetto a quello dei settori manifatturiero ed edilizio. Tale trend risulta vero anche in casi di terremoto: il sisma di Loma Prieta ha fortemente inciso sul commercio al dettaglio e sui servizi (Kroll *et al.*, 1990); similarmente, una grandissima percentuale di imprese retail ha subito notevoli perdite economiche a Seattle dopo il sisma Nisqually del 2001 (Chang e Falit-Baiamonte, 2003). Tale vulnerabilità è riconducibile alla maggiore rilevanza dei danni indiretti: oltre a danni diretti legati al danneggiamento strutturale dei punti vendita, dei beni strumentali a supporto dell'attività al dettaglio e dei prodotti in assortimento, il settore del commercio pesantemente risente della minore propensione all'acquisto da parte delle popolazioni colpite (Meszaros, 2002) e dei trend di aggiustamento dei consumi e di cambiamento delle preferenze della domanda (Frank e Schvaneveldt, 2016). Tra i possibili danni indiretti, la riduzione delle vendite conseguente alla diminuzione dei flussi di clienti è una delle maggiori sfide che il piccolo imprenditore al dettaglio deve affrontare, determinata dai trasferimenti di popolazionee dalla generalizzata minore propensione all'acquisto (Zhang *et al.*, 2009). Accanto a ciò, la piccola dimensione imprenditoriale tende a scontrarsi anche con le minori risorse di finanziamento, al contrario degli operatori affiliati a catene di franchising che possono avere maggiori possibilità di accesso al capitale (Runyan, 2006).

Nonostante ciò, alcuni studi hanno evidenziato come il commercio sia il primo settore a stabilizzarsi dopo circa un anno dall'evento critico, anche se su livelli decisamente più contenuti e con una perdita accentuata di piccole imprese (Wasileski *et al.*, 2011). Tale ripresa è trainata dal ruolo centrale che la rete commerciale locale riveste nell'immediato post-calamità: una volta superata la fase di prima emergenza l'atto del consumo consente alla comunità locale il ritorno ad un certo grado di normalità ed il raggiungimento di nuovi equilibri (Baker *et al.*, 2007; Liu *et al.*, 2012). Nel medio-lungo periodo, tuttavia, gli effetti della calamità naturale sulla struttura della rete commerciale e sugli assetti del settore possono essere sostanziali. Ad esempio, lo studio di Pearson *et al.* (2011), condotto sul commercio al dettaglio a cinque anni dall'uragano Katrina, ha evidenziato un forte calo del numero di dettaglianti. Nel caso specifico, diversi sono stati i *driver* di tale effetto. In primo luogo, i livelli di indebitamento, legati ad una veloce ripresa dell'attività di business, si sono rilevati insostenibili nel medio periodo. In secondo luogo, il fatto che la popolazione si sia stabilizzata su livelli più contenuti rispetto al pre-uragano ha portato ad una riduzione della domanda, con conseguente chiusura di alcuni punti di vendita. Inoltre, i vari settori merceologici hanno proposto un'offerta distributiva in eccesso rispetto al numero di residenti. Quelle emerse dallo studio di Pearson *et al.* (2011) sono solo alcune delle conseguenze che gli imprenditori al dettaglio sono chiamati ad affrontare. Gli imprenditori commerciali devono affrontare anche le mutate preferenze di acquisto nel post-calamità, tra cui: una diminuzione nell'acquisto di beni di lusso (Meszaros, 2002; Zhang *et al.*, 2009), una maggiore attenzione al prezzo ed una conseguente sostituzione di beni con prodotti meno costosi, ed un incremento di soluzioni di "fai-da-te" (Liu e Black, 2011).

A dispetto di quanto affermato fino ad ora, i disastri naturali, se affrontati correttamente, possono anche essere fonte di nuove e potenziali opportunità. Ad esempio, si è osservato come le imprese commerciali in grado di riaprire nell'immediato post-calamità abbiano registrato un significativo aumento delle vendite, complice la presenza di un minor numero di concorrenti (Runyan, 2006). Ancora, si è evidenziato come il comportamento socialmente responsabile dei commercianti, che si mettono al servizio della popolazione colpita dalla calamità naturale garantendo una continuità nel servizio a discapito del profitto, sia premiato dalla clientela con un maggior tasso di fidelizzazione (Liu *et al.*, 2012). Ne emerge il ruolo critico dei comportamenti messi in atto nella fase di emergenza, ai fini della ripresa a lungo termine dell'attività commerciale al dettaglio. In ultima analisi, ruolo distintivo assume anche il piccolo imprenditore commerciale: Teece (2012), infatti, sostiene che minori sono le dimensioni di impresa, maggiore è la probabilità che le sue capacità dipendano da uno o pochi individui; diventa pertanto fondamentale valutare la resilienza individuale dell'imprenditore commerciale, oltre alle caratteristiche dell'impresa.

4. Il modello e le ipotesi di ricerca: le determinanti della resilienza organizzativa

L'obiettivo dello studio è quello di esplorare il costrutto della resilienza organizzativa nelle sue dimensioni costitutive. Essendo la resilienza una caratteristica latente, tale capacità potenziale può essere colta ed analizzata solo nel momento in cui si manifesta (Linnenluecke, 2017). Similarmente a precedenti studi (Pearson *et al.*, 2011) si ricostruiscono le azioni intraprese al momento del disastro naturale a cinque anni di distanza, in modo da valutare l'efficacia delle strategie messe in campo e la resilienza di piccole imprese commerciali al dettaglio. Il sisma dell'Emilia del 2012 si configura quindi come esperimento naturale e contesto di riferimento dell'indagine.

Dall'analisi della letteratura accademica sul tema, appare come siano diverse le dimensioni che impattano sulla resilienza organizzativa. Come mostrato nella figura 1, il modello proposto vede l'azione sinergica di diversi fattori: il capitale sociale; l'approccio individuale dell'imprenditore, inteso come resilienza individuale; la capacità di vendita e la capacità di orientamento al mercato, tra le strategie più generali di gestione dell'attività commerciale. Gli item utilizzati per l'analisi del costrutto della resilienza organizzativa e delle dimensioni che impattano su di essa derivano da scale già validate dalla letteratura accademica, opportunamente tradotte e adattate al contesto della piccola impresa commerciale al dettaglio. Le variabili latenti oggetto di indagine sono quindi state valutate ad analizzate con l'utilizzo di specifiche scale di Likert a 7 punti, per la cui analisi di affidabilità si rimanda alla Tab. 4 nella sezione di presentazione dei risultati.

Per l'analisi del costrutto della resilienza organizzativa si è adottata la scala elaborata da Kantur e İşeri Say (2015), che per primi propongono una scala di misurazione non incentrata sugli antecedenti, ma sulla capacità di resilienza stessa, dove diventano centrali elementi legati alla robustezza dell'impresa di fronte all'evento critico e la sua capacità di adattarsi facilmente e velocemente alle nuove condizioni ambientali. Questa è pertanto la variabile dipendente del modello proposto.

Da precedenti studi empirici in tema di disastro naturale si è evidenziato come il comportamento dei commercianti e le strategie adottate nell'immediato post-calamità siano determinati per la ripresa dell'attività. In particolare, la capacità di orientamento al mercato – intesa come capacità di lettura e adeguamento pro-attivo ai cambiamenti delle esigenze e dei desideri della domanda in termini di assortimento e livello di servizio offerti – e la capacità di vendita – considerata come la capacità dell'imprenditore commerciale di generare vendite – si ritengono essere particolarmente importanti nell'affrontare gli effetti diretti ed indiretti portati dal terremoto (Pearson *et al.*, 2011), così come i mutamenti nelle caratteristiche della domanda nel post-calamità (Meszaros, 2002; Zhang *et al.*, 2009).

In primo luogo, strategie di orientamento al mercato, che tengano in considerazione le mutate condizioni economiche della popolazione colpita, ed incentrate sulla continuità di servizio, possono essere premiate dalla clientela con un maggior tasso di fidelizzazione (Liu *et al.*, 2012). Tale dimensione è stata rilevata sulla base della scala ad opera di Verreynne (2016), isolando gli item incentrati sulle capacità di analisi del mercato e valutazione delle condizioni e delle opportunità emergenti. In particolare, la natura degli item è volta ad indagare la capacità di cogliere nuove opportunità di mercato e di interpretare velocemente i cambiamenti della domanda, la tendenza a sperimentare nuovi modi di erogare il servizio commerciale e di modificare l'offerta di prodotto/servizio.

In secondo luogo, dati i mutamenti della domanda e delle preferenze di acquisto che caratterizzano il post-calamità (Liu e Black, 2011), si ritiene che le capacità di vendita dell'imprenditore possano giocare un ruolo fondamentale nel supportare la ripresa. In quanto abilità preesistente e parte del bagaglio professionale, tale elemento è stato determinato chiedendo agli intervistati di valutare una serie di indicatori di andamento della propria attività commerciale in rapporto a quello che l'intervistato ritiene essere il suo principale concorrente, in particolare in riferimento alla capacità di incrementare le vendite da un anno all'altro e al livello medio di fatturato.

H1: Le capacità di vendita del piccolo imprenditore commerciale al dettaglio hanno un impatto significativo e positivo sulla capacità di resilienza del retailer.

H2: Le capacità di orientamento al mercato del piccolo imprenditore commerciale al dettaglio hanno un impatto significativo e positivo sulla capacità di resilienza del retailer.

Oltre a ciò, come evidenziato nell'analisi della letteratura, nel caso di piccole imprese la capacità di resilienza dell'impresa è strettamente legata alla resilienza individuale dell'imprenditore (Teece, 2012). Si è ritenuto quindi opportuno inserire item che potessero cogliere tale elemento, in particolare, è stata mutuata una scala dalla letteratura piscologica, ampiamente utilizzata in altri studi sugli effetti dei disastri naturali, ad opera di Connor e Davidson (2003).

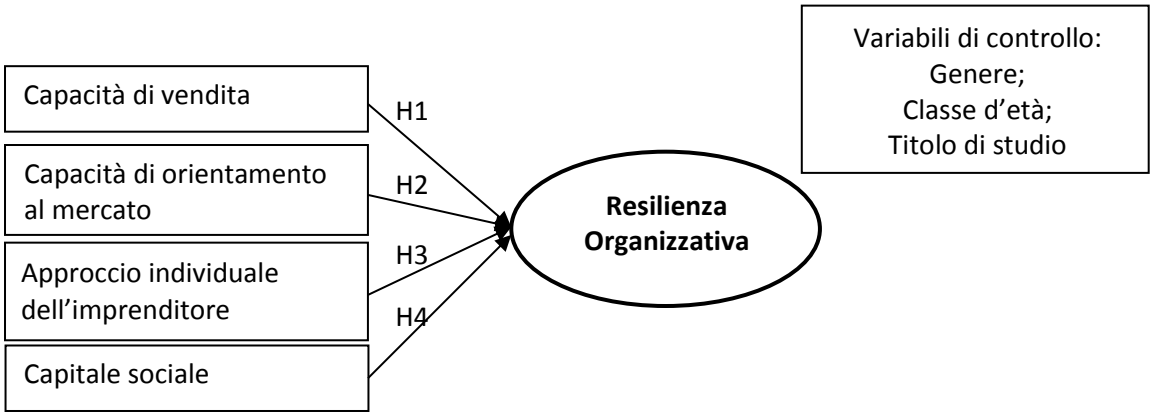
H3: L'approccio individuale alla resilienza ha un impatto significativo e positivo sulla capacità di resilienza del retailer.

In ultimo, l'importanza del capitale sociale è stata evidenziata in una serie di studi (Pal *et al.*, 2014; Lengnick-Hall e Beck, 2005) che sottolineano il ruolo delle relazioni tra gli individui, basate su reciprocità e fiducia, come riserva di ulteriori risorse e competenze a cui attingere in caso di necessità. La resilienza d'impresa dipende infatti anche dalla capacità di coltivare relazioni basate su fiducia e supporto all'interno della rete di individui e imprese con cui si interagisce (parenti, amici, conoscenti, clienti e fornitori). In letteratura tale fattore relazionale è denominato come capitale sociale ed esprime il sostegno e l'aiuto che può essere messo in atto da coloro che fanno parte di un certo network in caso di eventi critici (Dubini e Aldrich, 1991), consentendo la mobilizzazione delle risorse che ne deriva (Adler e Kwon, 2002). Nel valutare l'importanza del capitale sociale, si pensi ad esempio ai benefici collegati ad un rapporto fornitore-retailer basato su solidi legami fiduciari: in caso di disastri naturali si è osservata la disponibilità di alcuni fornitori ad allungare i tempi di pagamento o a sospendere il saldo delle fatture nel periodo di emergenza (Chamlee-Wright e Storr, 2014; Martinelli *et al.*, 2017). L'analisi di tale dimensione costitutiva della resilienza organizzativa si è basata, nello specifico, su una scala validata ad opera di Makkonen *et al.* (2014), da cui sono stati estratti i soli elementi inerenti alle reti di relazioni personali e professionali che gli imprenditori commerciali al dettaglio hanno saputo attivare e sviluppare nel tempo.

H4: Il capitale sociale ha un impatto significativo e positivo sulla capacità di resilienza del retailer.

Dall'analisi della letteratura ci si aspetta per ogni componente sopraelencata una relazione diretta e positiva sulla capacità di ripresa resiliente dell'impresa, così come mostrato nella seguente Figura 1. Nel modello sono state inserite alcune variabili di controllo legate ad aspetti socio-demografici del campione di imprenditori indagato, ovvero: genere; classe d'età; titolo di studio.

Fig. 1: I fattori determinanti della resilienza organizzativa



Fonte: ns. elaborazione

5. Metodologia

5.1 Il contesto di indagine: il sisma del 2012 in Emilia

La peculiarità del sisma che ha colpito l'Emilia nel 2012, che per la prima volta in Italia si manifesta in un'area altamente industrializzata, e le conseguenze che ne sono derivate a livello economico e sociale, lo rendono un interessante contesto di indagine ai fini del presente studio.

Il sisma ha colpito in due ondate di forte intensità. La prima scossa è avvenuta il 20 maggio 2012 (magnitudo ML 5,9) e la seconda il 29 maggio 2012 (ML 5,8), provocando 28 morti e 300 feriti, 45.000 sfollati, e danni pari a circa 13 miliardi di euro (Regione Emilia Romagna, 2017a).

Gli effetti di tale terremoto sono stati amplificati da vari fattori. In primo luogo, il fatto che il territorio non fosse classificato come potenzialmente sismico lo hanno reso del tutto inaspettato. In secondo luogo, il disastro si è sommato agli effetti della crisi economica allora in corso, che aveva già notevolmente indebolito il sistema economico locale, in particolare le aziende e le attività commerciali più piccole. Infine, gli effetti sono stati amplificati dal carattere fortemente industriale e produttivo dell'area, una tra le più produttive e densamente industrializzate del Paese, di cui sviluppa il 2% del PIL., con la presenza di numerose imprese e distretti industriali a vocazione internazionale. I settori più duramente colpiti sono stati quello manifatturiero, in particolare i comparti biomedicale e tessile, e la vendita al dettaglio (Regione Emilia Romagna, 2012). Nei cinque anni successivi al terremoto, il ripristino di edifici e attrezzature danneggiati e il trasferimento temporaneo delle attività hanno richiesto contributi per 1,748 milioni di euro (Regione Emilia Romagna, 2017a). Per quanto riguarda le attività commerciali, 2.137 unità appartenenti al settore della vendita al dettaglio sono state coinvolte nel processo di ricostruzione; si stima che circa la metà siano stati completati (Regione Emilia Romagna, 2017b).

5.2 Il questionario

Dopo una prima fase esplorativa basata su focus group, che hanno coinvolto sia imprenditori commerciali al dettaglio colpiti dal sisma sia rappresentanti dei comuni e delle associazioni di categoria del commercio, per meglio comprendere le difficoltà incontrate e le capacità attivate durante il sisma e nel recovery, è stato definito, testato e somministrato un questionario ad un campione di piccoli imprenditori commerciali dei comuni di Cavezzo, Mirandola, Novi di Modena e San Felice sul Panaro, scelti come esemplificativi per i forti danni subiti. Al fine della buona riuscita della survey, si sono coinvolte le amministrazioni locali dei Comuni selezionati per la selezione delle imprese commerciali attive e per chiedere supporto nella comunicazione dell'indagine ai commercianti. La raccolta dei dati ha impegnato tre intervistatori, opportunamente addestrati, ed è stata svolta nel periodo Febbraio - Aprile 2017.

Il questionario è formato da più batterie di domande, incentrate su un tema specifico, ognuna delle quali è composta da domande aperte, successivamente riclassificate, e domande a risposta multipla, organizzate su scale di Likert a 7 punti. Le sezioni sono così divise: informazioni anagrafiche e descrittive sull'imprenditore e sulla sua attività commerciale; capacità e competenze possedute; analisi del costrutto della resilienza organizzativa.

Il questionario è stato somministrato a piccoli imprenditori che svolgono attività di vendita al dettaglio di beni, selezionati tra quelli che hanno avuto esperienza diretta del sisma e che fossero in attività al momento della rilevazione. Sulla base delle indicazioni fornite dalle Amministrazioni locali, sono stati contattati tutti i commercianti che rientrassero in tali criteri; il riscontro generale è stato mediamente positivo.

5.3 Il campione

A conclusione della somministrazione dei questionari, il campione si compone di 207 piccoli imprenditori al dettaglio ed appare così diviso sui Comuni di interesse, coerentemente con la

dimensione della rete commerciale in loco: Cavezzo 17,4% , Mirandola 42%, San Felice sul Panaro 26,6% e Novi di Modena 14%. Nel 97% dei casi circa è stato intervistato il titolare dell'attività o uno dei soci; residuali sono i casi di interviste a collaboratori o dipendenti.

Tab. 1: Caratteristiche demografiche del campione

Variabile	Freq.	Min	Max	Media	St. Dev.	%
Nazionalità	207			.	.	100
- Italiana	201					97,1
- Straniera	6					2,9
Genere	207			.	.	100
- Uomo	88					42,5
- Donna	119					57,5
Livello istruzione	205			.	.	100
- Elementari	8					3,9
- Medie	76					37,1
- Superiori	106					51,7
- Laurea	15					7,3
Età in anni	206	27	78	53,24	10,70	.
Esperienza nel settore in anni	205	5	60	25,53	12,36	.

Fonte: ns. elaborazioni

Dalla Tabella 1 si nota come la nazionalità sia nella quasi totalità dei casi italiana (2,9% stranieri), e come le donne (57,5%) siano numericamente maggiori degli uomini (42,5%); l'età media è di 53 anni. La maggior parte dei rispondenti dichiara di essere in possesso di un diploma di scuola superiore (57,1%), un terzo circa di un diploma di scuola media inferiore (37,1%); residuali sono le lauree (7,3%) e le licenze di scuola elementare (3,9%). Per quanto riguarda l'esperienza nel settore del commercio, in media il dato si assesta sui 25 anni, con un massimo ed un minimo molto variabili. Il 10,6% dichiara poi di avere più di un punto vendita, per lo più all'esterno del territorio comunale; mentre il 17,9% ha avuto precedenti esperienze lavorative nel settore del commercio.

La specializzazione merceologica all'interno del campione (Tab. 2), rispecchia la natura e la caratterizzazione del piccolo al commercio al dettaglio anche in termini quantitativi.

Tab. 2: Specializzazione merceologica del campione

Categoria	%
Abbigliamento, accessori, calzature, intimo, pelletteria	22,7
Alimentari, gastronomia, gelateria, panetteria, ortofrutta, macelleria, salumeria	20,3
Antiquariato, belle arti e decorazioni, tappezzeria, vetreria	2,9
Armi, articoli pesca	1,4
Arredamento	3,9
Articoli da regalo, bomboniere	1,4
Biciclette, ricambi e accessori moto, vendita pneumatici	1,9
Cartolibreria, edicola, giocattoli	6,3
Casalinghi e biancheria casa, piccoli e grandi elettrodomestici	3,4
Farmacia, erboristeria, integratori	4,8
Ferramenta, materiale elettrico, materiale plastico	3,9
Fiori e piante, sementi, macchine da giardinaggio, mangimi, legnami	5,8
Fotografia	1,9
Gioielleria, oreficeria, preziosi e semipreziosi	2,9
Merceria, tessuti	2,4
Ottico	1,9
Profumeria, cura casa e cura persona	2,4
Sanitaria, ortopedia	1,0
Tabacchi e giochi lotto	5,3
Vendita autoveicoli	1,9
Vendita carburante	1,4

Fonte: ns. elaborazioni

Coerentemente con la numerosità attesa a livello di specializzazioni merceologiche presenti sul mercato, le categorie dominanti nel campione sono abbigliamento, accessori, calzature, intimo, pelletteria; a seguire alimentare e affini.

6. Risultati del modello di regressione

L'analisi della letteratura ha rilevato come siano necessari studi e analisi più sistematiche e di stampo quantitativo per meglio comprendere le dimensioni che sottendono alla resilienza organizzativa. Nel presente lavoro si analizzano l'impatto della capacità di vendita, della capacità di orientamento al mercato, dell'approccio individuale dell'imprenditore e del capitale sociale sulla resilienza di piccoli imprenditori commerciali. Gli item inerenti a questi aspetti sono stati recepiti, tradotti e adattati al contesto di indagine, verificati nella loro robustezza, fino ad associare un valore alla resilienza organizzativa delle imprese commerciali al dettaglio analizzate. Dopodiché, tramite la costruzione di un'analisi di regressione, si è verificato quali determinanti hanno impattato maggiormente sulla resilienza organizzativa e con quale intensità.

Tab. 3: I costrutti e gli item indagati

Costrutti indagati	Item	Media	St. Dev.
Resilienza organizzativa	La mia impresa va dritta per la sua strada e preserva la sua posizione competitiva sul mercato	4,86	1,452
	La mia impresa riesce a individuare diverse modalità di soluzione ai problemi	5,03	1,194
	La mia impresa riesce a permanere sul mercato anche in condizioni avverse	4,99	1,555
	La mia impresa non rinuncia al percorso di sviluppo intrapreso	5,15	1,344
	La mia impresa riesce ad attivarsi velocemente	4,86	1,321
	La mia impresa è in grado di generare opportunità anche da circostanze sfavorevoli	4,51	1,461
	La mia impresa riesce a mettere velocemente in campo azioni adeguate quando è necessario	5,1	1,243
Capacità di vendita	Fatturato (vendite)	3,54	1,434
	Capacità di incrementare le vendite da un anno all'altro	3,79	1,3
Capacità di Orientamento al mercato	Sono solito cogliere le nuove opportunità che si creano in nuovi mercati	5,02	1,23
	Cerco di offrire spesso nuovi prodotti o servizi sul mercato	5,6	0,996
	Sono in grado di cogliere ed interpretare velocemente i cambiamenti della domanda	5,34	1,128
	Sperimento spesso nuovi modi di erogare il servizio commerciale	4,91	1,292
Resilienza individuale	Sono capace di adattarmi al cambiamento	5,71	1,187
	Riesco a far fronte a qualunque cosa accada	5,12	1,34
	Cerco sempre di trovare il lato positivo delle cose	5,66	1,297
	Far fronte allo stress mi rafforza	4,85	1,511
	Tendo a riprendermi in fretta dopo una malattia o un'avversità	5,78	1,122
	Riesco a raggiungere gli obiettivi nonostante gli ostacoli	5,54	1,206
	Riesco a rimanere focalizzato anche sotto stress	5,51	1,11
	Sbagliare non mi scoraggia	5,56	1,077
	Mi ritengo una persona forte	5,59	1,106
	Riesco a gestire le emozioni negative	5,52	1,105
Capitale Sociale	Da chi ritiene di avere ricevuto maggiore supporto subito dopo il sisma ?		
	Fornitori	4,71	1,986
	Clienti	4,89	1,784
	Comune	3,11	1,754
	Associazioni di categoria	3,39	1,977
	Altri commercianti	3,5	1,903
	Banche e istituti finanziari	2,98	1,751
	Amici e conoscenti	4,82	1,962
	Parenti	4,57	2,065

Fonte: ns. elaborazioni

Di seguito si presentano le misure di affidabilità - α di Cronbach (Tab. 4). - dei costrutti utilizzati per la rilevazione di tali variabili latenti.

Tab. 4: Resilienza organizzativa e determinanti: i costrutti

Dimensione	N. item	Media	Dev. St.	α di Cronbach
Resilienza Organizzativa	7	4,931	0,988	0,859
Capacità di vendita	2	3,647	1,282	0,840
Capacità di orientamento al mercato	4	5,228	0,902	0,803
Approccio individuale dell'imprenditore	10	5,467	0,904	0,910
Capitale sociale	4	4,001	1,166	0,796

Fonte: ns. elaborazioni

Le relazioni indagate sono state valutate utilizzando un'analisi di regressione multi-gerarchica. Le variabili indipendenti sono quindi inserite in passaggi successivi per isolarne gli effetti, e determinando il valore di R^2 in ogni fase. La tecnica, inoltre, si presenta come cautelativa nei confronti dell'assunzione di endogeneità e permette di valutare se il modello è sufficientemente robusto e completo, oltre che parsimonioso. L'analisi è stata eseguita su 201 delle 207 unità che compongono il campione, a causa di vari valori mancanti in alcuni dei questionari raccolti. Genere, età e livello di istruzione sono state inserite come variabili di controllo. Per due delle variabili osservate, specificamente classe di età e titolo di studio conseguito, sono state create tre variabili dummy rispetto sia alle quattro classi di età rilevate (18-35 anni; 35-50 anni; 51-65 anni; over 65 anni), sia alle quattro tipologie di titoli di studio potenzialmente indicabili (elementari; medie, superiori, laurea), prendendo come baseline il gruppo più consistente dal punto di vista numerico - 51-65 anni per la classe d'età; diploma di scuola superiore per il titolo di studio - ed aggiungendole poi, insieme al genere, nell'ultimo step della regressione gerarchica.

Analizzando nel dettaglio i risultati della regressione (Tab. 5), si evidenzia come la bontà di adattamento (R-quadrato), ad eccezione del primo modello in cui si sono considerate solo le variabili demografiche di controllo, sia elevata, anche considerando l'originalità dello studio e la mancanza di simili ricerche empiriche in letteratura. In particolare, R-quadrato aumenta costantemente dal secondo passaggio in poi ed in modo altamente significativo ($p \leq 0{,}001$). Si può quindi affermare che i regressori scelti sono un punto di partenza molto buono per la valutazione delle dimensioni costitutive della resilienza organizzativa nel caso di disastri naturali, arrivando a spiegare il 48% circa della varianza totale della variabile dipendente.

Le variabili di controllo, inserite per prime nel modello, non contribuiscono allo stesso in modo significativo ($p > 0{,}1$).

Tab. 5: Modello di regressione

Modello	R-quadrato	Errore std. della stima	Modifica R-quadrato	Durbin-Watson
1 (a)	0,045	0,983	,045	
	a. Regressori: (costante), Genere, Età per classi, Titolo di studio,			
2 (b)	0,395	0,786	,350	
	b. regressori: (costante), Genere, Età per classi, Titolo di studio, Cap. vendita, Cap. orientamento al mercato			
3 (c)	0,455	0,748	, 060	
	c. Regressori: (costante), Genere, Età per classi, Titolo di studio, Cap. vendita, Cap. orientamento al mercato; Resilienza individuale			
4 (d)	0,483	0,731	,0,27	1,92
	Regressori: (costante), Genere, Età per classi, Titolo di studio, Cap. vendita, Cap. orientamento al mercato; Resilienza individuale, Capitale sociale			

Fonte: ns. elaborazioni

Passando a valutare gli effetti delle determinanti sul costrutto della resilienza organizzativa (Tab.6), si evidenzia come le variabili di controllo inserite risultino essere non significative ad eccezion fatta della variabile dummy relativa al possesso di un titolo di laurea ($p < 0{,}05$). Ne deriva che, in generale, le caratteristiche socio-demografiche del campione di imprenditori osservato

appaiono ininfluenti ai fini della capacità di resilienza organizzativa. Gli imprenditori commerciali al dettaglio che posseggono un diploma di laurea mostrano invece una capacità di resilienza maggiore rispetto a coloro che hanno titoli di studio di livello inferiore.

Aggiungendo i costrutti relativi alle competenze di vendita e di mercato, il modello diventa altamente significativo e così anche nei successivi ed ulteriori step in cui sono state inserite prima la resilienza individuale e poi il capitale sociale: le determinanti hanno tutte un effetto positivo e significativo (p-value < 0,001), così come rimane positivo e significativo il contributo dato dal livello di istruzione universitaria. Analizzando nel dettaglio il contributo delle singole determinanti, si evidenzia come la capacità di orientamento al mercato riporti un coefficiente (valore β), e quindi un impatto, maggiore rispetto alle altre determinanti, in tutti e tre i modelli significativi; seguita dalla resilienza individuale, inserita nel terzo modello e confermata nel quarto. I risultati, in linea generale, appaiono coerenti e consistenti con il modello proposto e con quanto affermato dalla letteratura accademica sul tema.

Tab. 6: Analisi dei regressori

Modello	**β**	**Errore Std.**	**Sign.**
1 (a)			
Costante		0,16	0
Età (18-35) Dummy età 1	0,045	0,322	0,544
Età (36-50) Dummy età 2	0,107	0,162	0,168
Età (over 65) Dummy età 3	0,106	0,24	0,172
Elementari Dummy istruzione 1	-0,101	0,387	0,19
Medie Dummy istruzione 2	0,055	0,158	0,478
Laurea Dummy istruzione 3**	0,157	0,283	0,033
Genere	-0,028	0,145	0,701
2 (b)			
Costante		0,362	0
Età (18-35) Dummy età 1	0,048	0,263	0,427
Età (36-50) Dummy età 2	0,077	0,131	0,216
Età (over 65) Dummy età 3	0,1	0,192	0,109
Elementari Dummy istruzione 1	-0,031	0,311	0,621
Medie Dummy istruzione 2	0,033	0,127	0,593
Laurea Dummy istruzione 3**	0,14	0,226	0,018
Genere	0,039	0,117	0,505
Cap. Vendita*	0,303	0,047	0
Cap. orientamento al mercato*	0,438	0,065	0
3 (c)			
Costante		0,387	0,148
Età (18-35) Dummy età 1	0,07	0,251	0,231
Età (36-50) Dummy età 2	0,053	0,125	0,377
Età (over 65) Dummy età 3	0,08	0,184	0,177
Elementari Dummy istruzione 1	-0,069	0,299	0,246
Medie Dummy istruzione 2	0,012	0,121	0,841
Laurea Dummy istruzione 3**	0,143	0,215	0,011
Genere	0,005	0,113	0,934
Cap. Vendita*	0,257	0,046	0
Cap. orientamento al mercato*	0,313	0,069	0
Resilienza Individuale*	0,291	0,07	0
4 (d)			
Costante		0,395	0,621
Età (18-35) Dummy età 1	0,065	0,245	0,253
Età (36-50) Dummy età 2	0,041	0,122	0,483
Età (over 65) Dummy età 3	0,096	0,18	0,1
Elementari Dummy istruzione 1	-0,047	0,295	0,426
Medie Dummy istruzione 2	0,037	0,12	0,526
Laurea Dummy istruzione 3**	0,139	0,21	0,011
Genere	-0,018	0,111	0,747
Cap. vendita*	0,221	0,045	0
Cap. orientamento al mercato*	0,297	0,068	0
Resilienza individuale*	0,283	0,068	0
Capitale sociale**	0,179	0,048	0,002

* p<0,001
** p<0,05

Fonte: ns. elaborazioni

Tali risultati pongono l'accento sulla prospettiva individuale a livello di singola impresa al dettaglio, ma analizzandola in un'ottica omnicomprensiva sistemica. La maggior parte dei contributi sulla *retail resilience* si inseriscono, ad oggi, all'interno degli studi di *urban retail*, definendo la resilienza come un processo dinamico ed evolutivo, piuttosto che come una proprietà di un sistema (Martin, 2012, Wrigley e Dolega, 2011). In tale prospettiva, la chiave interpretativa utilizzata è affine alla prospettiva socio-ecologico sistemica, sostenendo una riorganizzazione spontanea delle attività commerciali al dettaglio (Lang, 2011), in contrasto alla potenziale efficacia della riorganizzazione controllata attraverso il coordinamento e l'indirizzo degli attori istituzionali (Dolega e Celińska-Janowicz, 2015). Tali prospettive trovano un equilibro all'interno del lavoro di Erkip *et al.* (2014), che distingue tra resilienza "spontanea", definita come la strategia di reazione che gli imprenditori commerciali al dettaglio intraprendono come singoli, dalla resilienza "pianificata", che richiede il coinvolgimento delle istituzioni a livello locale e della comunità, in ottica onnicomprensiva. In tale contesto, il modello proposto integra ed analizza congiuntamente, da una parte, le capacità individuali e personali dei piccoli imprenditori commerciali e, dall'altra, il ruolo del capitale sociale. Si evidenziano quindi come le capacità imprenditoriali di vendita e di orientamento al mercato, accanto ad una spiccata indole personale all'agire resiliente, siano di traino alla strategia di reazione del singolo imprenditore, definita spontanea da Erkip *et al.* (2014), e diventino determinanti della resilienza, che viene quindi analizzata come una proprietà e capacità. Tale reazione a livello individuale, tuttavia, è ulteriormente rafforzata dalla presenza del capitale sociale, ponendo per esteso importanti riflessioni sul ruolo delle istituzioni e della comunità locale, integrando il livello della risposta immediata individuale e spontanea con quello di una risposta più pianificata e controllata ad un superiore livello di aggregazione.

7. Implicazioni e conclusioni

I disastri naturali sono avvenimenti di crescente manifestazione e intensità, particolarmente temibili per la continuità d'impresa e che richiedono distintive capacità di gestione, di improvvisazione e riconfigurazione del patrimonio di risorse e competenze d'impresa. Tuttavia, per mettere in campo una risposta resiliente è necessario comprendere più a fondo le dimensioni e le modalità con cui la resilienza si manifesta. Riteniamo pertanto che il primo contributo di tale analisi sia una preliminare riflessione sulle determinati della resilienza organizzativa, nel caso specifico di piccoli imprenditori commerciali, con particolare riferimento alle competenze di mercato, di vendita, individuali e relazionali che caratterizzano la configurazione delle attività imprenditoriali al dettaglio. Il lavoro estende pertanto la conoscenza sul tema della resilienza organizzativa nel retail verificando come siano queste abilità a influenzare in modo forte la capacità di resilienza degli imprenditori retail. In questo senso, l'analisi concorre all'ampliamento della conoscenza teorica sugli effetti dei disastri naturali sull'attività d'impresa, ambito che appare essere ancora limitato (Liu *et al.*, 2012; Battisti e Deakins, 2017), così come importante si ritiene essere il contributo che il lavoro presenta nell'applicare il tema della resilienza organizzativa ad un ambito scarsamente analizzato, come quello della vendita al dettaglio.

All'indomani del sisma, i piccoli imprenditori commerciali hanno dovuto fronteggiare effetti e conseguenze devastanti e sono stati chiamati alla valutazione e alla generazione di nuove soluzioni per il riposizionamento dell'attività commerciale. Consapevoli delle mutate condizioni economiche della comunità e del diminuito flusso di clientela, causato da una migrazione fuori dal cratere di una parte della popolazione, i piccoli imprenditori commerciali che mostrano maggiori capacità di resilienza sono coloro che hanno operato scelte strategiche in termini di offerta, mostrando le loro capacità di analisi e interpretazione del mercato e capacità di vendita, evidenziate come strategie di gestione dell'attività commerciale precursori della resilienza. Nondimeno, un ruolo estremamente importante è svolto anche dalla resilienza individuale dell'imprenditore stesso e dalla sua abilità come persona di rispondere ad eventi inattesi, ponendosi in ottica di resilienza. Hanno mostrato come è possibile adattarsi al cambiamento, con auto-controllo e *self-efficacy* (Markman *et al.*,

2005), facendo delle esperienze vissute una parte del bagaglio di conoscenze e risorse (Ayala e Manzano, 2014; Cooper *et al.*, 2004). In ultimo, emerge il ruolo del capitale sociale (Aldrich e Meyer, 2015; Lengnick-Hall *et al.*, 2011): soprattutto nel caso delle piccole imprese, che possiedono risorse scarse in termini di denaro, tempo e capitale umano (Van Gils, 2005), il supporto della rete di relazioni formali e informali può diventare una importante fonte di informazioni e supporto, così come di aiuti operativi concreti, anche in termini economici.

Si evidenzia inoltre il positivo contributo del livello di istruzione sulla capacità di resilienza organizzativa: gli imprenditori commerciali al dettaglio che hanno seguito un percorso di qualificazione a livello universitario mostrano livelli superiori di resilienza rispetto a coloro che si sono fermati a gradi inferiori di istruzione. Ne deriva l'importanza di sostenere e promuovere la formazione avanzata di livello terziario anche in un settore, come quello distributivo al dettaglio, tradizionalmente riconosciuto come settore-rifugio.

Relativamente alle implicazioni dello studio condotto, si ritiene che possano essere duplici. In primo luogo, in ambito manageriale, una più approfondita conoscenza delle determinanti della resilienza organizzativa permette alle imprese commerciali di meglio valutare su quali fattori investire e di quali conoscenze/capacità dotarsi per assicurare l'operatività, anche di fronte a eventi imprevisti. In secondo luogo, lo studio offre spunti di riflessione di public policy, in considerazione di come il successo nei processi di ripresa dell'intera comunità si fondi sulla resilienza dei soggetti e delle organizzazioni che la compongono (McManus *et al.*, 2008). Una maggiore consapevolezza del ruolo del commercio al dettaglio nel facilitare il recupero di condizioni di normalità consente di indirizzare le politiche di ricostruzione a livello urbanistico e di fornire utili indicazioni di programmazione. In ultima analisi, le evidenze emerse dal caso di studio, coinvolgendo piccoli imprenditori commerciali dell'Emilia colpiti dal sisma del 2012, potranno essere di esempio e guida nella sfortunata evenienza di altre calamità naturali.

Nonostante gli utili contributi che riteniamo la ricerca offra alla comunità scientifica, all'imprenditoria e alle istituzioni e organizzazioni che ne supportano lo sviluppo, lo studio non è esente da limiti. Innanzitutto si tratta di un primo lavoro di tipo esplorativo che ha tenuto in considerazione un numero importante, anche se comunque circoscritto, di possibili determinanti della capacità di resilienza d'impresa. Studi futuri potrebbero utilmente estendere l'analisi ad altri antecedenti, quali ad esempio alle risorse tangibili dell'impresa e/o a competenze ulteriori rispetto a quelle specificamente utilizzate nel presente studio, così da capire se una diversa dotazione di risorse e competenze dei retailer esposti ad un evento critico di tipo naturale possa portare a diverse capacità di resilienza imprenditoriale. Inoltre, l'analisi di regressione effettuata consente di dare una prima lettura delle relazioni tra le variabili, ma la verifica delle relazioni emerse tramite l'applicazione di sistemi di equazioni strutturali potrebbe in prospettiva fornire una comprensione più solida e completa della bontà del modello proposto.

Bibliografia

ADNKRONOS (2017), "Da terremoti a alluvioni, oltre 49mld di danni in 15 anni, 10 settembre", testo disponibile al sito http://www.adnkronos.com/soldi/economia/2017/09/10/terremoti-alluvioni-oltre-mld-danni-anni_7AAC3gmZqlopURxIeB3GtN.html?refresh_ce.

ADLER P., KWON S. (2002), "Social capital: prospects for a new concept", *Academy of Management Review*, vol. 27, n. 1, pp. 17-40.

ALESCH D.J., HOLLY J.N., MITTLER E., NAGY R. (2001), *Organizations at risk: What happens when small businesses and not-for-profits encounter natural disasters*, Public Entity Risk Institute PERI.

BAKER S.M., HUNT D.M., RITTENBURG T.L. (2007), "Consumer vulnerability as a shared experience: Tornado recovery process in Wright, Wyoming", *Journal of Public Policy & Marketing*, vol. 26, n. 1, pp. 6-19.

BATTISTI M., DEAKINS D. (2017), "The relationship between dynamic capabilities, the firm's resource base and performance in a post-disaster environment", *International Small Business Journal*, vol. 35, n. 1, pp. 78-98.

BHAMRA R., DANI S., BURNARD K. (2011), "Resilience: the concept, a literature review and future directions", *International Journal of Production Research*, vol. 49, n. 18, pp. 5375-5393.

CHAMLEE-WRIGHT E., STORR V.H. (2009), "There's no place like New Orleans": Sense of place and community recovery in the Ninth Ward after Hurricane Katrina", *Journal of Urban Affairs*, vol. 31, n. 5, pp. 615-634.

CHANG S.E., FALIT-BAIAMONTE A. (2002), "Disaster vulnerability of businesses in the 2001 Nisqually earthquake", *Global Environmental Change Part B: Environmental Hazards*, vol. 4, n. 2, pp. 59-71.

CONNOR K.M., DAVIDSON J.R. (2003), Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC)", *Depression and Anxiety*, vol. 18, n. 2, pp. 76-82.

CUTTER S.L., BARNES L., BERRY M., BURTON C., EVANS E., TATE E., WEBB J. (2008), "A place-based model for understanding community resilience to natural disasters", *Global environmental change*, vol. 18, n. 4, pp. 598-606.

DAHLES H., SUSILOWATI T.P. (2015), "Business resilience in times of growth and crisis", *Annals of Tourism Research*, vol. 51, marzo, pp. 34-50.

DEITCH E., COREY C. (2011), "Predicting long-term business recovery four years after Hurricane Katrina", *Journal of Contingencies and Crisis Management*, vol. 19, n. 3, pp. 169-181.

DOLEGA L., CELIŃSKA-JANOWICZ D. (2015), "Retail resilience: A theoretical framework for understanding town centre dynamics", *Studia Regionalne i Lokalne*, vol. 16, n. 60, pp. 8-31.

DUBINI P., ALDRICH H. (1991), "Personal and Extended Networks are Central to the Entrepreneurial Process", *Journal of Business Venturing*, vol. 6, n. 5, pp. 305-313.

ERKIP F., KIZILGÜN Ö., AKINCI G.M. (2014), "Retailers' resilience strategies and their impacts on urban spaces in Turkey", *Cities*, vol. *36*, pp. 112-120.

FRANK B., SCHVANEVELDT S.J. (2016), "Understanding consumer reactions to product contamination risks after national disasters: The roles of knowledge, experience, and information sources", *Journal of Retailing and Consumer Services*, vol. 28, pp. 199-208.

HOLLING C.S. (1973), "Resilience and stability of ecological systems", *Annual Review of Ecology and Systematics*, vol. 4, n. 1, pp. 1-23.

KANTUR D., İŞERI-SAY A. (2012), "Organizational resilience: A conceptual integrative framework", *Journal of Management & Organization*, vol. 18, n. 6, pp. 762-773.

KANTUR, D., İŞERI-SAY, A. (2015), "Measuring organizational resilience: a scale development", *Journal of Business, Economic and Finance*, vol. 4, n. 3, pp. 456-472.

KROLL C.A., LANDIS J.D., SHEN Q. (1990), "The economic impacts of the Loma Prieta earthquake: A focus on small business", *Berkeley Planning Journal*, vol. 5, n. 1, pp. 39-58.

LANG T. (2011), "Urban resilience and new institutional theory - A happy couple for urban and regional studies", in Muller B., *Urban and regional resilience: How do cities and regions deal with change?*, Berlin, Springer-Verlag, pp. 15-24.

LENGNICK-HALL C.A., BECK T.E. (2003), "Beyond bouncing back: The concept of organizational resilience", *National Academy of Management meetings*, Seattle, WA.

LENGNICK-HALL C.A., BECK T.E., LENGNICK-HALL M.L. (2011), "Developing a capacity for organizational resilience through strategic human resource management", *Human Resource Management Review*, vol. 21, n. 3, pp. 243-255.

LINNENLUECKE M.K. (2017), "Resilience in business and management research: A review of influential publications and a research agenda", *International Journal of Management Reviews*, vol. 19, n. 1, pp. 4-30.

LIU C., BLACK W.C. (2011), "Post-disaster consumer coping: consumption adjustment", *Asian Pacific Advances in Consumer Research*, vol. 9, in Yi Z., Xiao J.J., Cotte J., Price L., *Association for Consumer Research*, Duluth, MN, pp. 214-221.

LIU C., BLACK W.C., LAWRENCE F.C., GARRISON M.E.B. (2012), "Post-disaster coping and recovery: The role of perceived changes in the retail facilities", *Journal of Business Research*, vol. 65, n. 5, pp. 641-647.

MAKKONEN H., POHJOLA M., OLKKONEN R., KOPONEN A. (2014), "Dynamic capabilities and firm performance in a financial crisis", *Journal of Business Research*, vol. 67, n. 1, pp. 2707-2719.

MARKMAN G.D., BARON R.A., BALKIN D.B. (2005), "Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking", *Journal of Organizational Behavior*, vol. 26, n. 1, pp. 1-19.

MARTIN R. (2012), "Regional economic resilience, hysteresis and recessionary shocks", *Journal of Economic Geography*, vol. *12*, n. 1, pp. 1-32.

MARTINELLI E., TAGLIAZUCCHI G., MARCHI G. (2017), "The Resilient Retail Entrepreneur: Dynamic Capabilities for Facing Natural Disasters", *International Journal of Entrepreneurial Behavior & Research*, in corso di pubblicazione.

MCMANUS S., SEVILLE E., VARGO J., BRUNSDON D. (2008), "Facilitated process for improving organizational resilience", *Natural Hazards Review*, vol. 9, n. 2, pp. 81-90.

MESZAROS J. (2002), "Effects of the 2001 Nisqually earthquake on small businesses in Washington State", report prepared for the Economic Development Administration, US Department of Commerce, Seattle Regional office.

PAL R., TORSTENSSON H., MATTILA H. (2014), "Antecedents of organizational resilience in economic crises - an empirical study of Swedish textile and clothing SMEs", *International Journal of Production Economics*, vol. 147, part B, pp. 410-428.

PARKER C.F., STERN E.K., PAGLIA E. (2009), "Preventable catastrophe? The hurricane Katrina disaster revisited", *Journal of Contingencies and Crisis Management*, vol. 17, n. 4, pp. 206-220.

PEARSON M., LAWRENCE K., HICKMAN T. (2011), "Retail recovery from natural disasters: New Orleans versus eight other United States disaster sites", *The International Review of Retail, Distribution and Consumer Research*, vol. 21, n. 5, pp. 415-444.

PETERSON M., EKIC, A., HUNT D.M. (2010), "How the poor in a developing country view business' contribution to quality-of-life 5years after a national economic crisis", *Journal of Business Research*, vol. 63, n. 6, pp. 548-558.

REGIONE EMILIA ROMAGNA (2012), Report "A sei mesi dagli eventi del 20 e 29 maggio. I danni del terremoto e le politiche messe in campo per affrontare l'emergenza e la ricostruzione", Novembre.

REGIONE EMILIA ROMAGNA (2017a), Report "L'Emilia dopo il sisma. Report su cinque anni di ricostruzione", Maggio.

REGIONE EMILIA ROMAGNA (2017b), Dati Mude, aggiornamento 31 Agosto, disponibile al sito http://www.regione.emilia-romagna.it/terremoto/numeri/mude.

RUNYAN R.C. (2006), "Small business in the face of crisis: Identifying barriers to recovery from a natural disaster", *Journal of Contingencies and Crisis Management*, vol. 14, n. 1, pp. 12-26.

SUTCLIFFE K.M., VOGUS T.J. (2003), "Organizing for resilience", *Positive Organizational Scholarship*, in: Cameron K.S., Dutton J.E., Quinn R.E. (Eds), *Positive organizational scholarship: Foundations of a new discipline*, Berrett-Koehler, San Francisco, CA, pp. 94-110.

TEECE D.J. (2012), "Dynamic capabilities: Routines versus entrepreneurial action", *Journal of Management Studies*, vol. 49, n. 8, pp. 1395-1401.

TIERNEY K.J. (1997), "Business Impacts of the Northridge Earthquake", *Journal of Contingencies and Crisis Management*, vol. 5, n. 2, pp. 87-97.

VAN GILS A. (2005), "Management and governance in Dutch SMEs", *European Management Journal*, vol. *23*, n. 5 pp. 583-589.

VERREYNNE M.L., HINE D., COOTE L., PARKER R. (2016), "Building a scale for dynamic learning capabilities: The role of resources, learning, competitive intent and routine patterning", *Journal of Business Research*, vol. 69, n. 10, pp. 4287-4303.

WASILESKI G., RODRIGUEZ H., DIAZ W. (2011), "Business closure and relocation: a comparative analysis of the Loma Prieta earthquake and Hurricane Andrew", *Disasters*, vol. 35, n. 1, pp. 102-129.

WEBB G.R., TIERNEY K.J., DAHLHAMER J.M. (2000), "Businesses and disasters: Empirical patterns and unanswered questions", *Natural Hazards Review*, vol. 1, n. 2, pp. 83-90.

WILLIAMS T.A., GRUBER D.A., SUTCLIFFE K.M., SHEPHERD D.A., ZHAO E.Y. (2017), "Organizational response to adversity: fusing crisis management and resilience research streams", *Academy of Management Annals*, vol. 11, n. 2, pp. 733-769.

WALKER B., HOLLING C.S., CARPENTER S., KINZIG A, (2004), "Resilience, adaptability and transformability in social-ecological systems", *Ecology and Society*, vol. 9, n. 2, pp. 5. [online] URL: http://www.ecologyandsociety.org/vol9/iss2/art5/

WRIGLEY N., DOLEGA L. (2011), "Resilience, fragility, and adaptation: new evidence on the performance of UK high streets during global economic crisis and its policy implications", *Environment and Planning A*, vol. 43, n. 10, pp. 2337-2363.

ZHANG Y., LINDELL M.K., PRATER C.S. (2009), "Vulnerability of community businesses to environmental disasters", *Disasters*, vol. 33, n. 1, pp. 38-57.

TRACK - RETHINKING STRATEGY: STRATEGIC ENGAGEMENT FOR VALUE CREATION

Open innovation: a pathway toward open strategy?
ENRICO ANGIONI, MORENO FRAU, LUDOVICA MOI, FRANCESCA CABIDDU

The silent revolution affecting digital and physical stores
FEDERICA CABONI, ANGELA DETTORI, ERNESTINA GIUDICI

La decisione 'critica'. (In)capacità informativa nell'era delle ICT
FRANCESCO POLESE, CARLO ALESSANDRO SIRIANNI, LUCA CARRUBBO, ANTONIETTA MEGARO

Open Innovation: a Pathway Toward Open Strategy?

ENRICO ANGIONI[*] MORENO FRAU[•] LUDOVICA MOI[♠] FRANCESCA CABIDDU[**]

Abstract

Objectives. *This paper seeks to explain how and to what extent Open Strategy draws on Open Innovation and how different degrees of open strategy could occur as a result of the adoption of open innovation approach.*

Methodology. *Since the relationship between open innovation and open strategy represents an empirically under-explored research area, we adopted an exploratory multiple case study design to develop new theoretical insights towards this topic.*

Findings. *This study displays that the pathway towards open strategy could start by implementing open innovation approach. Moreover, once the open strategy is developed, it can influence open innovation process, and the level of strategy openness depends on how the firm shares information with external stakeholders, and on how the firm is able to transform external inputs in open strategic actions.*

Research limits. *Given the exploratory nature of this research, we consider the theoretical linkages among open innovation and open strategy as the starting point for future research in this area. Thus, this study needs further empirical attention, and test for validity.*

Practical implications. *Our theoretical framework can be used by practitioners to approach towards open strategy starting from open innovation approaches. It also displays two variables that managers should control to ration the openness of their strategy.*

Originality of the study. *This study represents a first attempt to find a theoretical connection between open innovation and open strategy from the firm perspective.*

Keywords: *Open strategy; Open innovation; Inclusion; Transparency; Entrepreneurship.*

[*] Dottore di ricerca of *Management* - University of Cagliari
e-mail: enricoangioni83@gmail.com

[•] Assegnista of *Management* - University of Cagliari
e-mail: moreno.frau@unica.it,

[♠] Dottoranda of *Management* - University of Cagliari
e-mail: ludovica.moi@unica.it

[**] Associate Professor of *Management* - University of Cagliari
e-mail: fcabiddu@unica.it

1. Introduction

Over past decades, "open innovation" topic has been widely argued in management innovation literature (e.g. Kim *et al*., 2015; Chesbrough and Bogers, 2014; Chesbrough and Crowther, 2006; Chesbrough, 2003; Dahlander and Gann, 2010; Gassmann and Enkel, 2004; von Hippel, 2005; Prahalad and Ramaswary, 2004; Randhawa *et al.*, 2016; West and Bogers, 2014; West and Gallagher, 2006; Enkel *et al.*, 2009). According to Chesbrough (2003), "open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as firms look to advance their technology" (p. 24). Scholars recognized many advantages related to this approach, like leveraging on external knowledge to accelerate firms' internal innovation, and external expansion towards new markets (Lichtenthaler, 2015; Chesbrough, 2003; Chesbrough and Appleyard, 2007; Lichtenthaler, 2008; Prandelli *et al.*, 2008). The combination of internal and external knowledge is a key element of innovation strategy, and even dynamic complementarity and boundary spanning, which imply the involvement of firm's environment (Love, 2014). Actually, more recently Chesbrough *et al.*, 2014 claimed that open innovation is a "distributed innovation process based on purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organization's business model" (p.17). The above-mentioned flows may be "knowledge inflows to the focal organization (leveraging external knowledge sources through internal processes), knowledge outflows from a focal organization (leveraging internal knowledge through external commercialization processes), or both (coupling external knowledge sources and commercialization activities)" (p. 17). The adoption of open innovation approaches of firms' processes has been increasing (Chesbrough and Appleyard, 2007; Doz and Kosonen, 2008; Chesbrough, 2006), posing some limits to traditional business models because of the necessity to develop new ones which better support ongoing innovating strategy for a sustained competitive advantage (Chesbrough and Appleyard, 2007; Whittington *et al.*, 2011). Despite the different definitions of open strategy provided by the literature (Doz and Kosonen, 2008, Schmitt 2010; Chesbrough and Appleyard, 2007), two are the key dimensions, recognized by all the studies, characterizing the open strategy process: transparency and inclusion (Whittngton *et al.*, 2011). In this context, it is important to recognize new sources of competitive advantage, embedded in complex processes (Rivkin, 2000) such as open innovation (Chesbrough, 2003; Chesbrough and Appleyard, 2007), and even the pathways towards open strategy (Whittington *et al.*, 2011).

However, despite scholars have broadly argued about the openness of company processes, open innovation (Chesbrough, 2003; Dahlander and Gann, 2010; Gassmann and Enkel, 2004; von Hippel, 2005; Prahalad and Ramaswary, 2004; West and Gallagher, 2006) and open strategy (Chesbrough, 2006; Chesbrough and Appleyard, 2007; Doz and Kosonen, 2008; Whittington *et al.*, 2011), there is still few knowledge on the relationship between these fields of study. Therefore, this paper aims to deepen how openness occurs as a result of open innovation approaches for a sustainable competitive advantage (Hautz *et al.*, 2017). Accordingly, by using a multiple case study methodology, this study tries to answer the following questions: how does and to what extent Open Strategy draw on Open Innovation? Are there different degrees of open strategy?

Our study is structured as follows: in section 2, we argue the literature background concerning open innovation and open strategy; in section 3, we display the methodology adopted to carry out the research; in section 4, we discuss the key findings; in section 5, we end with discussions and conclusion.

2. Literature background: from open innovation to open strategy

Over the last years, the adoption of open innovation approaches compared to traditional strategies has been increasing (Chesbrough, 2006; Chesbrough and Appleyard, 2007; Doz and Kosonen, 2008). As argued by Witthington *et al.* (2011), open strategy originates from the notion of open innovation, the process by which organizations increasingly innovate by pooling knowledge of

external agents, such as users, business partners, universities etc. (Almirall and Casadeuss-Masanell, 2010; Chesbrough, 2003). Some scholars claimed that open innovation overcomes traditional perspective of strategy, conceived as a process to create a market place to cope with competitors and build barriers around firm's business model. In fact, open innovation leverages on the involvement of both internal and external actors (Chesbrough, 2004) and the use of collaborative tools in performing tasks, like sharing information (Fichter, 2009), capturing new technologies (Fey and Birkinshaw, 2005; Laursen and Salter, 2006), sharing the sources of products (Henkel, 2006; Henkel *et al.*, 2014), exploiting external sources of knowledge for internal R&D etc. (Chesbrough, 2006). Therefore, it has grown the importance of business or entrepreneurial ecosystems as the proper context in which these affairs took place. Business ecosystems are the grounds where relationships and interactions among multiple actors are developed (Moore, 1993). Particularly, given the intensive global competition, it is crucial to focus on entrepreneurial ecosystems where agents are involved and interplay each other to foster innovation, technologies etc. (Campbell Davis and Carayannis, 2016; Davey, 2014; Ferraris and Grieco, 2015; Invernizzi *et al.*, 2012). Business ecosystems not only enable the sharing of knowledge inside and outside the firms (Dahlander, *et al.*, 2014; Dodgson, *et al.*, 2006; Salter, *et al.*, 2014), but also allow firms to better manage and coordinate these flows (Gawer and Cusumano, 2014; Nambisan and Baron, 2013) in a perspective of open innovation ecosystems (Christopher and Gaudenzi, 2015; Salter, *et al.*, 2014). Indeed, according to Chesbrough and Appleyard (2007), the exchange of ideas with external actors through the combination of 'open innovation' and 'open coordination' within these ecosystems have evolved towards the conceptualization of Open Strategy. The design of strategy in a perspective of open innovation is essential for innovation ecosystems in which a "coopetition" by involving multiple stakeholders take place (Afuah, 2000; Bouncken *et al.*, 2015). The new approach of open strategy fosters the ongoing updating and strategy innovation in order to fit market requirements, and maintain a competitive advantage (Chesbrough and Appleyard, 2007). Below, in Table 1, we summarize the main differences between open innovation and open strategy.

Table 1. The mail differences between open innovation and open strategy

Open Innovation	Open Strategy
• Firms exploit their internal and external ideas, opening up to the market to advance technology (Chesbrough, 2004);	• Openness links to strategy making: "balances the tenets of traditional business strategy with the promise of open innovation" (Chesbrough and Appleyard 2007, p. 58);
• Open innovation encompasses a multi-level relationship with internal and external actors, the involvement of external resources (i.e. ideas, people, technology etc.) and open communication (Chesbrough, 2004);	• Differently from open innovation, open strategy opens up to internal groups. Involving employees in strategy process is "a means [of creating] shared understanding, stronger commitment, and effective implementation" (Stieger *et al.*, 2012, p. 46);
• Open innovation opens up to external actors, for instance in sharing information with external innovation communities (Fichter, 2009), in getting technology from other firms (Fey and Birkinshaw, 2005; Laursen and Salter, 2006), or in sharing the sources of their own products to the external audience (Henkel, 2006; Henkel *et al.*, 2014);	• The key targets of open strategy are organization's members. Only seldom external actors are involved in open strategy-making, as the case of Wikimedia (Dobusch and Müller-Seitz, 2012; Heracleous *et al.*, 2017);
• Open innovation typically opens up to external audience by leveraging on either collaboration or competition-based tools;	• "Collaborative exchange" is part of "collaborative strategizing where both parties interact" (Dobusch and Müller-Seitz, 2012, p. 5). Studies on open strategy focusing on joint sense-making, such as Baptista *et al.* (2017), De Gooyert *et al.*, (2014), Hardy *et al.*, (2006), Werle and Seidl (2012; 2015) and Schmitt (2010), show how open strategy is performed by who participate in meetings and workshop;
• Studies on open innovation mostly concern technological and product-related knowledge (R&D assets). Chesbrough (2006) points out that many works, including Nelson and Winter (1982), Cohen and Levinthal (1990), and Rosenberg (1994), have already emphasized the importance of external sources of knowledge for internal R&D;	• Open strategy opens up to internal audience through collaborative means of engagement;
• Open innovation joins "unambiguous topics", such as defined knowledge regarding technologies and products;	• Open strategy joins topics not only well-defined and unequivocal, but also opinions, ideas and interpretations on a wide range of social issues. Indeed, the primary focus of open strategy is a joint sense-making, where who participate in open strategy provide primary ideas and interpretations, opinions on what the others state etc. (Hutter *et al.*, 2017; Luedicke *et al.*, 2017; Mack and Szulanski 2017; Malhotra *et al.*, 2017; Turco 2016).
• Open innovation generally does not require that participating actors integrate new visions and values, rather to be open to new competence-sets.	• Open strategy opens up to internal audience to foster innovation in firm's internal and external environment. Effective processes of open strategy exploit communication tools which enable participants (via forms of real-time interactions within groups) to handle uncertainty and emergent trends.

Source: adapted from Dobush *et al.*, (2017)

According to the literature, open strategy is an emerging IT-enabled practice of doing strategy, which leverages on the broad involvement of internal and external actors in strategy making (Schlagwein *et al.*, 2017; Tavakoli *et al.*, 2017; Whittington *et al.*, 2011). Differently from open innovation, open strategy particularly focuses on the involvement of internal groups to create a shared understanding and greater commitment (Stieger *et al.*, 2012). It aims to create a growing competitive advantage, and even to support open innovation, balancing value creation and value capture through greater transparency and inclusion (Chesbrough and Appleyard, 2007; Whittington *et al.*, 2011). In doing this, open strategy overcomes traditional strategy thinking as "exclusive" and "secret" (Whittington *et al.*, 2011). An exclusive strategy conceives strategy as the chief executive's job (Andrews, 1971; Montgomery, 2008) supported by strategic planners, an "elite staff" who perform to help a detached top management in carrying out strategic overseer task effectively (Williamson, 1970), whereas "secret" implies information asymmetry to get a competitive advantage (Makadok and Barney, 2001). On the contrary, open strategy owns the features of transparency and inclusion (Hautz *et al.*, 2017), which ensure higher creativity as straight consequence of several actors' involvement (Stieger *et al.*, 2012), more commitment and joint "sensemaking" (Baptista *et al.*, 2017; De Hardy *et al.*, 2006; Gooyert *et al.*, 2014; Ketokivi and Castaner, 2004; Dobusch and Müller-Seitz, 2012; Doz and Kosonen, 2008; Hutter *et al.*, 2016; Werle and Seidl, 2012; 2015), and positive impression management (Gegenhuber and Dobusch, 2017; Yakis-Douglas *et al.*, 2017). Transparency dimension related to internal and external sharing of information on firm's strategy, enhances the ongoing exchange of ideas and knowledge (Chesbrough and Appleyard, 2007), while inclusion dimension enables the internal and external consultation (Schmitt, 2010) or "co-strategizing" phenomenon (Doz and Kosonen, 2008) to shape the continuous development of firm's strategy (Ghemawat, 2002; Mantere and Vaara, 2008; Westley, 1990). Nevertheless, past research (Love *et al.*, 2014) argued that, on the one hand, the combination of internal and external knowledge could be considered a key element for strategy innovation and, on the other hand, may become a source of troubles because of the emergence of potential conflicts of interest. Even excessive transparency may become a problem, for instance in terms of piracy of information, thus it is better to protect businesses with copyrights and patents (Chesbrough and Appleyard, 2007). Most recent research has also identified another dimension related to open strategy, that is, reflexiveness, which represents a social ability to be reflexive, and specifically to integrate "open and emergent" feedbacks throughout the organization strategy (Baptista *et al.*, 2017). At the organizational level, it implies feedback systems and employees' capacity to apply practical reflexivity by acting as they were responsible for their job (Cunliffe, 2002), and actively perform in the "production, reproduction and transformation of their work processes" (Gorli *et al.*, 2015; p.3).

Furthermore, scholars argue that open strategy may be explained by three perspectives: entity view, process view and practice view (Tavakoli *et al.*, 2017). According to the entity view, open strategy is seen as a ''black box", where antecedent and consequent factors of strategy impact on it or are affected in return (Tackx and Verdin, 2014), and tries to explain these relationships to finally identify which open strategy is the best one (Yeaney, 2011). This view suffers from weaknesses since does not provide information on the real actions of open strategy. Process view offers a more holistic understanding of open strategy by identifying open strategy procedures (for instance, IS/IT artifacts) which lead to specific outcomes. However, also this view owns several limitations, since does not shed light on the real efforts, tools, managerial activities, environmental factors at the micro level, and it is limited to the most relevant aspects of open strategy. Finally, practice view conceives open strategy as a practice of dynamic and open participation of people in strategy doing, which leads to perform a set of practices, that is, "traditional strategizing practices" and open practices, based on IT-enabled transparent interaction, co-creation and democratic decision making (Tavakoli *et al.*, 2017).

Concluding, since open innovation has revolutionized firms' nature and the way in which they get and disseminate innovation, there are several opportunities for research towards this topic (West

and Bogers, 2017). Among the different research areas, the understanding of how open innovation and strategy intersect is an interesting one (Bogers *et al.*, 2017).

3. Method and research design

Given the few number of studies concerning open strategy, and the relationship between open innovation and open strategy, we adopted an exploratory multiple case study design (Miles and Huberman, 1994; Yin, 2009) as the proper approach to explore new phenomenon from the perspective of organizations' actors (Burrell and Morgan, 1979; Langley, 1999), and develop new theoretical insights towards this topic.

3.1 Research sample and case selection

To select the sample, this study focused on firms performing in different businesses in the ICT industry because they may provide deeper insight on the study of OI and open strategy approaches since this industry leverage for their strategies on firm's external information and stakeholders' requirements (Tavakoli *et al.*, 2017). Consequently, this article considered the following selection criteria (Yin, 2009): 1) transparency; 2) access to key information; 3) interest in participating to this research project; 4) a good background knowledge of the firm and its environment (its history, competitors, customers, etc.); 5) medium or big size company; 6) a structured open innovation organizational function.

A first bunch of 28 companies were identified. These companies differ in terms of size and type but having in common the adoption of open innovation approach. Appling the aforementioned criteria, a final sample of three companies was selected.

To carry out the research, we planned a two-steps research design: 1) a pilot test study on two companies, and 2) a multiple case study of three companies (see Table 1).

We used pilot case studies in preparation for the formal data collection, to help us refine the data collection plan with respect to the data contents and the procedures to be followed (Yin, 2009). We also tested the interview protocol on the CEOs of the two pilot case studies not included in the sample to establish whether the questions were clear and understandable. Feedbacks on ambiguities and difficult questions let us refine the protocol before full-scale utilization (Yin, 2009). Moreover, problems and issues identified in data analysis of the exploratory pilot case studies were aimed to redefine the variables for the second step of the investigation.

For confidentiality reasons, companies and informants are blinded and named with a distinctive sign, e.g. Case Study 1, 2 or 3, and informant 1 and 2.

Table 2. Description of case studies

Case Study	Country	Business Area	Size	Revenue (2014)	(N° of intw.) Informants
1	Sweden	Home and professional appliance	Large business	112.1	(2) Open innovation director
2	Netherlands	Electronics	Large business	21.4	(2) Open innovation manager
3	Italy	Telecommunications	Large business	21.5	(1) Open innovation analyst; (1) Strategy and Innovation analyst

*Business size: employees > 250; average annual turnover > 50 M€; revenues > 20 M€;

Source: our elaboration[1]

[1] Note. Revenue amount is in billion and determined in Euros.

3.2 Data collection

We collected data from both primary and secondary sources, that is: (a) semi-structured interviews with people involved in the development of strategy, innovation processes, and relationships with external actors; (b) archival data and websites.

Primary data were collected through semi-structured interviews carried out by phone to enable informants to freely argue about open innovation approach. We completed data collection with the analysis of each firm's website and sustainability reports, in order to triangulate data sources. All respondents were managers (e.g. open innovation manager, strategy manager, etc.) or CEOs (in the case of pilot tests), depending on their familiarity with firm's strategic actions, particularly corporate entrepreneurship and collaboration efforts (Miller, 1983; Prahalad and Ramaswamy, 2004; Zahra, 1991).

The main goal of the interviews was to understand how and to what extent Open Strategy draws on Open Innovation. Accordingly, we adopted an interview protocol consisting of five sections. Questions asked of the informants included: "*Can you explain your personal vision of open innovation?"*; "*What are the main reasons for your company while launching (or planning to launch) these open innovation projects (what kind of innovation do you expect?)?".* Furthermore, we tried to deepen the relationship with corporate strategy by asking for instance: "*What is, in your opinion, the relationship between open innovation approach and company strategy? Do you share some processes at the strategy level with external agents?".*

Findings are based on the analysis of the six interviews from the firm sample (see Table 1) which lasted from 45 minutes to an hour and a half. Interviews were registered for a total of five and half hours, and the interviewer has also taken notes (approximately, forty pages of text). We also relied on archival data of the same period of primary data, to triangulate self-reports of key informants and, in turn, to mitigate possible "retrospective bias" in the interviews with managers.

3.2 Data analysis

As is typical in inductive multiple case research (Miles and Huberman, 1994), we analyzed the data by first building the individual case summaries by reviewing interview transcripts, archival data, and firm's website, looking for descriptive codes (Miles and Huberman, 1994). Subsequently, we used a replication logic to see whether the rest of the cases confirmed or refuted the emerging findings (Eisenhardt, 2007). Therefore, during data analysis process, we compared data with previously identified codes, and either categorized new data under existing codes or created a new code if it was analytically distinct. Through this iterative process, we identified 15 descriptive codes. In the meanwhile, we started the generalization process by grouping data into higher-order themes, following a data-driven coding scheme (Gibbs, 2007). In this stage, we re-analyzed the first bulk of descriptive codes looking for interpretative codes which reflect the researcher's understanding of data (Miles and Huberman, 1994). From the 15 descriptive codes, we found a set of six themes (see Table 2).

Tab. 3: Data summary of the first coding stage

Interpretative code	Definition	Illustrative quote
Innovate by cooperating	Innovate by cooperating refers to firm's attitude to innovate itself by building partnerships with other actors.	"The R&D of our partner will be an extension of our R&D" [Case Study 1]
Accelerate innovation	Accelerate innovation is the firm's capability to speed up its innovation process by any means.	"We use this instrument in order to accelerate our processes about innovation and market adaptation" [Case Study 3; informant 2]
Participation	Participation is about increasing stakeholders' input for decisions (Mack and Szulanski, 2017)	"We have often received several suggestions... This situation has been the first step in the development of a database aimed to create a new strategic business area" [Case Study 1]
Inclusion	Inclusion is the external actors' involvement in affecting changes in firm's strategy. (Chesbrough and Appleyard, 2007)	"We need periodically to align the strategic and business areas...Our external agents are involved in this process, they drive us" [Case Study 2]
Disclosure	Disclosure is the firm's predisposition of renouncing to the strategy confidentiality and exclusivity.	"It depends on the layer of the strategy concerned because some strategies are shared because lead the company towards competitive advantages" [Case Study 3; informant 1]
Transparency	Transparency corresponds to firm's attitude to sharing information, with other actors, both internal and external. (Whittington *et al.*, 2011)	"We receive technical and strategic support from the external agents...it was created a bidirectional flow." [Case Study 3; informant 2]

Source: our elaboration.

Then we performed a cross-case analysis to understand whether the interpretative codes were repeated in the three cases (see Table 3). The first coding stage was conducted separately and simultaneously by two authors and, at the end of this stage, we run a coding comparison query through Nvivo 10. Then together we discussed the inconsistencies and found an agreed solution until the value of Kappa coefficient was above 0.75.

Tab. 4. Cross-case summary of the interpretative codes in the cases.

Interpretative code	Case Study 1	Case Study 2	Case Study 3
Innovate by cooperating	X	X	X
Accelerate innovation		X	X
Participation	X		X
Inclusion	X	X	X
Disclosure	X	X	X
Transparency	X	X	

Source: our elaboration.

Finally, we carried out the second stage of coding which led the analysis to a further level of abstraction. In doing so, we started from interpretative codes and seeking patterns repeated over the dataset (Miles and Huberman, 1994). Through the second stage of coding, we identified the three dimensions that, according to our analysis, underpin open strategy: open innovation, stakeholders engagement, and open communication (see Table 4).

Tab. 5. Data summary of the second coding stage.

Interpretative code	Pattern	Definition	Illustrative quote
Innovate by cooperating	Open Innovation	"Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as firms look to advance their technology" (Chesbrough, 2003, p. 24).	"[…] we argue that open innovation means go beyond listening and interacting with nontraditional players. There is a fundamental diversity, which very often is perceived as a barrier. This diversity means to talk with companies that are far away from us, for business area or technological competences[Case Study 1]
Accelerate innovation			
Participation	Stakeholders engagement	Stakeholders engagement is "the process used by an organization to engage relevant stakeholders for a clear purpose to achieve accepted outcomes" (Account Ability, 2008)	"We have just concluded an event where we met suppliers and even competitors, in order to speak openly about themes that will be aimed to drive some strategic processes and to find out if we are going in the right direction.". [Case Study 2]
Inclusion			
Disclosure	Open communication	Open communication is defined as the increase in transparency, concerning an opening-up of the communication process to include actors previously excluded. (Whittington *et al.* 2011)	"There are advantages for all the parts involved through the sharing, which must be bilateral unless trilateral. Obviously, we must keep a balance within our ecosystem between collaboration and competitiveness, interpreting the strategy development step by step". [Case Study 3; informant 2]
Transparency			

Source: our elaboration.

Also at this stage, we performed a cross-case study to verify if the patterns were repeated in the three cases (see Table 5). Finally, we checked the robustness of the codes by running a coding comparison query, and again we discussed inconsistencies until the value of Kappa coefficient was above 0.75. Table 3 displays the dimensions mentioned above and provides illustrative, direct quotations from our fieldwork.

Tab. 6. Cross-case summary of the patterns in the cases.

Interpretative code	Case Study 1	Case Study 2	Case Study 3
Open Innovation	X	X	X
Stakeholders engagement	X		X
Open communication		X	X

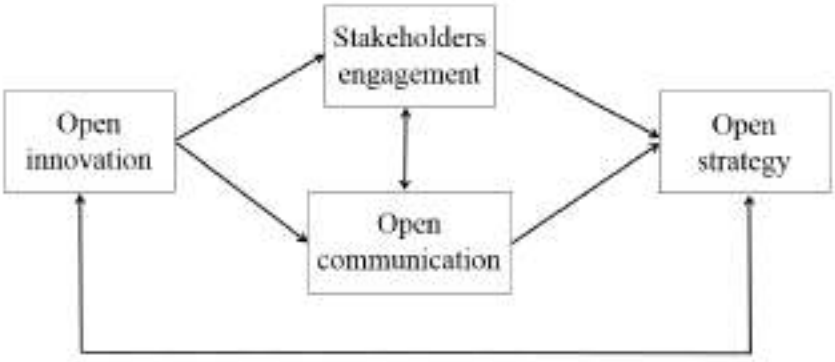
Source: our elaboration.

Once we ended data coding, the final phase of data analysis involved assessing the semantic relationships among these patterns. This inductive process connected the identified dimensions transforming them from static and standalone concepts into a dynamic, integrated, theoretical model.

4. Findings

We summarize and illustrate our findings in Figure 1 which shows the relationships between open innovation and open strategy (Figure 1).

Fig. 1. The pathway towards open strategy



Source: our elaboration.

Figure 1 shows that open innovation could be one of the starting points to implement the open strategy. In the attempt to implement an open innovation approach, firms try to detect external ideas and follow external paths to market through the ability to capture external changes and opening the communication process to previously-excluded actors (stakeholder engagement and open communication).

The theoretical framework also shows a bidirectional influence on stakeholders engagement and open communication. As the data analysis revealed, communicating with and getting information from a wide variety of external actors provides good inputs to reconfigure firms' strategy to fit with the environmental dynamics. On the other hand, thanks to stakeholders engagement, firms identify new sources of external information. This increments the degree of openness of the firms' communication process.

Stakeholders engagement and open communication capabilities directly affect the firms' strategy since companies are forced to share parts of their strategy when they are involved in process of participation, inclusion, disclosure, and transparency with external actors. This implies losing totally or, more often, partially the strategy confidentiality and exclusivity. Therefore, open innovation indirectly impacts open strategy through stakeholders engagement and open communication capabilities (see Figure 1).

Nevertheless, open innovation also directly influences open strategy since firms have to share parts of their strategy when there are cooperating with other actors in innovation activities. On the other hand, we could observe that also open strategy stimulates open innovation. When companies start opening their strategy, they proved more information to external actors. In the main time, the strategic information allows external actors to better understand the innovation needs of the company. This means that, on one hand, open innovation could be the beginning of a path which leads to open strategy, but, on the other hand, once the open strategy is implemented (even at an early stage) it helps companies in improving their open innovation process.

In the following paragraphs, we broadly analyze the key dimensions that underpin open strategy, that are: open innovation, stakeholders engagement, and open communication.

4.1 Open innovation

Our data show that all of the companies analyzed here consider open innovation as an essential instrument of doing business in order to accelerate innovation within the company through cooperation with other organizations. Firstly, gathering knowledge, competencies, and skills from the external network is a typical approach which forces the firm to open its communication with external stakeholders (Figure 1). As stated by informant 1 of Case Study 1, companies seek innovation by cooperating with external agents: *"Open innovation is a new way of making profits, through the synergy among ecosystems that diverge radically each other, which are (1) the*

company, with their organizational systems. The other ecosystem is the external one (2), the external network of innovators, which are beyond the traditional external networks of collaborators of the company…". Secondly, there is the opportunity to accelerate innovation processes within the company by exploiting the open approach since, according to data analysis, the implementation of open innovation is considered the best way of accelerating innovation process: *"We argue that open innovation is the idea to exploit the inflows and outflows of knowledge so that innovation as such be speeded up. Our industrial area is currently exposed to major changes and becoming the increasingly land of open ecosystems, that must increasingly adapt to new market dynamics. We use this instrument in order to accelerate our processes about innovation and market adaptation"* claimed the informant 2 of Case Study 3. We identify a similar dynamic in Case Study 1 as well, where the informant 1 claimed: *"We must not count on the support of our internal resources, but, even on the external ones, in order to create innovation and value. External resources are there, ready to be heard and exploited. Thus, the aim of open innovation is nothing more than accelerate innovation in our company".* These examples clearly show that open innovation approach forces firms to adapt their strategies to the external environment, following an outside-in path and exploiting external stakeholders engagement (Figure 1). Our analysis highlights how open strategy is a manifestation of an open innovation approach, whose implementation starts from two key aspects: innovate by cooperating and accelerate innovation.

4.2 Stakeholder engagement

Another key dimension emerged from data analysis is the activity of stakeholder engagement. This dimension is mainly associated with two main aspects: participation and inclusion. It explains how internal and external relevant pieces of information are aligned to each other, and even with corporate strategy. In the three case studies, we observed that, by implementing open innovation approaches, firms had the possibility to develop stakeholder engagement creating commitment by inviting external contributions (Figure 1): *"We received some suggestions that led us to present a new product that was not typical of our business areas, but was in line with our strategic idea."* declared the informant 1 of Case Study 1.

We also found that from an open innovation approach, the firm received specific external influences which led to reconsider its approach with partners. This fact implied a greater engagement for both the company and the innovator, which brought to creating a new outcome according to innovator's suggestions. Therefore, open innovation approach fosters stakeholder engagement which in turn is based on relationships between the firm and external actors, and the openness of their communication process (Figure 1). In short, the firms we explored have created a process of collaborative strategy-making, which led to creating shared knowledge, and supporting a greater engagement of external actors, that result in greater participation and inclusion by these actors on firm's strategy: *"About corporate strategy, we are building an engagement strategy and developing a set of activities that match our key stakeholders' expectations. In my unit, we are using the open innovation approach during the meetings with a wide variety of actors"* [informant 1 of Case Study 2].

According to data analysis, stakeholder engagement not only encompasses sharing information but also receiving inputs. This is due to an open innovation approach, which results in communication inflows and outflows, and implies the receiving of these inputs. This implies that participation and inclusion are strongly exploited by the company, and they also drive the firm to fit its strategy according to external inputs. Therefore, the firms we observed involve their internal and external stakeholders in the joint exploration of strategic developments and trends. This is due to the influence of open innovation on management, which leads the latter to include external agents in some strategic processes (Figure 1). These inclusions, as emerged from data analysis, aim to align company's strategic processes with partner's processes. These actors typically belong to a B2B context, for instance, they can be commercial or financial partners, or also competitors and universities.

4.3 Open communication

Last dimension concerns communication, and how the implementation of an open innovation approach leads the firm to an open exchange of information among actors (see Figure 1). This also brings the firm towards greater transparency. In particular, we observed the role played by bidirectional communication between management and stakeholders, as the combination of listening and talking which creates new knowledge to better fit strategy with the external environment through outside inputs (Figure 1).

As mentioned above, open communication encompasses two specific aspects: transparency and disclosure of information. As emerged in data analysis, the differences related to openness can be deemed as aspects of levels disclosure of information that, in turn, lead to several degrees of open strategy: *"In my unit the openness is total and provides for speak openly with a wide variety of actors and expecting the same behavior from them"* [informant 1 of Case Study 2]. On the other hand, we observed that not everyone is willing to totally open its communication. For example, the informant 2 of Case Study 3 claimed: *"Obviously, it depends on the layer of the strategy concerned, because some strategies are shared because lead the company towards competitive advantages, other could be lead the company towards some potential risks".*

The second aspect concerns transparency, the main purpose of sharing information is to receive more contributions by actors who participate in the innovation or strategy processes. Open innovation involves bidirectional communication, that includes both sharing and receiving from others. This emerges in the strategy process, where informants emphasized that sharing implies a "conversation", in which both parts share their strategic processes. This fact is due to greater transparency, which encourages the firm to share its processes with specific partners. According to our data, sharing is focused on strategic processes, and imply a bidirectional pattern aimed at reaching a competitive advantage for both the parties involved and that it is also directly connected to the implementation of the open strategy (Figure 1).

4.4 Open strategy

Overall, evidence from the case studies suggests how an open innovation approach could lead to the openness of strategy processes, and to reconsidering traditional dimensions of strategy as cooperation, inclusion, participation, transparency, etc. (Figure 1). From data analysis, there could be three different degrees of openness related to the different levels of business strategy: corporate, functional area and business area: *"If we focus on strategy levels below the core, there is a strategy even in the different business areas. Every one of these areas has a strategy that plans how to reach the customer, types of product, etc., thus, there is a strategy. Here the open innovation has a strong influence. Therefore, for the first time in history, there was a flexibility that we have never had before. Why? Because our external agents and internal customers tell us what could we do. For instance, R&D could be not aligned with marketing area, but it did not say it or was not be heard it. However, from the moment which comes important inputs from outward, we define together the potential paths for us to tread. This pathway can lead me to create a new business area"* [informant 1 of Case Study 1]. On the other hand, there is also who recognizes that there are several degrees of openness. For instance, informant 1 of the Case Study 3 stated: *"Obviously, not everything's black and white, the openness of the strategy is a topic that must be assessed case by case. We usually have a strategic meeting with European partners, in which, according to a non-disclosure agreement, we exchange information. Is utopian close myself in a walled garden and not to talk with anyone, we plan to speak with specific partners that could be important for my future and we decide to share with them some level of our strategy, obviously up to a point and they will do the same with us. There are several shades, that time after time are assessed according to the environment, and can imply to tell everybody what I do".*

Our data revealed how an open innovation approach leads the firm to forms of open strategy. Firms tend to share the strategic process up to specific levels, functional and business areas, which

in turn can affect back the openness of innovation process (Figure 1). Strategy openness could be complete but must be planned according to specific purposes.

Company's open communication could lead firms to open the strategy at different levels, which in turn could modify open innovation process (Figure 1). In particular, the dataset emphasizes a new perspective concerning transparency of strategic processes. Starting from a relationship that is typical of open innovation in which one partner receives information from another partner, it is possible to find a pathway aimed at developing business' strategy. The openness of strategic processes and the subsequent disclosure of these processes are necessary to achieve a competitive advantage. Obviously, the degree of openness is related to a specific level of strategy, which does not imply the core processes, but rather the "layers" below it.

5. Discussions

5.1 Open innovation

Our findings support the notion of open innovation. In particular, they focus on innovation process as an instrument "inspired" by strategy (Chesbrough and Appleyard, 2007; Whittington *et al.*, 2011). Currently, firms are combining internal R&D and external knowledge-acquisition activities, which lead to develop processes that enable the company to maximize its innovative payoff (Schlagwein *et al.*, 2017; Tavakoli *et al.*, 2017; Whittington *et al.*, 2011). Previous research recognized that an innovation strategy should specify how different types of innovation fit into business strategy and how resources should be allocated (Brohman *et al.*, 2009; Cenfentelli *et al.*, 2008; Prahalad and Ramaswamy, 2004; Rayport and Jarowsky, 2004; Rhee, 2010; Von Hippel 2005). Different perspectives are critical for successful innovation, but without a strategy aimed at integrating and aligning them around, common priorities may be blunted or self-defeating. Our study acknowledged that open innovation is an innovative strategic instrument that gathers and even extends these perspectives on innovation strategy, enclosing within this instrument two specific aspects: innovation by cooperation and the accelerate innovation.

In line with previous studies, we confirm previous research that companies benefit differentially from adopting open innovation strategies (Chesbrough, 2003; Chesbrough and Appleyard, 2007; Lichtenthaler, 2008, 2015; Prandelli *et al.*, 2008). In particular, we emphasized two aspects emerged from the multiple case studies. Our findings suggest that firms pursuing an innovation strategy need to accelerate innovation by cooperating with other organizations and, therefore, by exploiting open innovation. Thus, while previous literature only started to unravel the complex links between internal and external sourcing (Love, 2014), we provide evidence on complementarity in the innovation strategy and its sub-aspects.

5.2 Stakeholder engagement

Our data support the notion of stakeholder engagement as the situation in which there is an increment of participation and inclusion regarding strategic issues, involving both internal and external stakeholders (Schlagwein *et al.*, 2017; Tavakoli *et al.*, 2017; Whittington *et al.*, 2011). These forms of strategic alignment have been supported by several studies (Doz and Kosonen, 2008; Ketokivi and Castaner, 2004; Hutter *et al.*, 2016; Schmitt, 2010; Stieger *et al.*, 2012), where this alignment occurs in forms of joint sense-making and collaborative strategy-making. As a result, recent research argued that managers must seek a fit between firm's innovation strategies and its environment (Tavakoli *et al.*, 2017). Company's external environment may moderate its innovation strategies. In other words, the return generated from innovation is the result of the interaction between business environment and company's innovation strategies and capabilities (Chesbrough, 2006), further promoting inclusiveness (Whittington *et al.*, 2011). Our data also support the role of stakeholders engagement since it aims to create and co-construct a shared understanding or vision

with the external stakeholders (Schmitt 2010) involved in open strategic processes. In particular, our study acknowledged that the implementation of an open approach led these companies to consider participation (Mack and Szulanski 2017) and inclusion to promote greater commitment (Whittington *et al.*, 2011) of the innovator partners to strategy development. These findings emphasize a process of collaborative strategy-making from which emerged greater inclusiveness (Hautz *et al.*, 2017; Stieger *et al.*, 2012; Whittington *et al.*; 2011).

5.3 Open communication

Our findings confirm that communication aims to generate a shared understanding and involvement of different views to achieve a common understanding (Chesbrough and Appleyard, 2007). Stieger *et al.* (2012) pointed out the role of two-way communication between management and stakeholders as the combination of listening and talking - a dialogue - which creates new knowledge and shared understanding. We extended the notion of bidirectional communication, framing it as the openness of the strategic processes. In particular, we support the perspective of Whittington *et al.* (2011), acknowledging that greater sharing of information in the strategic processes could be a result of opening processes and transparency. From a communicative perspective, this dimension aims to create shared knowledge with partners through the exchange of information about the strategy (Stieger *et al.*, 2012; Whittington *et al.*, 2011;). Open strategy-making aims to create joint sense-making and usually involves bidirectional communication that includes both sharing with others, and receiving from others.

5.4 Open strategy

Our study also extended the notion of Whittington *et al.* (2011) about open strategy, acknowledging that there are three different degrees of openness: corporate, functional and business.

The process of open strategy analyzed here does not imply a natural and automatic sharing of strategic processes with the partner and the consequent ousting of top management from strategy development. First of all, in line with Schmitt (2010), the level of openness in innovation and strategy varies according to the degree of sharing information. Accordingly, a complete openness of strategic processes has not been observed yet since the field is still in its infancy. Nevertheless, it has been developed a pathway towards concrete degrees of open strategy (see Figure 1).

This openness does not embrace all strategic processes. There are several layers of influence that the literature has not yet analyzed. Previous research (Chesbrough and Appleyard, 2007; Hardy *et al.*, 2006; Schmitt, 2010; Whittington *et al.*, 2011) has not determined at which level the strategy may be subjected to this openness.

6. Conclusion and limitations

This paper seeks to explain how different degrees of open strategy occur as a result of open innovation approaches. Furthermore, it provides a theoretical framework of the key dimensions that are encompassed in the pathway towards open strategy.

First of all, a clear and strong influence of open innovation was developed. The implementation of this approach aims to achieve an innovation strategy for a sustainable competitive advantage. The case studies analyzed in this work tended to develop this approach in a deep way, up to considering inclusion not only for products and services but also for strategic processes.

Secondly, data analysis revealed that firms tend to change strategy's dimensions of inclusiveness and transparency in order to foster open communication and stakeholder engagement. This openness is not as complete as it occurs in open innovation approach. The open strategy is a process of openness that does not encompass the core processes of the strategy, which are linked to

top management. Conversely, it focuses on the layers immediately below, which will be affected in the long term. There are several businesses and functional areas that imply several strategies, which will be open and shared with partners to form the core strategy previously mentioned.

Given its exploratory nature, this study has several limitations. It may be defined as a pioneering research towards open strategy, due to the fact that this field of research is still in its infancy. The findings of our work may be the starting point for future empirical research in this domain. Accordingly, it may be interesting to compare it with further empirical studies. Furthermore, future research could test the validity of the developed framework. Finally, building on the already available IO measurement scales (e.g. Laursen and Salter, 2006), future studies could develop quantitative studies proposing scales for open innovation measuring.

References

ACCOUNTABILITY, (2008), *Accountability Principles Standard.* Retrieved from: http://www.accountability.org

AFUAH A. (2000), "How Much Do Your 'Co-opetitors' Capabilities Matter in the Face of Technological Change?", *Strategic Management Journal*, vol. 21, n. 3, pp. 387-404.

ALMIRALL E., CASADESUS-MASANELL R. (2010), "Open versus closed innovation: A model of discovery and divergence", *Academy of management review*, vol. 35, n. 1, pp. 27-47.

ANDREWS K.R. (1971), *The Concept of Corporate Strategy*, Homewood, IL: Irwin.

BAPTISTA J., WILSON A.D., GALLIERS R.D., BYNGHALL S. (2017), "Social media and the emergence of reflexiveness as a new capability for open strategy", *Long Range Planning*, vol. 50, n. 3, pp. 322-336.

BOGERS M., ZOBEL A.-K., AFUAH A., ALMIRALL E., BRUNSWICKER S., DAHLANDER L., HAEFLIGER S. (2017), "The open innovation research landscape: Established perspectives and emerging themes across different levels of analysis", *Industry and Innovation*, vol. 24, n. 1, pp. 8-40.

BOUNCKEN R.B., GAST J., KRAUS S., BOGERS M. (2015), "Coopetition: A Systematic Review, Synthesis, and Future Research Directions", *Review of Managerial Science*, vol. 9, n. 3, pp. 577-601.

BROHMAN M.K., PICCOLI G., MARTIN P., ZULKERNINE F., PARASURAMAN A., WATSON R.T. (2009), "A design theory approach to building strategic net-based customer service systems", *Decision Sciences*, vol. 40, n. 3, pp.403-430.

BURRELL G., MORGAN G. (1979), *Sociological paradigms and organizational analysis*, Portsmouth, NH: Heinemann.

CAMPBELL DAVID F.J., CARAYANNIS E.G. (2016), "The Academic Firm: A New Design and Redesign Proposition for Entrepreneurship in Innovation-Driven Knowledge Economy", *Journal of Innovation and Entrepreneurship*, vol. 5, n 12, pp. 1-10

CENFENTELLI R.T., BENBASAT I., AL-NATOUR S. (2008), "Addressing the what and how of online services: Positioning supporting-services functionality and service quality for business to consumer success", *Information Systems Research*, vol. 19, n. 2, pp. 161-181.

CHESBROUGH H. (2003), "The logic of open innovation: managing intellectual property", *California Management Review*, vol. 45, n. 3, pp. 33-58.

CHESBROUGH H.W., APPLEYARD M.M. (2007), "Open innovation and strategy", *California management review*, vol. 50, n. 1, pp. 57-76.

CHESBROUGH H., BOGERS M. (2014), *Explicating Open Innovation: Clarifying an Emerging Paradigm for Understanding Innovation*, In New Frontiers in Open Innovation, edited by Chesbrough H., Vanhaverbeke W., West J., pp. 3-28. Oxford: Oxford University Press.

CHESBROUGH H., CROWTHER A. K. (2006), "Beyond high tech: early adopters of open innovation in other industries", *R&d Management*, vol. 36, n. 3, pp. 229-236.

CHESBROUGH H., VANHAVERBEKE W., WEST J. (2014), *New frontiers in open innovation*, Oup Oxford.

CHESBROUGH H.W. (2006), *Open Business Models: How to Thrive in the New Innovation Landscape*, Boston, MA: Harvard Business School Press.

CHRISTOPHER M., GAUDENZI B. (2015), "Managing risks in sustainable supply chains", *Sinergie Italian Journal of Management*, pp. 57-74.

COHEN W.M., LEVINTHAL D.A. (1990), "Absorptive capacity: a new perspective on learning and innovation", *Administrative Science Quarterly*, vol. 35, n. 1, pp. 128-152.

CUNLIFFE A.L., (2002), "Reflexive dialogical practice in management learning", *Management Learning*, vol. 33, n. 1, pp. 35-61.

DE GOOYERT V., ROUWETTE E., VAN KRANENBURG H., FREEMAN E., VAN BREEN H. (2014), "Mental model renewal in inter-organizational strategizing: bridging the cognitive gap between internal and external stakeholders", Paper presented at Workshop on Open Strategy, Said Business School, Oxford, 01.7.2014.

DAHLANDER L., GANN D. M. (2010), "How open is innovation?", *Research Policy*, vol. 39, n. 6, pp. 699-709.

DAVEY M. (2014), "Entrepreneurship in the Informal Economy". *The International Journal of Entrepreneurship and Innovation*, vol. 15, n. 4, pp. 287-288.

DAHLANDER L., O'MAHONY S., GANN D.M. (2014), "One foot in, one foot out: how does individuals' external search breadth affect innovation outcomes?", *Strategic Management Journal*.

DOBUSCH, L., KREMSER, W., SEIDL, D., WERLE, F. (2017), "A communication perspective on open strategy and open innovation", *Managementforschung*, vol. 27, n. 1, pp. 5-25.

DOBUSCH L., MÜLLER-SEITZ G. (2012), "Strategy as a practice of thousands: the case of Wikimedia", *Academy of Management Proceedings*.

DODGSON M., GANN D., SALTER A. (2006), "The role of technology in the shift towards open innovation: the case of Procter and Gamble", *R&D Management*, vol. 36, n. 3, pp. 333-346.

DOZ Y.L., KOSONEN M. (2008), *Fast Strategy: How Strategic Agility Will Help You Stay Ahead of the Game*, Harlow: Pearson.

EISENHARDT K.M., GRAEBNER M.E. (2007), "Theory building from cases: Opportunities and challenges", *Academy of Management Journal*, vol. 50, n. 1, pp. 25-32.

ENKEL E., GASSMANN O., CHESBROUGH H. (2009), "Open R&D and open innovation: exploring the phenomenon", *R&D Management*, vol. 39, n. 4, pp. 311-316.

FERRARIS A., GRIECO C. (2015), "The role of the innovation catalyst in social innovation-an Italian case study", *Sinergie Italian Journal of Management*, pp. 127-144.

FEY C., BIRKINSHAW J. (2005), "External sources of knowledge, governance mode and R&D performance", *Journal of Management*, vol. 31, n. 4, pp. 597-621.

FICHTER K. (2009), "Innovation communities: the role of networks of promotors in Open Innovation", *R&D Management*, vol. 39, n. 4, pp. 357-371.

GASSMANN O., ENKEL E. (2004), "Towards a theory of open innovation: three core process archetypes", *R&D management conference*, vol. 6, pp. 1-18.

GAWER A., CUSUMANO M. A. (2014), "Industry platforms and ecosystem innovation. Journal of Product Innovation Management", vol. 31, n. 3, pp. 417-433.

GEGENHUBER T., DOBUSCH L. (2017), "Making an impression through openness: how open strategy-making practices change in the evolution of new ventures", *Long Range Planning*, vol. 50, n. 3, pp. 337-354.

GHEMAWAT P. (2002), "Competition and business strategy in historical perspective", *Business History Review*, vol. 76, pp. 37-74.

GIBBS G. R. (2007), "Thematic coding and categorizing", *Analyzing Qualitative Data*, Sage, pp. 38-56 London.

GORLI M., NICOLINI D., SCARATTI G. (2015), "Reflexivity in practice: tools and conditions for developing organizational authorship", *Human Relations*, vol. 68, n. 8, pp. 1347-1375.

HARDY C., LAWRENCE T., PHILLIPS N. (2006), "Swimming with sharks: creating strategic change through multi-sector collaboration", *International Journal of Strategic Change Management*, vol. 1, pp. 96-112.

HAUTZ J., SEIDL D., WHITTINGTON R. (2017), "Open strategy: Dimensions, dilemmas, dynamics", *Long Range Planning*, vol. 50, n. 3, pp. 298-309.

HENKEL J. (2006), "Selective revealing in open innovation processes: the case of embedded Linux", *Research Policy*, vol. 35, n. 7, pp. 953-969.

HENKEL J., SCHÖBERL S., ALEXY O. (2014), "The emergence of openness: How and why firms adopt selective revealing in open innovation", *Research Policy*, vol. 43, n. 5, pp. 879-890.

HERACLEOUS L., GOESSWEIN J., BEAUDETTE P. (2017), "Open strategy-making at the Wikimedia foundation: a dialogic perspective", The Journal of Applied Behavioral Science.

HUTTER K., NKETIA B.A., FÜLLER J. (2017), "Falling short with participation-different effects of ideation, commenting, and evaluating behavior on open strategizing", *Long Range Planning*, vol. 50, n. 3, pp. 355-370.

INVERNIZZI E., BIRAGHI S., ROMENTI S. (2012), "Entrepreneurial communication and the strategic role of internal communication", *Sinergie*, n. 87, pp. 149-170.

KETOKIVI M., CASTANER X. (2004), "Strategic planning as an integrative device", *Administrative Science Quarterly*, vol. 49, n. 3, pp. 337-365.

KIM N., KIM D.J., LEE S. (2015), "Antecedents of open innovation at the project level: empirical analysis of Korean firms", *R&D Management*, vol. 45, n. 5, pp. 411-439.

LANGLEY A. (1999), "Strategies for theorizing from process data", *Academy of Management Review*, vol. 24, pp. pp. 691-710.

LAURSEN, K., SALTER, A. (2006), "Open for innovation: the role of openness in explaining innovation performance among UK manufacturing firms", *Strategic Management Journal*, vol. 27, n. 2, pp. 131-150.

LICHTENTHALER U. (2008), "Open innovation in practice: an analysis of strategic approaches to technology trans-actions", *IEEE Transactions of Engineering Management*, vol. 55, pp. 148-157.

LICHTENTHALER U. (2015), "A note on outbound open innovation and firm performance", *R&D Management*, vol. 45, n. 5, pp. 606-608.

LOVE J.H., ROPER S., VAHTER P. (2014), "Learning from openness: The dynamics of breadth in external innovation linkages", *Strategic management journal*, vol. 35, n. 11, pp. 1703-1716.

LUEDICKE M.K., HUSEMANN K.C., FURNARI S., LADSTAETTER F. (2017), "Radically open strategizing: how the premium cola collective takes open strategy to the extreme", *Long Range Planning*, vol. 50, n. 3, pp. 371-384.

MAKADOK R., BARNEY J.B. (2001), "Strategic factor market intelligence: An application of information economics to strategy formulation and competitor intelligence", *Management Science*, vol. 47, n. 12, pp. 1621-1638.

MALHOTRA A., MAJCHRZAK A., NIEMIEC R.M. (2017), "Using public crowds for open strategy formulation: mitigating the risks of knowledge gaps", *Long Range Planning*, vol. 50, n. 3, pp. 397-410.

MANTERE S., VAARA E. (2008), "On the problem of participation in strategy: a critical discursive perspective", *Organization Science*, vol. 19, pp. 341-358.

MACK D.Z., SZULANSKI G. (2017), *Opening up: how centralization affects participation and inclusion in strategy making*, Long: Range Plan.

MILES M.B., HUBERMAN A.M. (1994), *Qualitative data analysis: An expanded sourcebook*, Beverly Hills: Sage Publications.

MILLER D. (1983), "The correlates of entrepreneurship in three types of firms", *Management Science*, vol. 29, n. 7, pp. 770-791.

MONTGOMERY C. (2008), "Putting leadership back into strategy", *Harvard Business Review*, vol. 86, pp. 54-60.

MOORE J. (1993), "The Death of Competition", *Boston, MA: Harvard Business School Press*.

MORAN P., GHOSHAL S. (1996), "Bad for Practice: A critique of the Transaction Cost Theory", *Academy of Management Review*, vol. 21, n. 1, pp. 13-47.

NAMBISAN S., BARON R.A. (2013), "Entrepreneurship in Innovation Ecosystems: Entrepreneurs' Self-Regulatory Processes and Their Implications for New Venture Success", *Entrepreneurship Theory and Practice*, vol. 37, n. 5, pp. 1071-1097.

NELSON R., WINTER S. (1982), *An evolutionary theory of economic change*, Belknap Press, Cambridge.

PRAHALAD C.K., RAMASWAMY V. (2004), "Co-creating unique value with customers", *Strategy & leadership*, vol. 32, n. 3, pp. 4-9.

PRANDELLI E., SAWHNEY M., VERONA G. (2008), *Collaborating with Customers to Innovate: Conceiving and Marketing Products in the Networking Age*, Cheltenham: Edward Elgar.

RANDHAWA K., WILDEN R., HOHBERGER J. (2016), "A Bibliometric Review of Open Innovation: Setting a Research Agenda", *Journal of Product Innovation Management*, vol. 36, n. 6, pp. 750-772.

RAYPORT J.F., JAWORSKI B.J. (2004), "Best face forward", *Harvard Business Review*, vol. 82, n. 12, pp. 47-58.

RHEE J., PARK T., LEE D.H. (2010), "Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation", *Technovation*, vol. 30, n. 1, pp. 65-75.

RIVKIN J. (2000), "Imitation of complex strategies", *Management Science*, vol. 46, pp. 824-844.

ROSENBERG N. (1994), *Exploring the black box: technology, economics, and history*, Cambridge University Press, Cambridge.

SALTER A., CRISCUOLO P., TER WAL A.L. (2014). "Coping with Open Innovation", *California Management Review*, vol. 56, n. 2, pp. 77-94.

SCHLAGWEIN D., CONBOY K., FELLER J., LEIMEISTER J.M., MORGAN L. (2017). *"Openness" with and without Information Technology: a framework and a brief history*, Springer.

SCHMITT R. (2010), "Dealing with Wicked Issues: Open Strategizing and the Camisea Case", *Journal of Business Ethics*, vol. 96, pp. 11-20.

STIEGER D., MATZLER K., CHATTERJEE S., LADSTAETTER-FUSSENEGGER F. (2012), "Democratizing Strategy: How Crowdsourcing Can Be Used for Strategy Dialogues", *California Management Review*, vol. 54, n. 4, pp. 44-69.

TACKX K., VERDIN P. (2014), "Can co-creation lead to better strategy? An exploratory research", *Universite Libre de Bruxelles, Working Papers*, pp. 14-027.

TAVAKOLI A., SCHLAGWEIN D., SCHODER D. (2017). "Open strategy: Literature review, re-analysis of cases and conceptualisation as a practice", *The Journal of Strategic Information Systems*, vol. 26, n. 3, pp. 163-184.

TURCO C. (2016), *The conversational firm: rethinking bureaucracy in the age of social media*, Columbia University Press, New York.

VON HIPPEL E. (2005), *Democratizing Innovation MIT Press*, Cambridge, MA.

WERLE F., SEIDL D. (2012), "Inter-organizational strategizing as extension of sensemaking capacities", Working Paper. University of Zurich, Zurich.

WERLE F., SEIDL D. (2015), "The layered materiality of strategizing: epistemic objects and the interplay between material artefacts in the exploration of strategic topics", *British Journal of Management*, vol. 1, pp. 67-89.

WEST J., BOGERS M. (2014), "Leveraging External Sources of Innovation: A Review of Research on Open Innovation", *Journal of Product Innovation Management*, vol. 31, n. 4, pp. 814-831.

WEST J., BOGERS M. (2017), "Open innovation: current status and research opportunities", *Innovation*, vol. 19, n. 1, pp. 43-50.

WEST J., GALLAGHER S. (2006), "Challenges of Open Innovation: The Paradox of Firm Investment in Open-Source Software", *R&D Management*, vol. 36, n. 3, pp. 319-331.

WESTLEY F. (1990), "Middle managers and strategy: micro- dynamics of inclusion", *Strategic Management Journal*, vol. 11, pp. 337-342.

WHITTINGTON R., CAILLUET L., YAKIS-DOUGLAS B. (2011), "Opening Strategy: Evolution of a Precarious Profession", *British Journal of Management*, vol. 22, n. 3, pp. 531-544.

WILLIAMSON O. E. (1970), *Corporate Control and Business Behavior. Englewood Cliffs*, NJ: Prentice Hall.

YAKIS-DOUGLAS B., ANGWIN D., AHN K., MEADOWS M. (2017), "Opening M&A strategy to investors: predictors and outcomes of transparency during organisational transition", *Long Range Planning*, vol. 50, n. 3, pp. 411-422.

YEANEY J. (2011), *Democratizing the Corporate Strategy Process at Red Hat*, Management Innovation EXchange.

YIN R.K. (2009), "Case study research: Design and methods", *Applied Social Research Methods Series*.

ZAHRA S.A. (1991), "Predictors and financial outcomes of corporate entrepreneurship: An exploratory study", *Journal of Business Venturing*, vol. 6, n. 4, pp. 259-285.

The Silent Revolution Affecting Digital and Physical Stores

FEDERICA CABONI[*] ANGELA DETTORI[•] ERNESTINA GIUDICI [♠]

Abstract

Objectives. *The retail world is involved by continuous changes that have affected both digital and physical stores. Both kinds of stores are committed to finding new ways to involve the emotional and behavioral spheres of customer action. This study purposes to discuss these issues considering that the academic literature on this topic has often failed to analyze these phenomena from a holistic perspective. Instead, attention has been devoted to studying online and physical stores separately.*

Methodology. *This is a conceptual paper based on the existing literature and several reports from major research institutions.*

Findings. *This study main finding is that stores are changing their character quickly: digital shops are adopting behaviors of physical stores, and physical stores are incorporating a variety of technological devices.*

This study contributes to narrowing the existing gap in the literature concerning mutual conditioning in both digital and physical stores. The resulting new perspective about digital stores will allow them to better satisfy consumer needs and to trail blaze for a rebirth of vibrant physical stores. Thus, a hybrid model is born.

Research limits. *The primary limitation is the absence of a specific survey. This will be the next step of this research in the future.*

Practical implications. *The main practical consequence of the study is to provide holistic analysis regarding phenomena often not studied from this point of view.*

Originality of the study. *The study highlights a new business model-a hybrid because it blends digital and physical retail operations-that represents the future of retailing using both dimensions in order to stay in the market.*

Key words: *digital stores; physical stores; hybrid model of commercial business.*

[*] Research Fellow in *Management* - University of Cagliari
e-mail: federica.caboini@unica.it

[•] Research Fellow in *Management* - University of Cagliari
e-mail: angela.dettori@unica.it

[♠] Full Professor *of Management* - University of Cagliari
e-mail: giudici@unica.it

1. Introduction

Change is a word that can be used to characterize (more than any other) the current period in history. Indeed, scientific and technological development has pervaded every individual and collective activity, modifying the operative modalities in each and every organization.

The widespread availability of technological tools with high potential to add value and such a small size, e.g., smartphones, demonstrates the ease with which one can access the Internet and numerous other information sources and has had a significant impact on business activities (Kushwaha and Shankar, 2013).

For several decades, physical sales points have been operating in a constantly changing environment: the advent of e-commerce has been as a major revolution. Indeed, other ways of operating in the digital world have obligated retail outlets to make physical changes to remain in the market.

In reality, the previous consideration is both true and false at the same time. While it is true that digital stores are progressing, it is also true that more and more of them include particular elements of physical stores in their offerings, it is also true that even with some of their peculiarities (e.g., direct contact with consumers and the possibility of creating unforgettable experiences), they are increasingly providing technological tools that meet the "digital" expectations of their customers.

A new hybrid business model has now emerged, which will increasingly influence the offerings of both digital stores and physical stores (Godfrey *et al.*, 2011; Jones and Runyan, 2013). We move toward the use by consumers of multiple retail channels.

This study was born from the awareness of the changes taking place. The main research question is "What is the future for digital stores and physical stores, taking into account the revolutionary changes that are affecting both markets and consumers?"

More specifically, one may wonder "Just how will traditional commerce find adequate answers to the online onslaught? How will digital commerce guarantee its continued market growth? What new business model will emerge?" Somehow, what emerges will be able to meet the needs of both digital and physical stores?

The work is structured as follows: in addition to this introduction and a subsequent point on the adopted methodology, the technology is highlighted that has determined some changes in the purchasing process, putting some considerations on a major change in consumer needs: the birth of the philosophy of "good living". A subsequent section is dedicated to identifying potential future paths for traditional and digital commerce. Attention will be paid to the combination of online and offline modes with specific attention, on the one hand, to the birth of Amazon books and, on the other hand, to the "responses" of traditional commerce. Finally, some concluding considerations are presented.

2. Methodology

This is a conceptual work based on the existing literature taken as a support to address the phenomenon under study. More exactly, the literature analysis is a method for identifying, evaluating, and synthesizing the existing body of works produced by researchers, scholars, and practitioners (Fink, 2010). Due to the specificity of the topic, the analysis concerned both studies by academics and studies of relevant research organizations in the world of retail companies

3. Technology and purchasing processes

Technology has made an important contribution to determining the characteristics of the modern consumer. The 2017 Censis report referred to an "unfaithful, hyper-informed buyer, ready

to share his experiences of consumption with others, a shrewd hunter of opportunities in prices, types of products, and quality". Analysis of the key words reveals their link with the digital evolution: hyper-information, for example, is a direct consequence of the greater ease of access to the database *par excellence*, that is the Internet, and sharing is the focal point of social networks, expanding rapidly in recent decades. Moreover, the possibility of choosing among prices, products, and quality is connected with the web and the mobile device, as they facilitate the search and comparison between companies in different contexts.

Cliquet *et al.* (2014) conducted empirical research that shows that purchasing is among the eight activities that people perform using the smartphone.

Singh and Swait (2017) noted that the use of smartphone has gone from information and entertainment functions to search and purchase functions. The observation is confirmed by the Audiweb survey (2017), according to which 93.7% of users connect for actual searches, while 72.8% do so to buy or visit e-commerce sites.

The digital evolution and the diffusion of the new devices is also indicated as responsible for the methods of making purchases, as pointed out by various scholars (Singh and Swait 2017, Hagberg *et al.*, 2016, Cliquet *et al.*, 2014; Shankar *et al.*, 2010).

However, the innovations concern not only the way the purchase is carried out but, above all, the pre-purchase phases. In fact, we go from the search for information on the product to be bought, to sharing one's own expenses with friends, to direct contact with companies through social networks, then to dialog and reviews on brands of interest.

It is interesting to underscore that these methods of behavior during the pre-purchase phases are increasingly frequent also with reference to purchases in physical stores.

The dissemination of the activities has contributed to the radical change in the consumption model. According to a traditional approach, the purchasing process can be described as a sequence of three phases: stimulus (stimulus), purchase (shelf), and experience (experience). The third phase is still in a nascent state but already characterized by a broad and deep set of research investigating specific facets of the meaning to be attributed to "customer experience" (Lemon and Verhoef, 2016).

The more modern approach, thanks to the multimedia and digital evolution, sees the purchasing process enrich itself with a further phase that is inserted between the moment of the stimulus and the moment of purchase and which is referred to as "zero moment of truth" (ZMOT) (Lecinski, 2011).

New consumers seek authenticity and, for this reason, they prefer unofficial sources such as the opinion of friends and acquaintances over the official sources of information promoted by companies or to the sales staff council. This is the behavior of 83% of consumers globally and 78% in Europe (Nielsen, 2015). Moreover, the opinion of strangers on the web, which is relevant for 66% of consumers at a global level (Nielsen, 2015), is not indifferent. According to a survey by Edelman (2016, 2017), the index of influence on the acquisition of information collected through word of mouth and reviews is 75%.

The pervasive impact of web sources on the decision can also be deduced from the research conducted by Shopper Science for Google (2011), which shows the tools most used by consumers to gather information on future purchases. That research shows that the primacy is up to the "search engine" that is consulted before making a decision by one-half of consumers, following comparisons with the best-selling products on the web with 49% up to 18% of social pages of the brand.

Besides the availability of more information, how it is understood has changed as the research has assumed increasing visual rather than textual characteristics (Ashman *et al.*, 2015). Dynamic messages such as video are used more frequently because, compared to static messages, they create a stronger emotional connection (Roggeveen *et al.*, 2015).

We are in the presence of a revolution, sometimes silent but always very effective: digital evolution puts individuals in a position to recognize new needs that arise continuously in relation to the development of social networks that favor the process of recognition of problems through

interaction with other individuals. It does not seem strange that purchases are triggered by a photo or a video on Instagram, Pinterest, or Facebook.

4. Consumption and philosophy of "living well"

Some recent surveys (Euromonitor international, Nielsen, Coop, 2016, Censis) have underlined a significant change in consumers' conception of life. The global diffusion of a new philosophy of life has emerged, that of "living well". This "philosophy" involves various aspects of daily life: we tend to take better care of our bodies and minds, but we also pay more attention to our environment and to the people we interact with. In terms of consumption, there are numerous sectors involved: primarily food but also cosmetics, sports, travel, and, albeit with less impact, clothing and household items.

Bersanetti (2016) argues that the origin of this change is the rejection of stress and frenetic daily living: the implication is that if individuals intend to pursue it, they must first try to "slow down". This concept is at the basis of the slow movement which, in fact, "allows one to decelerate the peace of daily life and practice time and space" (Foley, 2017).

In general, the slow life can be defined as "an emerging trend that is closer to all that is traditional, local, fair, organic, and authentic" (Chung *et al.*, 2017).

The spread of the slow movement has also invested in retail: therefore, slow retail can be indicated as the trend whereby sales outlets and shopping centers develop strategies aimed at favoring the longest possible stay of the consumer at the point of sale.

Confirming the above trend, let us recall that the sales in large shopping centers-even if they are still significant-decreased in 2015 by 2%, while sales in specialized shops increased by 5% (Russo and De Carne, 2016).

Among the reasons for this trend reversal we can consider, in addition to what has been observed so far, the reduced physical and assortment dimensions (Kahn, 2017), which give the consumer a sense of familiarity and relaxation. The role played by sales personnel in creating the aforementioned climate is not secondary, even if customers are increasingly inclined to take basic information via their smartphones (Cliquet *et al.*, 2014; Fuentes *et al.*, 2017).

In the philosophy of "living well," there is also the search for living unique and immemorial experiences (Lemon and Verhoef, 2016).

There are two reasons that push the consumer to buy at a specific point of sale, connected with this concept: the first, more direct, is the shopping experience; the second, less immediate, is the pleasantness of the environment connected with the need to be surrounded (as much as possible) with a positive atmosphere. These things are sought after in every place that one visits and even more so in sales points, often designated as environments in which to spend one's free time. Although the link between the pleasantness of the environment and the purchasing experience may not immediately appear, some empirical studies, e.g., Morrison et. al (2011) in a fashion store, highlight that environmental variables such as the volume of music and the presence of an aroma are able to positively influence the behavior of the buyers. In particular, the study shows that these factors lead to an increase in time spent in stores and the amount of purchases made. Along the same lines, Thang and Tan (2003) claimed that a pleasant atmosphere also affects store fidelity.

Ensuring a pleasant shopping experience is one of the fundamental aspects of establishing oneself in a competitive context such as the current one.

Experience is an added value that goes beyond the intrinsic attributes of the good itself and relates rather to intangible components: emotions and sensations that make the customer feel satisfied with his purchase, both for a greater extent and for a longer duration than that which occurs with a more utilitarian purchase (Van Boven *et al.*, 2003).

5. Traditional and digital commerce: what is the future?

Among the aspects of the new consumer shines the predominant role of technology in searching for attributes such as the ease and speed of purchase. This alone seems to favor online shopping to the detriment of the traditional buying. This scenario is confirmed by consumption figures that show the contrast between the strong rise of e-commerce and the general recovery in consumption. Going into detail, online sales have grown by an average of 20% per year now for four years (Coop, 2017), in contrast to a general increase in consumption that, despite the start of a recovery, has never even reached the 2% threshold in the last two years (Coop, 2017). Furthermore, the forecasts for the next few years seem to confirm the current trend.

To better understand the relationships that exist between online shopping, favored by the imposing technological development, and offline shopping, it is important to go beyond the data referring to the single phenomenon to consider them together.

Consider the 20% annual growth in online shopping. Yet, one must bear in mind that currently online shopping only covers a small share of the overall market. According to *Human Highway* (2017) research, Italian e-commerce accounts for just 4% of consumption. Globally, its incidence is higher, but not so much as to undermine the finding, representing 8.7% of retail sales and, according to forecasts, will reach 14.6% by 2020 (Hagberg *et al.*, 2017; Deloitte, 2017). The data just mentioned allow us to affirm that traditional channels have not at all become obsolete, nor are they destined to become so in the next few years. The highest percentage of sales in recent years has been made in physical stores and will continue to do so for several years (Hagberg *et al.*, 2017). In Italy, shoppers who opted for conventional purchases in 2016, represented the majority with a quota of 46.6 million users, of which 24.5 million were repeat or regular customers (Censis, 2017).

Agnihotri (2015) argued that physical presence, if well-exploited, is a valid source of competitive advantage for traditional companies, compared to pure digital operators.

The peculiar element of the current period is that retailers operate in a channel design context where the boundaries between online and offline are increasingly blurred. More specifically, retailers have to take into consideration the challenge to shift from the multichannel or cross-channel to the omni-channel one (Picot-Coupey *et al.*, 2016).

The combination of information sources and purchase channels is one of the peculiarities in consumer behavior of the new millennium (Censis, 2017). The data show that in the last year, hybrid forms of purchase such as checking the product in the store and then buying it on the web, or ordering it on the web and then picking it up at the store, have reached, 30.5 and 19.6 million buyers, respectively, of whom 8.8 and 5.4 million are regular or repeat customers.

The use by consumers of a combination of channels in the purchase decision-making process is increasingly the object of attention even by scholars (Picot-Coupey *et al.*, 2016). In particular, Singh and Swait (2017) pointed out that the operations performed via the web are so successful because they allow efficient use of one's "downtime" during the day (e.g., a trip, sitting on the metro, a lunch break, etc.).

It should be noted that the changes introduced by the web and digital technologies are not just about the spread of new platforms on which to make purchases but also the provision of more information to consumers and more opportunities for comparison that, of course, also affect purchases offline.

What is further highlighted is that e-commerce is not the only challenge that brick-and-mortar retailers face. The most direct consequence of the change in consumer needs cannot be the static competition between online and offline channels, but it must be a careful analysis of emerging needs and the consequent search for the most appropriate techniques to guarantee consumers an agreeable and complete shopping experience. This goal can be achieved with the help of hybrid tools, where online and offline channels complement each other instead of establishing sterile competition (Singh and Swait, 2017).

In short, the competition of the future will be not so much in the "where" to win over the interest and loyalty of customers, but rather in "how" to do it. This development is suggested by the fact that digital tools from the beginning of the millennium till today have multiplied, as has their use, leading to a situation in which e-commerce is only a part of the technological innovations present in the markets. Some analysts, to better outline the phenomenon in progress, have extended the investigation beyond the sphere of online sales, considering the "net retail" as a whole which includes, in addition to the actual sale, all the activities that allow users to identify, order, and pay for products or services remotely. Internet retailing does not exclude the feature that the sale may end at a traditional sales point but emphasizes that the use of technology may be included in the purchasing process and influence the outcome.

In this context, they can build their competitive advantage over those who use an exclusive online strategy by fully exploiting their potential (Agnihotri, 2015). Similarly, Anderson *et al.* (2013) showed that following a period in which it was thought that physical stores were destined to become obsolete, the same new potential began to be attributed to them. The authors, referring to the new impulse that affects the physical points of sale, affirm that "ironically, this is largely guided by what was once perceived as a threat to its traditional business model: the new technology. In fact, technology is providing brick & mortar retailers with innovative ways to seize strategic opportunities". Healey Cypher, co-founder and CEO of Oak Labs, an innovative startup, born with the aim of supporting the activities of offline retailers with technological tools, fully agrees that technology will be at the base of successful traditional retailers.

6. Showrooming and "guide shop" examples of online/offline combinations

Showrooming is a purchase method that requires buyers to search and choose references in a physical store and then proceed to finalize the purchase on the web. In reality, the negative and positive implications of this method are numerous. Gensler *et al.* (2017) noted that if consumers use the offline and online store of the same retailer, the showroom is not a problem for the retailer. However, in reality, it is also common for consumers to use the brick-and-mortar store of a retailer as an exhibition hall and to make the purchase at another retailer.

Other scholars have pointed out (Sit *et al.*, 2018) that the possibility that showrooming becomes a positive activity for the retailer that is strictly connected with the policies it adopts and with the capacity that it can express in making its own store attractive.

The showroom user is an uncertain consumer with respect to the purchase. By accessing the physical point of sale, he is looking for clarification. From this observation it emerges that a determining role is played by the information, the modalities with which it is provided, and their completeness.

Significant aid is provided by both QR-coding and with a simple scans, which provide a lot of information on the good or service identified, both by special digital totems (which will be discussed later on) that allow direct access to online pages.

Gensler *et al.* (2017) emphasized that the consumer may use the information collected at the point of sale just to make his online searching easier. In fact, by facilitating access to information, the company generates an increase in customer satisfaction, which can translate into greater likelihood that the purchase will be made at the point of sale. Furthermore, great care must be taken to avoid price discrepancies between the product sold online and in the showroom (Gensler *et al.*, 2017).

Another element that might induce the consumer to purchase in the store is the irreplaceable role of sales staff who must possess a high level of professionalism. They can quickly provide adequate answers to customer queries with regard to product availability and speedy delivery. It is this last aspect that Gensler *et al.* (2017) consider as the most relevant for customer satisfaction.

6.1 The birth of the "guide shop"

Alongside the techniques that offline retailers put in place to encourage purchases at the point of sale in the presence of showroom activities, even the web players have developed policies aimed at encouraging online purchases using the support of particular physical stores: the *guide shop*. These are shops-currently widespread in the U.S.A.-which represent the response of web players. This method provides an alternative to the physical stores often promoted by digital stores. Customers have a point of reference to view and test the references proposed online. The intent of pure digital is to "allow the customer to evaluate and wear samples to find the perfect model and size, making available the entire collection. Once back home, the customer himself will order the product from the online store" (Zorzoli, 2017).

The first cases concern the clothing and electronics sectors-retailers most affected by the showroom phenomenon. Consider Bonobos for example, a men's clothing store created in 2007 on the web, which a short time later opened 48 stores in the United States. Its founder, Andy Dunn, stated: "The average transaction on our e-store has more than doubled and our customers return to buy after 58 days, compared to 85 days when we were online only".

In Italy, guide shop cases are rarer. Perhaps the only one is Lanieri, which operates a men's clothing retail web portal that currently consists of five physical retail stores, where it is possible to have measurements taken and to feel the quality of the fabrics with one's own fingers.

These proposed examples, although not widespread, show that the competitive context is in constant and rapid evolution, acting in both online and offline channels.

7. Pure digital vs. brick-and-mortar stores: Amazon books

To demonstrate the rapidity with which the business sector has evolved, the new role assumed by physical points is significant. Only a few years ago we imagined an exclusively digital future, but today the physical sales point is invested by a "new vitality".

The cases of such vitality are not yet numerous but they are sufficient enough to confirm that a change is taking place. The www.Facile.it platform, created to compare online insurance quotes, opened the first physical branch in Varese in the first months of 2017 and, due to its success, the possibility of creating a franchising network (Magnani, 2017). This is a direct opening, but the digital-physical transition was also marked by alliances between pure digital and traditional businesses, such as those between Amazon and Whole Food Market, aimed at testing the technology of Amazon Go, and that between Google and Walmart for experimenting with Google Assistant technology.

One of the most significant evidences of the transition from digital to physical is attributable to Amazon. The company, after two decades of undisputed success as well as digital, has recently started the opening of a network of physical points of sale.

The stores are called "Amazon books" and have as main references the books that were chosen as the core business by the company even in its online debut, in 1995. A first step toward multichannel orientation has already been tried by the company US, with the opening of small kiosks at some American shopping centers and with the establishment of pick-up points for orders placed on the website. The propensity toward this direction was then confirmed precisely with the opening of a real sales point. The first was opened in Seattle in November 2015 and in just two years the network had expanded to 13 stores in the United States, with a further three points close to opening.

Although accepted with perplexity, Amazon's strategy appears to be in line with emerging market demand, which requires a growing commitment to finding the right combination between the two worlds.

The bookcase style is typical: wooden shelves, the scent of paper, a space dedicated to customers to sit down to browse magazines or e-books, a small area where children can become

familiar with books and spend time in the company of parents, contact with sales staff. All such features strictly belong to the physical point of sale, in which the purchase of the book is but a mere part of the in-store journey. These peculiarities can hardly be reproduced successfully on a website, where generally the choice and purchase, not only of books, but of any other type of product, takes place in a much more aseptic manner.

The Amazon store is different than traditional ones, by virtue of the introduction of innovative details, inherited from the online world of which it by now has consolidated experience. The large amount of information available to the company from the online channel is used to model the offer and make fit as close as possible with the needs of end users.

One of the peculiarities of Amazon books is the way in which the assortment is chosen. Considering the limited space compared to the references offered online, the company has chosen to display books with the cover facing the customer, rather than the spine alone showing, as it usually happens. This is because the company prefers quality to quantity. It is believed that this method exposure has a greater impact and favors the recognition of titles, and thus, the choice between the volumes to be included and those to be excluded from the range is essential. What is important is that the selection does not happen randomly but according to a method that focuses on the preferences of consumers. The best titles must be introduced on the store shelves and, in fact, must be chosen based on the assessments of customers entered on Amazon.com, the number of pre-orders or sales made and the popularity obtained on "Goodreads" a portal dedicated to the evaluation and research of the best books-acquired by Amazon in 2013. Just completing this procedure falls upon the evaluation of internal curators. The proposed in-store products are generally those that received average four-star or higher reviews (on a five-star ranking).

Another novelty, compared to traditional bookstores, inherited from the online world, is the publication of reviews. The strong interest of modern consumers in the opinions of others who have already experienced the product or service they want to buy is often crucial, so much so that even when they are inside the traditional store they use their smartphones to be able to read some reviews before completing the purchase. Amazon has identified this need and proposed a solution by adding to each book a review sheet that includes the evaluation of Amazon.com customers (average number of stars received) and the text of a review. Furthermore, scanning the product at the appropriate totems lets one have direct access to the online card of the book with the possibility to read also the other reviews on the net.

The guideline is to make the choice as simple as possible for the customer. One of the ways to do this is through good store placement. To this end, after the opening of the first store in Seattle, new sections were added to new stores. For example, there is a "recommended" section where they expose little-known titles but which have characteristics very similar to successful books. Another, however, is dedicated to the fast readings that Kindle e-reader users have finished within three days.

No book has a card indicating the price. This omission is because the same price is guaranteed for the online platform, which is normally subject to more frequent changes than that seen in normal stores. For example, at any time, discounts and promotions may be applied. Therefore, customers may know the cost of the product in real time by scanning it at the totems or through the appropriate function of the Amazon app on their smartphone.

8. Possible "answers" from traditional commerce

Despite the positive trend that recognizes a renewed interest in traditional shopping, it is also to be noted that changes and continuous adaptations are indispensable to fully recover and maintain the approval of consumers. Offering a memorable shopping experience for its customers is the factor that can provide the greatest contribution to the creation of a unique and captivating entity, capable of surviving in an increasingly dynamic environment (Grewal *et al.*, 2017), as well as contributing to increase loyalty all the way to the point of sale (Johnson *et al.*, 2015).

Actually, setting up and implementing an unforgettable shopping experience strategy is a complex task since many heterogeneous elements must be considered. The experience consists of both entities controllable by retailers (the atmosphere of the store, the assortment, the price, etc.) and of non-controllable entities (external influences, etc.) (Grewal *et al.*, 2017; Lemon and Verhoef, 2016), but above all, it is a combination of potentially antithetical elements: emotional and rational (Bäckström and Johansson, 2017). Nor should we underestimate the fact that every human subject, because of its uniqueness, experiences the encounter on the basis of its specific perceptions.

The aforementioned elements imply that it is impossible to identify operating methods or "behavior models" that are universally valid. What follows are some of the possible "responses" that the stores can adopt, bearing in mind that each store must "model" each technique based on its reference environment, its customers, and the need for specific adaptation through continuous change.

8.1 Point of sale environment and digital totems

Although today, consumers are less passive victims manipulated by marketing and commercial spaces (Fuentes *et al.*, 2017), the atmosphere of the store continues to be considered one of the variables that, more than others, affects one's shopping experience and overall customer satisfaction (Johnson *et al.*, 2015). The environmental variables (Bäckström and Johansson, 2017) - integrated colors, lighting, music, perfume, furnishing materials, etc. - have received attention from scholars (Morrison *et al.*, 2011; Thang *et al.*, 2003) in recent decades, precisely because of the peculiarity of influencing perceptions, attitudes, and intentions of consumers in retail environments.

Here we consider two dimensions that have been less explored: the reconfiguration of sales environments dictated by emerging technologies and the size of the offerings.

With reference to the role of technology, from the research conducted by Priporas *et al.* (2017), flexibility and convenience have emerged as being quintessential components, understood as encompassing the ease of identifying goods and avoiding queues. Such are the first reasons that push buyers to make use of in-store technology support: self-checkouts, information contact points, digital signage, and finally the new payment methods like those via smartphone or contactless.

Among the technological tools to be introduced in the traditional sales point, multimedia (or digital) totems cannot be cited. These are simple digital screens, which can support sales activities in various ways. For instance, they display multimedia content such as photos and videos for particular products that are intended to be promoted, or simply to display information like current promotions.

A system that guarantees the affinity of the contents coupled with the revealed tastes of each customer is the one developed for the apparel sector by teamLab in Japan (Stern and Verweij, 2015). It utilizes a hanger with a sensor that allows one to view on store screens, photos, videos, combinations, and more information about a specific product-activated once taken up by the exhibitor. In this way, the potential buyer is invited to take action (for example, to take measurements or buy the product), increasing the attractiveness of the product that he showed first interest in. At this stage, only the fact of seeing the product worn or coordinated with other elements may help make it more attractive to the consumer. According to Inoko Toshiyuki, CEO of teamLab, wearing the garment attracts consumers much more than a simple showing of it.

Multimedia kiosks can be a good way to encourage interaction with customers already beyond the point of sale and especially outside opening hours with their installation in the store window. In agreement with Bettucci *et al.* (2016), regardless of the functionalities associated with it, the digital screen generates the wow effect on customers, with a positive impact on customer experience and the probability that the individual decides to enter the point of sale. In addition, it allows one to continuously show more references, compared to what you could show in a normal

window and to quickly change layouts to adapt to different occasions. Some versions can then have a purchase function, through which customers can order products on the touch screen at any time of day, thus helping make the business model of the store even closer to that of the online shop.

One of the most used case studies on multimedia showcases is the Adidas NEO Label store (Anderson *et al.*, 2013; Bettucci *et al.*, 2016). The store in Nuremberg, Germany, was the first to host this technology, as a store test in 2012. The storefront consisted of a traditional part and a part in which there is a real virtual store. The screens showed passers-by some garments in real dimensions, which may be worn by a model or an individual customer. The touch technology promotes interaction, allowing for prospects to obtain more information on the movements of the model with one click. In addition, one can search for other products and create custom combinations. Creating their own look or filling the cart, through QR codes one can send details to a smartphone to directly complete the order remotely.

Other examples of shops that adopt this particular type of showcase, even if they do not yet implement the direct sales tool, are also present in Italy. Some Pinko stores offer multimedia showcases that feature videos of fashion shows, collections, look books, and more representative shots of press campaigns (Di Bari, 2011).

The totem can also be used as an effective storytelling tool through storytelling or fun through games and simulations. A good example, for the latter case, is represented by the Starbucks chain, which in 2011 launched an advertising campaign in its Vancouver and Toronto outlets, based on the use of interactive panels, for the promotion of the "Tazo" tea line. Customers could explore a new range by moving across the screen under the guise of a dragonfly, butterfly, or hummingbird (Starbucks, 2011).

8.2 Radio-frequency identification technology

As already noted, one of the strengths of the physical sales point is being able to touch or try the item one desires. This consideration is supported by Healey Cypher, CEO of Oak Labs. According to him, after entering the changing room, two out of three customers decided to buy. Furthermore, if at the same time there was some interaction with sales personnel, the probabilities increases as much as fivefold.

To improve the customer experience during the test, some companies, especially those belonging to the clothing industry, have begun to integrate their fitting rooms with smart devices. A cutting-edge example is that of the Ralph Lauren store in Manhattan. It is fitting rooms, designed by Oak Labs using radio-frequency identification (RFID) technology, transform what would appear to be a simple mirror, into a highly technological instrument able to recognize the product that enters the room and assist, in real time, the potential buyer with sizes, colors, and combinations. The same allows to request directly the intervention of the staff without the need to leave the fitting room. Moreover, after creating your own look, you can observe it by choosing different light settings.

Another *avant-garde* example is related to an Italian store and comes from the OVS flagship store in Milan. The dressing room adopted in that store works similarly to the aforementioned mirror but with two new elements. First, it allows, thanks to augmented reality, observing the adaptation of the garments to their figure, without the need to wear them. The second concerns the possibility of directly sharing their outfits on social networks, which is the most relevant aspect. Indeed, the social element, and in particular the consent of the individuals with whom we are connected, has an increasingly important influence in people's lives and consequently also in their purchases. Having the approval others helps to strengthen satisfaction with the purchase.

8.3 The size of the assortment

One of the advantages with online players is the possibility of offering a very wide range of products, which provides security for buyers to find through this channel everything they need. At

the physical point of sale, however, even for the simple matter of storage of goods, the variety of references is typically limited.

This difference can turn a threat into an opportunity. Kahn (2017) underscored the need to make the in-store assortment more appealing to consumers, rather than more abundant. Among the strategies to do this, in fact, mentions the reduction in the size of the same. This theme connects the excess of information (which characterizes online stores), which might cause a consumer to be confused and can lead him to purchase a product under stress, not leaving him with a positive recollection of his shopping experience.

The different amplitudes in the range between digital and non-digital points of sale have been a strong point in the creation of Amazon books. The disadvantage of a more limited range is very low when the company operates using both channels-since in this case the firm can use the technology to refer to its website directly at the point of sale, thus bridging the gap. This operating mode can also be used by smaller companies.

8.4 The efficient use of social networks

Although direct contact maintains its value, one cannot fail to note the affirmation of social networks above all else. They allow interaction even with the material obstacle of significant distances. Social networks allow the creation of a sense of community and, therefore, a deep connection with customers that goes beyond the boundaries of the point of sale. The aim is to establish a dialog between the company and its buyers, as well as among the buyer's cohort itself, making the company profile a real place for exchange and sharing.

Accordingly, Grewal *et al.* (2017) considered that the exploitation of social media is a useful tool to improve customer engagement. Fuentes and Svingstedt (2017) noted that consumers use social media information to stay up-to-date and to find suggestions that can guide their purchases, especially ones expressed by so-called *influencers*: personal profiles with a large number of followers and thus with every single published post they are able to involve a very wide audience. It is noteworthy that the messages that come from personal accounts are more effective than those that come from institutional accounts, as they are perceived by users as more authentic.

The business advantage is derived from the combination of technological and traditional factors: social networks and personal relationships. Customers can always make use of direct contacts in the store when they feel the need but can also connect regardless of where they are.

8.5 Shoppertainment: when shopping becomes synonymous with fun

Within the hedonic value of shopping, a variable that is assuming importance for physical points of sale is connected with entertainment. Physical stores, which intend to build a competitive advantage must create broad involvement for their customers (Stern and Verweij, 2015) and must also present themselves as a leisure place where people can go to escape from their routine.

Anderson *et al.* (2013) proposed entertainment as a fundamental driver of future business strategies to create a unique and memorable shopping experience; hence, the word "shoppertainment" was coined, derived from the merger of the terms shopper and entertainment to indicate the set of strategies aimed at the satisfaction and entertainment of the customer.

Among the various examples, that of Nike is particularly pertinent. In 2016, the firm decided to introduce new forms of entertainment for its best customers in its Soho store (New York), called sportsmen. The peculiarity of the store is found in its possession of playground reproductions, e.g., basketball in primis, for the success that that sport holds in America, but also for football and running. In its basketball court, customers can shoot hoops, test their shoes, perform custom exercises under the guidance of certified athletes, while the screens around them reproduce the most popular basketball courts in the USA. The football field has a real grass coat on which, among other things, one can test various brands and models of cleats. An initiative of this type, in addition to the dual purpose of customer satisfaction and entertainment, also has the

usefulness of allowing the testing of products in similar conditions to those of real use. Customers have approved of such entertainment and, after a short time, the model has been reproduced in its Miami and Beijing stores.

Still in the ambit of customer satisfaction and entertainment, a very special case is the one that comes from the Westgate shopping center in Oxford, England, which made entertainment its strong point to meet the challenge of electronic commerce, turning on various occasions to a real theater. On the opening day, a show was staged with professional actors performing in an "Alice in Wonderland" setting.

Singular evidence of this application of the philosophy of entertainment is found in the John Lewis store (Brown, 2017), a chain specialized in a variety of sectors, from clothing to cosmetics, from sports equipment to home accessories, which has invested huge resources in the creation and enhancement of a sales point in which everything revolves around the concept of experientialism. The use of spaces has also been organized in this sense. Not all the available space is dedicated to the exhibition of products, but a fifth of it is reserved just for the experience and services. In this space, customers can receive personalized style advice for the purchase of clothing and accessories, attend free seminars to learn how to use new devices, and they will be able to spend time with their friends or family at the specially-arranged refreshment points. Dedicated spaces are equipped to accommodate special events, organized periodically. The focal point of the sales point is "the experience desk"-a counter manned by a manager, in which customers can receive support in planning their day in-store, with personalized routes and registrations leading the way to the various activities. Framing the whole experience, one finds a refined and elegant environment. That example is exemplary and *avant-garde* in the current commercial landscape. It is not a matter of sporadically carrying out events that involve the customer but rather of founding the design of an entire point of sale in the pursuit of this objective. It is a model from which one may take inspiration to develop innovative business strategies that are well adapted to the competitive context and modern. However, it should be stressed that achieving such an ambitious goal is not easy. The success of the "John Lewis" company is derived from having made huge investments (both in money and personnel training). Another aspect to consider is the size of the company considered: the store occupies an area of about 12,000 square meters and employs over 300 employees. The big dimension is just one of the reasons that allowed owners to put in place such a structured plan, with ample dedicated spaces, with the involvement of highly professionalized figures, and with the proposal of various initiatives. It is clear that in reality, a small-sized "project" must necessarily be reduced even further, but this must not downplay the importance of adopting entertainment initiatives. The exclusive consideration of the technical characteristics of commercial premises is reductive. Concurring with Bäckström and Johansson (2017), the fundamental point now clearer than ever: the physical store must transformed from a simple place of sale, to one where consumers are welcome and will likely have a memorable experience. In their compelling view, "The store's business model passes from the sale of products to the creation of experiences around it".

9. Conclusion

The key aspect that emerges from this study is that the world of commerce is in a state of considerable entropy and that it is not easy to identify if and when it will return to equilibrium. The current precarious equilibrium is determined by the identification of the correct combination: mixing aspects of digital stores and with those of physical ones. This precarious equilibrium has emerged due to the fact that new technological tools are presented daily that possess considerably different potentialities compared to the previous ones, as well as new functions. This leads onlookers to indicate that digital stores and physical stores will certainly be present in the future. However, it is equally certain that it will not be possible to identify today with what configurations each will be found. The proposal of a hybrid business model that is determined by the

combination of digital and physical aspects appears as the best answer to both the needs of digital stores and those of physical ones. Moreover, since the effectiveness of the model is linked to the identification of the combined elements, it can be hypothesized that its validity will remain unchanged even in the presence of new and what are yet unimaginable technological tools.

References

AGNIHOTRI A. (2015), "Can Brick-and-Mortar Retailers Successfully Become Multichannel Retailers?", *Journal of Marketing Channels*, vol. 22, n. 1, pp. 62-73.

ASHMAN R., SOLOMON M., WOLNY J. (2015), "An old model for a new age: Consumer decision making in participatory digital culture", *Journal of Customer Behaviour*, vol. 14, n. 2, pp.127-146.

BÄCKSTRÖM K., JOHANSSON U. (2017), "An exploration of consumers' experiences in physical stores: comparing consumers' and retailers' perspective in past and present time, *The International review of Retail, Distribution and Consumer Research*, vol. 273, n. 3, pp. 241-259.

BETTUCCI M., D'AMATO I., PEREGO A., POZZOLI E. (2016), *Omnicanalità: assicurare continuità all'esperienza del cliente*, EGEA, Milano.

CHUNG J.Y., KIM J.S., LEE C., KIM M.J. (2017), "Slow-food-seeking behaviour, authentic experience, and perceived slow value of a slow-life festival", *Current Issues in Tourism*, vol. 21, n. 2, pp. 123-127.

CLIQUET G., PICOT-COUPEY K., HURÈ E., GAHINET M. (2014), "Shopping with a Smartphone: A French-Japanese Perspective", *Marketing ZFP*, vol. 2, July, pp. 96-106.

FINK A. (2010), *Conducting research literature reviews*, SAGE, Thousand Oaks.

FOLEY C. (2017), "The art of wasting time: sociability, friendship, community and holidays", *Leisure Studies*, vol. 36, n. 1, pp.1-20.

FUENTES C., BÄCKSTRÖM K., SVINGSTEDT A. (2017), "Smartphones and the reconfiguration of retailscapes: Stores, shopping, and digitalization", *Journal of Retailing and Consumer Services*, vol. 39, November, pp. 270-278.

FUENTES C., SVINGSTEDT A. (2017) "Mobile phones and the practice of shopping: A study of how young adults use smartphones to shop", *Journal of Retailing and Consumer Services*, vol. 38, September, pp.137-146.

GENSLER S., NESLIN S. A., VERHOEF P. C. (2017), "The Showrooming Phenomenon: It's More than Just About Price", *Journal of Interactive Marketing*, vol. 38, May, pp. 29-43.

GREWAL D., ROGGEVEEN A. L., NORDFALT J. (2017), "The future of retailing", *Journal of Retailing*, vol. 93, n. 1, pp. 1-6.

GODFREY A., SEIDERS K., VOSS G. B. (2011), "Enough is enough! The fine line in executing multichannel relational communication", *Journal of Marketing*, vol. 75, n. 4, pp. 94-109.

HAGBERG J., SUNDSTROM M., EGELS-ZANDÉN N. (2016), "The digitalization of retailing: an exploratory framework", *International Journal of Retail & Distribution Management*, vol. 44, n. 7, pp. 694-712.

HAGBERG J., JONSSON A., EGELS-ZANDEN N. (2017), "Retail digitalization: Implications for physical stores", *Journal of Retailing and Consumer Services*, vol. 39, November, pp. 264-269.

JONES R. P., RUNYAN R. C. (2013), "Brand experience and brand implications in a multi-channel setting", The *International Review of Retail, Distribution, and Consumer Research*, vol. 23, n. 3, pp. 265-290.

JOHNSON K.K.P., KIM H.Y., MUN J.M., LEE J.Y., (2015), "Keeping customers shopping in stores: interrelationships among store attributes, shopping enjoyment, and place attachment", *The International Review of Retail, Distribution and Consumer Research*, vol. 25, n. 1, pp. 20-34.

KAHN B. (2017), "Using Visual Design to Improve Customer Perceptions of Online Assortments", *Journal of Retailing*, vol. 93, n. 1, pp. 29-42.

KUSHVAHA T., SHANKAR V. (2013), "Are multichannel customers really more valuable? The moderating role of product category characteristics", *Journal of Marketing*, vol. 77, n. 4, pp. 67-85.

LEMON K. N., VERHOEF P. C., (2016), "Understanding customer experience throughout the customer journey", *Journal of Marketing*, vol. 80, n. 6, pp. 69-96.

MORRISON M., GAN S., DUBELAAR C., OPPEWAL H. (2011), "In-store music and aroma influences on shopper behavior and satisfaction", *Journal of Business Research*, vol. 64, n. 6, pp. 558-564.

PICOT-COUPEY K., HURÉ E., PIVETAU L. (2016), "Channel design to enrich customers' shopping experiences: Syncronizing cliks with bricks in an omni-channel perspective - the Direct Optic case", *International Journal of Retail & Distribution Management*, vol. 44, n. 3, pp. 336-338.

PRIPORAS C., STYLOS N., FOTIADIS A. (2017), "Generation Z consumers' expectations of interactions in smart retailing: a future agenda", *Computers in human behavior*, vol. 77, December, pp.374-381.

ROGGEVEEN A., GREWAL D., TOWNSEND C., KRISHNAN R. (2015), "The Impact of Dynamic Presentation Format on Consumer Preferences for Hedonic Products and Services," *Journal of Marketing*, vol. 79, n. 6, pp. 34-49.

SHANKAR V., VENKATESH A., HOFACKER C., NAIK P. (2010), "Mobile Marketing in the Retailing Environment: Current Insights and Future Research Avenues", *Journal of Interactive Marketing*, vol. 24, n. 2, pp. 111-120.

SINGH S., SWAIT J. (2017), "Channels for search and purchase: Does mobile Internet matter?", *Journal of Retailing and Consumer Services*, vol. 39, November, pp.123-134.

SIT J.K., HOANG A., INVERSINI A. (2018), "Showrooming and retail opportunities: A qualitative investigation via a consumer-experience lens", *Journal of Retailing and Consumer Services*, vol. 40, January, pp. 163-174.

STERN N., VERWEIJ L. (2015), *"10 Retail Innovations. A decade of innovation"*, Ebeltoft Group, Barcelona.

THANG D., TAN B. (2003), "Linking consumer perception to preference of retail stores an empirical assessment of the multiattributes of store image", *Journal of retailing and Consumer Services*, vol. 10, n. 4, pp.193-20.

VAN BOVEN L., GILOVICH T. (2003), "To do or to have? That is the question", *Journal of Personality and Social Psychology*, vol. 85, n. 6, pp. 1193-1202.

Websites

https://www.amazon.com/b?node=13270229011 consultazione 28 Novembre 2017.

https://www.bestbuy.com/site/customer-service/price-match-guarantee/pcmcat290300050002.c?id=pcmcat290300050002_consultazione 5 Dicembre 2017

www.drapersonline.com/business-operations/stores/inside-the-store-of-21st-century-john-lewis-at-westgate-oxford/7026951.article_Brown H. (2017), "Inside the store of the 21st century: John Lewis at Westgate Oxford", stores page.

http://giovaniimprenditoriconfcommercio.it/index.php/formazione/kiki-lab/item/456-un-appendino-digitale.html "TeamLab hanger: l'appendino digitale", consultazione 18 Dicembre 2017

https://www.lanieri.com/it?gclid=CjwKCAiAx57RBRBkEiwA8yZdUJ5ajQduZfJ-4wjbr8ySkYReuc7FSVTG8G1HUE8kvcmTSXm7_l58RhoCGrAQAvD_BwE#_consultazione 06 Dicembre 2017

http://www.ilsole24ore.com/art/impresa-e-territori/2017-10-10/facileit-va-anche-offline-rete-100-negozi-franchising-tutta-italia--160213.shtml?uuid=AEKa0CjC, MAGNANI A. (2017), "Facile.it va anche offline: rete di negozi in franchising in tutta Italia", Il Sole 24 ore, consultazione 06 Gennaio 2018

https://singularityhub.com/ (2011), Starbucks' interactive storefront window is latest in digital trend

www.news.nike.com/news/nike-soho-trial-zones, 10 Novembre 2016

http://www.oaklabs.is/ The Oak Mirror, consultazione 14 Dicembre 2017

https://www.amazon.com/b?ie=UTF8&node=13270229011. Amazon. Books. Bookstores in Seattle, San Diego, Portland, Boston.

Retail Innovation (2013), "Adidas RFID store", www.retail-innovation.com/a-look-into-adidas-neo-concept-stores , consultazione 27 dicembre 2017

https://www.linkedin.com/pulse/decathlon-come-utilizzare-tecnologia-rfid-simone-serni/___SERNI S. (2017), "Decathlon, come utilizzare al meglio la tecnologia RFID"

http://wwd.com/business-news/retail/ralph-lauren-oak-labs-connected-fitting-rooms-10280895/___STRUGATZ R. (2015), "Ralph Lauren, Oak Labs Debut Interactive Fitting Rooms"

https://www.teamlab.art/press/brurus2010 TeamLab, "What is "teamLab Hanger" that might change the way of shopping in future?", consultazione 18 Dicembre 2017

https://it.businessinsider.com/dalle-commerce-al-negozio-fisico-e-non-viceversa-amazon-chiama-litalia-risponde/ ZORZOLI M. (2017), "Dall'e-commerce al negozio fisico e non viceversa. Amazon chiama, l'Italia risponde", Business Insider.

Reports

ANDERSON B.S., ECKSTEIN W. (2013), "What's in Store: How Technology Is Transforming the Retail Industry", *KPMG Report*.

BERSANETTI F. (2016), "Consumi e distribuzione. Assetti, dinamiche, previsioni", *Rapporto Coop*, Cap. 2.

DELOITTE (2017), Global power of retailing. The art and science of customers, Annual Report.

EDELMAN (2016), "Trust barometer. Leadership in a Divided World", *Report*

EDELMAN (2017), "Trust Barometer", *Report*

FONDAZIONE CENSIS (2017), "Lo sviluppo italiano e il ruolo sociale della distribuzione moderna organizzata", *Report*

GOOGLE (2011), "Zero Moment of Truth Macro Study", *Shopper Sciences Report*

HUMAN HIGHWAY (2017) "Net retail. Il ruolo del digitale negli acquisti degli italiani", *Report*

ISTAT (2016), "Le trasformazioni demografiche e sociali: una lettura per generazione", Cap. 2, *Rapporto annuale*

KASRIEL-ALEXANDER D. (2017) "Top 10 Global Consumer trends for 2017", *White paper Euromonitor International*
LECINSKI J. (2011), "Winning the zero moment of truth", *Google Report*
NIELSEN (2016), "Give me five: opportunità di crescita per il largo consumo", *Report*
NIELSEN (2015), "Fiducia globale nella pubblicità. Strategie vincenti per lo scenario multimediale in evoluzione", *Report*
NIELSEN (2017), "Shopper trends 2016-2017", *Report*
NIELSEN (2017), "Campagne social, influencer e community" *Report*
PROCTER & GAMBLE (2006), *Annual Report*
RUSSO A., DE CARNE N. (2016), "Consumi e distribuzione. Assetti, dinamiche, previsioni", *Rapporto Coop*, Cap. 5

La decisione 'critica'. (In)capacità informativa nell'era delle ICT

FRANCESCO POLESE[*] CARLO ALESSANDRO SIRIANNI[•] LUCA CARRUBBO[♠]
ANTONIETTA MEGARO[**]

Abstract

Obiettivo. *L'obiettivo del lavoro è investigare il concetto di"crisi" intesa come una fase del processo decisionale del management, in cui la scelta risulta condizionata da variabili esogene potenzialmente destabilizzanti, tra cui l'informazione reperibile attraverso le ICT. Una scelta operata in condizioni inidonee, potrebbe determinare squilibri e la sola tempestiva individuazione degli stessi permetterebbe l'implementazione di adeguate azioni correttive.*

Metodologia. *Il lavoro ha natura teorica e concettuale; è stata indagata la letteratura sul tema ed i concetti emersi sono stati approfonditi alla luce delle considerazioni imposte dal mondo globale, in cui le organizzazioni oggi operano, e dei conseguenti repentini cambiamenti tecnologici.*

Findings. *Il lavoro suggerisce una rilettura delle azioni attuabili da parte delle organizzazioni, in condizioni di crisi, dirette alla riconfigurazione di precondizioni strutturali e di determinanti sistemiche.*

Implicazioni pratiche. *Il lavoro tenta di offrire nuovi spunti interpretativi sul tema del crisis management, e di proporsi come un Decision Support System, attraverso la definizione di nuove prospettive volte a fattori quali: sopravvivenza, innovazione e risorse.*

Limiti della ricerca. *Il limite principale è connesso alla tipologia di possibili cause di crisi d'impresa identificate. È necessario proseguire gli studi sul tema, indagare altre possibili cause oggettive e cause soggettive. Il lavoro inoltre necessita di approfondimenti di tipo empirico.*

Originalità. *L'analisi propone la gestione della crisi in chiave volta alla vitalità dell'impresa in difficoltà, secondo cui è necessario agire su processi di co-creazione di valore attraverso interazioni efficaci tra gli attori.*

Parole chiave: *decisione; conoscenza; informazione; integrazione di risorse; risonanza; co-creazione di valore.*

Objectives. *The aim is to investigate the "crisis", as a phase of management decision-making, in which the choice is conditioned by potentialyy destabilizing exogenous variables, as information available through ICT. A choice made under unsuitable conditions could cause imbalances and the only timely identification of these, would allow the implementation of adequate corrective actions.*

Methodology. *The work has a theoretical and conceptual nature; the literature on the subject has been investigated and the concepts emerged has been interpreted in the light of the global world in which the organizations operate and, therefore, of sudden technological changes.*

Findings. *The work suggests a re-reading of the actions that can be implemented by the organizations, in conditions of crisis, aimed at reconfiguring structural preconditions and systemic determinants.*

Practical implications. *The work tries to offer new interpretative insights on the topic of crisis management, and to propose itself as a Decision Support System, through the definition of new perspectives and factors, such as: survival, innovation and resources.*

Research limits. *The main limitation of this work is connected to the type of possible causes of crisis identified. It is necessary to continue the studies on other possible objective causes and subjective causes. The work also requires empirical investigations.*

Originality of the study: *The analysis proposes are a crisis management in an ecosystemic view: to allow the survival of the company, in difficulty, it is necessary to act on value co-creation, through effective interactions between the actors.*

Keywords: *decision; knowledge; information; resources integration; resonance; value co-creation*

[*] Ordinario di *Economia e Gestione delle Imprese* - Università di Salerno
e-mail: fpolese@unisa.it

[•] Ricercatore di *Economia e Gestione delle Im*prese - Università di Salerno
e-mail: carlo.sirianni@unisa.it

[♠] Ricercatore di *Economia e Gestione delle Imprese* - Università di Salerno
e-mail: lcarrubbo@unisa.it

[**] Dottoranda di *Economia e Gestione delle Imprese* - Università di Salerno
e-mail: amegaro@unisa.it

1. Introduzione

La realtà aziendale operante, al giorno d'oggi, all'interno di un contesto sempre più globale ed interconnesso, sarà osservata attraverso una prospettiva sistemica che permetterà di evidenziare e valutare come lo sviluppo di nuove tecnologie, sempre più performanti, possa caratterizzare un'opportunità o anche una minaccia per le organizzazioni.

L'analisi dell'influenza dell'ingresso di nuove informazioni, all'interno di un *sistema*, verrà operata tentando di indagare, attraverso la definizione del concetto di "crisi", il comportamento del soggetto decisore, esposto alla varietà e variabilità informativa anche attraverso l'utilizzo delle nuove tecnologie.

L'etimologia della parola crisi, secondo cui krísis deriva dal verbo greco "krínein", che vuol dire "decidere", rimanda al concetto di separazione, tra due fasi, connessa ad una scelta. Dunque il significato della parola permette di riferirsi ad un cambiamento drastico, che può assumere valenza positiva o negativa, legata ad un momento decisionale, che necessita di un atteggiamento risoluto e di capacità nel comprendere, al momento giusto, il modo migliore in cui agire.

Il lavoro, che muove dalla preliminare presentazione del problema, la *crisi d'impresa*, tenterà di individuarne possibili cause all'interno della decisione assunta in seno all'Organo di Governo. Il processo decisionale del management assume, all'interno del presente contributo, un ruolo decisivo, infatti anche attraverso la descrizione del modello di Shein, con cui si cercherà di evidenziare quanto sia rilevante riuscire a distinguere le cause di una crisi d'impresa dai suoi sintomi, poichè soltanto attraverso un adeguato ascolto delle condizioni sintomatiche saranno possibili tempestive azioni sulle cause, si evidenzia la rilevanza della decisione non soltanto in virtù di possibile causa di crisi, ma anche di possibile concausa di crisi, nell'eventualità in cui si sia in presenza di una crisi d'impresa latente.

Il contributo mira a proporre avanzamenti scientifici sul *crisis management* attraverso l'esplorazione del concetto di crisi e di alcune possibili cause, ricercate all'interno del processo decisionale del management, il quale potrebbe manifestare una incapacità decisionale, rispetto a due variabili: *quantità informativa* ed *informatizzazione informativa*. Le due variabili sono da intendersi non come potenziali condizioni simultanee ma come conseguenti. Tale prosecuzione logica verrà analizzata attraverso un'analisi di tipo deduttivo, in cui l'informatizzazione informativa si concreterà in seguito alla verticalizzazione delle problematiche legate alla quantità informativa reperibile attraverso uno specifico canale: il mondo dell'*ICT*, risultato dello sviluppo delle nuove tecnologie di informazione e comunicazione nell'era digitale .

Le varabili critiche così individuate, saranno approfondite alla luce di due differite condizioni, interpretabili prima in un'ottica generale e successivamente in una particolare: *miopia informativa* ed *ipermetropia informativa*.

La condizione di incapacità informativa, connessa a queste due condizioni declinate o meno in uno specifico contesto, risulta interessante nella misura per cui possano influenzare la scelta del decisore, ed una scelta errata da parte del decisore potrebbe comportare importanti squilibri all'interno dell'organizzazione cui si appartiene.

Si procederà dunque con l'approfondimento circa le possibili influenze di una quantità informativa patologica sul processo decisionale dell'organo di governo, alla luce degli spunti fornitici dall'*Approccio Sistemico Vitale* (Golinelli, 2009).

Successivamente si procederà con l'analisi dell'informatizzazione informativa, circa cause e conseguenze, per poter proporre, in ultimo, suggerimenti rispetto a possibili azioni correttive da implementare per ricostituire, all'interno della propria organizzazione, una condizione di equilibrio e rendere, nuovamente, l'informazione, ed in particolare quella fruibile attraverso l'utilizzo degli strumenti digitali, un'opportunità e non una minaccia.

L'obiettivo di questo contributo è quello di evidenziare come soltanto un'efficace azione su precondizioni strutturali e la possibilità che si verifichino efficaci determinanti sistemiche, possano condurre ad una stabilizzazione del sistema individuato. La valorizzazione delle risorse strutturali

deve essere sostenuta da un assiduo contributo multi-attore al fine di determinare condizioni di co-creazione di valore (Polese *et al.*, 2017), attraverso continue interazioni risonanti tra le parti.

2. Research Question e struttura del lavoro

Il lavoro, con l'obiettivo di fornire approfondimenti in tema di crisi d'impresa, muove dalla seguente domanda di ricerca:

RQ: È possibile definire una nuova prospettiva d'indagine rispetto alla crisi d'impresa attraverso un focus specifico sul processo decisionale dell'organo di governo e sue eventuali derive, in termini di crisi decisionale dovuta ad una crisi informativa?

Lo sviluppo del lavoro, a partire dalla definizione della metodologia di ricerca utilizzata (3), inquadra la fonte d'origine della riflessione, la crisi d'impresa, ed identifica una prima connessione con la crisi decisionale rinvenibile all'interno del management (4), intesa come impasse decisionale suscettibile di generare eventuali scelte risolutive indaguate rispetto a specifiche problematiche.

Assunto il collegamento tra crisi d'impresa e crisi decisionale, si procede con la descrizione del framework teorico di riferimento (5), l'Approccio Sistemico Vitale, e con l'identificazione delle variabili potenzialmente in grado di destabilizzare il logico percorso risolutivo del decision maker (6,7,8) e, rispetto ad esse, si forniscono dei suggerimenti circa possibili azioni correttive da intraprendere (8.1). Seguono implicazioni manageriali (9), limiti della ricerca e spunti per ricerche future sul tema (10) e considerazioni non conclusive (11).

3. Metodologia della ricerca

La metodologia adottata per lo sviluppo del lavoro è di tipo concettuale, sviluppata nell'intento di fornire avanzamenti scientifici circa il tema di *crisis management.* Quest'articolo si colloca come tentativo di contribuire alla letteratura in tema di crisi, rispetto a spunti interpretativi che derivano dall'Approccio Sistemico Vitale, con riferimento alle problematiche affrontate dal decision maker durante il suo percorso decisionale, analizzate alla luce della possibile influenza che, sulle stesse, può esercitare l'*informazione*, derivante da un contesto caratterizzato da elevata complessità (Piciocchi, 2005).

Il lavoro presenta inizialmente il tema di riferimento con un approfondimento specifico circa cause e sintomi di crisi d'impresa, per demarcare il ruolo strategico assunto dalla decisione, potenzialmente in grado di generare dissesti tali da pregiudicare la sopravvivenza dell'impresa. Il tutto però, viene proposto alla luce di approfondimenti in merito anche alle tempistiche dell'intervento attuabile, infatti descrivendo il modello di Shein si vuol evidenziare come soltanto un'azione operata in tempistiche in cui non si siano ancora prodotti effetti rilevanti possa essere effettivamente efficace. Anche in questo caso, rispetto all'individuazione dei sintomi, è necessario che il management sia in grado di assumere un'adeguata decisione, in quanto, al contempo, possibile opportunità per l'impresa o minaccia.

L'approccio utilizzato nello sviluppo del lavoro è di tipo deduttivo. Nello specifico, l'analisi del tema scelto, è stata condotta attraverso la preliminare identificazione di cause di derivazione *generale*, per poi convergere verso condizioni conseguenti di natura *particolare*. Nel tentativo di costituirsi come un *decision support system*, il presente lavoro pone in analisi il tema della gestione della crisi d'impresa, data la turbolenza con cui le imprese di oggi costantemente si confrontano. L'analisi si sviluppa a partire, innanzitutto da considerazioni circa la quantità informativa detenuta dal soggetto decisore al momento della scelta, per poi essere verticalizzata in una specifica tematica connessa alla quantità informativa derivante dall'ingresso, nelle dinamiche delle imprese moderne, di azioni di reperimento informativo attraverso il mondo digitale, oggi principale fonte di opportunità per le imprese, ma anche di complessità, date le numerose variabili che impone di saper governare. Si procede pertanto, in ultima analisi, con considerazioni circa la capacità di reperire ed

elaborare dati, in modo da rilevare informazioni rilevanti per il management finalizzate alla convergenza verso una decisione ottimale, e l'identificazione di azioni utili per la stabilizzazione del sistema in condizioni di difficoltà.

La metodologia utilizzata rappresenta però anche il principale limite della presente trattazione, in quanto rende necessarie successive dimostrazioni empiriche di quanto asserito.

4. Crisi d'impresa e Crisi decisionale. Diagnosi

Il concetto di crisi d'impresa, intesa come condizione in cui specifici fattori di natura economico-finanziaria abbiano minato la prospettiva di continuità aziendale (Pencarelli, 2013), viene analizzato in relazione al processo decisionale attivato dal soggetto decisore per rla isoluzione di una specifica problematica. Il percorso logico in grado di condurre il management ad una crisi decisionale può considerarsi causa di crisi d'impresa, rispetto a decisioni assunte in condizioni di inadeguata capacità informativa rispetto al problema, è questo il caso in cui una specifica decisione possa dar avvio ad una serie di di squilibrio; ma anche una concausa, laddove identificati i sintomi di una latente crisi d'impresa, sia necessaria un'efficace azione correttiva ma il management non sia in grado di poterla pianificare.

Infatti, l'incapacità del decisore di addivenire ad una decisione consapevole e pienamente razionale, risulta interessante in questa trattazione nella misura in cui una strategia sbagliata o non correttamente ragionata possa avere effetti sulle performance economiche e sugli equilibri finanziari dell'impresa (Baccarani, Golinelli, 1992), e determinare i presupposti per una crisi d'impresa.

Il tentativo di interpretare la crisi d'impresa alla luce di osservazioni circa possibili crisi decisionali, trova giustificazione in letteratura a partire dal concetto di *razionalità limitata* di Herbert Simon, secondo cui il soggetto decisore nel suo processo di scelta, non potrà affidarsi a verità oggettive ed assolute, quanto ad suo soggettivo approccio razionale al problema affrontato, soggettivo in quanto condizionato dai suoi limiti cognitivi, intesi come conoscenza e capacità di calcolo, quanto dalla complessità del contesto in cui l'organizzazione opera nel tentativo di sopravvivere (Barile, 2009a). In questo modo Simon inizia ad introdurre, nei percorsi di scelta del decisore, l'impatto dei suoi fattori psicologici e l'influenza del contesto entro cui la scelta viene operata.

La crisi decisionale potrebbe pertanto dirottare il decisore ad operare scelte inadeguate che, laddove non tempestivamente individuate attraverso una critica osservazione degli effetti di ciascuna, potrebbero condurre l'impresa ad uno stato di crisi. Tuttavia, anche la tempestiva individuazione degli effetti patologici di ciascuna richiede, ancora, un processo decisionale.

Per poter effettuare una valutazione circa la portata della crisi che l'impresa si potrebbe trovare a dover gestire, è infatti necessario che il management si interroghi sulle ragioni per cui l'impresa stessa si trovi a dover gestire una condizione di difficoltà (Polese, 2004). In tal senso, è necessario effettuare un'adeguata comprensione del problema rispetto agli effetti con cui la crisi si palesa per operare un'indagine sulle cause che possano averla determinata.

Risulta spesso difficile distinguere gli effetti della crisi dalle sue cause, occorre pertanto un preliminare chiarimento di questi due differenti momenti per poter valutare come la medesima condizione ivi identificata, la crisi decisionale, possa essere connessa alla crisi d'impresa impattando tanto rispetto alle cause quanto agli effetti.

Ad esempio, la scelta di ricorrere costantemente all'indebitamento finanziario, può configurarsi come possibile causa di crisi, nell'eventualità per cui intervenga per sostenere necessari investimenti ma comporti un "peso di oneri finanziari insostenibile al punto da condizionare l'agire dell'impresa e renderla troppo sensibile rispetto all'evoluzione di alcune variabili macro-economiche quali l'innalzamento dei tassi d'interesse" (Falini, 2011); ma potrebbe, al contempo, rappresentarne un sintomo qualora risulti indispensabile per sostenere scelte d'investimento erronee e poco redditizie. In questo caso la causa di crisi è da ricollegare ad una scelta poco oculata del

decisore, in assenza della quale magari l'indebitamento, effetto di una crisi d'impresa latente, si sarebbe potuto evitare.

Soltanto una tempestiva osservazione dello stato di difficoltà ed una immediata azione correttiva potrebbe permettere al management di operare un'inversione di rotta e gestire in maniera proficua la difficoltà. Per poter essere efficaci in una condizione di crisi risulta pertanto interessante la capacità di riuscire a diagnosticarla repentinamente attraverso un'adeguata ricognizione di condizioni sintomatiche. La fase iniziale della crisi presenta infatti problematiche non particolarmente rilevanti e dunque di difficile identificazione; ma con l'acuirsi della stessa, i sintomi iniziano a palesarsi in maniera sempre più evidente fino a determinare anche importanti squilibri economico-finanziari all'interno della stessa organizzazione (Guatri, 1995).

La crisi, dunque, nella maggior parte dei casi non si palesa come un'improvvisa "catastrofe" ma manifesta, nel tempo, esplicativi dissesti. Comprendere in quale momento del declino l'impresa si trovi, potrebbe aiutare il management a pianificare tempi e risorse (Singer, Sirianni, 2013) necessari per risanarlo e, a tal proposito, sono state individuate cinque fasi di declino (Shein, 2011):

- *blinded phase*: è il momento in cui la crisi è latente; si iniziano a palesare alcuni scenari economico-finanziari sintomatici ma difficilmente potrebbero essere identificati e riconosciuti dal management; le cause di tale condizione, vengono generalmente attribuite, dal management, a condizioni contestuali;
- *inaction phase*: i sintomi iniziano a palesarsi attraverso elementi facilmente riconducibili ad una condizione di instabilità. Tuttavia, il management potrebbe rischiare di rifugiarsi nella speranza che tale condizione possa migliorare senza particolari azioni, nonostante l'evidente necessità di un intervento;
- *faulty action phase*: la crisi ha raggiunto una posizione di particolare criticità e le soluzioni adottate dal management potrebbero risultare inadeguate;
- *crisis phase*: la condizione di crisi è evidente e tutti gli attori coinvolti intraprendono azioni, idonee alla propria condizione, per difendersi. È l'ultimo momento in cui il management possa agire per superare la crisi in autonomia e ripristinare l'equilibrio economico e finanziario.
- *dissolution phase*: viene meno il presupposto della continuità aziendale e le soluzioni possibili si presentano come radicali: ristrutturazione pre-fallimentare o liquidazione dell'attivo.

Dalle fasi descritte, è evidente che, per essere quanto più efficace possibile un'azione correttiva, è necessario che il management sia in grado di riconoscere i sintomi di una possibile crisi di impresa entro la fase di *inaction,* considerata come il momento in cui determinati dissesti iniziano a prodursi e sebbene non riconducibili implicitamente ad una condizione critica, dovrebbero sollecitare l'attenzione del management rispetto ad eventuali azioni di rettifica da pianificare. Un'azione in fase di *faculty action*, in cui la condizione critica risulta già essersi intensificata, potrebbe incontrare resistenze già radicate nel proprio sistema di riferimento, in quanto l'incapacità decisionale del management ha già determinato scelte errate, i cui effetti hanno già prodotto instabilità e soltanto una tempestiva azione, esercitata in maniera proattiva su elementi strutturali e su variabili di natura sistemica, potrebbe permetterne la risoluzione. L'individuazione di situazioni critiche in una già evidente condizione di *crisis*, potrebbe minarne anche la possibile risoluzione.

Il modello di Shein, viene qui proposto per fornire degli strumenti utili al management nell'individuazione di condizioni di squilibrio. Tuttavia, per poter compiere azioni correttive è necessario che il decisore attivi il suo processo decisionale che, come vedremo di seguito, sulla base della varietà informativa detenuta, possa condurlo a comprendere ciascuna fase di declino come caotica, complessa, complicata o certa.

5. Theoretical framework. La decisione indagata attraverso la lente dell'aSv

Il concetto di "decisione" appare particolarmente interessante in relazione allo scenario di riferimento in cui le organizzazioni sono inserite ed, all'interno dei quali, è richiesta al management

la capacità di essere, al più possibile, performanti attraverso congrui processi di problem solving e decision making (Saviano e Di Nauta, 2011).

L'Approccio Sistemico Vitale, ASV, fondato sul pensiero sistemico, si distingue dalle altre teorie sistemiche per la sua capacità di definire ed analizzare condizioni di complessità e di suggerire adeguati strumenti per gestirla.

Occorre innanzitutto precisare che in questa trattazione l'impresa verrà interpretata come *sistema vitale*. La finalità precipua di un sistema vitale immerso in uno specifico contesto è la sopravvivenza e tale finalità viene perseguita attraverso la soddisfazione delle attese proiettate da attori percepiti come rilevanti dal proprio Organo di Governo sulla base della criticità delle risorse da essi detenute e dell'influenza esercitabile (Golinelli e Barile, 2008).

Il contesto per l'Approccio Sistemico Vitale è inteso come insieme di componenti sistemiche, *sovrasistemi*, cui il sistema vitale si rivolge per reperire risorse, e con i quali cercherà di instaurare condizioni di sopravvivenza attraverso un processo di armonizzazione di finalità (*consonanza*) e nel tentativo di generare valore tale da migliorare le probabilità di vitale sopravvivenza per tutti (*risonanza)* (Barile, 2008).

La caratteristica fondamentale del contesto in cui il sistema vitale opera è la complessità.

Il contesto in cui le imprese oggi instaurano le proprie relazioni e successive interazioni si presenta come sempre più globale, innovativo e competitivo (Fahy, 2002), elementi che ne determinano l'elevato grado di complessità (Golinelli e Barile, 2008).

La complessità, a sua volta, rappresenta oggi un interessate fenomeno, oggetto di studi, in ragione della diffusa convinzione secondo cui, ciascuna realtà organizzativa, nell' affrontare situazioni e riuscire ad essere vitale nel proprio contesto, caratterizzato da numerosi fattori e morfologie di dinamicità, spesso si affidi a schemi interpretativi esistenti, basati su soluzioni predefinite e standardizzate, i quali potrebbero spesso rivelarsi inadeguati.

Tuttavia, "la complessità nell'ambito delle scienze sociali, e quindi nelle organizzazioni imprenditoriali, interviene quando il soggetto decisore è costretto ad abbandonare la prospettiva strutturale e ha bisogno di valutare 'oggetti', tangibili o intangibili, non enumerabili sulla base di criteri di calcolo noti, caratterizzati dai confini relazionali che diventano indistinti, in riferimento a relazioni che cambiano nel tempo e nello spazio e segnate da comportamenti discontinui ed emergenti" (Barile e Saviano, 2011), per cui, associando al concetto di complessità la possibile incapacità da parte delle organizzazioni di agire, ed essere flessibili, in un contesto instabile, l'unica azione per poter fronteggiare questa condizione di incertezza risiede nella possibilità di ampliare i propri confini e definire relazioni con altri attori che, in diverso modo, operano nel medesimo contesto.

La capacità di gestione della complessità contestuale, connessa alla capacità di definire interazioni dinamiche con entità presenti all'interno del contesto di riferimento e dunque alla possibilità di sopravvivere nel medio-lungo periodo, porta a ridefinire la necessità di un comportamento adattivo e propositivo attraverso un opportuno processo decisionale.

Questo permette di rileggere in una nuova ottica anche gli sviluppi in merito alla generazione del valore, che non viene più ora considerato come il semplice frutto di un'azione individuale, bensì come il risultato di un contributo multi-attore, la co-creazione di valore, perseguibile attraverso un'efficace integrazione di risorse tra le parti interrelate ed interagenti, necessario in un'azione strategica orientata alla vitalità (Carrubbo, 2013).

La complessità rappresenta però un concetto soggettivo e relativo, non è mai definibile in assoluto ma dipende dalle caratteristiche specifiche del contesto di riferimento, in relazione ai tratti qualitativi del fenomeno osservato. Soltanto attraverso l'utilizzo di un approccio olistico all'interpretazione del fenomeno (Barile, 2009b), lo stesso può essere semplificato e possono essere individuate le tre dimensioni di complessità che lo caratterizzano, la varietà, ossia le possibili varianti con cui un fenomeno può presentarsi all'osservatore, la variabilità, ovvero l'ulteriore varietà osservabile nel tempo ed in relazione a specifiche condizioni dell'osservatore, e l'indeterminatezza, connessa alla capacità di comprendere pienamente il fenomeno osservato (Barile, 2008; Golinelli, 2010).

Ecco il motivo per cui rilevano le caratteristiche soggettive dell'Attore decisore, il quale, nell'espletare il suo ruolo strategico all'interno dell'organizzazione, dovrà essere in grado di stabilire ed organizzare adeguate relazioni, attraverso decisioni idonee a convertire stimoli alla sopravvivenza (Barile *et al.*, 2014) in condizioni di perseguibile equilibrio interno ed esterno all'organizzazione stessa.

Per delineare il profilo dell'attore decisore, così come inteso all'interno del presente lavoro, si rimanda ad uno dei quattro postulati dell'ASV, l'*isotropia*, secondo cui per poter sopravvivere è necessario che il sistema sia in grado di identificare e perseguire i propri obiettivi attraverso l'area di governo, *organo di governo*, e di implementare quanto pianificato attraverso l'area di gestione. Area del decidere e area dell'agire rappresentano funzioni indispensabili per la vitalità (Polese, 2013).

Nell'affrontare la descrizione del processo decisionale affrontato dall'organo di governo per pianificare le azioni di governance da implementare, la letteratura opera una netta distinzione in ambito di decisioni, distinguendo quelle relative a questioni di problem solving da quelle relative a questioni di decision making; le prime riconducibili a condizioni note, che richiedono una soluzione individuata attraverso modelli già sperimentati, le seconde legate a condizioni poco circostanziate, connesse al concetto di emergenza e alla necessità che il decisore riesca a preservare la vitalità del sistema vitale che "governa" all'interno dello specifico contesto di riferimento (Barile, 2009b).

Dato che decidere vuol dire risolvere un problema (Palumbo, 2001), nel disbrigare il proprio ruolo decisionale, il soggetto decisore si troverà a dover gestire diverse aree problematiche e ciascuna necessiterà di un preciso e specifico percorso risolutivo in funzione dei diversi livelli di conoscenza.

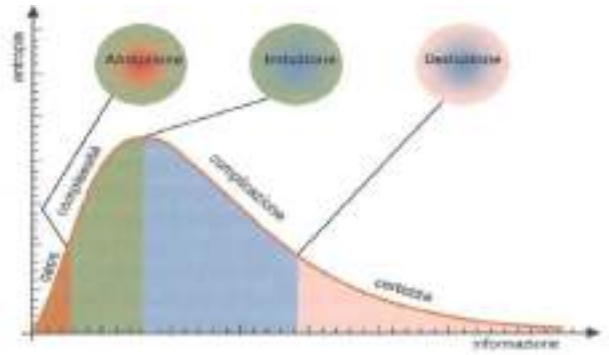
La decisione dipenderà dalla varietà informativa detenuta da ciascun soggetto e dalla sua percezione del contesto esterno. Ma la varietà informativa, a sua volta, dipende dal processo di acquisizione di conoscenza del decisore, attivabile in base un percorso logico-intellettivo, composto da tre momenti (*abduzione, induzione e deduzione*), attivabili sulla base di caratteristiche proprie del soggetto decisore (*categorie valoriali, schemi interpretativi ed unità informative*) (Barile, 2009a).

In prima istanza, il decisore si troverà a dover risolvere una condizione problematica in cui il flusso di informazioni entranti risulta disordinato ed imprevedibile (*caos*); all'aumentare di informazioni e, contestualmente alla capacità cognitiva del soggetto di veicolarle e codificarle in maniera ottimale attraverso un processo di apprendimento, connesso alla motivazione (Gentile, 2014), definita dalle categorie valoriali del soggetto, l'entropia decresce ed il processo abduttivo permette di muovere da una situazione problematica caotica ad una complessa. Il concetto di entropia interviene in quanto, sebbene ad un aumento di informazioni corrisponda ipoteticamente la possibilità di addivenire ad una soluzione, subentra all'interno del processo risolutivo la possibilità che il soggetto sia incapace di ricondurre le informazioni entranti a specifici schemi interpretativi. L'entropia è così assunta come crecente in caso di incessante flusso di informazioni, tale da impedire al potenziale intellettivo del soggetto di attivare il processo di produzione di conoscenza, qundi la comprensione dell'evento (Barile, 2009a)

Una condizione complessa è caratterizzato da incertezza e varietà di dati, il decisore non può identificare chiaramente tutte le variabili e le relazioni tra di loro intercorrenti. L'induzione è quel momento che permette al decisore di transitare dalla complessità alla complicazione in cui le caratteristiche, le cause e gli effetti delle condizioni di difficoltà sono note e le metodologie risolutive sono identificabili. La deduzione, infine, si configura come il momento di convergenza verso una condizione di consapevolezza (Polese, 2013).

In questo processo categorie valoriali, schemi interpretativi ed unità informative, elementi propri del soggetto, risultano essere fondamentali nella definizione e comprensione del problema e nello sviluppo di dinamiche e modelli in grado di far convergere verso una scelta.

Fig. 1: Dalla Teoria del Caos alla certezza nel decision making



Fonte: Barile, 2009a, p. 53

A questo punto, rileva come evidenze oggettive come quelle descritte da Shein, esposte nel precedente paragrafo, si arricchiscano di ulteriore criticità laddove intersecate con la percezione che il soggetto decisore ha del problema, sulla base della varietà informativa posseduta (elemento soggettivo). L'appartenenza di un problema oggettivamente descritto da Shein, ad una delle aree problematiche descritte dalla curva del decision making (Fig. 1), dipende dagli schemi interpretativi posseduti dal soggetto decisore il quale, pur trovandosi ipoteticamente in una crisis phase, potrebbe non detenere schemi interpretativi tali da poter avviare dei processi risolutivi rispetto agli elementi noti che richiedono un intervento.

6. Crisi decisionale e Crisi informativa. Variabili rilevanti

Nel presente lavoro si intende analizzare la possibile influenza negativa che una decisione, presa in condizioni di instabilità, possa riversare all'interno dell'organizzazione, in termini di disequilibri potenzialmente in grado di condurre l'impresa in uno stato di *crisi*.

Nel tentativo di individuare, all'interno del processo decisionale, tra le possibili cause di natura esogena, un elemento la cui quantità e tipologia di energia in ingresso possa destabilizzare il decisore ed incidere in qualche modo all'interno del processo conoscitivo dello stesso, preposto alla pianificazione dell'azione, si farà riferimento all'*informazione*.

Verrà analizzata la possibile generazione di una crisi d'impresa, alla luce di una possibile *crisi informativ*a del soggetto decisore, per poter indagare le misure correttive da implementare per evitare una degenerazione patologica della stessa.

La variabile informativa, possibile causa di crisi, sarà declinata attraverso un'analisi che condurrà dal generale al particolare, rispetto ad un possibile elemento di instabilità: la quantità informativa. Si indagherà se la *quantità* di informazioni a disposizione del soggetto decisore possa rappresentare un fattore di criticità, soprattutto alla luce di un ambito specifico, l'*informatizzazione*, qui intesa come veicolo di una quantità di dati da elaborare per reperire informazioni.

In merito alla *quantità informativa*, è condizione affermata dalla letteratura che la quantità di informazione detenuta dal soggetto decisore al momento della definizione della strategia, possa rappresentare un elemento particolarmente rilevante da considerare. L'abbondante letteratura sul tema, negli anni, ha trattato il problema rispetto alla possibile *asimmetria informativa* tra gli attori all'interno di un determinato processo economico, quindi la possibilità che l'informazione non fosse equamente distribuita tra tali attori e che qualcuno potesse detenere maggiori informazioni rispetto ad altri e trarre, da tale condizione, un vantaggio competitivo (Grant, 1999).

Nella presente trattazione non si parlerà di asimmetria informativa in qualità di possibile squilibrio presente sul mercato, ma si indagheranno i potenziali elementi di squilibrio all'interno dell'organo preposto alla decisione. Si tratta generalmente il tema dell'asimmetria informativa in termini di deficienza informativa. Tuttavia, è possibile evidenziare anomalie anche in relazione ad un eccesso informativo, potenzialmente in grado di generare distorsioni.

Nell'identificazione di configurazioni patologiche, riferibili all'informazione, ci si chiede se le due condizioni ambigue, da noi denominate come segue, possano rappresentare cause di crisi decisionale:

- *miopia informativa*, dovuta all'incapacità del management di reperire una quantità adeguata di informazione utile ai fini della decisione;
- *ipermetropia informativa*, dovuta ad un eccesso di informazioni detenute dal management, e all'incapacità dello stesso di scremare quelle effettivamente utili ai fini della decisione.

Con riferimento all'*informatizzazione* risulta particolarmente rilevante l'analisi dell'informazione alla luce degli avanzamenti scientifici in tema di *Information and Communications Technology*. Si indagherà pertanto l'impatto della quantità informativa reperibile attraverso l'utilizzo di un canale specifico: le nuove tecnologie abilitanti. Il mondo digitale si configura oggi infatti come fondamentale impulso allo sviluppo strategico di un'organizzazione, ma come un boomerang, può comportare vantaggi anche notevoli soltanto a chi è in grado di governarlo (Bencardino e Napolitano, 2003).

Si intende osservare quindi come l'informazione reperibile dal mondo digitale possa risultare potenzialmente *critica* nel processo decisionale descritto, rispetto alle due condizioni, di cui sopra, verticalizzate in una *particolare* condizione specifica, ovvero l'utilizzo delle nuove tecnologie abilitanti; si parlerà pertanto di:

- *miopia informativa*, dovuta ad aggiornamenti tecnologici continui e repentini, che potrebbero comportare problematiche in termini di dotazione tecnica di attrezzature adeguate, e di competenze e conoscenze specifiche dei soggetti chiamati ad utilizzarle per reperirvi informazioni utili;
- *ipermetropia informativa*, dovuta ad un eccesso d'informazione; che potrebbe comportare problematiche in termini di qualità informativa. La velocità con cui nuove informazioni raggiungono un soggetto, grazie alla possibilità di operare in contesti sempre più interconnessi, potrebbe far emergere la necessità di interrogarsi circa la qualità delle informazioni che, al minuto, pervadono l'osservatore, il quale, bombardato da eccessiva energia informativa, potrebbe non essere in grado di scremare le informazioni rilevanti ai fini della sua necessaria azione.

7. La Crisi Informativa. La Quantità Informativa come causa di instabilità

Come precisato nel primo paragrafo 5, l'organo di governo, nel risolvere le diverse aree problematiche (*caos, complessità, complicazione, certezza*) cui si trova a dover gestire nel suo processo decisionale, segue un percorso risolutivo chiaro e definito, influenzato dalla commistione tra la varietà informativa detenuta dal soggetto decisore e le nuove informazioni entranti durante il processo risolutivo. Tuttavia, il processo di risoluzione di uno specifico ambito problematico, non si presenta sempre come lineare, infatti ciascuna area problematica può essere percepita come tale, dal soggetto decisore, in merito ad una valutazione meramente soggettiva. I sistemi che vengono individuati dal soggetto decisore non sono altro che sue rappresentazioni soggettive della realtà (Proietti e Quattrociocchi, 2009). Una medesima problematica, infatti, potrebbe produrre effetti differenti su soggetti differenti, in relazione allo specifico contesto nei limiti del quale dovesse palesarsi, e quindi richiedere approcci alla soluzione, ancora una volta, differenti. Questo perché potrebbe variare la dotazione di varietà informativa posseduta da ciascun soggetto, sia perché potrebbe variare la configurazione delle relazioni che ciascuno di essi definisce con i propri interlocutori rilevanti (Golinelli *et al.*, 2002).

Il percorso descritto nel paragrafo 5, descrive l'andamento lineare di risoluzione problematica, rispetto ad uno specifico soggetto, inserito in uno specifico contesto. Tuttavia, l'effetto dell'ampliamento di varietà informativa in relazione all'ingresso di un nuovo flusso di informazioni, genera un incremento di entropia ed, al verificarsi di tale condizione, non è possibile asserire che nell'immediatezza degli eventi possa essere riscontrato quanto esposto. Nella realtà, i

percorsi risolutivi di uno specifico problema decisionale, può subire continue variazioni, continui processi di reiterazione ed accelerazione, prima di poter addivenire ad una soluzione di un problema.

In questa sede ci soffermeremo sulla crisi causata dall'incapacità di pervenire ad una decisione, determinata da reiterazioni nel processo risolutivo e quindi dalla necessità di addivenire ad una soluzione nonostante l'aumento di informazioni il quale, invece di permettere la convergenza verso una condizione di problem solving, continua ad alimentare la confluenza verso posizioni di crescente entropia.

Nello specifico, si è assunto che, nel passaggio dall'area problematica del caos a quella della complessità dovesse intervenire un momento abduttivo, considerato particolarmente "critico" in ragione della completa assenza di un processo definito e formalizzato a cui poter far riferimento per orientare l'azione. Il momento abduttivo, prevede e richiede un'efficace azione da parte del sistema valoriale del soggetto in modo che, sulla base della percezione del contesto informativo esterno e dell'auto-organizzazione perseguibile in base alla varietà informativa detenuta dal soggetto decisore, si possa generare una valida ipotesi risolutiva (Polese, 2013). L'ipotesi risolutiva però, al momento di validazione, potrebbe essere considerata o meno come soddisfacente e, qualora non dovesse essere ritenuta valida, richiamerebbe il soggetto decisore in una condizione di crescente entropia esigente di una nuova fase abduttiva.

Parimenti, nel caso di un'ipotesi sviluppata e soddisfacente sottoposta a verificare sperimentale, nel caso in cui la sperimentazione non dovesse confermarla, richiederebbe ancora la necessità di un momento abduttivo.

Ancora, acclarata la sperimentazione dell'ipotesi, quest'ultima viene razionalizzata e formalizzata, ma nell'eventualità per cui il modello risolutivo realizzato dovesse non risultare performante rispetto alla soluzione della problematica nel suo complesso, e non dovessero essere possibili affinamenti tecnici, ancora il soggetto decisore si ritroverebbe in una condizione di necessaria attivazione delle proprie categorie valoriali per poter compire, attraverso una nuova fase abduttiva, una nuova ipotesi risolutiva.

Sappiamo, al contempo che nel proprio percorso decisionale, il management si troverà a dover selezionare la miglior ipotesi, valutabile in termini di consonanza e risonanza rispetto alle attese degli *interlocutori rilevanti*.

La letteratura sul tema evidenzia la significativa relazione che connette la soluzione di un problema a fattori propri del soggetto decisore, a fattori di contesto, intesi come sovrasistemi di riferimento che sottendono l'esigenza di una decisione quanto più aderente possibile ai loro rispettivi sistemi valoriali e ad i loro rispettivi "interessi", nonché a fattori logico-intellettivi tipici del pensiero umano, quali abduzione, induzione e deduzione. La descrizione di tale rapporto rileva quanto il percorso decisionale sia fortemente influenzato da conoscenza ed obiettivi del soggetto decisore, ma la conoscenza dello stesso è funzione diretta dell'ampliamento informativo e dei fattori, propri dell'individuo, in grado di convertire l'informazione entrante in strategico elemento di risoluzione. Posti, come assunti di base, l'assoluta moralità degli obiettivi preposti e l'irreprensibile vigore intellettivo del management, il lavoro tenterà di contribuire all'individuazione del fattore critico nel percorso risolutivo, sulla base della conoscenza attivabile in base alla qualità delle informazioni percepite e dell'adeguatezza dei canali che le veicolano.

Tenuto conto, infatti, che la Risonanza dipende dalla sensibilità manifestata verso i propri sovra-sistemi in ragione dell'intensità con cui vengono percepite nuove informazioni, si chiarifica quanto sia influente il principio di ampliamento di varietà informativa in merito alla capacità del sistema vitale di perseguire la propria sopravvivenza (Barile, 2011).

Le "bombe informative", che impattano sulla varietà informativa ed influenzano il percorso di convergenza della conoscenza verso la fase risolutoria, potrebbero causare degli "*shock informativi"*, intesi come incapacità delle componenti della varietà informativa, di codificare il nuovo flusso di dati in elementi risolutivi.

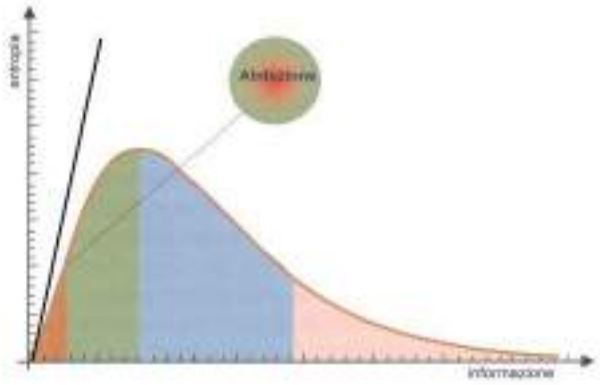
Tra tutte le possibili condizioni potenzialmente in grado di determinare questo dissesto, ci si soffermerà sulla problematica generale connessa alla quantità informativa. L'ampliamento di

varietà informativa potrebbe infatti avvenire in condizioni di miopia informativa, ossia le informazioni entranti non risultano quantitativamente sufficienti per favorire una decisione pertinente e consapevole rispetto alla problematica analizzata; o in condizioni di ipermetropia informativa, a causa di eccessive informazioni entranti e incapacità da parte del decisore di scremare quelle rilevanti. Queste condizioni, non idonee a permettere al soggetto di circostanziare al meglio la situazione e convergere verso la soluzione ottimale, nonostante si concretizzino nell'ingresso di nuove informazioni, potrebbero addirittura rappresentare una diretta causa di un momento critico per il soggetto decisore.

I. Gap in fase abduttiva

Il soggetto decisore è esposto ad una massa imponente di informazione ma non tutti gli stimoli che lo raggiungono riescono ad essere, dallo stesso, codificati. L'ampliamento di Varietà Informativa si caratterizza come flusso insufficiente e disordinato, o come un flusso in eccesso, in grado di dissuadere il soggetto dall'obiettivo. Il *sistema percettivo* (Trout e Rivkin, 1997) del *talmudista* non è in grado di condurlo ad una fase di abduzione.

Fig. 2: Gap in fase abduttiva

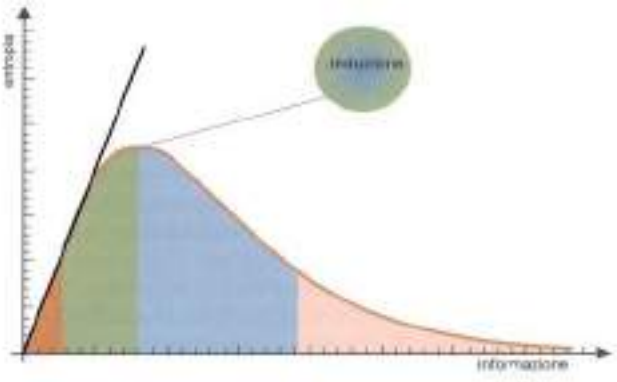


Fonte: ns. elaborazione

II. Gap in fase induttiva

La natura della mole informativa entrante, caratterizzata da sempre maggiore varietà e variabilità, l'incapacità del soggetto decisore di convergere verso l'informazione rilevante per i suoi fini decisionali, l'inadeguatezza palesata nel reperire l'informazione o la manchevole competenza necessaria per il suo utilizzo ottimale, può comportare il rischio che il *sistema interpretativo* (Busacca, Castaldo, 1996) del soggetto stesso non sia in grado di trasformare l'idea intervenuta in fase di abduzione in un'ipotesi sperimentale da verificare e quindi di condurre, efficacemente, la sua convergenza verso l'induzione.

Fig. 3: Gap in fase induttiva

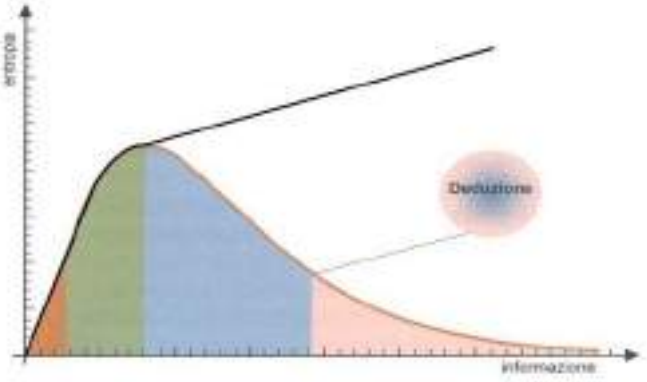


Fonte: ns. elaborazione

III. Gap in fase deduttiva

Validata l'ipotesi risolutiva, sviluppata in fase abduttiva e sperimentata in fase deduttiva, le configurazioni critiche connesse ad un nuovo ingresso informativo, precedentemente descritto, comportano ancora una decrescita della curva. Questo gap determina l'incapacità, da parte del *sistema valutativo* (Aaker, Mayers, 1991) dell'attore coinvolto, di formalizzare il criterio risolutivo in uno schema interpretativo specifico, utile per la soluzione della problematica nel suo complesso e di problematiche simili.

Fig. 4: Gap in fase deduttiva



Fonte: ns. elaborazione

In questo paragrafo è stato illustrato come le cause precedentemente identificate di una *crisi*, intesa come incapacità del soggetto decisore di confluire verso la scelta di un'ipotesi, a prescindere dalla fase in cui la stessa è richiesta, possano influenzare il processo decisionale dell'organo di governo; tenuto conto che, in qualunque caso, sia la definizione di un'idea in fase abduttiva, di un'ipotesi da verificare in fase induttiva, della formalizzazione di un modello operativo in fase induttiva, costituisce una decisione. Infatti, per poter risolvere un problema attraverso un'efficace decisione è necessario che siano risolti, contestualmente, una serie di sotto-problemi che si presentano nel passaggio da un'area all'altra della curva proposta (Barile, 2009a).

8. La Crisi Informativa. L'Informatizzazione Informativa come causa di instabilità

Nelle economie moderne, le imprese si ritrovano a dover essere quanto più performanti possibile rispetto ai propri sovra-sistemi, con la complessità aggiunta dettata dal fatto che le imprese si ritrovino oggi ad agire in mercati globali (Borgonovi, 1996), caratterizzati dunque da un'elevata densità di attori, informazioni e relazioni, connessi da un reticolo informativo che rende sempre più immediata l'integrazione di risorse (Maglio, Spohrer, 2008). In tali mercati globali, ciò che rileva è la capacità del management di valorizzare i caratteri intangibili della propria value proposition (Frow *et al.*, 2014), attraverso la possibilità di potenziamento e miglior utilizzo dei propri intangible assets (Teece, 1998), ossia l'insieme di conoscenze e competenze specialistiche detenute ed accumulate dall'azienda, ma anche "il complesso dei canali che le permettono l'acquisizione di informazioni rilevanti" (Brodoni, 2011). Le informazioni che confluiscono all'interno dell'organizzazione costituiscono *risorse operant* (Lusch, Vargo, 2014), in grado di definirne ed influenzarne il perimetro operativo. Per risorse operant si intendono le fondamentali fonti di vantaggio competitivo (Lusch, vargo, 2014). Ma risorse operant sono anche le competenze necessarie per la gestione dei canali utili per ottenerle e la dimestichezza intellettiva necessaria per ottimizzarne l'utilizzo.

Il reticolo comunicativo, che ha contribuito all'abbattimento di qualunque barriera e alla definizione di un mondo economico e sociale sempre più interconnesso (Basole, Rouse, 2008), ha definito la necessità, per le organizzazioni, di costanti aggiornamenti strutturali e sistemici, per riuscire ad essere quanto più performanti ed adattivi possibili alle cangianti dinamiche contestuali.

È necessario che il soggetto decisore abbia strumenti e competenze tali per poter reperire e scremare le informazioni rilevanti.

Tuttavia, tale processo potrebbe non essere immediato, pertanto, alla luce di quanto fino ad ora esposto, in ambito generale, risulta interessante focalizzare l'attenzione circa le possibilità di sviluppo delle imprese in relazione ad una vera e propria rivoluzione digitale che, negli ultimi anni, ha condizionato, influenzato e stravolto il modo di operare delle imprese, ma anche della società in generale e degli individui. Le ICT, hanno infatti completamente sovvertito le regole di interazione tra gli attori, introducendo nuove possibili configurazioni degli stessi e nuove esigenze. Hanno definito ancor di più, la necessità di adottare nelle logiche di gestione d'impresa, un approccio orientato all'analisi della relazione tra gli attori e del possibile scambio di risorse tra gli stessi, in quanto reticolo in grado di veicolare con destrezza opportunità così come minacce (Ripamonti, 2010).

Le tecnologie hanno assunto oggi un ruolo sempre più rilevante all'interno delle organizzazioni, infatti hanno visto mutare la loro valenza da semplice strumento per reperire informazioni a vera e propria leva strategica (Neri, 2015). Infatti, dal momento in cui la sopravvivenza di una realtà aziendale è perseguibile attraverso azioni risonanti con il contesto, le stesse imprese necessitano di una continua integrazione di risorse con l'esterno (Barile e Gatti, 2007), motivo per cui risulta fondamentale analizzare la qualità della relazione che si instaura tra gli attori del contesto di riferimento e la rete che ne permette la più agevole realizzazione (Gummesson, 2006). Il mondo informatico si configura dunque, non soltanto come opportunità in termini di informazione reperibile, ma come effettivo possibile strumento di co-creazione di valore per le imprese e dunque favorirne un comportamento competitivo (Payne *et al.*, 2008).

L'impatto addotto dall'ingresso delle tecnologie nelle tradizionali logiche organizzative ha imposto una radicale ridefinizione, in termini di competenze e strumenti da adeguare ai tumultuosi sussulti esterni, alle imprese e al loro personale (Bennato, 2015).

Le impegnative rivoluzioni interne, imposte dalla rivoluzione tecnologica ed innovativa, si riferiscono principalmente al management e alle risorse umane. É sorta infatti, negli anni, l'esigenza di nuove strutture organizzative, più confacenti ai big data (Davenport, 2014).

Per poter reperire infatti un'*informazione* in quanto tale, è necessario che le imprese detengano risorse adeguate in termini di raccolta ed elaborazione dei dati e che tali risorse siano in grado di associare a ciascun dato un significato.

Per poter definirie i big data, si ci riferisce ad almeno cinque dimensioni (Vanauer *et al.*, 2015): il volume; la varietà, intesa come numero di diverse fonti di dati e moduli dati generati da strumenti e sensori; la velocità, correlata alla velocità di generazione dei dati e alle difficoltà dell'analisi in tempo reale e del miglioramento dei processi; il valore, l'utilità per scopi analitici; la veridicità, l'incertezza e l'affidabilità dei dati (Martinez *et al.*, 2017). Il processo, invece, di estrazione di valore dai dati attraverso acquisizione, aggregazione, l'esplorazione ed interpretazione degli stessi (Grossman e Siegel , 2014), viene indicato con il termine *analytics*.

L'introduzione dei *big data*, come strumento di supporto al decision maker, ha comportato una nuova convinzione in base alla quale per poter sopravvivere le organizzazioni devono riuscire ad essere non soltanto risonanti con il proprio contesto, ma è necessario che siano anche quanto più veloci nel comprendere la volubilità del contesto stesso e rapide nell'offrirne un'adeguata risposta. Il nuovo orientamento al governo d'impresa, rispetto alla gestione della mole di dati reperibile attraverso le nuove tecnologie, comporta una rivoluzione non soltanto tecnologica, ma anche culturale, all'interno delle organizzazioni. Non risulta più, infatti, vincente l'impresa caratterizzata da una solida struttura, ma l'impresa caratterizzata da una struttura in grado di essere fluida così come il flusso di dati in entrata, flessibile così come gli adeguamenti tecnologici richiedono, agile nell'elaborare il dato e tramutarlo, sotto forma di risorsa, nella relazione instaurata con l'esterno (Davenport, 2014). Le grandi organizzazioni hanno infatti dovuto utilizzare regolarmente l'analisi dei dati per supportare i propri processi decisionali come parte delle loro procedure abituali, mentre le piccole e medie imprese si registra una difficoltà nel raccogliere e analizzare più dati con l'obiettivo di migliorare e supportare le decisioni (Davenport e Dyché , 2013).

Per poter essere performanti è necessario che le aziende siano dotate di adeguate strumentazioni tecnologiche di opportune competenze specializzate nel loro utilizzo, tali da poter rilevare il dato; ma i big data richiedono anche un appropriato approccio umano alla gestione del dato.

Per poter essere utile e poter fornire al management informazioni utili di supporto alla decisione strategica, è importante che si abbiano competenze adeguate in grado di estrarre valore dai dati, saper comprendere la correlazione utile tra gli stessi, finalizzata all'estrazione dell'informazione rilevante ivi contenuta (Rezzani, 2013).

A tal fine rileva la possibilità che *l'informatizzazione informativa*, precedentemente esposta, possa costituire un gap all'interno delle organizzazioni e convertire il potenziale di crescita, connesso all'ottimale utilizzo delle nuove tecnologie, in potenziale minaccia, riferibile alla possibilità che le stesse possano impedire decisioni sostanzialmente consonanti o anche decisioni tempestive, in seguito a distorsioni informative determinate tanto da *miopia informativa* quanto da *ipermetropia*, inammissibili nei contesti sempre più complessi in cui le aziende si trovano oggi ad interagire ed in cui, le organizzazione costruiscono il proprio vantaggio competitivo sulla base di due caratteristiche fondamentali e distintive: la risonanza (Barile *et al.*, 2012) e la velocità (Baccarini *et al.*, 2015).

8.1 Azioni stabilizzanti.

Alla luce di quanto fino ad ora esposto, ed esplorate, dunque, le possibili condizioni potenzialmente in grado di condurre in soggetto decisore ad operare scelte avventate o a pianificare strategie inadeguate, e consapevoli di quanto risulti fisiologicamente necessaria un'azione preventiva sulle possibili cause o un agire tempestivo a seguito delle prime manifestazioni sintomatiche, si presenta utile, a fini della presente trattazione, l'individuazione di eventuali azioni stabilizzanti, che siano intendersi come *correttive* o *preventive* a seconda della condizione in cui l'impresa riversi (Pastore *et al.*, 2016)

Nell'individuare le possibili azioni implementabili al fine di ricondurre l'impresa in una condizione di equilibrio, il management può tener conto di *precondizioni strutturali* e di *determinanti sistemiche* (Polese, 2017)

Ci sono, infatti, diverse precondizioni strutturali che potrebbero essere identificate ed ottimizzate dal management per promuovere la prevenzione e la gestione di una crisi d'impresa, al palesarsi di condizioni critiche nelle capacità decisionali dell'osservatore principale; così come determinanti sistemiche, che dovrebbero essere attenzionate dal management. Infatti, se da un lato si andrà ad indagare, tra le varie precondizioni strutturali identificabili, la configurazione di specifiche risorse tangibili e intangibili, in quanto si ritiene che, il rinnovamento, l'aggiornamento costante ed il miglior utilizzo possibile di esse, possa dar luogo a competenze sempre più specializzate in grado di consentire all'impresa stessa la definizione di un valore aggiunto inimitabile (Stampacchia, 2005), dall'altro si ritiene che per poter comprendere come immaginare un'azione efficace, tale da poter evitare il declino (Guatri, 1996), e tesa alla vitalità del sistema nel suo complesso, all'analisi riduzionista e statica circa gli aspetti strutturali su cui agire, vada associata un'indagine di tipo olistico su condizioni dinamiche identificabili rispetto alle medesime risorse.

Le azioni riferibili a precondizioni strutturali, si riferiscono a strategie, implementate dal management, volte a ridefinire la configurazione delle risorse detenute dall'impresa (Vicari, 1992) e quindi il design di alcuni dei suoi tratti strutturali. Pertanto, individuate in miopia informativa ed ipermetropia informativa, rispetto all'informatizzazione informativa, alcune delle possibili cause di una crisi d'impresa, potrebbe essere utile agire in una duplice direzione:

- correzione della miopia informativa attraverso un'azione volta ad una più efficiente ed efficace dotazione strumentale, tale da permettere all'impresa di essere sempre aggiornata nonostante i continui adeguamenti tecnologici che il mondo digitale impone e di essere sempre pronta per un'efficace aggregazione con i propri interlocutori esterni (Solima, 1010); ed un'azione volta

alla valorizzazione delle risorse umane, preposte all'utilizzo di tali strumenti, attraverso formazioni specifiche volte a massimizzare le risorse operant, naturalmente appartenenti agli stessi, in termini di capacità distintive in un ottimale utilizzo delle nuove tecnologie abilitanti;

- correzione dell'ipermetropia informativa, attraverso una formazione sempre più specializzata e specializzante, in termini sostanziali, finalizzata alla efficace canalizzazione e scrematura di informazioni rilevanti.

Le azioni volte a favorire specifiche determinanti sistemiche, si riferiscono alle possibilità di valorizzare le dinamiche intercorrenti tra i diversi attori attraverso un'efficace integrazione di risorse tra di essi.

Posto che, nel processo di risoluzione di una crisi, si rivelino necessari alcuni aggiornamenti ed azioni su condizioni strutturali, come precedentemente illustrato; altrettanto si ritiene, richiamando l'ASV, che tali condizioni restino però in una posizione di staticità e rappresentino un potenziale non ancora valorizzato, fin quando, gli attori interessati in tale processo risolutivo, non inizino ad attivare le relazioni intercorrenti tra tutti gli elementi strutturali, in modo da permettere l'emergenza di interazioni volte alla risonanza (Polese, 2017), e dunque alla possibilità di sopravvivere nel tempo, indispensabili per perseguire condizioni di armonia tra gli elementi ed efficacia ed efficienza nell'azione dell'intero sistema osservato.

Gli attori, presenti all'interno dell'sistema immaginato, detengono risorse necessarie per contribuire al raggiungimento della finalità identificata. Dunque, diventano soggetti attivi nella loro interazione con gli altri e soltanto quando riusciranno a definire un'interazione efficace, giustificata da un'efficace integrazione di risorse, potranno determinare un comportamento risonante a beneficio di tutti (Pels *et al.*, 2014) , fondato sulla sinergia tra gli obiettivi di tutti.

Ai fini del raggiungimento di una posizione di risonanza del sistema con i suoi sovra-sistemi, si ritiene necessaria pertanto la capacità dei vari attori coinvolti di co-creare valore (Polese *et al.*, 2015). Tuttavia, la co-creazione di valore, e di conseguenza la risonanza, sono correlate all'attitudine degli attori ad integrare risorse per il beneficio proprio e degli altri soggetti coinvolti (Polese, 2017). Il processo di integrazione avviene attraverso il rilascio simultaneo, da parte degli stessi, delle risorse possedute, utili per l'azione degli altri, e la successiva benevola accettazione delle risorse ricevute (Wieland *et al.*, 2012). In questo modo, ciascun attore rilevante ha ciò di cui necessita.

A sostegno di tale concezione, vi è l'acclarata rilevanza attribuita allo scambio di risorse intangibili (Edvardsson *et al.*, 2011), idonea a produrre nuove conoscenze e dunque nuove attitudini circa la capacità di realizzare condizioni di sopravvivenza nel proprio contesto ed ottenere vantaggi sostenibili.

In questo modo, la *comunicazione* tra gli attori, intesa non soltanto come processo di ampliamento informativo quanto come potenziale strumento di accrescimento conoscitivo, assume importanza strategica (Sciarelli, 2002) e diviene requisito essenziale per l'operatività dei sistemi e la gestione delle difficoltà, in funzione della possibilità che si verifichi una convergenza di obiettivi, inizialmente differenti, dei diversi soggetti del sistema, realizzata attraverso lo scambio di risorse tra gli stessi, *finality alignment (*Polese *et al.*, 2017*).* Egualmente, la rilevanza della comunicazione è da riscontrare anche in relazione al quinto concetto fondamentale dell'ASV, l'*autoregolazione* (Polese, 2013), in base al quale è necessario che le informazioni riguardanti il passato siano riportate nel sistema presente in modo da influenzare il futuro attraverso una *retroazione autocorrettiva* (Fiorani, 2011).

L'azione orientate a far emergere risonanti determinanti sistemiche deve essere finalizzata ad una efficace comunicazione tra le parti. Dunque, rileva la capacità del management di trasformare il dato in informazione rilevante per poter definire, attraverso tale informazione, un'adeguata comunicazione tra tutti gli attori presenti all'interno del proprio contesto.

9. Implicazioni manageriali

Il presente lavoro ha tentato di evidenziare come, in un contesto sempre più globale, gli avanzamenti tecnologici possano rappresentare una trappola per le imprese, nel momento in cui le risorse a disposizione risultino inadeguate in termini di identificazione e reperimento delle informazioni rilevanti.

Questa incapacità del management di utilizzare l'informazione in maniera ottimale, e dunque questa sua incapacità decisionale, fa emergere problematiche in termini di crisi d'impresa, dal momento in cui, inadeguate strategie poste in essere da parte del management possano determinare dissesti. Risulta necessaria, pertanto, una tempestiva azione sulle cause di instabilità, attraverso un'opportuna ottimizzazione delle risorse a disposizione e la definizione di proattive interazioni tra le parti coinvolte, in modo da permettere una comunicazione efficace in grado di implementare le capacità conoscitive del soggetto decisore e semplificare il suo processo decisionale, attraverso meccanismi di co-creazione d valore.

Il tentativo di tale lavoro è quello di fornire al management nuovi spunti di analisi rispetto alle possibili criticità riscontrabili nel proprio processo decisionale, nell'intento di potervi costituire ulteriori osservazioni di supporto alla decisione, data la complessità con cui il management stesso costantemente si interfaccia (Baccarani, 2010). In particolare, rispetto all'introduzione dei big data, è necessario che l'organizzazione sia "reintegrata" con nuove figure professionali specializzate nell'analisi del dato e, rispetto a tale implicazione anche i professionisti delle risorse umane dovrebbero intraprendere un percorso evolutivo diventando anc'essi "scienziati sociali", al fine di progettare e implementare nuove pratiche di risorse umane, diventando sempre più veloci ed agili nel focalizzare continuamente le risorse umane verso la sostenibilità sociale (Camuffo, 2016); ma si presenta anche il rischio che si verifichi un passaggio di potere all'interno dell'organizzazione, a favore degli specialisti di dati che così detengono informazioni sensibili (Martinez *et al.*, 2017).

10. Limiti e ricerche future

I limiti della trattazione risiedono nell'aver operato un'analisi marginale circa le possibili cause di una crisi d'impresa, in quanto è stato indagato soltanto uno specifico ambito, quello riferito al mondo digitale, ed in riferimento a questo, soltanto cause di natura esterna ed oggettiva, ossia condizioni che inaspettatamente investono il management. Inoltre, l'investigazione circa le possibili cause di una crisi d'impresa non è stata validata da un'analisi empirica.

Potrebbe risultare interessante, un ulteriore approfondimento circa le tematiche trattate alla luce dell'analisi di un case study o di esemplificazioni da riscontrare nell'operato contestuale delle realtà d'impresa. Così da poter valutare la validità sul campo di quanto asserito e costruirvi un modello interpretativo di riferimento che possa costituirsi come un decision support system per il management.

Nei successivi approfondimenti in tema di crisis management, inoltre, potrebbe essere utile indagare le possibili dinamiche e cause di una crisi d'impresa alla luce di altri specifici ambiti di riferimento; ed al contempo, dato che il lavoro, in ultimo, ha individuato, tra le possibili soluzioni agli squilibri d'impresa, l'allineamento degli obiettivi dei diversi attori, potrebbe essere interessante in futuro operare un'analisi circa possibili cause soggettive, da ricercare dunque all'interno degli organi decisori, all'interno di qualsiasi ambito specifico, tali da non permettere, in maniera volontaria, la convergenza degli obiettivi e dunque la predisposizione di condizioni propedeutiche ad una efficace integrazione di risorse tra le parti (Lusch, 2011).

11. Considerazioni non conclusive

Il presente lavoro suggerisce una riqualificazione delle possibili cause di una crisi d'impresa e propone una rilettura delle organizzazioni sulla base di opportune valutazioni circa azioni da

compiere su condizioni strutturali e su dinamiche sistemiche. In particolare, il presente lavoro individua tra le possibili cause di crisi, un'incapacità decisionale del management connessa alle mutevoli configurazioni della *variabile informativa*. La stessa, quantitativamente influente, in termini di difetto o eccesso, può agire sulle condizioni cognitive, interpretative o valutative del soggetto decisore. Tale considerazione risulta utile nell'ottica per cui un'inadeguata azione, connessa ad una decisione poco conscia, potrebbe comportare rilevanti dissesti all'interno dell'organizzazione. Soltanto poi una tempestiva attenzione circa possibili condizioni di crisi potrebbe permettere l'implementazione di efficaci azioni di stabilizzazione. Per approfondire il tema, si è analizzato il caso della quantità informativa, in difetto o in eccesso, rilevabile attraverso l'utilizzo delle nuove tecnologie abilitanti, oggi risorse sempre più rilevanti all'interno delle dinamiche d'impresa data la sempre più fitta connessione tra tutti gli elementi attivi ed influenti che le determinano.

Alla luce di quanto valutato, rispetto all'informazione fruibile dal management attraverso l'utilizzo delle ICT, sono stati poi posti in essere alcuni suggerimenti circa azioni correttive esercitabili, orientate alla riqualificazione della configurazione di specifiche risorse strutturali e ad una sempre più congrua ricerca di sinergiche dinamiche sistemiche, favorite da una sempre più efficace comunicazione tra le parti.

Bibliografia

AAKER D.A., MYERS J.G. (1991), *Management della pubblicità*, FrancoAngeli, Milano.

BACCARANI C. (2010), "Complessità e intelligenza manageriale", *Sinergie*, n. 81, pp. 97-111.

BACCARANI C., GOLINELLI G.M. (1992), "L'impresa inesistente: le relazioni tra immagine e strategia", *Sinergie*, n. 29, pp. 213-225.

BACCARANI C., BRUNETTI F., GIARETTA E. (2015), *Impresa e management tra competitività e progresso*, Giappichelli Editore, Torino.

BARILE S. (2008), *L'impresa come sistema. Contributi sull'Approccio Sistemico Vitale (ASV)*, Giappichelli Editore, Torino.

BARILE S. (2009a), *Management sistemico vitale. Decidere in contesti complessi*, Giappichelli Editore, Torino.

BARILE S. (2009b), "Verso la qualificazione del concetto di complessità sistemica", *Sinergie*, n. 79, pp. 47-76.

BARILE S., GATTI M. (2007), "Corporate governance e creazione di valore nella prospettiva sistemico-vitale", *Sinergie*, n.73-74, pp.151-168.

BARILE S., SAVIANO M. (2011), "Qualifying the concept of system complexity", in *Various Authors, Contributions to Theoretical and Practical Advances in Management. A Viable Systems Approach (VSA).* ASVSA, Associazione per La Ricerca sui Sistemi Vitali. International Printing, pp. 27-60.

BARILE S., POLESE F., CARRUBBO L. (2012), "Il Cambiamento quale Fattore Strategico per la Sopravvivenza delle Organizzazioni Imprenditoriali", in Barile S., Polese F., Saviano M. (a cura di), *Immaginare l'innovazione*, e-book Giappichelli Editore, Torino, pp. 2-32.

BARILE S., SAVIANO M., IANDOLO F., CALABRESE M. (2014) "The Viable Systems Approach and its contribution to sustainable business behaviors", *Systems Research and Behavioural Science*, doi: 10.1002/sres.2318.

BASOLE R.C., ROUSE W.B. (2008) "Complexity of service value networks: Conceptualization and empirical investigation", *IBM Systems Journal*, vol. 47, n. 1, pp. 53-70.

BENCARDINO F., NAPOLITANO M. (2003), *Economia del software e tecnologie dell'informazione e della comunicazione. Un confronto internazionale per lo sviluppo locale*, FrancoAngeli, Milano.

BENNATO D. (2015), *Il computer come macroscopio. Big data e approccio computazionale per comprendere i cambiamenti sociali e culturali*, FrancoAngeli, Milano.

BORGONOVI E. (1996), "Le nuove frontiere dei servizi pubblici tra soddisfazione dell'utente e tutela dell'interesse pubblico ", *Sinergie*, n. 41, pp. 3-12.

BRODONI S.M. (2011), "Comunicazione, performance e sistema delle risorse immateriali d'impresa", *Sinergie*, n. 59, pp. 41-52.

BUSACCA B., CASTALDO S. (1996), *Il potenziale competitivo della fedeltà alla marca e all'insegna commerciale. Una metodologia di misurazione congiunta*, Egea, Milano.

CARRUBBO L. (2013), *La Co-creazione di valore nelle destinazioni turistiche*, ed. RIREA; Collana Opera Prima, n. 2.

CAMUFFO A. (2016), "The new HR challenges: big data, relevance and sustainability", *Economia & Management*, vol. 5, n.6, pp.117-125.

DAVENPORT T.H. (2014), *Big data @ work. Despelling the myths, uncovering the opportunities*, Harvard Business School Publishing, Harvard.

DAVENPORT T.H., DYCHÉ J. (2013), "Big data in big companies", *International Institute for Analytics*. Available online at http://www.demonish.com/cracker/14313168771217a9641e/bigdata-bigcompanies-106461.pdf.

EDVARDSSON B., TRONVOLL B., GRUBER T. (2011), "Expanding understanding of service exchange and value co-creation: a social construction approach", *Journal of the Academy of Marketing Science*,vol. 39, n. 2, pp. 327-339.

FALINI A. (2011), *La crisi d'impresa e le sue cause: un modello interpretative*, Università degli Studi di Brescia.

FAHY J. (2002), "A resource-based analysis of sustainable competitive advantage in a global environment", *International Business Review*, vol. 11, n. 1, pp. 57-77.

FIORANI G. (2011), *System Thinking, System Dynamics e politiche pubbliche*, Egea, Milano.

FROW P., MCCOLL-KENNEDY J.R., HILTON T., DAVIDSON A., PAYNE A., BROZOVIC D. (2014), "Value propositions. A service ecosystems perspective", *Marketing Theory*, vol. 14, n. 3, pp. 327-351.

GENTILE A. (2014), "La centralità della motivazione nei processi di apprendimento", *QTimes Web Magazine*, vol. VI, n.1, pp. 1-15.

GOLINELLI G.M. (2009), "L'approccio sistemico vitale: nuovi orizzonti di ricerca per il governo dell'impresa", *Sinergie*, n. 79.

GOLINELLI G. (2010), *Viable Systems Approach (VSA). Governing Business Dynamics*, Cedam, Padova.

GOLINELLI G.M., BARILE S. (2008), "Nascita ed evoluzione del pensiero sistemico", in Barile S. (eds.) 2008. *L'impresa come sistema. Contributi sull'approccio sistemico vitale*, II ed, Giappichelli Editore, Torino.

GUATRI L. (1995), *Turnaround: Declino crisi e ritorno al valore*, Egea, Milano.

GOLINELLI G.M., PASTORE A., GATTI M., MASSARONI E., VAGNANI G. (2002), "The firm as a viable system: managing inter-organisational relationships", *Sinergie*, n. 58, pp. 65-98.

GRANT R.M. (1999), "The resource-based theory of competitive advantage: implications for strategy formulation", *Knowledge and strategy*, pp. 3-23.

GROSSMAN R.L., SIEGEL K.P. (2014), "Organizational models for big data and analytics", *Journal of Organization Design*, Special Issue on Big Data and Organization Design, vol. 3, n. 1, pp. 20-25.

GUATRI L. (1996), "La teoria del valore tra economia e finanza", *Sinergie*, n. 39, pp. 52-57.

GUMMESSON E. (2006), "Qualitative Research in Management: Addressing Complexity, Context and Persona", *Management Decision*, n. 2, pp. 167-184.

LUSCH R.F. (2011), "Reframing supply chain management: a service-dominant logic perspective", *Journal of supply chain management*, vol. 47, n. 1, pp. 14-18.

LUSCH R.F., VARGO S.L. (2014), *Service-dominant logic: Premises, perspectives, possibilities*, Cambridge University Press.

MAGLIO P.P., SPOHRER J. (2008), "Fundamentals of service science", *Journal of the Academy of Marketing Science*, vol. 36, n. 1, pp. 18-20.

MARTINEZ M., DI NAUTA P., SARNO D., "Real and apparent changes of organizational processes in the era of big data analytics", *Studi Organizzativi*, pp. 91-107.

NERI G. (2015), *L' impresa nell'era digitale. Tecnologie informatiche e rivoluzione digitale al servizio dell'impresa*, Guaraldi, Rimini.

PALUMBO M. (2001), *Il processo di valutazione: decidere, programmare, valutare*, FrancoAngeli, Milano.

PASTORE M.P., JEANTET L., BASSO L., VAROLI A. (2016), *La ristrutturazione. Linee guida e strumenti di composizione della crisi d'impresa,* FrancoAngeli, Milano.

PAYNE A., STORBACKA K., FROW P. (2008), "Managing the co-creation of value", *Journal of the Academy of Marketing Science*, vol. 36, n. 11, pp. 83-96.

PELS J., BARILE S., SAVIANO M., POLESE F., CARRUBBO L. (2014), "The contribution of VSA and SDL perspectives to strategic thinking in emerging economies", *Managing Service Quality*, vol. 24, n. 6, pp. 565-591.

PENCARELLI T. (2013), *Le crisi d'impresa.Diagnosi, previsione e procedure di risanamento*, Franco Angeli, Milano.

PICIOCCHI P. (2005), "Il problema della dissolvenza e il monitoraggio di vitalità nel sistema impresa", *Sinergie*, n. 21 pp. 53-66.

POLESE F. (2004), *Il manager a tempo*, Aracne, Roma.

POLESE F. (2013), *Management sanitario in ottica sistemico vitale*, Giappichelli Editore, Torino.

POLESE F. (2017), "Successful value co-creation exchanges - a VSA contribution", in Barile S.; Pellicano M., Polese F., *Social dynamics in a System perspective*, pp.19-37, Spinger.

POLESE F., IANDOLO F., CARRUBBO L. (2015), "Co-creare valore compartecipando valori - Un contributo in ottica service, tra fruizione e compartecipazione", *Proceedings Convegno Sinergie Heritage, management e impresa: quali sinergie?*, Termoli.

POLESE F., MELE C., GUMMESSON E. (2017), "Value co-creation as a complex adaptive process", *Journal of Service Theory and Practice*, vol.27, pp.1040-1056.

POLESE F., PELS J., TRONVOLL B., BRUNI R., CARRUBBO L. (2017). "A4A relationships", *Journal of Service Theory and Practice*, vol. 27, n. 5, pp. 1040-1056.

PROIETTI L., QUATTROCIOCCHI B. (2009), "Crisi e complessità dei sistemi economici e sociali: dalla sinergia al contagio", *Sinergie*, n. 79, pp. 77-115.

RIPAMONTI L.A. (2010), "Il rapporto tra ICT e PMI italiane e le problematiche economico-organizzative dell'OS", *Dipartimento di Informatica e Comunicazione - Università degli Studi di Milano.*

REZZANI A. (2013), *Big Data: Architettura, tecnologie e metodi per l'utilizzo di grandi basi di dati,* MaggioliEditore, Milano.

SAVIANO M., DI NAUTA P. (2011), "Project Management as a compass in complex decision making contexts. A Viable Systems Approach", in Caivano D., Baldassarre M.T., Garcia F., Benero M., Mendes E., Runeson P., Sislitti A., Travassos G.H., Visaggio G.*12th International Conference on Product Focused Software Development and Process Improvement***.** New York ACM Association for Computing Machinery, pp. 112-119.

SCIARELLI S. (2002), "Comunicazione e gestione della crisi", *Sinergie*, n. 59, pp. 63-75.

SHEIN J.B. (2011), *Reversing the Slide: A Strategic Guide to Turnarounds and Corporate Renewal*, John Wiley & Sons, New Jersey.

SINGER P., SIRIANNI C.A. (2013), *La corporate governance. Elementi di teoria e profili operativi*, Giappichelli Editore, Torino.

SOLIMA L. (2010), "Social Network: verso un nuovo paradigma per la valorizzazione della domanda culturale", *Sinergie*, n.82, pp.47-74.

STAMPACCHIA P. (2005), "Generazione di "valore" e relazioni impresa - stakeholder: un'ottica in-tegrata", *Sinergie*, n. 67, pp.69-71.

VICARI S. (1992), "Risorse aziendali e valore", *Sinergie*, n. 29, pp. 81-94.

WIELAND H., POLESE F., VARGO S., LUSCH R. (2012), "Toward a Service (Eco) Systems Perspective on Value Creation", *International Journal of Service Science, Management, Engineering and Technology*, vol. 3, n. 3, pp. 12-25.

TEECE D.J. (1998), "Capturing Value from Knowledge Assets: The New Economy, Markets for Know-How, and Intangible Assets", *California Management Review*, vol. 40, n. 3, pp. 55-79.

TROUT J., RIVKIN S. (1997), *Il nuovo positioning*, McGraw-Hill, New York.

VANAUER M., BÖHLE C., HELLINGRATH B. (2015), "Guiding the Introduction of Big Data in Organizations: A Methodology with Business - and Data-Driven Ideation and Enterprise Architecture Management-Based Implementation", *48th Hawaii International Conference on System Sciences*, IEEE Computer Society.

TRACK - BUSINESS MODELS EVOLUTION: TECHNOLOGY AND BEYOND

Towards the digital business model: A holistic overview from an SME

VERONICA SCUOTTO, FRANCESCA SERRAVALLE, ALAN MURRAY, MILENA VIASSONE

Towards the digital business model: A holistic overview from an SME

VERONICA SCUOTTO[*] FRANCESCA SERRAVALLE[•] ALAN MURRAY[♠] MILENA VIASSONE[**]

Abstract

Objectives. *This research seeks to investigate the shift towards a digital business model of SMEs against the six dimensions of the business model framework (Chesbrough, 2007): value proposition, target market, value chain, revenue mechanism, value network and competitive strategy.*

Methodology. *The methodology is based on a case study of an Italian SME, Truly Design. It takes the form of an interview along with secondary research to better investigate the shift of SMEs towards the digital business model (DBM).*

Findings. *Critically exploring the effects of the shift of the SME towards the digital business model, the results show the significance of such a shift in the era of digital transformation and the increased need for technological skills inside the SME.*

Research limits. *Due to the holistic overview of the topic, results cannot be generalized and therefore, it is suggested that a cross - comparative analysis or a quantitative study be conducted to develop this research.*

Practical implications. *This paper has theoretical and managerial implications, firstly adding a clear definition of the digital business model for SMEs in literature and secondly explaining the possibility for SMEs to innovate their skills with the adoption of DBM, supported by network competences.*

Originality of the study. *The study presents a successful adoption of a digital business model within an SME, suggesting a novel definition of the DBM. The new definition highlights the relevance of SME's network competences along with the use of digital technologies to improve business visibility and customer satisfaction. It also merges market and customer orientation into a single entity which drives SMEs' strategy.*

Keywords: *Digital business model; SMEs; digitalization; digital orientation; business model framework.*

[*] Leonard de Vinci, Pole universitaire, Research center, 92 916 Paris La Défense, France.
e-mail: veronica.scuotto@devinci.fr

[•] Ph.D. student in *Business and Management*- University of Turin
e-mail: francesca.serravalle@unito.it

[♠] Lecturer in *Business and Enterprise* -University of the West of Scotland
e-mail: alan.murray@uws.ac.uk

[**] Associate Professor of *Management* - University of Turin
e-mail: milena.viassone@unito.it

1. Introduction

Products, applications and services are changing our lives in a radical way (Li *et al.*, 2017). It is not only products or services that become obsolete but also organizational processes and systems because they simply no longer create enough value (Zott *et al.*, 2017). In this field of incoming reorganization of a management process, companies have been pushed towards digitalization to find a competitive edge (El Sawy and Pereira, 2013). This has resulted in the shift of the adoption of the business model from the traditional version to the digital one. The digital business model (DBM) involves a reinvention of how businesses operate by employing advanced technologies as social networks, mobile application and digitalized processes (Shimp, 2017). Therefore, companies have had to revolutionize how they produce, sell, and promote their products/services in order to survive in the current highly competitive market (El Sawy and Pereira, 2013). This revolution can be difficult and stressful for the business (Menon and Yao, 2017) and can also increase sunk costs (Stiglitz, et al., 1987). In reference to the latter, a company needs to take account of these costs because they are non-transportable, non-convertible, and cannot be recovered. Kim and Kankanhalli (2009) state that "sunk costs refer to previous commitments, which cause reluctance to switch to a new alternative" (p.569). Therefore, sunk costs can limit the process of business change. For this reason, changing a BM could appear to be unsustainable for a company, which does not want to modify the current organizational scripts and lose money from a previous investment (Kim and Kankanhalli, 2009). Therefore, the entrepreneur prefers to maintain the current situation, which they consider to be more comfortable *in line with status quo bias theory* (Samuelson and Zeckhauser, 1988). However some scholars have emphasized the relevance of embracing the digital business model due to the high -speed market evolution, increasing number of competitors, and the greater uncertainty of business growth (Al-Debei *et al.*, 2010). Antonopoulou *et al.* (2017) show that a digital business model can reduce production costs and create value through a wide virtual network even though an entrepreneur can overcome a few potential barriers such as uncertainty of business, data privacy, and clash of cultures (Bilgeri *et al.*, 2017). Additionally, other researchers have placed greater focus on the use of digital technologies such as social media networks (Scuotto *et al.*, 2017a; 2017b; Teece, 2010; Pateli and Giaglis, 2004) and the internet of things (Bilgeri *et al.*, 2017; Scuotto *et al.*, 2017). However, although the interest in this topic can be traced back to the beginning of the century with the increased presence of IT-centered businesses (Osterwalder *et al.*, 2005; Antonopoulou *et al.*, 2017; Foss *et al.*, 2017; Terrenghi *et al.*, 2017; Zott *et al.*, 2011; Al-Debei *et al.*, 2010; Bowman *et al.*, 2017) as far as we know nobody has provided a single and complete definition of the digital business model.

Al-Debei (2010) and Antonopoulou (2017) have attempted to provide a definition of DBM, describing the move from a traditional to a digital business model, investing more in new technologies which has proven to be the critical need for all companies. Notwithstanding, most of small to medium enterprises (SMEs) seem to struggle to embrace this shift due to the lack of financial and technical resources (Zott *et al.*, 2011).

Hence, the adoption of a digital business model becomes the main challenge for an SME which needs to adjust its core business in order to embrace digital transformation. SMEs need to (a) create a value from the use of new, advanced technologies (Chesbrough and Rosenbloom, 2002), (b) innovate their own network dynamics (Calia *et al.*, 2007), and (c) build up intertwining relationships between a company and its consumers (Björkdahl, 2009). This would generate an harmonic and wide flow of information (Wang *et al.*, 2017; Hennig-Thurau, 2010; Mathwick *et al.*, 2008) and reduce promotion costs (Quinton *et al.*, 2017; Borges, Hoppen, and Luce, 2009; Harrigan *et al.*, 2011) which could compensate for the SMEs' lack of resources.

So, DBM is crucial for the success of today's SMEs, especially concerning growth potential (Teece, 2010), competitive advantage (Mitchell *et al.*, 2003; Afuah *et al.*, 2000), and long-term performance (George *et al.*, 2011). This model, thus, provides a viable source of a competitive edge (Markides *et al.*, 2004; Zott *et al.*, 2011).

From this, a holistic case study approach is employed to seek to offer a single definition of DBM by looking into the six dimensions of the business model framework (*Customer value proposition, target market, value chain, revenue mechanism, network, and competitive strategy* introduced by Chesbrough in 2007 and then improved by Johnson, Christensen and Kagermann (2010) in explaining profit formula as the creation of value for the company, due to the revenue mechanism, the cost structure, the margin model and the resource velocity (how fast we need to turn over inventory, fixed assets and other assets).

The remainder of this paper is structured as follows: section two explains the state of the art of the digital business model, trying to define the shift from traditional BM to DBM within SMEs. Section three describes the research method and justifies its suitability for the present research. Section four presents the results which have emerged followed by section five where, theoretical and managerial implications are discussed along with limitations and recommendations for further research.

2. Theoretical background

2.1 State of the art of Digital BM

The literature offers a plethora of definitions of a traditional business model (BM). Rappa (2000) describes a BM as a technique for running a business. A BM indicates how a company generates revenue and is positioned in the value chain. Linder and Cantrell (2000) declare that a business model is "a business logic" used to create value for profit-oriented business. Magretta (2002), emphasizes the logic component of the BM which shows a company's target market, values, and revenue. Terrenghi *et al.* (2017) consider a business model to be a business logic which is used as a guide to address idea generation and communication activities. According to Hedman and Kalling, "a business model is a term often used to describe the key components of a given business" (p.49), Bouwman *et al.* (2017) present BMs as an effective tool to be used to implement new strategy as well as create new, innovative ideas to improve a competitive edge and network competence (see table 1).

Those definitions can be divided into two different groups of meanings: (a) when authors refer to a BM as an instrument to capture value proposition and increment revenue (Bowman *et al.*, 2017; Rappa *et al.*, 2000; Linder and Cantrell, 2000; Magretta, 2002) and (b) when they describe a BM as a business logic (Terrenghi *et al.*, 2017; Hedman *et al.*, 2003).

From this, Bouwman *et al.*'s definition (2017; p.1) seems to be more in line with this research: "effective instruments for strategy execution. BMs are combined with the designing, analyzing and implementing of new innovative concepts that can enhance the competitiveness of companies or business network."

Tab. 1: Selected business model definitions

Author	BM definition
Terrenghi *et al.* (2017, p. 972)	A business model is an abstract representation of business logic. Serving as a reference framework, it supports practitioners in conceiving, designing and communicating business ideas.
Hedman *et al.* (2003, p. 49)	Business model is a term often used to describe the key components of a given business.
Bouwman *et al.* (2017, p. 1)	Business models (BMs) are acknowledged as effective instruments for strategy execution. They are combined with the designing, analyzing and implementing of new innovative concepts that can enhance the competitiveness of companies or business network.
Rappa (2000)	A BM is the method of doing business by which a company can sustain itself, that is, generate revenue. The business model spells out how a company makes money by specifying where it is positioned in the value chain.
Linder and Cantrell (2000, pp. 1-2)	The organization's core logic for creating value. The business model for a profit-oriented enterprise explains how it makes money.
Magretta (2002,p. 4)	The business model tells a logical story explaining who your customers are, what they value, and how you will make money in providing them that value.

Source: personal elaboration

By drawing digital features into the definition of Bouwman *et al.* (2017), the Authors started to review the literature on this topic. Initially the digital business model was considered to be an e-commerce business model (Dubosson-Torbay *et al.*, 2001). Stolterman *et al.*, (2004) proposed the idea that a digital business model is an evolution of running a business derived from the adoption of digital technologies in the society. Al-Debei *et al.* (2010, p.2) seek to draw the digitalization process into a BM definition; Clemons (2009) introduces DBM in relation to the increase use of websites. Recently, Zott *et al.* (2017, p. 19) state that DBM referred to digital innovation and the creation of a new value chain. Terrenghi *et al.*, (2017) describe the DBM as an evolution of the traditional business model derived from the introduction of information technologies (IT) in the BM management process. Additionally, Lozic *et al.* (2017) introduce the concept of WEB 2.0 to the DBM, whereas Jalozie *et al.* (2017) re-emphasize the value of an e-commerce business model as part of the digitalization process of a company.

Gartner (2018) considers the DBM as a guide to shift a traditional business to the digital world (see table 2).

Some authors have tried to attempt to offer a few studies on the adoption of DBM within SMEs. In fact, Kreeger *et al.* (2017) refers to the relationship between SMEs and digitalization, whereas Antonopoulou *et al.* (2017) explain the relationship between SMEs' BM and digital innovation (see table 3).

SMEs struggle to adjust their business to the digital world due to the lack of financial and technical expertise (Quinton *et al.*, 2017; Cyert *et al.*, 1963; Nguyen, Newby & Macaulay, 2015; O'Toole, 2003).

Tab. 2: Literature review of the main studies on a digital business model

DIGITAL BM	**TOPIC REFERRED TO DBM**
Zott *et al.* (2017, p.19)	Digital innovation and the creation of a new value chain
Terrenghi *et al.* (2017, p.974)	IT in the BM management process
Lozic *et al.* (2017, p.392)	BM and the Web 2.0
Clemons (2009, pp.19-20)	BM and web sites
Al-Debei *et al.* (2010, p.2)	BM and digital business
Jalozie *et al.* (2017, p.75)	E-commerce business model
Dubosson-Torbay *et al.* (2001, p.3)	E-commerce business model

Source: personal elaboration

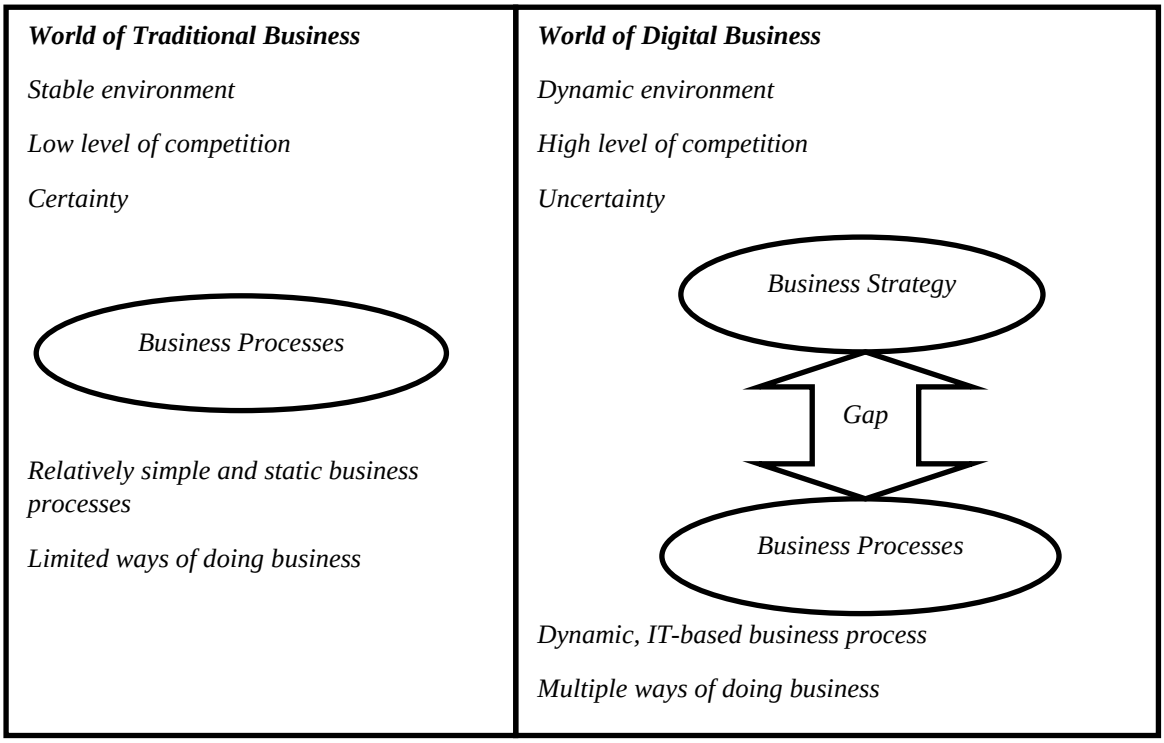
Tab. 3: Literature review of the main studies on a digital business model and SMEs

DIGITAL BM AND SMES	**TOPIC REFERRED TO DBM AND SMES**
Kreeger *et al.* (2017, p.8-9)	SMEs and digitalization
Antonopoulou *et al.* (2017, p.5154)	BM and digital innovation

Source: personal elaboration

Interest in the DBM has emerged due to the global, digital transformation which has revolutionized how businesses run and grow (Antonopoulou *et al.*, 2017; Al-Debei *et al.*, 2010). Along with the globalization phenomenon, this has extended market transactions and production (Lozic *et al.*, 2017) but it also generates a gap between the business strategy - that is the way by which a company positions itself in a chosen market to pursues competitive advantages - (Porter, 1980) and the business processes - the way in which all the resources of an organization are used in a reliable, repeatable and consistent way to achieve its goals- (Zairi, 1997; Al-Debei *et al.* (2010) (see figure 1). This gap is generated due to the high speed of the information spread and the slowness of information acquisition of SMEs (Al-Debei *et al.*, 2010).

Fig. 1: Comparison between Traditional and Digital Business Models



Source: Al-Debei *et al.*, 2010, p.5.

Despite this the shift in the adoption of a digital business model offers the fastest and appropriate way to serve customers' needs and acquire suitable knowledge to increase business performance (Al-Debei *et al.*, 2010). From this the need to embrace a DBM is increased due to greater uncertainty and the growth of the digital marketplace Therefore, given the paucity of the studies, the Authors seek to enlarge the study of this phenomenon offering an holistic case study of a successful Italian SME, which has based its growth and excellent performance on the adoption of a DBM.

2.2 The digital business framework: a novel model.

Digitalization has dramatically changed organizational environments, bringing challenges and opportunities to SMEs (Quinton *et al.*, 2017) and therefore this phenomenon is recognized to be a fundamental process for SMEs' survival (Paiola, 2017). However, a DBM is not generic and it needs to be adjusted to the market and business features. For instance, the use of LinkedIn can be more powerful for an SME than other channels. Similarly the adoption of augmented reality can be valuable for one SMEs but not for another. This calls for digital and market orientation (Theodosiou *et al.*, 2012).

In a nutshell, every successful SME runs according to an effective business model (Johnson *et al.*, 2008). This allows the unlocking of the value potential embedded in new technologies which can be converted into market outcomes (Zott *et al.*, 2009). Indeed, digitalization can trigger changes in production, management, and commercial activities (Calia *et al.*, 2007). In line with this, Chesbrough (2007) introduced a business model framework (BMF) with six dimensions to better define a digital business model: customer value proposition, target market, value chain, revenue mechanism, network, and competitive strategy. Following Chesbrough (2007), these dimensions have been better described by other authors as well. Hence, for a more complete description of the BMF, the Authors provide a synthesis of this framework embracing all studies and introducing the concept of digital as follows:

1. *Customer value proposition*: A successful company has found a digital way to create and maintain value for the customers (Johnson *et al.*, 2008) and captures the degree of business model innovation embodied in the activity system (Zott *et al.*, 2017).
2. *Target market*: A successful strategy of market orientation could help the company towards digitalizing processes (Quinton *et al.*, 2017), creating an intangible resource that allows organizations to be uniquely competitive (Yung, 2017).
3. *Value chain*: Given the digital transformation, a linear business model is no longer used. The digitalization of production and communication processes has converted the value chain flow – moving from bottom to top of an organizational environment (Foss *et al.*, 2017).
4. *Revenue mechanisms*: The profit formula defines how the company creates value for itself, starting from cost structure (direct costs, indirect costs and economies of scale), margin model (which gives the expected volume and cost structure of the firm analyzed) and resource velocity (how fast we need to turn over inventory, fixed assets,..) (Johnson *et al.*, 2008). As a matter of fact, digitalization could benefit the cost structure in terms of advertising and communication for companies (i.e. Google AdWord pay per click), or monitoring its websites and social network (Scuotto *et al.*, 2017) with cheaper digital options (i.e. Google Analytics) giving the possibility to accelerate information (i.e. better position on a SERP page) and online purchase processes (Zhai *et al.*, 2017).
5. *Network*: The key resources of a company are assets such as people, technology, products, facilities, brands which are applied to deliver the value proposition to the target market (Johnson *et al.*, 2008). By adopting a digital business model, an SME can make interactions with different actors (e.g other companies, institutions, customers, etc.) (Li *et al.*, 2017).
6. *Competitive strategy*: BMs are very difficult to imitate by other companies (Chesbrough, 2007). Digital Orientation (DO) could deliberate a strategic positioning of an SME to take important advantages of opportunities presented by digital technologies and digitalization processes (Quinton *et al.*, 2017).

So in adapting to the ever changing formats of digital technology, SMEs need to look beyond individual initiatives, and consider organisational practices as well as the broader environment (Quinton *et al.*, 2017; Bharadwaj *et al.*, 2013).

Given this, the authors seek to confirm and\or refute the following assumptions.

A1: SMEs are reluctant to digitalize their business model (Kreeger *et al.*, 2017; Tan *et al.*, 2017).

A2: The incoming digitalization pushes SMEs to overcome a business obsolescence, embedding digital features in their business models (Zott *et al.*, 2017).

3. Methodology

Given the paucity of the research around the shift between traditional BM and DBM, this research seeks to extend the literature review providing a holistic case study of a successful Italian SME, Truly Design based in Turin has achieved its growth and excellent performance through the adoption of a DBM. A case study methodology (Yin, 2013) has been chosen because this approach is particularly useful for responding to *how* and *why* questions about a contemporary set of events (Leonard-Barton 1990) and certain kinds of information can be difficult or even impossible to tackle by means other than qualitative approaches such as the case study (Sykes 1990). As a matter of fact, Dyer and Wilkins (1991) argue that a single case study could create better high-quality theory than multiple case study, because it let the possibility to observe deeper a specific object (Gustafsson, 2017).

Moreover, Turin city is considered a suitable research context because of it is the first city of Italy with many digitalized SMEs (Rapporto PMI Piemonte, 2017) and it is also considered to be an international hub of innovative and productive retailing (Tardivo *et al.*, 2017). Truly design has been chosen because its company size is under 50 staff, which includes the four founders and all the

external collaborators. The company belongs to the category of SMEs (European Commission, 2003). It has also already shifted from a traditional to a digital business model through the adoption of social networks (i.e. Facebook, Linkedin, Twitter, Behance, etc) which channel users to their e-commerce website.

The case study is presented in the form of an interview. The interview is recognized to be a suitable research technique to investigate a case study because it can help the researcher to explore an interviewer's thoughts (Fife, 2005). In this case, the SME studied is "Truly Design" located in Turin, in the North of Italy and a semi structured interview has been conducted with one of the four founders. The interview was divided into four parts: 1) The description of the SME; 2) DBM definition; 3) Digitalization process; and 4) Network competences.

The initial approach was made by phone to one of the founders to provide a brief introduction of the research scope and interview structure. One of the Authors conducted the interview in the native language of the interviewer (id est Italian language). The interview lasted ninety minutes and was recorded, transcribed and translated by a bilingual professional translator to be interpreted by the Authors.

During the interview, a definition of the DBM employed by the Authors was presented and then analysed with the interviewer.

Truly Design's core business is based on "the street art" which is used to advertise multinational enterprises (e.g. Ferrero, Nike, FCA, Timberland) and SMEs. Their strengths are reflected in their design which leaves a unique signature for each client.

4. Findings

As shown by the results, the digitalization process has brought a huge impact in each process of the SME analyzed. Truly Design was founded around 1998 by four entrepreneurs who established their business using a traditional business model however very soon they converted their business model into a digital model. In particular they started to embed social media networks to spread their "voice", moving from word-of-mouth (WOM) to word-of-mouse (Helm, 2000).

"From the very beginning with Truly we were interested in the world of street art and graffiti and in a short time we came to understand that street art could be a good business. So, we began to make some odd jobs, structuring more and more the company with a sort of digitalization, because the Internet was so well used".

By analysing the SME against the six dimensions of the BFM the following results were noted:

Collaboration: by using social networks, Truly Design has been able to internationalize its business making partnerships with business abroad and serving multinational clients such as Nike, Ferrero, FCA and Timberland along with local and international SMEs. Moreover, they also work with artists' web agencies and photographers around the world which compensates for their lack of technical resources.

"Timberland, Vans and other big companies have contacted us directly through the Web, in particular thanks to social networks, website and keywords searching after a visit in a company where we have worked. Our team is supported by some external collaborators such as some web agencies, photographs and freelance graphics artists".

Other important data gathered by interview relates to the six value drivers which authors describe in their studies (Chesbrough, 2007; Abell 1980; Porter 1985; Hammel 1985; Johnson and Christensen 2010), i.e. (a) customer value proposition, (b) target market, (c) value chain, (d) revenue mechanism, (e) network and (f) competitive strategy.

Customer value proposition: Truly Design's customer value proposition is based on its artistic and unique signature which is generated via collaborations with worldwide actors using digital technologies.

"Our customer value proposition is made by providing artistic solutions for everyday life, thanks to our partnerships with many external collaborators and the high use of social media to show to our fans our creations".

Target market: they are very customer 'oriented. In fact, their primary scope is to solve problems and satisfy their needs in a novel and efficient way.

"As we have said before, our art is unique and made to solve non-artistic problems with artistic solutions. For example, this could mean whitening an office in an alternative way for a client"

Value chain: Truly Design's value chain is not only based on production and customers' service but also on the improvement of the internal working environment providing a pleasant place to work. Alongside this, they have an extended network which has helped them to internationalize their business.

"The presence on social networks of our works has allowed us to expand our network of collaborations, benefiting from the point of view of artistic experimentation, because you can do some good work even if there is a small budget. Companies up to 10 years ago left the walls of white offices. This trend lasted until the beginning of the 2000s, when motivational phrases were written, such as the mission or the company logo was reproduced, nothing artistic but something that made trends. Now, however, the current trend is to go to create works of art to be put in these spaces with color theories for which the working environments are improved"

Revenue mechanism: Truly Design enjoys a high profit margin and an equilibrium in its financial structure, reducing cost thanks to digital communication (i.e. adopting social media) and tracking web traffic of companies' website (i.e. using Google Analytics).

"Working with a view to the contribution margin, it has allowed us to structure the economic and financial potential to the maximum. This is why our margin remains high. To track traffic on our website, we use Google Analytics to track visitors, but we have never used advertising tools"

Network: One of the principal assets is people. Thanks to internal and external people or stakeholders, they have been able to improve their network competence. This has resulted in being able to serve local and international multinational enterprises as well as SMEs

"Assets are the basis of the image strategy. Starting from the structure, investments have been made to have a representative structure that evokes in the client, who is in the studio, on the one hand security (large and structured enough to give security), and on the other side a sense of our community in being able to manage even larger projects with external collaborators. The other important assets are certainly: human resources understood as a network of collaborators, the study brand and the artistic brand that represent our reputation towards the outside world"

Competitive strategy: the leverage of Truly Design's competitive strategy relies on digital technologies. For instance, by using different social media networks (e.g. Facebook, Instagram and Twitter), they have been able to increase client's sale and brand awareness.

"The competitive advantage is that moving a lot in terms of physical travel between the various companies we work for we have never paid to give visibility on social media. People know us by word of mouth (both physical and digital) and then access the virtual world normally. We use Google Analytics to monitor visits, but we never did any promotion. We think that our resource is the people involved, without having the goal of selling something. For us it is more useful to have a base of followers who click us deliberately, maintaining a genuine strategy"

In sum, Truly Design's DBM is divided in two core parts: (a) Social media networks, used to improve brand awareness and to improve their e-commerce; b) monitoring digital tools (e.g. Google Analytics), adopted to control web traffic and implement new strategies as an answer to market changes. This has resulted in a greater enhancement of their performance:

"Social media responds every time we share our work, while the site is a working tool in the sense that we load all the projects so that our client can find all our work on the site. The site becomes a virtual showcase when we go to the customer, in order to show them our art"

5. Discussion and conclusion

SMEs has long been recognized to be an engine of economic growth (Eggers *et al.*, 2013; Henderson and Weiler, 2010). The digital revolution has changed the way to run a business and therefore the embeddedness of the digitalization process within SMEs business model is recognized as being a feasible and successful action (Müller *et al.*, 2018; Gatautis *et al.*, 2017). However, SMEs are still suffering because of their lack of technical and financial resources which in most cases tends to be overcome by their network competences (Hitchen *et al.*, 2016). On this basis, social media networks assume a key role in reaching an international audience and examining competitors by tracking website traffic and monitoring competitor's activities on their website page. These networks help SMEs in reducing cost structure and providing more technical expertise (Gatautis *et al.*, 2017; Heini *et al.*, 2015; Hitchen *et al.*, 2016; Tan *et al.*, 2016).

However as opposed to previous research (Kreeger, 2017; Tan 2017), the SME analyzed proved to be more prone to the adoption of the DBM, which has benefited the business in getting more local and international clients. In fact, as the interviewer declared: *"The digital optics in our business have had a positive impact from the beginning, especially from the point of view of artistic experimentation, which is essential in our work. Social media and the web keep us up to date from the point of view of fashions and events, to which we usually participate, to be present as a company. Traditional values, such as company credibility, our reputation and experience, combined with digital communication have allowed us to grow a lot, both as a company and as people".*

Although this study attempts to address the gap in the management and digital literature on the adoption of a DBM by SMEs, the results cannot be generalized due to the analysis of a single case. Therefore this research would encourage further research on the digital phenomenon conducting a cross comparative analysis as well as a quantitative study.

References

ABELL D.F. (1980), *Defining the business: The starting point of strategic planning*, Prentice Hall, Englewood Cliffs, NJ.

AFUAH A., TUCCI C.L. (2000), *Internet business models and strategies: Text and cases*, McGrawHill Int. Ed. Manag. Organ. Ser. 2, New York.

AL-DEBEI M. M., AVISON D. (2010), "Developing a unified framework of the business model concept", *European Journal of Information Systems*, vol. 19, n. 3, pp. 359-376.

ANTONOPOULOU K., NANDHAKUMAR J., BEGKOS C. (2017), "The emergence of business model for digital innovation projects without predetermined usage and market potential", In *Proceedings of the 50th Hawaii International Conference on System Sciences*.

BHARADWAJ A., EL SAWY O.A., PAVLOU P.A., VENKATRAMAN N. (2013), "Visions and voices on emerging challenges in digital business strategy", *MIS Quarterly*, vol. 37, n. 2, pp. 633-661.

BILGERI D., WORTMANN F. (2017), "Barriers to IoT Business Model Innovation", In *13. Internationale Tagung Wirtschaftsinformatik* (WI 2017), February 12-15, 2017, St. Gallen, Switzerland

BJÖRKDAHL J. (2009). "Technology cross-fertilization and the business model: The case of integrating ICTs in mechanical engineering products", *Research Policy*, vol. 38, n. 9, pp. 1468-1477.

BORGES M., HOPPEN N., LUCE F. B. (2009), "Information technology impact on market orientation in e-business", *Journal of business research*, vol. 62, n. 9, pp. 883-890.

BOUWMAN H., HEIKKILÄ J., HEIKKILÄ M., LEOPOLD C., HAAKER T. (2017), "Achieving agility using business model stress testing", *Electronic Markets*, vol. 1, n. 14.

CALIA R. C., GUERRINI F. M., MOURA G. L. (2007), "Innovation networks: From technological development to business model reconfiguration", *Technovation*, vol. 27, n. 8, pp. 426-432.

CHESBROUGH H. (2007), "Business model innovation: it's not just about technology anymore", *Strategy & leadership*, vol. 35, n. 6, pp. 12-17.

CHESBROUGH H., ROSENBLOOM R.S. (2002), "The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies", *Industrial and corporate change*, vol. 11, n. 3, pp. 529-555.

CLEMONS E.K. (2009), "Business models for monetizing internet applications and web sites: Experience, theory, and predictions", *Journal of Management Information Systems*, vol. 26, n. 2, pp. 15-41.

CYERT R. M., MARCH J. G. (1963), *A behavioral theory of the firm*. Englewood Cliffs, NJ, 2.

DYER, W. GIBB, JR, WILKINS, ALAN L., & EISENHARDT, KATHLEEN M. (1991), "Better stories, not better constructs, to generate better theory: A rejoinder to Eisenhardt; better stories and better constructs: The case for rigor and comparative logic", The Academy of Management Review, Vol. 16, N. 3, p. 613.

DUBOSSON-TORBAY M., OSTERWALDER A., PIGNEUR Y. (2002), "E-business model design, classification, and measurements", *Thunderbird International Business Review*, vol. 44, n. 1, pp. 5-23.

EGGERS F., KRAUS S., HUGHES M., LARAWAY S., SNYCERSKI S. (2013), "Implications of customer and entrepreneurial orientations for SME growth", *Management Decision*, vol. 51, n. 3, pp. 524-546.

EL SAWY O.A., PEREIRA F. (2013), *Business modelling in the dynamic digital space: An ecosystem approach*, Springer, Heidelberg.

FIFE W. (2005), *Doing fieldwork: Ethnographic methods for research in developing countries and beyond.* Springer, New York.

FOSS N.J., SAEBI T. (2017), "Fifteen years of research on business model innovation: How far have we come, and where should we go?", *Journal of Management*, vol. 43, n. 1, pp. 200-227.

GARTNER (2018), Gartner's make digital business transformation a practical reality research document now. Online source, https://www.gartner.com/technology/research/digital-business/ (Access on 18th February 2018).

GATAUTIS R., VITKAUSKAITĖ E., DE REUVER M. (2017), "Use of Facebook and Google Platforms for SMEs Business Model Innovation", *BLED 2017 Proceedings. 38.*

GEORGE G., BOCK A. J. (2011), "The business model in practice and its implications for entrepreneurship research", *Entrepreneurship Theory and Practice*, vol. 35, n. 1, pp. 83-111.

GUSTAFSSON, JOHANNA (2017), *Single Case Studies vs. Multiple Case Studies: A Comparative Study*, Academy of Business, Engineering and Science, Halmstad University, Halmstad, Sweden

HAMMEL S.M., JONES C.K.R.T., MOLONEY J.V. (1985), "Global dynamical behavior of the optical field in a ring cavity", *JOSA B*, vol. 2, n. 4, pp. 552-564.

HARRIGAN P., RAMSEY E., IBBOTSON P. (2011), "Critical factors underpinning the e-CRM activities of SMEs", *Journal of Marketing Management*, vol. 27, n. 5-6, pp. 503-529.

HEDMAN J., KALLING T. (2003), "The business model concept: theoretical underpinnings and empirical illustrations", *European Journal of Information Systems*, vol. 12, n. 1, pp. 49-59.

HEINI MAARIT TAIMINEN, HEIKKI KARJALUOTO, (2015), "The usage of digital marketing channels in SMEs", *Journal of Small Business and Enterprise Development*, vol. 22, n. 4, pp. 633-651, https://doi.org/10.1108/JSBED-05-2013-0073

HELM S. (2000), "Viral marketing-establishing customer relationships by'word-of-mouse'", *Electronic Markets*, vol. 10, n. 3, pp. 158-161.

HENDERSON J., WEILER S. (2010), "Entrepreneurs and job growth: Probing the boundaries of time and space", *Economic Development Quarterly*, vol. 24, n. 1, pp. 23-32.

HENNIG-THURAU T., MALTHOUSE E. C., FRIEGE C., GENSLER S., LOBSCHAT L., RANGASWAMY A., SKIERA B. (2010), "The impact of new media on customer relationships", *Journal of Service Research*, vol. 13, n. 3, pp. 311-330.

HITCHEN E. L., NYLUND P. A., FERRÀS X., MUSSONS S. (2017), "Social media: open innovation in SMEs finds new support", *Journal of Business Strategy*, vol. 38, n. 3, pp. 21-29.

JALOZIE I. K., WEN H. J., HUANG H. L. (2006), "A framework for selecting e-commerce business Models", *Online source*, Retrieved on 10th February 2012, http://www.msu.ac.zw/elearning/material/temp/1280406960A%20framework%20for%20selecting%20e-commerce%20business%20models.pdf (Access on 18th February 2018)

JOHNSON M. W., CHRISTENSEN C.M., KAGERMANN H. (2008), "Reinventing your business model", *Harvard Business Review*, vol. 86, n. 12, pp. 57-68.

KEMP R. (2016), "Fourth industrial revolution", *The Lawyer*, vol. 31, n. 21, p. 12.

KIM, H. W., & KANKANHALLI, A. (2009), "Investigating user resistance to information systems implementation: A status quo bias perspective", MIS quarterly, pp. 567-582.

KREEGER M.N., HARINDRANATH G. (2017), "Security V&V Within Software SMEs: A Socio-Technical Interaction Network Analysis", *Online source*, https://pdfs.semanticscholar.org/2a35/641727d2d4d78903ed633e7d69ae5ea5d9b3.pdf (access on 18th February 2018).

LEONARD-BARTON D. (1990), "A dual methodology for case studies: Synergistic use of a longitudinal single site with replicated multiple sites", *Organization Science*, vol. 1, n. 3, pp. 248-66.

LI L., SU F., ZHANG W., MAO J.Y. (2017), "Digital transformation by SME entrepreneurs: A capability perspective", *Information Systems Journal*., Special Issue, pp. 1-29.

LI W., LIU K., TANG Y., BELITSKI M. (2017), *E-Leadership for SMEs in the Digital Age*. In The Palgrave Handbook of Managing Continuous Business Transformation (pp. 375-416). Palgrave Macmillan, London.

LINDER J., CANTRELL S. (2000), "Changing Business Models: Surveying the Landscape", *Accenture Institute for Strategic Change*, Cambridge.

LOZIC J., MILKOVIC M., LOZIC I. (2017), "Economics of platforms and changes in management paradigms: transformation of production system from linear to circular model", *26th International Scientific Conference on Economic and Social Development- "Building Resilient Society-* Zagreb, Croatia, 8-9 December 2017.

MAGRETTA J. (2002), "Why business models matter", *Online source*, https://pdfs.semanticscholar.org/57b4/caef955e71dc6eab4867f5bc5f070d127d75.pdf (Access on 18th February 2018).

MARKIDES C., CHARITOU C.D. (2004), "Competing with dual business models: A contingency approach", *The Academy of Management Executive*, vol. 18, n. 3, pp. 22-36.

MATHWICK CHARLA, CAROLINE WIERTZ, KO DE RUYTER (2008), "Social Capital Production in a Virtual P3 Community", *Journal of Consumer Research*, vol. 34, n. 6, pp. 832-849.

MENON A.R., YAO D.A. (2017), "Elevating repositioning costs: Strategy dynamics and competitive interactions", *Strategic Management Journal*, vol. 38, n. 10, pp. 1953-1963.

MITCHELL D., COLES C. (2003), "The ultimate competitive advantage of continuing business model innovation", *Journal of Business Strategy*, vol. 24, n. 5, pp. 15-21.

MÜLLER J. M., BULIGA O., VOIGT K.I. (2018), "Fortune favors the prepared: How SMEs approach business model innovations in Industry 4.0", *Technological Forecasting and Social Change*, https://doi.org/10.1016/j.techfore.2017.12.019

NGUYEN T.H., NEWBY M., MACAULAY M.J. (2015), "Information technology adoption in small business: Confirmation of a proposed framework", *Journal of Small Business Management*, vol. 53, n. 1, pp. 207-227.

O'TOOLE T. (2003), "E-relationships-emergence and the small firm", *Marketing Intelligence and Planning*, vol. 21, n. 2, pp. 115-122.

OSTERWALDER A., PIGNEUR Y., TUCCI C.L. (2005), "Clarifying business models: Origins, present, and future of the concept", *Communications of the Association for Information Systems*, vol. 16, n. 1, pp. 1-25.

PAIOLA M. (2017), "Digital servitization: opportunities and challenges for Italian SMES", *Online article* : https://www.researchgate.net/profile/Marco_Paiola/publication/320833181_Digital_servitization_opportunities_and_challenges_for_Italian_SMES/links/59fc7f16aca272347a214bfc/Digital-servitization-opportunities-and-challenges-for-Italian-SMES.pdf (access on 18th February 2018).

PATELI A.G., GIAGLIS G.M. (2004), "A Research Framework for Analyzing eBusiness Model", *European Journal of Information Systems*, vol. 13, n. 14, pp. 302–314.

PORTER M.E. (1980), *Competitive strategy: Techniques for analyzing industries and competitors* (Vol. 980). New York: Free Press.

PORTER M.E., MILLAR V.E. (1985). "How information gives you competitive advantage", from the July 1985 issue, online source: http://www.gospi.fr/IMG/pdf/how_information_gives_you_competitive_advantage-porter-hbr-1985.pdf

QUINTON S., KHAN M.A. (2009), "Generating web site traffic: a new model for SMEs", *Direct Marketing: An International Journal*, vol. 3, n. 2, pp. 109-123.

RAPPA M. (2000), "Managing the Digital Enterprise", Online: http://digitalenterprise.org/index.html (Access on 26th January 2018)

SAMUELSON W., ZECKHAUSER R. (1988), "Status Quo Bias in Decision Making," *Journal of Risk and Uncertainty*, vol. 1, pp. 7-59.

SCUOTTO V., DEL GIUDICE M., CARAYANNIS E.G. (2017a), "The effect of social networking sites and absorptive capacity on SMES'innovation performance", *The Journal of Technology Transfer*, vol. 42, n. 2, pp. 409-424.

SCUOTTO V., SANTORO G., BRESCIANI S., DEL GIUDICE M. (2017b), "Shifting intra-and inter-organizational innovation processes towards digital business: An empirical analysis of SMEs", *Creativity and Innovation Management*, vol. 26, n. 3, pp. 247-255.

SCUOTTO V., USAI A., MURRAY A., FIANO F. (2017c) "Overcoming "imperfections" of technological change: the borderless nature of entrepreneurship in open innovation model", in 10th Annual *Conference of the EuroMed Academy of Business*.

SHIMP G. (2017), "How Digital Transformation Is Rewriting Business Models", *Digitalist Magazine*, Accessed on 14th February 2018, from http://www.digitalistmag.com/digital-economy/2017/04/19/digital-transformation-rewriting-business-models-05042457

STIGLITZ J.E., MCFADDEN D., PELTZMAN S. (1987), "Technological change, sunk costs, and competition. Brookings papers on economic activity", vol. 3, pp. 883-947.

STOLTERMAN E., FORS A.C. (2004), *Information technology and the good life*. In Information systems research (pp. 687-692). Springer, Boston, MA.

SYKES W. (1990), "Validity and reliability in qualitative market research: A review of the literature", *Journal of the Market Research Society*, vol. 32, n. 3, pp. 289-328.

TAN A., BREWER P., LIESCH P. (2017), "Rigidity in SME export commencement decisions", *International Business Review*, vol. 27, n. 1, pp. 46-55.

TARDIVO G., THRASSO, A., VIASSONE M., SERRAVALLE F. (2017), "Value co-creation in the beverage and food industry", *British Food Journal*, vol. 119, n. 11, pp. 2359-2372.

TEECE D.J. (2010), "Business models, business strategy and innovation", *Long Range Plann*, vol. 43, n. 2-3, pp. 172–194.

TERRENGHI N., SCHWARZ J., LEGNER C., EISERT U. (2017), "Business model management: current practices, required activities and IT support", *online source*: https://www.researchgate.net/profile/Nicola_Terrenghi/publication/319624829_Business_Model_Management_Current_Practices_Required_Activities_and_IT_Support/links/59b66cbc458515c212b2235a/Business-Model-Management-Current-Practices-Required-Activities-and-IT-Support.pdf (access on 18th February 2018).

THEODOSIOU M., KEHAGIAS J., KATSIKEA E. (2012), "Strategic orientations, marketing capabilities and firm performance: An empirical investigation in the context of frontline managers in service organizations", *Industrial Marketing Management*, vol. 41, n. 7, pp. 1058-1070.

WANG Y., YU C. (2017), "Social interaction-based consumer decision-making model in social commerce: The role of word of mouth and observational learning", *International Journal of Information Management*, vol. 37, n. 3, pp. 179-189.

YIN R. (2013), "Case Study Research: Design and Methods", *Thousand Oaks: Sage*.

YUNG ALAN (2018), "From Digital Divide to Facebook Divide, Reconstruct Our Target Market Segments with Facebook Native and Facebook Immigrant", *Jaipuria International Journal of Management Research* (January-June, 2017), vol. 3, n. 1, pp. 08-18. Available at SSRN: https://ssrn. com/abstract=2983729

ZAIRI M. (1997), "Business process management: a boundaryless approach to modern competitiveness", *Business Process Management Journal*, vol. 3, n. 1, pp. 64-80.

ZHAI Q., CAO X., MOKHTARIAN P.L., ZHEN F. (2017), "The interactions between e-shopping and store shopping in the shopping process for search goods and experience goods", *Transportation*, vol. 44, n. 5, pp. 885-904.

ZOTT C., AMIT R. (2017), "Business Model Innovation: How to Create Value in a Digital World", *GfK Marketing Intelligence Review*, vol. 9, n. 1, p. 18.

ZOTT C., AMIT R. (2010), "Business model design: An activity system perspective", *Long Range Plann*, vol. 43, n. 2-3, pp. 216-226.

ZOTT C., AMIT R., MASSA L. (2011), "The business model: recent developments and future research", *Journal of management*, vol. 37, n. 4, pp. 1019-1042.

Websites

RAPPORTO PMI PIEMONTE (2017), https://www.ui.torino.it/Sys/Src/DwnVer.asp?fInfCod=73833&fCodAll=42800 (Access on 27th January 2018)

TRULY DESIGN | Studio - Specialisti in Graffiti 3D, Office Graffiti e Arte Murale. http://truly-design. com/it/ (Access on 27th January 2018).

TRACK - L'EVOLUZIONE DEI MODELLI DI BUSINESS TRA BIG DATA E TECNOLOGIA

Capacità dinamiche e modello di business: ri-definizione di un modello di analisi per l'impresa commerciale

MARCELLO SANSONE, ANNARITA COLAMATTEO, MARIA ANNA PAGNANELLI

Capacità dinamiche e modello di business: ri-definizione di un modello di analisi per l'impresa commerciale

MARCELLO SANSONE[*] ANNARITA COLAMATTEO[•] MARIA ANNA PAGNANELLI[♠]

Abstract

Obiettivi. *Il presente lavoro è finalizzato a definire un modello di analisi delle capacità dinamiche dei retailer proponendo avanzamenti in linea con la letteratura di riferimento, con l'obiettivo di fornire uno strumento utile per la misurazione delle dynamic capabilities nella gestione delle fonti del vantaggio competitivo delle imprese retail in un macroambiente complesso.*

Metodologia. *La ricerca si qualifica sul piano metodologico come un conceptual paper: contestualizza un framework teorico di classificazione delle capacità dinamiche alle imprese commerciali.*

Risultati. *Il lavoro fornisce un modello innovativo di misurazione delle capacità dinamiche nell'impresa retail, riadattato in base ad una recente classificazione delle capacità dinamiche, delineando due ordini di indicatori afferenti alle DCs di high-order e alle DCs di ordine secondario.*

Limiti della ricerca. *Il paper propone un modello teorico; ad esso seguiranno analisi empiriche ed esempi applicativi di utilizzo del modello.*

Implicazioni pratiche. *Considerando la complessità del macroambiente il modello teorico appare rilevante per la definizione o ridefinizione del modello di business e per il governo delle fonti del vantaggio competitivo delle imprese retail.*

Originalità del lavoro. *L'originalità del lavoro consiste nella sistematizzazione delle capacità dinamiche per la gestione delle aziende commerciali, attraverso il riadattamento di un framework consolidato in letteratura e la creazione di un modello per la misurazione delle stesse.*

Parole chiave: *capacità dinamiche; modelli di business; retail management; retail strategy*

Objectives. *The paper aims at defining a model of analysis of the dynamic capabilities of retailers proposing advances in line with the literature, with the purpose of providing a useful tool for the measurement of dynamic capabilities in the management of sources of competitive advantage of retail companies in a complex macro environment*.

Methodology. *The research can be qualified on the methodological level as a conceptual paper: it contextualizes a theoretical framework for the classification of dynamic capabilities to retail companies.*

Findings. *The work provides an innovative model for the measurement of dynamic capabilities in the retail companies, readapted on the basis of a recent classification of dynamic capabilities, outlining two orders of indicators related to high-order DCs and secondary DCs.*

Research limits. *The paper proposes a theoretical model; this will be followed by empirical analyses and application of it.*

Practical implications. *Considering the complexity of the macro-environment, the theoretical model appears relevant for the definition or redefinition of the business model and for the governance of the sources of the competitive advantage of retail companies.*

Originality of the study. *The originality of the work is the systematization of the dynamic capabilities for the management of retail companies, through the re-adaptation of a consolidated literature framework and the creation of a model for measuring them.*

Keywords: *dynamic capabilities*; *business model*; *retail management*; *retail strategy*

[*] Associato di *Economia e Gestione delle Imprese* - Università di Cassino e del Lazio Meridionale
e-mail: m.sansone@unicas.it

[•] PhD Student - Università di Cassino e del Lazio Meridionale
e-mail: a.colamatteo@unicas.it

[♠] PhD Student - Università di Cassino e del Lazio Meridionale
e-mail: mariaanna.pagnanelli@unicas.it

1. Introduzione

Il settore retail è oggetto di continui cambiamenti derivanti dal dinamismo dei mercati e dalla complessità delle relazioni BtoB e BtoC; tale contesto condiziona le performance delle imprese, sia in riferimento alle specifiche attività immateriali che alle attività di decision making, che risultano tanto più performanti quanto maggiore è nell'impresa la flessibilità nel trasformare la propria proposta di valore adattandola all'ambiente.
In un ambiente complesso, le fonti del vantaggio competitivo possono valorizzarsi attraverso le dynamic capabilities dell'impresa; quest'ultime svolgono un ruolo fondamentale nella definizione e nell'operatività dei modelli di business (Teece, 2017).
Considerando che il successo di un'impresa - *anche dell'impresa retail* - è strettamente legato alla delineazione ed implementazione di un modello di business che determini e supporti un vantaggio competitivo durevole, appare fondamentale il ruolo delle capacità dinamiche dell'impresa; infatti la definizione, l'applicazione e la trasformazione del modello di business sono *output* delle high-order DCs (Teece, 2007, 2017).
Anche in considerazione degli avanzamenti della letteratura, risulta pertanto interessante ridefinire un modello di analisi delle capacità dinamiche nelle strategie di marketing dell'impresa retail.

Il lavoro è strutturato come segue: dopo aver analizzato i principali contributi della letteratura sul ruolo delle capacità dinamiche nella gestione d'impresa, si è proceduto alla ridefinizione del modello di analisi per l'impresa retail, risultato della ricerca; conclusioni, implicazioni manageriali e prospettive di ricerca future concludono il lavoro.

2. Il ruolo delle capacità dinamiche nel management d'impresa: review della letteratura

I continui cambiamenti del contesto spingono l'impresa a riconsiderare qualsiasi aspetto della gestione (dalle principali attività di routine - *operation* - al modello di business) attraverso il ricorso alle proprie capacità specifiche: la cultura e la predisposizione interna all'organizzazione dell'impresa devono necessariamente essere disposte ad assimilare il mutamento.

Si ritiene che la sostenibilità del vantaggio competitivo, fortemente correlata all'esistenza delle capacità dinamiche all'interno dell'impresa, sia strettamente legata alla volontà/capacità di riconfigurare o ricombinare le proprie risorse di fronte ai cambiamenti delle esigenze di mercato.

Il dibattito in letteratura sul ruolo delle capacità dinamiche nel management di impresa è stato ed è ampio e diversi sono gli orientamenti principali che si annoverano. Per Teece, Pisano e Shuen (1997) le DCs sono intese come *l'attitudine del management di adattare, combinare, riconfigurare, armonizzare e integrare risorse e processi organizzativi sia interni che esterni* al fine di rendere l'azienda *"consonante"* rispetto al rapido cambiamento dell'ambiente (Teece *et al.*, 1997). *«Le capacità dinamiche coinvolgono attività di livello superiore che possono consentire a un'impresa di dirigere le sue attività ordinarie verso sforzi di alto profitto»* (Teece, 2014).

Secondo la prospettiva di Eisenhardt e Martin le capacità dinamiche sono *«le routine organizzative e strategiche con le quali le imprese raggiungono nuove configurazioni di risorse»* (Eisenhardt, Martin, 2000); risultano essere facilmente identificabili e quindi replicabili dai concorrenti.

Ancora, Makadok (2001) identifica le capacità dinamiche in *«un tipo speciale di risorsa, in particolare, una risorsa specifica per ogni impresa, non trasferibile e integrata nell'organizzazione che ha lo scopo di migliorare la produttività di altre risorse»;* le capacità includono la combinazione di conoscenze e abilità che rappresentano i veri fattori critici del successo aziendale (Petty, Guthrie, 2000) perché rappresentano la propensione dell'impresa a risolvere sistematicamente i problemi, a prendere decisioni tempestive ed orientate al mercato, per intervenire sulle risorse di base (Barreto, 2010).

Altri autorevoli autori hanno esteso il framework originario di Teece (1997; 2007) - *che classifica le DCs nei tre macro cluster di sensing, seizing e transforming* - individuando nelle

capacità dinamiche le *sensing capability, learning capability, integrating capability e le coordinating capability* (Pavlou e El Sawi, 2011).
Teece e Pisano (1994) collocano a fondamento delle capacità dinamiche i processi organizzativi di coordinamento, integrazione e apprendimento; i processi manageriali più importanti sono rappresentati dalla capacità di riconfigurare tali risorse e possono essere considerati come dei sottoinsiemi (sub-processi) di quelli necessari a supportare le attività di exploration ed exploitation. Una visione sistemica degli stessi va a delineare il concetto di asset orchestration (Teece *et al.*, 1997) (Teece, 2007).

Pertanto è solo attraverso il coordinamento e l'integrazione delle varie risorse che l'impresa riesce a determinare le varie opportunità per la creazione di valore: la ricerca continua di quest'ultimo diviene così principalmente fondata su attitudini conoscitive che risultano per questo motivo essere di difficile replicazione o imitazione. A tal proposito alcune imprese tentano di combinare le proprie risorse con quelle di altre imprese, allargando la prospettiva di creazione di valore e rendendo l'output finale ulteriormente imprevedibile e inimitabile; in altri termini è ciò che Teece (2007) evidenzia considerando il valore potenziale delle combinazioni tra *co-specialized assets* o tra risorse complementari.

In tale ottica appare evidente la centralità delle capacità detenute dal top management di individuare le complementarietà o la combinazione di entrambe (Ettlie e Pavlou, 2006).

Tra le caratteristiche di un'impresa in possesso di capacità dinamiche devono essere annoverate anche una profonda tensione all'innovazione e un complesso di risorse umane con elevata esperienza nel settore: sono tutti asset intangibili che non possono per loro natura essere acquisiti all'esterno, attraverso l'outsourcing, se non per periodi limitati. Affinché si configurino le capacità dinamiche, occorre una profonda conoscenza sia dell'impresa, che dell'ecosistema in cui essa opera e compete (Teece, 2007). Le capacità dinamiche permettono all'impresa di coordinare le diverse risorse tangibili e intangibili per definire ed implementare il modello di business (Teece e Linden, 2017).

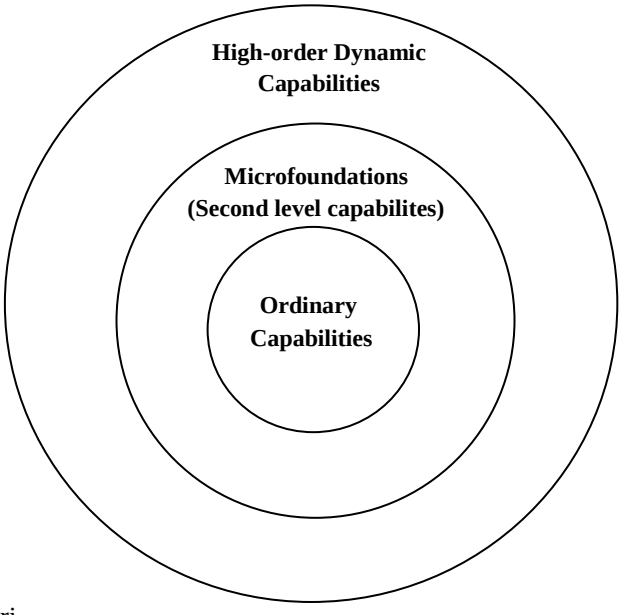
Recentemente Teece (2017) ha riclassificato le capacità dinamiche in capacità di livello base (*base level capabilities*) microfoundations capabilities e capacità di ordine elevato (*high-order capabilities*) (Fig. 1). Le *base level capabilities* sono le capacità operative ordinarie corrispondenti alle attività di routine, di amministrazione e di gestione basilari: queste permettono all'impresa di seguire un programma di produzione stabilito o un definito set di attività in modo più o meno efficiente. Al di sopra di queste è possibile definire un livello di capacità dinamiche che possono essere suddivise in microfoundations e high-order capabilities. Le microfoundations sono costituite dalla ricombinazione delle capacità ordinarie già esistenti che determina lo sviluppo di nuove capacità; sono capacità di secondo livello che includono tutte le decisioni strategiche prese dal management in una fase di incertezza come lo sviluppo di nuovi prodotti e l'espansione in nuovi mercati. Le microfoundations sono a loro volta guidate dalle high-order capabilities – *proprie del top management* - attraverso le quali si delinea la vision dell'impresa concependo modelli di business necessari per cogliere il mutamento delle opportunità e implementare nuove strategie.

Pertanto le high-order capabilities sono suddivisibili in tre cluster: *sensing capabilities* (capacità di identificare le opportunità e le minacce che provengono dal macroambiente) *seizing capabilities* (impiego di risorse per cogliere le nuove opportunità), *transforming capabilities* (capacità di rinnovarsi continuamente attraverso grandi cambiamenti strategici).

Sebbene l'esistenza delle DCs all'interno dell'impresa è quindi fondamentale se si vuole perseguire o sostenere il vantaggio competitivo, risulta piuttosto complesso identificare una lista esaustiva delle stesse perché occorre di volta in volta considerare le singole imprese, il settore e le caratteristiche del mercato nel quale operano.

Considerando le caratteristiche specifiche di ciascun framework si ritiene il modello teorico di Teece il più adeguato per il raggiungimento degli obiettivi del presente lavoro, legati alla contestualizzazione del modello al sistema retail in Italia.

Fig. 1: Classificazione delle dynamic capabilities



Fonte: Elaborazione degli autori

3. Le Capacità dinamiche nell'impresa retail: risultati e discussione

Il presente lavoro è finalizzato a definire un modello di analisi delle capacità dinamiche dei retailer, pertanto propone la ridefinizione - *in considerazione degli avanzamenti proposti dalla letteratura* - di un modello già strutturato (Sansone et al, 2017) con l'obiettivo di implementare un'analisi empirica.

Nella letteratura di riferimento si riscontrano diversi tentativi di operazionalizzazione dei framework teorici sulle capacità dinamiche; in via esemplificativa si pensi a Protogerou *et al*. (2008), i quali, partendo dal framework teorico di Eisenhardt e Martin (2000) e Winter (2003), misurano la relazione tra le capacità dinamiche e le performance di impresa evidenziando che le stesse non le influenzano direttamente, ma agiscono sulle competenze funzionali e operative. Mentre sul framework di Teece, Cao (2011) delinea tre dimensioni - *sensing, shaping and transfer, reconfiguration*- delle capacità dinamiche dei retailer definendone 11 categorie.

Il modello teorico oggetto della presente ricerca è stato costruito sulla base del framework di Teece tenendo conto delle caratteristiche del sistema retail italiano, considerando il macroambiente in cui opera, e delle fonti del vantaggio competitivo dei retailer.

Tali elementi sono sintetizzati nella tabella che segue (Tab. 1) e risultano indispensabili per andare poi a ridefinire quelle che sono le microfoundations e le high-order dynamic capabilities delle imprese retail.

Tab. 1: Macroambiente e le FVC dei retailer

Gli elementi del macroambiente	**Le fonti del vantaggio competitivo dei retailer**
• Reddito disponibile e propensione al consumo • Dinamiche di contesto • New media e comunicazione • Cambiamenti nello stile di vita • Complessità nelle dinamiche demografiche e sociali	• Canale • Format • Immagine/Identità • Assortimento • Prezzo • Marca del distributore • Logistica e relazioni di canale • Risorse umane

Fonte: Elaborazione degli autori

Gli elementi del macroambiente derivano da un'analisi di dati secondari e report (Istat, 2017; Rapporto Censis, 2017; Rapporto Coop, 2017), mentre gli asset rilevanti per la determinazione del vantaggio competitivo sono stati individuati attraverso una attenta analisi della letteratura di riferimento e contestualizzazione al sistema italiano (Lugli, 2003; Lugli e Pellegrini, 2003; Sansone, 2016; Castaldo, 2005; Fornari, 2005; Kumar e Steenkamp, 2007; Pellegrini, 2008; Castaldo e Mauri, 2008; Fornari, 2009; Lugli, 2009; Castaldo et al., 2013; Bruni, 2014; Castaldo e Mauri, 2015).

Rispetto ai nuovi avanzamenti proposti dalla letteratura è opportuno procedere ad una riclassificazione delle capacità dinamiche delle imprese retail che intervengono nel management delle fonti del vantaggio competitivo. Il modello realizzato in precedenza, delineato anch'esso partendo dalla individuazione degli elementi del macroambiente e dalle fonti del vantaggio competitivo delle imprese commerciali - *che risultano peraltro invariate* - non attua una distinzione tra le capacità dinamiche di livello superiore e quelle di livello secondario. Pertanto, al fine di procedere ad una misurazione delle stesse, la rilevanza delle prime è giocoforza prevalente rispetto alle seconde. Nell'implementazione del nuovo modello, dunque, è necessario ponderare il valore delle high-order capabilities rispetto alle microfoundations (capabilities di secondo livello).

A tal proposito le capacità dinamiche delle imprese commerciali sono dunque classificabili in capacità ordinarie o di base, in capacità di secondo livello (*microfoundations*) proprie del management e *high-order capabilities* afferenti al top management. In particolare, focalizzandosi sulle ultime due tipologie e riadattando il modello già proposto, possiamo procedere a ridefinire gli indicatori che permettono di renderle rilevabili e misurabili.

Le *high-order capabilities* sono classificabili nelle capacità di *Sensing* ossia di percepire ambiente e contesto per pianificare le strategie del retailer, in capacità di *Seizing* legate al dimensionamento dell'offerta rispetto alle fonti del vantaggio competitivo e in capacità di *Transforming*, capacità di riconfigurare ed adattare continuamente al cambiamento le strategie di marketing e di management. Le *high-order* DCs governano le microfoundation, anch'esse strettamente correlate alle attività del management; per ogni high-order DCs possiamo individuarne diverse. Le microfoundation governate dalle DCs di *Sensing* sono a) le capacità di implementare nei PDV le indicazioni derivanti dai risultati di ricerche e studi, b) capacità di sviluppare expertise e di utilizzare nuove tecnologie utili alla crescita del retailer, c) capacità di recepire gli strumenti innovativi, d) capacità di comprendere le dinamiche di consumo e di mercato attraverso il contatto diretto col consumatore. Le microfoundation governate dalle capacità di *Seizing* sono le a)capacità di consultarsi con il top management nelle fasi di decision making, b) capacità di evitare o superare gli errori, c) abilità di implementazione delle strategie proposte dal top management, d) capacità di ridefinire l'assortimento del PDV considerando le esigenze percepite a contatto con i consumatori.

Infine le microfoundation connesse alle DCs di *Transforming* sono a) le capacità di gestione delle criticità e di decentramento del processo decisionale, b) capacità di apportare innovazione integrata direttamente sui PDV e c) le capacità di gestione delle conoscenze acquisite e di condivisione delle stesse.

Pertanto, delineate quali sono le capacità dinamiche che devono intervenire nella gestione delle imprese retailer per determinarne il vantaggio competitivo, è possibile collegare ad esse degli indicatori che permettono di renderle misurabili e rilevabili.

Gli avanzamenti della letteratura di riferimento hanno permesso di rivedere il modello precedentemente presentato (Sansone et al, 2017) in termini di classificazione delle capacità dinamiche; a ciò consegue anche una ridefinizione degli indicatori delle dynamic capabilities dell'impresa commerciale. Difatti questi ultimi risultano essere indispensabili al fine di rilevare l'esistenza delle stesse nelle imprese retail e di misurarle.

Rispetto alle capacità di *Sensing* gli indicatori selezionati sono 6 ed in particolare il livello di investimenti in studi e ricerche, livello di attività collaborative finalizzate alla percezione del contesto, il livello di investimenti in innovazione, impiego di strumenti e tecniche innovative, il livello di disponibilità e di analisi dei dati di mercato ed infine il livello di disponibilità e

approfondimento di dati che concernono le ricerche sui consumatori.

Gli indicatori delle capacità di *Seizing* individuati sono 6: livello di percezione delle correlazioni tra le decisioni strategiche e gli errori commessi, livello di inclusione degli stakeholder nella definizione del processo strategico, livello di incidenza degli elementi di contesto, livello di incidenza della tecnologia, effetti generati dagli errori ed il livello di consultazione tra i manager nelle fasi di decision making.

Infine in riferimento agli indicatori delle capacità di *Transforming* possiamo identificare 8 indicatori: livello di accentramento/decentramento delle attività di management e controllo delle stesse, livello della capacità di generare un vantaggio competitivo nelle relazioni di contesto, livello di integrazione delle best practice, livello di istruzione delle risorse umane, livello di investimenti nella formazione, livello di adattabilità all'innovazione, livello di comprensione delle scelte strategiche ed il numero di attori interni all'impresa che sono coinvolti nelle attività di cambiamento.

Gli indicatori individuati per le *microfoundations* delle capacità di *Sensing* sono 3: impiego di strumenti e tecniche innovative, il livello di disponibilità dei dati e livello di capacità di analisi dei dati sull'andamento delle vendite ed il livello di disponibilità e di dettaglio dei dati sui consumatori.
Gli indicatori individuati per le *microfoundations* delle capacità di *Seizing* sono 4: livello di incidenza degli elementi di contesto, il tempo di risposta alle indicazioni strategiche del top management, il livello di autonomia nella gestione delle emergenze per arginare gli effetti generati dagli errori e livello di interazioni con il top management.
Gli indicatori selezionati al fine di misurare le *microfoundations* delle capacità di *Transforming* sono 4: livello di istruzione delle risorse umane, tempo dedicato alla formazione, livello di adattabilità all'innovazione, livello di comprensione delle scelte strategiche (in termini di obiettivi e riconfigurazione degli stessi).
La Tabella 2 mostra il percorso per la definizione del modello adottato; l'obiettivo che ci si pone con questo nuovo framework è quello, in una ricerca futura, di definire un questionario da somministrare alle imprese retail per individuare e misurare le capacità dinamiche che intervengono nella loro gestione e definizione strategica.

Nella definizione del modello presentato, le capacità dinamiche di primo e secondo ordine ed i rispettivi indicatori individuati non hanno la presunzione di rappresentare un elenco esaustivo; nel processo di individuazione infatti essi vanno di volta in volta considerati tenendo conto delle tipologie di imprese commerciali oggetto di studio e del mercato in cui le stesse operano.

Tab. 2 Il modello teorico

High-order Capabilities	***Indicatori***	***Microfoundations (second level capabilities)***	***Indicatori***
Sensing Percezione dell' ambiente e del contesto per pianificare le strategie del retailer	1) livello di investimenti in studi e ricerche 2) livello di attività collaborative finalizzate alla percezione del contesto 3) livello di investimenti in innovazione 4) impiego di strumenti e tecniche innovative 5) livello di disponibilità e di analisi dei dati di mercato 6) livello di disponibilità e di dettaglio dei dati sui consumatori	a) le capacità di implementare nei PDV le indicazioni derivanti dai risultati di ricerche e studi b) capacità di sviluppare expertise e di utilizzare nuove tecnologie utili alla crescita del retailer c) capacità di recepire gli strumenti innovativi d) capacità di comprendere le dinamiche di consumo e di mercato attraverso il contatto diretto col consumatore	1) impiego di strumenti e tecniche innovative 2) livello di disponibilità dei dati e livello di capacità di analisi dei dati sull'andamento delle vendite 3) livello di disponibilità di approfondimento di dati sui consumatori

Seizing Dimensionamento dell'offerta rispetto alle fonti del vantaggio competitivo	1) livello di percezione delle correlazioni tra le decisioni strategiche e gli errori commessi 2) inclusione degli stakeholder nella definizione del processo strategico 3) livello di incidenza degli elementi di contesto 4) livello di incidenza della tecnologia 5) effetti generati dagli errori 6) livello di consultazione tra i manager nelle fasi di decision making	a) capacità di consultarsi con il top management nelle fasi di decision making b) capacità di evitare o superare gli errori c) abilità di implementazione delle strategie proposte dal top management d) capacità di ridefinire l'assortimento del PDV considerando le esigenze percepite a contatto con i consumatori	1) livello di incidenza degli elementi di contesto 2) tempo di risposta alle indicazioni strategiche del top management 3) livello di autonomia nella gestione delle emergenze per arginare gli effetti generati dagli errori 4) livello di interazioni con il top management
Transforming Capacità di riconfigurare ed adattare continuamente al cambiamento le strategie di marketing e di management	1) livello di accentramento/ decentramento delle attività di management 2) livello della capacità di generare un vantaggio competitivo nelle relazioni di contesto 3) Integrazione delle best practice 4) livello di istruzione delle risorse umane 5) livello di investimenti nella formazione 6) livello di adattabilità all'innovazione 7) livello di comprensione delle scelte strategiche 8) numero di attori interni all'impresa che sono coinvolti nelle attività di cambiamento	a) le capacità di gestione delle criticità e di decentramento del processo decisionale b) capacità di apportare innovazione integrata direttamente sui pdv c) le capacità di gestione delle conoscenze acquisite e di condivisione delle stesse	1) livello di istruzione delle risorse umane 2) tempo dedicato alla formazione 3) livello di adattabilità all'innovazione 4) livello di comprensione delle scelte strategiche

Fonte: Elaborazione degli autori

Il presente lavoro ha ridefinito un modello teorico per individuare quali sono le capacità dinamiche dell'imprese retail che intervengono nel management delle fonti del vantaggio competitivo.

Per ogni tipologia di high-order capabilities - *sensing*, *seizing and transforming*- e di microfoundations capabilities sono stati individuati degli indicatori espressi sia in dimensioni quantitative (ad esempio per quanto concerne le informazioni provenienti, da bilanci, piani strategici, dati quantitativi provenienti da centri di ricerca e studi indipendenti) che in dimensioni qualitative (ci si riferisce alle informazioni che provengono ad esempio dalle percezioni del top management, degli stakeholder, delle risorse umane e dei consumatori). Tali indicatori, ai quali è stato assegnato un valore possibile su una scala Likert da 1 a 5, sono sintetizzati in un questionario che dovrà essere somministrato al management delle imprese retail al fine di identificare quali delle capacità dinamiche indicate intervengono maggiormente nella gestione delle fonti del vantaggio competitivo. Nella elaborazione dei risultati il peso che verrà attribuito agli indicatori delle high-order capabilities sarà superiore rispetto a quello delle microfoundations capabilities le implicazioni manageriali si determineranno confrontando i differenziali degli indicatori tra i retailer analizzati.

L'applicazione del modello mostrerà le differenze e le analogie tra le capacità dei retailer di percepire l'ambiente, il contesto e l'impresa, cogliere le opportunità e definire la proposta di valore e infine adattare e innovare continuamente le strategie di marketing e le fonti di vantaggio competitivo.

4. Conclusioni

Il presente lavoro ha inteso definire un nuovo framework delle DCs nelle strategie di marketing delle imprese retail che può risultare utile alla research community e al contesto attuale per le misurazioni empiriche delle stesse.

La definizione di tale modello teorico ha portato all'individuazione di 3 DCs relative alle capacità dinamiche di ordine elevato e alla definizione dei rispettivi indicatori; le high-order DCs intervengono nel governo di 11 DCs di secondo livello (microfoundations) misurabili attraverso 11 indicatori. Il modello dovrà essere applicato attraverso la somministrazione di interviste al management delle imprese retail.

I risultati attesi dovrebbero mostrare quali sono i fattori critici in termini di capacità dinamiche nella strategia di marketing dei retailer; l'analisi dovrà evidenziare se alla gestione tradizionale dell'impresa si sta sostituendo una gestione che contempli dinamismo delle decisioni e propensione al cambiamento; i risultati, confrontati con le performance dell'impresa, potranno permetterci di individuare quale possa essere un modello che considera le capacità dinamiche e che sia ideale per la gestione dell'impresa commerciale.

Le capacità di *sensing*, ossia di percezione dell'ambiente e di visione provengono dal mercato e dai clienti; un esempio su tutti potrebbe essere quello del crescente aumento dell'uso della tecnologia all'interno dei punti vendita per procedere agli acquisti o alle descrizioni dei prodotti; anche le capacità di *seizing e transforming* devono considerare il macroambiente ed il mercato. È per questo motivo che risulta di centrale importanza misurare le capacità di acquisire nuove conoscenze per governare le fonti del vantaggio competitivo.

L'originalità del lavoro potrebbe risiedere nella ridefinizione di un precedente framework e nell'applicazione all'impresa retail; il modello è definito includendo le dinamiche del macroambiente e dell'impresa commerciale complessa, nella ricerca continua di nuovi asset di generazione del valore; il modello potrà consentire un'analisi comparativa tra le capacità dinamiche dei retailer e le ricerche future potranno altresì prevedere l'analisi dei risultati derivanti dalla applicazione del modello attraverso interviste in profondità non solo del top management, ma anche di altre risorse umane che operano all'interno delle imprese della distribuzione commerciale.

Bibliografia

BARRETO I. (2010), "Dynamic Capabilities: A Review of Past Research and an Agenda for the Future", *Journal of Management*, vol. 36, n 1, pp. 256-280

BRUNI R. (2014) *Dinamiche impresa-contesto-cliente e retail di prossimità*, Aracne Editore, Roma.

CAO L. (2011), "Dynamic capabilities in a turbulent market environment: empirical evidence from international retailers in China", *Journal of Strategic Marketing*, vol. 19, n. 5, pp. 455-469.

CASTALDO S.(2005) *Analisi e gestione dei canali distributivi*, Il Mulino, Bologna.

CASTALDO S., MAURI C. (a cura di) (2008), *Innovazione, experience, partnership. Casi di innovazione nel retail*, Franco Angeli, Milano.

CASTALDO S., PREMAZZI K., GROSSO M. (2013), *Retail and channel Marketing*, Cheltenham, UK, Edward Elgar.

CASTALDO S., MAURI C. (2015), *Store management. Il punto vendita come piattaforma relazionale: Il punto vendita come piattaforma relazionale*, FrancoAngeli, Milano

CENSIS (2017), 51° Rapporto sulla situazione sociale del paese.

COOP (2017), Rapporto annuale su consumi e GDO.

EISENHARDT K.M., MARTIN J.A. (2000), "Dynamic capabilities: What are they?", *Strategic Management Journal*, vol. 21, pp. 1105-1121.

ETTLIE J.E., PAVLOU P.A. (2006), Technology-based new product development partnerships, *Decision Sciences*, vol. 37, n. 2, pp. 117-147.
FORNARI D. (2009), *Trade Marketing*, Egea, Milano.
ISTAT (2017), Annuario statistico italiano.
LUGLI G. (2003), *Branding distributivo: dalla marca di prodotto alla marca di categoria*, Egea, Milano.
LUGLI G., PELLEGRINI L. (2003), *Marketing distributivo*, UTET, Torino.
LUGLI G. (2009), *Marketing distributivo. La creazione di valore nella distribuzione specializzata*, UTET, Torino.
MAKADOK, R. (2001), "Toward a synthesis of the resource-based and dynamic-capability views of rent creation", *Strategic Management Journal*, vol. 22, n. 5, pp. 387-401.
PAVLOU P.A., EL SAWY O.A. (2011), "Understanding the Elusive Black Box of Dynamic Capabilities. Decision Sciences", vol. 42, pp. 239-273.
PELLEGRINI L. (2008), I rapporti industria-distribuzione: modelli integrati e ricerca di cooperazione, *Economia e Politica Industriale*, vol. 3, pp. 83-100.
PETTY R., GUTHRIE J. (2000) "Intellectual capital literature review: measurement, reporting and management", *Journal of Intellectual Capital*, vol. 1, n. 2, pp. 155-176.
PROTOGEROU A., YANNIS C., SPYROS L. (2012) "Dynamic capabilities and their indirect impact on firm performance", *Industrial and Corporate Change*, vol. 21, n. 3,pp. 615-647.
SANSONE, M. (2016), *The strategic role of private label*, Giappichelli Editore, Torino.
SANSONE M., BRUNI R., COLAMATTEO A., PAGNANELLI M.A. (2017), "Dynamic capabilities in retailers' marketing strategies: Defining an analysis model", *Mercati e Competitività*, vol. 2, pp. 17-42.
TEECE D., PISANO G. (1994), "The dynamic capabilities of firms: an introduction", *Industrial and Corporate Change*, vol. 3, n. 3, pp. 537-556.
TEECE D.J., PISANO G., SHUEN A. (1997) "Dynamic Capabilities and Strategic Management", *Strategic Management Journal*, vol. 18, n. 7, pp. 509-533.
TEECE D.J. (2006), "Reflections on "profiting from innovation", *Research Policy*, vol. 35, n. 8, pp. 1131-1146.
TEECE D.J. (2007), "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance", *Strategic Management Journal*, vol. 28, n. 13, pp. 1319-1350.
TEECE D.J. (2014), "A dynamic capabilities-based entrepreneurial theory of the multinational enterprise" *Journal of International Business Studies*, vol. 45, n. 1, pp 8-37.
TEECE D.J. (2017) "Business models and dynamic capabilities", *Long Range Planning*, *Elsiever* vol. 51, pp. 40-49.
TEECE D.J., LINDEN G. (2017), "Business models, value capture, and the digital enterprise", *Journal of Organization Design*, vol. 6, n.1, pp.1-14.

TRACK

MARKETING STRATEGIES TO CREATE CUSTOMER VALUE

The desiderata and the reality of patient empowerment: a tale of two strategies

ROCCO PALUMBO, PAOLA ADINOLFI, CARMELA ANNARUMMA, ROSALBA MANNA, GABRIELLA PISCOPO

The desiderata and the reality of patient empowerment: A tale of two strategies

ROCCO PALUMBO[*] PAOLA ADINOLFI[•] CARMELA ANNARUMMA[♠] ROSALBA MANNA[**]
GABRIELLA PISCOPO[••]

Abstract

Objectives. *Drawing on the main topics raised by the 2018 Sinergie-Sima Annual Conference, this manuscript investigates the gap between the desiderata and the reality of patient empowerment. In particular, patient empowerment is understood as a non-technological trigger stimulating a momentous change in traditional value creation model rooted in the health care service system.*

Methodology. *A mixed qualitative approach was used. The research was basically conceived as a comparative case study, confronting the experiences of two regional sub-systems operating within the Italian National Health Service. The process of data collection primarily consisted of a content analysis, which was performed on strategy and policy documents designed by the two units of analysis in a 20 years' time-span (1997-2017).*

Findings. *Patient empowerment is recognized as a spur to the transition toward patient-centered care. Different approaches could be undertaken to realize patient empowerment. An individual-based and a community-based approach have been identified. However, various institutional and management challenges prevent the implementation of patient empowerment. Among others, the inadequate attention paid to the empowerment of health care organizations and the loyalty of health care professionals to the traditional provider-led bio-medical model of health care are sources of both organization and individual inertia.*

Research limits. *This paper is still in its infancy. The research findings presented in this study mainly relied on a content analysis; further developments will be aimed at enriching and deepening the data used to compare the two units of analysis.*

Practical implications. *Policy makers are generally unaware of the importance of health care organizations' empowerment for the purpose of patients' enablement and involvement. The research findings confirm this consideration and shed light on the missing ingredients in the recipe for patient empowerment in Italy.*

Originality of the study. *Studies in the field of patient empowerment are widely focused on the patient-provider relationship. Alternatively, to the best of the authors' knowledge, limited attention has been paid to the role of health care organizations in establishing health care settings which are able to empower patients.*

Key words: *Patient empowerment; Health strategies; Health policy; Value co-creation; Patient involvement*

[*] Research Fellow in *Organization Studies* - University of Salerno
e-mail: rpalumbo@unisa.it

[•] Full Professor of *Organization Studies* - University of Salerno
e-mail: padinolfi@unisa.it

[♠] Research Fellow in *Organization Studies* - University of Salerno
e-mail: cannarumma@unisa.it

[**] Research Fellow in *Statistics* - University "Parthenope" of Naples
e-mail: rosalba.manna@uniparthenope.it

[••] Associate Professor of *Organization Studies* - University of Salerno
e-mail: gpiscopo@unisa.it

1. Introduction

Health care service systems are facing an increasing number of environmental pressures and management challenges, which put under stress their long-term sustainability (Angelis *et al.*, 2017). On the one hand, the processes of epidemiological and demographic transition profoundly alter the health needs of the population, requiring a redesign of current policies, strategies and practices to enhance health outcomes (McCracken and Phillips, 2017). On the other hand, increasing fiscal deficits and declining resources devoted to nourish the functioning of the health care service system determine significant drawbacks on organizational dynamics and management approaches (Palumbo, 2017_a). From this point of view, health policy makers are compelled to reframe the structures and the processes rooted in the health care arena, in an attempt to transform existing strategies and redesign the conventional models of value creation.

Even though scholars have widely argued the need for a shift of the conceptual underpinnings on which health services' provision is established (Engel, 1977; Anderson and Funnel, 2005; Osei-Frimpong, *et al.*, 2015; Keeling, *et al.*, 2017), it seems that the reductionist and provider-led bio-medical approach to care is still prevailing among health care professionals (Wade and Halligan, 2017). The bio-medical model assumes that the providers are the main value creators in the design and delivery of health services (Adinolfi, 2014; Barile, *et al.*, 2014). On the opposite, the patients are assumed to merely perform as recipients of care, who are unable to contribute in the design and delivery of care (Palumbo, 2016). This circumstance has been mainly produced by the inability of policy makers to steer the strategic and organizational reconfiguration of the health care service system according to a patient-centered approach to care, paving the way for new styles of patient-provider relationships (Fox, *et al.*, 2005).

Among others, patient empowerment has been depicted as an effective strategy to stimulate a radical rethinking of the health care service system's functioning (Segal, 1998; Palumbo, *et al.*, 2017). Actually, it is able to induce a deep change of both health care organizations' processes and health care professionals' behaviors (Palumbo, *et al.*, 2016), setting the conditions for innovative approaches of value creation (Adinolfi, *et al.*, 2016; McColl-Kennedy, *et al.*, 2017). Ultimately, patient empowerment could be understood as a dynamic of power rebalancing between the health care professionals and the patients (Roberts, 1999): on the one hand, the former accept to dismiss medical dominance and to involve the patients in health services' design and delivery (Hewitt-Taylor, 2013); on the other hand, the latter agree to participate in health decision making, partnering with the health care professionals in planning and implementing appropriate health treatments (Barry and Edgman-Levitan, 2012).

In most of the cases, patient empowerment has been handled by health policy makers as a self-nourishing and self-winding strategy, which does not need special efforts and institutional commitment to be realized (Anderson and Funnell, 2010). From this point of view, it is not surprising that scattered policies and initiatives have been accomplished in an attempt to realize patient empowerment and to encourage a shift toward value co-creation in the health care service system (Hardyman, *et al.*, 2015). What is even more interesting, is that most of the attention has been paid to the role of health care providers in engaging patients in the provision of care (Brach, *et al.*, 2014); on the opposite, the process of patient enablement has attracted only partial consideration among both practitioners and decision makers (Palumbo and Annarumma, 2016).

The paper tackles this issue and attempts to contribute to the advancement of the scientific knowledge in the field of patient empowerment. For this purpose, it discusses and confronts the strategies embraced by two Regional sub-systems of the Italian National Health Service (INHS) to empower patients and propel a gradual transition toward patient-centeredness. Going more into details, the following research questions inspired this work:

R. Q. 1: How does patient empowerment concur in the transformation of traditional models of value creation in the health care environment?

R. Q. 2: In light of the current scientific knowledge, what are the missing ingredients of the recipe for patient empowerment in the two regional health systems involved in the study?

R. Q. 3: And, last but not least, is there a gap between the desiderata and the reality of patient empowerment in the two experiences?

The remainder of this paper is organized as follows. The second section summarizes the conceptual pillars of this study, delving into the topic of patient empowerment and disclosing the main requisites to its implementation. The third section provides brief notes on the research design and methods; also, it depicts the distinguishing attributes of the two contexts of analysis. Findings are summarized in the fourth paragraph; it is organized in three subsections, each of which deals with one of the research questions. The fifth section critically discusses the results of this research, which entail intriguing conceptual and practical implications. Conclusions synthesize the contribution of this study, stressing the need for further research to shed light on the role of patient empowerment in transforming the health care service system of the future.

2. Theoretical background: patient empowerment and the shift toward patient-centered care

It is not easy to define what is ultimately meant by patient empowerment. Among others, Fumagalli *et al.* (2015) tried to delimit the contours of this construct, depicting patient empowerment as "*…the acquisition of motivation (...) and ability (...) that patients might use to be involved or participate in decision-making, thus creating an opportunity for higher levels of power in their relationship with professionals*" (p. 390). Sticking to this definition, patient empowerment implies a sort of redistribution of responsibilities, power and onus between the patients and the health care professionals (Chiapperino and Tengland, 2015). Rather than embracing the traditional reductionist approach, which identifies the provider of care as the sole value creator, the patients and the health care professionals accept to enter in a co-creating partnership (Janamian, *et al*., 2016). Both of them actively contribute in the design and delivery of health services, thus performing as value co-creators (Frow, *et al.*, 2016).

Patient empowerment has been variously presented as an important component of reforms aimed at reshaping the functioning of Western health care service systems (Colombo, *et al.*, 2012). Nonetheless, while patient empowerment strategies acknowledge and emphasize the crucial role of patients in partnering with the health care professionals in order to improve health services' quality and appropriateness, thus enhancing achievable health outcomes, it has been argued that the gap between the myths and the reality of patient empowerment is likely to prevent the smooth and factual transformation of traditional value creation models entrenched in the health care environment (Aujoulat, *et al.*, 2007). Moreover, it is worth noting that several hurdles do not allow the transition toward patient-centered care: this circumstance nurtures the loyalty of health care professionals to the traditional bio-medical model of health, generating inertia at both the individual and the collective levels.

First of all, although the idea of patient empowerment dates back to early '90_s, scholars are still quarrelling on the methods and implications of initiatives intended to enable patients and to involve them in the provision of care. Such an uncertainty undermines the widespread implementation of patient empowerment interventions and, consequently, hinders the evolution toward patient-centeredness (Ocloo and Matthews, 2016). Secondly, patient involvement relies on a renewed ethos of care, which has repercussion at different levels (Bravo, *et al.*, 2015): 1) patients assume momentous duties within the health care relationship, having a stake in health decision making and participating in the efforts to optimise the use of available health resources (Osborne, *et al*., 2016); 2) concomitantly, health care professionals are called to respect the patients' autonomy and to adopt a participative style, which encourages the engagement of the latter in the provision of care (Fredericks, *et al.*, 2012); 3) policy makers and decision makers should endorse patient empowerment, striving to merge the appropriate use of available health resources with the maximization of patients' health status and well-being (Porter, 2009).

Due to their professional bureaucracies' traits, health care organizations generally resist the transformation of existing health care ethos and practices, obstructing the realization of patient empowerment. Moreover, it is worth noting that patient empowerment is not free of charge: it requires that health care organizations allocate adequate human and financial resources to the purpose of patient enablement and engagement in the provision of care (Boudioni, *et al.*, 2018). In the current period of managerial strains and financial distress, there is the risk that health care service systems do not have adequate slack resources to support patient empowerment initiatives; therefore, the reiteration of the traditional bio-medical approach to care turns out to be relatively more convenient as compared with patient engagement (Adinolfi, *et al.*, 2016).

Scholars have discussed the organizational and behavioural antecedents of patient empowerment. Weaver *et al.* (2012) identified the requisites to enhance the health care organizations' ability to establish clear and empowering relationships with the patients, setting the condition for their involvement in value co-creation. Health care organizations should simultaneously work on strategies, structures, processes, interaction models, and human resource management, in an attempt to establish an organizational climate which is supportive of patient empowerment and encourages patients to actively participate in the design and delivery of care. From this point of view, a systemic intervention is needed to trigger a reconfiguration of traditional approaches of value creation in the health care service system: government actions, organizational change and enhanced inter-organizational relationships are required (Willis, *et al.*, 2014). Governing bodies should patronize the engagement of patients in the process of health services' design and delivery, introducing and disseminating social norms which induce the health care professionals to revise their communication and interaction strategies in a perspective of value co-creation and patient centredness (Epstein, *et al.*, 2010). Organizational change should be aimed at improving the meaningfulness of health care organizations (Palumbo, *et al.*, 2017) and upholding the adoption of a distributed style of leadership, which empowers providers to engage the patients in health services' provision (Merino, *et al.*, 2016). Inter-organizational relationships should be aimed at improving the interdependencies between the health care service system and the other institutions operating in the field of patients' care, advocacy and support, in order to foster the implementation of effective patient empowerment initiatives (Palumbo, 2017_b).

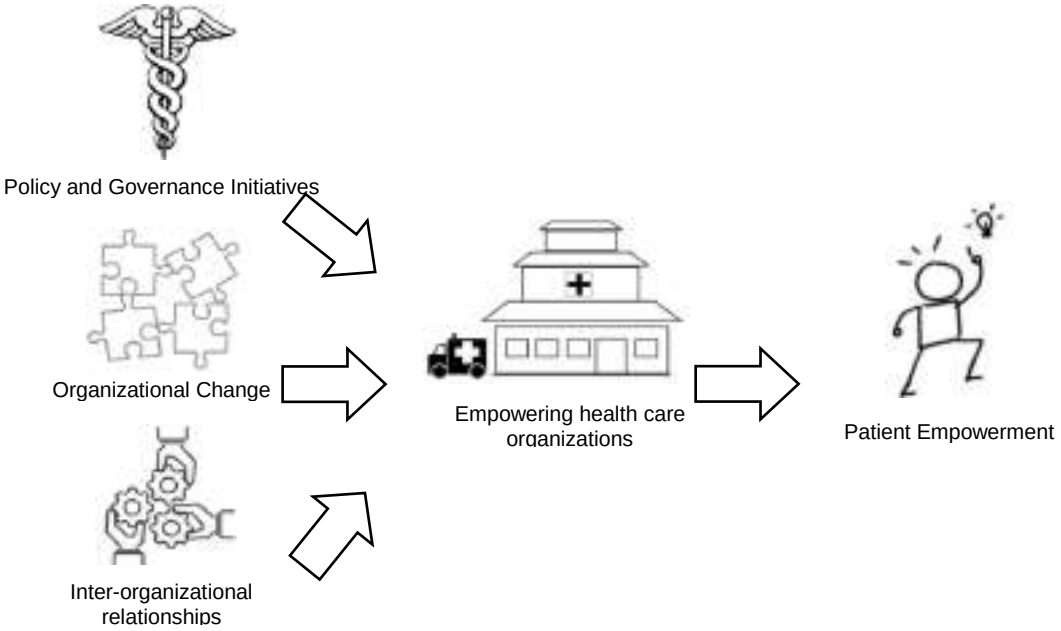
Summarizing these considerations and drawing on the organizational health literacy perspective, several attributes of empowering health care organizations could be sketched (Schillinger and Keller, 2012). An evolution of organizational culture and values is primarily needed: health care organizations should strive for encouraging health care professionals to change their entrenched approach to care, recognizing that the contribution of patients in value co-creation is essential to meet the evolving health needs of the population served (Gill, *et al.*, 2011). To overcome existing culture and traditions, a supportive organizational atmosphere should be established: this is possible by incorporating the purpose of patient empowerment in the organizational mission, arousing the institutional legitimacy of the transition toward patient-centered care (Groene, *et al.*, 2010). At the same time, health care professionals should be endowed with adequate technological, temporal and cognitive resources to empower patients and to effectively involve them in the provision of care (Asagbra, *et al.*, 2017). Lack of adequate resources sterilizes patient empowerment initiatives and generates a disempowering climate, which leads to the stagnation of the bio-medical model in everyday practices. Last, but not least, health care organizations should promote friendly relationships at any point of contact between the patients and the providers of care, thus realizing the full potential of patient empowerment and allowing the evolution toward value co-creation in the provision of care (Tang and Lansky, 2005).

In line with these points, health care professionals have an important stake in implementing patient empowerment within health care organizations. In fact, they are in direct contact with the patients and assume the responsibility to integrate the purpose of patient empowerment and engagement within the culture and the structures of health care organizations (Briglia, *et al.*, 2015). However, the commitment of health care professionals is not enough to allow health services' co-production and to make the patient a co-creator of value. The patients' sleeping resources should be

awakened, in order to make patient empowerment possible (Mead, *et al.*, 2002). As argued by Prigge *et al.* (2015), both health-related knowledge and self-efficacy concur in building the patients' ability to actively participate in the process of health services provision. Hence, health care organizations should devote most of their efforts to the enhancement of the patients' ability to be involved in the design and delivery of care (Palumbo, *et al.*, 2016). Actually, the empowerment and the involvement of patients who lack adequate health competencies and who are unable to play a positive role in optimizing the use of health resources may turn out to be counterproductive (Schulz and Nakamoto, 2013; Palumbo and Manna, 2017), paving the way for value co-destruction rather than value co-creation (Plé and Cáceres, 2010).

Figure 1 provides a graphical summary of the conceptual framework reported above, while Table 1 synthesizes the main antecedents to effective patient empowerment initiatives: they underpin the conceptual map which inspired the findings' analysis and interpretation.

Fig. 1: The institutional and organizational antecedents of patient empowerment



Source: our re-elaboration from Willis, *et al.*, 2014

Tab. 1: The recipe for patient empowerment

Policy and governance Initiatives	***Organizational change***	***Inter-organizational relationships***
Patronizing patient empowerment in health policies and strategies	Introducing structural changes to realize patient empowerment	Bridging health and social care for the purpose of patient empowerment
Championing patient empowerment to enhance its institutional legitimation	Developing an empowerment culture throughout the organization	Facilitating patients' access to community patient empowerment initiatives
Encouraging health care professionals to develop patient empowerment interventions	Establishing professional incentives to embrace patient empowerment initiatives	Emphasizing patient empowerment as a spanning strategy among health and social care
Introducing standardized measuring approaches to assess patient empowerment initiatives' quality and appropriateness	Including a specific patient empowerment concern within organizational performance management systems	Implementing appropriate inter-organizational relationships to realize the full potential of patient empowerment relationships
Providing health practitioners with appropriate training activities in the field of patient empowerment	Investing in communication tools and interactive strategies to enhance patient-provider relationships	Enhancing inter-dependencies among health care organizations and patient advocacy entities
Endorsing and supporting applied research in the field of patient empowerment	Implementing appropriate feedback tools to steer patient empowerment initiatives	Involving patients' association in patient empowerment initiatives
Contextualizing patient empowerment in the broader functioning of the health care service system	Engage patients in the process of organizational change to boost patient empowerment	Creating inter-organizational commitment toward patient empowerment
Empowering health care organizations		

Source: our re-elaboration from Willis, *et al.*, 2014

3. Research design and methods

3.1 Methods

A comparative case study approach was taken to meet the aims of this paper. Eliciting the similarities and dissimilarities between two illustrative experiences, this method allowed us to collect some intriguing insights about health policies and strategies intended to foster patient-centeredness (Campbell, 2010); such evidence accompanied the development of tentative answers to the research questions at the basis of this manuscript. In line with the main topic of interest of this paper, the attention was focused on health policies and strategies implemented by two regional sub-systems operating in the INHS. The two units of analysis were conveniently selected; in particular, three selection criteria were agreed by the authors during the first steps of this research. Firstly, in light of the north-south gap which characterizes the INHS (France, *et al.*, 2005), we decided to include in this research a Northern and a Southern regional health system. In addition, we tried to confront the health strategies and policies of two comparable realities in terms of health-related needs of the population served, as well as of organizational complexity of the health care service system (Donatini, *et al.*, 2001). Lastly, yet importantly, we focused on two regional sub-systems which operated in similar social and institutional environments, thus reducing the risks of biases in the process of findings' analysis and interpretation.

A mixed approach was implemented to collect, classify, and examine relevant evidence. A realist review of the current scientific literature discussing the design and the management of patient empowerment initiatives in the research context inspired the initial steps of the research. Also, attention was paid to the institutional reports produced by the Italian Ministry of Health in order to foster the transition toward patient-centered care across Italy. The results of these two preliminary research activities allowed to establish the boundaries within which we performed our study. We decided to take into consideration all the typologies of strategic documents depicting health policies and plans designed by the two regional sub-systems included in this research. A time span of 20 years (1997-2017) was set to define the temporal contours of this study. Since patient empowerment is a cross-sectional topic, different categories of documents were concomitantly contemplated, including integrated health and social care programs, hospital network plans, and human resource development plans. We systematized the documents collected for each regional sub-system in a separated electronic worksheet. Then, we conducted a content analysis on them.

Content analysis relies on a structural and logic analysis of written texts (Neuendorf, 2017). This approach is effective to identify the recurrence of key concepts within a document; besides, it permits to delve into the epistemological attributes of such concepts. From this point of view, content analysis entails a systemic understanding of the examined document, taking into consideration its structural organization and the logical order of the concepts reported in the text (Zheng and Wildemuth, 2017). For this purpose, the topics of interest have to be coded according to consistent qualitative variables (Dey, 1993), which allows a standardized examination of textual information (Weber, 1990). Ultimately, content analysis does not solely involve the count of the recurrence of specific portions of the text; rather, it is aimed at catching the inner meaning of the paragraphs of interest (Crowley and Delfico, 1996; Krippendorff, 2004).

The content analysis method has several strengths as compared with other research approaches. Such advantages include, but are not limited to: its non-intrusive nature, the possibility to include in the analysis a huge mass of data, its systemic nature, and the opportunity to merge it with other research designs and approaches to deepen the study (Carney, 1972). Content analysis is usually realized through seven steps: 1) the preliminary arrangement of the research design; 2) the selection of materials to be included in the study; 3) the definition of criteria and variables to examine the collected documents; 4) the identification of logic sections in which the text is organized, in an attempt to guide the textual analysis; 5) the arrangement of a tailored action plan to implement the content analysis; 6) the design and the implementation of an *ad hoc* coding model; and 7) the elaboration of the research report (Krippendorff, 2004).

The criteria which inspired the content analysis were drawn on both the conceptual framework depicted in the previous section and the evolutionary perspectives which are pushing health care service systems toward a patient-centered approach to care (Epstein, *et al.*, 2010; Cleary, 2016). On the one hand, the attention was focused on the strategic pushes to the transition toward patient-centeredness; keywords such as "patient empowerment", "patient enablement", "patient involvement", "patient engagement", and "patient-centered care" were searched and investigated across the documents. On the other hand, we tried to identify the tools which were proposed within health policies and strategies to realize the full potential of patient empowerment initiatives. Sticking to the conceptual underpinnings of this research, we investigated the interventions envisioned by the health policy maker at the institutional, governance, inter-organizational and organizational levels to foster the transition toward patient-centered care.

Since the simple enumeration of keywords' recurrence would have provided inadequate information for the purpose of this paper, we decided to focus on the qualitative and hermeneutic interpretation of the topics highlighted across the texts. We adopted a twofold perspective in interpreting such data. Firstly, we investigated the epistemological meaning of the contents which were selected in the documents, in order to stress the relevance attached to patient-centered care and patient empowerment in reshaping value creation models in the health care service system. Secondly, we strived for emphasizing the expected outcomes which are attached to the implementation of a patient-centered approach to care; indeed, even though in most of the cases patient empowerment and patient-centered care are understood as critical tools to enhance the quality of health services provided (Arnetz, *et al.*, 2004; Pulvirenti, *et al.*, 2014), in several circumstances they could be exploited as effective solutions to save available health resources (Palumbo, 2017_c).

Sticking to our decision to focus on the qualitative interpretation of the key concepts which were selected in the texts, our study was not supported by specific software dedicated to content analysis. Rather, information and communication tools were solely used to store digital copies of the documents analysed and to search across them the keywords which guided this content analysis. All elaborations on the documents were performed manually. Findings were classified and coded in electronic worksheets, using traditional word processing suites.

3.2 Research context

Table 2 reports the distinguishing institutional and organizational attributes of the two regional sub-system which were included in this research. They were labelled "*Regional Subsystem X*" and "*Regional Subsystem Y*". The former was established in Northern Italy and presented a stable financial situation; the latter was established in Southern Italy and – at the moment of the research - underwent a rebalancing procedure, due to a significant debt exposition. The two units of analysis were among the most populated areas of Italy; both of them showed a complex organization of the regional health care service system, which brought significant institutional and management challenges to implement patient empowerment initiatives.

Tab. 2: The units of analysis

Dimensions	***Regional sub-system X***	***Regional sub-system Y***
Geographical location	Northern Italy	Southern Italy
Financial situation	Stable	Undergoing a rebalancing procedure
Population served	10.019.166[**]	5.839.084[**]
People aged 65 or more	2.222.375[**]	1.062.671[**]
No. of General Practitioners	6.535[*]	4.418[*]
No. of health care organizations	130[*]	112[*]
Days of hospitalization	10.222.786[*]	4.378.892[*]
No. of District Health Organizations	730[*]	1.428[*]

Source: our re-elaboration from ISTAT data ([*]2013; [**]2017).

4. Findings

4.1 The transformation of traditional value creation models

Patient empowerment and patient-centered care were found to be two important triggers of the revision of traditional model of value creation in both the regional health systems included in this study. However, two different approaches seemed to be adopted. On the one hand, the *Regional Sub-System X* was oriented toward a form of "community empowerment", which implies a radical rethinking of patient-provider relationships. On the other hand, the *Regional Sub-System Y* focused on "individual empowerment", endorsing an incremental evolution of the conventional provider-led model of value creation.

Individual empowerment involves a process of patient enablement, which is intended to provide patients with adequate health-related competencies and abilities to effectively participate in the provision of health services. It focuses the attention on the user, identifying individual health literacy, self-efficacy and willingness to be involved in the provision of care as the main determinants of patient empowerment. In turn, patient involvement in the design and delivery of care is argued to pave the way for greater compliance with medication prescriptions, better quality of care, reduced costs, and increased patient satisfaction. From this point of view, the model of patient empowerment embraced by the *Regional Sub-System Y* assumes a partial transformation of the patient-provider relationship. In fact, it primarily affects the responsibilities and the behaviors of patients, who are actively engaged in the process of value co-creation. However, the role of health care professionals in setting the conditions for patient empowerment is overlooked. In other words, it is pretended that patient involvement is not influenced by the willingness of health care professionals to enable and engage the user. Therefore, the health policies and strategies of the *Regional Sub-System Y* are characterized by the lack of contextualization of patient empowerment within the broader functioning of the health care service system. Poor attention is paid to the need of adequate training activities addressed to health care professionals in order to endorse the implementation of patient empowerment. Lastly, yet importantly, there is no record of assessment tools aimed at evaluating the effects and outcomes of patient empowerment initiatives at both the organizational and the individual levels.

Community empowerment shows distinguishing attributes as confronted with individual empowerment. In fact, rather than focusing on the process of patient enablement, it stresses the need for a deeper rethinking of value creation models in the health care arena. On the one hand, it is affirmed that patients need adequate health skills and competencies to play an active role in the design and delivery of care; on the other hand, it is recognized that patient enablement is not enough to foster the transformation of the traditional provider-led and bio-medical approach to care. In light of these considerations, the health policies and strategies of the *Regional Sub-System X* suggested an integrated and systemic approach to patient empowerment. Firstly, it stressed the importance of tailored governance interventions aimed at encouraging health care organizations to adopt a patient-centered model of care. The importance of patient empowerment in enhancing the functioning of the health care service system is underlined, in an attempt to increase the institutional legitimation of initiatives addressed to enable patients and engage them in value co-creation. Patient empowerment is championed at both the management and the operational levels, introducing formal and informal incentives to support the involvement of patients in the design and delivery of health services. Beyond health care professionals, other institutions who are able to influence individual and collective well-being are included in the process of patient empowerment. Among others, firms and public organizations are encouraged to participate in enabling patients, patronizing specific initiatives finalized to improve the individual awareness of available health prevention and promotion services. *Inter alia*, public schools are identified as champions of empowerment interventions, being able to deeply affect the development of adequate health competencies in the population served. Moreover, social care organizations are considered to play an important role in realizing patient empowerment, encouraging self-care behaviors in the society. Ultimately,

community empowerment requires a radical transformation of value creation models in health care, reshaping the roots of the patient-provider relationship and involving the wider community in the generation of individual and collective well-being.

4.2 The missing ingredients of the recipe for patient empowerment

Summarizing what has been depicted above, the research findings pointed out that the two systems involved in this study adopted different strategies to realize patient empowerment and to support the shift toward patient-centered care. The *Regional Sub-System Y* embraced an individual approach to empower patients; for this purpose, policy and governance initiatives were envisioned, in an attempt to stimulate patient enablement at the institutional level and to encourage patients to actively participate in the design and delivery of health services. The *Regional Sub-System X* took a community approach, trying to initiate a deep transition in the traditional model of value creation in the health care environment: beyond governance interventions, the enhancement of inter-organizational links between the entities involved in health protection and health promotion activities was exploited. This allowed to set the conditions for value co-creation between the patients and the providers of care.

In both the experiences, poor attention was paid to the need for organizational change, which is a critical ingredient of the recipe for patient empowerment. In fact, no evidence of structural change initiatives intended to endow health care organizations with fitting tools and competencies to engage the patients in value co-creation were found. In other words, it was assumed that health care organizations were naturally able to host co-creating partnerships between the patients and the providers of care. Some illustrative examples permit to maintain this consideration. Firstly, the investigated documents did not include adequate references to the potential clash that could arouse between the traditional bio-medical culture which is still prevailing in the health care arena and the ambition of empowering patients. As a consequence, neither the *Regional Sub-System X* nor the *Regional Sub-System Y* stressed that patient empowerment initiatives require a deep transformation of the existing organizational culture of health care institutions. On the one hand, health policies and strategies seemed to be unaware of the consequences of patient empowerment on conventional processes and practices rooted in health care organizations; on the other hand, the investigated documents did not include tailored and effective incentives to assist health care organizations in the transition toward patient-centered care.

What is even more interesting is that in both the cases performance management tools set at the policy and strategy levels were not adjusted to contemplate the potential drawbacks of patient empowerment. Actually, institutional initiatives aimed at promoting value co-creation in the patient-provider relationship were not supported by the configuration of appropriate feedback tools to steer patient empowerment through fitting organizational and management interventions. Besides, the policy and strategy documents did not maintain the opportunity to introduce adequate organizational incentives in order to induce health care professionals to dismiss their traditional loyalty to the bio-medical model of health and to embrace patient-centeredness. Surprisingly, while patient empowerment was identified as a priority in the policies of both regional sub-systems involved in this study, we did not retrieve any allusion to the convenience of involving patients and/or patients' associations in the process of institutional and organizational change which is affecting the evolution of the health care service system. Obviously, this circumstance is able to hinder the transition toward patient-centered care, since the changing needs of the population served are not taken into consideration to inspire the future shapes of the health care setting. Lastly, yet importantly, the documents investigated for the purpose of this study overlooked the need to invest in tailored interacting and communication tools, which are crucial to support health care organizations in revising the patient-provider relationship in a perspective of value co-creation.

4.3 The gap between the desiderata and the reality of patient empowerment

The results of the content analysis suggested that a gap divided the desiderata and the reality of patient empowerment. While in the last 20 years the two regional sub-systems have steadily recognized the role of patient enablement and involvement in the design and delivery of care as a turning point in the transition toward patient-centeredness, the reality of patient empowerment seems to be still scattered. The gap between the desiderata and the reality of patient empowerment echoes the chasm between the multiple institutional interventions reported in strategy and policy making to foster patient engagement and the limited implementation of organizational initiatives intended to establish a full-fledged co-creating partnership in the patient provider relationship.

In sum, the thoughtfulness expressed by health policy makers of both the *Regional Sub-System X* and *Regional Sub-System Y* was found to be ineffective in empowering health care organizations. However, without a deep process of change directed at reframing the organizational culture of health care institutions and the professional orientation of health care providers, the enablement of patient turns out to be sterile and unproductive of substantial effects. If health care organizations are not solicited to embrace a new model of value co-creation, there is the risk that patient empowerment results to be counterproductive. In fact, it could pave the way for conflicting relationships between the patients and the providers of care, which entail value co-destruction, thus deteriorating achievable health outcomes.

It is worth noting that the documents investigated in this research were found to be largely unaware of the divide between the desiderata and the reality of patient empowerment. In other words, the research findings pointed out a clash between the optimism of policy makers - who emphasize the value added of patient empowerment and stress its contribution to the transition toward patient centredness - and the lack of practical interventions and tools intended to reshape the functioning of health care organizations and the behaviors of health care providers, sticking to the tenets of health services' co-production and value co-creation. On the one hand, individual-based patient empowerment was negatively affected by the inadequate attention paid to the importance of the health care setting in influencing the patient-provider relationship. It is assumed that patient empowerment is likely to enable the patient and to realize the shift toward patient centeredness. Nonetheless, conventional health care settings are generally disempowering, preventing the patients to perform as value co-creators in the health care service system. Hence, in this specific circumstance, the gap between the desiderata and the reality of patient empowerment is produced by the mismatch between patient enablement initiatives and lack of organizational interventions aimed at fostering patient involvement in the design and delivery of care. On the other hand, community-based patient empowerment was intended to establish a wider institutional commitment around the purposes of patients' enabling and engagement in the provision of care. Even though this strategy is critical to endow patients with adequate knowledge and competencies in order to actively participate in health services' delivery, it is defective if health care organizations are not stimulated to adopt a patient-centered approach to care by tailored incentive tools.

5. Discussion

The research findings should be red in light of the main limitations which affected this study. The qualitative approach used in this manuscript prevented the generalization of the results above discussed. Moreover, the convenience approach adopted to select the units of analysis undermined the consistency and reliability of this manuscript. Lastly, yet importantly, this paper suffered from a focus on the Italian experience, which constrained the breadth and the depth of the study results. In spite of these shortcomings, the evidence collected in this first step of the study allowed us to tentatively answer the questions which inspired the present paper.

As far as *R.Q. 1* is concerned, we found that patient empowerment was institutionally included among the keywords embraced by the regional health policy makers in order to revise the

functioning of the health care service system. In particular, two different approaches were proposed for this purpose. The individual-based approach was directed to empower the patient, in an attempt to endow the latter with adequate skills and competencies to actively participate in the design and delivery of care; therefore, it works on the patient, striving to reframe the conventional model of value creation in the health care environment in a perspective of patient centeredness. In a quite similar way, the community-based approach relies on the enablement of the patient, in order to promote value co-creation in the health care setting. However, as compared with the former, it envisages the involvement of the community in the process of patient empowerment, recognizing the need for a systemic approach to patient empowerment.

In both the cases, we retrieved several missing ingredients of the recipe for patient empowerment. The cues collected in this study suggest an interesting answer to *R.Q.2*. Health policies and strategic plans did not include references to organizational tools and management incentives intended to stimulate health care professionals to endorse a patient-centered approach to care. Besides, inadequate attention was paid to the introduction of performance management instruments intended to integrate patient empowerment in the usual functioning of health care organizations. As a consequence, patient empowerment initiatives were likely to be neutralized by the lack of a favourable and supporting organizational setting.

Last, but not least, we detected a gap between the reality and the desiderata of patient empowerment in both the experiences, recommending a positive answer to *R.Q.3*. As argued above, the health policy makers were found to be unaware of the reality of patient centredness, as well as of the need for tailoring the process of patient empowerment to the specific structural and management attributes of the health care service system. In addition, the opportunity to merge the shift toward patient centeredness with organizational change of health care institutions was not caught in neither the *Regional Sub-System X* nor in the *Regional Sub-System Y*. This circumstance engendered a clash between the institutional importance attached to patient empowerment and the prevalence of a disempowering health care organizations, which still stick to a traditional and provider-led approach to care.

6. Conclusions

Further developments are needed to shed light on the way forward to patient empowerment in Italy. First of all, the research findings should be deepened, in an attempt to integrate the evidence collected through the content analysis with supplementary research methods. Also, an expansion of the research strategy to other Italian health care regional subsystem would assist in strengthening this research, paving the way for the collection of more reliable and consistent findings. Finally, international comparisons are needed, in an attempt to point out the relevance played by patient empowerment in different institutional contexts and in various policy settings. These developments will help to obtain more insightful and trustworthy evidence on the transition toward patient-centeredness in the health care service system.

In spite of these considerations, the findings of this paper incite to maintain that the gap between the reality and the desiderata of patient empowerment is mainly produced by the lack of adequate institutional, structural and managerial efforts aimed at empowering health care organizations and at enabling them to establish a comfortable and co-creating partnership with the patients. In other words, while patient empowerment has been widely conceptualized as a two-way street, current health policies and strategies seem to solely focus on one direction, emphasizing the need for patient enablement and engagement. From this standpoint, both managers and policy makers should pay greater attention to the special role played by health care organizations in setting the conditions for patient empowerment and in establishing a health care delivery environment which allows patients to factually and actively participate in health services co-production and value co-creation.

References

ADINOLFI P. (2014), "Philosophy, Medicine and Healthcare: Insights from the Italian Experience", *Health Care Analysis*, vol. 22, n. 3, pp. 223-244.

ADINOLFI P., STARACE F., PALUMBO R. (2016), "Health Outcomes and Patient Empowerment the Case of Health Budgets in Italy", *Journal of Health Management*, vol. 18, n. 1, pp. 117-133.

ANDERSON R.M., FUNNELL M.M. (2010), "Patient empowerment: Myths and misconceptions", *Patient Education and Counseling*, vol. 79, n. 3, pp. 277-282.

ANDERSON R.M., FUNNEL M.M. (2005), "Patient empowerment: reflections on the challenge of fostering the adoption of a new paradigm", *Patient Education* & *Counselling*, vol. 57, n. 2, pp. 153-157.

ANGELIS A., TORDUP D., KANAVOS P. (2017), "Is the Funding of Public National Health Systems Sustainable over the Long Term? Evidence from Eight OECD Countries", *Global Policy*, vol. 8, n. S2, pp. 7-22.

ARNETZ J.E., ALMIN I., BERGSTRÖM K., FRANZÉN Y., NILSSON H. (2004), "Active patient involvement in the establishment of physical therapy goals: Effects on treatment outcome and quality of care", *Advances in Physiotherapy*, vol. 6, n. 4, pp. 50-69.

ASAGBRA O.E., BURKE D., LIANG H. (2017), "Why hospitals adopt patient engagement functionalities at different speeds? A moderated trend analysis", *International Journal of Medical Informatics*, vol. 111, n. 3, pp. 123-130.

AUJOULAT I., D'HOORE W., DECCACHE A. (2007), "Patient empowerment in theory and practice: Polysemy or cacophony?", *Patient Education and Counseling*, vol. 66, n. 1, pp. 13-20.

BARILE S., SAVIANO M., POLESE F. (2014). "Information Asymmetry and Co-Creation in Health Care Services", *Australasian Marketing Journal*, vol. 22 n. 3, pp. 205-217.

BARRY M.J., EDGMAN-LEVITAN, S. (2012), "Shared Decision Making - The Pinnacle of Patient-Centered Care", *The New England Journal of Medicine*, vol. 366, n. 9, pp. 780-781.

BOUDIONI M., MCLAREN S., LISTER G. (2018), "Patient empowerment: Its implementation and systems within hospitals in England and Greece", *Health Services Management Research*, Published on-line ahead of print on January, 1st, 2018. Doi: 10.1177/0951484817752628.

BRACH C., DREYER B.P., SCHILLINGER D. (2014), "Physicians' Roles in Creating Health Literate Organizations: A Call to Action", *Journal of General Internal Medicine*, vol. 29, n. 2, pp. 273-275.

BRAVO P., EDWARDS A., BARR P.J., SCHOLL I., ELWYN G., MCALLISTER M. (2015), "Conceptualising patient empowerment: a mixed methods study", *BMC Health Services Research*, vol. 15, n. 252. Doi: 10.1186/s12913-015-0907-z.

BRIGLIA E., PERLMAN M., WEISSMAN M.A. (2015), "Integrating health literacy into organizational structure", *Physician Leadership Journal*, vol. 2, n. 2, pp. 66-69.

CAMPBELL S. (2010), "Comparative case study", in: Mills A.J., Durepos G., Wiebe E. (Eds.), *Encyclopedia of Case Study Research*, Sage, Washington, DC, pp. 174-175.

CARNEY T.F. (1972), *Content analysis: A technique for systematic inference from communications*, University of Manitoba Press, Winnipeg.

CHIAPPERINO L., TENGLAND P.A. (2015), "Empowerment in healthcare policy making: three domains of substantive controversy", *Health Promotion Journal of Australia*, vol. 26, n. 3, pp. 210-215.

CLEARY P.D. (2016), "Evolving Concepts of Patient-Centered Care and the Assessment of Patient Care Experiences: Optimism and Opposition", *Journal of Health Politics, Policy and Law*, vol. 41, n. 4, pp. 675-696.

COLOMBO C., MOJA L., GONZALES-LORENZO M., LIBERATI A., MOSCONI P. (2012), "Patient empowerment as a component of health system reforms: rights, benefits and vested interests", *Internal and Emergency Medicine*, vol. 7, n. 2, pp. 183-187.

CROWLEY B.P., DELFICO J.F. (1996), *Content Analysis: A methodology for structuring and analysing written text*, General Accounting Office, Washington, DC.

DEY I. (1993), *Qualitative Data Analysis: A User Friendly Guide for Social Scientists*, Routledge, London.

DONATINI A., RICO A., D'AMBROSIO M.G., LO SCALZO A., ORZELLA L., CICCHETTI A., PROFILI S. (2001), *Health Systems in Transition - Italy*, WHO Regional Office for Europe, London.

ENGEL G.L. (1977), "The need for a new medical model: a challenge for biomedicine", *Science*, vol. 196, n. 4286, pp. 129-136.

EPSTEIN R.M., FISCELLA K., LESSER C.S., STANGE K.C. (2010), "Why The Nation Needs a Policy Push On Patient-Centered Health Care", *Health Affairs*, vol. 29, n. 8, pp. 1489-1495.

FOX N., WARD K., O'ROURKE A. (2005), "The 'expert patient': empowerment or medical dominance? The case of weight loss, pharmaceutical drugs and the Internet", *Social Science* & *Medicine*, vol. 60, n. 6, pp. 1299-1309.

FRANCE G., TARONI F., DONATINI A. (2005), "The Italian health-care system", *Health Economics*, vol. 14, n. S1, pp. 187-202.

FREDERICKS S., LAPUM J., SCHWIND J., BEANLANDS H., ROMANIUK D., MCCAY E. (2012), "Discussion of Patient-Centered Care in Health Care Organizations", *Quality Management in Health Care*, vol. 21 n. 3, pp. 127-134.

FROW P., MCCOLL-KENNEDY J.R., PAYNE A. (2016), "Co-creation practices: Their role in shaping a health care ecosystem", *Industrial Marketing Management*, vol. 56, n. 6, pp. 24-39.

FUMAGALLI L.P., RADAELLI G., LETTIERI E., BERTELE' P., MASELLA C. (2015), "Patient Empowerment and its neighbours: Clarifying the boundaries and their mutual relationships", *Health Policy,* vol. 19, n. 3, pp. 384-394.

GILL L., WHITE L., CAMERON I.D. (2011), "Service co-creation in community-based aged healthcare", *Managing Service Quality: An International Journal,* vol. 21, n. 2, pp. 152-177.

GROENE O., KLAZINGA N., WAGNER C., ARAH O.A., THOMPSON A., BRUNEAU C., SUNOL R. (2010), Investigating organizational quality improvement systems, patient empowerment, organizational culture, professional involvement and the quality of care in European hospitals: the DUQuE project. *BMC Health Services Research,* vol. 20, n. 281. Doi: 10.1186/1472-6963-10-281.

HARDYMAN W., DAUNT K.L., KITCHENER M. (2015), "Value Co-Creation through Patient Engagement in Health Care: A micro-level approach and research agenda", *Public Management Review,* vol. 17, n. 1, pp. 90-107.

HEWITT-TAYLOR J. (2013), "Challenging the balance of power: patient empowerment", *Nursing Standard,* vol. 18, n. 22, pp. 33-37.

JANAMIAN T., CROSSLAND L., WELLS L. (2016), "On the road to value co-creation in health care: the role of consumers in defining the destination, planning the journey and sharing the drive", *Medical Journal of Australia*, vol. 204 n. 7S, p. 12.

KEELING D.I., LAING A., DE RUYTER K. (2017), "Evolving roles and structures of triadic engagement in healthcare", *Journal of Service Management,* published on-line ahead of print on October, 25th 2017. Doi: 10.1108/JOSM-09-2016-0249.

KRIPPENDORFF K. (2004), *Content Analysis: An introduction to its methodology*, Sage Publications, Thousand Oaks, CA.

MCCOLL-KENNEDY J.R., SNYDER H., ELG M., WITELL L., HELKKULA A., HOGAN S.J., ANDERSON L., (2017), "The changing role of the health care customer: review, synthesis and research agenda", *Journal of Service Management,* vol. 28 n. 1, pp.2-33

MCCRACKEN K., PHILLIPS D.R. (2017), "Demographic and Epidemiological Transition", in Richardson D., Castree N., Goodchild M.F., Kobayashi A., Liu W., Marston R.A. (Eds.), *The International Encyclopedia of Geography: People, the Earth, Environment, and Technology*, Wiley, London. Doi: 10.1002/9781118786352.wbieg0063.

MEAD N., BOWER P., HANN M. (2002), "The impact of general practitioners' patient-centredness on patients' post-consultation satisfaction and enablement", *Social Science* & *Medicine,* vol. 55, n. 2, pp. 283-299.

MERINO M., MARQUÉS M., EGURBIDE M., ROMO M., RODRÍGUEZ I., GARCÍA M., PONCE S., FULLAONDO A., MORA J., DE MANUEL E. (2016), "Up-scaling of an integrated care model for frail elderly patients", *International Journal of Integrated Care,* vol. 16, n. 6, p. 251.

NEUENDORF K.A. (2017), *The Content Analysis Guidebook*, Sage, Los Angeles, CA.

OCLOO J., MATTHEWS R. (2016), "From tokenism to empowerment: progressing patient and public involvement in healthcare improvement", *BMJ Quality* & *Safety,* vol. 25, n. 8, pp. 626-632.

OSBORNE S.P., RADNOR Z., STROKOSCH K. (2016), "Co-Production and the Co-Creation of Value in Public Services: A suitable case for treatment?", *Public Management Review*, vol. 18, n. 5, pp. 639-653.

OSEI-FRIMPONG K., WILSON A., OWUSU-FRIMPONG N., (2015), "Service experiences and dyadic value co-creation in healthcare service delivery: a CIT approach", *Journal of Service Theory and Practice*, vol. 25, n. 4, pp.443-462

PALUMBO R. (2016), "Contextualizing co-production of health care: a systematic literature review", *International Journal of Public Sector Management,* vol. 29, n. 1, pp. 72-90.

PALUMBO R. (2017a), "Examining the impacts of health literacy on healthcare costs. An evidence synthesis", *Health Services Management Research,* vol. 30, n. 4, pp. 197-212.

PALUMBO R. (2017b), *The Bright Side and the Dark Side of Patient Empowerment*, Springer, New York.

PALUMBO R. (2017c), "Toward a New Conceptualization of Health Care Services to Inspire Public Health. Public National Health Service as a 'Common Pool of Resources'", *International Review on Public and Nonprofit Marketing*, vol. 14, n. 3, pp. 271-287.

PALUMBO R., ANNARUMMA C. (2016), "Empowering organizations to empower patients: An organizational health literacy approach", *International Journal of Healthcare Management,* Published on-line ahead of print on November, 14th 2016. Doi: 10.1080/20479700.2016.1253254.

PALUMBO R., ANNARUMMA C., ADINOLFI P., MUSELLA M. (2016), "The missing link to patient engagement in Italy: The role of health literacy in enabling patients", *Journal of Health Organization and Management,* vol. 30, n. 8, pp. 1183-1203.

PALUMBO R., ANNARUMMA C., MUSELLA M. (2017), "Exploring the meaningfulness of healthcare organizations: a multiple case study", *International Journal of Public Sector Management,* vol. 30, n. 5, pp. 503-518.

PALUMBO R., COSIMATO S., TOMMASETTI A. (2017), "Dream or reality? A recipe for sustainable and innovative health care ecosystems", the *Total Quality Management Journal*, vol. 29 n. 6, pp. 847-862

PALUMBO R., MANNA R. (2017), "What if things go wrong in co-producing health services? Exploring the implementation problems of health care co-production", *Policy and Society,* Published on-line ahead of print on December, 10th 2017. Doi: 10.1080/14494035.2018.1411872.

PLÉ L., CÁCERES R.C. (2010), "Not always co-creation: Introducing interactional co-destruction of value in service-dominant logic", *Journal of Services Marketing*, vol. 24, n. 6, pp. 430-437.

PORTER M.E. (2009), "A Strategy for Health Care Reform - Toward a Value-Based System", *New England Journal of Medicine*, vol. 361 n. 2, pp. 109-112

PRIGGE J.K., Dietz B., Homburg C., Hoyer W.D., Burton J.L. (2015), "Patient empowerment: A cross-disease exploration of antecedents and consequences", *International Journal of Research in Marketing*, vol. 32, n. 4, pp. 375-386.

PULVIRENTI M., MCMILLAN J., LAWN S. (2014), "Empowerment, patient centred care and self-management", *Health Expectations*, vol. 17, n. 3, pp. 303-310.

ROBERTS K.J. (1999), "Patient empowerment in the United States: a critical commentary", *Health Expectations*, vol. 2, n. 2, pp. 82-92.

SCHILLINGER D., KELLER D. (2012), "The other side of the Coin: Attributes of a Health Literate Health Organization", in Hernandez L.M. (Ed.), *How Can Health Care Organizations Become More Health Literate: Workshop Summary*, National Academy Press, Washington, DC., pp. 5-20.

SCHULZ P.J., NAKAMOTO K. (2013), "Health literacy and patient empowerment in health communication: The importance of separating conjoined twins", *Patient Education and Counseling*, vol. 90, n. 1, pp. 4-11.

SEGAL L. (1998), "The importance of patient empowerment in health system reform", *Health Policy*, vol. 44, n. 1, pp. 31-44.

TANG P.C., LANSKY D. (2005), "The Missing Link: Bridging The Patient–Provider Health Information Gap", *Health Affairs*, vol. 24, n. 5, pp. 1290-1295.

WADE D.T., HALLIGAN P.W. (2017), "The biopsychosocial model of illness: a model whose time has come", *Clinical Rehabilitation*, vol. 31, n. 8, pp. 995-1004.

WEAVER N.L., WRAY R.J., ZELLIN S., GAUTAM K., JUPKA K. (2012), "Advancing Organizational Health Literacy in Health Care Organizations Serving High-Needs Populations: A Case Study", *Journal of Health Communication*, vol. 17, n. 3, pp. 55-66.

WEBER R.P. (1990), *Basic Content Analysis*, Sage, Newbury Park, CA.

WILLIS C.D., SAUL J.E., BITZ J., POMPU K., BEST A., JACKSON B. (2014), "Improving organizational capacity to address health literacy in public health: a rapid realist review", *Public Health*, vol. 128, n. 6, pp. 515-524.

ZHENG Y., WILDEMUTH B.M. (2017), "Qualitative Analysis of Content", in Wildemuth B.M. (Ed.), *Applications of Social Research Methods to Questions in Information and Library Science*, Libraries Unlimited, Santa Barbara, CA, pp. 318-329.

TRACK - BUSINESS STRATEGIES

FOR A BETTER WORLD

Enhancing impact evaluation systems to support strategic decision making and value creation processes in social enterprises

VALENTINA CASTELLO, PAOLA OLIMPIA ACHARD, ANTONINA DI BERARDINO

Enhancing impact evaluation systems to support strategic decision making and value creation processes in social enterprises

VALENTINA CASTELLO[*] PAOLA OLIMPIA ACHARD[•] ANTONINA DI BERARDINO[♠]

Abstract

Objectives. *Realizing strategies contributing to a better world (improving individual and collective sustainable wellbeing), call for innovative managerial systems able to plan, monitor and evaluate the social impact of the business actions. Moreover, the growing interest on social enterprises development - and diversification - call for common frames. Although many contributions exist, and practices are emerging, there is a significant gap between theory and practice on "impact" models. The paper aims at developing a literature-based framework useful to highlight the main dimensions of a social impact assessment system able for support effective decision making and value creation processes, with a special reference for social enterprises. This is done by assuming a process-led perspective, connecting impact evaluation to the overall strategic and managerial systems.*

Methodology. *Methodology employed is desk research.*

Findings. *Competences, models and tools supporting SEs along the overall value creation process are lacking. Building integrated approaches allow SEs to implement customized, effective and process-led systems. This enhance the implementation of business strategies impacting on social well-being and, in turn, "social" reporting and accountability.*

Research limits. *Research scalability within very diversified social enterprises typologies and scopes.*

Practical implications. *The paper reports the main bases of a comprehensive social impact model that is being validated within a wide national empirical research, that, in turn, will identify effective models, tools and indicators.*

Originality of the study. *Enhancing process-led impact evaluation model definition and widening the focus from organizational dimensions and quantitative impact indicators approach to strategic and managerial process perspective.*

Key words: *social enterprise; strategy; social impact and performance evaluation*

[*] Docente aggiunto di *Economia e Gestione delle Imprese* - Università degli Studi dell'Aquila
e-mail: valentina.castello@univaq.it

[•] Associato di *Economia e Gestione delle Imprese* - Università degli Studi dell'Aquila
e-mail: paolaolimpia.achard@univaq.it

[♠] Dottoranda in *Ingegneria Industriale, dell'Informazione e di Economia* - Università degli Studi dell'Aquila
e-mail: antonina.diberardino@graduate.univaq.it

1. Introduction

In the new era the business mantra is sustainability; it is defined as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs" (IISD, 2016). Sustainability can be analyzed at economic, social and environmental perspectives within very and very diversified focus (Frey, 2006; Venturi *et al.*, 2012; Ferraris and Grieco, 2015; Brown *et al.*, 2015). A common element is that it intrinsically includes the social innovation that is realized "wherever new mechanisms and norms consolidate and improve the well-being of individuals, communities and territories in terms of social inclusion, creation of employment, quality of life" (OECD, 2010).

Many researches and studies has been realized to better define and articulate the "measurement" of social innovation, including the national initiatives related to the overcoming of GDP as socio-economical solely indicator[1]. Moreover, in the recent decade, a great interest has been created around the impact-based finance or social finance (and social-impact bonds or contract pay-by-results tools) (SIIT, 2014; Human Foundation, 2016). At the same time, many and diversified models and practices have been developed with reference to the enterprise' role in creating social innovation and, mostly, to the corporate social responsibility (Gawell, 2014; Mair *et al.*, 2006; Austin *et al.*, 2012; Grieco *et al.*, 2013; Iasevoli and Grieco, 2015). All these streams relate to the realization of strategies contributing to a better world, improving, in other terms, individual and collective sustainable and equal wellbeing. This calls for the development of innovative managerial systems able to plan, monitor and evaluate the impact of the business action, shifting the *research&practice* focus from "indicators measurement" itself to an overall, organic and comprehensive "impact model" and value creation process.

Social enterprises are often recognized as the best to achieve social innovation purposes; it tends towards social improvement and its hybrid form allows it to be close to different parts of society (Venturi *et al.*, 2012; Zamagni *et al.*, 2015; Borzaga *et al.*, 2001; Defourny and Nyssens, 2012; Defourny, Develtere, 1999). The same recent Third Sector reform in Italy has further stressed the relevance of social impact dimension and has routed social enterprises managerial processes within the dynamic alignment of their dual dimensions. SEs are hybrid organizations dealing with a dynamic balance between social and economic scope and goals (Pache and Santos, 2013; Santos *et al.*, 2015; Austin *et al.*, 2012). Another complexity dimension is related to the very diversified nature of SEs (from social cooperatives to foundations) both at national and European level (Kerlin, 2013; SESBA, 2017; Baglioni, Calo, 2018)[2]. The high fragmentation of SEs around Europe, in term of regulatory discipline and preferred sectors is highly linked to the Countries welfare system, if more centralized or decentralized (Borzaga *et al.*, 2001; Defourny and Nyssens, 2012; Defourny and Develtere, 1999). The above assumptions do not allow to homogeneously identify SEs features.

The research questions concerning the definition of effective social impact assessment systems are, so, strictly interconnected to the ones related to the deepening of SEs strategic and managerial approach and features.

To redefine and requalify the role of SEs it is important to build an integrated measurement system which represent economic and social dimensions, as embedded in the specific strategic and organizational system in terms of: actors, rules, values and so on, consistently with the existing "helix"[3] models.

---

1 For the Italian system, see the BES initiative (https://www.istat.it/it/archivio/rapporto+bes), as also reported later in the paper.

2 A comparative analysis of SEs in Europe has been realised within the Erasmus Plus SESBA *(Social Enterprise Skills for Business Advisers)* project (http://sesbaproject.eu/)

3 Some Authors refer to it as the Triple Helix Model, Others as the Quadruple Helix Model, some Others as the Quintuple Helix Model according to the explication of the third helix, mainly referred to the education institutions, the collectivity, to meso-structures and so on (Ferraris and Grieco, 2015).

Social enterprises are "ontologically" interested in impact evaluation but are often far away from them, struggling with the daily operational activities and assuming a merely compliance behaviors in social reporting. Competences, models and tools supporting SEs along the overall (social and economic) value creation process are lacking. While most studies focus on the business organizational constraints figured by social enterprises, the present work investigates the strategic potential role of assuming an integrated approach correlating impact evaluation issues to the overall business and managerial processes.

Although many contributions exist, and practices are emerging, there is a significant gap between theory and practice on "impact" models. Particularly, the paper aims to develop a literature-based framework useful to highlight the main dimensions of a social impact assessment system able for support effective decision making and value creation processes of companies, with a special reference to social enterprises (SEs).

This is done by assuming a strategic overall perspective, linking the impact evaluation issues to the overall strategic and managerial processes. This allows SEs to implement customized, integrated and process-led impact systems and support the "social" accounting and reporting transparency and accountability and the enhancement of business strategies impact on sustainable well-being. The paper reports the main bases useful to build a comprehensive social impact model that is being defined and validated within a wide national empirical research, encompassing focus group, structured interviews and semi-structured questionnaires.

Paper aims consideration, coupled with the significant diversification of SEs (in terms of legal forms as well as strategic, managerial and organizational dimensions both at national, European and international levels) suggest to first draft the conceptual and operative borders of SEs (par. 2) and then deepen the analysis of social impact and social impact evaluation (par. 3).

2. Social enterprises relevant dual-edged dimensions

Social enterprise has been differently defined, according the focus assumed on the prevalence of some characteristics, such as the capability to drive transformational changes, the re-investment of profits, the ability to address special needs and so on (Massetti, 2008; Kerlin, 2013; Borzaga *et al.*, 2001; Matacena, 2017; Defourny, Nyssens, 2012; Santos *et al.*, 2015; Pache *et al.*, 2013; OECD/LEED, 2018; Baglioni and Calo, 2018).

Social enterprise definition is also influenced by the different theoretical approaches, mainly between European and US ones; particularly, different is the concept of separation between the market-oriented actors and the socially oriented ones (Defourny, Nyssens, 2012; Kerlin, 2013). Social enterprises development has mainly been characterized in US by a growing reliance on commercial revenues from not profit organizations (Defourny and Nyssens, 2012; Kerlin, 2013; Baglioni and Calo, 2018); different the general trend in EU, where social enterprises are featured by the contemporary presence of social and business dimensions and has been defined as "business organizations aiming to provide goods and services addressing societal needs" (Borzaga and Defourny, 2001; Defourny and Nyssens, 2012). Under this very wide common conceptual umbrella there are significantly differences among countries as well as among diverse literature and empirical models and evidences on definitions and concepts with the term social enterprise (Kerlin, 2013; Matacena, 2017; Baglioni and Calo, 2018). Moreover, SEs definition is still overlapped with those of social entrepreneurship, social economy, third sector and, also, on the use of the same social enterprise "label"; in some contribution, SE is also used to identify a business which is adopting a social media strategy (Turban *et al.*, 2016). SE also is used as synonym of social entrepreneurship and social entrepreneur which, respectively, focus on "hybridity trends" of organizations and on the personal characteristic and orientation of the entrepreneur(s) and/or of individual innovators pursuing social change (Gawell, 2014; EC, 2016; Baglioni and Calo, 2018).

Additionally, SEs take different legal forms; the diversification of SEs concept is, in fact, the result of social, institutional and economic context diversity[4], also related to the Country welfare system and its relative regulatory discipline (Borzaga and Defourny, 2001; Trexler, 2008; Defourny, Nyssens, 2012; Kerlin, 2013; SESBA, 2017; Matacena, 2017; Roman-Calderon *et al.*, 2018; OECD/LEED, 2018). Italy is the solely European Country to have recently defined SEs' legal form and regulatory frame within the Third Sector (TS) reform (Law 106/2016). The reform confirms the European Commission approach in identifying as SEs main dimension the relevance of the social impact within the company business architecture.

This fragmentation among countries and approaches, according to the combination of different drivers featuring SEs, call for a general and cross-country definition of SE (Roman-Calderon *et al.*, 2018). The common element and definition of SEs can be referred to the pursuing of both social and economic goals with an entrepreneurial spirit (Mair, Marti, 2006; Venturi *et al.*, 2012); definition compliant with the recent definition of SEs in the national regulation of Third Sector and Social Enterprises. SEs can be defined, thus, as every organization socially oriented (Ebrahim, Battilana and Mair, 2014), a hybrid form in which the social goals combine with the economic performance ones. The social dimension meaning "an array of values associated with behavior with an orientation beyond the market, state or self"; also, the economic dimension (the "enterprise" nature) refer to the "values associated with business, commerce, purpose and corporate structure" (Trexler, 2008; Ebrahim, Battilana and Mair, 2014; Venturi *et al.*, 2012).

Assuming this general and cross-country perspective and building on on Defourny & Nyssens (2012) and on OECD/LEED (2018) contributions, the following table clusters the SEs' main economic, social and managerial dimensions.

Tab. 1: Social Enterprises main features

Economic dimensions	Social dimensions	Managerial dimensions
Goods production and/or services delivery	Explicit aim to benefit the community	High degree of autonomy
Significant level of economic risk	Initiatives launched by citizens or civil society organizations	Decision-making power not based on capital ownership
Minimum amount of paid workers	Restricted or limited profit distribution	Participatory nature, involving all relevant internal/external actors

Source: Adaptation from Defourny and Nyssens (2012) and OECD/LEED (2018)

SEs and "traditional" businesses share some characteristics (Austin *et al.*,2012; Mair and Martí, 2006; Zahra *et al.*,2009) as: the opportunities, the entrepreneurial risks, the managerial processes, and, to some extension, to the resource seeking (financial and not) and the external context. At the same time, they differ in mission and motivation, resources, accountability and in the drift between the mission and the performance measurement.

Dual strategic goals alignment also means for SEs the ability to balance financial funding among welfare state procurements and grants with market-based business revenues. For both funding "arenas", SEs ability to catch market needs allow them to be flexible and easily adapt to challenge scenarios. Social enterprises face with multi-stakes, with divergent needs and holding different interests (Ebrahim *et al.*,2014). Managing external pressures/opportunities and internal decision-making processes (highly participatory and not based on capital ownership) are the main crucial dimensions to SEs sustainability (Pache and Santos, 2013; Santos *et al.*, 2015). This is even more true in turbulent times, exercising more pressure in term of prioritizations, resources allocation, and pathways needed (Eisenhardt and Martin, 2000; Ramus *et al.*,2016).

[4] For comprehensive comparative analysis of models of social enterprise found internationally please refer to Kerlin (2013) that specifically focus on national/regional differences among SEs driven by institutional dimensions as well as to Baglioni and Calo (2018) and to SESBA project reports (2017).

SEs legitimacy relates to their ability to create an impact (Suchman, 1995; Kostova *et al.*,1999; Kuosmanen, 2014) and, consequently, to prioritize actions and resources (Deephouse, 1996). SEs has always been "evaluated" for their capability to generate outputs able to deal with social issues. Nowadays it is required a "structured proof" of the impact, of the "long lasting effect" generated by those outputs. This is confirmed by the same regulatory frame defined, in Italy, within the Third Sector Reform (IPSOA, 2017; Non Profit Network, 2017; Italian Non Profit, 2017; Esela, 2017). In Italy, most of SEs are micro-sized and, lack of quality management, lack of skilled labour (Unioncamere, 2014) and information opacity.

Although briefly reported, these considerations highlight the importance of building effective managerial models and tools supporting SEs strategic, organizational, financial and operative "dual balance" and performance. The need of keeping track of the organization's financial and statistical indicators as well as the relevance of managerial skills and structure has strongly emerged from Raišienė and Urmanavičienė (2017) recent research as well as from, among the others, Santos *et al.*, (2015) and Pache *et al.* (2013). The lack of managerial competences and models are defined as the "factors that could cause a drift in the balance"; it should be noted that this is a double-edged problem, because a reverse mission drift may occur as the revenue drifts (Raišienė and Urmanavičienė, 2017).

3. Impact measurement and SEs strategic and managerial processes

As already reported, many researches and studies has been realized to better define and articulate the "measurement" of social innovation and impact: national statistics on socio-economic well-being (overcoming GDP); impact-based finance system and tools; corporate social responsibility in creating social innovation. Traditionally impact has been referred to the "investment impact" that is the companies investment "with the intention to generate social and environmental impact alongside a financial return" (Human Foundation, 2016; DCED, 2016; Matacena 2007, 2017; Zamagni *et al.*, 2015)[5]. To widening the horizon, crucial is the role of public policies; in Italy in fact, the G8 National Advisory Board (which involved the representatives of TS, finance and business) has been changed in Social Impact Agenda to scale-up the, currently, four-years work for the sustainable development of the Country (Human Foundation, 2016).

The "impact challenge" has in fact started in 2013 with the work of the G8 Social Impact Investment Taskforce (GSG, 2016). In fact, with "impact" we refer now to wider a process focused on the outcome generated through the SEs operational activities, plus the potential value lost if those activities were not run-out (Clark *et al.*,2004; EVPA, 2012 in GECES, 2014; HBR, 2015). The paper leverages on contributions developed within all these - partially interrelated - purposes to furnish an organic frame aimed at contributing to the definition of a process-led, customizable and integrated SEs managerial systems able to plan, monitor and evaluate business value and impacts.

3.1 Corporate Social Responsibility, Hybrid Forms and Impact Evaluation

All companies have a social impact; moreover, nowadays, most companies are aware of their social role and support social goals achievement. Different degree of embeddedness and explication of the social oriented goals exist within the socio-economic eco-system, drafting a kind of continuum between for-profit and not-for-profit strategic spaces (Defourny, Develtere, 1999; Borzaga, Defourny, 2001; Moulaert, Ailenei; 2005; Zamagni *et al.*, 2015). Both for-profit and not-for-profit organizations are subjected to market uncertainty, socio-economic and demographic changes and, industry ghosting borders; they require new organizational forms, more flexible and adaptive (Daft and Lewin, 1993). Organizational problems often strive with the structural inertia

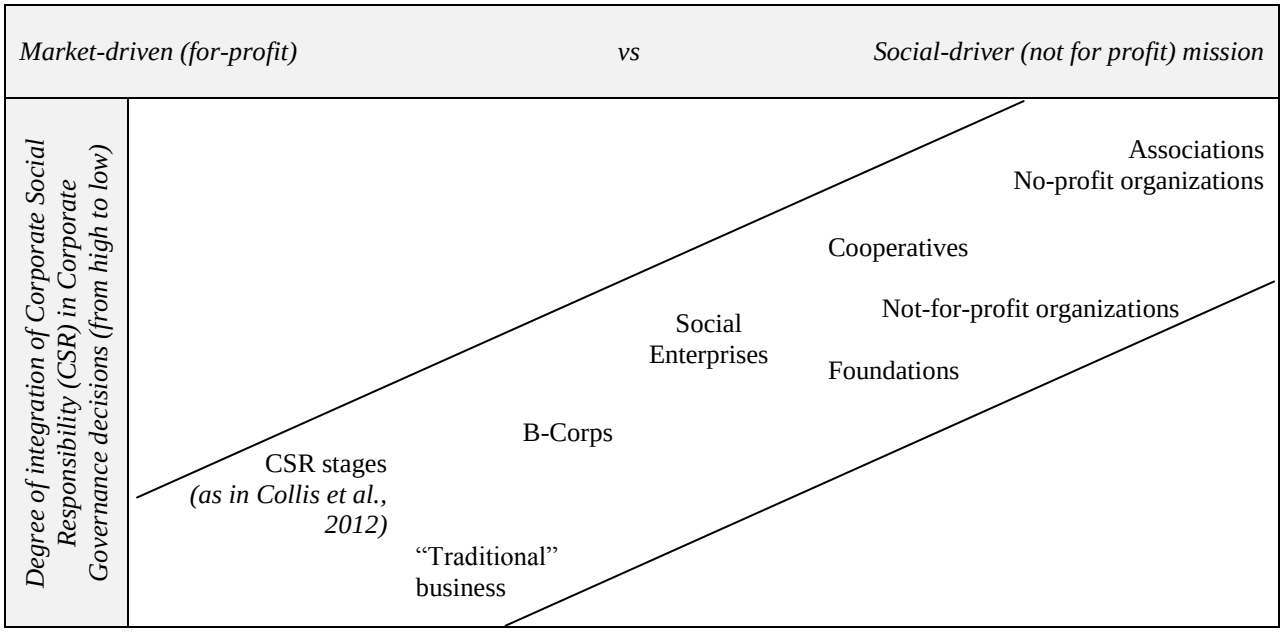
[5] DCED (2016) has been put more emphasis on the impact at a micro-level analysis, although still with a financial perspective; it is measured through the "financial returns and outputs after investment decisions have been made", defining the rate system and a set of indicators which can be used by enterprise to self-report their achievements.

(cultural assumption, idiosyncratic investments and more); the case is even emphasized for hybrid organization because they often face drift problems among the mission and the performance measurement, making even harder the competition in the market arena.

To better identify the various hybrids forms within this continuum, we can refer to stakeholder theory and Corporate Social Responsibility (CSR). CSR is a "concept whereby organizations integrate social and environmental concerns in their business operations and in their interactions with their stakeholders on a voluntary basis" (European Commission, 2001 in Maon *et al.*,2008). To this extent, it's useful to distinguish the stages of commitment of the different organizations in terms a) they explicit orientation to market or social mission and, b) to their degree of integration into the Corporate strategy (Collis *et al.*, 2012), meaning as the intentionality to adopt strategies which take into consideration the economic and the social dynamics.

In order to build an integrated social impact system for SEs it is valuable to consider both the CSR's stages continuum and the social and market-oriented continuum (which move through the not-for-profit and for-profit requirement continuum). To the extremes, there are the traditional intended business and the associations and/or in general no-profit organizations, in the middle a wide scenario of the so-called hybrid organizations, as the B-Corps, the cooperatives, the foundations, the social enterprises and so on, as in the following Figure 1.

Fig. 1: CSR and social/market mission continuum



Source: Elaborated by Authors

SE is characterized by a high degree of integration of Corporate Social Responsibility (CSR) in Corporate Governance decisions and by the need to manage the tension between the social and economic goals. As assumed by Grieco (2015 and in Florman *et al.*, 2016) "the aim of social impact assessment is both to help decision-makers evaluate the merits of continuing with their business or programs and ex-post evaluations of activities undertaken".

At the same time, this evaluation is strongly embedded within a wider societal context that need to be considered while building integrated models.

3.2 Impact evaluation macro and micro level

Impact is embedded in the organization mission but, at the same time, within "the societal challenges it seeks to address" with its activities (Social Impact Investment Taskforce, 2014; Brown *et al.*, 2015; Zamagni *et al.*, 2015). For this reason, it is impossible to define a standard set of

indicators. The country-specific context influences the businesses dynamics and, so, the same contents of shared "social" performances. To this extent, some driving indicators for SEs performance evaluation can be derived from the national statistical social and economic sustainable well-being analysis to address and articulate the composing parameters of the socio-economic dimensions. Impact, its dimensions related to the same "well-being" concept as well as their associated indicators, change over time and across (local) system, as also assumed within the Italian national system monitoring and evaluating well-being (ISTAT-CNEL, BES Reports, 2013; 2014; 2015; 2016; 2017). Consistently, the methodology impACT developed by EURICSE (Depedri, 2016), moved forward to identify the main relevant actors for SEs, and how to catch the right information to dynamically re-design internal and external processes and priorities. The impACT model highlights two very relevant dimensions:

- the first: the need of integrating internal and external priorities, actors and processes that, in turn, confirm the continuity of macro and micro level analysis and goals as well as the consequent need for defining multi-dimensional balanced monitoring and evaluation systems;
- the second: the need of assuring a process-led approach supporting strategic and managerial dynamic alignment.

Before deepening the analysis on the process dimension, the next paragraph deals with the first point, with reference of the existing multi-variable impact evaluation systems.

3.3 Balanced impact evaluation models

There are three different methods for the social impact evaluation (Grieco *et al.*, 2013; Zamagni *et al.*, 2015); according to Clark *et al.* (2004), the methods can be grouped as follow:

1. "Process Methods". It measures the efficiency and efficacy of the outputs. It is influenced by the organization's understanding of its own operational processes and its cultural willingness to embrace the value of accountability and to practice performance assessment;
2. "Impact Methods". It is a tool that relate outputs and outcomes;
3. "Monetization Methods" monetize outcomes or impact by assigning a currency value to them.

Indicators differ in the methods, in organizational costs and in the business nature for the primary application. Most of indicators have been suited for nonprofit organizations (Clark *et al.*, 2004; Zamagni *et al.*, 2015; Grieco and Iasevoli, 2015). Among the mostly known indicators there are the Theories of Change that focuses on the "Process", the Balanced Scorecard (BSc) focuses on the "Process" and in part on the "Impact" and the Social Return on Investment (SROI) that focus on the "Impact" and "Monetization".

Moreover, for each indicator there are different purpose to assess, such as the screening, the partnership formation, the management operation, the scaling operation, the external reporting, the exit and the retrospective evaluation (Clark *et al.*,2004; Grieco *et al.*, 2013; Grieco and Iasevoli, 2015). Considering the scaling operation, the most effective is the Balanced Scorecard (BSC).

According to Weber, Kröger and Lambrich (2015, in EU-OECD, 2016), "scaling social impact is a big challenge for all the entities - public agencies, networks of social enterprises, communities of practitioners and researchers - that are committed to supporting social enterprise development. In most cases, the value-creation chain of social enterprises differs significantly from that of conventional enterprises".

Most of the impact measurement tools can be divided in general or specific, basing on the number of spheres taken into consideration (Florman *et al.* (2016); however, but this can be a limited approach to measure the impact chain. Authors to this extend realized the "External Rate of Return - ERR" impact measurement platform which call to cover from the strictly business sphere to the society and environmental spheres, as valorized also within the impACT approach (Depedri, 2016). Florman (2016) ERR diagram articulate the impact evaluation in layers (distributed along a concentric circle system) related to diverse actors/stakeholders to whom refer the impact values.

Florman contribution can be related to two main dimensions, with reference to the present paper aims: the definition of a diversified and rich set of indicators per each layer; the confirm of

the opportunity - and value - of defining systems (and platform) integrating diverse indicators and layers (and, so, actors to whom the same impact is referred). As already reported, the need of defining models and system integrating different typologies and "levels" of impact indicators is also valorized within the impACT model (Depedri, 2016).

The set of indicators to measure results and impacts is a strategic tool to address the business pathway and the stakeholders' expectations because it shows off "which areas of performance in the organization are considered most important" (Epstein, Yuthas, 2014). As assumed by Santos *et al.* (2015), "social business hybrids attempt to combine the best of both worlds: create value for society in areas where markets and governments are failing, while developing financially sustainable operations that leverage commercial contracts and enable reaching scale".

The impact measurement issue can be, thus, analyzed considering the process of integration of the impact into the operational activities and the business orientation, output versus outcome. According to DCED (2016) there are different impact measurement approach such as:

1. "Rating systems as a predictor of impact": it considers the quantitative indicators to monitor all the policies and processes for the due diligence;
2. "Output measurement as a proxy for social impact": it considers the quantitative indicators strictly related to the output processes;
3. "Directly assessing social impact": it considers a range of quantitative and/or qualitative information to vary the analysis according to the levels of depth and the referred stakeholders;
4. "The assessment of social impact as part of doing businesses": it considers a range of quantitative and/or qualitative information which "encourage the integration of results measurement into the management decision-making" of the beneficiaries.

Tab. 2: Embeddedness and focus of impact measurement approaches

Impact measurement operational embeddedness			
	High	Rating systems as impact predictors	Social impact assessment as organic business dimension
	Low	Output measurement as a proxy of social impact	Measurement system directly assessing social impact
		Output oriented	*Outcome oriented*
		Measurement Focus/Orientation	

Source: Elaboration from DCED (2016)

All impact measurement systems have common strength and weakness points (Grieco *et al.*, 2013; Grieco and Iasevoli, 2015; Flormann *et al.*, 2016). The strength ones are "usability", "inclusiveness", "value demonstrating and enhancing", meanwhile the weakness points are "resource intensive", "subjective", "inaccessible" and "insufficiently transparent" (Florman *et al.*,2016, p.12-16). Impact evaluation general constrains mainly refer to the "level of research expertise", the "commitment to longitudinal study", and the "allocation of resources that are typically beyond the capabilities of implementing organizations" (Ebrahim, 2013; Grieco and Iasevoli, 2015).

Overcoming main constrains require all internal and external actors to make a long-term commitment to research and collaboration (Ebrahim, 2013). This statement also confirms that:

- impact measurement is an important issue that need to be fully understood, customized and "weighted" within the specific strategic and organizational context (Ebrahim, 2013) in order to specifically evaluate "where" and "how" the value is created, and which are the best indicators and models to support achievements;
- impact evaluation system requires "longitudinal" attention, resources and competences to be built within the SEs, together with a cultural change toward impact-evaluation-based individual

and organizational behaviors (that can leverage on the strong impact-based and purpose-oriented behaviors that already represent strong values in almost all SEs).

3.4 From balanced systems to process-led and integrated impact evaluation models and tools

"Simply repeating the mantra of measuring impact won't get us there" (Ebrahim, 2013; Grieco and Iasevoli, 2015). It is crucial to assume an approach valorizing:

- the full integration of the impact evaluation within SEs strategic, organizational and operative behaviors, rules and values (*customized model*);
- the balance among internal and external impact dimensions and actors (*balanced model*);
- the assumption of a process-driven approach that will "bring" SEs to an effective impact evaluation model dynamically aligned with internal and external dimensions. The process perspective drives allow to enhance "impact-driven" organizational behaviors, build "impact-related" managerial competences and models starting from the impact goal definition (together with the economic and financial performance ones), its monitoring and alignment, to its evaluation (and consequent goals re-definition) (*process-led model*).

The development of this approach is itself gradual. Basing on the DCED (2016) assumptions, four different stages can be analyzed with reference to the implementation of impact evaluation system. "These are:

1. Emergence - individual organizations are developing their own practices;
2. Consensus - best practices emerge and there is increasing alignment across organizations;
3. Standardization - standards for performance measurement and transparency increase traction;
4. Integration - standards become part of impact investing market's formal infrastructure.

As already stated, although with a different perspective, businesses - socially or market oriented - are open system thus does not make sense to evaluate their impact singularly intended". The critical analysis base on the evaluation of the impact value system. It is fundamental to analyze the impact in a systemic perspective to work on the actual scenario and get oriented to new futures (Hamel, 2012). In other words, as assumed by Edward de Bono "most of the mistakes in thinking are inadequacies of perception rather than mistakes of logic" (in Maon *et al.*,2008).

Less importance has been typically put to a more systematic and embedded approach into the organizational activities which can help to analyze and scale-up the impact in multi-levels and multi-actors' perspective; in other words, to focus on the "impact chain" (DCED, 2016) which is the most sustainable pathway because it considers an iterative and embedded process (Clark *et al.*,2004; Grieco *et al.*, 2013; Grieco and Iasevoli, 2015). This is even more crucial when considering that nowadays impact - and its measurement - is not perceived as relevant important issue from those actors whom operate in the Third Sector (Epstein, Yuthas, 2014). It is mostly taken as automatically assured by assuming purpose-driven behavior; in addition, operators typically strive to catch the opportunity to integrate different and disparate values (Trexler, 2008), and struggle whit the bureaucratic and operative issues.

On the contrary, assuming the proposed customized, integrated and process-led approach allow to sustain the value creation and the impact achievement supporting the individual and organizational behavior, starting from the same impact goals co-definition. Shifting the "impact evaluation" issue from the measurement stage (at the end) to the strategic planning phase (at the beginning) also allow a better communication and social marketing, including the attraction of additional investor resources.

Impact evaluation requires new tools, which can emphasize and "track" the positive loop generated and allow to focus on the overall iterative "impact chain" process (Clark *et al.*,2004; Ebrahim, 2013; Grieco *et al.*, 2013; Zamagni *et al.*, 2015; Grieco and Iasevoli, 2015; DCED, 2016). It consists in clearly identify business missions, accountability roles and the targets of the operative processes. Assuming this approach, traditional tools can be:

1) enriched and renewed consistently within a balanced and integrated system (also in terms of: internal/external actors expected; macro/micro level; and so on) that is also customized according to the SE institutional, environmental, strategic and managerial features. Consistently, tools have to be defined together with actors, responsibility as well as with the specific step of the value creation process, both for the internal and external dimension. Internal and external communication plays a very significant role within overall processes of value definition, creation and distribution. Focusing on the internal vs external perspective of the impact measurement and communication allows to highlight different "tool and actors" combinations. For example:
   - on the "external perspective", the integrated balance sheet can represent the main relevant tool to communicate to main targets (including the internal resources) as well as to wider stakeholders groups the value creation and distribution processes and the impacts realized (DCEC, 2006);
   - on the "internal perspective", the Balanced Scorecard (BSC) definition represent a very relevant tool to promote and valorize the internal "value-chain processes", stimulating and guiding SEs internal actors in sharing and defining purposes, goals, actions and responsibilities.
2) integrated with models and tools referred to the different stages of the strategic and managerial processes, starting from the CANVAS (as in DCED, 2016) and the traditional planning, control and evaluation models, as also applied to not-profit (among the others, Anthony, Young, 2002; Matacena, 2007, 2017), including the Deming's PDCA cycle, that has been extensively used as base level to define and deploy strategic, managerial and operative planning and control systems.

4. Conclusion

Impact evaluation represent a strategic issue to valorize business strategies contributing to individual and collective sustainable wellbeing as well as social innovation. This is true for all companies (also on a CSR perspective) and, especially, for SEs.

SEs are intrinsically interested in impact evaluation but are often far away from them, struggling with the daily operational activities, the "lack of commonly defined performance metrics to assess both organizations and capital returns" (Bonini and Emerson, 2005) as well as with the lack (in Italy until the recent reform) of a clear and organic regulation frame. This situation also - but not completely - explain why many SEs have been assuming merely compliant behaviors in social reporting. Moreover, in defining impact - and its measurement and reporting -SEs tend to focus on the operational level (social reports describing activities and not impacts). This approach, moreover, might mislead SEs to correctly perceive the opportunities and threats coming from the external environment, and to the alternative pathways being run out into the internal processes (Anheier, 2005). On the contrary, SEs need to understand the managerial approaches to catch opportunities, to match the social and the economic dimensions, and, to attract and address the investor resources to generate impact.

Although many contributions exist, and practices are emerging, there is a significant gap between theory and practice on "impact" models. Competences, models and tools supporting SEs along the overall (social and economic) value creation process is needed.

The paper aims to develop a literature-based framework useful to contribute to the definition of a comprehensive impact evaluation model allowing the SEs in implementing customized, integrated and process-led systems (and tools). This, in turn, support the "social" accounting and reporting transparency and accountability and enhance the implementation of business strategies impacting on social well-being in a sustainable way.

The present paper leverages on existing contributions to contribute to the definition of a process-led and integrated SEs managerial systems, able to plan, monitor and evaluate the impact of

the business action. This integration allows:

- to valorize the relevant contributions and evidences not only on the static "measurement" perspective but, also, on the overall SEs required managerial processes, sustaining the implementation of business strategies improving social innovation. Moreover, this level is intended to valorize the interconnections between macro and micro impact levels;
- to highlight the importance of integrating the "impact evaluation" issue within the overall strategic and organizational value creation processes. Assuming a process-led perspective allows to re-think the managerial competences and model needs along the overall strategic processes, from organizational identity definition to the social reporting. This approach:
  - enhances the organic integration of social orientation (and evaluation) along the overall managerial and organization behavior;
  - avoids that "social reporting" represent a merely formal commitment, due by (social and regulatory) norms, describing activities - and not impacts - and/or not fully representing SE' identity, culture, value and impact (expected and realized).

Contributions and evidences on social impact evaluation models and tools, coupled with the ones deepening SEs features, allow the draft the main conceptual and operative frame underpinning the definition of an organic SEs' impact evaluation approach. More specifically, the analysis proposed in the paper has aimed to enhance the assumption of a "process-led, customized and balanced" SEs impact evaluation approach, widening the focus from quantitative impact indicators approach to an overall strategic and managerial process perspective. This approach (as well as the dimensions and the tools proposed for each step of the impact evaluation process) is being defined and validated within a wide empirical research, encompassing focus group, structured interviews and semi-structured questionnaires, involving many and differentiated actors at the overall national level.

References

ANHEIER H.K. (2005), *Nonprofit Organizations. Theory, management, policy*, Routledge, Abingdon.

ANTHONY R., YOUNG D. (2002), *Management Control In Nonprofit Organizations*, McGraw-Hill/Irwin, Boston.

AUSTIN J., STEVENSON H., WEI-SKILLERN J. (2012), "Social and commercial entrepreneurship: same, different, or both?", *R.Adm.*, vol. 47, n.3, pp. 370-384.

BAGLIONI S., CALO F. (2018), "Governance and Social Enterprise", in Farazmand A., *Springer Global Encyclopedia of Public Administration, Public Policy, and Governance*, Springer, Cham.

BONINI S., EMERSON J. (2005), "Maximizing Blended Value - Building Beyond the Blended Value Map to Sustainable Investing, Philanthropy and Organizations", www.blendedvalue.org.

BORZAGA C., DEFOURNY J. (2001), *L'impresa sociale in prospettiva europea. Diffusione, evoluzione, caratteristiche e interpretazioni teoriche*, Edizioni31, Trento.

BROWN A., SCHULTZ D., BACCARANI C., GOLINELLI G.M., GATTI C., VOLPE L. (2015), "Sustainability, Stakeholders and Business", *Sinergie Italian Journal of Management*, vol. 33, n. 96, pp. 9-15.

CLARK C., ROSENZWEIG W., LONG D., OLSEN S. (2004). "Double Bottom Line Project: assessing social impact in double bottom line ventures. Method catalog", January 2004, RISE project, http://www.riseproject.org/DBL_Methods_Catalog.pdf.

COLLIS D.J., MONTGOMERY C.A., INVERNIZZI G., MOLTENI M. (2012). *Corporate level strategy-generare valore condiviso nelle imprese multi business*, McGraw-Hill, Milan.

DAFT R.L., LEWIN A.Y. (1993), "Where are the theories for the "new" organizational forms? An editorial essay", *Organization Science*, vol. 4, n. 4, pp. i-vi.

DCED (2016), Results Measurement in Impact Investing: A preliminary review, October 2016, http://www.enterprise-development.org/wp-content/uploads/DCED-RM-in-Impact-Investing-Review.pdf.

DEEPHOUSE D.L. (1996), "Does isomorphism legitimate?", *Academy of Management Journal*, vol. 39, n. 4, pp. 1024-1039.

DEFOURNY J., DEVELTERE P. (1999), "The Social Economy: The Worldwide Making of a Third Sector", in Defourny J., Develtere P., Fonteneau B., *L'économie sociale au Nord et au Sud*, De Boeck, Bruxelles.

DEFOURNY J., NYSSENS M. (2012), "Conceptions of social enterprise in Europe: a comparative perspective with the United States", In Gidron B., Hasenfeld Y., *Social Enterprises. An Organizational Perspective*, Palgrave Macmillan, London.

DEPEDRI S. (2016), La valutazione dell'impatto sociale nel Terzo Settore. Il posizionamento di Euricse e il metodo ImpACT, EURICSE, Position Paper, http://www.euricse.eu/wp-content/uploads/2016/09/Position-Paper.pdf.

EBRAHIM A. (2013), "Let's Be Realistic About Measuring Impact", *Harward Business Review*, March 13th, 2013, https://hbr.org/2013/03/lets-be-realistic-about-measur.html.

EBRAHIM A., BATTILANA J., MAIR J. (2014), "The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations", *Research in Organizational Behavior*, vol. 34, pp. 81-100.

EISENHARDT K.M., MARTIN J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, vol. 21, n. 10/11, pp. 1105-1121.

EPSTEIN M.J., YUTHAS K. (2014), *Measuring and improving social impacts*, Berrett-Koehler, Oakland, California.

ESELA (2017), "Landmark Reform of the Third Sector in Italy", *European Social Enterprise Law Association*, September 28th, 2017, https://esela.eu/news/landmark-reform-third-sector-italy.

EUROPEAN COMMISSION, Directorate-General for Employment, Social Affairs and Inclusion (2016), "Social Enterprises and their eco-systems: developments in Europe", *Publications Office of the European Union*, Luxembourg, doi: 10.2767/823980.

EUROPEAN COMMISSION-OECD (2016), "Policy Brief on Scaling the Impact of Social Enterprises. Policies for social entrepreneurship", *Publications Office of the European Union*, Luxembourg, doi:10.2767/45737.

FERRARIS A., GRIECO C. (2015), "The role of the innovation catalyst in social innovation - an Italian case study", *Sinergie Italian Journal of Management*, vol. 33, n. 97, pp. 127-144.

FLORMAN M., KLINGLER-VIDRA R., FACADA M.J. (2016), "A critical evaluation of social impact assessment methodologies and a call to measure economic and social impact holistically through the External Rate of Return platform", *LSE Enterprise*, Working Paper n. 1602.

FREY M. (2006), "Etica d'impresa e sostenibilità: coinvolgimento e comunicazione con gli stakeholder", in Rusconi G., Dorigatti M., *Impresa e responsabilità sociale*, Franco Angeli, Milano, pp. 191-205.

GAWELL M. (2014), "Soci(et)al Entrepreneuship and different forms of social enterprise", in Lundstrom A., Zhou C., von Friedrichs Y., Sundin E., *Social Entrepreneurship*, Springer International Publishing, Switzerland.

GAZZETTA UFFICIALE (2016), Delega al Governo per la riforma del Terzo settore, dell'impresa sociale e per la disciplina del servizio civile universale, no. 106, June 6th, 2016, http://www.gazzettaufficiale.it/eli/id/2016/06/18/16G00118/sg.

GAZZETTA UFFICIALE (2017), Decreto Legislativo 3 luglio 2017, n. 112, Revisione della disciplina in materia di impresa sociale, a norma dell'articolo 2, comma 2, lettera c) della legge 6 giugno 2016, n. 106, July 3rd, 2017, http://www.gazzettaufficiale.it/eli/id/2017/07/19/17G00124/sg.

GECES (2014), "Proposed Approaches to Social Impact Measurement in European Commission legislation and in practice relating to: EuSEFs and the EaSI", June 2014, http://ec.europa.eu/internal_market/social_business/docs/expert-group/social_impact/140605-sub-group-report_en.pdf.

GRIECO C., IASEVOLI G. (2015), "Missione terzo settore", *Microfinanza*, vol. 10, anno 3, pp. 32-38.

GRIECO C., IASEVOLI G., MICHELINI L. (2013), "Impresa sociale e creazione di valore: una tassonomia dei modelli di misurazione dell'impatto sociale sul territorio", *Sinergie Italian Journal of Management*, vol. 91, may-august 2013, pp. 61-82.

HAMEL G. (2012), *25 strategie per tempi difficili. Ciò che va fatto oggi per vincere domani*, Rizzoli Etas, Milan.

HUMAN FOUNDATION (2016), "Nasce Social Impact Agenda per l'Italia", January 21st 2016, http://www.humanfoundation.it/ita/notizie/2016/159-nasce-social-impact-agenda-per-l%E2%80%99italia.html.

IPSOA (2017), "Terzo settore: tutte le novità della riforma", November 10th, 2017, http://www.ipsoa.it/documents/fisco/professioni/quotidiano/2017/11/11/terzo-settore-tutte-le-novita-della-riforma.

KERLIN J. (2013), "Defining Social Enterprise Across Different Contexts: A Conceptual Framework Based on Institutional Factors", *Nonprofit and Voluntary Sector Quarterly*, vol. 42, issue 1, pp. 84-108.

KOSTOVA T., ZAHEER S. (1999), "Organizational Legitimacy under Conditions of Complexity: The Case of the Multinational Enterprise", *The Academy of Management Review*, vol. 24, n. 1, pp. 64-81.

KUOSMANEN J. (2014), "Care Provision, Empowerment, and Market Forces: The Art of Establishing Legitimacy for Work Integration Social Enterprises (WISEs)", *Voluntas*, vol. 25, n. 1, pp. 248-269.

MAIR J., MARTI I. (2006), "Social entrepreneurship research: A source of explanation, prediction, and delight", *Journal of World Business*, vol. 41, n. 1, pp. 36-44.

MAON F., LINDGREEN A., SWAEN V. (2008), "Thinking of the organization as a system: the role of managerial perceptions in developing a CSR strategic agenda", *Systems Research and Behavioural Science*, vol. 25, n. 3, pp. 413-426.

MASSETTI B.L. (2008), "The Social Entrepreneurship Matrix as a "Tipping Point" for Economic Change", *E:CO Issue*, vol. 10, n. 3, pp. 1-8.

MATACENA A. (2007), "Accountability e social reporting nelle imprese sociali", *Rivista Impresa Sociale*, n. 1, pp. 13-39.

MATACENA A. (2017), *Le cooperative imprese "altere". Mission, governance e accountability*, FrancoAngeli, Milan.

MOULAERT F., AILENEI O. (2005), "Social Economy, Third Sector and Solidarity Relations: A Conceptual Synthesis from History to Present", *Urban Studies*, vol. 42, n. 11, pp. 2037-2053.

OECD (2010), Fostering Innovation to Address Social Challenges, http://www.oecd.org/sti/inno/47861327.pdf.

OECD/LEED (2018), "The Social Enterprise Sector: A Conceptual Framework", http://www.oecd.org/dataoecd/43/40/37753595.pdf, OECD, last verified April 2018.

PACHE A.C., SANTOS F. (2013), "Inside the hybrid organization: selective coupling as a response to competing institutional logics", *Academy of Management Journal*, vol. 56, n. 4, pp. 972-1001.

RAISIENE A.G., URMANAVICIENE A. (2017), "Mission drift in a hybrid organization: How can social business combine its dual goals?", *Ekonomski Vjesnik*, God. XXX, BR. 2/2017, pp. 301-310.

RAMUS T., VACCARO A., BRUSONI S. (2016), "Institutional Complexity in Turbulent Times: Formalization, Collaboration, and the Emergence of Blended Logics", *Academy of Management Journal*, vol. 60, n. 4, pp. 1253-1284;

ROMAN-CALDERON J., FRANCO-RUIZ C., BATTISTELLI A., ODOARDI C. (2018), "European Social Enterprises, Still an Epitome of Benevolent Enterprises? The Employees' Perspective", *Journal of Social Entrepreneurship*, vol. 9, n. 2, pp. 169-179.

SANTOS F., PACHE A.C., BIRKHOLZ C. (2015), "Making hybrids work: aligning business models and organizational design for social enterprises", *California Management Review*, vol. 57, n. 3, pp. 36-58.

SESBA (2017), Research Report about the status and reinforcement of social entrepreneurship in Europe, Erasmus+ funded project, http://sesbaproject.eu/it/.

SIIT - SOCIAL IMPACT INVESTMENT TASKFORCE (2014), Measuring impact, September 2014, http://www.socialimpactinvestment.org/reports/Measuring%20Impact%20WG%20paper%20FINAL.pdf.

SUCHMAN M.C. (1995), "Managing Legitimacy: Strategic and Institutional Approaches", *The Academy of Management Review*, vol. 20, n. 3, pp. 571-610.

TREXLER J. (2008), "Social Entrepreneurship as an Algorithm: Is Social Enterprise Sustainable?", *E:CO Issue*, vol. 10, n. 3, pp. 65-85.

TURBAN E., STRAUSS J., LAI L. (2016), "The Social Enterprise: From Recruiting to Problem Solving and Collaboration", in Turban E., Strauss J., Lai L., *Social Commerce. Marketing, Technology and Management*, Springer International Publishing, Switzerland.

UNIONCAMERE (2009), *Imprese, occupazione e valore aggiunto delle cooperative in Italia*, Le giornate dell'economia cooperativa, Rome.

VENTURI P., ZANDONAI F. (2012), *L'impresa sociale in Italia. Pluralità dei modelli e contributo alla ripresa*. *Rapporto Iris Network*, Altreconomia, Milan.

ZAHRA S.A., GEDAJLOVIC E., NEUBAUM D.O., SHULMAN J.M. (2009), "A typology of social entrepreneurs: Motives, search processes and ethical challenges", *Journal of Business Venturing*, vol. 24, n. 5, pp. 519-532.

ZAMAGNI S., VENTURI P., RAGO S. (2015), "Valutare l'impatto sociale. La questione della misurazione nelle imprese sociali", *Rivista Impresa Sociale*, n. 6.

Websites

GLOBAL SOCIAL IMPACT INVESTMENT STEERING GROUP (GSG), last verified February 2018, http://www.socialimpactinvestment.org/.

IISD, Sustainable Development, last verified February 2018, http://www.iisd.org/topic/sustainable-development.

ISTAT-CNEL (2013. 2014. 2015. 2016. 2017), Rapporto BES, last verified February 2018, https://www.istat.it/it/archivio/rapporto+bes.

ITALIA NON-PROFIT (2017), last verified February 2018, https://italianonprofit.it/.

NON PROFIT NETWORK (2017), last verified February 2018, http://www.volontariatotrentin.it/.

TRACK - COMPETITION AND COLLABORATION IN BUSINESS

Collaboration types and performance of firms: insights on consumer innovation
BEATRICE ORLANDO, ALESSANDRO DE NISCO, GIUSEPPE SANCETTA

Identifying and assessing the breadth of open innovation practices: the impact on innovation performance
GABRIELE SANTORO, ALBERTO FERRARIS, STEFANO BRESCIANI

Collaborative innovation types and performance of firms: insights on consumer innovation

BEATRICE ORLANDO[*] ALESSANDRO DE NISCO[•] GIUSEPPE SANCETTA[♠]

Abstract

Objectives. *Current study aims to understand the dynamics of collaborative innovation between firm and clients. Our research questions are: what is the most valuable collaboration type? How does it impact innovative performance of firms?*

Methodology. *As for the methodology and consistently with explorative aim of the study, we use one-way Anova to test validity of our hypotheses. Then, we measure correlations among variables.*

Findings. *Findings largely confirm model hypotheses. We identify five different patterns of collaboration. At large, firms for which collaboration is the most valuable method have better innovative performance than others and they also tend to search for collaborations broadly. Firms adopt collaboration with clients to co-design the meaning of incremental innovation.*

Research limits. *The explorative intent led us too choose a general statistic method, although more robust and sophisticated tests are necessary to achieve a clearer knowledge on the phenomenon.*

Practical implications. *The study suggests that firms should be more externally oriented to achieve radical innovation. Precisely, collaboration with both clients and suppliers is the most valuable method.*

Originality of the study. *As far as we can see, none of prior studies distinguishes the impact of specific collaborations on either the different dimensions of innovative performance of firms or value co-creation.*

Key words: *user innovation; open and collaborative innovation; innovative performance; customer innovation; value co-creation; design-driven innovation.*

[*] Professor on term of *Strategies for Business Growth* - Sapienza University of Rome
e-mail: beatrice.orlando@uniroma1.it

[•] Full Professor of *Management* - Unint - Rome
e-mail: alessandro.denisco@unint.eu

[♠] Full Professor of *Management* - Sapienza University of Rome
e-mail: giuseppe.sancetta@uniroma1.it

1. Introduction

Tautological as it may seems, even the conception of innovation reflects the zeitgeist of times. Though, and that is the curious fact, not so many authors pay sufficient attention to explaining how does the essence of innovation paradigm in use reflects the societal weltanschauung and what are the very core implications for developing and marketing innovations.

The term weltanschauung was firstly and metaphorically used by the philosopher Immanuel Kant (1790) to signify an individual imagine of the world in a specific stage of his/her knowledge. Lately, Weber *et al.* (1904, 1905) used the term to identify a sort of intuition that people have of the world, or, more precisely, their idealistic representation of it. Also, the term was frequently used by the psychologist Jung throughout his work: he anchors the individual weltanschauung to an external objectified knowledge. In this work, we originally consider the concept of societal weltanschauung as the collective representation of the world in a given time range. It is the result of the prominent culture of a vast community and it manifests itself as a sort of objectified truth. It spurs from and is the synthesis of a mix of factors, from economy to technology. More in detail, it can be portrayed as a collective knowledge, which serves as the reference point for the individual. Such knowledge is embedded in artifacts, embodied in individuals and drives their emotions. The goals of firms is to intercept and anticipate time by time the societal weltanschauung, thus structuring their offer accordingly. That is precisely the ultimate aim of innovation, indeed. As a further detail, this knowledge has a bridging function between the individual and the society. One individual trusts the societal weltanschauung almost uncritically and this condition determines his/her expectations and needs. As for that, prospect innovations are expected to be in line with this collective orientation. They must reflect the times, not only in technological terms. According to this conjecture, the economic paradigm in charge both reflects and influences in its turn the current societal weltanschauung. Current work finds its very rationale in the concept of societal weltanschauung.

To make a clear example of how the societal weltanschauung and the economic paradigm are mutually connected, theoretical formulation by Schumpeter (1942) assumes that innovation is undertaken almost exclusively by producers. Many years later, von Hippel (1998) brilliantly found out that users - rather than suppliers - are the actual designers of the goods. Lately, Chesbrough (2003a and 2003b) noticed that a change in paradigm had occurred at firm level, which implications relate to openness of the firm toward external and modes of developing innovation.

What has changed in sixty years between Schumpeter and Chesbrough is the logic of inclusion: with Information and Communication Technology (ICT) people actively participate of business, politics, society, economics, and, most of all, to the formation of a collective knowledge (e.g. let us think about the case of Wikipedia). This trend has now been taken to the extreme, as we can witness in everyday social media. Paradoxically, the culture of inclusiveness, social media presence and instant sharing is culminated in an extreme individualism, or, better to say, in the struggle between individualism and collectivism: "Does the individual's life belong to him-or does it belong to the group, the community, society, or the state?" (Biddle, 2012, p. 1). In a society of stranded certainties, modern economists so far centered their theories on the concept of self-realization through models such as the popular one of utility maximization. Yet, they do not consider how this maximization is affected by herd belief. One of the great thinker of the last century, Nietzsche (1882) foretold that the modern era could have brought a preference for herd mentality, which one can escape only through searching for authenticity. Recent empirical studies (Varnum *et al.*, 2010, Grossmann and Varnum, 2015, Santos *et al*., 2017) investigating the markers of individualism - mostly consumptions and other behavior in search for uniqueness - found evidence that individualism has been rising steadily for more than a century. Though, only one out of six tested cultural psychological theories predicts such shift toward uniqueness in individual preferences (Varnum and Grossman, 2017). The implication of aforementioned conjectures is huge for strategy scholars. The diktat of today societal weltanschauung can be expressed as the search for uniqueness as a means for authenticity, which is caused by the struggle between individualism and collectivism. At a practical level, this societal momentum can be translated in the search for innovation that are

costumers designed, where the customer is allowed to determine the quantum of uniqueness he/she desire for him/herself in novel products. At a business level, this drastically affects the value-proposition of the company and, obviously, its performance: the product life-cycle is shrunk continuously, as much as the time-to-market.

Combining such conditions with the customers' need for uniqueness, it turns out that the new economic paradigm is centered on collaborative innovation indeed, but its roots also go way far more in-depth: the need for co-designing the novelty meaning attains the self-realization in terms of uniqueness. Despite a myriad of contributions have proliferated in the field of open innovation, value-co-creation and other related topics, none of them focuses on how collaborative innovation with customers in the design phase reflects and impacts the economic paradigm as the result of current societal weltanschauung. The design phase, by definition, involves to draw ex ante the new meaning of the good. In current study, the new meaning is influenced by societal weltanschauung, as we have labeled and described it.

Thus, our study go in-depth of open and collaborative innovation implications for innovative performance of firms by explaining how current paradigm is informed by today societal weltanschauung. Taking the cue from von Hippel (1998), we explain the economic and sociologic rationale for collaborative innovation with clients. Almost unprecedented, we also disentangle the impact of having different partners in open innovation on innovative performance.

Open innovation has surged to attention as a powerful means for overcoming firm's limitations when it has to develop a novelty. Roughly, it consists in employing external assistance to produce new knowledge and ideas and in supporting their marketing. What have added a huge lead to open innovation, is the rise and mass-diffusion of digital technologies, which are facilitators for collaboration and a vehicle for funneling the intake of knowledge. External subjects could have a wide array of motivations for siding with the firm in innovation development. But, what is the inherent motivation for clients? We argue the ultimate reason lies far beyond just having a customized good or filling a prior unmet need. Clients search for differentiated and identity-reflecting meanings in new goods. By consequence, one main kind of innovators in this sense are users, customers and collaborative communities, which are usually motivated by intrinsic considerations and are informally organized (Boudreau and Lakhani, 2013).

Despite the extreme relevance of the topic, apparently previous literature have scantly investigated the impact of change in societal mindset onto collaborative innovation strategy. Moreover, there is a poor understanding of the dynamics of collaboration choices. Current paper is aimed to tackle these gaps. We propose a customer-centric model for collaborative innovation, which ultimately affects the way the openness is set. The model is tested on a large-scale sample of innovative European firms.

For the remainder, the paper is structured as follows: section 2 synthesizes main literature antecedent, section 3 presents the model, section 4 describes the empirical analysis. Finally, section 5 is left for authors' concluding remarks.

2. Collaborative and open innovation studies

2.1 Genesis and characteristics of open innovation

Collaborative innovation refers to the co-development of an innovation leveraging on a commitment which is shared and distributed among different actors (Blomqvist and Levy, 2006; Ketchen, Ireland and Snow, 2007; Baldwin and Von Hippel, 2011; Davis and Eisenhardt, 2011). This collaborative mode is also renewed as open innovation (Chesbrough, 2006; Enkel, Gassmann and Chesbrough, 2009; Van de Vrande *et al.*, 2009; Dahlander and Gann, 2010; Gassmann *et al.*, 2010; Huizingh, 2011).

Following Chesbrough and Crowther (2006), companies leverage on external discoveries - inbound open innovation -, and external firms to commercialize their innovation - outbound open

innovation, or both of them - coupled open innovation. This way firms realize a Kuhnian anomaly "of having the benefits of the innovation accrue not to the firm that financed its development, but instead to other firms who were able to capture the benefits of the innovation". (Chesbrough and Crowther, 2006; p. 230). In a nutshell, open innovation allows to improve firm ambidexterity, which is a combination of either technology exploitation or exploration (Gibson and Birkinshaw, 2004; Van de Vrande *et al.*, 2009). Extant literature on open innovation is extremely copious. Most scholars praise open innovation (Bogers, 2011), others see it as "old wine in a new bottle" (Trott and Hartmann, 2009).

The concept of open innovation was firstly introduced by Chesbrough (2003b) and it refers to "the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively" (Chesbrough, 2006; p.1). For Lichtenthaler, "Open innovation is defined as systematically performing knowledge exploration, retention, and exploitation inside and outside an organization's boundaries throughout the innovation process". (Lichtenthaler, 2011; p. 11). It is also "the attitude of a firm of balancing in flow of knowledge and outflow of knowledge through the prevalence of inbound and outbound practices" (Mazzola *et al.*, 2015; p.109). There are those who glimpsed in the same words (open innovation) an establishment of ties of innovating firms with other organizations (Lichtenthaler 2008). Other authors focus on open innovation as the external inflow of knowledge (Vanhaverbeke and Van de Vrande, 2008; Lichtenthaler, 2011; Xia and Roper, 2016). Dahalander and Gann (2010) study the construct of openness in terms of knowledge flows. Similarly, Laursen and Salter (2006) consider individual firm's openness in terms of external search, so that the breadth and depth of the search determine openness. Consistently, other studies propose proxy measures for open innovation in relation to exploitation and exploration activities (Dogson *et al.*, 2006; van de Vrande *et al.*, 2009). Henkel (2006) interprets openness in light of the revealing behavior of the firm.

Previous reviews (Elmquist *et al.*, 2009) identify seven streams in open innovation researches: notion of open innovation, business model, organizational design and boundaries of the firm, leadership and culture, tools and technologies, intellectual property, industrial dynamics and manufacturing. Later review articles extend and update this categorization (Giannopoulou, *et al.*, 2010; Lichtenthaler, 2001; Schroll and Mild, 2012; Wikhamn and Wikhamn, 2013; West and Boger, 2014; Greco *et al.*, 2015; Schueffel and Vadana, 2015).

Most authors agree on the positive role of open innovation in technology scouting (Laursen and Salter, 2006). In fact, vertical technology collaboration are deemed as a tool to capture collaborative relationships with customers or suppliers (Baum, Calabrese and Silverman, 2000; Enkel *et al.*, 2005). Also, they are a driver for customer loyalty (Ozkan, 2015). Another stream of researches pay attention to motivations for adopting open innovation (Perkman and Walsh, 2007; Dittrich and Duysters, 2007; Chesbrough and Appleyard, 2007).

2.2 Types of collaborations in open innovation: collaborative innovation with clients- a hot topic under research radar?

Having clear what are the types of collaborative innovation and how they impact performance of firm is a relevant topic both for academia and for practitioners. Open innovation practices strongly impact innovation performance (Ebersberger *et al.*, 2012; Bengtsson *et al.*, 2015 Lassen and Laugen 2017). Though, what is the differential impact of each of them?

Previous findings shows that firms provided with information from market sources and from internal sources as well as firms involved in science-based collaboration for their product innovations are more likely to introduce new to the market innovations (Mention, 2011). Perkmann and Walsh (2007) address the impact of university-industry relationship, by arguing that this is the most valuable method in open innovation. Similarly, other scholars propose that R&D collaborations with universities are likely to have the highest impact on product innovation, followed by R&D collaborations with suppliers, customers, and, finally, competitors (Un *et al.*, 2010). One of the main problem in extant studies on collaborative innovation with clients is that

they do not properly acknowledge its positive effect. By contrast, scholars argue that collaboration with customers do not appear to affect product innovation (Un *et al.*, 2010; Un and Asakawa, 2015). However, there is a main issue with such finding: it does not match with actual practices.

3. A framework for a customer designed meaning in collaborative innovation

This study proposes a new conceptual framework for collaborative innovation with customers. The main rationale underlying current work is the witnessing of a revolution in individual behaviors, which reflects the new societal weltanschauung, combined with the massive diffusion of digital technologies, such as platform, which allow to facilitate collaboration mechanisms. The individual is at the center of the universe, he/she beseeches and longs for out-of-the-box novelties, he/she worships individualism at its purest core. The firm cannot disregard this new wind when designing its innovations-to-be. Amidst other collaborations form, the one with customers seem to best reflect the sense of this cultural revolution. It occurs at the meaning-definition level. The span of firm creativity benefits from this button up approach. Yet, it remains a trade-off between creativity and innovation economics. A firm must also be prepared in strategy and business model to face such revolutionary challenges. Does this customer-centric approach is fitting for any innovation type? How does differences in collaboration types impact innovative performance of firms? What is the most valuable collaboration type? How actually is open a collaboration-with-clients strategy? That broad is the span of answers we aim to provide with our analysis. We argue that in a deconstructed and individualistic societal panorama, consumer choices are self-centered and mostly blind to undifferentiated meanings. In such a world, individual struggles to relate to global and uniform meanings, so that we are increasingly witnessing to a run-away of firms from offerings indistinct solutions. We hypothesize the firm might prefer a customer-designed-meaning approach to innovation. The reason lies behind the fact that collaboration with clients involves a greater creativity intake from outbound. As a result, firms favor client design-collaboration in open innovation over other forms. At a managerial level, implications are related to the evidence of the rising need for flexible business models and open strategies. Thus, we advance theory by proposing a collaboration-differentiated insight on openness of firms. To the core, innovation occurs as a bundle of meanings which are definition-shared with the client.

Thus, the main model assumption is that collaboration with clients entails a medium/high degree of firm's openness. Consistently with above premises, we formulate the following hypotheses:

- Hp.1: collaboration with clients/customers is positively related to innovative performance;
- Hp.2: collaboration with clients/customers is positively related to incremental innovation, negatively to radical innovation;
- Hp.3: collaboration with clients/customers is positively related to marketing innovation
- Hp.4: collaboration with clients/customers is positively related to meaning-design of goods.

To the end of explaining how current model innovates extant theory, the following table reports some of the main empirical findings of prior studies.

Tab. 1: Main findings of prior studies on effectiveness of collaborative innovation with customers

Possible associations with current model hypotheses	Main studies	Findings
Hp.1	Laursen and Salter 2006 Von Hippel 1988	"firms' innovation activities are strongly determined by relations between themselves and their suppliers and customers."
Hp.2	Tsai 2009 Tödtling, Lehner and Kaufmann 2009	Partnership with customers have no influence on radicalness of the innovation
Hp.3	Sawhney, Verona and Prandelli 2005	Collaborative innovation with customers via digital platforms facilitate product innovation and customer engegement
Hp.4	Sawhney, Prandelli and Verona 2003	Virtual customers community can support mass customization and other marketing initiatives by becoming co-designers of products and services

Source: our elaboration

Although late scholars were concerned with similar research wonderings, their findings are far from being conclusive. Moreover, none of them have empirically tested the relationship between collaborative innovation with customers in the design phase and innovative performance.

Accordingly, the hypothesis 4 stands out as the original one. To synthesize, the main elements of our model are the followings:

1. type and existence of the collaborative innovation partnership (with private or public customers, with suppliers, with competitors, with firms within the enterprise group);
2. perception of managers with regard to how much is valuable each collaboration form;
3. innovative performance of the firm (radicalness, type of innovation -product, service, process, marketing, organizational -, firm's engagement to innovativeness - continuous or discontinuous R&D activities, external innovation adoption, early stage of the innovation diffusion, open versus closed innovation).
4. collaboration in the sphere of meaning design.

Yet, we also assume that co-designing the meaning of innovation with clients (as instance the aesthetics or the packaging) entails customization. Customization is a tool for meeting the need for uniqueness of clients. In sum, a novel artifact is a means for accomplishing the individual self-realization. This way, collaborative innovation with clients becomes more than merely a business fact. This form of collaboration is logically and inherently linked with the current societal weltanschauung, since it reflects the rising of individualism in society. Such individualism is allowed by current status of technology and by firms' increasing favor toward open innovation.

In a broader sense, the intensification of collaboration with clients in the depth dimension of openness can be deemed as a milestone in the transition toward the next economic paradigm. Today collaboration with clients occurs with means, modes, and intents that are drastically different from those in the past decades. Any client gives for granted that he/she will be deeply involved in the design phase of the innovation process. He/she might not always have the technical competences required for the action, nonetheless he/she expects to rule over the process output. Any different firm's behavior is out-of-date and it will turn out in a total draw-back. One important consequence is that all the other collaboration forms are subordinated, they only serve to realize the customer's designed output. Consistently, this collaboration form has the hugest impact on firm's innovative performance over others. In this sense, it is possible to deem the hypothesis 4 as a clue of the change in the economic paradigm.

The portrayed framework is tested on a large-scale sample of European firms. On the practical side, this model is a trailblazer for the definition of a more customer-sounding business model and for innovation-design approach.

4. The empirical investigation

4.1 Sample

The sample was collected in, 2014 and updated over-time constantly. Last update refers to January, 2017. Data were retrieved online, from Eurostat, and extracted from Community Innovation Survey (CIS). This survey is based on responses of individual industries. For all firms in the sample, innovation is the core activity: they are product and/or process innovative enterprises, regardless of organizational or marketing innovation (including enterprises with abandoned/suspended or on-going innovation activities). In total, the sample includes 403.855 European firms aggregated per Country-level. Firms are categorized by NACE rev.2 code and by size class. The dataset contains observations from a harmonized survey questionnaire, which was mailed or online distributed. Answer are mostly of two types: yes-or-no questions, degree of importance questions (high, medium, low, not relevant).

4.2 Method and variables

Consistently with the explorative intent of the study, we verify in the first stance that there are statistically significant differences between groups, as a means to reject the null hypothesis.

For this motive, first, we perform one-way Anova test; second, we measure the correlation among variables. Our measurement variable is the number of respondents aggregated per Country. Nominal variables are: collaboration with different types of partners, goods innovation and service innovation, market and governance, innovation activities types, organizational and marketing innovation, product and process innovation. Partners in collaborations are: other enterprises within the enterprise group, competitors or other enterprises of the same sector, clients or customers from the private sector, clients or customers from the public sector, suppliers of equipment, materials, components or software. Our dependent variable is collaboration and it can be measured at the interval level. To give a further clue on our operationalization of variables with regard to hypothesis 4, we analyze the relationship between the variable "enterprises that introduced significant changes to the aesthetic design or packaging" and collaboration with clients, both from the public and the private sector. More in detail, the analysis were conducted alternatively considering either the number of firms implementing this collaborations type or the number of those which deem such collaboration as extremely valuable. This kind of operationalization is fitting with the need of corroboration of the hypothesis 4. At large, a similar process was adopted to corroborate all other hypotheses. For more details on corroboration of constructs see all later tables.

Yet, we consider all other nominal variables as proxies for innovative performance, which is our independent variable and consists of 31 categories. For more details on such categories see the labels reported in tables of section 4.3. Observations are independent, there are no significant outliers, there is homogeneity of variances and dependent variable is approximately normally distributed for each category of the independent variable (Box and Cox, 1964; Ramsey, 1969; Lunney, 1970; Mood, 2010; Snijders, 2011).

We group firms in the sample into two different clusters: firms having external collaboration; firms for which collaboration is the most valuable method. Cluster-grouping increases significance of results. Firms included in the first cluster are those which deem collaboration as the most valuable method. Differently, the second cluster includes firms which generally implement some form of collaborative innovation.

For each and every set we perform one-way Anova test and we measure correlations. This distinction allows to obtain more significant and more precise results. The analysis is cross-sectional, coherently with the aim of exploring the existence and magnitude of relationships between our dependent variable (collaboration with clients) and the set of aforementioned independent variables. To keep tables lean and convey findings, we include only essential correlations for the relationship between collaboration and innovative performance. Streamlined tables mostly display correlations which value is greater than 0,8.

4.3 Findings

Results of the Anova test for the first cluster allow to reject the null hypothesis (first type error) and accept the alternative hypothesis (second type error). The means appears significantly heterogeneous (one-way Anova, $F_{35,1080}$ = 3,891433347, P= 6,94756E-13). Precisely, we have $F_{35,1080}$ = > F_{sig} = 1,433958471, with a probability of being obtained, starting from homogeneous groups, P= 6,94756E-13 (with a= 0,05). Results of one-way Anova for the first set are reported in table 2.

Tab. 2: One-way Anova- cluster n. 1 (□ = 0,05)

Origin of variation	*Sum of squares*	*Degrees of freedom*	*Mean square*	*F*	*P*	*F sig.*
Among groups	1799620247	35	51417721,34	3,891433	6,94756E-13	1,433958
Within groups	14270098981	1080	13213054,61			
Total	16069719228	1115				

Source: our elaboration

Similarly, results of the Anova test for the second set allow to reject the null hypothesis (first type error) and accept the alternative hypothesis (second type error). The means appears significantly heterogeneous (one-way Anova, $F_{35,\ 1080}$= 3,19448106, P= 2,25907E-09). Precisely, we have $F_{35,\ 1080}$= 3,19448106> F_{sig} = 1,433958471, with a probability of being obtained, starting from homogeneous groups, P= 2,25907E-09 (with a= 0,05). Results of one-way Anova for the second set are reported in table 3.

Tab. 3: One-way Anova- cluster n. 2 (□ = 0,05)

Origin of variation	*Sum of squares*	*Degrees of freedom*	*Mean square*	*F*	*P*	*F sig.*
Among groups	1542546118	35	44072746,22	3,19448106	2,25907E-09	1,433958
Within groups	14900249846	1080	13796527,63			
Total	16442795963	1115				

Source: our elaboration

The size of the sample is large enough, so that observations within each group are approximately normally-distributed (Box and Cox, 1964; Ramsey, 1969; Lunney, 1970; Mood, 2010; Snijders, 2011). As for this reasons, we can conclude the possibility the null hypothesis (Ho) is true can be rejected in both cases.

Afterwards, we have measured correlations among variables for each of the two sets. The aim is to understand how much each pair of variables are close to have a linear relationship with each other. Results of correlation statistics are reported in table 4 and 5.

Tab. 4: Main correlations among variables - cluster n. 1

	Enterprises for which cooperation with other enterprises within the enterprise group is the most valuable method	Enterprises for which cooperation with competitors or other enterprises of the same sector is the most valuable method	Enterprises for which cooperation with clients or customers from the private sector is the most valuable method	Enterprises for which cooperation with clients or customers from the public sector is the most valuable method	Enterprises for which cooperation with suppliers of equipment, materials, components or software is the most valuable method
Enterprises for which cooperation with clients or customers from the public sector is the most valuable method	0,783276879	0,5475	0,8586	1	
Enterprises for which cooperation with suppliers of equipment, materials, components or software is the most valuable method	0,866939517	0,913489	0,845648	0,70155	1
Enterprises that developed goods innovation	0,671875493	0,737864	0,846772	0,833235	0,799031

Enterprises that developed service innovation	0,716109505	0,733327	0,878868	0,867784	0,814914
Enterprises, engaged continuously in in-house R&D activities	0,755538169	0,693347	0,90786	0,886251	0,80689
Enterprises, engaged occasionally in in-house R&D activities	0,791879715	0,746619	0,895409	0,848208	0,861313
Enterprises, engaged in acquisition of machinery, equipment and software	0,584106974	0,809982	0,369067	0,200137	0,759466
Enterprises, engaged in market introduction of innovations	0,701159578	0,80944	0,426193	0,276634	0,795735
Enterprises, engaged in external R&D activities	0,818006094	0,669879	0,917633	0,865442	0,81914
Enterprises, engaged in in-house R&D activities	0,774733547	0,715002	0,912046	0,884447	0,829678
Enterprises that introduced significant changes to the aesthetic design or packaging	0,632094877	0,696384	0,827772	0,847593	0,748017
Enterprises that introduced new methods for product placement	0,572994464	0,551242	0,851309	0,881549	0,650466
Enterprises that introduced new media or techniques for product promotion	0,680853379	0,739947	0,856428	0,843609	0,80092
Enterprises that introduced new methods of pricing goods or services	0,662111357	0,700959	0,835013	0,843544	0,763584
Enterprises that introduced new business practices for organising procedures	0,730814021	0,712149	0,877242	0,893428	0,795843
Enterprises that introduced new methods of organising external relations	0,69863913	0,664856	0,870913	0,897206	0,75693
Enterprises that introduced new methods of organising work responsibilities and decision making	0,740033724	0,746645	0,863461	0,876743	0,81774
Enterprises that have introduced new or significantly improved products that were only new to the firm	0,57330532	0,581262	0,78594	0,818999	0,651464
Enterprises that have introduced new or significantly improved products that were new to the market	0,713609401	0,795639	0,762424	0,719412	0,827687

Source: our elaboration

Tab. 5: Main correlations among variables - cluster n. 2

	Enterprises co-operating with other enterprises within the enterprise group	Enterprises co-operating with competitors or other enterprises of the same sector	Enterprises co-operating with clients or customers from the private sector	Enterprises co-operating with clients or customers from the public sector	Enterprises co-operating with suppliers of equipment, materials, components or software
Enterprises co-operating with competitors or other enterprises of the same sector	0,957839	1			
Enterprises co-operating with clients or customers from the private sector	0,963787	0,977224	1		
Enterprises co-operating with clients or customers from the public sector	0,941148	0,95698	0,98584	1	
Enterprises co-operating with suppliers of equipment, materials, components or software	0,980901	0,982152	0,969005	0,937538	1

Source: our elaboration

In a nutshell, findings for the first cluster are the followings:

a) firms for which collaboration with clients/customers from the private sector is the most valuable method also consider likewise valuable collaborations with clients/customers from the public sector.
b) firms for which cooperation with suppliers of equipment, materials, components or software is the most valuable method also consider likewise valuable collaborations with other enterprises within the enterprise group, with competitors or other enterprises of the same sector, with clients/customers from the private sector,
c) for firms that developed goods innovation, collaborations with both private and public clients/customers are the most valuable methods;
d) for firms that developed service innovations, collaborations either with clients/customer or suppliers are the most valuable methods;
e) for firms engaged either continuously or occasionally in in-house R&D, collaborations with clients/customer and suppliers are the most valuable methods;
f) for firms engaged in acquisition of machinery, equipment and software, collaborations with competitors or other enterprises of the same sector are the most valuable methods;
g) for firms engaged in market introduction of innovations, collaboration with competitors or other enterprises of the same sector are the most valuable methods;
h) for firms engaged in external R&D activities, collaborations with other enterprises within the enterprise group, with clients/customers from the private/public sector, and with suppliers are the most valuable methods;
i) for firms engaged in internal R&D activities, collaborations with clients/customers from the private/public sector and with suppliers are the most valuable methods;
j) for firms that introduced significant changes to the aesthetic design or packaging, that introduced new methods for product placement or that introduced new methods of pricing goods or services, collaborations with clients/customers from the private/public sector is the most valuable method;
k) for firms that introduced new media or techniques for product promotion, collaborations with clients/customers from the private/public sector and with suppliers are the most valuable methods;

l) for firms that introduced new business practices for organizing procedures or that introduced new methods of organizing external relations, collaborations with clients/customers from the private/public sector is the most valuable method;
m) for firms that introduced new methods of organizing work responsibilities and decision making, collaborations with clients/customers from the private/public sector and with suppliers are the most valuable methods;
n) for firms that that have introduced new or significantly improved products that were only new to the firm, collaborations with clients/customers from the public sector is the most valuable method.
o) for firms that have introduced new or significantly improved products that were new to the market, collaborations with suppliers is the most valuable method.

Differently, for the second group the most significant findings are the followings:

a) firms collaborating with competitors or other enterprises of the same sector tend to collaborate also with other enterprises within the enterprise group;
b) firms collaborating with clients/customers from the private sector tend to collaborate also with other enterprises within the enterprise group and with competitors or other enterprises of the same sector;
c) firms collaborating with clients/customers from the public sector tend to collaborate also with other enterprises within the enterprise group, with competitors or other enterprises of the same sector and with clients/customers from the private sector;
d) firms collaborating with suppliers tend also to collaborate with all the other types of partners.

4.4 Discussion

A large body of empirical analyses suggests that each collaboration form might serve a different purpose (Belderbos *et al*., 2004). In their literature review paper, Greer and Lei (2012) argue there is a need for a greater understanding of the impact of collaborative innovation with clients on firm performance, because empirical results in this research domain are not homogeneous: much studies assumes net positive benefits from collaboration with customers, other reach opposing results. At large and so far, collaborative innovation with customers was mostly deemed as a partnership useful to reduce the risk associated with the market introduction of a novelty (von Hippel 1988), with a scarce or no impact at all on productivity growth and patenting (Belderbos *et al*., 2004, Tödtling *et al*., 2009): "there is no evidence in our analysis that these efforts are effective in improving firms' performance in bringing novel products to the market." (Belderbos *et al*., 2004, p. 11). Apparently, the research domain is exclusively concerned with the impact of the collaborative innovation with customers on innovative performance of the firm.

Another stream of literature examines value co-creation and co-innovation in user-driven networks (Romero and Molina, 2011): "collaborative networks represent a promising paradigm together with customer communities to emphasis on core competencies, personalisation and innovation, supported by collaborative mechanisms. " (Romero and Molina, 2011, p. 1). The combination of collaborative networks and customer communities are aimed to co-produce a unique value proposition for each consumer (Romero and Molina, 2009) via the discussion contents in virtual communities (Romero and Molina, 2011). This second stream studies the customers' voluntarily sharing of ideas for the co-development of future innovations (Foray 2004, Esposito De Falco *et al.* 2017). This way customers become proper innovators, because they have been given tools to design and test their own novelty (Nambisan, 2002). This approach seems to be wiser, than instead trying hard to figure out what it will be the "on-the-next" customer's desire (Thomke and von Hippel, 2002). Generally speaking, the co-creation and co-innovation research domain leverages on the wisdom of crowds in open innovation communities (Romero and Molina, 2011), but it mostly limits its interest to both address what is "in" for each stakeholder and to dynamics of the process.

Also, Verganti (2008) defines the design-driven innovation as "the radical innovation of a product's meaning" (Verganti 2008, p. 4). Though, the author seems to be convinced that, rather than being user-centered (Verganti and Dell'era, 2009), the design of the meaning of an innovation "is therefore pushed by a firm's vision about possible breakthrough meanings and product languages that could emerge in the future" (Verganti, 2008, p. 5). Curiously, in the same paragraph the author also argues that "The socio-cultural context in which they (customers) are currently immersed make them inclined to interpretations that are in line with what is happening today. Radical changes in meanings instead ask for radical changes in socio-cultural models, and this is something that might be understood (and affected) only by looking at long-term phenomena with a broader perspective." (Verganti, 2008, p. 5), somewhat contradicting himself. By contrast, taking the cue exactly from this statement we propose an opposing interpretation. The reason is quite simple: we are witnessing a massive change is the current socio-cultural model, which we have labeled as societal weltanschauung. We point out that there are at least three main gaps in the broader field of study, whose extent is by far more reaching than usual: a) how we got here (to collaborative innovation with customers) in terms of profound motivations that go beyond the merely business convenience, b) what are the economic and paradigmatic implications for prospect societal trends, c) at which level this collaboration occurs and what are its effects. Current analysis attempts to tackles the underscored gaps.

Either the change was driven by the rising of digital technologies or by the mass diffusion of open innovation practices at business level, its effects are nonetheless emblematic at a paradigmatic level. Leveraging on concept of the ideal-types of Weberian reminiscence, today social weltanschauung is based on solving the struggle between the categories of individualism and collectivism: the former leads to a quest for a continuously evolving uniqueness, the latter solicits a need for social and group identity stronger than ever. Both result in the search for a continuous gale of innovation. In this pursuit, innovation becomes a transitional object (Verganti, 2008), and participation occurs as the massive and instant involvement of users in each and every social aspects, from politics to economics and innovation, mostly via digital platforms. In this sense, we argue collaborative innovation with customers is the clue of a paradigmatic change which is currently on-going.

First, we study the relationship between collaborative innovation with customers and innovative performance.

The interaction mechanism between collaborative innovation and innovative performance of firms is rather the complex phenomenon. Literature is unspecific, to say the list, on whether there is a differential contribution of collaboration forms to innovativeness or not. To overcome this limitation, we distinguish the actual existence of collaborative innovation between customers and firms from perceptions on how much this collaboration can be deemed as valuable. By grouping firms into two different clusters with obtain rather the fine-tuned results. In fact, findings provides a clear confirmation of our model hypotheses: collaborative innovation with customers has a positive impact on innovative performance indeed.

At large, correlation results are higher for the first than the second cluster. Most correlations in the second group are scarcely significant, with regard the mere impact of collaboration on innovative performance. Firms from the first cluster- firms for which collaboration is the most valuable method - generally have better innovative performance than the second cluster. Second cluster identifies general patterns of collaborative innovation. We can distinguish five different patterns of openness for innovative firms, as displayed in table 5:

Tab. 6: Openness and patterns of collaborative innovation

Intensity of collaboration	**Type of collaboration**
Basic	*Collaborations with firms within enterprise group*
Low	*Collaborations with firms within enterprise group and with competitors or other enterprises of the same sector*
Moderate	*Collaborations with customers from the private sector, with other enterprises within the enterprise group and with competitors or other enterprises of the same sector*
Medium	*Collaborations with customers from the public sector, with other enterprises within the enterprise group, with competitors or other enterprises of the same sector and with customers from the private sector*
High	*Collaborations with suppliers, with customers from the public sector, with other enterprises within the enterprise group, with competitors or other enterprises of the same sector and with customers from the private sector*

Source: our elaboration

Firms for which collaboration is the most valuable method tend to search for collaborations largely and to extend their span in depth and breadth. As far as openness increases, so does innovative performance.

Second, firms from the first cluster prefer to co-develop product innovation with clients. Differently, service innovation seems to require also collaboration with suppliers. This finding seems to largely confirm our main hypothesis, the hypothesis 4: firms co-design the meaning of products with their customers (e.g. aesthetics and packaging). The more complex and technology-intensive is the innovation, the broader is the span of collaboration required. Thereby, whether a firm does open innovation, closed innovation or both of them, we acknowledge the presence of a firm-client-supplier collaborative pattern. Also, this pattern occurs in either marketing or organizational innovation. Collaborative innovation with clients is rather frequent in innovative and open firms, especially when they search for marketing innovation. In fact, results confirm that firm collaborates with client when it is going to introduce significant changes to the aesthetic design or packaging, new methods for product placement or new pricing methods. Additionally, we find that the most probable outcome of collaboration with clients is incremental innovation. Differently, radical innovation often is co-designed with suppliers. One explanation for current results rely on the firm's need for meeting customers expectation. A little effort could improve financial performance brilliantly, whereas not following customers' guidelines could determine a void in innovation meaning that can be easily and timely covered by rivals. The negative consequence of clients discontent could be such that financial performances decrease sharply. The recent launch of the Iphone X by Apple is a practical example of what has been said. Also, collaboration with clients is deemed to be a funnel for gathering a reservoir of heterogeneous knowledge and a driver for creativity. Besides, collaboration with clients brings the further benefit that is almost costless. Though, as supported by current empirical analysis, rarely this way of gathering new knowledge leads to disruptive innovations. By contrast, it seems that it could produce more newness rather than ground-breaking novelties. Thereby, if the firm's intent is to disrupt the market, then it has to go for broader alliances at technology level. Nevertheless, the innovative meaning definition appears as ultimately left to customers' hands. Open innovation seems to have had open up to a new domain for meaning design in innovation. For far too long, clients' involvement was limited to feeds-back on the good or to marginal changes, mostly aimed to increase clients loyalty and engagement. Lately, the new open paradigm for innovation led the firm itself to be engaged with clients' more intimate desires to the point that this priceless source is directly deployed onto the forefront of innovation development. By harnessing and internalizing people creativity the firm's reach goes far beyond its borders. Collaborative innovation with clients is the future means for producing novelties which have the inherent characteristic of generating a differentiated meaning, and, thus value, per final user. The other interpretation of results goes far beyond the business horizon, since its meaning is attached to the cultural revolution occurring at societal level. We can definitely say that open innovation is becoming so much "normal" that is a rather expected organization's behavior.

The involvement of customers is no longer limited to lead users and early adopters, by contrast it embraces every user in the community willing to express his/her opinion. In other words, users can exercise a strong influence on organizations. The influence is such that their opinion ought to be taken into account at any costs. This condition, coupled with the massive diffusion of digital technologies, led firms to favor, for a vast array of reasons, the collaborative innovation with clients over all other forms (as confirmed by our findings). We find that the marker of uniqueness is designed (and, often, re-designed lately) at a meaning level, during the phase of the conceptualization of the product. We argue that this revolution is only driven for a small part by technology. By contrast, the main motivation is the new imperative societal weltanschauung. In a nutshell, it is not due to technological constraints, or profit motives, but to the cultural diktat. In this sense, the digital co-design of innovation meaning can be deemed as the new economic paradigm informing today society.

4.5 Limitations of the analysis

At large, cross-sectional studies have some main limitations. First, this type of investigation does not give any information on which is the cause and which one is the effect. Plus, there can be some confounding factors. The research question itself can bias results of the analysis, whereas longitudinal studies might help to reduce such type of biases. Since this cross-sectional study aggregates individual-level data, there can be some negative effects related to ecological fallacy and atomistic fallacy. As a consequence, a relationship that does not surface at group level may still exist at individual level. As the advantage, this study does not assume that the relationship is stable over-time.

4.6 Relevance and originality of the study: managerial and practical implications

This study fulfills the resounding literature gaps earlier underscore, by bringing such the advancements in the understanding of open innovation collaboration ends, impact and dynamics.

First, we propose a new ontological interpretation of the essence of collaborative innovation with clients, in terms of meaning co-development to serve the societal need for individualism.

Second, we study the epistemological dimension of collaborative innovation with clients. This way we answer to prior relevant calls for research in this field (West *et al.*, 2014; Bogers *et al.*, 2017). Furthermore, we find evidences that contrast with prior researches, which underestimate the effects of collaboration with clients (Un *et al.*, 2010). By contrast, our findings turn upside-down these results. Reliability of results is ensured by the size and characteristics of the sample. CIS survey was largely employed from prior scholars to study innovative performance of firms, openness and open innovation (Laursen and Salter, 2006; Mention, 2011; Ebersberger *et al.*, 2012). Additionally, the use of CIS data answers to the call for replicability of studies. At practical level, our study can be used as a beacon to enlightening how to set strategy openness, how this would impact performance, and as a means for choosing innovation partnerships optimally.

4.7 Suggestions for future investigations

Future scholar are called to perform more in-depth analyses on this topic. We not only refer to quantitative investigations. Qualitative methods, such as case study, could be of help when trying to catch the deep meaning and dynamics of collaborative innovation mechanisms and how they interplay with customer needs. Among future roadmaps for research, we identify the following questions:

- How does collaborative innovation with clients process up?
- Is there any sector where it is particularly valuable, more than elsewhere?
- What are technologies fostering collaboration with clients?

- Which is the theory -as instance contract theory, neo-institutional theory, organizational theory, etc. - that better frames collaboration with clients?
- Which are, in detail, the negative effect of developing an innovation regardless the need for differentiated meanings?

Such suggestions are just a small portion of the many future research domains this study opens up to. Perhaps, even a multi-disciplinary approach could be of help to explain this phenomenon.

5. Concluding remarks

The new societal culture is simultaneously selfish and selfless. It demands for high-tech solutions and for a continuous gale of innovations and renovation. From the verge, individualism has surged to the frontline of each and every decision. Effectiveness of firm innovation strategy cannot disregard the wind of change we are witnessing: a firm ought to satisfy the sense for selfish fulfillment of customers via a selfless collaborative approach. Though, collaborative innovations are an extremely complex phenomenon. Current analysis dig to light the relevance of collaboration with clients for innovative performance of firms.

We argue that the customer is the sovereign of the realm for meaning-definition. It is hard to forecast what the future modes of innovation and effects for intellectual properties will be. A huge scholars' effort and commitment is requested for portraying the next paradigmatic behavior in innovation.

References

BALDWIN C., VON HIPPEL E. (20011), "Modeling a paradigm shift: From producer innovation to user and open collaborative innovation", *Organization Science*, vol. 22, n. 6, pp. 1399-1417.

BAUM J.A., CALABRESE T., SILVERMAN B.S. (2000), "Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology", *Strategic Management Journal*, vol. 21, n. 3, pp. 267-294.

BELDERBOS R., CARREE M., LOKSHIN B. (2004), "Cooperative R&D and firm performance", *Research Policy*, vol. 33, n. 10, pp. 1477-1492.

BENGTSSON L., LAKEMOND N. , LAZZAROTTI V., MANZINI R., PELLEGRINI L., TELL F. (2015), "Open to a select few? Matching partners and knowledge content for open innovation performance", *Creativity and Innovation Management*, vol. 24, n. 1, pp. 72-86.

BIDDLE C. (2012), "Individualism vs. Collectivism: Our Future, Our Choice", *The Objective Standard*, vol. 7, n. 1.

BLOMQVIST K., LEVY J. (2006), "Collaboration capability-a focal concept in knowledge creation and collaborative innovation in networks", *International Journal of Management Concepts and Philosophy*, vol. 2, n. 1, pp. 31-48.

BOGERS M. (2011), "The open innovation paradox: knowledge sharing and protection in R&D collaborations", *European Journal of Innovation Management*, vol. 14, n. 1, pp. 93-117.

BOGERS M., ZOBEL A.K., AFUAH A., ALMIRALL E., BRUNSWICKER S., DAHLANDER L., HAGEDOORN J. (2017), "The open innovation research landscape: Established perspectives and emerging themes across different levels of analysis", *Industry and Innovation*, vol. 24, n. 1, pp. 8-40.

BOUDREAU K.J., LAKHANI K.R. (2013), "Using the crowd as an innovation partner", *Harvard Business Review*, vol. 91, n. 4, pp. 60-9.

BOX G.E., COX D.R. (1964), "An analysis of transformations", *Journal of the Royal Statistical Society. Series B (Methodological)*, vol. 26, n. 2, pp. 211-252.

CHESBROUGH H. (2003a), "The logic of open innovation: managing intellectual property", *California Management Review*, vol. 45, n. 3, pp. 33-58.

CHESBROUGH H., CROWTHER A.K. (2006), "Beyond high tech: early adopters of open innovation in other industries", *R&d Management*, vol. 36, n. 3, pp. 229-236.

CHESBROUGH H.W. (2003b), *Open Innovation*, Harvard Business School Press, Boston, MA.

CHESBROUGH H.W. (2006), *Open innovation: The new imperative for creating and profiting from technology*, Harvard Business Press, Boston.

CHESBROUGH H.W., APPLEYARD M.M. (2007), "Open innovation and strategy", *California Management Review*, vol. 50, n. 1, pp. 57-76.

DAHLANDER L., GANN D.M. (2010), "How open is innovation?", *Research Policy*, vol. 39, n. 6, pp. 699-709.

DAVIS J.P., EISENHARDT K.M. (2011), "Rotating leadership and collaborative innovation: Recombination processes in symbiotic relationships", *Administrative Science Quarterly*, vol. 56, n. 2, pp. 159-201.

DELL'ERA C., VERGANTI R. (2010), "Collaborative strategies in design-intensive industries: knowledge diversity and innovation", *Long Range Planning*, vol. 43, n. 1, pp. 123-141.

DITTRICH K., DUYSTERS G. (2007), "Networking as a means to strategy change: the case of open innovation in mobile telephony", *Journal of Product Innovation Management*, vol. 24, n. 6, pp. 510-521.

DODGSON M., GANN D., SALTER A. (2006), "The role of technology in the shift towards open innovation: the case of Procter & Gamble", *R&D Management*, vol. 36, n. 3, pp. 333-346.

EBERSBERGER B., BLOCH C., HERSTAD S.J., VAN DE VELDE E.L.S. (2012), "Open innovation practices and their effect on innovation performance", *International Journal of Innovation and Technology Management*, vol. 9, n. 06, pp. 2-22.

ELMQUIST M., FREDBERG T., OLLILA S. (2009), "Exploring the field of open innovation", *European Journal of Innovation Management*, vol. 12, n. 3, pp. 326-345.

ENKEL E., GASSMANN O., CHESBROUGH H. (2009), "Open R&D and open innovation: exploring the phenomenon", *R&d Management*, vol. 39, n. 4, pp. 311-316.

ENKEL E., KAUSCH C., GASSMANN O. (2005), "Managing the risk of customer integration", *European Management Journal*, vol. 23, n. 2, pp. 203-213.

ESPOSITO DE FALCO S., RENZI A., ORLANDO B., CUCARI N. (2017), "Open collaborative innovation and digital platforms", *Production Planning & Control*, vol. 28, n. 16, pp. 1344-1353.

FORAY D. (2004), *Economics of knowledge*, Cambridge, MIT press.

GASSMANN O., ENKEL E., CHESBROUGH H. (2010), "The future of open innovation", *R&D Management*, vol. 40, n. 3, pp. 213-221.

GIANNOPOULOU E., YSTRÖM A., OLLILA S., FREDBERG T., ELMQUIST M. (2010), "Implications of openness: A study into (all) the growing literature on open innovation", *Journal of Technology Management & Innovation*, vol. 5, n. 3, pp. 162-180.

GIBSON C.B., BIRKINSHAW J. (2004), "The antecedents, consequences, and mediating role of organizational ambidexterity", *Academy of Management Journal*, vol. 47, n. 2, pp. 209-226.

GRECO M., GRIMALDI M., CRICELLI L. (2015), "Open innovation actions and innovation performance: a literature review of European empirical evidence", *European Journal of Innovation Management*, vol. 18, n. 2, pp. 150-171.

GREER C.R., LEI D. (2012), "Collaborative innovation with customers: A review of the literature and suggestions for future research", *International Journal of Management Reviews*, vol. 14, n. 1, pp. 63-84.

GROSSMANN I., VARNUM M.E. (2015), "Social structure, infectious diseases, disasters, secularism, and cultural change in America", *Psychological Science*, vol. 26, n. 3, pp. 311-324.

HENKEL J. (2006), "Selective revealing in open innovation processes: The case of embedded Linux", *Research policy*, 35, n. 7, pp. 953-969.

HUIZINGH E.K. (2011), "Open innovation: State of the art and future perspectives", *Technovation*, vol. 31, n. 1, pp. 2-9.

KANT I. (1987), *Critique of Judgment*, 1790, Trans. Werner S. Pluhar. Indianapolis: Hackett.

KETCHEN D.J., IRELAND R.D., SNOW C.C. (2007), "Strategic entrepreneurship, collaborative innovation, and wealth creation", *Strategic Entrepreneurship Journal*, vol. 1, n. 3-4, pp. 371-385.

LASSEN A.H., LAUGEN B.T. (2017), "Open innovation: on the influence of internal and external collaboration on degree of newness", *Business Process Management Journal*, vol. 23, n. 6, pp. 1129-1143.

LAURSEN K., SALTER A. (2006), "Open for innovation: the role of openness in explaining innovation performance among UK manufacturing firms", *Strategic Management Journal*, vol. 27, n. 2, pp. 131-150.

LICHTENTHALER U. (2008), "Open innovation in practice: an analysis of strategic approaches to technology transactions", *IEEE transactions on engineering management*, vol. 55, n. 1, pp. 148-157.

LICHTENTHALER U. (2011), "'Is open innovation a field of study or a communication barrier to theory development?'. A contribution to the current debate", *Technovation*, vol. 31, n. 2-3, pp. 138-139.

LICHTENTHALER U. (2011), "Open innovation: Past research, current debates, and future directions", *The Academy of Management Perspectives*, vol. 25, n. 1, pp. 75-93.

LUNNEY G.H. (1970), "Using analysis of variance with a dichotomous dependent variable: An empirical study", *Journal of educational measurement*, vol. 7, n. 4, pp. 263-269.

MAZZOLA E., PERRONE G., KAMURIWO D.S. (2015), "Network embeddedness and new product development in the biopharmaceutical industry: The moderating role of open innovation flow", *International Journal of Production Economics*, vol. 160, pp. 106-119.

MENTION A.L. (2011), "Co-operation and co-opetition as open innovation practices in the service sector: Which influence on innovation novelty?", *Technovation*, vol. 31, n. 1, pp. 44-53.

MOOD C. (2010), "Logistic regression: Why we cannot do what we think we can do, and what we can do about it", *European sociological review*, vol. 26, n. 1, pp. 67-82.

NAMBISAN S. (2002), "Designing virtual customer environments for new product development: Toward a theory", *Academy of Management Review*, vol. 27, n. 3, pp. 392-413.

NIETZSCHE F.W. (1882), *Die Fröhliche Wissenschaft*, Chemnitz, New York.

OZKAN N.N. (2015), "An example of open innovation: P&G", *Procedia-Social and Behavioral Sciences*, n. 195, pp. 1496-1502.

PERKMANN M., WALSH K. (2007), "University-industry relationships and open innovation: Towards a research agenda", *International Journal of Management Reviews*, vol. 9, n. 4, pp. 259-280.

RAMSEY J.B. (1969), Tests for specification errors in classical linear least-squares regression analysis. Journal of the *Royal Statistical Society. Series B (Methodological)*, vol. 31, n. 2, pp. 350-371.

ROMERO D., MOLINA A. (2009), "Value Co-creation & Co-Innovation: Linking Networked Organisations and Customer Communities, in Leveraging Knowledge for Innovation in Collaborative Networks", Camarinha-Matos L.M., Paraskakis I., Afsarmanesh H. (Eds.), in *International Federation for Information Processing*, AICT 307, Springer, pp. 401-412.

ROMERO D., MOLINA A. (2011), "Collaborative networked organisations and customer communities: value co-creation and co-innovation in the networking era", *Production Planning & Control*, vol. 22, n. 5-6, pp. 447-472.

SANTOS H.C., VARNUM M.E., GROSSMANN I. (2017), "Global increases in individualism", *Psychological science*, vol. 28, n. 9, pp. 1228-1239.

SAWHNEY M., PRANDELLI E., VERONA G. (2003), "The power of innomediation", *MIT Sloan Management Review*, vol. 44, n. 2, pp. 77.

SAWHNEY M., VERONA G., PRANDELLI E. (2005), "Collaborating to create: The Internet as a platform for customer engagement in product innovation", *Journal of interactive marketing*, vol. 19, n. 4, pp. 4-17.

SCHROLL A., MILD A. (2012), "A critical review of empirical research on open innovation adoption", *Journal für Betriebswirtschaft*, vol. 62, n. 2, pp. 85-118.

SCHUEFFEL P.E., VADANA I.I. (2015), "Open Innovation in the Financial Services Sector-A global literature review", *Journal of Innovation Management*, vol. 3, n. 1, p. 25.

SCHUMPETER J. (1942), *Creative destructio*n. *Capitalism, socialism and democracy*, Harper and Row, New York.

SNIJDERS T.A. (2011), *Multilevel analysis*. In International encyclopedia of statistical science (pp. 879-882), Berlin Heidelberg: Springer.

THOMKE S., VON HIPPEL E. (2002), "Customers as innovators: a new way to create value", *Harvard Business Review*, vol. 80, n. 4, pp. 74-85.

TÖDTLING F., LEHNER P., KAUFMANN A. (2009), "Do different types of innovation rely on specific kinds of knowledge interactions?", *Technovation*, vol. 29, n. 1, pp. 59-71.

TROTT P., HARTMANN D.A.P. (2009), "Why open innovation is old wine in new bottles", *International Journal of Innovation Management*, vol. 13, n. 04, pp. 715-736.

TSAI K.H. (2009), "Collaborative networks and product innovation performance: Toward a contingency perspective", *Research policy*, vol. 38, n. 5, pp. 765-778.

UN C.A., ASAKAWA K. (2015), "Types of R&D collaborations and process innovation: The benefit of collaborating upstream in the knowledge chain", *Journal of Product Innovation Management*, vol. 32, n. 1, pp. 138-153.

UN C.A., CUERVO-CAZURRA A., ASAKAWA K. (2010), "R&d collaborations and product innovation", *Journal of Product Innovation Management*, vol. 27, n. 5, pp. 673-689.

VAN DE VRANDE V., DE JONG J.P., VANHAVERBEKE W., DE ROCHEMONT M. (2009), "Open innovation in SMEs: Trends, motives and management challenges", *Technovation*, vol. 29, n. 6-7, pp. 423-437.

VANHAVERBEKE W., VAN DE VRANDE V., CHESBROUGH H. (2008), "Understanding the advantages of open innovation practices in corporate venturing in terms of real options", *Creativity and Innovation Management*, vol. 17, n. 4, pp. 251-258.

VARNUM M.E., GROSSMANN I., KITAYAMA S., NISBETT R.E. (2010), "The origin of cultural differences in cognition: The social orientation hypothesis", *Current directions in psychological science*, vol. 19, n. 1, pp. 9-13.

VERGANTI R. (2008), "Design, meanings, and radical innovation: A metamodel and a research agenda", *Journal of product innovation management*, vol. 25, n. 5, pp. 436-456.

VON HIPPEL E. (1988), *The Sources of Innovation*, Oxford University Press, New York.

VON HIPPEL E. (1998), "Economics of product development by users: The impact of "sticky" local information", *Management Science*, vol. 44, n. 5, pp. 629-644.

WEBER M., KALBERG S. (ED.), KALBERG S. (2001), *The Protestant Ethic and the Spirit of Capitalism*, Routledge, New York.

WEST J., BOGERS M. (2014), "Leveraging external sources of innovation: a review of research on open innovation", *Journal of Product Innovation Management*, vol. 31, n. 4, pp. 814-831.

WEST J., SALTER A., VANHAVERBEKE W., CHESBROUGH H. (2014), "Open innovation: The next decade", *Research Policy*, vol. 43, n. 5, pp. 805-811.

WIKHAMN B., WIKHAMN W. (2013), "Structuring of the open innovation field", *Journal of Technology Management & Innovation*, vol. 8, n. 3, pp. 173-185.

XIA T., ROPER S. (2016), "Unpacking open innovation: Absorptive capacity, exploratory and exploitative openness, and the growth of entrepreneurial biopharmaceutical firms", *Journal of Small Business Management*, vol. 54, n. 3, pp. 931-952.

Identifying and assessing the breadth of open innovation practices: the impact on innovation performance

GABRIELE SANTORO[*] ALBERTO FERRARIS[•] STEFANO BRESCIANI[♠]

Abstract

Objectives. *This research has a twofold purpose. First, it aims to identify open innovation practices (OIP) used by empirical studies within the open innovation (OI) field. Second, it aims to test the relationship between the breadth of OIP and innovation performance to understand whether too much openness is beneficial or not for firms.*

Methodology. *We followed two steps, conducting: a) a bibliographical analysis to identify the OIP already used in empirical studies; b) an empirical analysis with a sample of 184 Italian firms to test the relationship between the breadth of OIP and innovation performance.*

Findings. *The research identifies 16 OIP used by empirical literature and suggests that there is an inverted U shaped relationship between the breadth of OIP and innovation performance.*

Research limits. *The empirical analysis does not consider the effect of the single OIP. Then, our sample is heterogeneous involving different sectors and sizes. We acknowledge that innovation management changes depending of the sectors' hallmarks. Future studies could focus on specific sectors to further our understanding on this topic.*

Practical implications. *The research helps to understand: a) what are the OIP available for firms, b) how literature has used these OIP in empirical studies, and, c) if too openness is not beneficial for firm's innovativeness.*

Originality of the study. *The study offers an original and comprehensive view of openness based on OIP given that most of the empirical studies on OI focused on external sources of knowledge.*

Keywords: *open innovation; innovation performance; Italian firms; open innovation practices; internal R&D*

[*] Post-Doc Fellow of *Management*- University of Turin
e-mail: gabriele.santoro@unito.it

[•] Post-Doc Researcher of *Management*- University of Turin
e-mail: alberto.ferraris@unito.it

[♠] Associate Professor of *Management* - University of Turin
e-mail: stefano.bresciani@unito.it

1. Introduction

Collaborative innovation modes have been considered essential for the renewal of the firms in the last decades (Gulati, 1998; Katila and Ahuja, 2002; Nieto and Santamaria, 2007).

Since the seminal work of Chesbrough (2003), collaborative innovation modes have been framed with the term "open innovation", according to which firms can and should acquire and integrate external knowledge and technologies that are globally dispersed in the external environment. The main idea of this model is that firms improve innovation processes by integrating and leveraging external sources of knowledge and collaborating with different partners (Laursen and Salter, 2006; West and Bogers, 2014; Ferraris and Grieco, 2015). Accordingly, firms explore and exploit external knowledge to enhance their innovation performance since external sourcing might have a mediator effect on firm performance. In the current globalized world of aggressive competition and fast pace of change, OI strategies become a key element for new product development and firm survival (Enkel *et al.*, 2009; Bresciani *et al.*, 2017; Vrontis *et al.*, 2017).

A key aspect in the OI literature regards the measurement of openness. However, the literature presents scattered and inconsistent perspectives about what openness is and how to measure the level of openness of the firm's innovation process. In fact, a major critique to the OI phenomenon is about the lack of coherence in the OI theoretical framework and assessment (Trott and Hartmann, 2009).

There are two main mechanisms of OI, such as inbound that refers to the acquisition of knowledge, outbound that regards the transferring of knowledge. Considering the first mechanism, empirical studies have used different measures and theoretical views about openness. Most of the studies have followed the concepts of search breadth and depth of knowledge sources to measure how open is a firm (Laursen and Salter, 2006; Nieto and Santamaria, 2007; Chiang and Hung, 2010; Ahn *et al.*, 2015). Breadth refers to the extent that firms access different external knowledge sources, such as customers, suppliers, competitors, universities and research centres, while depth regards the intensity of each relationship.

However, these measures fail to provide a comprehensive view of the firm's innovation process. So, the absence of a comprehensive framework makes difficult to compare and validate the results about the effects of firms' openness on performance measures and to assess openness antecedents.

This paper thus aims to shed light on the OI model proposing an alternative and complementary view of openness with regard to knowledge acquisition[1], namely considering the open innovation practices (OIP) and their breadth in the firm's innovation process. OIP can be considered as methods applied by firms to acquire new knowledge from external counterparts (van de Vrande *et al.*, 2009; Aquilani *et al.*, 2016).

To reach this first goal, a bibliographical analysis to identify the OIP used in empirical studies is developed.

Following this, using a unique database result of a survey conducted over Italian firms operating in a wide array of manufacturing and service industries such as ICT, food and beverage, textile, automotive, financial services, and engineering, the paper tests an inverted U shaped relationship between the breadth of OIP and innovation performance. In addition, the moderating role of internal R&D is assessed given that it is essential to manage external knowledge and previous studies achieved inconsistent results due to the different measures applied to quantify openness (Cohen and Levinthal 1990; Veugelers and Cassiman, 1999; Tsai, 2001; Caloghirou *et al.*, 2004; Laursen and Salter, 2006; Schroll and Mild, 2011). Therefore, this research adopts a combination of theoretical and empirical perspective in order to develop a better understanding of openness in relation to OIP.

[1] We are interested in the acquiring of knowledge perspective (inbound and coupled).

2. Theoretical background

Studies within innovation management field have emphasized the relevance of firms engaging in collaborative and networked activities in the last two decades (Gulati, 1998; Katila and Ahuja, 2002; Nieto and Santamaría, 2007). These new models contrast the view of a closed innovation process according to which a firm generates, develops and commercializes its own ideas with a tight control of knowledge (Chandler, 1990; Rothwell, 1992; Chesbrough, 2003). The OI paradigm has been developed in 2003 to extend those theories through a new perspective. In detail, it describes the inflow and outflow of knowledge and technology between the focal firm and the external entities (Chesbrough, 2003). More specifically, OI is defined as *"a distributed innovation process that involves purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organization's business model"* (Chesbrough and Bogers, 2014, p. 12).

Two main mechanisms describe the OI model. The inbound OI mechanism regards the leveraging of technological and knowledge capabilities developed outside the boundaries of the organization to integrate those developed internally (Spithoven *et al.*, 2011; Du *et al.*, 2014). In turn, the outbound OI mechanism entails innovation activities aimed at capturing value by transferring knowledge and technologies to other counterparts through, for example, licensing-out (Bianchi *et al.*, 2011; Kutvonen, 2011).

Despite the large amount of theoretical studies on inbound OI, what is really missing in literature is a comprehensive framework to measure the openness of the firm's innovation process with regard to knowledge acquisition. This is because each study uses different measures of openness and consider openness in different ways. In fact, a major critique to the OI phenomenon is about the lack of coherence in the OI theoretical framework and assessment (Trott and Hartmann, 2009).

Scholars have used the concept of openness degree in order to explain the weight of collaborations in the innovation process. In particular, a stream of studies considers the number of external sources of knowledge involved in the innovation process to measure openness (Laursen and Salter, 2006; Tether and Tajar, 2008; Chiang and Hung, 2010; Gronum *et al.*, 2012; Lasagni, 2012; Ahn *et al.*, 2013, 2015). Specifically, Laursen and Salter's seminal work proposed the concept of search breadth and depth to describe the number of the external sources of knowledge and the intensity of the relationship with each source. Other authors have followed the same logic (Ahn *et al.*, 2015; Aloini *et al.*, 2015; Bengtsson *et al.* 2015; Chen *et al.*, 2016).

Other studies consider openness as the leveraging of different OIP (van der Meer, 2007; Petroni *et al.*, 2012; Michelino *et al.*, 2015). Van de Vrande *et al.* (2009), for example, propose technology exploitation in terms of venturing, licensing-out, and employee involvement, whilst technology exploration in terms of customer involvement, networks, external participation, outsourcing R&D and licensing-in. Parida *et al.* (2012) assess the openness in terms of technology scouting, vertical collaboration, horizontal collaboration and technology sourcing. Spithoven *et al.* (2013) focused on both sources and practices. First, they evaluate openness considering cooperation with several external sources. Second, they investigate several modes for accessing external knowledge. Also Ahn *et al.* (2015) use a mixed approach by considering several practices such as licensing-in, co-R&D, M&A, alliances, user involvement, spin-off and open sourcing.

Overall, most of the empirical studies on OI have followed the concept of search breadth and depth of knowledge sources to measure how open is a firm (Laursen and Salter, 2006; Nieto and Santamaria, 2007; Chiang and Hung, 2010; Ahn *et al.*, 2015), while some studies have considered the OIP but incoherently. The methodology section will present all the OIP practices used by empirical studies in order to trace directions for future studies and shed light of this phenomenon from both a theoretical and empirical point of view.

3. Hypothesis development

Overall, firms establish alliances, join networks and seek external knowledge to enhance the strategic position and legitimacy (Eisenhardt and Schoonhoven, 1996), acquire resources and assets (Marx and Hsu, 2015), expand the internal knowledge base (Scuotto *et al.*, 2017) and develop innovations with lower risks, time and costs (Chesbrough, 2003).

Many previous studies found a positive relationship between the number of external sources of knowledge involved in the innovation process and innovation performance (Ahuja, 2000; Caloghirou, 2004; Laursen and Salter, 2006; Gronum *et al.*, 2012; Ahn *et al.* 2013, 2015; Fernandes and Ferreira, 2013). In detail, some studies indicate that a wide OI strategy involving different external sources is beneficial for incremental innovation (Garriga *et al.*, 2013). By increasing the openness of the innovation process, firm can burgeon its competitiveness through mixing and exploiting various knowledge bases (Laursen and Salter, 2006; Hung and Chou, 2013). Integrating diverse knowledge inputs increases the opportunities for new knowledge combinations (Salge *et al.*, 2012). In this guise, involving different sources of knowledge provides firms with a pool of heterogeneous knowledge bases useful to recombine existing products or develop new ones following technological and market trends. As a consequence, firms that invest in broader search may have a greater ability to adapt to change and therefore to innovate (Laursen and Salter, 2006).

With a similar logic, leveraging various OIP enhances firm's innovation processes. Using different OIP increases the knowledge base of the firm and helps in developing both incremental and radical innovation (van de Vrande *et al.* 2009; Parida *et al.*, 2012). Specifically, Spithoven *et al.* (2013) found that OIP improve performance of both SMEs and large enterprises, and that SMEs are more able to apply several practices at the same time. Ahn *et al.* (2015) indicate that the quantity of both external sources and practices are beneficial for firm's innovation performance. However, the benefits of openness are subject to decreasing returns, indicating that there is a point where additional search decreases innovation performance (Laursen and Salter, 2006; Berchicci, 2013). This is due to the increasing complexity that firms cope with the increasing open approach to innovation. In fact, over-searching can lead to too many ideas and knowledge to consider and firms risk choosing the wrong innovative projects (Koput, 1997).

Moreover, too many OIP can lead to high transaction costs due to the efforts to control and manage the relationships (Faems *et al.*, 2008; Gulati and Singh, 1998), a poor allocation of managerial attention (Laursen and Salter, 2006; Ocasio, 1997), and the difficulties in managing and absorbing the external ideas (Koput, 1997; Laursen and Salter, 2006).

For the above reasons, we hypothesized that:

H1: The breadth of open innovation practices is positively related to innovation performance, but with inverted U-shaped relationship.

Internal R&D has been long time considered an essential source of innovation for firms (Cohen and Levinthal 1990; Veugelers and Cassiman, 1999), especially in a closed innovation model (Chesbrough, 2003).

From a strategic point of view, firms should choose to develop new products and services internally, develop them relying on external sources or through alliances, or integrate internal R&D and external sources of knowledge. In this way, a strategically balanced mix of internal and external sources of knowledge can prevent not only from over- or under-investing in R&D, but also to exploit efficiently business opportunity (Ahn *et al.*, 2016; Capone and Lazzeretti, 2017; Ferraris *et al.* 2017).

However, the role of internal R&D to improve the performance of an OI approach is still unclear in literature. In fact, although many studies attempted to understand the reasons behind a firm's choice between external and internal technological development, it still remains unknown whether high levels of openness to external sources of knowledge in combination with a high level internal R&D leads to higher performance. Additionally, studies analyzed external knowledge

without investigating the nature of the sources, the characteristics of R&D collaborations and even less the OIP established.

Despite the contradictions in literature, most of the scholars have found complementarity between internal R&D and external knowledge sourcing in terms of external sources of knowledge (Tsai, 2001; Rigby and Zook, 2002; Caloghirou *et al.* 2004; Cassiman and Veugelers, 2006; Chesbrough and Crowther, 2006; Escribano *et al.*, 2009; Berchicci, 2013; Chen *et al.*, 2016), because of the absorptive capacity developed by firms. Cohen and Levinthal (1990, p. 128) defined the absorptive capacity as *'the ability to recognize the value of new information, assimilate it, and apply it to commercial ends'*. Hence, absorptive capacity has a potential value for inbound OI activities. However, in order to absorb external knowledge, firms need a prior related knowledge base to assimilate that knowledge (Zahra and George, 2002).

Concluding, although other studies found that openness in innovation is substitute of internal R&D (Pisano, 1990; Laursen and Salter, 2006; Schroll and Mild, 2011), our view here is that internal R&D is necessary to manage different OIP at the same time to improve innovation performance. Therefore, our hypothesis is that internal R&D helps firms in improving the effects of higher level of openness in terms OIP on innovation performance.

HP. 2: the inverted U-shaped relationship between the breadth of open innovation practices and innovation performance is moderated by internal R&D

4. Research design

As anticipated, this research has a twofold purpose. First, it aims to identify OIP practices used by empirical studies within the OI field to provide a comprehensive and alternative view of openness. Second, it aims to test the relationship between the breadth of OIP and innovation performance to understand whether too much openness is beneficial or not for firms. To reach these goals, we followed two steps:

1. a bibliographical analysis to identify the OIP found in empirical studies;
2. an empirical analysis to test the relationship between the breadth of OIP and innovation performance.

4.1 Methods for the bibliographical analysis

In order to classify and analyse the empirical studies on OI we created a taxonomy consisting of two variables: OI sources and OI practices. The main purpose is to identify the frequencies of sources and practices occurred in empirical studies.

The findings presented in this section are thus part of a broader study where systematic searches of the OI literature have been carried out in several sequential studies covering a time period from 2003 up until 2017. As suggested by Schroll and Mild (2012), we restricted the timeframe to articles published from 2003 onwards, as the term "open innovation" was originally coined in 2003. The searches were made in three selected sources, namely ISI Web of Knowledge, Google Scholar and Scopus, which cover the field of social sciences. Only papers explicitly using the term "open innovation" were included in the search range. Naturally, there are publications closely related to OI without using the term, but this lies outside the scope. The search was also limited to social sciences publications. Only peer-reviewed material was included in the analysis, and thus materials, such as pure interviews, industry reports and book reviews, were excluded. We chose to also exclude conference papers, as some conferences are not peer-reviewed, and we did not have the capacity to make a distinction among conferences that are peer-reviewed and those that are not. In total, 486 publications in English were found. Then, we have analysed the abstracts in order to verify whether the articles had an empirical nature, or was simply citing other empirical articles. In the latter case, we discarded the article from our research. Whenever the abstracts were too

ambiguous to understand the subject of the respective articles, we extended the preliminary analysis of the abstract to the entire article in order to avoid undesirable exclusions. We have read the abstract trying to understand whether the paper addressed in some way the issue concerning the measurement of openness with particular regard to the acquisition of knowledge or technology. Therefore, the transfer of knowledge/technology (outbound OI) is not considered in our study. Furthermore, we just considered quantitative papers because they clearly measured openness. This procedure led us to 42 papers published between 2006 and 2017.

This procedure led us the identify 16 OIP. The following table shows us the OIP and how many times they have been found in empirical studies.

Tab. 1: OIP found in empirical studies

OIP	**Occurrences**
Licensing in/Technology purchase	20
Partnering/R&D alliances/Co-patent	10
Customer engagement	6
Equity investment/M&A/JV	6
Outsourcing R&D	6
Vertical technology collaboration	5
Networking	5
University collaboration and grants	5
Technology scouting	4
Horizontal technology collaboration	3
National public funding	2
E-collaboration tools/social media	2
Patent search	1
Government collaboration	1
Idea and start-up competition	1
Crowdsourcing (unknown problem solvers)	1

Source: own elaboration

4.2 Methods for empirical analysis

An empirical research was carried out on a sample of Italian firms and data were assessed through quantitative methods. The quantitative methodology has been chosen due to the nature of the topic, which calls for more fine-grained approaches to explore relationships among variables. Moreover, the quantitative approach is widely used in this field of research (Laursen and Salter, 2006; van de Vrande *et al.*, 2009; Parida *et al.*, 2012; Spithoven *et al.*, 2013). As a first step, 1000 Italian firms from different sectors of both manufacturing and service industry have been selected from the Italian *database AIDA-Bureau van Dijk*, which contains comprehensive information on companies in Italy, with up to ten years of history, such as standardised annual accounts, financial ratios, sectoral activities and ownership data. This database is suitable for research on firms' competitiveness as well as for economic integration, applied microeconomics and corporate finance and is one of the most suitable sources of information on firm's data in Italy.

Second, we sent a questionnaire along a brief introduction of the research scope by using their direct email address. If the email address was not available, the firm was approached by phone requesting an email address and then the questionnaire was sent. The questionnaire, composed of several questions (open and closed), was answered and returned by 184 CEOs or owners. All the respondents had more than 5 years of tenure in their firm. This expertise further supports the validity of both informants for reporting data about their organization (Cruz-González *et al.*, 2015).

In detail, firms within the sample belong to a wide array of manufacturing and service industries such as ICT, food and beverage, textile, automotive, financial services, engineering (table 3). 83 firms are small (less than 50 employees), 81 are medium sized (less than 250 employees), while 17 firms are large (more than 249 employees).

Tab. 2: Sectors

Sectors	**%**
Automotive	10,9
Beverage	7,6
Electronics	4,3
Energy	3,8
Engineering	2,7
Financial services	3,8
Food	4,9
Human Resources	2,2
IT hardware	2,2
IT services	34,8
Machinery	5,4
Metals	6,5
Retail	7,1
Textiles	3,8

Source: own elaboration

The questionnaire was developed according to the previously discussed literature. It is divided in two parts, with both open and closed questions. The first part investigates general information about the firm, such as industry, number of employees, age and performance. The second part investigates specifically approaches to innovation, OIP established, knowledge sources and internal R&D capacity.

The single questions have been separated in order to reduce the risk of rationalising the answers of the respondents. We also assessed potential non-response bias by looking for differences between early and late respondents (Kanuk and Berenson, 1975). To do so, the order of responses to the survey was recorded and it was revealed to be non-significantly correlated with both firm age and firm size, suggesting that concern regarding non response bias is minimal (Hawes and Crittenden, 1984). We also found no substantial differences in either firm age or firm size across industries. This result is important given the heterogeneity of our sample. Firms are distributed across Italy, though the majority operate in the north of the country.

The hypotheses were tested through hierarchical OLS regression model, which was considered a suitable method in innovation management studies (Benner and Tushman, 2002; Blindenbach-Driessen & Van Den Ende, 2010; Chen *et al.*, 2016), is appropriate to test moderation effects and is a proper method for our dependent variable (innovation performance).

The dependent variable is innovation performance (*InnPerf*), and it measures the ability of a firm of developing new products or services (Laursen and Salter, 2006). In particular, it is taken from previous studies in innovation management, and is calculated by using the percentage of sales from new or significantly improved products and services on total sales of the firm (Laursen and Salter, 2006; Brunswicker and Vanhaverbeke, 2015; Chen *et al.*, 2016).

The independent variable is *OIP*. We build on procedures of Laursen and Salter (2006) followed by Ahn *et al.* (2015), with specific regard to their variable *search breadth of knowledge* to develop the variable *open innovation practices (OIP)*. In detail, we asked respondent to select practices used to innovate on a list of 16 practices identified through the bibliographic analysis previously conducted (tab. 1). Respondents had to select 0 if the practice was not used, 1 if the practice was used. Subsequently, the 16 practices are simply added up so that each firm gets a 0 when no practices are used, while the firm gets the value of 16, when all practices are used. In other words, it is assumed that firms that use higher numbers of practices are more 'open', with regard to knowledge acquisition. Seven managers of the firms involved in the survey participated in a pre-test to validate this variable and to discuss about OIP and openness.

The variable *R&D intensity*, the moderator, is calculated as the share of investments in R&D to total sales for the year, because it could affect knowledge creation and innovation within firms, and

it likely impact internal capacities for innovation (Cohen and Levinthal, 1990; Tsai, 2001; Blindenbach-Driessen and van den Ende 2014; Ahn *et al.*, 2015; Bresciani *et al.*, 2015).

Finally, we added several control variables. We firstly controlled for firm's age, namely the number of years since founding, given that it could affect innovation processes positively or negatively (Huergo and Jaumandreu 2004). Then, we controlled for the firm's size, namely the number of employees, because it may affect organisational characteristics and the ability to pursue innovation (Dewar and Dutton, 1986). We added a dummy variable concerning the industry dividing between services and manufacturing (Blindenbach-Driessen and van den Ende 2014). Finally, we checked for environmental dynamism (ED) and technological dynamism (TD) in the sectors, as suggested by previous empirical studies (Jaworski and Kohli, 1993; Jansen *et al.*, 2009).

This study follows the procedure suggested by Friedrich (1982) to reduce or eliminate any bias resulting from multicollinearity because of interaction terms. Before calculating the interaction terms, the variables were mean-centered to avoid multicolinearity issues (Van de Vrande, 2013). In addition, a VIF (variance inflation factor) test is used to evaluate the effect of multicollinearity. Only the VIF for the variable interaction variables exceed 10, but since it is constructed through the interaction of two standardized variables, we do not believe it contaminates the results; the VIFs for the rest of variables are smaller than 10. Table 3 shows the correlations among variables and descriptive statistics.

Tab. 3: Correlation matrix and descriptive statistics

	Min	Max	Mean	TD	ED	Size	Age	InnPerf	R&D	OIP
TD	1	7	3,83	1	,029	,079	-,072	,259**	,103	,368**
ED	1	7	4,77	,029	1	,043	,001	,055	-,201**	,039
Size	5	1728	143,77	,079	,043	1	,439**	,043	-,070	,233**
Age	3	95	24,81	-,072	,001	,439**	1	-,245**	,181*	-,057
InnPerf	,00	1,00	,3365	,259**	,055	,043	-,245**	1	-,088	,286**
R&D	,000	,480	,09872	,103	-,201**	-,070	,181*	-,088	1	,052
OIP	0	16	4,64	,368**	,039	,233**	-,057	,286**	,052	1

Notes: *p<0.01; **p<0.001

Source: own elaboration

It is noteworthy to consider that firms in the sample are small on average even though micro and large firms are part of the sample alike. On average, firms have good innovation performance (33% of sales come from new products and services), they have established 4.64 out of 16 OIP on average, and they have substantial R&D investments (tab. 3).

5. Findings of the empirical analysis

The results of the hierarchical regressions are presented in table 4. First, we estimate Model 1, which contains the solecontrol variables. Model 2 contains the direct and linear effect of the breadth of OIP on innovation performance. Model 3 adds the squared term of the breadth of OIP to test the inverted U shaped relationship. Finally, Model 4 introduces the interaction terms between the breadth of OIP and internal R&D.

Data confirm an inverted U shaped relationship between the dependent variable (innovation performance) and the independent variable (the breadth of OIP) with OIP (*ß=0.396**) and OIP^2 (*ß=-0.639**). Moreover, the moderating effect of internal R&D is positive but non-significant (*ß=0.311*); therefore, HP 1 is confirmed while HP 2 is rejected.

Although Haans *et al.* (2016) justified that testing for moderation in U-shaped relationships should include both the interaction term and its square, some researchers argue that adding the squared terms and later the interaction between the squared terms to the model would

overemphasize the effect of outliers in the estimates. To check that the introduction of the interaction with the squared term does not bias the results, we run the model without that squared interaction term and results remain the same.

The findings of the empirical analysis suggest that increasing the openness of the firm's innovation process is beneficial for innovation performance, but there is a point where an additional search is unproductive for firms, confirming the findings of Laursen and Salter (2006) with regard to the breadth of external knowledge sourcing, and Berchicci (2013) with regard to external R&D. This is true also for the number of OIP as this paper advocates. From one side, with diverse OIP firm are able to tap into heterogeneous knowledge types allowing to improve products and find new solutions. From the other side, it is reasonable to understand that firms cannot manage too many OIP because of the complexity they face especially if we consider that, while some OIP are established and carried out informally (technology scouting), others are formally established requiring control, analysis and management with resources (either financial and human).

Evidently, high investments in R&D did not lead to higher innovative products and services for firms of our sample, and therefore our findings hint that R&D does not help in managing the complexity of too many OIP. However, we have to consider that the effects of R&D activities sometimes are time-delayed and therefore not evident in the short period.

If we consider these results together, we can conclude that innovative performance are driven by selected OIP rather that R&D investments.

Tab. 4: Results of regressions

	INNPERF	**INNPERF**	**INNPERF**	**INNPERF**
VARIABLES	*Model 1*	*Model 2*	*Model 3*	*Model 4*
ED	-0.020 (-0.324)	-0.020 (-0.338)	0.024 (0.438)	0.014 (0.209)
TD	0.362 (5.941)***	0.381 (5.982)***	0.410 (7.007)***	0.390 (6.068)***
LOGSIZE	0.476 (7.079)***	0.488 (7.169)***	0.537 (8.607)***	0.544 (8.393)***
LOGAGE	0.085 (1.244)	0.152 (2.054)*	0.094 (1.328)	0.103 (1.447)
R&D	-0.168 (-2.638)**	-0.158 (-2.366)*	-0.145 (-2.306)*	-0.266 (-1.017)
OIP		0.144 (2.234)*	0.396 (2.021)*	0.421 (2.107)*
OIP2			-0.639 (-3.318)**	-0.733 (-3.378)**
OIP*R&D				0.311 (1.103)
R	0.635	0.662	0.739	0.742
R^2	0.403	0.439	0.545	0.551
ADJUSTED R^2	0.358	0.411	0.515	0.512
F-VALUE	22.7000***	16.108***	17.669***	13.943***

Notes: [a]p <0.1; *p<0.05; **p<0.01; ***p<0.001
T-values in parentheses

Source: own elaboration

Regarding the control variables, two of the variables employed in the different regressions significantly explain a part of the variance in innovation performance. They are TD and size. In each model these variables have a strong impact on innovation performance. Regarding the TD, this is likely due to the fact that dynamism from a technological point of view pushes firms to research new solutions and adjustments to existing products and develop new ones. Regarding firm's size, it seems that larger firms have more capabilities to be innovative or simply they look for introducing new products while smaller firms look for sell more existing products.

6. Implications and conclusions

This paper has tried to shed light on the OI model clarifying how openness can be measured. In fact, most of the empirical studies on OI have followed the concept of search breadth and depth of the sources of knowledge to measure how open is a firm (Laursen and Salter, 2006). However,

these measures fail to provide a comprehensive view of the firm's innovation process. An alternative view of openness focuses on OIP exploited by firms to innovate (van de Vrande *et al.*, 2009; Parida *et al.*, 2012; Chesbrough and Brunswicker, 2013). In line with this, this research has followed two steps. First, through a bibliometric analysis we have identified 16 OIP used by empirical studies on OI. Second, we have developed an empirical analysis assessing the relationship between OIP and innovation performance, and the moderating role of internal R&D on the above relationship. Findings of this empirical analysis suggest that the breadth of OIP is curvilinearly related to innovation performance, extending and supporting previous studies on the relationship between breadth of sources and innovation performance (Laursen and Salter, 2006; Berchicci, 2013), and that internal R&D does not play a moderating role, contrasting previous studies hinting a complementarity effect between internal and external R&D (Tsai, 2001; Rigby and Zook, 2002; Caloghirou *et al.* 2004; Cassiman and Veugelers, 2006; Chesbrough and Crowther, 2006; Escribano *et al.*, 2009; Berchicci, 2013; Chen *et al.*, 2016).

These findings allow us to provide interesting theoretical implications. First, the study identifies and proposes 16 different OIP that firms can exploit to embrace OI, extending the contribution of previous empirical studies that focused on sources (Laursen and Salter, 2006), or just few practices (van de Vrande *et al.*, 2009; Parida *et al.*, 2012). In this regard, it is important to specify that some OIP have been found more frequently in empirical studies (e.g. licensing-in, partnering/R&D alliances/Co-patent, customer engagement…). This main contribution could be a watershed for future empirical studies on OI focusing on "how" OI can be embraced, whereas most of the previous studies focused on "where" to acquire the relevant knowledge (external sources of knowledge). Second, it proposes the measure breadth of OIP extending our understanding on how to measure OI apart from counting the number of external sources of knowledge (Laursen and Salter, 2006). This could provide future studies with a guideline to be followed. Third, the study sheds more light on the internal/external R&D relationship suggesting a substitution effect between the variables, confirming the results of previous studies assessing openness in terms of external sources (Laursen and Salter, 2006; Schroll and Mild, 2011).

From a managerial point of view, the study suggests that high performing firms in terms of innovativeness are those who embrace OI increasing but not exaggerating in terms of OIP. This means that R&D units and corporate managers should allocate time and resources (either financial and human) to understand which type of OIP fit better for firm's innovative projects and with existing business models. Therefore, the study advises managers against the risk of oversearching through too many OIP. Our paper shows that there is an optimal level of OIP exploitation, and that after this point, accessing external knowledge has detrimental effects on innovation performance. Moreover, we stress that firms that want to increase sales from new products and services must not increase internal R&D investments but rather increase the OI approaches, selecting the most appropriate mechanisms and practices.

The paper of course has limitations. First, the empirical analysis does not consider the effect of the single OIP. Future studies could try to understand what are the best performing OIP exploited by firm and what are the different benefits of the OIP. Second, our sample is heterogeneous involving different sectors and sizes. We acknowledge that innovation management changes depending of the sectors' hallmarks. Future studies could focus on specific sectors. Finally, it is noteworthy to underline that, regarding the bibliographical analysis, we did not consider publications with terms different from "open innovation" even though they could be closely related to it. However, we truly think that 16 OIPs are fully comprehensive.

To conclude, OIP regard a key aspect in the OI field, considering that refer to the mode by which firms embrace OI. In this regard, future studies should deeply explore each sources trying to understand the relative dynamics, barriers and sustaining factors.

References

AHN J.M., JU Y., MOON T.H., MINSHALL T., PROBERT D., SOHN S.Y., MORTARA L. (2016), "Beyond absorptive capacity in open innovation process: the relationships between openness, capacities and firm performance", *Technology Analysis & Strategic Management*, vol. 28, n. 9, pp. 1009-1028.

AHN J.M., MINSHALL T., MORTARA L. (2015), "Open innovation: a new classification and its impact on firm performance in innovative SMEs", *Journal of Innovation Management*, vol. 3, n. 2, pp. 33-54.

AHN J.M., MORTARA L., MINSHALL T. (2013), "The effects of open innovation on firm performance: a capacity approach", *STI Policy Review*, vol. 4, n. 1, pp. 79-93.

AHUJA G. (2000), "Collaboration networks, structural holes, and innovation: A longitudinal study", *Administrative Science Quarterly*, vol. 45, n. 3, pp. 425-455.

ALOINI D., PELLEGRINI L., LAZZAROTTI V., MANZINI R. (2015), "Technological strategy, open innovation and innovation performance: evidences on the basis of a structural-equation-model approach", *Measuring Business Excellence*, vol. 19, n. 3, pp. 22-41.

AQUILANI B., ABBATE T., D'AMICO A., GATTI C. (2016), "Co-creare prodotti e processi con i clienti: i servizi degli Open Innovation Intermediaries (OII)", *Sinergie*, vol. 33, n. 98, pp. 311-329.

BENGTSSON L., LAKEMOND N., LAZZAROTTI V., MANZINI R., PELLEGRINI L., TELL F. (2015), "Open to a select few? Matching partners and knowledge content for open innovation performance", *Creativity and Innovation Management*, vol. 24, n. 1, pp. 72-86.

BENNER M.J., TUSHMAN M. (2002), "Process management and technological innovation: A longitudinal study of the photography and paint industries", *Administrative Science Quarterly*, vol. 47, n. 4, pp. 676-707.

BERCHICCI L. (2013), "Towards an open R&D system: Internal R&D investment, external knowledge acquisition and innovative performance", *Research Policy*, vol. 42, n. 1, pp. 117-127.

BIANCHI M., CHIARONI D., CHIESA V., FRATTINI F. (2011), "Organizing for external technology commercialization: evidence from a multiple case study in the pharmaceutical industry", *R&D Management*, vol. 41, n. 2, pp. 120-137.

BLINDENBACH-DRIESSEN F., ENDE J. (2014), "The locus of innovation: The effect of a separate innovation unit on exploration, exploitation, and ambidexterity in manufacturing and service firms", *Journal of Product Innovation Management*, vol. 31, n. 5, pp. 1089-1105.

BLINDENBACH-DRIESSEN F., VAN DALEN J., VAN DEN ENDE J. (2010), "Subjective performance assessment of innovation projects", *Journal of Product Innovation Management*, vol. 27, n. 4, pp. 572-592.

BRESCIANI S., FERRARIS A., DEL GIUDICE M. (2017), "The management of organizational ambidexterity through alliances in a new context of analysis: Internet of Things (IoT) smart city projects", *Technological Forecasting and Social Change*. Forthcoming. https://doi.org/10.1016/j.techfore.2017.03.002

BRUNSWICKER S., VANHAVERBEKE W. (2015), "Open innovation in small and medium-sized enterprises (SMEs): External knowledge sourcing strategies and internal organizational facilitators", *Journal of Small Business Management*, vol. 53, n. 4, pp. 1241-1263.

CALOGHIROU Y., KASTELLI I., TSAKANIKAS A. (2004), "Internal capabilities and external knowledge sources: complements or substitutes for innovative performance?", *Technovation*, vol. 24, n. 1, pp. 29-39.

CAPONE F., LAZZERETTI L. (2017), "Interorganisational networks and proximity: an analysis of R&D networks for cultural goods", *Sinergie*, vol. 34, n. 101, pp. 53-70.

CASSIMAN B., VEUGELERS R. (2006), "In search of complementarity in innovation strategy: Internal R&D and external knowledge acquisition", *Management science*, vol. 52, n. 1, pp. 68-82.

CHANDLER A.D. (1990), *Strategy and structure: Chapters in the history of the industrial enterprise* (Vol. 120). MIT press.

CHEN Y., VANHAVERBEKE W., DU J. (2016), "The interaction between internal R&D and different types of external knowledge sourcing: an empirical study of Chinese innovative firms", *R&D Management*, vol. 46, n.3, pp. 1006-1023.

CHESBROUGH H., BOGERS M. (2014), *Explicating open innovation: Clarifying an emerging paradigm for understanding innovation*, in H. Chesbrough, W. Vanhaverbeke & J. West (Eds.), New Frontiers in open Innovation, pp. 3-28.

CHESBROUGH H.W. (2003), *Open innovation: The new imperative for creating and profiting from technology*, Harvard Business Press, Boston.

CHESBROUGH H., BRUNSWICKER S. (2013), *Managing open innovation in large firms*, Berkeley, CA, Fraunhofer Verlag.

CHESBROUGH H., CROWTHER A.K. (2006), "Beyond high tech: early adopters of open innovation in other industries", *R&D Management*, vol. 36, n. 3, pp. 229-236.

CHIANG Y.H., HUNG K.P. (2010), "Exploring open search strategies and perceived innovation performance from the perspective of inter-organizational knowledge flows", *R&D Management*, vol. 40, n. 3, pp. 292-299.

COHEN W.M., LEVINTHAL D.A. (1990), "Absorptive capacity: A new perspective on learning and innovation", *Administrative science quarterly*, vol. 35, n. 1, pp. 128-152.

CRUZ-GONZÁLEZ J., LÓPEZ-SÁEZ P., NAVAS-LÓPEZ J.E., DELGADO-VERDE M. (2015), "Open search strategies and firm performance: The different moderating role of technological environmental dynamism", *Technovation*, vol. 35, pp. 32-45.

DU J., LETEN B., VANHAVERBEKE W. (2014), "Managing open innovation projects with science-based and market-based partners", *Research Policy*, vol. 43, n. 5, pp. 828-840.

EISENHARDT K.M., SCHOONHOVEN C.B. (1996), "Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms", *Organization Science*, vol. 7, n. 2, pp. 136-150.

ENKEL E., GASSMANN O., CHESBROUGH H. (2009), "Open R&D and open innovation: exploring the phenomenon", *R&D Management*, vol. 39, n. 4, pp. 311-316.

ESCRIBANO A., FOSFURI A., TRIBÓ J.A. (2009), "Managing external knowledge flows: The moderating role of absorptive capacity", *Research Policy*, vol. 38, n. 1, pp. 96-105.

FAEMS D., JANSSENS M., MADHOK A., VAN LOOY B. (2008), "Toward an integrative perspective on alliance governance: Connecting contract design, trust dynamics, and contract application", *Academy of Management Journal*, vol. 51, n. 6, pp. 1053-1078.

FERNANDES C.I., FERREIRA J.J. (2013), "Knowledge spillovers: cooperation between universities and KIBS", *R&D Management*, vol. 43, n. 5, pp. 461-472.

FERRARIS A., GRIECO C. (2015), "The role of the innovation catalyst in social innovation-an Italian case study", *Sinergie*, vol. 33, n. 97, pp. 127-144.

FERRARIS A., SANTORO G., DEZI L. (2017), "How MNC's subsidiaries may improve their innovative performance? The role of external sources and knowledge management capabilities" *Journal of Knowledge Management*, vol. 21, n. 3, pp. 540-552.

GARRIGA H., VON KROGH G., SPAETH S. (2013), "How constraints and knowledge impact open innovation", *Strategic Management Journal*, vol. 34, n. 9, pp. 1134-1144.

GRONUM S., VERREYNNE M.L., KASTELLE T. (2012), "The role of networks in small and medium-sized enterprise innovation and firm performance", *Journal of Small Business Management*, vol. 50, n. 2, pp. 257-282.

GULATI R. (1998), "Alliances and networks", *Strategic Management Journal*, vol. 19, n. 4, pp. 293-317.

HAANS R.F., PIETERS C., HE Z.L. (2016), "Thinking about U: Theorizing and testing U-and inverted U-shaped relationships in strategy research", *Strategic Management Journal*, vol. 37, n. 7, pp. 1177-1195.

HAWES J.M., CRITTENDEN W.F. (1984), "A taxonomy of competitive retailing strategies", *Strategic Management Journal*, vol. 5, n. 3, pp. 275-287.

HUERGO E., JAUMANDREU J. (2004), "How does probability of innovation change with firm age?", *Small Business Economics*, vol. 22, n. 3, pp. 193-207.

HUNG K.P., CHOU C. (2013), "The impact of open innovation on firm performance: The moderating effects of internal R&D and environmental turbulence", *Technovation*, vol. 33, n. 10, pp. 368-380.

JANSEN J.J., VERA D., CROSSAN M. (2009), "Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism", *The Leadership Quarterly*, vol. 20, n. 1, pp. 5-18.

JAWORSKI B.J., KOHLI A.K. (1993), "Market orientation: antecedents and consequences", *The Journal of marketing*, vol. 57, n. 3, pp. 53-70.

KANUK L., BERENSON C. (1975), "Mail surveys and response rates: A literature review", *Journal of Marketing Research*, vol. 12, n. 4, pp. 440-453.

KATILA R. (2002), "New product search over time: past ideas in their prime?", *Academy of Management Journal*, vol. 45, n. 5, pp. 995-1010.

KATILA R., AHUJA G. (2002), "Something old, something new: A longitudinal study of search behaviour and new product introduction", *Academy of Management Journal*, vol. 45, n. 6, pp. 1183-1194.

KOPUT K.W. (1997), "A chaotic model of innovative search: some answers, many questions", *Organization Science*, vol. 8, n. 5, pp. 528-542.

KUTVONEN A. (2011), "Strategic application of outbound open innovation", *European Journal of Innovation Management*, vol. 14, n. 4, pp. 460-474.

LASAGNI A. (2012), "How can external relationships enhance innovation in SMEs? New evidence for Europe", *Journal of Small Business Management*, vol. 50, n. 2, pp. 310-339.

LAURSEN K., SALTER A. (2006), "Open for innovation: the role of openness in explaining innovation performance among UK manufacturing firms", *Strategic Management Journal*, vol. 27, n. 2, pp. 131-150.

MARX M., HSU D.H. (2015), "Strategic switchbacks: Dynamic commercialization strategies for technology entrepreneurs", *Research Policy*, vol. 44, n. 10, pp. 1815-1826.

MICHELINO F., LAMBERTI E., CAMMARANO A., CAPUTO M. (2015), "Measuring open innovation in the Bio- Pharmaceutical industry", *Creativity and Innovation Management*, vol. 24, n. 1, pp. 4-28.

NIETO M.J., SANTAMARÍA L. (2007), "The importance of diverse collaborative networks for the novelty of product innovation", *Technovation*, vol. 27, n. 6, pp. 367-377.

OCASIO W. (1997), "Towards an attention-based view of the firm", *Strategic Management Journal*, vol. 18, pp. 187-206.

PARIDA V., WESTERBERG M., FRISHAMMAR J. (2012), "Inbound open innovation activities in high-tech SMEs: the impact on innovation performance", *Journal of Small Business Management*, vol. 50, n. 2, pp. 283-309.

PETRONI G., VENTURINI K., VERBANO C. (2012), "Open innovation and new issues in R&D organization and personnel management", *The International Journal of Human Resource Management*, vol. 23, n. 1, pp. 147-173.

PISANO G.P. (1990), "The R&D boundaries of the firm: an empirical analysis", *Administrative Science Quarterly*, vol. 35, n. 1, pp. 153-176.

RIGBY D., ZOOK C. (2002), "Open-market innovation", *Harvard Business Review*, vol. 80, n. 10, pp. 80-93.

ROTHWELL R. (1992), "Successful industrial innovation: critical factors for the 1990s", *R&D Management*, vol. 22, n. 3, pp. 221-240.

SALGE T.O., BOHNÉ T.M., FARCHI T., PIENING E.P. (2012), "Harnessing the value of open innovation: The moderating role of innovation management", *International Journal of Innovation Management*, vol. 16, n. 3, 1240005.

SCHROLL A., MILD A. (2011), "Open innovation modes and the role of internal R&D: An empirical study on open innovation adoption in Europe", *European Journal of Innovation Management*, vol. 14, n. 4, pp. 475-495.

SCHROLL A., MILD A. (2012), "A critical review of empirical research on open innovation adoption", *Journal für Betriebswirtschaft*, vol. 62, n. 2, pp. 85-118.

SCUOTTO V., SANTORO G., PAPA A., CARAYANNIS E.G. (2017), "Triggering open service innovation through social media networks", *Mercati & Competitività*, vol. 3, pp. 21-40.

SPITHOVEN A., CLARYSSE B., KNOCKAERT M. (2011), "Building absorptive capacity to organise inbound open innovation in traditional industries", *Technovation*, vol. 31, n. 1, pp. 10-21.

SPITHOVEN A., VANHAVERBEKE W., ROIJAKKERS N. (2013), "Open innovation practices in SMEs and large enterprises", *Small Business Economics*, vol. 41, n. 3, pp. 537-562.

TETHER B.S., TAJAR A. (2008), "Beyond industry-university links: Sourcing knowledge for innovation from consultants, private research organisations and the public science-base", *Research Policy*, vol. 37, n. 6, pp. 1079-1095.

TROTT P., HARTMANN D.A.P. (2009), "Why 'open innovation' is old wine in new bottles", *International Journal of Innovation Management*, vol. 13, n. 04, pp. 715-736.

TSAI W. (2001), "Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance", *Academy of Management Journal*, vol. 44, n. 5, pp. 996-1004.

VAN DE VRANDE V. (2013), "Balancing your technology-sourcing portfolio: How sourcing mode diversity enhances innovative performance", *Strategic Management Journal*, vol. 34, n. 5, pp. 610-621.

VAN DE VRANDE V., DE JONG J.P., VANHAVERBEKE W., DE ROCHEMONT M. (2009), "Open innovation in SMEs: Trends, motives and management challenges", *Technovation*, vol. 29, n. 6, pp. 423-437.

VAN DER MEER H. (2007), "Open innovation-the Dutch treat: challenges in thinking in business models", *Creativity and Innovation Management*, vol. 16, n. 2, pp. 192-202.

VEUGELERS R., CASSIMAN B. (1999), "Make and buy in innovation strategies: evidence from Belgian manufacturing firms", *Research Policy*, vol. 28, n. 1, pp. 63-80.

VRONTIS D., THRASSOU A., SANTORO G., PAPA A. (2017), "Ambidexterity, external knowledge and performance in knowledge-intensive firms", *The Journal of Technology Transfer*, vol. 42, n. 2, pp. 374-388.

WEST J., BOGERS M. (2014), "Leveraging external sources of innovation: a review of research on open innovation", *Journal of Product Innovation Management*, vol. 31, n. 4, pp. 814-831.

ZAHRA S.A., GEORGE G. (2002), "Absorptive capacity: A review, reconceptualization, and extension", *Academy of Management Review*, vol. 27, n. 2, pp. 185-203.

TRACK - LA PROSPETTIVA DEL CONSUMATORE AL VALORE

Alterazione dei dati e intenzione d'acquisto: il ruolo dell'immagine di marca e dell'autostima

GIUSEPPE BERTOLI, BRUNO BUSACCA, ALESSANDRO CALZETTI

Alterazione dei dati e intenzione d'acquisto: il ruolo dell'immagine di marca e dell'autostima

GIUSEPPE BERTOLI[*] BRUNO BUSACCA[•] ALESSANDRO CALZETTI[♠]

Abstract

Obiettivi. *Il paper analizza l'effetto dell'alterazione dei dati inerenti al prodotto e alla responsabilità sociale dell'impresa sull'intenzione d'acquisto del consumatore e come tali tipologie di alterazione interagiscono con la brand image e l'autostima individuale.*

Metodologia. *La ricerca si fonda su un esperimento between subjects condotto su un campione di 200 consumatori. Il disegno fattoriale prevede tre variabili indipendenti: l'alterazione dei dati di prodotto (product sophistication vs product social responsibility); la brand image (forte vs debole); e l'autostima dell'individuo (alta vs bassa). La variabile dipendente è costituita dall'intenzione d'acquisto del consumatore.*

Risultati. *I dati ottenuti dimostrano che i consumatori sono influenzati in misura maggiormente negativa dalla alterazione dei dati di product sophistication che non da quella concernente la product social responsibility. In secondo luogo, l'intenzione d'acquisto del consumatore in presenza di quest'ultimo tipo di alterazione risulta più elevata quando l'impresa ha saputo sviluppare associazioni forti, favorevoli e uniche alla propria marca. In terzo luogo, i dati dimostrano che tale intenzione si accresce ulteriormente se, in presenza del medesimo tipo di alterazione dei dati, a una forte immagine di marca si accompagna un'alta autostima individuale.*

Limiti della ricerca. *Nell'indagine non è stato considerato il livello di coinvolgimento psicologico del consumatore nei confronti delle tematiche etiche in generale e di alcune di esse in particolare. Inoltre, non è stato valutato l'impatto della fedeltà alla marca e della percezione della sua unicità . In terzo luogo, si è esaminata un'unica variabile psicografica.*

Implicazioni pratiche. *I risultati ottenuti confermano la centralità delle informazioni sul prodotto, l'importanza dell'immagine di marca e l'opportunità di segmentare i consumatori sulla base del grado di autostima. Emergono inoltre significative implicazioni per quanto concerne la tutela dell'interesse collettivo.*

Originalità del lavoro. *Il tema dell'impatto dell'alterazione delle due tipologie di informazioni concernenti il prodotto aziendale e della loro interazione con la brand image e l'autostima non ha sin qui ricevuto attenzione*

Parole chiave: *alterazione dei dati; corporate social responsibility; immagine di marca; autostima.*

Objectives. *The paper analyzes: a) the effect of data alteration related to product sophistication and to product social responsibility on the consumer purchase intention; b) how these types of alteration interact with the brand image and individual self-esteem..*

Methodology. *The research is based on a between subjects experiment conducted on a sample of 200 consumers. The factorial design includes three independent variables: falsification of product data (product sophistication vs. product social responsibility); the brand image (strong vs. weak); and the individual self-esteem (high vs. low). The dependent variable is the consumer purchase intention*

Findings. *The data obtained show that consumers are more negatively influenced by the alteration of data concerning product sophistication than product social responsibility. Secondly, the consumer purchase intention in the presence of the latter type of alteration is higher when the company has been able to develop a strong brand image. Thirdly, purchase intention is further enhanced if, in the presence of the same type of falsification of data, a strong brand image is associated to a high individual self-esteem*

Research limits. *The survey did not consider the level of psychological involvement of the consumer in relation to ethical issues or the product category. Furthermore, the impact of brand loyalty and the perception of its uniqueness was not assessed. Thirdly, a single psychographic variable was examined.*

Practical implications. *The results obtained confirm the centrality of the information on the product, the importance of the brand image and the opportunity to segment consumers based on the degree of self-esteem. There are also significant implications for the protection of collective interests.*

Originality of the study.*So far, the impact of different types of product data falsification on consumer purchase intention and their interaction with the brand image and the individual self-esteem has not received adequate attention*

Key words: *alteration of product data; corporate social responsibility; brand image; self-esteem.*

[*] Ordinario di *Economia e Gestione delle Imprese* - Università degli Studi di Brescia
e-mail: giuseppe.bertoli@unibs.it

[•] Ordinario di *Economia e Gestione delle Imprese* - Università Luigi Bocconi
e-mail: bruno.busacca@unibocconi.it

[♠] Sales Account, - Gruppo Danone,
e-mail. alessandro.calzetti93@gmail.com

1. Introduzione

L'attenzione alla responsabilità sociale è sempre più al centro delle strategie aziendali (ad es. Porter, 2011; Perrini *et al.*, 2011; Tencati e Pogutz, 2015;) e numerosi studi evidenziano che, a parità di altre condizioni, i consumatori esprimono una valutazione migliore nei confronti delle imprese che pongono in atto comportamenti eticamente corretti (Carrigan e Attalla, 2001; Sen e Bhattacharya, 2001; De Pelsmacker *et al*., 2005; Mohr e Webb, 2005).

Fra i comportamenti eticamente riprovevoli che hanno ottenuto ampio risalto dalla cronaca in tempi relativamente recenti, è possibile ricordare il caso di una nota compagnia accusata per alcuni dispositivi telefonici che non rispettavano la durata della batteria o i gigabyte dichiarati, o quello di un'importante casa automobilistica che ha comunicato dati sulle emissioni inquinanti di alcune sue vetture difformi da quelli reali o, ancora, quello di un rinomato produttore di abbigliamento per il quale sono emerse situazioni di maltrattamento degli animali da cui è ottenuta una materia prima rilevante per la sua produzione.

In questi e in altri casi, il comportamento eticamente scorretto, ma non di rado anche illegale, attiene alla cosiddetta alterazione delle informazioni (Hunt *et al*., 1984; Ferrell e Gresham, 1985; Chonko e Hunt, 1985), la quale si sostanzia nell'omissione di informazioni rilevanti o nella diffusione di dati non veritieri. Plank e Teichmann (2018) evidenziano ad esempio come spesso le etichette dei prodotti riportino poche informazioni relativamente all'impegno sociale e ambientale di un'azienda, lasciando così spazio all'omissione di informazioni o all'incongruenza sulla responsabilità sociale dei prodotti. Tale alterazione riguarda sovente il prodotto, nel senso che le imprese possono comunicare caratteristiche dell'offerta o dei sottostanti processi produttivi – ma più in generale aziendali - superiori o comunque diverse da quelle realmente possedute, al fine di superare la concorrenza, incrementarne le vendite e migliorare la propria redditività .

Tuttavia, al di là degli orientamenti comportamentali dichiarati, la reale consapevolezza dei consumatori verso le condotte socialmente responsabili delle aziende risulta in linea generale non elevata e, anche laddove è presente, non sembra incidere in modo rilevante sulle effettive decisioni di acquisto. I criteri dichiarati più importanti, infatti, risultano essere: il prezzo, la qualità, la familiarità con la marca e l'immagine di quest'ultima (Carrigan e Attalla, 2001; De Pelsmacker *et al.*, 2005; Mohr e Webb, 2005).

Peraltro, un comportamento eticamente scorretto ha un impatto più forte sull'immagine dell'impresa rispetto a uno positivo (Sen e Bhattacharya, 2001; Folkes e Kamins, 2008): è più facile che un consumatore non cambi la sua valutazione verso un'azienda che promuove la responsabilità sociale ma che, al contrario, cerchi di 'boicottare' un'impresa che mette in atto comportamenti non etici. Solo i consumatori che ricercano attivamente informazioni sono disposti a passare da una marca positivamente valutata a una di minor valore ma che reputano eticamente più attenta (Auger *et al*., 2003). Inoltre, la maggioranza dei consumatori difficilmente smette di acquistare il prodotto di una marca con la quale si identifica, in particolare per l'immagine che essa conferisce nell'ambito dei gruppi di riferimento.

Quanto più il consumatore si identifica con la marca e quanto più quest'ultima ha un'immagine positiva tanto più viene giudicata favorevolmente. Da qui due conseguenze opposte: in primo luogo, il consumatore valuta ancora più positivamente una marca con la quale si identifica e che mette in atto azioni di CSR; in secondo luogo, il consumatore è influenzato meno negativamente da un'informazione concernente un comportamento eticamente scorretto ascrivibile a una marca alla quale è fedele (Sen e Bhattacharya, 2001).

Sulla sensibilità del consumatore alle informazioni sull'eticità dei comportamenti aziendali agiscono anche variabili legate all'individuo. A questo riguardo, la letteratura ha indagato sia quelle di natura socio-demografica, evidenziandone il limitato impatto, sia quelle – più significative – di natura psicografica. Le variabili socio-demografiche non permettono di identificare con precisione un consumatore etico: studi passati hanno dimostrato che l'età, il sesso o il reddito, ad esempio, non sono discriminanti (Dickson, 2001), mentre altri studi hanno evidenziato risultati non convergenti nel tentativo di identificare le caratteristiche del consumatore etico (De Pelsmacker *et al*., 2005).

Numerosi studi hanno invece evidenziato come attraverso le variabili psicografiche sia possibile individuare "i consumatori etici" e il loro comportamento di acquisto (Anderson e Cunningham, 1972; Cowe e Williams, 2000; Dickson, 2001). In particolare, i valori, intesi come princìpi astratti che riflettono il self-concept di un individuo, orientano le convinzioni in merito al fatto che un determinato comportamento possa essere desiderabile o meno e guidano le decisioni relative all'etica (Dickson, 2000).

Il presente lavoro intende contribuire agli studi sulle reazioni dei consumatori ai comportamenti non etici delle aziende introducendo la distinzione tra alterazione dei dati di *product sophistication* e di *product social responsibility*, e analizzando quale tra esse incida maggiormente sull'intenzione di acquisto del consumatore, per poi indagare l'effetto della loro interazione con la brand image e con l'autostima dell'individuo, componente fondamentale del self concept. Più precisamente, si intende esaminare se e come l'immagine di marca possa attutire l'effetto negativo della alterazione, a seconda che si tratti dei dati relativi alla qualità e alla funzionalità del prodotto o alla sua responsabilità sociale. Rispetto a tale interazione, ci si prefigge poi di approfondire l'effetto dell'autostima, che influenzando direttamente il self concept del consumatore, rappresenta una variabile in grado di incidere anche sulle reazioni a comportamenti non etici.

L'analisi è svolta con riferimento a una sperimentazione condotta su una marca e un prodotto fittizi, in modo da innalzare il controllo sperimentale. Dopo avere ideato gli stimoli relativi ai due tipi di alterazione dei dati considerati, essi vengono associati a tale marca nell'ipotesi in cui essa sia dotata di un'immagine forte o, al contrario, debole. Successivamente alle opportune verifiche preliminari, gli stimoli sono stati sottoposti al giudizio di un campione di convenienza composto da 200 consumatori. Per ogni intervistato è stato quindi misurato il grado di autostima, mediante una consolidata scala utilizzata in letteratura, utilizzando il valore mediano per classificare gli individui in due sottogruppi (caratterizzati da alta e bassa autostima) per ciascuna cella sperimentale.

Il lavoro è così strutturato: il paragrafo 2, alla luce dell'analisi della letteratura, definisce le ipotesi di ricerca che ci si prefigge di verificare; il paragrafo 3 illustra il disegno sperimentale, le scale di misurazione utilizzate e la metodologia d'indagine; il paragrafo 4 sintetizza i risultati ottenuti. Infine, nelle conclusioni vengono discusse le principali implicazioni dell'analisi svolta.

2. Le ipotesi di ricerca

Come anticipato nell'introduzione al lavoro, l'obiettivo di ricerca perseguito consiste nell'analisi che l'alterazione delle informazioni inerenti al prodotto da parte di una marca, l'immagine di quest'ultima e il livello di autostima del consumatore possono esercitare sull'intenzione d'acquisto. I dati ai quali può riferirsi tale alterazione possono essere specificati facendo riferimento alla classificazione proposta da Brown e Dacin (1997), i quali individuano le informazioni in questione in base alle associazioni cognitive "that consumers can hold for a corporation on consumers product evaluations". Tali associazioni vengono distinte in due tipologie, fra loro non necessariamente collegate:

- associazioni di corporate ability (CA), "related to the company's expertise in producing and delivering its outputs";
- associazioni di corporate social responsibility (CSR), le quali riflettono "the organization's status and activities with respect to its perceived societal obbligations".

Brown e Dacin (1997, p. 71) evidenziano come la prima tipologia di associazioni incida in via diretta sulla valutazione degli attributi del prodotto da parte del consumatore, fra i quali la cosiddetta "product sophistication", intesa "as the degree to which a product exhibits the latest technological advances". Le associazioni del secondo tipo, invece, influenzano in via diretta la percezione della marca e/o dell'impresa ("enhancing the liking or trustworthiness of the company"), ma non direttamente gli attributi del prodotto**.** Inoltre, lo studio di Johnson *et al.* (2018) dimostra che le associazioni di corporate social responsibility prevalgono su quelle di corporate ability

quando il consumatore valuta l'esperienza di consumo, mentre si verifica il contrario allorchè oggetto di considerazione sono gli attributi di prodotto.

È possibile, dunque, distinguere l'alterazione dei dati di product sophistication da quella relativa ai dati sulla product social responsibility. Mentre la prima si verifica quando il prodotto presenta differenze rispetto agli attributi, alla qualità, all'innovazione, alle performance o alle funzionalità comunicate dall'impresa; la seconda ha invece luogo quando il prodotto non è conforme alla responsabilità sociale da essa dichiarata (con riferimento ai diritti umani, alle condizioni di lavoro, al benessere animale, ambientale ecc.).

Auger *et al*. (2003) hanno evidenziato come, benché anche le associazioni di product social responsibility siano ritenute importanti dai consumatori al fine di valutare l'impresa e/o la sua offerta, al momento dell'acquisto la maggior parte di essi considera prevalentemente gli attributi di product sophistication. Mentre sono relativamente pochi i consumatori in grado di ricordare le caratteristiche etiche dei prodotti acquistati, ben più numerosi sono quanti rammentano con precisione la loro marca e le principali caratteristiche tecniche. La maggioranza dei consumatori manifesta, inoltre, una ridotta conoscenza delle caratteristiche etiche dei prodotti considerati nel processo di scelta, ma si definisce confidente nel ricordarne le caratteristiche funzionali.

Ciò dimostra che, per i consumatori, hanno maggior importanza le associazioni di product sophistication che non quelle di product social responsibility, in particolare al momento dell'acquisto. Pertanto ci si attende che nel caso in cui l'alterazione dei dati riguardi il rispetto delle "societal obbligations" i consumatori siano meno inclini a penalizzare l'impresa protagonista di tale violazione etica.

Alla luce di quanto osservato, è possibile avanzare la seguente ipotesi di ricerca:

H1) l'intenzione di acquisto del consumatore è più alta se l'alterazione dei dati riguarda la product social responsibility anziché la product sophistication.

In molte situazioni, l'immagine della marca rappresenta il principale criterio di scelta del consumatore (es. De Pelsmacker, 2005, p. 375). Essa esercita un impatto particolarmente rilevante sulla percezione di qualità dell'offerta, sul valore e sull'intenzione d'acquisto degli individui (Dodds *et al.*, 1991). L'immagine sintetizza l'insieme delle associazioni nei confronti della marca presenti nella memoria del consumatore (Aaker, 1995). Se tali associazioni sono forti, favorevoli e uniche (Keller, 2003) e se vengono correttamente comunicate, esse aiutano a stabilire un efficace posizionamento del brand e, quindi, a svolgere un ruolo fondamentale nella costruzione del valore della marca nel lungo periodo (Aaker e Keller, 1990; Park e Srinivasan, 1994).

Un brand la cui immagine positiva è ben radicata nelle mente del consumatore o nel quale questi si identifica può risultare più resiliente rispetto alla diffusione di notizie negative sull'azienda alla quale fa capo (Mohr e Webb, 2005; Oberseder *et al*., 2011). In quest'ottica, anche di fronte alla conoscenza di comportamenti eticamente scorretti, diversi consumatori sostengono che acquisterebbero ugualmente il prodotto se percepiscono positivamente la sua immagine o, comunque, che difficilmente lo osteggerebbero (Carrigan e Attalla, 2001).

Tale evidenza trova giustificazione, in primo luogo, nella tendenza degli individui a confermare le scelte adottate in passato, evitando o ridimensionando le informazioni potenzialmente destabilizzanti, al fine di non incorrere in stati di disequilibro o di dissonanza cognitiva (Heider, 1958; Festinger, 1957). In secondo luogo, la componente fiduciaria della marca – che in ultima analisi scaturisce dalla ripetuta conferma delle aspettative (in termini di soddisfazione dei bisogni) – genera nel consumatore una sorta di inerzia cognitiva, che, ancora una volta, riduce la sensibilità a nuove informazioni dissonanti rispetto a quelle già memorizzate. L'informazione sull'affidabilità della marca non avrebbe infatti alcun significato se il soggetto acquirente si proponesse di verificarla in ogni occasione di acquisto e consumo della marca stessa. Il cliente, per economizzare le proprie risorse cognitive e temporali, compie pertanto un atto di fiducia nella marca, confidando di ritrovare in tutte le sue manifestazioni le medesime valenze distintive (Vicari, 1995).

Questa inerzia cognitiva è maggiore per le associazioni più astratte, riguardanti la sfera valoriale del consumatore. La *self knowledge*, che secondo la teoria della catena mezzi-fini (Gutnam, 1982; Olson e Reynolds, 1983; Reynolds e Gutnam, 2001; Orsingher *et al*., 2011) attiene al legame tra i benefici ricercati nella marca e i valori individuali, risulta più difficile da modificare rispetto *alla product knowledge* (cioè alla rappresentazione mentale delle caratteristiche del prodotto). La self knowledge, infatti, coinvolge maggiormente la componente affettiva degli atteggiamenti, che – essendo più legata alle funzioni di autodifesa e comunicativa da essi svolte nell'ambito del contesto psicologico e sociale dell'individuo (Katz, 1960) - presenta una più elevata resistenza al cambiamento.

Pertanto, poiché l'alterazione dei dati di product social responsibility coinvolge associazioni alla marca più astratte rispetto a quelle concernenti la product sophistication (che interessa la product knowledge), data la relazione positiva fra immagine di marca e intenzione di acquisto, possiamo avanzare la seguente ipotesi:

H2) In presenza di una forte immagine di marca:

a) l'intenzione di acquisto del consumatore aumenta per entrambe le tipologie di alterazione dei dati;

b) tale aumento è più elevato se l'alterazione dei dati riguarda la product social responsibility

La letteratura evidenzia che le caratteristiche socio-demografiche non influiscono in misura rilevante sull'intenzione d'acquisto del consumatore in presenza di comportamenti eticamente responsabili/irresponsabili dall'azienda (De Pelsmacker et al., 2005). Diversamente avviene nel caso delle variabili psicografiche. A questo riguardo, Dickson (2001) ha evidenziato l'importanza di variabili quali gli atteggiamenti e, soprattutto, i valori strumentali e terminali dell'individuo in base alla classificazione di Rokeach (1973). Una variabile psicografica meritevole di approfondimento è rappresentata dalle caratteristiche della personalità, come ad esempio quelle che riflettono il "self concept" dell'individuo.

Tale costrutto è inteso quale complesso delle valutazioni e delle sensazioni relative a se stesso (Sirgy, 1982). Il self concept possiede una propria coerenza complessiva ed è relativamente stabile, quantomeno nel breve periodo. Esso rappresenta pertanto una fonte di inerzia e di rigidità nel comportamento dell'individuo, nella misura in cui questi si sforza di rendere coerente ciò che fa con ciò che pensa di sé. Inoltre, il self concept si caratterizza per una certa "autoreferenzialità", poiché l'individuo tende a interpretare gli stimoli ai quali è esposto coerentemente con le convinzioni e le valutazioni già maturate.

Gli studi sul tema hanno evidenziato l'esistenza e l'influenza indipendente di almeno due dimensioni di tale costrutto: coerenza con se stessi (*self consistency*) e autostima (*self esteem*). La prima motiva l'individuo ad agire in modo coerente con la propria percezione di sé. La seconda, invece, alimenta il bisogno di orientare i comportamenti di consumo al perseguimento di obiettivi che permettano di mantenere o aumentare positivamente la propria self image (Sirgy, 1985). Quest'ultima dimensione è quella più rilevante ai nostri fini, in quanto è stato rilevato che il grado di autostima incide sulla sensibilità alle informazioni che orientano i processi decisionali dei consumatori. In particolare, gli individui con bassa autostima vengono maggiormente influenzati dalla comunicazione e risultano più sensibili ai messaggi negativi (Cohen, 1959; Leventhal e Perloe, 1962; Brockner, 1988; Campbell, 1990). Inoltre, come evidenziato da Rhodes e Wood (1992, pp. 158-159), "people high in self-esteem may use avoidance defense mechanisms, such as repression and reaction formation, which enable them to ignore or repress information threatening to their self-concept. These types of defenses result in low levels of yielding".

Alla luce della correlazione negativa fra autostima e influenzabilità del consumatore, ci si attende pertanto che:

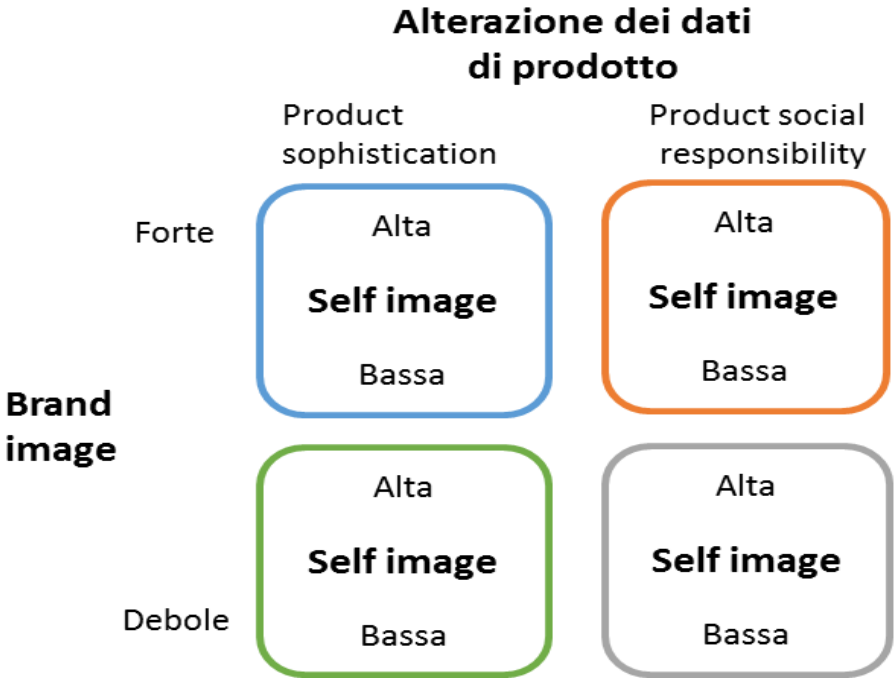
H3) in presenza di un'alterazione dei dati di product social responsibility, l'intenzione di acquisto del consumatore si accresce ulteriormente se a una forte brand image si associa un'elevata autostima.

3. La metodologia di ricerca

La verifica delle ipotesi illustrate nelle pagine precedenti è avvenuta mediante un esperimento *between subjects*, nel quale gruppi diversi di soggetti sono stati esposti alle differenti condizioni sperimentali in maniera casuale. L'esperimento si basa su un disegno fattoriale 2x2x2, ossia su tre variabili indipendenti, ciascuna articolata su due livelli, e una variabile dipendente. Più precisamente, le variabili indipendenti sono rappresentate da: l'alterazione dei dati di prodotto (product sophistication *vs* product social responsibility), la brand image (forte *vs* debole) e l'autostima dell'individuo (alta *vs bassa*). La variabile dipendente è invece costituita dall'intenzione d'acquisto del consumatore.

La figura 1 sintetizza il disegno sperimentale utilizzato. Come si nota, esso è composto da otto possibili condizioni, corrispondenti all'incrocio fra le tre variabili indipendenti e i loro rispettivi livelli. Le prime due variabili indipendenti (alterazione dei dati di prodotto e brand image) sono state proposte al campione coinvolto nella sperimentazione sottoforma di stimoli, mentre, come anticipato nell'introduzione, la terza variabile (autostima) è stata misurata nel corso dell'esperimento e quindi distinta ex post nei suoi due livelli (alta *vs* bassa).

Fig. 1: Il disegno sperimentale



Fonte: elaborazione degli autori

Le quattro condizioni determinate dall'incontro dei livelli dei due stimoli proposti sono state sottoposte a quattro gruppi differenti di soggetti. Successivamente, dopo aver misurato l'autostima individuale, si è proceduto a distinguere ulteriormente ciascuno di tali gruppi in due sottogruppi in funzione dei livelli assunti da tale variabile (alta *vs* bassa), ottenendo così otto campioni differenti, uno per ciascuna delle condizioni previste dal disegno sperimentale.

La metodologia utilizzata per la realizzazione del disegno sperimentale si è articolata nelle seguenti fasi:

- definizione delle variabili oggetto di studio, scelta delle rispettive scale di misurazione e descrizione degli stimoli da sottoporre agli individui coinvolti nella sperimentazione;
- svolgimento di indagini preliminari finalizzate a verificare la corretta percezione degli stimoli proposti e l'adeguatezza del questionario da somministrare al campione indagato;
- selezione degli individui in riferimento ai quali svolgere la sperimentazione e svolgimento delle interviste.

3.1 Le variabili oggetto di studio, le scale di misurazione e gli stimoli proposti

Le variabili utilizzate nel disegno sperimentale sono state misurate ricorrendo a scale già testate nella letteratura relativa ai costrutti oggetto di analisi. Tutte le scale di misurazione utilizzate sono a 7 punti. Nello specifico, le variabili alterazione dei dati di prodotto, autostima e intenzione d'acquisto sono state misurate mediante una scala Likert, mentre la brand image con una scala bipolare. La tabella 1 evidenzia, per ciascuna variabile, gli item utilizzati, i coefficienti Alpha di Cronbach rilevati mediante i pre-test e le fonti di riferimento.

Tab. 1: Le scale di misurazione utilizzate

Variabile	Numero di item	Fonte	Alpha di Cronbach
Brand image	12	Low e Lamb (2000)	.985
Alterazione dei dati di product sophistication	3	Brown e Dacin (1997)	.965
Alterazione dei dati di product social responsibility	3	Brown e Dacin (1997)	.945
Intenzione d'acquisto	3	Dodds, Monroe e Grewal (1991)	.963
Autostima	10	Rosemberg (1965)	.889

Fonte: ns elaborazione

Gli stimoli sottoposti agli individui coinvolti nell'esperimento sono rappresentati dalle variabili indipendenti alterazione dei dati di prodotto e brand image. Nello specifico, sono stati presentati quattro scenari, derivanti dalla combinazione dei livelli dei suddetti stimoli e corrispondenti alle celle della matrice rappresentata nella precedente Figura 1.

Per quanto in particolare riguarda l'immagine di marca, al fine di innalzare il controllo sperimentale e meglio valutare le associazioni dei rispondenti, la letteratura suggerisce l'utilizzo di brand name fittizi (Boush e Loken, 1991; Aaker e Keller, 1992). Come nell'esperimento condotto da Brown e Dacin (1997), è stata così utilizzata una marca ideata ad hoc, casualmente denominata "Rowfie" e collegata a un prodotto, altrettanto fittizio, indicato come "Nigiko3". Anche in questo caso, tale scelta è motivata dall'obiettivo di aumentare il controllo sperimentale, focalizzando l'attenzione degli intervistati solo sulle informazioni fornite nell'esperimento attraverso gli stimoli, evitando che il giudizio sul prodotto risulti influenzato dalla valutazione della categoria (Fiske e Pavelchak, 1986) e dal coinvolgimento psicologico verso la stessa (Petty *et al*., 2005).

La marca e il prodotto individuati sono stati presentati all'interno di un contesto reale (Low e Lamb, 2000): un articolo di giornale, il cui contenuto definisce quindi lo scenario proposto al rispondente.

Nel dettaglio, lo stimolo alterazione dei dati di prodotto è stato manipolato utilizzando le definizioni di product sophistication e di product social responsibility fornite dal citato studio di Brown e Dacin (1997) e sottoponendo agli intervistati, rispettivamente, le seguenti affermazioni:

- Rowfie è stata accusata di aver falsificato i dati delle caratteristiche tecniche del suo ultimo prodotto "Nigiko3" e i test sul prodotto hanno confermato l'accusa. Nigiko3 non rispetta la qualità tecnica e nemmeno le prestazioni e l'innovatività promesse dall'azienda;
- Rowfie è stata accusata di aver falsificato i dati di responsabilità sociale del suo ultimo prodotto "Nigiko3" e i test sul prodotto hanno confermato l'accusa. Nigiko3 non rispetta l'ambiente e l'impegno sociale promesso dall'azienda.

Riguardo allo stimolo rappresentato della brand image, ai soggetti coinvolti nella sperimentazione è stata proposta una descrizione finalizzata a porre in evidenza le associazioni alla marca, con riferimento alla loro forza, favorevolezza e unicità (Keller, 1993). Più precisamente, la valenza dell'immagine è stata manipolata mediante le seguenti affermazioni polari in grado di rappresentare i suoi due livelli (forte *vs* debole):

- Rowfie è un'azienda di fama mondiale e si contraddistingue dai concorrenti per l'unicità dei suoi prodotti, occupando così i primi posti nella lista delle migliori aziende;
- Rowfie è un'azienda poco conosciuta e non si contraddistingue dai concorrenti per l'unicità dei suoi prodotti, non figurando così ai primi posti nella lista delle migliori aziende.

3.2 Le indagini preliminari

Al fine di verificare la corretta percezione degli stimoli proposti e sviluppare al meglio il questionario da sottoporre ai soggetti coinvolti nella sperimentazione, è stato svolto un pre-test.

A un campione di convenienza composto da venti rispondenti di origine italiana (60% maschi e 40% femmine), con età media di 24 anni e con un elevato livello di istruzione (90% tra studenti universitari e studenti lavoratori e 10% lavoratori a tempo pieno con precedente percorso universitario), è stato somministrato in maniera casuale un questionario. A ciascun partecipante è stata sottoposta una delle quattro condizioni sperimentali rappresentate nella precedente Figura 1, in modo da ottenere un numero uguale di risposte per ciascuna condizione.

Nel pre-test, per entrambe le variabili indicate sugli assi di tale figura, è stata effettuata un'analisi T-test su due campioni indipendenti. Per quanto riguarda la variabile brand image, i rispondenti hanno valutato lo stimolo sulla base della scala di misurazione proposta da Low e Lamb (2000). Il risultato del T-test ha rilevato che la percezione dello stimolo brand image forte (M=4.44); SD=.55) è significativamente diversa (t(18)=7.53; p<.001) da quella di brand image debole (M=2.76; SD=.43), confermando così l'adeguata comprensione dello stimolo proposto.

In relazione alla variabile alterazione dei dati di prodotto, i rispondenti hanno valutato lo stimolo sulla base della scala di misurazione proposta da Brown e Dacin (1997). Attenendo tale alterazione a una problematica etica e assumendo quindi, per sua natura, valenza negativa per entrambi i suoi livelli (product sophistication e produc social responsbility), si è condotta un'analisi T-test per verificare la distanza di ciascun livello della variabile indipendente dalla valutazione complessiva del prodotto. I risultati del test hanno confermato, per entrambi i livelli, la corretta percezione dello stimolo in questione, individuando conseguentemente una distanza significativa delle caratteristiche di prodotto falsificate dalla valutazione globale del prodotto. Nello specifico, la percezione del livello product sophistication (M=1,70; SD=.43) è risultata significativamente diversa (t(18)=3.75; p<.005) dalla valutazione complessiva del prodotto (M=3.10; SD=1.10). Allo stesso modo, la percezione del livello product social responsibility (M=1.36; SD=.37) è significativamente diversa (t(18)=5.70; p<.001) da tale valutazione (M=4.10; SD=1.37).

Infine, è stata valutata l'adeguatezza del testo del questionario da somministrare al campione di soggetti coinvolti nell'indagine, chiedendo ai partecipanti al pre-test di valutare la chiarezza dei quesiti proposti. In base alle loro osservazioni, si è proceduto alla modifica del testo concernente gli stimoli individuati e alla formulazione di alcune domande.

Il questionario somministrato è suddiviso in cinque sezioni:

- introduzione, nella quale viene presentato il tema generale della ricerca, la durata stimata dell'impegno richiesto al rispondente e la garanzia per il rispetto della privacy;
- breve descrizione dell'azienda fittizia Rowfie, al fine di generare un'idea relativamente alla stessa e rendere più veritiero l'esperimento (Kanar *et al*., 2010). Ai partecipanti è stato comunicato che "Rowfie e un'azienda diversificata operante in vari settori (informatica, telecomunicazioni, sanità, bancario, industriale, immobiliare, distribuzione al dettaglio). Rowfie produce sia prodotti per l'industria sia beni di consumo e servizi destinati ai consumatori finali. L'ultimo prodotto di Rowfie è il dispositivo Nigiko3";
- presentazione degli stimoli dell'esperimento, sottoponendo ai rispondenti, in maniera casuale e all'interno di un ipotetico articolo di giornale contenente le informazioni indicate nel paragrafo precedente, una delle quattro condizioni rappresentate della precedente Figura 1 e determinate dall'incontro dei livelli dei due stimoli considerati, in modo da ricevere il medesimo numero di risposte riguardo a ciascuna di tali condizioni;
- misurazione delle variabili oggetto di studio (alterazione dei dati di prodotto, brand image, autostima, intenzione d'acquisto) con le rispettive scale;
- domande sulle caratteristiche socio-demografiche dei rispondenti.

3.3 Il campione

Il questionario è stato somministrato a un campione formato da studenti e lavoratori di origine italiana, di età compresa fra i 18 e i 60 anni. Il campione è composto prevalentemente da lavoratori in possesso di titolo di studio universitario e da studenti universitari, provenienti principalmente da corsi di studio di tipo economico e ingegneristico attivati dalle università milanesi e da business school straniere. Il metodo di campionamento utilizzato è quello non probabilistico per convenienza. Il questionario è stato distribuito sia online che di persona con il supporto di dispositivi digitali.

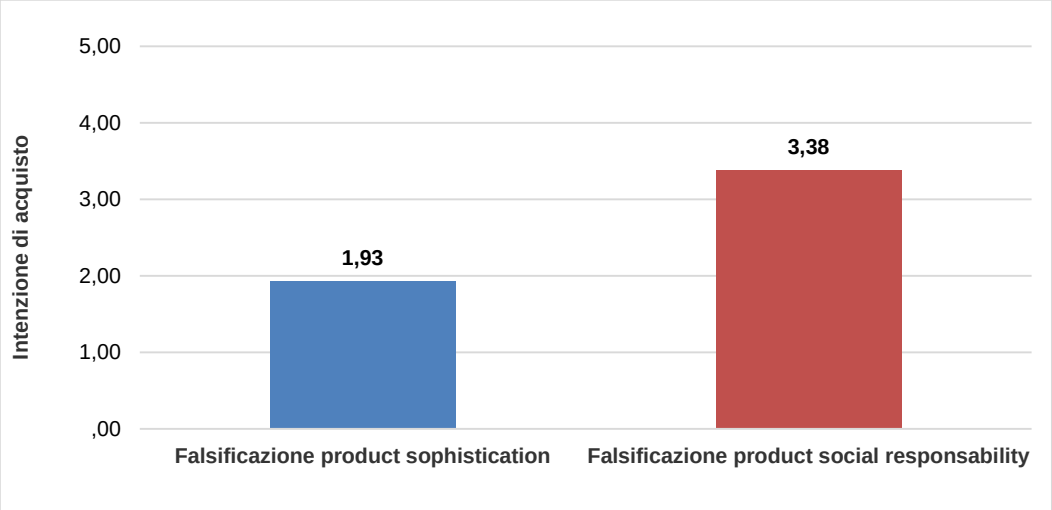
Le risposte valide complessivamente ottenute assommano a 200, ossia 50 per ciascuna delle quattro condizioni presentate nella precedente Figura 1. Il 55% dei rispondenti è di sesso maschile, il 58% proviene dal nord Italia (20% dal centro e 22% dal sud). L'età media è pari a 32,9 anni: il 61% ha un'età compresa fra i 18 e i 30 anni, l'11% fra 31 e 40 e il 17% tra i 50 e i 60 anni. Il campione è complessivamente ben educato: il 18% possiede il diploma di maturità, il 40% la laurea triennale e il 42% la laurea magistrale o a ciclo unico. Per quanto riguarda l'occupazione, il 52% dei rispondenti sono lavoratori a tempo pieno, il 6% lavoratori a tempo parziale, il 2% persone in cerca di occupazione, mentre gli studenti e gli studenti lavoratori rappresentano ciascuno il 20% del totale.

4. I risultati della sperimentazione

La nostra ricerca ipotizza in primo luogo che l'alterazione dei dati di product sophistication da parte di un'impresa influenzi in misura maggiormente negativa l'intenzione d'acquisto del consumatore rispetto all'alterazione dei dati di product social responsibility. Per la verifica di tale ipotesi, si è condotta un'analisi T-test su due gruppi, ciascuno composto da 100 individui esposti a una delle due tipologie di alterazione dei dati. Si è quindi proceduto al confronto dell'intenzione media di acquisto espressa dai due gruppi.

I risultati dell'analisi (Figura 2) evidenziano che la media delle valutazioni di tale intenzione è significativamente diversa ($p < .001$). In particolare, l'intenzione media di acquisto in situazioni di alterazione dei dati di product sophistication ($M=1.93$; $SD=.93$) è risultata significativamente inferiore ($t(151.6)= -7.32$; $p<.001$) rispetto a quella rilevata allorché l'alterazione riguarda i dati di product social responsibility ($M=3.38$; $SD=1.74$). L'ipotesi *H1*risulta quindi confermata.

Fig. 2: Confronto delle medie dell'intenzione di acquisto per i livelli product sophistication e product social responsibility della variabile indipendente alterazione dei dati di prodotto



Fonte: elaborazione degli autori

La seconda ipotesi di ricerca oggetto di verifica sostiene che, in presenza di una forte immagine di marca, l'intenzione di acquisto del consumatore è più elevata se l'alterazione dei dati riguarda la product social responsibility anziché la product sophistication. Al fine di verificare tale ipotesi, si è condotta un'analisi della varianza fattoriale univariata. Dall'output di tale analisi (Tabella 2), si nota che tanto le singole variabili brand image (p<.001) e alterazione dei dati di prodotto (p<.001) quanto la loro interazione (p<.001) influenzano in misura statisticamente significativa l'intenzione di acquisto.

Tab. 2: Risultati dell'analisi della varianza fattoriale univariata

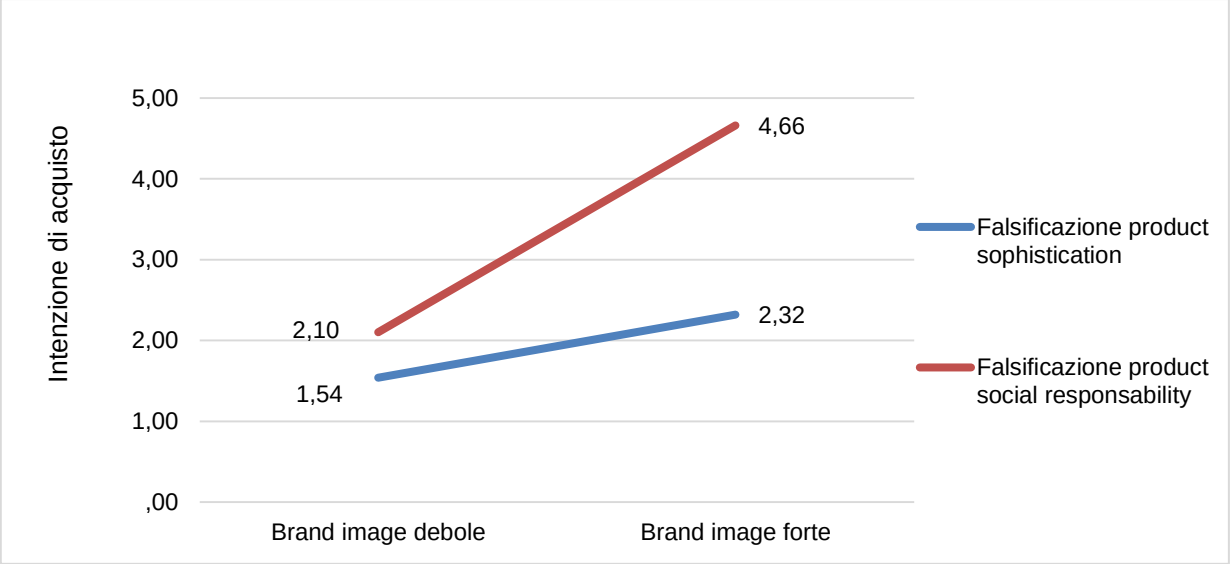
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	284,175[a]	3	94,725	88,815	,000
Intercept	1416,894	1	1416,894	1328,493	,000
Brand Image	139,445	1	139,445	130,745	**,000**
Alterazione	105,125	1	105,125	98,566	**,000**
Brand Image * Alterazione	39,605	1	39,605	37,134	**,000**
Error	209,042	196	1,067		
Total	1910,111	200			
Corrected Total	493,217	199			

a. R Squared = ,576 (Adjusted R Squared = ,570)

Fonte: nostra elaborazione.

La Figura 3 permette di verificare l'ipotesi *H2. C*ome si nota, l'immagine di marca svolge un ruolo "protettivo" in presenza di entrambe le tipologie di alterazione dei dati esaminate (*H2 a*). In caso di alterazione dei dati di product sophistication, la media delle valutazioni dell'intenzione di acquisto in presenza di brand image forte (M=2.32; SD=.91) è infatti significativamente più elevata rispetto a quella rilevata con immagine debole (M=1.54; SD=.79). Tuttavia, in caso di alterazione dei dati di product social responsibility, la media delle valutazioni dell'intenzione di acquisto per un prodotto dotato di una forte immagine di marca (M=4.66; SD=1.52) è significativamente più elevata rispetto a quella rilevata in presenza di una brand image debole (M=2.10; SD=.69). Ciò conferma l' ipotesi di ricerca *H2 b*.

Fig. 3: Effetto delle variabili indipendenti brand image e alterazione dei dati sulla variabile dipendente intenzione di acquisto



Fonte: nostra elaborazione.

Con la terza ipotesi di ricerca viene introdotta la variabile indipendente autostima. Come anticipato, tale variabile, a differenza degli stimoli sin qui considerati (brand image e alterazione dei dati), è stata valutata ex-post e distinta in due livelli (alta *vs* bassa) rispetto al valore assunto dalla mediana. Si è quindi condotta un'analisi della varianza fattoriale univariata al fine di valutare l'effetto delle tre variabili indipendenti (brand image, alterazione dei dati di prodotto e autostima) sulla variabile dipendente (intenzione di acquisto).

Dai risultati dell'analisi (Tabella 3) si evince che le singole variabili brand image (p<.001) e alterazione dei dati di prodotto (p<.001) esercitano un effetto significativo sull'intenzione di acquisto, mentre l'impatto dell'autostima non risulta avere rilevanza statistica (p=.081). Tutte le interazioni delle variabili indipendenti a due livelli hanno un effetto significativo sulla variabile dipendente (p<.001). È anche statisticamente significativo l'effetto dell'interazione fra brand image, alterazione dei dati di prodotto e autostima (p=.003).

Tab. 3: Output dell'analisi della varianza fattoriale univariata
(Tests of Between-Subjects Effects - Dependent Variable: Intenzione d'acquisto)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	344,259[a]	7	49,180	63,391	,000
Intercept	1380,203	1	1380,203	1779,019	,000
Brand Image	129,790	1	129,790	167,293	**,000**
Alterazione	91,703	1	91,703	118,201	**,000**
Autostima	2,384	1	2,384	3,073	**,081**
Brand Image * Alterazione	33,504	1	33,504	43,186	**,000**
Brand Image * Autostima	16,070	1	16,070	20,714	**,000**
Alterazione * Autostima	34,845	1	34,845	44,913	**,000**
Brand Image * Alterazione * Autostima	6,843	1	6,843	8,820	**,003**
Error	148,958	192	,776		
Total	1910,111	200			
Corrected Total	493,217	199			

a. R Squared = ,698 (Adjusted R Squared = ,687)

Fonte: elaborazione degli autori.

A conferma dell'ipotesi *H3*, la media delle valutazioni dell'intenzione di acquisto per una marca con immagine forte che ha alterato i dati di product social responsibility è significativamente più elevata per individui con alta autostima (M=5.54; SD=.42) rispetto a quella espressa da individui con autostima bassa (M=3.54; SD=1.67). Peraltro, l'intenzione media di acquisto pari a 5,54 è significativamente superiore rispetto a quella rilevata in tutte le altre combinazioni dei livelli delle tre variabili indipendenti (tabella 4). Di conseguenza, si può confermare che, in presenza di un'alterazione dei dati di product social responsibility, l'intenzione di acquisto del consumatore si accresce ulteriormente se a un'elevata brand image si associa un'alta autostima.

Tab. 4: Statistiche descrittive dell'intenzione di acquisto nelle combinazioni dei livelli delle tre variabili indipendenti

Brand Image	**Alterazione**	**Autostima**	Mean	Std. Deviation	N
BI_Debole	ALT_Product sophistication	Bassa	1,9722	,95258	24
		Alta	1,1538	,23534	26
	ALT_Product social responsibility	Bassa	2,0435	,92826	23
		Alta	2,1605	,42738	27
BI_Forte	ALT_Product sophistication	Bassa	2,5714	1,17446	21
		Alta	2,1494	,63362	29
	ALT_Product social responsibility	Bassa	**3,5455**	1,67946	22
		Alta	**5,5476**	,42759	28

Fonte: elaborazioni degli autori.

5. Implicazioni teoriche e manageriali

La nostra ricerca si è prefissa l'obiettivo di studiare come l'alterazione, riferita ai dati di product sophistication e a quelli di product social responsibility, l'immagine di marca e l'autostima individuale influenzino l'intenzione d'acquisto del consumatore.

Le analisi della varianza effettuate hanno confermato le ipotesi di ricerca formulate. In particolare, il consumatore è influenzato in misura maggiormente negativa dall'alterazione dei dati di product sophistication che non da quella concernente la product social responsibility. Ciò dimostra che le decisioni del consumatore sono maggiormente influenzate dalla qualità e dalla funzionalità del prodotto che non dalla sua conformità alle "societal obbligation" dell'impresa. Se ne deduce che, quantunque sia le associazioni di product sophistication sia quelle di product social responsibility siano importanti per la reputazione aziendale, per il consumatore è più rilevante che il prodotto rispetti la qualità e le performance dichiarate dall'azienda.

È inoltre possibile affermare che, per entrambe le tipologie di alterazione dei dati considerate, l'immagine di marca esercita un forte impatto sull'intenzione d'acquisto. Infatti, in presenza di una forte brand image, il consumatore è più propenso ad acquistare il prodotto a prescindere dal tipo di dati alterati, siano cioè essi relativi alla product sophistication o alla product social responsibility.

Alla luce della positiva verifica dell'ipotesi *H2*, un risultato particolarmente interessante per le strategie aziendali è rappresentato dall'effetto dell'interazione della brand image con l'alterazione dei dati di prodotto. In particolare, se l'alterazione riguarda i dati di product social responsibility ed è compiuta da un'impresa con un'elevata immagine di marca, si riscontra un'intenzione d'acquisto superiore a quella rilevata in tutte le altre condizioni. In coerenza, quindi, con quanto riscontrato a proposito dell'ipotesi *H1*, l'alterazione dei dati relativi all'attività sociale e ambientale ha un impatto minore sulle decisioni del consumatore, in particolare quando l'impresa ha saputo sviluppare associazioni forti, favorevoli e uniche alla propria marca. Al contrario, l'alterazione dei dati di product sophistication, soprattutto in presenza di brand image debole, comporta l'intenzione media di acquisto più bassa. È fondamentale, quindi, che il management di un'impresa sia in grado di costruire e rafforzare nel tempo l'immagine di marca. Le associazioni al brand, infatti, orientano le aspettative e la percezioni del consumatore verso i benefici funzionali, simbolici ed esperienziali dell'offerta, alimentando un capitale di fiducia in grado di proteggere l'azienda dall'impatto di informazioni destabilizzanti.

Da qui alcune fondamentali implicazioni, nella prospettiva dell'impresa e in quella dell'interesse collettivo.

Per quanto riguarda l'impresa, pare evidente che il management debba riservare grande attenzione:

- alla verifica dell'attendibilità delle informazioni comunicate al mercato relativamente agli attributi, alla qualità e alla performance dei prodotti. Ciò anche in considerazione della crescente diffusione delle recensioni su tali caratteristiche spontaneamente pubblicate dai consumatori negli ambienti digitali e della spirale di passaparola negativo che si innescherebbe ove gli utilizzatori rilevassero che le caratteristiche dichiarate dall'azienda divergono da quelle reali (Tassiello *et al*., 2017; Amatulli *et al*., 2018);
- alla costruzione e comunicazione dell'immagine della marca. Sulla base di quest'ultima, infatti, il consumatore genera le proprie associazioni verso l'impresa e i suoi il prodotti, soprattutto per quanto riguarda la tecnologia e la funzionalità. Inoltre, l'effetto di una brand image forte sull'intenzione d'acquisto in presenza di entrambi i tipi di alterazione dei dati di prodotto conferma l'importanza strategica di questa risorsa immateriale, in grado di attutire significativamente l'impatto del comportamento eticamente scorretto posto in essere da un'impresa. I consumatori, infatti, tendono a non venire influenzati da informazioni negative concernenti marche affermate e a selezionare le informazioni coerentemente con le loro opinioni (Ahluwalia, 2002).

Le suddette riflessioni assumono tuttavia un'implicazione che chiama in causa l'interesse collettivo: il minore impatto dell'alterazione legata alla responsabilità sociale sulle scelte del

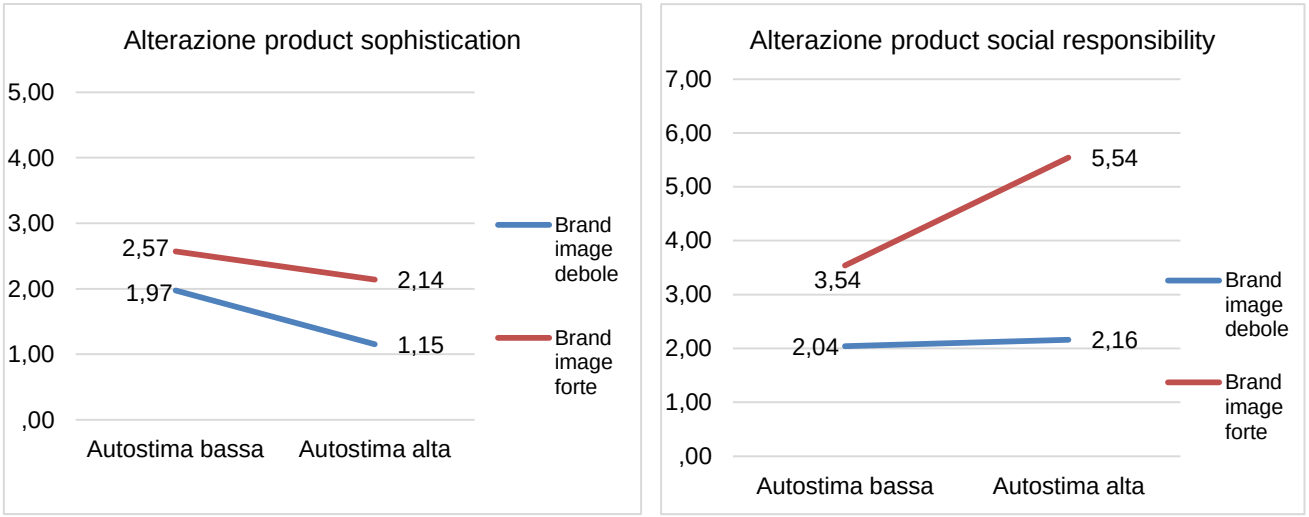
consumatore, ulteriormente attenuato dallo "scudo" rappresentato dall'immagine di marca, evidenzia la parziale inefficacia del mercato nel sanzionare comportamenti eticamente scorretti. È pertanto doveroso trovare un rimedio a tale inefficacia, elevando *in primis* la sensibilità del consumatore a tali tematiche. Il punto verrà ripreso nelle considerazioni conclusive.

Con la terza ipotesi di ricerca è stata introdotta la variabile autostima, che rappresentando una componente centrale del self concept dell'individuo, ne influenza la sensibilità alle informazioni che orientano i suoi processi decisionali.

I dati rilevati dimostrano che l'autostima, singolarmente considerata, pur non esercitando un impatto statisticamente rilevante sull'intenzione d'acquisto del consumatore, manifesta un effetto di interazione significativo con le altre variabili indipendenti considerate nell'analisi.

In particolare, in presenza di alterazione di dati relativi alla responsabilità sociale, se a una forte immagine di marca si associa un'elevata autostima, l'intenzione di acquisto del consumatore assume il valore più elevato. Per le marche caratterizzate da associazioni forti, favorevoli e uniche si rivela quindi opportuna la segmentazione dei consumatori sulla base del grado di autostima, per identificare il cluster meno influenzabile dall'insorgere di informazioni negative sui prodotti dell'impresa. È peraltro interessante sottolineare che tale opportunità permane anche nel caso di alterazione dei dati di product sophistication, dove l'intenzione di acquisto si rivela invece decrescente. In altre parole, anche se la maggiore sensibilità del consumatore all'alterazione dei dati di prodotto impatta negativamente sull'intenzione di acquisto, l'interazione fra la forza dell'immagine di marca e l'elevata autostima dell'individuo determina una minore riduzione della suddetta intenzione (Figura 4).

Fig. 4 Effetto delle variabili indipendenti brand Image e autostima sulla variabile dipendente intenzione di acquisto, nelle due tipologie di alterazione dei dati



Fonte: elaborazioni degli autori.

6. Considerazioni finali

La letteratura ha studiato negli anni l'importanza dell'etica aziendale per il consumatore, l'impatto (asimmetrico) dei comportamenti corretti e scorretti sull'immagine dell'impresa, le implicazioni connesse alla vicinanza del core business di un'azienda alle tematiche di CSR, alla sua brand image o, ancora, alla superiorità degli attributi di prodotto. Alcuni studi recenti si sono occupati di investigare se il comportamento eticamente scorretto di un'impresa, ad esempio l'alterazione dei dati di un prodotto, possa riflettersi negativamente sull'intera categoria merceologica (Trump e Newman, 2017).

La nostra ricerca arricchisce la letteratura esistente analizzando l'impatto sul consumatore di due tipologie di comportamenti eticamente scorretti. In particolare, si rileva che la percezione del consumatore differisce a seconda che l'alterazione dei dati riguardi la product sophistication o la product social responsibility. Inoltre, i risultati emersi dall'esperimento descritto nelle pagine precedenti confermano l'effetto protettivo di una forte brand image (Sen e Bhattacharya, 2001) ed evidenziano l'effetto specifico dell'autostima dell'individuo.

In sintesi, i risultati delle analisi svolte hanno dimostrato che l'alterazione dei dati relativi alla qualità e alla funzionalità del prodotto influenza in misura maggiormente negativa l'intenzione d'acquisto del consumatore rispetto a quella concernente i dati di responsabilità sociale e che un'immagine di marca forte attutisce i comportamenti scorretti delle imprese, in particolare quando l'alterazione concerne tale seconda tipologia di dati e gli individui presentano elevati livelli di autostima.

Alla luce delle variabili in grado di limitare la sensibilità dei consumatori ai comportamenti socialmente responsabili delle aziende, un tema meritevole di attenta riflessione e di futuri approfondimenti, al quale sembra opportuno accennare in chiusura del lavoro, è rappresentato dalle iniziative atte a far sì che, per il benessere della collettività, tale sensibilità si diffonda, stimolando così le imprese all'adozione di comportamenti virtuosi (Du *et al*., 2010).

In linea di principio, queste iniziative potrebbero essere adottate dal management, il quale spesso non è tuttavia adeguatamente incentivato a investire in azioni di CRS, dal momento che i ritorni economico-finanziari di queste ultime non sono certi. Un'altra possibilità è quella di far leva sulle organizzazioni non-profit, le quali possono amplificare le attività di CSR e porre in evidenza gli eventuali comportamenti scorretti delle imprese. A questo riguardo è tuttavia essenziale che, successivamente alla segnalazione di tali comportamenti, vengano posti in essere opportuni interventi sanzionatori. Un'ulteriore soluzione è rappresentata dall'adozione, da parte delle istituzioni nazionali o sovranazionali, di una regolamentazione finalizzata a incoraggiare e a sostenere l'adozione di comportamenti eticamente corretti da parte delle imprese, stimolando per tale via il loro contributo al benessere sociale.

Naturalmente, il presente lavoro non è esente da limiti, che potrebbero essere rimossi da eventuali ricerche future. In primo luogo, la generalizzabilità dei risultati è limitata dalla numerosità e dalla composizione del campione di soggetti coinvolto nell'esperimento. In secondo luogo, non è stato considerato il livello di coinvolgimento psicologico del consumatore nei confronti delle tematiche etiche in generale e di alcune di esse in particolare. In terzo luogo, se da un lato l'utilizzo di una marca e di un prodotto fittizi consente un maggiore controllo sperimentale, esso impedisce dall'altro di considerare i legami che gli individui sviluppano con i brand reali. Ciò non permette di valutare l'impatto della fedeltà alla marca e della percezione della sua unicità da parte dei consumatori, né di testare l'effetto di possibili variabili di mediazione e/o di moderazione (come ad esempio l'intensità degli investimenti in comunicazione o il livello di product involvement). Inoltre, nell'ambito delle variabili psicografiche suscettibili di influenzare le scelte del consumatore in presenza di comportamenti aziendali eticamente irresponsabili, si è concentrata l'attenzione solo su una dimensione del self concept dell'individuo. Ricerche future potrebbero indagare sia altre variabili psicografiche sia approfondire l'impatto della self consistency. Infine, l'esperimento è stato condotto con riferimento a un campione di consumatori solo italiani. Potrebbe pertanto essere interessante considerare l'impatto della diversità culturale, coinvolgendo nella sperimentazione individui appartenenti a paesi diversi sotto il profilo della sensibilità nei confronti di tematiche etiche.

Bibliografia

AAKER D.A., KELLER K.L (1990), "Consumer Evaluations of Brand Extensions", *Journal of Marketing*, vol. 54, n. 1, pp. 27-41.

AMATULLI C., DE ANGELIS M., TASSIELLO V. (2018), "Efficacia delle raccomandazioni online relative ai servizi", *Micro&Macro Marketing*, n. 1, pp. 39-56.

ANDERSON T.W., CUNNINGHAM W.H. (1972), "The Socially Conscious Consumer", *Journal of Marketing*, vol. 36, summer, pp. 23-31.

AUGER P., BURKE P., DEVINNEY T.M., LOUVIERE J.J. (2003), "What Will Consumers Pay for Social Product Features", *Journal of Business Ethics*, vol. 42, n. 3, pp. 281-304

BOUSH D.M., LOKEN B. (1991), "A Process-Tracing Study of Brand Extension Evaluation", *Journal of Marketing Research*, vol. 28, n. 1, pp. 16-28.

BROCKNER J. (1988), *Self-Esteem at Work: Research, Theory and Practice*., D.C. Heath & Co, Lexington.

BROWN T.J., DACIN P.A. (1997), "The Company and the Product: Corporate Associations and Consumer Product Response", *Journal of Marketing*, vol. 61, n. 1, pp. 68-84.

CAMPBELL J. P. (1990), "Modeling the performance prediction problem in industrial and organizational psychology", in Dunnette M.D., Hough L.M. (Eds.), *Handbook of Industrial and Organizational Psychology*, Consulting Psychologists Press, Inc, Palo Alto, CA, pp. 687-732.

CARRIGAN M., ATTALLA A. (2001), "The Myth of the Ethical Consumer. Do Ethics Matter in Purchase Behavior?", *Journal of Consumer Marketing*, vol. 18, n. 7, pp. 560-77.

COHEN A.R. (1959), " Some implications of self-esteem for social influence", in Janis L. et al. (eds.), *Personality and Persuasibility*, Yale University Press, New Haven CT, pp. 102-20

COWE R., SIMON W. (2000), "Who Are the Ethical Consumers?" Booklet for the Co-operative Bank, Manchester.

DE PELSMACKER P., DRIESEN L., RAYP G. (2005), "Do Consumers Care About Ethics? Willingness to Pay for Fair-Trade Coffee", *The Journal of Consumer Affairs*, vol. 39, n. 2, pp. -363-85.

DICKSON M.A. (2000), "Personal Values, Beliefs, Knowledge, and Attitudes Relating to Intentions to Purchase Apparel from Socially Responsible Businesses", *Clothing and Textiles Research Journal*, vol. 18, n. 1, pp. 19-30.

DICKSON M.A. (2001), "Utility of No Sweat Labels for Apparel Consumers: Profiling Label Users and Predicting Their Purchases", *The Journal of Consumer Affairs*, vol. 35, n. 1, pp. 96-119.

DODDS W.B., MONROE K.B., GREWAL D. (1991), "Effects of Price, Brand and Store Information on Buyers' Product Evaluations", *Journal of Marketing Research*, vol. 28, n. 3, pp. 307-19.

Du S., Bhattacharya C.B., Sen S. (2010), "Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication", *International Journal of Management Reviews*, vol. 12, n. 1, pp. 8-19.

FESTINGER L.A. (1957), *A Theory of Cognitive Dissonance*, HAper & Row, New York.

FERREL O.C., GRESHAM L.G. (1985), "A Contingency Framework for Understanding Ethical Decision Making in Marketing", *Journal of Marketing*, vol. 49, summer, pp. 87-96.

FISKE S.T., PAVELCHAK M.A. (1986), "Category-based versus piecemeal-based affective responses: Developments in schema-triggered affect", in Sorrentino R.M., Higgins E.T., *The Handbook of Motivation and Cognition*, vol. 1: Foundations of Social Behavior, New York: Guilford, pp. 167-203.

FOLKES V.S., KAMINS M.A. (2008), "Effects of Information About Firms Ethical and Unethical Actions on Consumers' Attitudes", Journal of Consumer Psychology, vol. 8, n. , pp. 243-259.

GUTMAN J. (1982), "A Means-End Chain Model Based on Consumer Categorization Processes", *Journal of Marketing*, spring, pp. 60-72.

HEIDER F. (1958), *The Psychology of Interpersonal Relations*, John Wiley & Sons, New York.

HUNT S.D., CHONKO L.B. (1985), "Ethics and Marketing Management: An Empirical Examination", *Journal of Business Research*, vol. 23, n. 4, pp. 339-59.

KAYNAR A.D., COLLINS C.J., BELL B.S. (2009), "A Comparison of the Effect s of Positive and Negative Information on Job Seekers' Organizational Attraction and Attribute Recall", *Human Performance*, vol. 23, n. 3, pp. 193-212.

KATZ D. (1960), "The Functional Approach to the Study of Attitudes", *Public Opinion Quarterly*, vol. 24, n. 2, pp. 163-204.

KELLER K.L. (1993), "Conceptualizing, Measuring and Managing Customer-based Brand Equity", *Journal of Marketing*, vol. 57, n. 1, pp. 1-22.

KELLER K.L., AAKER D.A. (1992), "The Effects of Sequential Introduction of Brand Extensions", *Journal of Marketing Research*, vol. 29, n. 1, pp. 35-50.

JOHNSON Z.S., LEE Y.J., ASHOORI M.T. (2018), "Brand associations: the value of ability versus social responsibility depends on consumer goals", Journal of Brand Management, vol. 25, n. 1, pp. 27-37.

LEVENTHAL H., PERLOE S. I. (1962), "A Relationship between Self-Esteem and Persuasibility", *Journal of Abnormal and Social Psychology*, vol. 64, n. 5, pp. 385-88.

LOW G.S., LAMB Jr. C.W. (2000), "The Measurement and Dimensionality of Brand Associations", *Journal of Product and Brand Management*, vol. 9, n. 6, pp. 350-68.

MOHR L.A., WEBB D.J. (2005), "The Effects of Corporate Social Responsibility and Price on Consumer Responses", *The Journal of Consumer Affairs*, vol. 39, n.1, pp. 121-47.

MOHR L.A., WEBB D.J., HARRIS K.E. (2001), "Do Consumers Expect Companies to be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior", *The Journal of Consumer Affairs*, vol. 35, n. 1, pp. 45-72.

NANDAM S. (2005), "An Exploration of the Brand Identity-Brand Image Linkage: A Communication Perspective", *Journal of Brand Management*, vol. 12, n. 4, pp. 264-78.

OBERSEDER M., SCHLEGELMILCH B.B., GRUBER V. (2011), "Why Don't Consumers Care about CSR? A Qualitative Study Exploring the Role of CSR in Consumption Decisions. Empirical Paper", *Journal of Business Ethics*, vol. 104, n. 4, pp. 449-60.

OLSON J.C., REYNOLDS T.J.(1983), "Understanding Consumers' Cognitive Structures: Implications for Advertising and Strategy", in Percy L., Woodside A., *Advertising and Consumer Psychology*, Lexington Books, Lexington, Mass., pp. 77-90.

ORSINGHER C., MARZOCCHI G.L., VALENTINI S. (2011), "Consumer goal satisfaction: A means-end chain approach", *Psychology and Marketing*, vol. 28, pp. 730-48.

PARK C.S., SRINIVASAN V. (1994), "A Survey-based Method for Measuring and Understanding Brand Equity and Its Extendibility", *Journal of Marketing Research*, vol. 31, n. 2, pp. 271-88.

PERRINI F., RUSSO A., TENCATI A., VURRO C. (2011), "*Deconstructing the relationship between social and financial performance", Journal of Business Ethics*, n. 102, pp. 59-76.

PETTY R.E., CACIOPPO J.T., STRATHMAN A.J., PRIESTER J.R. (2005) "To think or not to think? Exploring two routes to persuasion", in Brock T.C. and Green M.C., *Persuasion: Psychological Insights and Perspectives*. Thousand Oaks, CA: Sage Publications, pp. 81-116.

PLANK A., TEICHMANN K. (2018), "Andreas Plank and Karin Teichmann, A facts panel on corporate social and environmental behavir: Decreasing information asymmetries between producers and consumers through product labeling", *Journal of Cleaner Production*, vol. 177, spring, pp. 868-877.

PORTER M. E., KRAMER M.R. (2011), "Creating shared value", *Harvard Business Review*, vol. 89, n.1/2, pp. 62-77.

ROKEACH M. (1973), *The Nature of Human values*, Free Press, New York.

REYNOLDS T.J., GUTNAM J.(2001), "Laddering Theory, Method, Analysis and Interpretation", in Reynolds T.J., Gutnam J. (eds.), *Understanding Consumer Decision Making. The Means-End Approach to Marketing and Advertising Strategy*, Lawrence Erlbaum Associates Publishers, Mahwah (N.J.).

Rhodes N. e Wood W (1992), "Self-esteem and Intelligence Affect Influenceability: The Mediating Role of Message Reception", *Psychological Bulletin*, n. 111, pp. 156-71.

SEN S., BHATTACHARYA C.B. (2001), "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility", *Journal of Marketing Research*, vol. 38, pp. 43-62.

SIRGY J.M. (1982), "Self-Concept in Consumer Behavior: A Critical Review", *Journal of Consumer Research*, vol. 9, n. 3, pp. 287-300.

SIRGY J.M. (1985), "Using Self-Congruity and Ideal Congruity to Predict Purchase Motivation", *Journal of Business Research*, vol. 13, n. 3, pp. 195-206.

SIRGY J.M., GREWAL D., MANGLEBURG T.F., PARK J., CHON K., CLAIBORNE C.B., JOHAR J.S., BERKMAN H. (1997), Assessing the Predictive Validity of Two Methods of Measuring Self-Image Congruence", *Academy of Marketing Science Journal*, vol. 25, n. 3, p. 229.

TASSIELLO V., DE ANGELIS M., AMATULLI C. (2017), "Piattaforme digitali e rischio sociale nella condivisione di opinioni estreme", *Micro&Macro Marketing*, n. 3, pp. 391-410.

TENCATI A., POGUTZ S., [2015], "Recognizing the Limits: Sustainable Development, Corporate Sustainability and the Need for Innovative Business Paradigms", *Sinergie Italian Journal of Management*, vol.96, pp. 37-55.

TRUMP R.K., NEWMAN K.P. (2017), "When do unethical brand perceptions spill over to competitors?", *Marketing Letters*, vol. 28, n.2, pp. 219-230.

VICARI S. (1995) (a cura di), *Brand equity. Il potenziale generativo della fiducia*, Egea, Milano.

TRACK - DECISION SUPPORT SYSTEMS, NETWORKS AND STRATEGY

Big data sources for green strategy implementation
FRANCESCO CALZA, ADELE PARMENTOLA, ILARIA TUTORE

Entrepreneurship in innovative artistic production. Insights from the Italian context
MARTHA FRIEL, ANGELO MIGLIETTA, GIOVANNA SEGRE

Big data sources for green strategy implementation

FRANCESCO CALZA[**] ADELE PARMENTOLA[•] ILARIA TUTORE[♠]

Abstract

Objectives. *The paper wants to explore how firms can capture value from big data to improve green engagement by providing a conceptual framework that relate big data to the specific green strategy the companies want to pursuit.*

Methodology. *The study provides a conceptual model through a comprehensive and panoramic literature that relates big data sources to the adoption of different green strategies. An empirical case is presented to illustrates the application of IoT technology to develop a Clean Technology strategy.*

Findings. *The implementation of Clean Innovation Strategy requires the development of a particular ability in managing several physical assets, such as smart interconnected devices and capabilities, such as interconnected data storage and analytics. In this case, companies often refer to external partner to develop the necessary architecture needed to exploit information potentialities.*

Research limits. *The paper represents the first attempt to address the issue that requires a deeper investigation.*

Practical implications. *The study offers valuable suggestion for companies that wants to grasp green opportunities from big data analytics*

Originality of the study. *Big data is an increasing trend in strategic management. Notwithstanding, just few studies envisage the potentiality offered by big data to sustain different green strategy typologies*

Key words: *Big data; Green strategy; Green innovation; conceptual framework; IoT*

[*] Full Professor of *Management* - University of Naples "Parthenope"
e-mail: francesco.calza@uniparthenope.it

[•] Associate Professor of *Management* - University of Naples "Parthenope"
e-mail: adele.parmentola@uniparthenope.it

[♠] Research of *Management* - University of Naples "Parthenope"
e-mail: ilaria.tutore@uniparthenope.it

1. Introduction

In the modern digital and connected era big data represent a growing topic of interest, due to the fact that humans and machines continue to produce large volumes of data at an unprecedented rate. Over the past 5 years, both academics in management fields and practitioners focus their attention on the potentiality offered by big data to business improvement and strategic management.

Several definitions of big data concept have been provided to identify and conceptualize this emerging trend. In particular, Ghani *et al.* (2014) defines big data as the "ultralarge bodies of data that have not been prospectively limited in size or scope by the intent to address specific research questions or disease conditions, and that grow continuously and rapidly" (Ghani *et al.*, 2014, p. 976).

According McAfee and Brynjolfsson (2012) big data movement is able to drive the management revolution, since it seeks to glean intelligence from data and translate that into business advantage (McAfee and Brynjolfsson 2012).

According Elias Baltassis, a BCG's managing director, big data open the boundaries between industries and changes competitive dynamics, letting companies to transform their business models and find new opportunities for revenue streams, customers, products and services.

If the right use of Big data is widely recognized as being one of the most powerful drivers to promote productivity, efficiency, and innovation (Wu *et al.*, 2016), only few contributions focus on the potentiality offered by data analytics to drive and support company's engagement into green initiatives, such as green strategy.

Despite big data are receiving an increasing societal emphasis, especially in ecology fields (Hampton *et al.*, 2013), its use is often related to resource consumption or pollution measurements, especially at macroeconomic level. In particular, previous studies showed that big data has environmental and social impacts on innovation and performance of the supply chain (Zhao *et al.*, 2017), focusing on when and how these data can enhance sustainability in this specific domain (Dubey *et al.*, 2017). Etzion and Aragon Correa (2016) identified several business and research opportunities of the use of big data for management and sustainability, even if the authors did not provide a clear classification of such opportunities. Wu *et al.* (2016) rather provided a comprehensive and panoramic literature survey of big data technologies classified according the specific green impacts they want to have, missing to analyze the competitive dimension of such involvement.

Notwithstanding, at the best of our knowledge little is known on the specific potentiality of big data for company that wants to embrace the green challenge. Consequently, further discussions on big data applications to the environmental sustainability effort are needed, adding breadth to the topic and elevating it closer to parity with other fields (Keeso, 2014).

Accordingly, the objective of this paper is to explore how firm can capture value from big data to improve green strategy by providing a conceptual framework of the green challenge offered by big data to companies.

In particular, the paper wants to answer to the following research question:

RQ. How big data can support green strategies? Which big data are required to develop different green strategies approches?

The remainder of the paper is organized as follows: the next section reviews prior studies on the use of Big Data into business management and, in particular, how they can drive firms' competitiveness and new business model development. Section 2.2 presents how big data has been employed into sustainability studies, specifically to support firms' green challenge. Section 3 presents the conceptual model of big data support of different green strategy with an empirical case as a tool to illustrate the application of these technologies. Lastly, in the final part of the paper, the main implications and limitations of the study are summarized.

2. Theoretical background

2.1 Big data Management: definition and current issues

Big data represents a growing topic of interest from both academics and practitioners due to the fact that humans and machines continue to produce and share large volumes of data at an unprecedented rate that are becoming an increasingly common feature of the modern economy.

These data are presented in different forms as textual contents (i.e. structured, semistructured as well as unstructured), multimedia content (e.g. videos, images, audio) or integrated platforms (e.g. machine-to-machine communications, social media sites, sensors networks and Internet of Things) (Sivarajah *et al.* 2017).

Several definitions of big data concept have been provided to identify and conceptualize this emerging trend.

Big data can be defined as "a set of techniques and technologies that require new forms of integration to uncover large hidden values from large datasets that are diverse, complex, and of a massive scale" (Mishra *et al.*, 2016, p.15). Also Ghani et al (2014) emphasizes these aspects of big data, defining it as the "ultralarge bodies of data that have not been prospectively limited in size or scope by the intent to address specific research questions or disease conditions, and that grow continuously and rapidly" (Ghani *et al.*, 2014, p. 976).

The contents of data constantly change because of the absorption of complementary data collections, the introduction of previously archived data or legacy collections, and the adding of streamed data arriving from multiple sources (Berman, 2013).

The complexity of big data is often described by some authors including the three 'Vs' of data management: 'volume', 'velocity', and 'variety' (Chen *et al.*, 2012).

'Volume' refers to the amount of all types of data generated from different sources and continue to expand. Gathering large amounts of data allows the creation of hidden information and patterns through data analysis. 'Variety' refers to the different types of data collected using different technologies or sources, such as sensors, smartphones, or social networks. 'Velocity' rather refers to the speed of data transfer.

Recently, two more V's are added to original concept of big data, namely 'Value' and 'Veracity'.

The forth V refers to fact that the process of discovering huge hidden values from large datasets with various types of data should ensure an improvement of firm's return. A fifth dimension, 'Veracity' has been added in order to highlight the importance of quality data and the level of trust in various data sources (Wamba *et al.*, 2015).

General characteristics of data deals with how to acquire the data, what is their structure and format, how frequently data becomes available.

In order to better understand their characteristics, big data can be classified in different categories, according to different aspect, such as data sources, content format, data stores, data staging, and data processing (Hashem *et al.*, 2015).

Based on data source, big data can be classified in Social Media, Machine generated, Sensing, Transaction, Internet of Things (IoT).

In table 1 are described the characteristics of these categories of big data.

Tab. 1: Big Data typology according Data Source

TIPOLOGY	DESCRIPTION	EXAMPLES
Social Media	information generated via URL to share or exchange information and ideas in virtual communities and networks	data are generated from a wide number of Internet applications and Web sites (i.e. Facebook, Twitter, LinkedIn, Google)
Machine-generated data	Information automatically generated from a hardware or software, such as computers, medical devices, or other machines, without human intervention	Web server logs, Call detail records, Financial instrument trades, Network event logs
Sensing	Information derived from devices that measure physical quantities and change them into signals.	i.e. thermostat, barometer, Co2 measurement instruments
Transactions	information that involves a time dimension to describe the data	Financial (i.e. orders, invoices, payments), work data (i.e. plans or activities records), logistics data (i.e. deliveries, storage records or travel records)
IoT	huge amounts of data and information (also from machine and sensors) generated by large number of devices connected to the Internet	i.e. Smart grid data (Energy consumption monitoring and management)

Source: Our Elaboration of Hashem *et al.*, 2015

Despite the importance of big data to support firm's management, their implementation presents some challenges in every part of the process: acquisition, storage, model analysis and representation.

In particular, Sivarajah *et al.* (2017) envisaged three specific challenges for the effectively employment of big data. The first is the data challenge, related to the characteristics of the data itself (volume, variety, velocity, veracity, volatility, quality, discovery and dogmatism). A second challenge is related to big data management, such as privacy, security, governance and ethical aspects. The last challenge is related to process acquisition and use of big data. It relates on how to capture data, how to integrate and transform data, how to select the right model for analysis and how to provide the results. The size or complexity of the Big Data, including transaction and interaction data sets, exceeds a regular technical capability in capturing, managing, and processing these data within reasonable cost and time limits (Wu *et al.*, 2014).

These challenges are due to the fact that big data are not immediately usable by the companies but need specific architecture's development, such as the specific process of data extraction, processing analysis, loading and visualization.

2.2. Big data in environmental domain

Big data is considered to have the potential to revolutionize the art of management (Wamba *et al.*, 2012). From an organizational point of view, big data is going to play an important role to drive the fourth industrial revolution, considering the benefits and the challenge that it poses to every industry. In general terms, the use of big data can display significant value in all the company's activities areas as product and market development, operational efficiency, market demand predictions, decision making, and customer experience and loyalty.

Organizations that truly embrace big data can create new opportunities to build the competitive advantage for strategic differentiation as for the cost leadership while, those that do not exploit these opportunities, can definitively lose out. (Wang, 2012).

In particular, according to Wang (2012) different business models can emerge in the big data world, that are primarily affected by the following approaches: information based differentiation, information based brokering and information based networks.

The first focuses on using data to create differentiated offerings. Big data allow companies to better understand customers' intentional behavior and create new services, increase satisfaction and provide contextual relevance.

The second involves the opportunities stemming by the commercialization of firm's owned big data. It means that there are huge business opportunities to sell raw information, provide benchmarking and deliver analysis and insights.

The third is about building networks to deliver data where and when it is needed. It means that companies can create a data delivery networks where information can be aggregated, exchanged and reconstituted and drive deal making.

However, this overabundance of information can also be an important asset to those organizations that choose to capitalize on it. Powerful big data and analytics solutions are now being used to analyze this explosion of information and fundamentally change the way that organizations manage their daily operations. The advantages to be gained from big data and analytics are substantial. Organizations that are aggressively pursuing analytics and information strategies are differentiating themselves from their competitors. Meanwhile, many companies that neglect to implement big data and analytics are struggling to maintain their market share.

Despite the high operational and strategic impacts, there is a paucity of empirical research to assess the business value of big data.

From business management standpoint, several studies highlight that this investment can only be valuable if organizations use the appropriate technology and organizational resources to achieve this competitive advantage (Manyika *et al.*, 2011).

In particular, big data analytics capability are defined as the competence to provide business insights using data management infrastructure (technology) and talent (personnel) capability to translate business into competitive force (Kiron *et al.*, 2014;Akter, 2011).

Big data Analytics capabilities are related to the ability to use big data for decision making at strategic level (Lavalle *et al.*, 2011; Wixom *et al.*, 2013; Shroeck *et al.*, 2014) and have positively effect of firm performance.

Among the other strategic potentiality, big data can be employed also to drive companies' green strategy.

The meeting of two of the most fashioning trend in current business scenario, namely big data and environmental sustainability, is receiving an increasing interest among academia and practitioners.

The sustainability and more specifically the greening of organizations' business activities represents an essential issue for the companies that, in order to integrate environment into their strategies, are producing specific innovations that have also positive environmental outcomes.

Big data, indeed, is one of the most powerful drivers to promote productivity, efficiency, and innovation (Wu *et al.*, 2016). Thus, it is easy to image the potentiality of the merge of two concepts.

El Kassae and Singh (2018) indeed demonstrate that big data can be considered one of the driver of green innovation, firms' performance and competitive advantage.

At macroeconomic level, big data are receiving an increasing societal emphasis, especially in ecology fields (Hampton *et al.*, 2013), since its use is often related to resource consumption or pollution measurements. For instance, Big data Analytics encourage and sustain Smart city development and green technology diffusion.

At organizational level, Etzion and Aragon Correa (2016) identify several business and research opportunities deriving by the use of big data for management and sustainability.

With regard to operation and strategic implications of Big data in terms of sustainability, the first most obvious effect according the authors is the use of big data into functional area, such as smart sensor in specific plants enable real time adjustments of systems to maximize efficiency. The second use of big data, beside real-time applications, is to align resource usage with multidimensional forces of costumer behaviors, markets and resources. Third application of big data is rather related to mass customization. Big data may help to create a more compelling value proposition for environmental differentiation strategy, by adjusting product characteristics to the willingness of customers. Finally, big data can help to better manage the risk.

Wu *et al.* (2016) rather provide a comprehensive and panoramic literature survey of big data technologies classified according the specific green impacts they want to have.

When discussing on the achieving green objectives based on big data technologies, authors classified green impacts of big data employment into a number of aspects, such as environment improvement, energy efficiency and management, and sustainability development.

For the environment improvement, authors consider studies that analyze the effect of big data on pollution, climate, and degradation.

With regard to air pollution, for instance, they consider the opportunities offered by big data to monitor the air quality in real time in order to create simulation models based on actual ambient air pollution data, to determine a method to track pollution violations and predict future pollution.

For energy efficiency and management, they analyze four application fields for big data: appliances, such as sensors to be equipped in electric devices to monitor power consumption; building, such as sensor networks in buildings, integrated with existing IP (InternetProtocol) networks to offer real-time information of power consumptions; industry, such as smart meters to reduce air conditioning; and vehicles, such as social media, sensing data, and big data analytics to optimize smart grid management. Finally, for sustainability development, authors reviewed some advances and projects from the aspects of renewable resource, recyclability, sustainable environments, and various sustainable applications missing to analyze the competitive dimension of such involvement.

Other studies on the topic also focus the attention on environmental and social impacts of big data on innovation and performance of the supply chain (Huang *et al.*, 2017; Rossman *et al.*, 2017), analyzing when and how these data can enhance sustainability in this domain (Dubey *et al.*, 2017).

Despite such interest on the topic, big data's support to the green engagement of companies goes beyond supply chain management. The potentiality offered by data opens a set of opportunities for companies that wants to catch the green wave.

Moreover, considering the vast amount of big data technology that company can implement and the potential use related to such technologies, a clear framework of big data implementation for the achievement of green objectives still lacks.

Accordingly, we propose a conceptual framework that relates big data to the different green strategy companies want to pursuit. The theoretical framework is then empowered by empirical cases to show how big data technology can hold or drive firms' environmental strategy.

3. Big data to implement green strategy: a conceptual framework

Commitment to the environment has become a crucial variable in the current economic competition forcing many companies to change their attitude towards environmental issues.

According to some researchers (Hass, 1996; Kolk and Mauser, 2002), environmental engagement may increase by the time, following an ideal path towards sustainability (Ghobadian *et al.*, 1998; Hart, 1995; Hunt and Auster, 1990; Roome, 1992). The emerging behavior of firms extends along a continuum between two extreme positions (Gonzales-Benito and Gonzales-Benito, 2006): a passive, or reactive, conduct, followed by companies that decide to simply introduce the necessary transformations in order to meet regulatory requirements, and a proactive conduct, typical of firms that decide to introduce plans and actions voluntarily to reduce their impact on the natural environment, whereas company reduce its environmental impact and manage the interface between business and nature beyond imposed compliance (Sharma, 2000; Aragon-Correa and Sharma, 2003). Among the others, this study employs one of the more relevant classification, provided by Hart (1997). According to the author, the strategic focus on green can be incrementally recognized through different stages of environmental strategy.

The first stage for most companies is to make the shift from pollution control to pollution prevention. *Pollution control* refers to the need of cleaning up waste or reduce environmental damage after it has been created. Companies that adopt this behavior seek to manage a pollutant after it is emitted and reduce its impact upon the environment.

Pollution prevention is rather any practice that reduces, eliminates, or prevents pollution at its source minimizing or eliminating waste before it is created.

Much like total quality management, pollution prevention strategy depends on continuous improvement efforts to reduce waste and energy use.

Third environmental strategy is *Product stewardship:* it focuses on minimizing not only pollution from manufacturing but also all environmental impacts associated with the full life cycle of a product.

The last stage of environmental proactivity is reached, according to Hart (1997) with *Clean technology strategy*: companies invest in tomorrow's technologies to stay competitive in resource constrained future. This strategy relies in the company's willing to realize major improvement of environmental performance through innovation and new technology.

Big data and analytics, considered an important driver to motivate radical new business models and disrupt traditional industry structures, can help companies in driving new ideas and new innovation in environmental domain.

The growth in the quantity and diversity of data has led to data sets larger than is manageable by the conventional, hands on management tools. To manage these new and potentially invaluable data sets, new methods of data science and new applications in the form of predictive analytics, have been developed. Categorizing business problems, and classifying nature and type of Big Data will helps understand the type of Big Data solution required to solve the equation.

In particular, the potentiality of each typology of big data depends to the specific green strategy the company wants to obtain and the environmental benefit derived from such strategies (Figure 1).

We image that the adoption of more complex green strategies requires the use of more complex big data. The complexity of the big data refers to the five '"Vs"' of data management: 'volume', 'velocity', and 'variety' (Chen *et al.*, 2012).

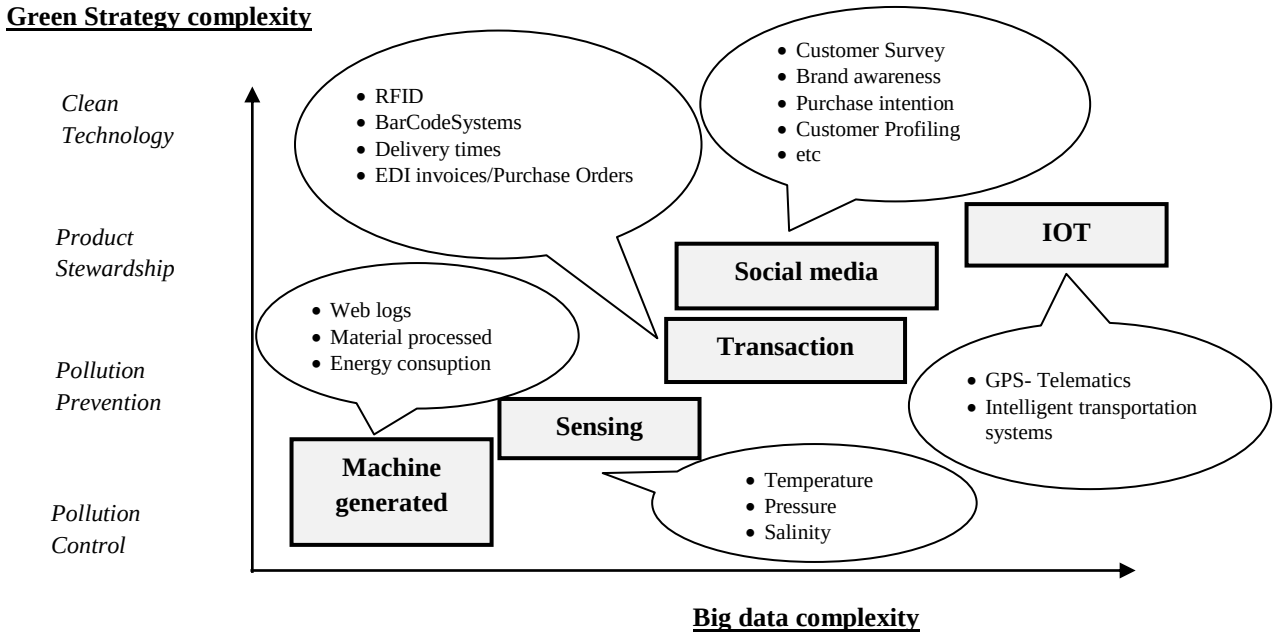
Big data complexity relies on the fact that the more is the volume, velocity and variety of data, the more is challenging to link, match, cleanse and transform data across systems coming from various sources. It is also necessary to connect and correlate relationships, hierarchies and multiple data linkages or data can quickly spiral out of control (Katal *et al.*, 2013).

Big Data complexity is represented in many aspects, including complex heterogeneous data types, complex intrinsic semantic associations in data, and complex relationship networks among data (Wu *et al.*, 2014).

With regards to the heterogeneity of data types, they include structured data, unstructured data, and semistructured data, and so on. More in particular, there are tabular data (relational databases), text, hyper-text, image, audio and video data, and so on. The second aspect of complexity regards the intrinsic semantic associations in data. Mining complex semantic associations from different sources of data will significantly help improve application system performance such as search engines or recommendation systems. However, in the context of Big Data, it is a great challenge to efficiently describe semantic features and to build semantic association models to bridge the semantic gap of various heterogeneous data sources. The third level of Big data complexity relies on the complex relationship networks in data.

According to these considerations we propose a model that, starting from the classification of the data sources proposed by the Hashem *et al.* (2015), suggests which big data sources, considering the increasing level of the complexity, the companies have to use to adopt different green strategies.

Fig. 1: Big data for green strategy implementation



Source: Our Elaboration

In the pursuit of Pollution Control objectives, firms simply need to measure and to provide information to external stakeholder about its production process or about product/service use.

In the energy industry, companies run big, expensive, and complicated systems to generate power. Each grid includes sophisticated devices that monitor voltage, current, frequency, and other important operating characteristics.

Thus, machine generated data are the simplest internal information needed to demonstrate the achievement or the compliance to the environmental target, such as the level of gas emissions during the operations or the energy efficiency of electric appliance.

In pursuit of the Pollution Prevention strategy companies requires a more complex data that allows not only the ex-post controlling of its operations but also the continuous monitoring of its activity. Accordingly, the complexity and the amount of the data required increases.

Environmental benefit during the process can be reached, for instance, with a multifunctional meter, an electronic device capable of monitoring, analyzing, and diagnosing indoor air quality. In addition, it can allow user to easily pinpoint and troubleshoot airflow problems and immediately see the results of correction.

This data can also improve the operation efficiency, for instance manufacturing sensor data provide real-time manufacturing equipment and identifying tear and wear.

The implementation of Product stewardship strategy, reducing the environmental impacts associated with the full life cycle of a product, requires data that overlap companies' boundaries.

In particular, the research of environmental benefits during the process is related to the whole supply chain. Thus, transaction data are required to effectively implement this kind of strategy.

In order to reach a Supply Chain Optimization, RFID Data (real time inventory, Automated replenishment signals, Automated receiving and storing data), monitoring of delivery routes, traffic data can be used to reduce environmental damage during production process.

The applications that RFID technology, for instance supports to lower the carbon footprint in several ways: by improving recycling through refuse management, reducing vehicle emissions through better usage, improving the management of natural resources, tracking animals to monitor the impact of climate change, reducing equipment by better asset management.

Moreover, when company wants to embrace Product stewardship strategy realizing environmental benefit for end users can rather collect data from customers by using social media.

Social media big data has become an important driver for acquiring and spreading information in different domains because it allows to receive a huge amount of data (Stieglitz *et al.*, 2018).

In the environmental domain, collecting social media data from customers can help companies to design and develop a product that fit with customers' expectation and needs.

Marketing departments indeed are using social network feeds to conduct sentiment analysis to determine what users are saying about the company and its green products or services, especially after a new product or release is launched.

These data are more complex than previous not only because they require the integration of internal and external data sources but also because the amount of the data volume that companies need to manage is considerably high.

Lastly, when companies want to implement a Clean Technology Strategy, a more complex data are needed, such as insights gained from Internet of things.

Internet of things (Iot) is formed by a number internet connected objects, which include PCs, smartphones, tablets, WiFi enabled sensors, wearable devices, and household appliances. IoT data collect information from different source, such as machine, sensors, customers using these interconnected devices and products. Most IoT applications do not only focus on monitoring discrete events but also on mining the information collected by IoT objects.

The data generated from IoT devices, the most complex, most added value, most investment required, can be used in finding potential research trends and investigating the impact of certain events or decisions (Ahmed *et al.* 2017).

An environmental use of IoT is represented by smart grids. A big data solution can analyze power generation (supply) and power consumption (demand) data using smart meters: large amounts of data are collected from various sources, such as the power utilization habits of users, pharos measurement data for situational awareness, and energy consumption data measured by widespread smart meters. (Ahmed *et al.* 2017).

Another application of Iot with a huge positive impact on the environment is on agriculture.

Interconnected devices can be used to control crop or greenhouse irrigation through sensors: automatic irrigation can be deployed as a way to fight the periodic droughts providing water according to the conditions of soil. Moreover, the spectral on-board sensors of connected drones help farmers optimize the use of fertilizers and plant protection products besides providing airborne soil condition data to complement soil sensor information.

The implementation of Iot technologies for the realization of a Clean Technology Strategy requires the development of a particular ability in managing different infrastructures and interconnected data.

Applying Iot to business requires several physical assets, such as smart interconnected devices; and capabilities, such as data storage and analytics tools to effectively integrate information from different sources and transform into valuable resources able to improve their strategy. Integrating information can unlock new insights by creating value chains that reduce waste and bridge gaps between organizations. Data can also be combined to create ecosystem connectivity and promote collaboration, each of which is essential for delivery of the sophisticated, compelling experiences that are increasingly demanded by customers.

In order to develop Clean technology through these complex big data, companies often refer to external partner to develop the necessary architecture needed to exploit information potentialities. In one industry after another, IoT drives new partnerships, and those partnerships drive transformation.

The next case illustrates the application of Iot technology to develop a Clean Technology strategy.

3.1 Big data to the implementation of sustainable mobility: the case of Car2go

In order to illustrate the conceptual framework presented, we use an empirical case of big data use to drive green strategy.

Among others, transportation activities affect humans and the natural environment to a very great extent.

This is one of the industries that produce the highest environmental impact and, in recent years, it has been subjected to increasing regulatory restrictions. For this reason, companies that operates in this industry are forced to the green challenge, implementing and developing green innovations even if it needs a great effort and a change in their existing technologies and business models.

Smart transportation, combining different modes and options (public transport, car-sharing, car rental services, taxis and a bicycle system) can actually meet the increasing demand for mobility, and at the same time generate benefits for the environment, including cleaner air, fewer accidents, less congestion and less noise pollution.

Smart transportation not only needs IT, apps and smart invoicing but innovation and research as one of the driving forces behind the transition towards smarter and cleaner mobility.

Carsharing is one of the services able to change the transportation landscape in urban areas, creating new opportunities for automakers to expose their brand to a younger, urban-dwelling demographic who want affordable access to vehicle mobility, but are not yet ready to purchase a car.

It represents one of the most active area of application of IoT for the environment.

If consumers are shifting from car ownership to ownership plus vehicle access, manufacturers have to make a second shift - from being designers and manufacturers of cars to being providers of transportation experiences. For this to occur they have to get into the insight-generation business, which requires not only data collection, but also the expertise to analyze data and create additional value for their customers through insight generation.

Daimler AG is one of the company more active in the car-sharing industry. The car manufacturer is actively driving forward the transition from automotive manufacturer to networked mobility service provider.

Through Car2go, one of its subsidiaries, the company launched a car-sharing service in Europe, China and North American cities.

Car2go, initially piloted Germany in 2008, has evolved from an innovative mobility experiment to become the largest one-way car-sharing company on Earth, with over 2.2 million members sharing cars on three continents.

The service offers flexible mobility everywhere and at any time for a cheap price in several cities.

Despite the traditional car-sharing systems, the free-floating car-sharing service does not use fixed rental stations or require reservations, instead, vehicles are spread throughout a city.

The cars are located everywhere and booked via smartphone app or the internet portal and users pay only for the rental time - calculated at intervals of one minute, since other costs, such as parking fees, fuel, taxes and insurance are already included. The Car2go App allows to locate, unlock, drive, and park the car in any legal parking space within a city's Home Area.

The new car-sharing business model is based on the management of several hardware (such as car, devices) and software (mobile App) components. Its implementation deals with the capability to gather, analyze and combine data deriving from different sources.

The first hardware component is represented by cars. The vehicles are ready to be connected via Bluetooth technology with user's smartphone to allow the navigation system and enjoy the drive, playing music and podcasts.

Cars location is updated via GPS system and monitored centrally, along with information like fuel level and plenty of other metrics, all uploaded over an integrated data connection.

Users receive a RFID card that provides access: just walk up, tap it on the windshield, and the car unlocks. Once have found the keys hiding in the glove box and, after punching in a PIN and accepting a few terms and conditions on the car's center-mounted touchscreen, user is ready to roll.

The second hardware component is the user's smartphone. Through the official App, the user can register its account, entering personal data, including address, payment information and scan driver's license. The registration allows to use the service and receive the membership cards.

The app provides cars location information, so user can search, reserve and also open and rent the available vehicles. The app is layered over Google Maps and so user can get walking directions if he doesn't know his way around.

Moreover, through *Mercedes me* online portal, the company gives to customers a ranges of services such as electronic appointment booking for classic customer service, Car2go information, lifestyle activities and entertainment offerings and also it enables users across Europe to connect with their vehicles anywhere, any time.

The portal includes the new Lifestyle Configurator, which enhances the classic vehicle configurator: customer can use it to enter their individual preferences in furnishings, travel destinations or sporting disciplines and, on the basis of their selections, a vehicle is suggested that would be the best match for them.

With its members worldwide, Car2Go uses visualization-mapping software based on daily trips and member data to track travel patterns.

This interconnection provides a great customer experience. All these data also give marketers with deeper customer insights and profiling, so that one-to-one marketing has become a reality.

The company also created partnership in order to enrich the new urban mobility approach. For instance, the company established in 2012 (and completed with the full acquisition in 2014) a strategic partnership with Intelligent Apps, a German market leader into taxi management by smartphones. The rational above the collaboration encompasses several areas of joint product development and marketing initiatives with the aim to achieve added value for customers and greater market penetration. The purpose was to make customers will be able to find and book both a taxis or car2go cars. It is also envisaged the development of a common payment system.

Daimler also developed Moovel, the free app available for Android and iOS that combines offers from various mobility service providers and offers the ability to comfortably compare different transportation options with one another regarding travel time and cost. With one single account users handle booking and payment for several services, such as car2go, Flinkster, mytaxi and Deutsche Bahn.

In order to enter into carsharing business, Daimler and automakers in general needed to develop a broad set of partnerships around data.

To develop this product and this service for customers, Car2go needed a global operation, as well as a fast and agile way of provisioning IT resources because it needed to be able to scale.

When investigating how to accomplish this, the company found that the only way to do that was to work with one of the major cloud providers. It not only needed cloud resources, but also wanted to have additional services on top of those cloud resources.

Confronted with the issue, car2go developed a solution to tie together the car2go vehicles with an app using GPS, the mobile network, and backend technologies into one cohesive application and user experience.

Thus, the company migrated all running systems to IBM Cloud infrastructure and established a managed services agreement with IBM to provide DevOps capabilities from the IBM service center in Bucharest, Romania. The DevOps concept included a continuous delivery pipeline for advanced mobility applications based on automated deployment and infrastructure provisioning.

4. Conclusion

Big data and green strategy are considered two of the hottest topic in strategic and innovation management. Previous scholars that merged these two topic focused on the business and research opportunities deriving by the use of big data for management and sustainability (Etzion and Aragon Correa, 2016), on big data technologies classified according the specific green impacts they want to have (Wu *et al.*, 2016) or on big data environmental and social impacts on innovation and performance in the supply chain management (Huang *et al.*, 2017; Rossman *et al.*, 2017).

Despite such interest on the topic, considering the vast amount of big data technology that company can implement and the potential use related to such technology, a clear framework of big data implementation for the achievement of green objectives still lacks.

This paper aims at shedding lights on this field proposing a conceptual framework that relates big data sources to the adoption of different green strategies. An empirical case illustrates the application of Iot technology to develop a Clean Technology strategy.

From the study, it emerges that adoption of more complex green strategies requires the use of more complex big data. In order to develop Clean technology through these complex big data, companies often refer to external partner to develop the necessary architecture needed to exploit information potentialities.

The conceptual framework represents just the first attempt to study the topic and should be improved and tested with empirical cases, able to demonstrate the support of big data types on different green strategies.

Despite such limitations, this contribution provides some valuable research implications, useful for researchers and academics,

At theoretical level, this study fills the gap in the literature that does not specifically relate big data employment with green strategy.

With the growing importance of data-oriented or evidence based organizations, our study has important implication for practice as well.

Firstly, the theoretical analysis suggests that companies can employ big data as a tool to develop and implement their green strategy with different extent. Secondly, it highlights that as soon as big data become more complex, companies need several complementary assets to successfully drive toward green proactivity.

Finally, the study also confirms that in order to take the value offered by big data to green challenge, companies should be open mind to co-create product with costumers, collaborate with technology provider that help to improve their operation and processes, cooperate with data brokering to offer a new set of data that can be translated into valuable resource in the future.

References

AHMED E., YAQOOB I., HASHEM I.A.T., KHAN I., AHMED A.I.A., IMRAN M., VASILAKOS A.V. (2017), "The role of big data analytics in Internet of Things", *Computer Networks*, vol. 129, n. 2, pp. 459-471.

AKTER, S., WAMBA, S. F., GUNASEKARAN, A., DUBEY, R., CHILDE, S. J. (2016), "How to improve firm performance using big data analytics capability and business strategy alignment?", *International Journal of Production Economics*, vol. 182, pp. 113-131.

AMANKWAH-AMOAH J. (2016), "Emerging economies, emerging challenges: Mobilising and capturing value from big data", *Technological Forecasting and Social Change*, vol. 110, n. 9, pp. 167-174.

ARAGON-CORREA, J.A. SHARMA, S. (2003), "A Contingent Resource Based View of Proactive Corporate Environmental Strategy", *Academy of Management Review*, vol. 29, n. 1, pp. 71-88

BERMAN J.J. (2013), *Principles of big data: preparing, sharing, and analyzing complex information* Waltham, MA, Morgan Kaufmann

BROWN B., CHUI M., MANYIKA J. (2011), "Are you ready for the era of 'big data'", *McKinsey Quarterly*, vol. 4, n. 1, pp. 24-35.

CHEN H., CHIANG R.H., STOREY V.C. (2012), "Business intelligence and analytics: From big data to big impact", *MIS quarterly*, vol. 36, n. 4, pp. 1165-1188.

CHRISTMANN P. (2000), "Effects of "best practices" of environmental management on cost advantage: The role of complementary assets", *Academy of Management Journal*, vol. 43, n. 4, pp. 663-680.

DUBEY, R. et al (2017), "Can big data and predictive analytics improve social and environmental sustainability?." *Technological Forecasting and Social Change*, Forthcoming

EL-KASSAR A.N., SINGH S.K. (2018), "Green innovation and organizational performance: The influence of big data and the moderating role of management commitment and HR practices", *Technological Forecasting and Social Change*. In Press

ETZION, D., ARAGON-CORREA, J. A. (2016), "Big data, management, and sustainability: Strategic opportunities ahead", Organization & Environment, vol. 29, n. 2, pp. 147-155.

GHANI K.R., ZHENG K., WEI J.T., FRIEDMAN C.P. (2014), "Harnessing big data for health care and research: are urologists ready?", *European Urology*, vol. 66, n. 6, pp. 975-977.

GHOBADIAN A., VINEY H., LIU J., JAMES P. (1998), "Extending Linear Approaches to Mapping Corporate Environmental Behaviour", *Business Strategy and the Environment*, vol. 7, n. 1, pp. 13-23.
GONZALES-BENITO J.C. GONZALES-BENITO O.C. (2006), "A Review of Determinant Factors of Environmental Proactivity", *Business Strategy and the Environment*, vol. 15, n. 2, pp. 87-102.
HAMPTON S.E., STRASSER C.A., TEWKSBURY J.J., GRAM W.K., BUDDEN A.E., BATCHELLER A.L., PORTER J.H. (2013), "Big data and the future of ecology", *Frontiers in Ecology and the Environment*, vol. 11, n. 3, pp. 156-162
HART S.L. (1995), "A natural-resource-based view of the firm", *Academy of Management Review*, vol. 20, n. 4, pp. 986-1014.
HART S.L. (1997), "Beyond greening: strategies for a sustainable world", *Harvard Business Review*, vol. 75, n. 1, pp. 66-77.
HASHEM I.A.T., YAQOOB I., ANUAR N B., MOKHTAR S., GANI A., KHAN S.U. (2015), "The rise of "big data" on cloud computing: Review and open research issues", *Information Systems*, vol. 47, n. 1, pp. 98-115.
HASS J.L. (1996), "Environmental (Green) Management Typologies: an Evaluation, Operationalization and Empirical Development", *Business Strategy and the Environment*, vol. 5, n. 2, pp. 59-68.
HUNT C.B., AUSTER E.R. (1990), "Proactive Environmental Management: Avoiding the Toxic Trap", *Sloan Management Review*, vol. 31, n. 2, pp. 7-18.
KATAL, A., WAZID, M. GOUDAR, R.H., (2013), "August. Big data: issues, challenges, tools and good practices", In *Contemporary Computing (IC3), 2013 Sixth International Conference on* (pp. 404-409), IEEE.
KEESO A. (2014), "Big data and environmental sustainability: A conversation starter", *Working paper 14-04*, Smith School Working Paper Series.
KIRON D., PRENTICE P.K., FERGUSON R.B. (2014), "The analytics mandate", *MIT Sloan Management Review*, vol. 55, n. 4, p. 1.
KOLK A., MAUSER A. (2002), "The Evolution of Environmental Management: From Stage Models to Performance Evaluation", *Business Strategy and the Environment*, vol. 11, n. 1, pp- 14-31.
LAVALLE S., LESSER E., SHOCKLEY R., HOPKINS M.S., KRUSCHWITZ N. (2011), "Big data, analytics and the path from insights to value", *MIT Sloan Management Review*, vol. 52, n. 2, pp. 21-32.
MANYIKA J., CHUI M., BROWN B., BUGHIN J., DOBBS R., ROXBURGH C., BYERS A.H. (2011), Big data: The next frontier for innovation, competition, and productivity McKinsey Global Institute, McKinsey & Company.
MCAFEE A., BRYNJOLFSSON E., DAVENPORT T.H., PATIL D.J., BARTON D. (2012), "Big data: the management revolution", *Harvard Business Review*, vol. 90, n. 10, pp. 60-68.
MISHRA B.S.P., DEHURI S., KIM E. (Eds.), (2016), *Techniques and Environments for Big Data Analysis: Parallel, Cloud, and Grid Computing* (vol. 17), Springer.
ROOME N. (1992), "Developing Environmental Management Strategies", *Business Strategy and the Environment*, vol. 1, n. 1, pp. 11-24.
SCHROECK, M., SHOCKLEY, R., SMART, J., ROMERO-MORALES, D., TUFANO, P. (2012), "Analytics: The real-world use of big data", *IBM Global Business Services*, vol. 12, pp. 1-20.
SHARMA S. (2000), "Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of Environmental Strategy", *Academy of Management Journal*, vol. 43, n. 4, pp. 681-697
SIVARAJAH U., KAMAL M.M., IRANI Z., WEERAKKODY V. (2017), "Critical analysis of Big Data challenges and analytical methods", *Journal of Business Research*, vol. 70, n.1, 263-286.
STIEGLITZ S., MIRBABAIE M., ROSS B., NEUBERGER C. (2018), "Social media analytics-Challenges in topic discovery, data collection, and data preparation", *International Journal of Information Management*, vol. 39, n. 2, pp. 156-168.
WAMBA S.F., AKTER S., EDWARDS A., CHOPIN G., GNANZOU D. (2015), "How 'big data'can make big impact: Findings from a systematic review and a longitudinal case study", *International Journal of Production Economics*, vol. 165, n. 7, pp. 234-246.
WAMBA S.F., GUNASEKARAN A., AKTER S., REN S.J.F., DUBEY R., CHILDE S.J. (2017), "Big data analytics and firm performance: Effects of dynamic capabilities", *Journal of Business Research*, vol. 70, pp. 356-365.
WANG R. (2012), "What a Big-Data Business Model Looks Like", *Harvard Business Review website*, https://hbr.org/2012/12/what-a-big-data-business-model
WIXOM B.H., YEN B., RELICH M. (2013), "Maximizing Value from Business Analytics", *MIS Quarterly Executive*, vol. 12, n. 2, pp. 111-123.
WU J., GUO S., LI J., ZENG D. (2016), "Big data meet green challenges: big data toward green applications", *IEEE Systems Journal*, vol. 10, n. 3, pp. 888-900.
ZHAO R., YIYUN L., NING Z., HUANG, T. (2017) "An optimization model for green supply chain management by using a big data analytic approach", *Journal of Cleaner Production*, vol. 142, n. 2, pp. 1085-1097.

Websites

http://www.car2go.com
http://www.ibm.com

Entrepreneurship in innovative artistic production. Insights from the Italian context

MARTHA FRIEL[*] ANGELO MIGLIETTA[•] GIOVANNA SEGRE[♠]

Abstract

Objectives. *The work investigates the challenges imposed on artistic and cultural entrepreneurship in a period characterized by a general decline in public resources for culture and by a growing competition between traditional operators in the art world and in innovative cultural and creative start-ups. The analysis also aims to provide a framework on the specific skills that cultural artists/entrepreneurs must possess to ensure the success of their innovative projects.*

Methodology. *After a review of the literature on entrepreneurship in the arts and culture, the paper analyses the characteristics of over 200 operators and of their project proposals in the framework of the call "Ora!" of the Italian foundation Compagnia di San Paolo.*

Findings. *The paper highlights the centrality of skills related to teamwork management, interdisciplinary application of solid mono-disciplinary knowledge, product innovation through digital technologies, and networking. The work also suggests multi-stakeholder management practices that can be implemented in order to create more favourable conditions to support cultural production and entrepreneurship in the arts.*

Research limits. The *research is a first exploration. Further analysis will be carried out either by analysing subjects and projects candidates for other funding programs or by analysing individual case studies vertically.*

Practical implications. *Through the analysis proposed, insights are provided on the development of new ways to support entrepreneurship in the artistic and cultural field.*

Originality of the study. *The work aims at enriching through the use of new sources a field of studies still often limited by the few data available.*

Key words: *creative industries; entrepreneurship in arts and culture; innovation; support-policies*

[*] Assistant Professor of *Economics and Business Management* - IULM University, Milan, Italy
e-mail: martha.friel@iulm.it

[•] Full Professor of *Management* - IULM University, Milan, Italy
e-mail: angelo.miglietta@iulm.it

[♠] Associate Professor of *Political Economy* - University of Turin
e-mail: giovanna.segre@unito.it

1. Introduction

In the last twenty years the economic value generated by the industries producing cultural and creative goods and services and the potential growth of this macro-sector has turned the spotlight on the creative economy and has led to a rich academic literature in the field.

This attention, started in particular from the United Kingdom (DCMS 1998; 2001), has then spread rapidly to all the advanced economies and to developing countries during the years 2000, creating a global debate and a wide production of studies aimed at delimiting and quantifying the economy of creativity. This taxonomy, however, proved to be rather complex given the great dynamism and the variety of the sectors that comprise it (Roodhouse, 2008).

Literature on creative industries has focused on many different aspects. Scholars have engaged in analysing the potential of the creative economy (Caves, 2000; Howkins, 2002) and of the spatial concentration of creative talents for territorial competitiveness (Scott, 2000; Hall, 2000; Florida, 2002 et al.); cultural and creative industries have been described as a tool for urban regeneration (Communian, 2011), in terms of sustainable and "smart" economic growth and innovation (Potts et al., 2008; Bertacchini and Santagata, 2012).

In recent years, literature has also been developed on the characteristics of entrepreneurship in the cultural and artistic field (Greffe, 2016), on support policies and on the development of incentive schemes for entrepreneurship in the cultural and creative sector (Montanari, 2011), and on the role of education and training in supporting innovation in the arts and culture (Wilson and Stokes, 2005; Comunian and Gilmore, 2016).

Many countries - from the United Kingdom, to Germany (BMWI, 2009), from Hong Kong (University of Hong Kong, 2003) to the USA (Americans for the Arts, 2005) - have mapped and quantified their own creative sectors, adopting ad hoc support policies and launching, particularly in urban areas, important investments, public and private. Investments have been directed to both general structural or sector-wide interventions and generic measures aimed at the development of innovative companies and creative start-ups (Foord, 2008).

Support policies to the creative economy have shown however significant limitations and studies demonstrate how these strategies, in some cases, have deflected a situation of growing market failure, particularly in traditional micro and small cultural activities (Foord, 2008; Hausmann, 2010).

Micro and small cultural and creative activities, which in the past have been able to count on public resources, today find themselves competing in an increasingly crowded market with ever more limited economic resources. Moreover, artists-entrepreneurs often show a general weakness in terms of managerial and organizational skills, and in terms of process and product innovation, which penalizes them in accessing alternative resources from the private sector (Bilton and Cummings, 2015).

This requires today a rethinking of policies to support entrepreneurship in cultural and creative sectors. Consistently with literature on entrepreneurial innovation, the rethinking of these policies should be done taking into account several levels of analysis (Garud, Gehman and Giuliani, 2014), that is, the individual characteristics of the artist-entrepreneur, the role of team members and their networks and the different contexts in which artistic and cultural entrepreneurship develops.

Moreover, the issue concerns not only the public policy system but also non-profit organizations and private foundations that, in many countries, play a fundamental role in supporting cultural innovation.

In particular, some questions are: which subjects are able to generate processes of organizational and operational change with their interventions? How can different forms of financing trigger change in professional practices, and on entrepreneurial teams?

These questions find a particularly interesting context of analysis in Italy where artistic and cultural production is strongly supported by a number of newly introduced grant programmes such as Funder-35 and CheFare, both launched in 2012, and Culturability, launched in 2013. Among the different programmes supporting cultural productions, an important role is played also by Italian

bank foundations, non-profit entities peculiar to the Italian context, acting both as operating and grant-making institutions in the exclusive pursuit of social purposes (Leardini *et al.*, 2014). Specific areas of intervention of these institutions are the fields of arts and culture, which, together with the education, social assistance, and research areas, are absorbing the highest part of their funds. The great amount of financial resources and the high number of interventions supporting art, cultural activities and heritage by all the 88 Italian bank foundations, which knowingly act in a country where culture and creativity are strategic assets, represents also an important occasion for research. Given the highly non standardized nature of the organizations involved in the cultural production, the occasion for research derives from the recognition that the action of the bank foundation are actually creating, as a by-product, a privileged observatory for studying the characteristics and the organizational and economic practices of the subjects operating in contemporary artistic and creative production and that are applying for grants, in order to identify opportunities and critical issues related to their management and organization. In particular, the article aims at addressing two fundamental questions:

1. Is it a valid statement that artists should become entrepreneurs?
2. What are multi-stakeholder management practices that could be implemented in order to create supportive conditions for artists?

To answer these questions, 250 cultural and creative artistic organizations and their proposal of innovative cultural productions were analysed in the context of the requests for funding received by Compagnia di San Paolo, one of the main Italian bank foundations.

The paper is exploratory and represents an initial analysis of the collected data and is divided as follows. In the next section we illustrate some evidences on entrepreneurship in the creative and cultural field, integrating indications given by literature with some data on the Italian system and on the supporting action of Italian bank foundations.

Then, the methodological aspects of the work are exposed with an analysis of key evidences. Finally, the last part discusses most relevant knowledge gaps and suggests further research opportunities.

2. Entrepreneurship in arts and culture in Italy

As in other European countries, since the mid-2000s (Santagata, 2009), in Italy too there has been a growing interest in the creative industries in terms of added value and employment creation.

In Italy, in 2016, the cultural and creative production system (cultural industries, creative industries, artistic heritage, performing arts and visual arts, creative-driven productions) was worth about € 89.9 billion to reach 250 billion (16.7% GDP) when considering the entire cultural supply chain. The cultural and creative production system also provides work for 1.5 million people, 6% of the total employed in Italy (Symbola, 2017) and, over the years, the sector has shown a certain liveliness in terms of planning quality and of new start-ups.

Despite these numbers and the many reports available on the industry today, studies on entrepreneurship in the cultural and creative sector are still limited. Instead, this theme is particularly relevant today and at the centre of some debate in other countries.

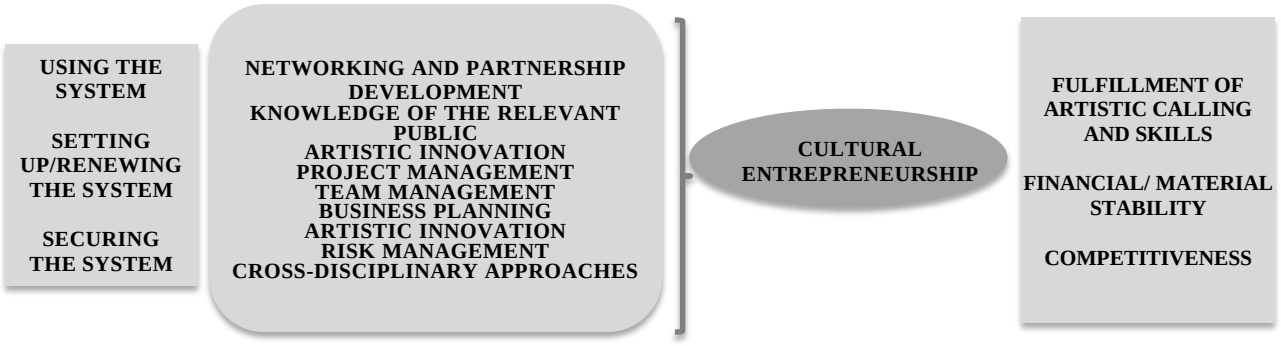
The increase in creative cultural micro-small business activities in fact has been ascribed also to the sharp contraction of public spending in culture, at all levels of government, which has pushed many cultural and creative operators, already on the market or new entrants, in a sort of "forced entrepreneurship" (Oakley, 2014).

This also applies to many arts and culture organizations increasingly facing the same challenges of for-profit organizations (Weinstein and Bukovinsky, 2009).

The persistent weakness of these subjects in their market effectiveness and survival, are widely reported in arts management and cultural entrepreneurship literature, and find empirical evidence from the many case studies available.

Despite difficulties in generalizing a universe of such different subjects operating in the creative and cultural sector, when taking into consideration only cultural and creative self-entrepreneurs and small artistic and cultural organizations, scholars have identified recurrent aspects of weakness and failure factors (Eikhof and Haunschild, 2006; Lange, 2006; Mc Guigan, 2010, Scott 2012, Miglietta et. al 2013), these are related mainly to: teamwork and project management, cross-disciplinary application of sound mono-disciplinary knowledge, product innovation though digital technologies, business planning, networking and partnership development. Part of the literature also focused on organizational weaknesses stemming from the peculiarities of the cultural and creative labour market (Hausmann, 2010, Menger, 2014 et al.). Based on these literature outcomes and by reinterpreting the framework proposed in particular by Hausmann (2010) for Germany, the following scheme on entrepreneurial functions and start-up success in the cultural context is proposed also for the Italian context (Figure 1).

Fig. 1: Key variables and sources for the economic analysis of cultural production



Source: Own elaboration, based on Hausmann (2010)

How do Italian cultural and creative micro-enterprises and organizations that operate in artistic and cultural innovation enter this scheme? What systemic actions can be implemented to support them? What role does the context play and what role does the individual characteristics of the artist entrepreneur and of the project team have instead? To try and give an answer to this question it is possible to analyse evidences from bank foundations support actions in the artistic and cultural production field.

Art and culture are priority areas of action in need of both public and private support, due to the usual argument based on market failure (art as public good, generating externalities). Following this failure, according to the ACRI - the organization representing Italian banking foundations - foundations operating in "Arts and Cultural Heritage" in 2016 were 85, providing € 260.9 million to the sector through 7,007 interventions (ACRI, 2017). These concerned the conservation and enhancement of architectural and archaeological heritage; the support to artistic and literary creations and to innovative audience engagement practices; technological innovation; and the organization of various cultural events and activities.

With this spectrum of action and great financial resources, bank foundations play a fundamental role in Italy not only in supporting the sector but also for its knowledge and innovation (Barbetta, Cammelli, Della Torre, 2013; Segre, Longhi, Fornara, 2015). In fact, the operational mechanisms underlying foundations' grant making processes allow us to gather valuable information on the operating methods of the beneficiaries and any critical issues. Moreover, as we will discuss in the following sections, being at the forefront in grasping the possible market failures of funded subjects, foundations are in an ideal position to study innovative solutions to support cultural projects development and creative start-ups, also in coordination with other local stakeholders.

3. Innovative artistic production: the sample and the support-action of a bank foundation

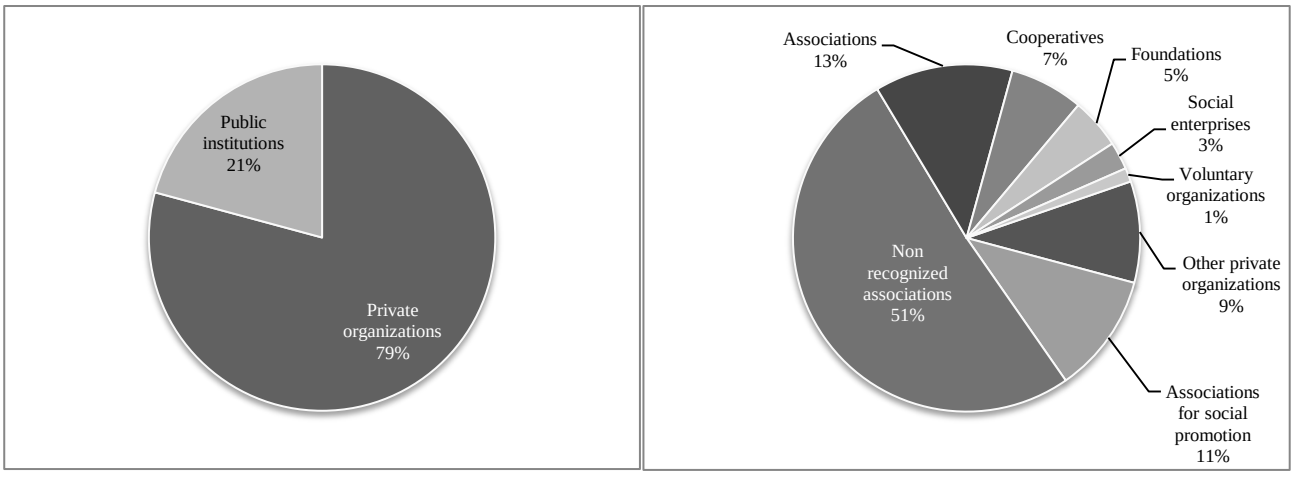
For the purposes of our investigation, we analysed organizations that have applied to one of the most important calls in the Italian scene of banking foundations' grant making activities: the call "ORA! Contemporary languages, innovative productions". The importance of this call as a sample for research is twofold. It is one of the few existing call specifically devoted to the support of innovative artistic productions, and it is promoted by the second largest Italian banking foundation, the Compagnia di San Paolo. Founded in Turin in 1563, the Compagnia di San Paolo is today one of the largest private foundations in Europe and Italy - at the end of 2016 it had a total market value of the financial assets portfolio of € 6.8 billion - and through calls, projects managed directly by its structure, and through its own instrumental bodies, is particularly involved both in the promotion of arts and heritage valorisation and in cultural innovation. The total amount of grants awarded in 2016 for the arts, cultural heritage and cultural innovation sectors exceeded € 35 million.

As part of its commitment to cultural innovation, in 2015 the Compagnia di San Paolo promoted the call for proposals "ORA! Contemporary languages, innovative productions". The call aimed at promoting cultural production at national level by supporting projects in the visual and performing arts and in other fields of contemporary culture; encouraging the development of actors and projects with a strategic perspective of their cultural proposal and their economic sustainability; enriching the contemporary cultural offer of the Piedmont and Liguria regions by attracting new actors on the territory, and connecting them with the institutions.

Project proposals were to include creations in the visual and performing arts as well as in more expressive languages of contemporary culture such as exhibitions, events, workshops, video and performance art, installations, multimedia products, etc.). Projects had to be characterized by elements of originality, both in the creative process and in the final realization. Finally, projects had to: demonstrate the ability to foster cross-disciplinary exchange of creative experiences; identify original solutions with regard to the management, organization and economic-financial sustainability of the project; possess replicability characteristics.

The call, though was requesting to propose a project to be performed in the Piedmont or Liguria regions, for the first time in the history of the foundation was open to applicants from all over Italy. The call received 250 applications. Only non-profit organizations (such as associations, foundations, social and cultural cooperatives and public institutions) were allowed to apply. Figure 2 shows the percentage distribution between private non-profit organizations and public institutions (left side), and the percentage distribution of private organizations into different typologies (right side).

Fig. 2: Private non-profit organizations and public institutions distribution of the sample



Source: Own elaboration

The maximum possible granted amount was € 45,000, expressed as maximum 80% of the total budget of the proposed project. Figure 3 shows the budgets of the proposed projects.

Of the 250 candidate projects, 20 were selected for funding, for a total amount of € 740,000. However, since the aim of the paper is to assess the level of management skills either of artists or included in the project team involved in innovative cultural entrepreneurship in the Italian scene, we mainly concentrate our analysis on the sample of the 250 applicants.

4. Research methodology

The analysis covers all the candidate institutions and was divided into two steps. The first phase involved the construction and analysis of a full and original dataset on the 250 institutions that participated in the call. The information contained in the dataset includes legal and economic characteristics of the subjects applying to the call, the composition and experience of the project teams, and the main cultural and artistic characteristics of the proposed projects. The data are obtained from the analysis of statutes, balance sheets, and project sheets in order to obtain information about the organization in terms of legal nature, foundation year, staff, working group CV's, financial and economic data, area of activity, and partnerships. Moreover, information about the project was collected, mainly in relation to the two principal characteristics of the call: cross-disciplinarity and use of digital technology.

Although the dataset has some limitations concerning both the synthesis of complex project documents and the focus on a single call, nevertheless the collected data can be considered representative of project activities carried out by Italian micro and small realities operating in the artistic and cultural sector. This is also confirmed by comparing the results obtained with those of other evaluation projects carried out in other foundations (Fondazione Cariplo, 2016).

In order to investigate the characteristics of cultural entrepreneurship, the analysis of the dataset is concentrated on three main aspects, following the scheme presented in Figure 1. First of all, we concentrate our analysis on the examination of the professional skills involved both in the organizations and in the proposed project. Secondly, we look at the economic sustainability of cultural organizations. We complete the analysis by investigating the main features for the competitiveness of innovative cultural productions.

5. Results: main features of cultural production

The analysis allowed to outline the main characteristics of the organizations and artists on the Italian contemporary artistic production scene. The sample of 250 cultural producers can be divided according to three main cultural domains: 30% belong to the performing art sector (theatre, live music and dance), 17% belong to contemporary art sector, and 16% are working in cultural promotion. The other areas of activity (37%) concern audio-visual, digital, social and artistic training. This representative sample of the wide-ranging types of cultural production allows highlighting several characteristics of the entrepreneurial strategies carried on by artist and cultural managers.

5.1 Artistic and professional skills: looking for "artepreneurs"

One third of the organizations have been active on the cultural scene for 5 years or less: 80 organizations were established after 2012 and the remaining ones are also relatively young. Most were born after 1996 and in particular after 2008, and this "youth" is also reflected on the experience of the work teams.

Moreover, although functions among team members are clearly outlined in the organizational structure, the analysis of the curricula shows a greater specialization in the field of art while project management and economic-financial skills are underrepresented.

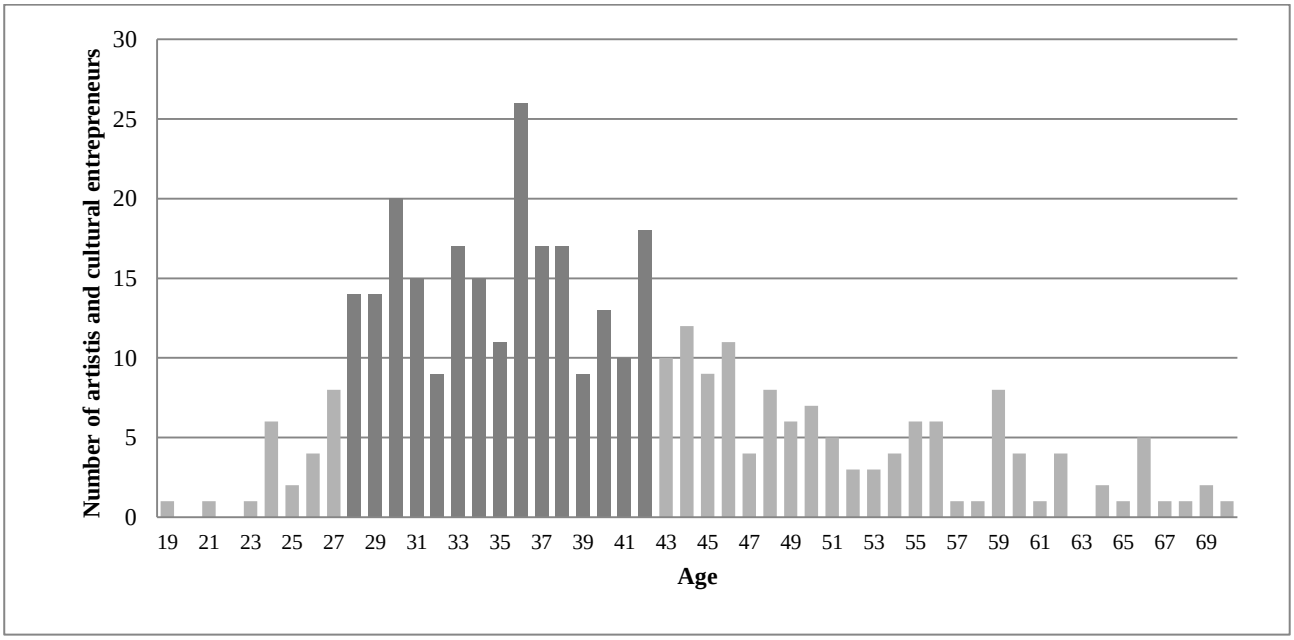
About 34% of applicants identify an artist as the project manager, 48% indicate individuals with a heterogeneous work experience (artistic and in project management at the same time) and, only 18%, a trained and experienced project manager.

Cultural planners are a few and in most cases they are younger than the other project managers: this seems to confirm the fact that the cultural planner is a more recent professional figure whose tasks and skills in the past were absorbed by the artists.

The professionals who collaborate with the proposing institutions have in most cases less than 35 years and the percentage of under-35 increases significantly for institutions born after 2010 (Figure 3).

Particularly interesting was the outcome from the analysis of project managers and artist's curricula, which show very fragmented professional paths. This evidence is widely confirmed by literature and if on the one side represents a great wealth in terms of experience gained on the other highlights certain fragility with the coexistence of very different work experiences and a resulting economic instability.

Fig. 3. Age of artists and cultural entrepreneurs



Source: Own elaboration

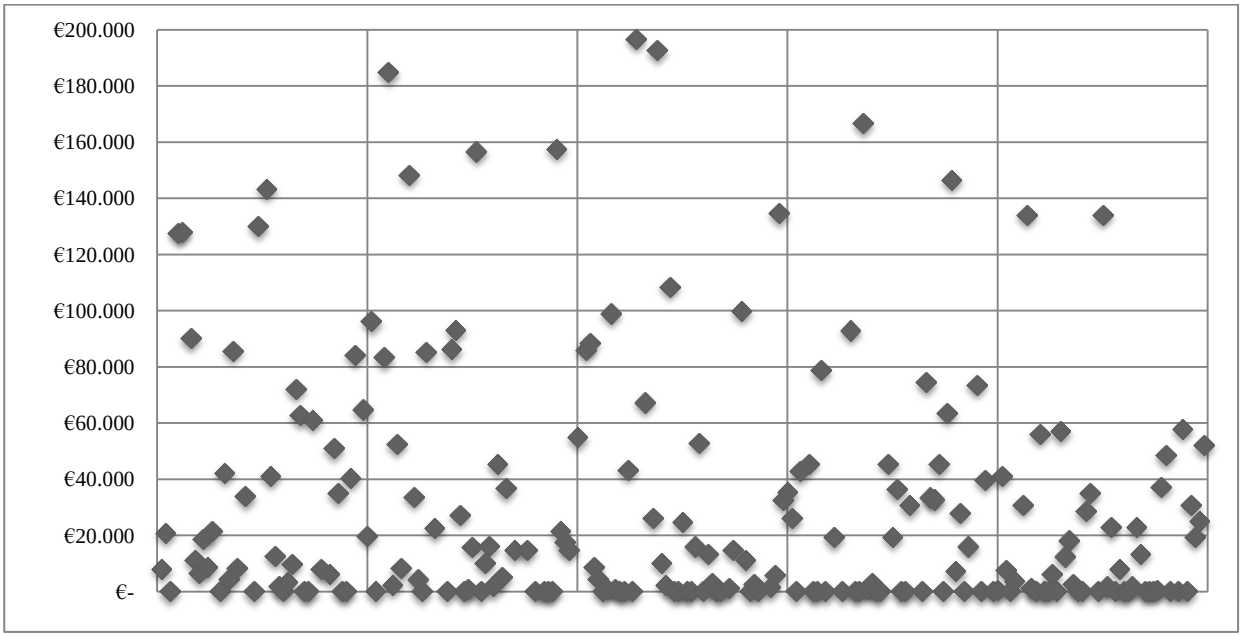
5.2 The economic sustainability of cultural entrepreneurship

Comparability in the analysis of the financial statements of the proponents is particularly complex due to the diversity of the adopted accounting systems.

Most applicants have revenues of less than € 20,000 per year (Figure 4). Organizations with more solid budgets are those that operate in the social field and those that manage spaces for performing arts.

In general, data show two different situations: that of organizations that have just started their business and that of associations that work for years with minimum budget and trying to take advantage from call to obtain resources necessary to structure themselves in a more solid way.

Fig. 4: Applicants yearly revenues



Source: Own elaboration

Most of the applicants do not work through fundraising campaigns - 179 out of 250 - and only 71 organizations are active with structured fundraising strategies, raising between 2,000 and 3,000 euros per year.

Moreover, only a few projects are designed to diversify revenues from their artistic idea. The most common sources of revenue are:

- Tickets sales for performing arts shows
- Replication of the project in different places
- Use of different distribution channels for the same project idea
- Rent of technical material or technological infrastructure acquired for the project

5.3 The outcome: the role of networks and cross-disciplinary approaches

A final analysis concerns three aspects particularly relevant for the purpose of the call and for the projects' success: the ability of projects and proponents to activate collaborative networks; the innovative use of digital technology; and the adoption of a cross-disciplinary approach (i.e. to design projects the intersection between different disciplines as a distinctive element of innovation).

Only a third of participants operated according to a true cross-disciplinary perspective by integrating different forms of expression even though many projects involved actions in different artistic fields.

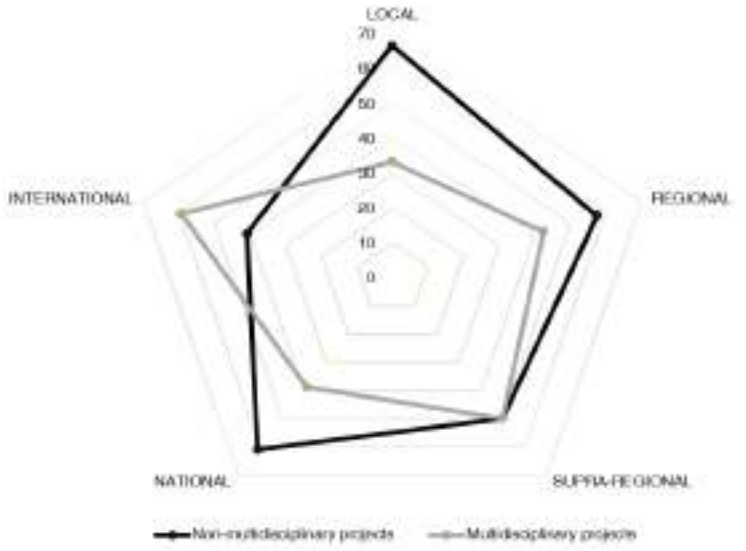
In particular, it is interesting to note how cross-discipline, requested by the project, was conceived according to two models: as an interpenetration of several disciplines or as a juxtaposition of disciplines.

Comparing the curricula of different organizations and project teams, and the adoption of an approach rather than the other, it can be seen that those who have already carried out cross-disciplinary cultural activities are slightly more inclined to build cross-disciplinary projects than those who do not adopt this working approach.

Organizations that do not show a cross-disciplinary curriculum but propose cross-disciplinary project tend to follow a mere juxtaposition of disciplines. Moreover, the ability to propose cross-disciplinary projects tends to be greater for those most able to build regional, national and international partnerships.

As the complexity and range of the partnerships that organizations are able to weave grows, the ability to propose cross-disciplinary projects also grows. Who over time has created and maintained international relations, in fact, is twice as likely to present cross-disciplinary projects and vice versa (Figure 5).

Fig. 5: Relationship between territorial scope of partnerships and multidisciplinary nature of projects



Source: own elaboration

In general, partnerships activated by the project are for the most part at the local level (49%) while national or international networks are present only in 17% of the projects; activated or planned partnerships demonstrate a good degree of congruity with respect to the range of action of the projects.

6. Conclusions and further research

The analysis highlights some first interesting results with regard to cultural, economic and organizational characteristics of the applicants and main evidences concern:

- Artists and micro-small cultural entrepreneurs experience a great fragmentation of professional paths, which on the one hand can be seen as a great wealth in terms of relationships and opportunities for growth, but which, at the same time, represents a critical issue for the acquisition of solid skills and financial stability.
- A lack of professional figures specialized in the planning of cultural actions and with more specifically economic-managerial skills.
- In most cases, there is no plan on the possible elements for building economies of scale in projects.
- Organizations show a limited ability to design and implement projects on their own resources, and to acquire additional resources beyond those required within the call for proposals.
- There is a difficulty in adopting multidisciplinary and cross-disciplinary approaches.
- Specific skills in the digital field are lacking, both in the conception and in the implementation of the project.

If these evidences are reflected in what in literature, they are also a fundamental area of work for the future development of policy makers and grant-makers actions.

A first question emerges in particular: future actions will have to focus on the complex and varied world of those working in the cultural and creative field and in artistic innovation, or they

will have to work more closely with counterparts that show more solid skills and greater chance of emerging on the international scene, thus concentrating resources on few projects?

How can organizations and project teams be supported in reinforcing missing skills?

In this regard at least two solutions can be identified: 1) training, in order to allow project teams to integrate the missing skills; 2) the construction of dedicated areas within the grant-making parties to provide all the project teams with lacking technical skills.

The first solution is clearly easier to implement in the short term, but finds limits in the very composition of the teams, which often lack the figures that could take care of the design aspects, of the concept development, of the supply chain management, and of business planning issues. This approach should also closely connect to the training system already present in the area.

The second path is more onerous from an economic and organizational point of view and needs to be studied in depth in relation both to possible similar cases at the international level and to the connections with other initiatives at the local level.

However, this second approach could, in a more systematic way, be able to accompany artists and cultural entrepreneurs in the development of their intuitions and their artistic projects, also laying the foundations for the economic sustainability of cultural organizations.

In this perspective, the research developments of this exploratory paper will be directed towards greater detail in the quantitative analysis of the collected data. Further in-depth analysis could be carried out either by analysing subjects and projects candidates for other funding programs or by analysing individual case studies vertically to find more robust considerations for the definition of future actions.

References

AMERICANS FOR THE ARTS (2005), *Creative Industries 2005. The Congressional Report*, Americans for the Arts, Washington.

BARBETTA, G.P, CAMMELLI, M., DELLA TORRE, S. (2013), *Distretti culturali: dalla teoria alla pratica*, Il Mulino, Bologna.

BERTACCHINI E., SANTAGATA W. (2012), *Atmosfera creativa. Un modello di sviluppo sostenibile in Piemonte fondato su cultura e creatività*, Il Mulino, Bologna.

BILTON C., CUMMINGS S., (2014), *Handbook of management and creativity*, Edward Elgar Publishing.

BMWI (2009), *Culture and Creative Industries in Germany*, Federal Ministry of Economics and Technology http://www.kulturwirtschaft.de/wp-content/uploads/2009/03/german_cci_en_summary_0903231.pdf

DMCS (1998), *Creative Industries Mapping Document 1998*, Department for Culture, Media and Sport, UK.

DMCS (2001), *Creative Industries Mapping Document 2001*, Department for Culture, Media and Sport, UK.

CAVES R.E. (2000), *Creative Industries*, Harvard University Press, Cambridge.

COMUNIAN R. (2011), "Rethinking the creative city: the role of complexity, networks and interactions in the urban creative economy", *Urban Studies*, vol. 6, n.48, pp.1157-1179.

COMUNIAN R., GILMORE A. (2016). Higher education and the creative economy: Beyond the campus. Routledge.

EIKHOF D.R., HAUNSCHILD A. (2006), "Lifestyle meets market: Bohemian entrepreneurs in creative industries", *Creativity and Innovation Management*, vol. 3, n. 15, pp. 234-241.

FLORIDA R. (2002), *The rise of the creative class*, Basic Books, New York.

FONDAZIONE CARIPLO (2014), *Quaderno 18. Progetti Culturali e Sviluppo Urbano*, Fondazione Cariplo, Milano.

FOORD J. (2009), "Strategies for creative industries: an international review", *Creative Industries Journal*, vol. 1, n. 2, pp. 91-113.

GARUD R., GEHMAN J., GIULIANI A. P. (2014) "Contextualizing entrepreneurial innovation: A narrative perspective" *Research Policy*, vol. 43, n. 7, pp. 1177-1188.

GREFFE X. (2016), *The Artist-enterprise in the Digital Age*, Springer, Japan.

HALL P. (2000), "Creative Cities and Economic Development", *Urban Studies*, vol. 37, n. 4, pp. 639-649.

HAUSMANN A. (2010), "German artists between Bohemian idealism and entrepreneurial dynamics: Reflections on cultural entrepreneurship and the need for start-up management", *International Journal of Arts Management*, vol. 12, n. 2, pp. 17-29.

HOWKINS J. (2002), *The creative economy. How people makes money from ideas*, Penguin Press, London.

KEA (2006), *The Economy of Culture in Europe*, Study prepared for the European Commission. http://www.keanet.eu/ecoculture/studynew.pdf

KEA (2009), *The Impact of Culture on Creativity*, Study prepared for the European Commission. http://www.keanet.eu/docs/impactculturecreativityfull.pdf

LANGE B. (2006) "From cool Britannia to generation Berlin? Geographies of culturepreneurs and their creative milieus in Berlin", in Eisenberg C., Gerlach R., Handke C. (eds.) *Cultural industries: the British experience in international perspective*, Humboldt University Berlin, Berlin.

LEARDINI C., MOGGI S., ROSSI G. (2013), *Board governance in bank foundations*, Springer.

MCGUIGAN J. (2010), "Creative Labour, Cultural Work and Individualisation", *International Journal Of Cultural Policy*, vol. 16, pp. 323-335.

MENGER P.M. (2014), *The economics of creativity: Art and achievement under uncertainty*, Harvard University Press, Cambridge.

MIGLIETTA A., PARISI E., PESSIONE M., SERVATO F. (2013), "Gli strumenti finanziari a supporto delle start-up innovative: le opportunità offerte dal CrowdFunding", XXV *Sinergie Conference Proceedings.*

MONTANARI F. (2011), *Territori creativi: L'organizzazione delle politiche a supporto della creatività*, Egea, Milano.

OAKLEY, K. (2014), "Good work? Rethinking cultural entrepreneurship" in Bilton C. and Cummings S. (eds) *Handbook of management and creativity*, Elgar, pp. 145-159.

OAKLEY, K. (2009), *'Art works': Cultural labour markets: a literature review*, Creative Partnerships, Arts Council England, London.

POTTS J., CUNNINGHAM S., HARTLEY J., ORMEROD P. (2008), "Social network markets: A new definition of the creative industries", *Journal of Cultural Economics*, vol. 32, n. 3, pp. 167-185.

ROODHOUSE S. (2008), "Creative industries: The business of definition and cultural management practice", *International Journal of Arts Management*, vol. 11, pp. 16-27.

SAMDANIS M., LEE S.H. (2017), "Access Inequalities in the Artistic Labour Market in the UK: A Critical Discourse Analysis of Precariousness, Entrepreneurialism and Voluntarism", *European Management Review*, online version, in press.

SANTAGATA W. (2009), *Libro Bianco sulla Creatività. Per un modello italiano di sviluppo*, Università Bocconi Editore, Milano.

SCOTT A.J. (2000), *The Cultural Economy of Cities*, Sage, London.

SCOTT M. (2012), "Cultural entrepreneurs, cultural entrepreneurship: Music producers mobilising and converting Bourdieu's alternative capitals", *Poetics*, vol. 40, n. 3, pp. 237-255.

SEGRE G., LONGHI A., FORNARA L. (2015), "Il finanziamento alla cultura delle fondazioni di origine bancaria: riflessioni sull'asimmetria informativa", working paper SIEP https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=SIEP2015&paper_id=93.

SYMBOLA (2017), *Io sono cultura 2017. L'Italia della qualità e della bellezza sfida la crisi.* Report online at http://www.symbola.net/html/article/iosonocultura17ricerca.

TURBIDE J., LAURIN C. (2009), "Performance measurement in the arts sector: the case of the performing arts" *International Journal of Arts Management*, vol. 11, n. 2, pp. 56-70.

UNCTAD (2008), *Creative Economy Report 2008. The challenge of assessing the creative economy towards informed policy-making*. http://www.unctad.org/en/docs/ditc20082cer_en.pdf

UNCTAD (2010), *Creative Economy Report 2010. Creative Economy: A Feasible Development Option.* http://www.unctad.org/en/docs/ditctab20103_en.pdf

UNESCO/UIS (2005), *International flows of selected cultural goods and services, 1994-2003*, UNESCO Institute for Statistics, Montreal.

UNIVERSITY OF HONG KONG (2003), *Baseline Study on Hong Kong's Creative Industries*. Centre for Cultural Policy Research http://www.cpu.gov.hk/english/documents/new/press/baseline%20study(eng).pdf

WEINSTEIN L., BUKOVINSKY D. (2009), "Use of the balanced scorecard and performance metrics to achieve operational and strategic alignment in arts and culture not-for-profits", *International Journal of Arts Management*, vol. 11, n. 2, pp. 42-55.

WILSON N., STOKES D. (2005), "Managing creativity and innovation: The challenge for cultural entrepreneurs" *Journal of small business and enterprise development*, vol. 12, n. 3, pp. 366-378.

TRACK - CROWDFUNDING

AS A NEW BUSINESS MODEL

It's not what you say, it's how you say it: avoiding uncertainty in crowdfunding pitch

FRANCESCA DI PIETRO, FRANCESCA MASCIARELLI

It's Not What You Say, It's How You Say It: Avoiding Uncertainty in Crowdfunding Pitch

FRANCESCA DI PIETRO* FRANCESCA MASCIARELLI•

Abstract

Objectives. *The objective of this study is to analyze the linguistic style of equity crowdfunding pitches and how linguistic style relates to fund raising success.*

Methodology. *We empirically analyzed of 101 equity crowdfunding campaigns in the UK platforms Seedrs and Crowdcube.*

Findings. *The results of the analysis suggest that providing information about company future plans and past activities in a context characterized by high uncertainty, such as the markets in which startups generally operate - decreases the investors' perception of risk and increases the probability of successfully closing a crowdfunding campaign.*

Research limits. *Our study targets a particular category of crowdfunding - equity crowdfunding - in the UK, the most active European country in terms of volumes and number of start-up founded through crowdfunding.*

Practical implications. *Our results draw attention to the importance for entrepreneurs of communicating and framing their projects in such a way as to influence investors' decision. Entrepreneurs should consider the linguistic style used in the information they disclose on line since it could persuade or deter the crowd from investing in their project.*

Originality of the study. *Our study provides a novel contribution to the literature on entrepreneurial finance by emphasizing the role of linguistic style in influencing investing behavior via crowdfunding*

Key words: *crowdfunding; linguistic style; uncertainty avoidance; future plan markers; track record markers*

* Post-Doctoral Researcher of *Organization studies* -University LUISS Guido Carli - Roma
e-mail: fipietro@luiss.it

• Associate Professor of *Management* - University of "G. D'Annunzio" - Chieti-Pescara
e-mail: f.masciarelli@unich.it

1. Introduction

Crowdfunding is an effort made by an entrepreneurial individual or group to obtain funds for their startups via the internet from a large number of contributors without the support of financial intermediaries (Schwienbacher and Larralde, 2010). The crowdfunding phenomenon has been analyzed from various perspectives (Agrawal *et al.,* 2011; Colombo *et al.,* 2015; Mollick, 2014) but the role of qualitative information provided to future investors through online platforms, and its impacts on the success of a crowdfunding campaign have so far been overlooked, especially in the context of equity crowdfunding campaigns.

Entrepreneurs seeking financial support need to provide on the crowdfunding platform detailed information about their business. The pitch can be considered a concise version of the business plan but one that offers a persuasive story and provides a solution to a consumer need. The pitch is crucial to secure investors' attention and has a huge impact on the campaign's objective, i.e. to raise the funds required within a set time (Mollick, 2014).

Previous empirical studies show that the probability of success is affected also by the linguistic style adopted in the crowdfunding campaign (Parhankangas and Renko, 2017). Yet missing from this body of research is evidence on how the style of verbal communication factors into crowdfunding success.

Thus, in this study we explore how the use of a language that evokes the uncertainty avoidance is related to equity crowdfunding campaign success by addressing the following research question: "*How does providing information about future and past company activities help entrepreneurs to reduce uncertainty avoidance in an online equity crowdfunding campaign influencing its later success?*"

We consider the most popular equity-crowdfunding platforms in the UK, Seedrs and Crowdcube, exploiting the language spoken, i.e. English which requires its speakers to mark future events grammatically - so called strong-future-time-reference (FTR) languages (Dahl, 2000). Equity crowdfunding allows investors to obtain equity shares in exchange for their investment and proportional to their contribution. Equity crowdfunding is particularly relevant due to the magnitude of the advantages (and risks) involved, and its potential to revolutionize entrepreneurial financing.

Our results support our hypotheses about linguistic style is an important predictor of crowdfunding success: new ventures that make extensive use of words related to uncertainty avoidance in their pitches, and therefore provide the crowd with more information about the company's future plans and track records, reduce the level of risk perceived by the crowd, and increase the probability of their being financed.

We contribute to the entrepreneurship literature by emphasizing the role of language in helping entrepreneurs to appeal to an audience of potential investors.

2. Background

Several variables influence crowdfunding investments, e.g. project quality (Mollick, 2014), spatial proximity (Agrawal *et al.,* 2011), entrepreneurs' internal social capital (Colombo *et al.*, 2015; Butticè *et al.,* 2017). However, the role of the qualitative information provided by entrepreneurs to future investors in online crowdfunding pitches, and its impact on fundraising success have been mostly overlooked.

Many entrepreneurs struggle over how to deliver a successful fund-raising pitch. Some recent studies have addressed this problem by analyzing different aspects of the linguistic style in crowdfunding pitches and their effect on fundraising success. Desai *et al.* (2015) show that words that convey specific social behaviors have a major influence on success. Also, collective phrasing, i.e. use of the plural pronoun 'we' in project descriptions tends to bring more success than use if the singular first-person pronoun 'I'. An interesting perspective on the topic is offered by Gorbatai and Nelson (2015) showing that crowdfunding success increases with the frequency of positive emotive

terms. Parhankangas and Renko (2017) suggest that in general, using specific language and adopting an interactive style facilitates fundraising by both social and commercial entrepreneurs. Karapandza (2016) finds that companies that talk less about the future in their 10-K reports achieve higher returns on stocks, and conclude that markets and investors consider companies less willing to talk about future events as riskier. Building on these previous studies, we analyze the role of future plan and track record markers in affecting the success of the crowdfunding campaigns.

3. Hypotheses development

We focus on equity crowdfunding to investigate whether frequency of use of future plan and track record markers in the descriptions of new venture projects affects the outcome of the crowdfunding campaign. Some recent literature linking information and return finds that stocks that receive good coverage in the media offer lower returns compared to stocks that attract no media coverage (Fang and Peress, 2009). Easley and O'Hara (2004) distinguish between public and private information, and investigate how the composition of this information affects the return required by investors. Last, Karapandza (2016) finds that companies that say less about the future in their 10-K reports achieve higher returns on their stocks, demonstrating that qualitative information is related systematically to stock returns. Drawing on this literature, we posit that disseminating forward-looking information in pitches positively influences the success of the crowdfunding campaign, and reduces information asymmetries. Additionally, referring to the literature linking language and individuals' perceptions of time distance, we posit that providing more information about future events and actions (plans, strategies) influences investors' perceptions and delays perception of potential loss of their investment, thus stimulating risky behaviors (Chen, 2013). This leads to the following hypothesis.

H1: Everything being equal, the frequency of use of future plan markers in equity crowdfunding project descriptions affects the success of a crowdfunding campaign positively.

We also analyze how track record markers frequency affects crowdfunding campaign success. Age is a determinant in the development of high levels of reliability and accountability in firm performance, structures, and internal routines (Hannan and Freeman, 1977; Stinchcombe, 1965). New ventures suffer from the liability of newness, and their short track record reduces the possibilities for outsiders such as investors, to evaluate their potential (Baum and Silverman, 2004). Therefore, the new ventures whose pitches report on past activities and results achieved, could overcome the problems related to information asymmetry by providing prospective investors with more information on which to base their investment decision, and partially compensating for their lack of experience and reputation.

H2: Everything being equal, the frequency of use of track record markers in equity crowdfunding project descriptions affects the success of a crowdfunding campaign positively.

4. Methodology

4.1 Sample and data

Empirically, we analyze 101 campaigns from the most popular equity-crowdfunding platforms in the UK: Seedrs and Crowdcube. We collected data from April 2017 to October 2017. The projects' creators provide an overview of their service or product in the main section of the campaign web page, on team members, and use of the proceed.

4.2 Variables Description

The crowdfunding campaign is our unit of analysis. We consider closed campaigns, as meaning that investors can no longer add pledges. Our dependent variable, *Success,* is a dummy variable that takes the value 1 for a campaign successfully funded - achieving the funding goal - 0 otherwise.

We have two main independent variables. The first independent variable is *future plans markers* measured as the ratio between the number of will, shall, and going to and the total number of word (Karapandza, 2016). We manually counted the total number of words used in the campaign, including the words accompanying pictures on the campaign page.

The second independent variable is the frequency of use of *tract record markers*, calculated as the ratio between the "number of expressions referring to the past" and the total number of words. We manually identified and counted words referring to company's past activities and achievements considering different past tenses: (i) was, were, been, had, and "-ve" auxiliaries; (ii) the suffix "-ed" - was manually checked to confirm whether it was a true past tense or a passive form; (iii) most frequent irregular past tenses: found, saw, grew, sold, built, did, went; and (iv) other auxiliaries and words used to individuate the remaining irregular past tenses, for instance, have, has, last, once, ago, months of the year, and years.

To have a clear understanding of the reliability of our independent variables, we included in our regression models some control variables that could potentially affect our dependent variable, the *success* of crowdfunding campaign. We controlled for *Amount sought* for the total amount (in euros) that entrepreneurs aimed at raising through the online platform; *Equity offered* for the percentage of the capital of the company offered in exchange of the amount of money requested; *Team size* for the number of members of the team; and company's stage of development with *Startups* denoting a company age of less than three years; and company's *Social media popularity*, measured as the number of Facebook likes gathered from the company's official Facebook page.

5. Findings

Our aim was to investigate the relation between the success of a new venture's equity crowdfunding campaign and future plan and track record markers. Using the statistic software STATA, we employed a logit model since our dependent variable is a dummy variable, *Success*. Table 1 reports the logit model and model fit statistics.

Tab. 1: The impact of future plans and track record markers on crowdfunding success

DV: Success	*Model I*		*Model II*		*Model III*		*Model IV*	
	Coeff.	P-value	Coeff.	P-value	Coeff.	P-value	Coeff.	P-value
Future plan markers			86.8	0.177			**124.0**	**0.076†**
Track record markers					**98.44**	**0.015****	**112.7**	**0.009****
Amount Sought	0.000	0.347	0.000	0.351	0.000	0.600	0.000	0.620
Equity	0.008	0.811	-0.000	0.995	0.000	0.984	-0.010	0.792
Startup	0.126	0.810	0.135	0.799	-0.084	0.879	-0.120	0.833
Team size	0.185	0.049*	0.201	0.039*	0.225	0.022*	0.247	0.016*
Social media popularity	0.000	0.897	0.000	0.867	0.000	0.735	0.000	0.652
Constant	-0.796	0.548	-1.300	0.054†	-1.425	0.233	-0.549	0.684
Observations	101		101		101		101	
Adjusted R2	6.3%		7,78%		11,61%		14,2%	

Notes: DV, dependent variable. † P < 0.1; *P < 0.05; **P < 0.01; ***P < 0.001

Source: Our elaboration

Model I (table 1) reports the effects of the control variables including *Amount sought, Equity offered, Team size, Startup, Social media popularity* on our dependent variable *Success*.

We introduced *Future plan markers* in Model II. Our results provide weak support for the first hypothesis *(H1 (Everything being equal, the frequency of use of future plan markers in equity crowdfunding project descriptions affects the success of a crowdfunding campaign positively)* by showing a positive association between future plan markers and crowdfunding campaign success *(p = 0.177, β = 86.84)*. Campaigns with extensive use of future tense markers are more likely to

achieve their goal. In other words, we find that potential investors will be more willing to invest if the startup provides the crowd with information about its future plans and actions.

We introduced *Track record* markers to test our second hypothesis (*H2*: *Everything being equal, the frequency of use of track record markers in equity crowdfunding project descriptions affects the success of a crowdfunding campaign positively*). The results of Model III support our second hypothesis and show that use of the track record markers is positive and significant for explaining the success of crowdfunding campaigns. In other words, entrepreneurs that use more track record markers in their crowdfunding campaigns, and therefore provide the crowd with more information on their past experience and achievements, have a higher probability of successful fundraising. Crowdfunding pitches' use of more track record markers might resolve problems related to information asymmetry, could signal the founding team's experience, and compensate for lack of reputation.

Model IV considers the effect of both future plan and track record markers on the success of crowdfunding campaigns. Our finding confirmed and reinforced that both future plan and track record markers have an impact on crowdfunding campaigns success. Specifically, the results of Model IV suggest that increased frequency of use of the future plan markers in a crowdfunding campaign pitch increases the probability of its success (p = 0.076, β = *1*24.03). Additionally, frequency of use of track record tense markers has a positive influence on the probability of closing the campaign successfully (p = 0.009, β = 112.76).

6. Discussion and Conclusion

Our results indicate that new ventures that describe their future plans using the verbs will, shall, and going to - in their pitches have a higher probability of being financed. In other words, our study supports the hypothesis that the disclosure of future plans is an important aspect of a fundraising strategy, particularly for new ventures. At different stages of the company's development, i.e. listed companies and new ventures, lack of information on future plans and activities can be seen by investors as a negative signal. In the case of listed companies, higher returns are expected as a reward for lack of information about the future (Karapandza, 2016); in a crowdfunding context, providing less information about the future has a negative impact on fundraising success. By linking our results to work on the role of future perceptions of people's economic behaviors, we support Chen's (2013) results: providing more information about a company's future plans leads investors to perceive the future as more distant, and makes investors more prone to risky behaviors.

Additionally, we found that entrepreneurs who focus more on their past achievements and milestones, has a positive influence on the probability to close their fundraising round successfully through crowdfunding. This allows potential investors to evaluate the startup based also on its track record such as past achievements, established collaborations with incumbents, awards, prizes, press coverage, etc. Management scholars note that information availability helps to reduce the liabilities of newness from which new ventures suffer when seeking financial capital from external investors (Starr and MacMillan, 1990; Stinchcombe, 1965), and especially for firms in a nascent industry without an established organizational form or category.

Our study contributes to the entrepreneurial finance literature by emphasizing the importance of linguistic style for influencing investing behavior via crowdfunding. New ventures often operate in unpredictable contexts, develop disruptive technologies, and create new markets. The information that entrepreneurs can provide about the potential growth of the company and the returns on investment are extremely important for investors in allowing them to estimate the company's potential. Having and communicating a clear plan instils confidence in potential investors about the ability of the entrepreneur to execute the plan, and promotes a positive evaluation of the quality of the investment. This work has important practical implications and wants to stimulate new ventures' attention toward a good creation of their campaign. We suggest that new ventures engaging in equity-crowdfunding campaigns shall be aware of the importance of

communication and framing of their project in order to influence investors' decision.
New ventures that use these platforms should clearly identify and list their future objectives, they should let their potential investors know clearly their development plans and how funds will be used. They are also called to describe their history that could help reducing the liability of newness.

7. Limitation and future research

Despite its contributions, this study has various limitations. First, we adopted a "word count approach" to measure the entrepreneurs' linguistic style. Although this approach is efficient for processing large quantities of data it can miss some nuances of a complex phenomenon such as language use. Our choice of style categories for the analysis was based on the previous literature on entrepreneurial finance but there are many other interesting entrepreneurial language styles that could be studied in the future, perhaps in a more qualitative way. We would suggest that future research should combine content analysis with qualitative discourse analysis, and for instance, emphasize the type of information provided to the crowd about the company's future plans. Also, sentiment analysis could be conducted to understand the role of emotions in influencing the willingness of potential investors to bet on the company's success. Second, we focused on equity crowdfunding but there are different types of crowdfunding platforms that could be tested using our approach. Finally, future research could try to identify other relevant content word categories that might influence the success of a crowdfunding campaign.

References

AGRAWAL A.K., CATALINI C., GOLDFARB A. (2011), *Friends, Family, and the Flat World: The Geography of Crowdfunding. NBER Working Paper*, n. 16820, pp.1-61.

AMIT R., LIVNAT, J. (1988), "Diversification and the risk-return trade-off", *Academy of Management Journal*, vol. 31, n. 1, pp. 154-166.

BAUM J.A., SILVERMAN B.S. (20049. "Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups", *Journal of business venturing*, vol. 19, n. 3, pp. 411-436.

BUTTICÈ V., COLOMBO M.G., WRIGHT M. (2017), "Serial crowdfunding, social capital, and project success", *Entrepreneurship Theory and Practice*, vol. 41, n. 2, pp. 183-207.

CHEN M.K. (2013), "The effect of language on economic behavior: Evidence from savings rates, health behaviors, and retirement assets", *The American Economic Review*, vol. 103, n. 2, pp. 690-731.

COLOMBO M.G., FRANZONI C., ROSSI-LAMASTRA C. (2015), "Internal social capital and the attraction of early contributions in crowdfunding", *Entrepreneurship Theory and Practice*, vol. 39, n. 1, pp. 75-100.

DAHL O. (2000), "The grammar of future time reference in European languages", *Empirical Approaches to Language Typology*, vol. 6, pp. 309-328.

DESAI N., GUPTA R., TRUONG K. (2015), *Plead or Pitch? The Role of Language in Kickstarter Project Success, Working paper, Department of Computer Science Stanford University Stanford, CA 94305, United States*.

DEUTSCH Y., ROSS T.W. (2003), "You are known by the directors you keep: Reputable directors as a signaling mechanism for young firms", *Management Science*, vol. 49, n. 8, pp. 1003-1017.

EASLEY D., O'HARA M. (2004), "Information and the cost of capital", *The Journal of Finance*, vol. 59, n. 4, pp. 1553-1583.

FANG L., PERESS J. (2009), "Media coverage and the cross-section of stock returns", *The Journal of Finance*, vol. 64, n. 5, pp. 2023-2052.

GORBATAI A., NELSON L. (2015), *The Narrative Advantage: Gender and the Language of Crowdfunding*, Haas School of Business UC Berkeley, Research Papers.

HAIR J.F., BLACK W.C., BABIN B.J., ANDERSON R.E., TATHAM R.L. (2006), *Multivariate Data Analysis 6th Edition*, New Jersey: Pearson Education

HANNAN M.T., FREEMAN J. (1977), "The Population Ecology of Organizations", *The American journal of Sociology*, vol. 82, n. 5, pp. 929.

JAKOBSON R. (1959), "On linguistic aspects of translation", *On translation*, vol. 3, pp. 30-39.

KARAPANDZA R. (2016), "Stock returns and future tense language in 10-K reports", *Journal of Banking & Finance*, vol. 71, n.4 , pp. 50-61.

KUTNER M., NACHTSHEIM C., NETER J., LI W. (2004), *Applied linear statistical models*, McGraw Hill, Chicago, Irwin.

LIANG H., MARQUIS C., RENNEBOOG L., SUN S.L. (2014), Speaking of corporate social responsibility, *Harvard Business School Organizational Behavior Unit, Working Paper*, pp. 14-082, March 2, 2014

LOUGHRAN T., MCDONALD B. (2011), "When is a liability not a liability? Textual analysis, dictionaries, and 10 Ks", *The Journal of Finance*, vol. 66, n. 1, pp. 35-65.

MOLLICK E. (2014), "The dynamics of crowdfunding: An exploratory study", *Journal of Business Venturing*, vol. 29, n. 1, pp. 1-16.

PARHANKANGAS A., RENKO M. (2017), "Linguistic style and crowdfunding success among social and commercial entrepreneurs", *Journal of Business Venturing*, vol. 32, n. 2, pp. 215-236.

SCHWIENBACHER A., LARRALDE B. (2010), *Crowdfunding of small entrepreneurial ventures*, In Cumming, D. (Ed.), Handbook of Entrepreneurial Finance, Oxford, UK: Oxford University Press,

STARR J.A., MACMILLAN I. (1990), "Resource cooptation via social contracting: Resource acquisition strategies for new ventures", *Strategic Management Journal*, vol. 2, n. 11, pp. 79-92.

STINCHCOMBE A.L. (1965), "Organizations and Social Structure", in March J. (Ed.), *Handbook of Organizations*, pp. 153-193, Rand McNally, Chicago.

TRACK - INNOVATION AND TECHNOLOGY MANAGEMENT

Un modello di supporto alle decisioni territoriali tra analisi dei "sentiment" e consonanza sistemica

SERGIO BARILE, IRENE FULCO, FRANCESCA LOIA, PIETRO VITO

Un modello di supporto alle decisioni territoriali tra analisi dei "sentiment" e consonanza sistemica

SERGIO BARILE[*] IRENE FULCO[•] FRANCESCA LOIA[♠] PIETRO VITO[**]

Abstract

Obiettivi. *Il paper propone un modello di supporto al processo decisionale dell'Organo di Governo territoriale, che fornisce un quadro rappresentativo della varietà di aspettative, prospettive e interessi presenti nel contesto di riferimento, consentendo una maggiore consapevolezza degli interventi volti a risolvere le problematiche urbane.*

Metodologia. *Il modello proposto, basato sulla tecnica di Aspect Based Sentiment Analysis (ABSA), attraverso la lente del corpus teorico dell'Approccio Sistemico Vitale (aSv), è capace di mettere in luce i sentimenti degli attori presenti in un sistema vitale dinamico quale è il territorio.*

Risultati. *Il lavoro perviene all'esposizione di valutazioni condivise sui livelli di "sentiment" percepiti dalla comunità rispetto ad un punto di interesse urbano considerato, guidando l'Organo di Governo territoriale nel porre in essere le condizioni per l'emergere di consonanza di contesto.*

Limiti della ricerca. *Le logiche delineate in una prima sperimentazione, condotta esclusivamente su un punto urbano, dovranno essere estese ad un'area d'interesse e ad un modello più sofisticato, per compiere analisi territoriali più accurate.*

Implicazioni pratiche. *Il modello si presenta come un valido supporto al processo di decision making territoriale, proponendo valutazioni condivise riguardo le potenzialità e le criticità latenti legate ai contesti urbani da cui trarre future linee d'azione.*

Originalità del lavoro. *L'originalità del paper risiede nel combinare, in un unico modello, l'aSv, lente interpretativa della realtà, con l'ABSA, adattando quest'ultima al contesto territoriale.*

Parole chiave: *Processo decisionale; approccio sistemico vitale; aspect based sentiment analysis; governo del territorio; modello di supporto alle decisioni; consonanza*

Objectives. *This paper proposes a model of support to the decision-making process of the territory governing body, which provides a picture representative of the variety of expectations, perspectives and interests present in the reference context, allowing for greater awareness of the interventions that could be aimed at solving urban problems.*

Methodology. *The proposed model, based on Aspect Based Sentiment Analysis (ABSA), aims to highlight, through the theoretical lens of the Viable Systems Approach (vSa), the sentiments of all the actors involved in a dynamic viable system such as the territory.*

Findings. *The study leads to an exposition of shared evaluations on the levels of "sentiment" as perceived by the community in relation to an urban point of interest, leading the territory governing body to achieving the conditions necessary for the emergence of context consonance.*

Research limits. *The logics outlined through a first experimentation, carried out exclusively on a single urban point of interest, should be extended to an urban area of interest and to a more sophisticated model, aiming to perform more accurate analyses.*

Practical implications. *The model presents itself as a valid support system to decision making in relation to territory dynamics, proposing community-shared evaluations regarding the potentialities and latent critical flaws of urban contexts from which to define future courses of action.*

Originality of the study. *The originality of the paper lies in combining, in a single model, the vSa, interpretative lens of reality, and the ABSA, adapting it to the environmental context.*

Key words: *decision making; viable systems approach; aspect based sentiment analysis; territory government; decision support systems; consonance*

[*] Ordinario di *Economia e Gestione delle Imprese* - Sapienza Università di Roma
e-mail: sergio.barile@uniroma1.it

[•] Dottoranda di Ricerca in *Management* - Sapienza Università di Roma
e-mail: irene.fulco@uniroma1.it

[♠] Dottoranda di Ricerca in *Management* - Sapienza Università di Roma
e-mail: francesca.loia@uniroma1.it

[**] Dottorando di Ricerca in *Management* - Sapienza Università di Roma
e-mail: pietro.vito@uniroma1.it

1. Introduzione

Le problematiche di governo del territorio e, in questo ambito, di specifici punti di interesse turistici e culturali richiedono approcci olistici che tengano conto del sistema di cui tali luoghi fanno parte e della varietà di categorie di portatori di interesse, che vanno dai fruitori agli Organi di Governo, passando attraverso gli attori che partecipano allo sviluppo del territorio.

Alla soluzione del problema di definire strategie efficaci per la conservazione e la garanzia di continuità di fruizione di tali punti di interesse possono concorrere le dottrine economico-manageriali con i loro principi. Inoltre, si sta oggi affacciando, data l'ampiezza, la profondità e la tempestività crescenti del flusso informativo e della capacità di elaborazione dello stesso, la possibilità resa dal Web di esplorare tutte le opinioni rilevanti e raccogliere tutte le informazioni necessarie, fruendone in quadri sinottici di sintesi; questi costituiscono importanti supporti alle decisioni in quanto contribuiscono all'incremento delle varietà informative dei soggetti e, ove opportunamente gestiti, allineano progressivamente queste ultime in un processo di consonanza sistemica (Barile *et al.*, 2015).

Gli Studiosi di economia d'impresa forniscono una ricca strumentazione sul *decision making* strategico. Secondo Panati e Golinelli (1988), le decisioni strategiche a) riguardano il lungo periodo e influiscono sulla sopravvivenza e sulle direzioni di sviluppo delle imprese; b) sono centralizzate, in quanto vengono assunte da un numero limitato di soggetti; c) scaturiscono in condizioni di incertezza; d) non sono ripetitive e non sono, dunque, risolvibili attraverso un confronto tra decisioni alternative o con quelle formulate in passato.

Riguardo alla genesi delle decisioni strategiche, sono ormai generalmente accettate le posizioni - tra le altre - di Panati e Golinelli (1988) e di Eisenhardt e Zbaracki (1992) che individuano la loro origine in un processo che contempera opportunamente razionalità (seppur limitata) del ragionamento scientifico e intuizione propria della creatività manageriale, così definendo un "continuum" i cui confini interni sono tracciati principalmente dalla disponibilità di dati ed informazioni e dalla capacità di elaborazione degli stessi.

Alla base del concetto di razionalità limitata di Simon (1957) ritroviamo, infatti, il postulato secondo il quale "ad eccezione di problematiche particolarmente semplici, non è ragionevole, nella generalità dei casi, attribuire ai decisori tanto la conoscenza tecnica quanto la capacità di calcolo necessarie per determinare i percorsi risolutivi previsti dalla teoria" (Barile *et al.*, 2015).

Nel moderno ambiente informativo, in cui si vanno prepotentemente affermando interpretazioni e conclusioni basate su "big data", appare tuttavia postulabile che, nel mix tra razionalità limitata e caratteristiche di intuizione, induzione, deduzione e ragionamento logico del decisore, intervengano fenomeni osmotici intensi: da un lato, tali caratteristiche possono supporsi rafforzate dalle moderne rappresentazioni olistiche di anche grandissime quantità di dati ed informazioni e dalla possibilità crescente della loro elaborazione; dall'altro, la capacità di calcolo restituisce alla componente razionale del *decision making* nuova linfa e vigore (Intezari e Gressel, 2017).

Alla luce di queste considerazioni, la prospettiva olistica dell'aSv, peraltro in via di applicazione con successo in diversi ambiti di attività economica e sociale (Polese *et al.*, 2017; Toledo *et al.*, 2017; Walker, 2017), consente di abbracciare la complessità del problema in cui l'Organo di Governo è deputato a ricercare consonanza tra le varietà informative di tutti i sistemi interessati all'esito del suo processo decisionale. In questo quadro, la disponibilità di big data e di strumenti per la loro elaborazione incrementa la probabilità di generare risonanza. Tramite una rilettura in chiave sistemico vitale, si rileva la responsabilità di un'organizzazione nei confronti delle diverse entità con le quali si relaziona, direttamente o indirettamente (sovrasistemi e subsistemi), nella prospettiva soggettiva dell'Organo di Governo (OdG), il quale, sulla base del principio di rilevanza, agisce sulle condizioni di sopravvivenza dell'organizzazione (Barile *et al.*, 2014).

Nell'Approccio Sistemico Vitale (aSv), il moderno ambiente informativo appare in grado di accelerare i processi di allineamento delle varietà informative, agendo, in particolare, tra le dimensioni e caratteri di cui essa è costituita (Barile *et al.*, 2015), sui livelli delle unità informative e

degli schemi interpretativi di sintesi, non potendosi a priori escludere effetti di varia entità anche sugli schemi interpretativi generali e sulle categorie valoriali.

2. Il decision making nella letteratura

Sullo *strategic decision making* esistono vasti corpi letterari in vari ambiti disciplinari, tanto che Eisenhardt e Zbaracki, già nel 1992, rilevavano che "the character of the field resembles a 'crazy quilt' of perspectives". Gli Autori, partendo dagli studi seminali di Simon (1957), effettuano una review critica della letteratura fino ad allora esistente, identificando tre fondamentali approcci: "Rationality and Bounded Rationality", "Politics and Power", "Garbage Can", concludendo, tra l'altro, che i risultati empirici evidenziano il carattere di sistemi politici delle imprese; in essi gli organi delegati alle decisioni strategiche hanno obiettivi parzialmente confliggenti e razionalità limitata (in termini di carente disponibilità di dati ed informazioni e di capacità di elaborazione degli stessi).

Alla sistematizzazione di Eisenhardt e Zbaracki (1992) sono succeduti molteplici contributi adottanti le più varie prospettive e metodologie, il che rende pretenzioso effettuare una pur breve review, per quanto narrativa o storica, della letteratura manageriale sull'argomento. A questo proposito, appare utile considerare il contributo di Shepherd e Rudd (2014), in cui la letteratura esistente al 2012 viene sistematizzata in quattro cluster sulla base delle tematiche prevalenti trattate: le caratteristiche dell'organo di governo (Top Management Team) in termini essenzialmente di varietà informativa; quelle della decisione strategica (importanza, incertezza, opportunità, minacce); quelle dell'ambiente esterno (stabilità, dinamismo, munificenza) ed infine le caratteristiche dell'impresa (struttura organizzativa, accentramento/decentramento decisionale, organicità/burocraticità).

Nel seguito, basandoci sui cluster così identificati, viene esposto un sintetico aggiornamento del pensiero scientifico negli stessi, in ottica aSv[1].

Nel primo cluster ricadono gli studi più numerosi ed omogenei, indicando una specifica direzione di interesse della riflessione scientifica, focalizzata sulle differenze delle varietà informative tra i componenti dell'organo di governo, i conseguenti conflitti nel processo decisionale e le ricadute sulla performance (velocità e qualità) del processo decisionale. Le conclusioni di Olson, Parayitam e Bao (2007) sull'esistenza di effetti negativi sia sulla tempestività che sulla qualità del processo decisionale, da un altro versante confermate da Clark e Maggitti (2012) che trovano una correlazione positiva tra alte velocità e livelli di potere fortemente accentrato, risultano mitigate negli studi recenti di Loughry e Amason (2014), che rilevano risultati contrastanti nelle ricerche recenti sul tema, e da quelli di de Wit, Greer, e Jehn (2012), che non individuano correlazioni negative forti tra l'esistenza di conflitti nell'organo di governo e performance del processo decisionale. In modo più diretto, Samba, Van Knippenberg e Miller (2018) ritengono di poter "mettere definitivamente a riposo" l'idea che le differenze tra le varietà informative conducano a processi decisionali migliori.

Nel secondo cluster, le caratteristiche delle decisioni vengono caratterizzate mediante le dimensioni dell'importanza, incertezza, opportunità, minacce ed estensione dell'impatto. In tale ambito, i contributi concordano sul fatto che l'incertezza sia correlata negativamente con la razionalità del processo decisionale e positivamente con la flessibilità dello stesso. L'importanza degli obiettivi non appare correlata significativamente con la razionalità (Dean e Sharfman, 1993; Sharfman e Dean, 1997). Gli studi recenti sulle decisioni complesse, definite "intrattabili" da Bettis (2017), stanno rivolgendo una maggiore attenzione ai procedimenti euristici (Loock e Hinnen,

[1] L'aggiornamento è stato fatto attraverso una ricerca su Web of Science, che ha restituito, nel periodo 2012-2018, 480 contributi nelle aree "business" e "management" in risposta alla query TOPIC: ("strategic decision making") Refined by: WEB OF SCIENCE CATEGORIES: (MANAGEMENT OR BUSINESS). I cluster sono stati identificati utilizzando CITNET di van Eck N.J., Waltman L. 2014. Visualizing bibliometric networks, *Measuring scholarly impact*: 285-320: Springer.

2015), la cui potenzialità risulta, peraltro, già intuita da Panati e Golinelli (1988) e che, dopo un iniziale interesse (Abualsamh *et al*., 1990; Krabuanrat e Phelps, 1998), risultano trascurati nella letteratura manageriale tra il 2000 e il 2010. Bettis (2017), in analogia con l'uso estensivo di procedimenti euristici nelle intelligenze artificiali per la risoluzione di problemi computazionali "intrattabili", ritiene che tali procedimenti diventano sempre più efficaci al fine di prendere importanti decisioni "intrattabili" per le imprese. Della stessa opinione è Eisenhardt (2013), la quale ritiene che procedimenti euristici basati su "simple rules" consentano di ottenere importanti risultati sia nel processo decisorio che sugli effetti di decisioni quali, ad esempio, lo sviluppo di nuovi prodotti o di internazionalizzazione. I contributi del terzo cluster risultano generalmente volti ad identificare il mix tra razionalità e comportamento politico nel processo decisionale in funzione delle caratteristiche ambientali esterne: in questo ambito, le conclusioni sono generalmente concordanti sul fatto che elevati livelli di razionalità sono correlati negativamente alla performance del processo decisionale ed all'esito delle decisioni in ambienti instabili, mentre lo sono positivamente in ambienti stabili. Recentemente, Heyden, van Doorn, Reimer, Van den Bosch e Volberda (2013) e van Doom, Heyden e Volberda (2017) allargano l'orizzonte mettendo in evidenza l'importanza, negli ambienti dinamici, delle relazioni con i sovrasistemi rilevanti ("*upper echelons*"). Per quanto concerne gli studi relativi agli ambienti dinamici e complessi, risultano essere di particolare rilevanza i contributi di Croutch e Richie (1999), Buhalis (2000) e Tamma (2000), i quali si soffermano sullo strategic management delle nuove configurazioni territoriali. In ottica sistemica, gli avanzamenti sul tema si sono focalizzati sui sistemi di offerta turistici (Della Corte, 2000), sugli ecosistemi (Pilotti, 2011; 2012), sulla competitività delle destinazioni turistiche (Martini, 2002; Franch, 2002, Pencarelli e Forlani, 2003) e sulle risposte strategiche alla complessità (Rispoli e Tamma, 1995). Il ruolo dei sovrasistemi viene implicitamente considerato anche da Vecchiato (2012), che esplora il modo in cui pratiche e tecniche previsionali, utilizzabili per affrontare l'incertezza ambientale, siano coordinate all'interno di grandi imprese e come i risultati siano usati per supportare i processi decisionali strategici.

Nel quarto cluster vengono messi in relazione i temi del livello di accentramento del potere, del carattere organicistico o meccanicistico dell'impresa e della sua dimensione con l'efficienza del processo decisionale in termini di tempestività e qualità. I primi contributi (Eisenhardt e Burgeois 1988, Wally e Baum 1994) si soffermano sulla centralizzazione del potere ed evidenziano una correlazione positiva tra questa e l'efficienza del processo decisionale. Elbanna (2007) enfatizza il ruolo delle caratteristiche dell'impresa, ritenendolo prevalente sia rispetto alle caratteristiche della decisione (secondo cluster) sia rispetto a quelle ambientali (terzo cluster). Gli studi recenti si orientano verso la relazione tra la disparità di potere all'interno dei gruppi di decisori e l'efficienza del processo decisionale, cercando di spiegare perché la letteratura riporta risultati contrastanti (Tarakci, 2016). In questo ambito, Kisfalvi (2016) focalizza l'attenzione sulle interazioni tra membri di uno stesso team e sulle loro interrelazioni durante i processi decisionali. Altri filoni di ricerca si rivolgono all'influenza esercitata sul processo decisionale da parte degli altri attori della rete in cui l'impresa opera (Whitford, 2016).

2.1 L'aSv come approccio innovativo al decision making in ambito complesso

Data la frammentazione dei contributi nei sottoinsiemi specifici rilevati da Shepherd e Rudd (2014) e di cui sopra si è effettuato un sommario aggiornamento, emerge la necessità di una visione olistica sul tema. In questa direzione si pone la visione sistemica di Beer (1972), progressivamente arricchita da nuove concettualizzazioni da parte di Golinelli (2000, 2011) e Barile (2009, 2015) sul *decision making* in ambito complesso, che abbraccia, in un'ottica sistemico vitale, gran parte del dibattito scientifico.

La necessità di allineamento delle "varietà informative" dei diversi sistemi in cui è immerso l'oggetto di studio, al fine di pervenire a decisioni efficienti ed efficaci da parte dell'Organo di Governo, rende manifesta la centralità dei concetti di *consonanza*, *risonanza* e *rilevanza*; concetti

che riprenderemo successivamente, in riferimento al sistema territoriale, al fine della definizione del modello proposto.

Il concetto fondamentale dell'aSv è quello che tende a rappresentare la realtà sociale come un "mondo" di sistemi vitali.

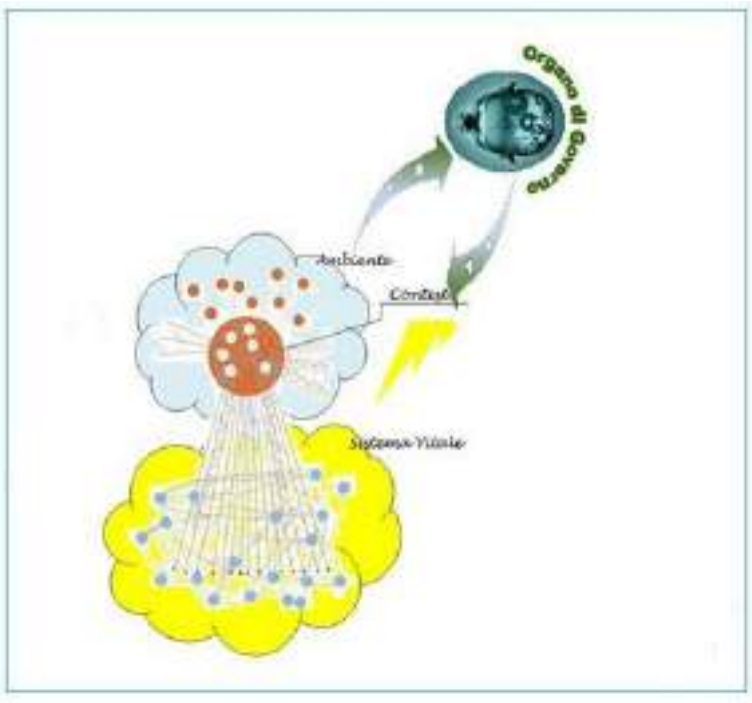
Una prima definizione di sistema vitale si deve a Stafford Beer (1972), secondo cui "[…] il sistema vitale è un sistema che sopravvive, rimane unito ed è integrale; è omeostaticamente equilibrato sia internamente che esternamente e possiede inoltre meccanismi e opportunità per crescere e apprendere, per svilupparsi ed adattarsi, e cioè per diventare sempre più efficace nel suo ambiente" (Golinelli, 2000).

Le innovazioni di tipo concettuale apportate dall'aSv possono essere riassunte, data la natura assiomatica dell'approccio, nei seguenti principi (Barile *et al.* 2015):

- della sopravvivenza: "Un sistema vitale, inserito in uno specifico contesto, ha il precipuo fine della sopravvivenza";
- dell'eidos: "Il sistema vitale nella sua qualificazione ontologica può essere concepito in una duplice prospettiva: quella della struttura e quella del sistema";
- dell'isotropia: "Il sistema vitale nella sua qualificazione comportamentale è caratterizzato dalla evidenziazione di due aree logicamente distinte: quella del decidere e quella dell'agire";
- dell'ethos: "Il sistema vitale, nella sua dinamica esistenziale, è indirizzato verso il perseguimento di finalità e il raggiungimento di obiettivi dall'interazione con sovrasistemi e subsistemi da cui e a cui, rispettivamente, trae e fornisce indirizzi e regole";
- dell'esaustività: "Per un sistema vitale, tutte le entità esterne alla propria struttura sono anch'esse vitali, ovvero sono componenti riconducibili alla struttura di un sistema vitale di livello superiore".

Non è possibile, però, parlare di sistema vitale senza fare riferimento all'ambiente in cui tale sistema è immerso e al risultato del processo di percezione, da parte dell'Organo di Governo del sistema, di tale ambiente. Il sistema vitale, dunque, pur essendo caratterizzabile attraverso il riferimento ai principi, risulta essere determinato da continui processi di contestualizzazione implementati in uno specifico ambiente da parte del soggetto decisore (Golinelli, 2000, 2002, 2005, 2011; Barile, 2009), che opera, in tal modo, una selezione dei sistemi ritenuti rilevanti (fig.1).

Fig.1: Il processo di contestualizzazione

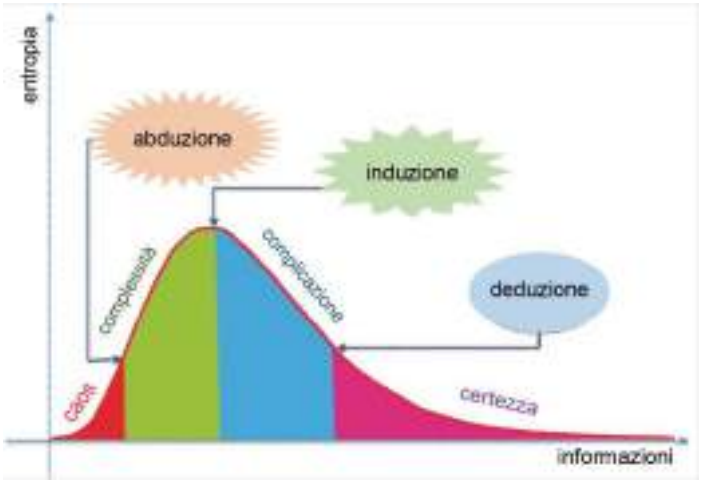


Fonte: Barile, 2010, www.asvsa.org. Figura utilizzata con il permesso di ASVSA

Alla luce di queste considerazioni, è necessario operare una sintesi tra sistema vitale e ambito problematico in cui l'Organo di Governo è tenuto a prendere decisioni.

Il decisore può ricondurre, in ottica aSv, le scelte da affrontare a quattro aree problematiche: l'area del Caos, l'area della Complessità, l'area della Complicazione e l'area della Certezza (le cosiddette quattro C del contesto).

Fig. 2: Le quattro aree problematiche



Fonte: Barile *et al.* 2015

È utile sottolineare che soprattutto le decisioni in ambito complesso vengono ricondotte al rapporto di *consonanza* che l'Organo di Governo intende e può stabilire con i sovrasistemi di contesto che ritiene maggiormente rilevanti.

In particolare, appare utile fare riferimento al corpus teorico dell'aSv in relazione al governo di un'entità particolarmente complessa quale il territorio.

3. Il processo decisionale *per* il territorio in ottica aSv

Il territorio, originariamente definito tramite i concetti di area, spazio e regione e descritto, sulla base della sua configurazione fisica, come un insieme di "risorse di dotazione" (Barile e Saviano, 2008, 2011), viene interpretato, da una letteratura più recente (Golinelli, 2003; Barile e Golinelli, 2008; Barile, 2011b; Barile e Di Nauta, 2011; Barile e Saviano, 2012; Barile *et al.*, 2012), come un "giacimento di risorse ed entità in azione per l'emersione di un sistema unitario" (Barile *et al.*, 2013). L'area geografica territoriale a cui facciamo riferimento, dunque, grazie alla lente del corpus teorico dell'aSv, non assume più una connotazione puramente strutturale, ma diviene il risultato di interazioni (relazioni attivate tra individuo e individuo e tra individuo e ambiente) che evolvono dinamicamente e si sviluppano ricorsivamente. Alle dotazioni naturali, artistiche e strutturali, incluse 'oggettivamente' nella definizione di territorio, si affiancano, quindi, le componenti sistemiche (individui, organizzazioni e istituzioni), che, con le loro visioni e proiezioni di aspettative irriducibilmente soggettive, possono perseguire finalità non condivise e non allineate al fine di sopravvivere nel contesto di riferimento (Barile e Golinelli, 2008; Barile, 2011).

Come già accennato nel paragrafo precedente, un sistema può essere definito vitale se è in grado di sopravvivere nel suo contesto di riferimento (Barile *et al.*, 2015); questa capacità di sopravvivenza deriva dall'abilità dell'Organo di Governo di stabilire relazioni sinergiche (definite dal concetto di *consonanza*) con le entità che popolano quello stesso contesto. Risulta necessario, dunque, per l'Organo di Governo, fondare le decisioni su una logica partecipativa, che possa fungere da guida verso un obiettivo condiviso, basato su un'armonia di fini (*consonanza*). Ponendo in essere iniziative realizzate nell'interesse del territorio stesso e adottando, dunque, una visione

unitaria (effetto di *risonanza*), si fortifica la probabilità di un potenziale passaggio da uno spinto individualismo all'emersione di una coscienza collettiva (Barile, 2009; Schillaci e Gatti, 2010).

Il processo di contestualizzazione che conduce all'estrazione, da parte dell'Organo di Governo, di uno specifico contesto di riferimento da un ambiente più generico (Golinelli, 2000, 2002, 2005, 2011; Barile, 2009), qualifica, come già accennato, uno dei momenti centrali nel superamento dei limiti propri di una prospettiva meramente strutturale. In tal modo, tramite l'evanescenza dei confini territoriali, viene spostato il focus verso le dinamiche sistemiche e verso un bacino più ampio di relazioni inter ed intra-sistemiche che caratterizzano il territorio, accrescendo la probabilità di sopravvivenza del sistema stesso.

Il processo di contestualizzazione pone enfasi su uno dei concetti chiave dell'aSv: il principio di *rilevanza*. La qualificazione del contesto avviene, infatti, sulla base del grado di interesse (in termini di criticità delle risorse e potere di influenza esercitabile) suscitato da un certo sovrasistema (individui, imprese, organizzazioni, ecc.) sull'Organo di Governo del sistema vitale preso in considerazione (Golinelli 2005; Barile e Golinelli, 2008); nel nostro caso sull'organo di governo multi-soggettivo e di natura composita di cui è dotato il territorio (Barile e Golinelli, 2008; Barile *et al*., 2018).

In sintesi, col passaggio da ambiente a contesto, l'Organo di Governo territoriale procede alla valutazione e alla selezione delle entità con cui intende interagire e, di conseguenza, alla mappatura della rete di relazioni da instaurare con le stesse (Polese e Minguzzi, 2009), all'attivazione di queste relazioni (Polese, 2002) e alla definizione di una strategia che possa interpretare le loro esigenze, tradurle in obiettivi e consentirne il loro raggiungimento.

Alla luce di queste breve considerazioni, possiamo affermare che il governo del territorio, riconcepito in ottica sistemica, ci indirizza verso una nuova visione di concepire il processo decisionale: parliamo di decision making *per* il territorio (Barile, 2011b), superando la precedente visione di orientamento delle decisioni e delle azioni alla creazione di valore *nel* territorio e *del* territorio.

Quanto fin qui descritto è origine, d'altro canto, dei tipici problemi legati al governo del territorio, soprattutto quando i livelli di complessità risultano essere particolarmente significativi. Il processo di valorizzazione territoriale richiede di concepire soluzioni condivise per le complesse questioni ambientali, sociali ed economiche a livello locale (Napolitano, 2000; Sciarelli, 2007; Marino *et al.*, 2013; Carrubbo, 2013; Iandolo *et al*., 2016; Simone *et al.*, 2018). In tal senso, "*la complessità può riassumersi nell'impossibilità di circostanziare il problema servendosi di schemi interpretativi, e quindi modelli, tecniche e strumenti, utilizzati nel passato"* (Barile, 2012). Il *location paradox* (Porter, 1998), d'altronde, già sottolineava come, in un mondo economico sempre più globalizzato e caratterizzato da crescente complessità, l'unica possibilità di trarre linfa vitale discendesse dalla capacità di instaurare relazioni profonde e dinamiche con l'ambito locale di riferimento.

L'avvento di questa crescente interdipendenza tra globale e locale ha posto l'enfasi sui concetti di "relazione" e "sistema", tanto da condurre Scott e Storper (2003) a definire le nuove configurazioni territoriali come sistemi sinergici di risorse fisiche e relazionali.

È necessario, in sintesi, andare alla ricerca di soluzioni che possano essere di supporto al processo decisionale (decision support system) dell'Organo di Governo territoriale, che si trova a rapportarsi con numerosi e mutevoli entità del contesto in condizioni di complessità, nel tentativo di armonizzare gli interessi dei vari attori e di convergere verso una direzione evolutiva congiunta, verso una ricercata consonanza di contesto (Barile e Calabrese, 2011).

4. Metodologia di indagine

4.1 Obiettivi e metodologia di ricerca

Alla luce del quadro sopra delineato, considerando, dunque, il territorio come un sistema dinamico di relazioni intersoggettive (Barile *et al.*, 2013), è stato condotto uno studio, basato sulle

tecniche di Sentiment Analysis, al fine di definire un modello di supporto alle decisioni dell'Organo di Governo territoriale, che metta in luce i sentimenti e le opinioni espressi all'interno di testi generati in rete (big data) (Manyika *et al.*, 2011; Provost e Fawcett, 2013; Troisi *et al*., 2018) dai cittadini e dai visitatori di una specifica area territoriale, in riferimento alle risorse, alle strutture o ai servizi ivi presenti. In particolare, l'idea alla base del modello è quella di applicare la tecnica di Aspect Based Sentiment Analisys (Liu, 2012), evoluzione della Sentiment Analysis (Wilson, Wiebe e Hoffmann, P., 2005; Pang e Lee, 2008; Pak e Paroubek, 2010), non più per condurre analisi di mercato, come di consuetudine, bensì in un contesto urbano, al fine di rendere l'Organo di Governo, grazie alla possibilità di ottenere in output analisi aggregate a diversi livelli di granularità, consapevole delle sensazioni condivide riguardo ai principali aspetti delle risorse urbane (monumenti, luoghi di interesse turistico, servizi, ecc.). L'intero sistema proposto, basato su tale modello, alla luce dell'Approccio Sistemico Vitale (aSv), consente di enfatizzare, attraverso il concetto di consonanza e risonanza territoriale, come il passaggio dall'orientamento individuale a quello sistemico, che tiene conto della collettività, possa favorire un miglioramento dei processi decisionali e il conseguente convergere verso una visione unitaria.

In questa direzione, il modello di supporto alle decisioni territoriali proposto, basato, come già detto, sulle tecniche di ABSA, insieme ad una prima sperimentazione condotta su un punto di interesse, farà emergere le opinioni collettive legate allo stesso e consentirà di implementare azioni a più macrolivelli decisionali:

- valorizzare le componenti sistemiche presenti nel punto di interesse, coinvolgendole direttamente e indirettamente nello sviluppo dello specifico sistema territoriale, al fine di accrescere le probabilità di sopravvivenza del sistema stesso;
- favorire il coinvolgimento e la partecipazione tramite un tentativo di armonizzazione e allineamento delle diverse proiezioni;
- coordinare i comportamenti delle componenti coinvolte nello sviluppo dello specifico sistema territoriale;
- orientare il processo decisionale ad interventi volti a porre in essere le condizioni per l'emergere di consonanza di contesto.

4.1.1 La ABSA applicata al sistema territoriale in ottica aSv

L'idea è quella di applicare la tecnica di Aspect Based Sentiment Analisys, al fine di valutare le opinioni della comunità rispetto alle varie componenti degli asset urbani. La tecnica dell'Aspect Based Sentiment Analysis fornisce informazioni non più sul livello di "Sentiment" del prodotto nel suo insieme, ma circa le varie componenti dello stesso, consentendo un'analisi più precisa e puntuale (Liu, 2012; Pavlopoulos, 2014).

Nel caso specifico, si adotta la tecnica dell'ABSA, precedentemente utilizzata, come già affermato, nell'analisi dei prodotti commerciali, alle diverse componenti degli asset urbani, per rendere consapevole l'Organo di Governo territoriale delle opinioni collettive riguardo ai differenti aspetti caratterizzanti un punto di interesse.

Dunque, secondo l'approccio di Liu, la tecnica di Aspect Based Sentiment Analisys individua le sensazioni espresse dagli utenti della community oggetto di analisi, detti "*holders*", in riferimento ai singoli "*aspects*" delle risorse urbane (monumenti, luoghi di interesse turistico, servizi, ecc.), e stabilisce se esse siano positive o negative, con possibilità di analisi aggregate a diversi livelli di granularità. A tal fine definiamo: *l'opinion-city* come una quintupla $(e_i, a_{ij}, s_{ijkl}, h_k, t_l)$, dove e_i è il nome dell'*entity-city (*ad esempio un monumento, una piazza, un punto di interesse turistico, ecc) a_{ij} è un *aspect-city* di e_i (ad esempio con riferimento alle grandi fontane: vasca, statua, piazza), s_{ijkl} è il *sentiment* sull'aspetto a_{ij} dell'entità, e_i (ad esempio grazioso), h_k è l'*opinion holder* (soggetto che esprime il sentiment) e t_l è il *tempo* in cui l'opinione è espressa da h_k. Si ottiene, dunque, una sintesi organizzata in diversi livelli di "sentiment" riguardanti le entità urbane e i diversi aspetti delle stesse, grazie al processo di trasformazione di dati non strutturati in dati strutturati. In tal modo, l'Organo di Governo territoriale può avvalersi di tale output per compiere

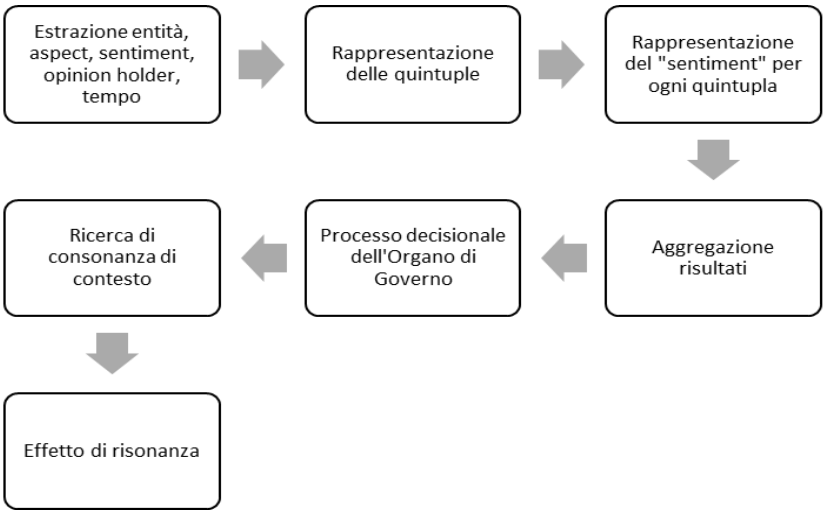
analisi sia qualitative che quantitative, al fine di valutare in toto le opinioni degli attori individuati come *rilevanti* (nel caso specifico, la community di riferimento), e, quindi, accrescere la possibilità di sopravvivenza del sistema, grazie ad una ricercata consonanza.

4.1.2 Il processo decisionale territoriale basato sulla ABSA in ottica aSv

Dato un insieme di *opinion-city* contenute su un Sito Web rispetto ad un asset urbano, il processo decisionale dell'Organo di Governo territoriale, basato su tecniche di ABSA in ottica sistemico vitale, si basa sui seguenti passaggi:

- *Estrazione dell'entità e categorizzazione*: consente di estrarre tutte le espressioni dell'entità e le categorizza e/o raggruppa in entità cluster (o categorie). Ogni cluster di espressioni di entità rappresenta un'unica entità;
- *Estrazione degli aspect e categorizzazione*: consente di estrarre tutte le espressioni degli *aspect* delle entità, categorizzandole in *aspect* cluster. Ogni cluster rappresenta un unico *aspect* dell'entità;
- *Estrazione dell'opinion holder e categorizzazione*: si estrae *l'opinion holder* all'interno della frase;
- *Estrazione del tempo e standardizzazione*: si estrae il tempo in cui è espressa l'opinione;
- *Rappresentazione delle quintuple dell'opinion* (Liu B., 2012): è possibile generare le quintuple;
- *Rappresentazione del Sentiment delle sentiment words e/o expressions*: utilizzando Sentiwordnet (Baccianella, Esuli e Sebastiani, 2010) si rappresentano i valori di "sentiment" di ogni tupla;
- *Aggregazione dei risultati*: si utilizza la media come funzione di aggregazione;
- *Rappresentazione grafica dei risultati*: mediante un grafico a barre si rappresentano sinteticamente le polarità di ogni entità della città analizzata e degli *aspect* individuati;
- *Attività decisionale dell'organo di governo territoriale:* l'Organo di Governo potrà porre in essere interventi volti a creare le condizioni per l'emergere di consonanza di contesto.

Fig. 3: Processo decisionale territoriale con tecniche di ABSA in ottica ASV



Fonte: elaborazione degli autori

4.2 Definizione della Community e raccolta dei dati

È stato condotto uno studio di analisi del testo su larga scala, con l'obiettivo di comprendere, relativamente ad un punto di interesse individuato, i principali sentimenti espressi all'interno di testi generati in rete dai cittadini e dai visitatori della città di Roma. Il fine è quello di definire un

modello che, considerando le interazioni dinamiche tra gli attori coinvolti, supporti l'Organo di Governo territoriale di fronte alla crescente sfida di una gestione efficace ed efficiente della capitale.

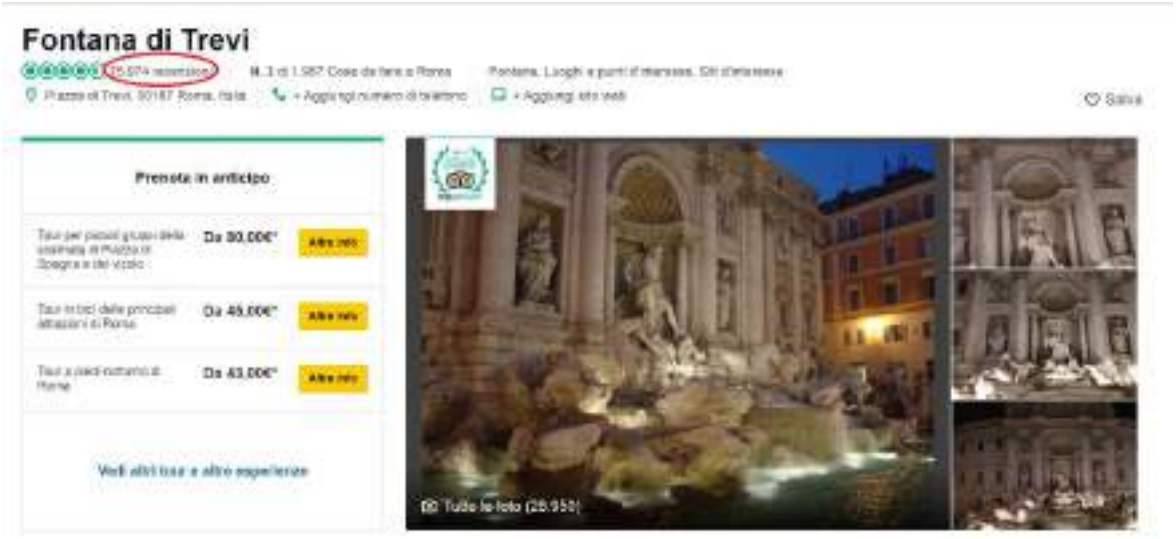
La raccolta delle opinioni degli utenti avviene in una community di un Sito Web. In particolare, la scelta è ricaduta sul sito TripAdvisor.com, un portale web di viaggi che pubblica le recensioni degli utenti riguardo hotel, B&B, appartamenti, ristoranti e attrazioni turistiche, che, con oltre 60 milioni di recensioni e opinioni, rappresenta il più grande sito di viaggi al mondo, capace di connettere dinamicamente un'ampia rete di relazioni.

Per il caso di studio, è di interesse soffermarsi sul punto verso il quale la popolazione nutre particolari opinioni che possono contribuire al processo decisionale dell'Organo di Governo, facendo emergere delle problematiche latenti legate alla specifica area territoriale. Nello specifico, è stato selezionato sul Sito Web uno dei punti di interesse di maggiore rilevanza per la comunità: Fontana di Trevi. Tale punto di interesse locale figura tra i primi nella classifica consigliata dal Sito Web e gode di uno dei più elevati gradi di attrattività nella città di Roma.

In particolare, l'intero corpus di recensioni sulla fontana di Trevi presente su Tripadvisor.com risulta essere, alla data della rilevazione dei dati, di 75.974 recensioni visibili. Su tale popolazione di recensioni (75.974), per ovvi vincoli di tempo e costi, individuiamo una numerosità campionaria *n* tale da consentirci di garantire, rispetto all'intera popolazione, un errore campionario del 5% ad un livello di probabilità del 95%. Dunque, sulla base di tali parametri, la numerosità campionaria calcolata è pari a 382 recensioni. Dall'intero corpus, quindi, attraverso un campionamento casuale semplice, vengono selezionate ed estratte 382 recensioni, opportunamente memorizzate in un *repository* delle recensioni che funge da alimentatore e da input per la successiva fase di analisi prevista dall'approccio. Dalle sperimentazioni effettuate risulta peraltro evidente che, a valle di una attività di integrazione, ottimizzazione e tuning delle diverse fasi, tecniche e tecnologie abilitanti, sarà possibile applicare, qualora si ritenga opportuno, il processo definito sull'intera popolazione di recensioni, praticamente a parità di risorse disponibili.

Ciò premesso, durante la fase di raccolta dei dati, utilizzando appositi tool di analisi sintattica e di knowledge extraction (D'Aniello et al., 2018), si identificano le componenti del punto di interesse a cui la community presta maggiore attenzione e gli attributi ad esse associati su cui, successivamente, attraverso la risorsa lessicale SentiWord.net, verrà applicata la tecnica di Aspect Based Sentiment Analysis e, dunque, calcolato il valore di "sentiment" percepito dalla comunità.

Fig. 4: Screenshot del Sito Web TripAdvisor.com



Fonte: https://www.tripadvisor.it/Attraction_Review-g187791-d190131-Reviews-Trevi_Fountain-Rome_Lazio.html, febbraio 2018.

4.3 Analisi dei dati

Terminata la fase di raccolta dei dati, si procede con l'estrazione dell'entità e degli *aspect* per ciascun *opinion holder* che ha rilasciato una recensione in riferimento al punto di interesse in esame. Successivamente, le entità, gli *aspect*, le opinioni, gli *opinion leader*, insieme all'intervallo temporale in cui la recensione è stata lasciata, vengono rappresentati in quintuple, insiemi di cinque elementi che sono in relazione con alcuni attributi del testo estratto.

Si riportano, di seguito, alcune tuple estratte dalle recensioni rilasciate dagli utenti riguardo "Fontana di Trevi" su TripAdvisor.com:

"{Fontana di Trevi, vasca, meravigliosa, FedericoLeoni, Sept-15-2017};
{Fontana di Trevi, statue, stupefacenti, Oliviero98, Nov-18-2017};
{Fontana di Trevi, piazza, sporca, Sandra23, Nov-21-2017};
{Fontana di Trevi, GENERAL, unica, MarcoForti_, Dic-3-2017};
{Fontana di Trevi, piazza, ampia, Carlagrami, Dic-15-2017}".

Successivamente, utilizzando Sentiwordnet (Esuli e Sebastiani, 2007; Denecke, 2008), si rappresentano i valori di "*sentiment*" di ogni tupla. In particolare, considerando ogni parola chiave estratta, i termini vengono analizzati al fine di stabilire la loro connotazione positiva, negativa o oggettiva. Il tool semantico, dunque, fornisce in output, per ciascun termine, i valori nell'intervallo [0,1], che rappresentano la positività, la negatività o la neutralità di ogni parola chiave analizzata, la cui somma totale deve essere pari a 1.

In base a quanto detto, per ciascun termine, si valutano i relativi valori di positività Sp_i, negatività Sn_i o neutralità Su_i come segue:

$$Sp_i = \frac{\sum_{k=1}^{K} p_k}{K}$$

$$Sn_i = \frac{\sum_{k=1}^{K} n_k}{K}$$

$$Su_i = \frac{\sum_{k=1}^{K} u_k}{K}$$

A titolo esemplificativo, si riportano i valori di sentiment riguardanti "Fontana di Trevi" di alcune tuple estratte:
"{Fontana di Trevi, vasca, (0.80, 0.20, 0), FedericoLeoni, Sept-15-2017};
{Fontana di Trevi, statue, (0.85, 0.15, 0), Oliviero98, Nov-18-2017};
{Fontana di Trevi, piazza, (0, 0.30, 0.70), Sandra23, Nov-21-2017};
{Fontana di Trevi, GENERAL, (0.70, 0.30, 0), MarcoForti_, Dic-3-2017};
{Fontana di Trevi, piazza, (0.90, 0.10, 0), Carlagrami, Dic-15-2017}".

Si procede, infine, con l'aggregazione dei risultati mediante la funzione media, al fine di poter compiere valutazioni a diversi livelli di granularità, soffermandosi sia sul punto di interesse nella sua totalità che sui differenti *aspect* che lo compongono.

5. Risultati

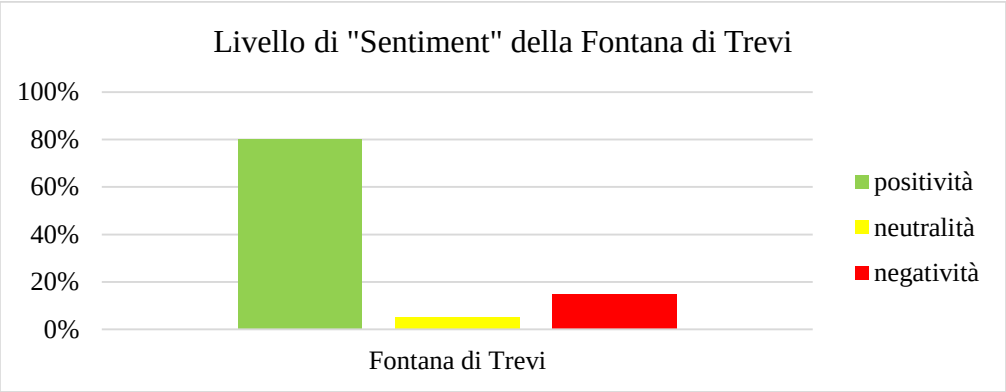
Rappresentati i livelli di "sentiment" di ogni tupla, riguardanti l'entità presa in esame e i corrispettivi *aspect*, si procede con l'aggregazione di questi ultimi, al fine di poter effettuare, dunque, delle valutazioni generali sul punto di interesse considerato. Dalla Tab.1 e dal grafico emerso, risulta che le opinioni collettive riguardanti "Fontana di Trevi" sono prevalentemente positive, confermando il luogo come uno dei punti della città con la più alta attrattività.

Tab. 1: Livello di Sentiment "Fontana di Trevi"

	Livello di Sentiment
Fontana di Trevi	0.65; 0.05; 0.30

Fonte: elaborazione degli autori.

Fig. 5: Livello di "sentiment" del punto di interesse



Fonte: elaborazione degli autori.

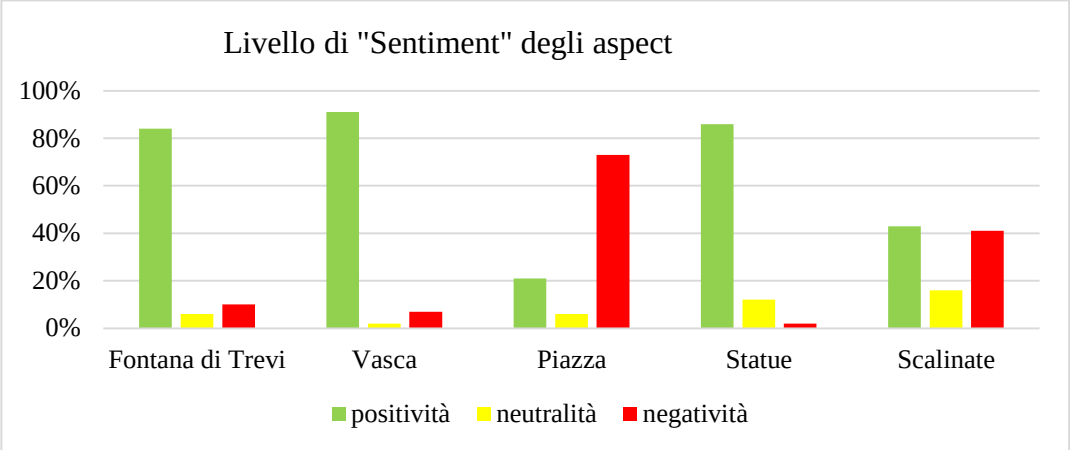
A questo punto, l'Organo di Governo territoriale può compiere un'analisi più accurata, al fine di comprendere, analizzando le diversi parti che compongono il punto di interesse, se, da parte degli utenti della community, vi è l'insorgere di particolari sentimenti positivi, o, contrariamente, opinioni negative, rappresentative di problematiche celate del contesto urbano.

Tab. 2: Valori di polarità di entità e aspect

Entità	**Aspect**	**Valori di Polarità**
Fontana di Trevi		0.65; 0.05; 0.30
	GENERAL-Fontana di Trevi	0.84; 0.06;0.10
	Vasca	0.91; 0.02; 0.07
	Piazza	0.21; 0.06; 0.73
	Statue	0.86; 0.12; 0.2
	Scalinate	0.43; 0.16; 0.41

Fonte: elaborazione degli autori.

Fig. 6: Livello di "sentiment" degli aspect



Fonte: elaborazione degli autori.

Si analizza, dunque, il grafico dei risultati ottenuti che, in maniera sintetica, rappresenta le polarità di ogni *aspect* dell'entità analizzata. In particolare, come si può notare dalla Tab. 3 e dal grafico in Fig.4, vi sono alcuni *aspect* percepiti come particolarmente positivi. Infatti, soprattutto verso gli *aspect* "statua" e "vasca", gli utenti hanno espresso un'opinione fortemente positiva, legata alla magnificenza delle statue, delle rocce e delle tre vasche di cui è composta la fontana. La connotazione positiva caratterizzante gli *aspect* suggerisce all'Organo di Governo territoriale, ad esempio, la possibilità di enfatizzare, mediante strategie di marketing, la storicità del luogo e l'attrattività legata all'aspetto della tradizione storico-culturale italiana.

Da un'analisi ancora più accurata, si evidenzia che, seppur in misura ridotta, sono presenti dei primi sintomi di malcontento da parte della community, in riferimento a particolari aspetti della Fontana di Trevi. Tali opinioni negative fanno emergere segnali velati a cui l'Organo di Governo deve necessariamente porre attenzione. Nell'analisi, infatti, il livello di "sentiment" associato all'*aspect "*piazza" è prevalentemente negativo, poiché, andando a considerare le tuple costruite, è emersa più volte la connessione con l'aggettivo "sporco". Tale informazione può essere di particolare rilevanza per l'Organo di Governo, che, essendo consapevole di questa problematica percepita dalla collettività, potrà destinare con maggiore capillarità le risorse dedite allo smaltimento dei rifiuti nell'aerea interessata e in quella limitrofa. Ancora, analizzando le tuple, l'*aspect* "piazza" risulta connesso all'aggettivo "pericoloso", sintomo di un principio di percezione fortemente negativa da parte degli utenti rispetto al luogo d'interesse, legato probabilmente alla presenza di borseggiatori nell'area vicina a "Fontana di Trevi". L'Organo di Governo dovrà, affinché tale percezione non venga condivisa da una fetta di utenti sempre maggiore e il luogo d'interesse non venga più percepito come storico e ricreativo, prendere provvedimenti di gestione delle risorse da destinare alla sicurezza del luogo.

6. Implicazioni manageriali, future linee di ricerca e conclusioni

Il lavoro proposto offre interessanti implicazioni teoriche, combinando, in un unico modello, l'approccio sistemico vitale (Golinelli, 2000, 2010; Barile, 2000, 2008, 2009), lente interpretativa della realtà, con l'ABSA (Liu, 2012), tecnica di estrazione e valutazione di opinioni riguardo entità specifiche. Il fine è quello di integrare ad un *corpus* teorico, in maniera innovativa, tecniche di analisi testuale e definire un modello che consenta non solo la raccolta e l'analisi dei dati, ma anche -e soprattutto- un approccio interpretativo alle informazioni ottenute.

L'unicità del lavoro risiede, infatti, nel tentativo di integrare, per la prima volta, al framework concettuale dell'approccio sistemico vitale, già in precedenza impiegato per interpretare problematiche legate al territorio (Barile e Golinelli, 2008; Polese, 2005, 2010; Barile, 2012; Barile *et al*., 2013), l'impianto metodologico dell'ABSA, per portare avanti ricerche di tipo non solo qualitativo, come già effettuato nei precedenti lavori, ma anche quantitativo, al fine di garantire una maggiore accuratezza nell'analisi dei risultati. Infatti, i due approcci sono considerati complementari (Firestone, 1987) e permettono, da un lato, di ottenere dati strutturati dai quali è possibile trarre analisi di vario tipo e, dall'altro, di applicare un approccio interpretativo e decisionale alla moltitudine di informazioni ricavate.

Da un punto di vista manageriale, il modello si presenta come un valido supporto alle attività decisionali dell'Organo di Governo territoriale, proponendo, in maniera flessibile, valutazioni condivise sui livelli di "sentiment" percepiti dalla comunità rispetto all'area urbana di interesse.

È possibile, pertanto, offrire al decisore un'immediata consapevolezza riguardo alle differenti opinioni espresse dalla community, sia per valutare le principali attrattività di un'area urbana sia per rilevare i sintomi di un principio di malcontento. Dunque, a fronte delle informazioni ottenute dai quadri sintetici, l'OdG è in grado di attuare una serie di interventi, volti a stabilire le condizioni per una consonanza di contesto, avendo acquisito una visione d'insieme composta dalle diverse percezioni della collettività.

Tra i futuri sviluppi dello studio, si prevede la possibilità di estendere le logiche delineate nel lavoro, compiendo un'analisi non più sui singoli punti ma su un'area urbana di interesse,

determinata, a sua volta, dall'aggregazione degli *asset* in essa presenti. Il fine è quello di fornire in output informazioni che consentano all'Organo di Governo di implementare azioni volte ad un maggior coordinamento delle componenti coinvolte nello sviluppo dello specifico sistema territoriale.

Inoltre, si prevede di affinare il modello proposto, ricercando funzioni di aggregazione per le tecniche di ABSA più sofisticate, per compiere analisi territoriali con maggiore precisione. Sarebbe, infine, di grande interesse integrare al modello una possibile valutazione dei livelli di consonanza e risonanza ottenuti, al fine di fornire all'Organo di Governo territoriale un'informazione sull'efficacia delle politiche territoriali intraprese, in un circolo virtuoso mirato al perseguimento di una maggiore probabilità di sopravvivenza nel contesto considerato.

Concludendo, la rilettura in chiave sistemico vitale, affiancata da tecniche quali la ABSA, che contribuiscono ad accrescere la consapevolezza di un irriducibile nesso che lega ogni entità in un'unica grande rete virale (Capra, 1997), nasce dall'esigenza di un profondo ripensamento nell'approccio di analisi e di conseguente risoluzione delle problematiche legate al governo di qualsiasi sistema, soprattutto se si fa riferimento ad un'entità multi-stakeholder e multi-dimensionale quale il sistema territorio. La varietà di aspettative, prospettive e interessi presenti nel contesto di riferimento è origine dei tipici problemi legati al governo del territorio. In questa direzione, la proposta di un modello di supporto al processo decisionale dell'Organo di Governo territoriale, che abbia alla base la concezione del territorio come sistema vitale, consente il superamento dell'ottica tradizionale, attenta esclusivamente alla fisicità delle sue componenti strutturali, spostando l'accento sull'interazione tra le componenti sistemiche e sui concetti chiave di 'consonanza', 'risonanza' e 'rilevanza', centrali nel processo decisionale dell'Organo di Governo, in una più ampia e generale visione di 'vitalità sistemica'.

Bibliografia

ABUALSAMH R.A., CARLIN B., MCDANIEL R.R. (1990), "Problem structuring heuristics in strategic decision-making", *Organizational Behavior and Human Decision Processes*, vol. 45, n. 2, pp. 159-174.

BACCIANELLA S., ESULI A., SEBASTIANI F. (2010), "Sentiwordnet 3.0: an enhanced lexical resource for sentiment analysis and opinion mining", in *LREC* (vol. 10, n. 2010, pp. 2200-2204).

BARILE S. (2009), *Management sistemico vitale*, Giappichelli: Torino.

BARILE S. (2011), *Management sistemico vitale: Decisioni e scelte in ambito complesso*, Avellino: International Printing Srl Editore.

BARILE S. (2011b), "L'approccio sistemico vitale per lo sviluppo del territorio", *Sinergie*, n. 84, pp. 47-87.

BARILE S., CALABRESE M. (2011), "Business design e consonanza di contesto", *Sinergie rapporti di ricerca*, n. 32.

BARILE S., DI NAUTA P. (2011), "Viable Systems Approach for territory development", in Various Authors, *Contributions to theoretical and practical advances in management - A Viable Systems Approach (VSA)*, International Printing, Avellino, pp. 199-243

BARILE S., GOLINELLI C.M. (2008), "Modalità e limiti dell'azione di governo del territorio in ottica sistemica", in Barile S. (a cura di), *L'impresa come sistema. Contributi sull'Approccio Sistemico Vitale (ASV)*, Giappichelli, Torino, pp. 243-268.

BARILE S., GOLINELLI G.M., MONTELLA M., SAVIANO M. (2012), "A systems view of cultural heritage. The case of landscape", in Morvillo A. (ed.), *Advances in Tourism Studies. In memory of Clara S. Petrillo*, Collana "Services and Competitiveness", McGraw-Hill Education, New York, pp. 361-379.

BARILE S., QUATTROCIOCCHI B., CALABRESE M., IANDOLO F. (2018), Sustainability and the Viable Systems Approach: Opportunities and Issues for the Governance of the Territory. *Sustainability*, *10*(3), 790.

BARILE S., SANCETTA G., SAVIANO M., (2015), *Management. Il modello sistemico e le decisioni manageriali*, vol. I, Giappichelli, Torino.

BARILE S., SAVIANO M. (2008), "Le basi del pensiero sistemico: la dicotomia struttura sistema", in Barile S. (a cura di), *L'impresa come sistema*, Giappichelli, Torino.

BARILE S., SAVIANO M. (2011), "Foundations of systems thinking: the structure-system paradigm", in Various Authors, *Contributions to theoretical and practical advances in management. A Viable Systems Approach (VSA)*, International Printing, Avellino, pp. 1-26.

BARILE S., SAVIANO M. (2012), "Dalla gestione dei beni culturali al governo del sistema dei beni culturali", in Golinelli G.M. (a cura di), *Patrimonio culturale e creazione di valore. Verso nuovi percorsi*, Cedam, Padova, pp. 97-148.

BARILE S., SAVIANO M., IANDOLO F., CALABRESE M. (2014), "The viable systems approach and its contribution to the analysis of sustainable business behaviors", *Systems Research and Behavioral Science*, vol. 31, n. 6, pp. 683-695.

BARILE S., SAVIANO M., POLESE F., DI NAUTA P. (2013), "Il rapporto impresa-territorio tra efficienza locale, efficacia di contesto e sostenibilità ambientale", *Sinergie rivista di studi e ricerche*.

BEER S. (1972), *Brain of the firm; a development in management cybernetics*, New York: Herder and Herder.

BETTIS R.A. (2017), "Organizationally Intractable Decision Problems and the Intellectual Virtues of Heuristics", *Journal of Management*, vol. 43, n. 8, pp. 2620-2637.

BUHALIS D. (2000), "Marketing the competitive destination of the future", *Tourism Management*, vol. 21, n. 1, pp. 97-116.

CAPRA F. (1997), *The web of life: A new scientific understanding of living systems*, Anchor.

CARRUBBO L. (2013), *La Co-creazione di valore nelle destinazioni turistiche*. Rirea.

CLARK K. D., MAGGITTI P.G. (2012), "TMT Potency and Strategic Decision-Making in High Technology Firms", *Journal of Management Studies*, vol. 49, n. 7, pp. 1168-1193.

CROUCH G.I., RITCHIE J.B. (1999), "Tourism, competitiveness, and societal prosperity." *Journal of Business Research*, vol. 44, n. 3, pp. 137-152.

D'ANIELLO G., GAETA M., LOIA F., REFORMAT M., TOTI D. (2018), "An Environment for Collective Perception based on Fuzzy and Semantic Approaches", *Journal of Artificial Intelligence and Soft Computing Research*, vol. 8, n. 3, pp. 191-210

DE WIT F.R.C., GREER L.L., JEHN K.A. (2012), "The Paradox of Intragroup Conflict: A Meta-Analysis", *Journal of Applied Psychology*, vol. 97, n. 2, pp. 360-390.

DEAN J.W., SHARFMAN M.P. (1993), "The relationship between procedural rationality and political-behavior in strategic decision-making", *Decision Sciences*, vol. 24, n. 6, pp. 1069-1083.

DELLA CORTE V. (2000), *La gestione dei sistemi locali di offerta turistica*, CEDAM, Padova.

DENECKE K. (2008, April), "Using sentiwordnet for multilingual sentiment analysis", in *Data Engineering Workshop, 2008. ICDEW 2008. IEEE 24th International Conference on* (pp. 507-512), IEEE.

EISENHARDT K.M. (2013), "Top management teams and the performance of entrepreneurial firms", *Small Business Economics*, vol. 40, n. 4, pp. 805-816.

EISENHARDT K.M., ZBARACKI M.J. (1992), "Strategic decision making", *Strategic Management Journal*, vol. 13, n. S2, pp. 17-37.

ELBANNA S. CHILD J. (2007), "The influence of decision, environmental and firm characteristics on the rationality of strategic decision-making", *Journal of Management Studies*, vol. 44, n. 4, pp. 561-591.

ESULI A., SEBASTIANI F. (2007), "SentiWordNet: a high-coverage lexical resource for opinion mining", *Evaluation*, 1-26.

FIRESTONE W.A. (1987), "Meaning in method: The rhetoric of quantitative and qualitative research", *Educational researcher*, vol. 16, n. 7, pp. 16-21.

FRANCH M. (2002), *Destination management. Governare il turismo tra locale e globale*, Giappichelli, Torino.

GOLINELLI C.M. (2002), *Il territorio sistema vitale: verso un modello di analisi*, Giappichelli, Torino.

GOLINELLI G.M. (2000), *L'approccio sistematico al governo dell'impresa*, Cedam.

GOLINELLI G.M. (2002), *L'approccio sistemico al governo dell'impresa. Verso la scientificazione dell'azione di governo II*, Cedam, Padova.

GOLINELLI G.M. (2005), *L'approccio sistemico al governo dell'impresa. L'impresa sistema vitale, I*, Cedam, Padova.

GOLINELLI G.M. (2011), *L'Approccio Sistemico Vitale (ASV) al governo dell'impresa. Verso la scientificazione dell'azione di governo*, Cedam, Padova.

HEYDEN M.L.M., VAN DOORN S., REIMER M., VAN DEN BOSCH F.A.J., VOLBERDA H.W. (2013), "Perceived Environmental Dynamism, Relative Competitive Performance, and Top Management Team Heterogeneity: Examining Correlates of Upper Echelons' Advice-Seeking", *Organization Studies*, vol. 34, n. 9, pp. 1327-1356.

IANDOLO F., FULCO I., CARRUBBO L., ARMENIA S. (2016), "Destination mobility management in the light of service research: the "good practices" of South Tyrol", *Esperienze d'Impresa*, vol. 24, n. 2.

INTEZARI A., GRESSEL S. (2017), "Information and reformation in KM systems: big data and strategic decision-making", *Journal of Knowledge Management*, vol. 21, n. 1, pp. 71-91.

KISFALVI V., *ET AL.* (2016), "Managing and Mobilizing Microdynamics to Achieve Behavioral Integration in Top Management Teams", *Long Range Planning*, vol. 49, n. 4, pp. 427-446.

KRABUANRAT K., PHELPS R. (1998), "Heuristics and rationality in strategic decision making: An exploratory study", *Journal of Business Research*, vol. 41, n. 1, pp. 83-93.

LIU B. (2012), "Sentiment analysis and opinion mining", *Synthesis lectures on human language technologies*, vol. 5, n. 1, pp. 1-167.

LOOCK M., HINNEN G. (2015), "Heuristics in organizations: A review and a research agenda", *Journal of Business Research*, vol. 68, n. 9, pp. 2027-2036.

LOUGHRY M.L., AMASON A.C. (2014), "Why won't task conflict cooperate? Deciphering stubborn results", *International Journal of Conflict Management*, vol. 25, n. 4, pp. 333-358.

MANYIKA J., CHUI M., BROWN B., BUGHIN J., DOBBS R., ROXBURGH C., BYERS A.H. (2011), *Big data: The next frontier for innovation, competition, and productivity.*

MARINO V., GALLUCCI C., BELLELLI P. (2013), "The conceptual framework of Placescape. A new Service Marketing perspective for the territory system", in Gummesson E., Mele C., Polese F. (Eds.), *Service Dominant Logic, Network and Systems Theory and Service Science: Integrating three Perspectives for a New Service Agenda*, Giannini, Napoli.

NAPOLITANO M.R. (2000), *Dal Marketing Territoriale alla Gestione Competitiva del Territorio*, Edizioni scientifiche italiane.

OLSON B.J., PARAYITAM S., BAO Y.J. (2007), "Strategic decision making: The effects of cognitive diversity, conflict, and trust on decision outcomes", *Journal of Management*, vol. 33, n. 2, pp. 196-222.

PAK A., PAROUBEK P. (2010), "Twitter as a corpus for sentiment analysis and opinion mining", in *LREc* (vol. 10, n. 2010).

PANATI G., GOLINELLI G. (1988), *Tecnica economica industriale e commerciale: imprese, strategie e management*, Nuova Italia Scientifica, Roma.

PANG B., LEE L. (2008), "Opinion mining and sentiment analysis", *Foundations and Trends® in Information Retrieval*, vol. 2, n. 1-2, pp. 1-135.

PAVLOPOULOS I. (2014), "Aspect based sentiment analysis", *Athens University of Economics and Business*.

PENCARELLI T., FORLANI F. (2003), ""Il marketing dei distretti turistici-sistemi vitali nell'economia delle esperienze" (versione ampliata)".

PILOTTI L., ET AL. (2012), "La competitività dinamica degli ecosistemi territoriali. Il caso degli eco-sistemi turistici multilocali tra Italia e Svizzera", Atti del XXIV Convegno annuale di Sinergie.

PILOTTI L., TEDESCHI-TOSCHI A. (2011), La competitività ecologica dei sistemi territoriali tra identità, immagine e vantaggi "costruiti". Quale marketing dei servizi turistici di fronte alla "long tail"? International Marketing Trends Conference, Paris, 20th-22nd January 2011

POLESE F. (2002), "L'approccio sistemico vitale per l'analisi del territorio: Il caso del Parco Nazionale del Vesuvio", *Esperienze d'Impresa*, vol. X, n. 2, pp. 121-139.

POLESE F. (2005), "I protagonisti dello sviluppo del territorio", in Polese, F. (a cura di), "Risorse e identità locale per la valorizzazione del territorio: un percorso difficile di integrazione sistemica e networking", in Morvillo A., Petrillo C. (a cura di), Sviluppo del territorio: Identità.

POLESE F., CARRUBBO L., BRUNI R., MAIONE G. (2017), "The viable system perspective of actors in eco-systems", *TQM Journal*, vol. 29, n. 6, pp. 783-799.

POLESE F., MINGUZZI A. (2009), "Networking approaches for sustainable destination management", in *Advances in Tourism Destination Marketing: Managing Networks*, n. 113, pp. 113-124.

PORTER M.E. (1998), *Clusters and the new economics of competition* (vol. 76, n. 6, pp. 77-90), Harvard Business Review, Boston.

PROVOST F., FAWCETT T. (2013), "Data science and its relationship to big data and data-driven decision making", *Big data*, vol. 1, n. 1, pp. 51-59.

RISPOLI M., TAMMA M. (1995), *Risposte strategiche alla complessità: le forme di offerta dei prodotti alberghieri*. Giappichelli, Torino.

SAMBA C., VAN KNIPPENBERG D., MILLER C.C. (2018), "The impact of strategic dissent on organizational outcomes: A meta-analytic integration", *Strategic Management Journal*, vol. 39, n. 2, pp. 379-402.

SCHILLACI C.E., GATTI C. (2010), "E pluribus unum: intenzionalità collettiva e governo dei sistemi territoriali", *Sinergie*, n. 84, pp. 21-45.

SCIARELLI S. (2007), *Il management dei sistemi turistici locali: strategie e strumenti per la governance*. Giappichelli.

SCOTT A., STORPER M. (2003), Regions, globalization, development. *Regional studies*, vol. 37, n. 6-7, pp. 579-593.

SHARFMAN M.P., DEAN J.W. (1997), "Flexibility in strategic decision making: Informational and ideological perspectives", *Journal of Management Studies*, vol. 34, n. 2, pp. 191-217.

SHEPHERD N.G., RUDD J.M. (2014), "The Influence of Context on the Strategic Decision-Making Process: A Review of the Literature", *International Journal of Management Reviews*, vol. 16, n. 3, pp. 340-364.

SIMON H.A. (1957), *Models of man: social and rational; mathematical essays on rational human behavior in society setting*, Wiley.

SIMONE C., BARILE S., CALABRESE M. (2018), "Managing territory and its complexity: a decision-making model based on the viable system approach (VsA)", *Land Use Policy*, vol.72, pp. 493-502.

TAMMA M. (2000), "Aspetti strategici del destination management", in Pechlaner e Weiermair K., (a cura di), *Destination Management*, Touring Univeristy Press, T.C.I..

TARAKCI M., *ET AL.* (2016), "When Does Power Disparity Help or Hurt Group Performance?", *Journal of Applied Psychology*, vol. 101, n. 3, pp. 415-429.

TOLEDO PARRA C.A., GAMBOA SARMIENTO S.C., DI FATTA D. (2017), "Studying University as Social Systems Using the Viable System Model: mApp and Semantic Web Technologies at the Industrial University of Santander", *Journal of Organisational Transformation and Social Change*, vol. 14, n. 1, pp. 56-77.

TROISI O., D'ARCO M., LOIA F., MAIONE G. (2018), Big data management: The case of Mulino Bianco's engagement platform for value co-creation. *International Journal of Engineering Business Management*, vol. 10, pp. 1-8.

VAN DOOM S., HEYDEN M.L.M., VOLBERDA H.W. (2017), "Enhancing Entrepreneurial Orientation in Dynamic Environments: The Interplay between Top Management Team Advice-Seeking and Absorptive Capacity", *Long Range Planning*, vol. 50, n. 2, pp. 134-144.

VAN ECK N. J., WALTMAN L. (2014), "Visualizing bibliometric networks", *Measuring scholarly impact*, pp. 285-320, Springer.

VECCHIATO R. (2012), "Environmental uncertainty, foresight and strategic decision making: An integrated study", *Technological Forecasting and Social Change*, vol. 79, n. 3, pp. 436-447.

WALKER M. (2017), "The Search for Viability: A practitioner's view of how the Viable Systems Model is helping transform English local government (and why it has passed unrecognised)", *Systems Research and Behavioral Science*, vol. 34, n. 3, pp. 313-334.

WALLY S., BAUM J.R. (1994), "Personal and structural determinants of the pace of strategic decision making", *Academy of Management Journal*, vol. 37, n. 4, pp. 932-956.

WHITFORD J., ZIRPOLI, F. (2016), "The Network Firm as a Political Coalition", *Organization Studies*, vol. 37, n. 9, pp. 1227-1248.

WILSON T., WIEBE J., HOFFMANN P. (2005), "Recognizing contextual polarity in phrase-level sentiment analysis", in *Proceedings of the conference on human language technology and empirical methods in natural language processing* (pp. 347-354). Association for Computational Linguistics.

Sitografia

http://sinergiejournal.eu/
https://web.archive.org/web/20130120065922/http://www.traveltradejournal.com/newsdetails.php?nid=353
https://www.tripadvisor.it/Attraction_Review-g187791-d190131-Reviews-Trevi_Fountain-Rome_Lazio.html

TRACK - TOURISM AND CULTURE MANAGEMENT

How to rise above the crowd? The promotion of an unknown destination in the tourism market
ANGELO PRESENZA, GIAN LUCA CASALI, CARLO MARI, MICHELE MODINA

How to rise above the crowd?
The promotion of an unknown destination in the tourism market

ANGELO PRESENZA[*] GIAN LUCA CASALI[•] CARLO MARI[♠] MICHELE MODINA[**]

Abstract

Objectives. *The objectives of this study is to provide empirical evidence of how different segments of tourists perceive the image of Molise region and to assess whether information sources is a significant discriminator among the identified clusters in forming the choice of Molise as a potential holiday destination.*

Methodology. *Data collected from surveying 680 non-residents were analysed using mixed methods.*

Findings. *Factor analysis showed the existence of four underlying unique dimensions of Destination Image (DI) in the data while cluster analysis demonstrated the presence of three segments of tourists.*

Research limits. *The main limit is that the sample of non-residents is based on a non-random sampling approach. This choice gives the possibility that the sample is non-representative of tourists to Molise.*

Practical implications. *The study provides recommendation for the development of different marketing strategy to achieve a suitable positioning for the targeted clusters. It also shows which information sources better helps to form the image of Molise region.*

Originality of the study. *The study offers original contributions for academics, policy makers and tourist practitioners. First, this research depicts the main factors that drive for each cluster the choice of Molise as a holiday vacation based on their image perception of the destination. Second, the study gives a contribution to understand the impact of destination familiarity on the perception of Molise as a tourism destination. Third, it shows which information sources better helps to form the touristic image of Molise region.*

Key words: *destination image; segmentation; destination familiarity; destination marketing; Molise*

[*] Assistant professor of *Management* - University of Molise
e-mail: presenza@unimol.it

[•] Senior Lecturer - Queensland University of Technology,
e-mail: luca.casali@qut.edu.au

[♠] Associate professor of *Management* - University of Molise
e-mail: cmari@unimol.it

[**] Associate professor of *Management* - University of Molise
e-mail: michele.modina@unimol.it

1. Introduction

Tourism is a major international industry whose century-long growth has pushed many destinations to use it as a popular development strategy. The pivotal idea is that the tourism industry offers an opportunity to earn revenue to support the local economy, preserve art heritage resources and promote local businesses (Chen and Tsai, 2007).

Tourism has gone through enormous changes in recent years. In particular small-unknown destinations could now take a leading role in many countries (Cracolici and Nijkamp, 2008), as they are able to combine the beauty of the landscape with history, culture, and traditions that are frequently missing in large mass destinations. Italy is a typical example of this emerging pattern as almost three-quarter of total tourism flows are directed towards "minor" destinations (Istat, 2016). This peculiarity of the emerging tourism industry needs attention because these destinations could account for a sizable share of the total tourist flows (Sharpley, 2002; Tosun *et al.*, 2003).

Due to the increasing complexity that destinations must face to achieve, maintain or improve important benefits from tourism (Pearce and Butler, 1999; Scheyvens, 2011), how can an unknown and small region gain success in the hyper-competitive tourism arena?

The success of a tourism destination is defined by its competitiveness compared with alternative destinations (Dwyer *et al.*, 2000). A proper understanding of destination competitiveness (DC) requires an evaluation of tourist destination image (DI) (Goodrich 1977; Fakeye and Crompton 1991; Jenkins 1999).

DI is defined as an overall mental picture (imagery) of a destination (Crompton, 1979; Phelps, 1986; Gartner and Hunt, 1987). This imagery comprises the sum of beliefs, ideas and impressions that tourists have of the attributes of a destination and/or the activities available there. In view of that, measuring the DI perceived by tourists and its evolution over time becomes essential for the proper strategic management of destinations (Kotler *et al.*, 1993; Gallarza *et al.*, 2002; San Martín and Rodríguez, 2008). To create a useful value proposition, managers need to identify their destination's best-valued attributes as well as those to be improved (Pike and Ryan, 2004). That is, they need to detect the strengths and weaknesses of their destination in order to deal with threats before they turn into actual problems, and take advantage of latent opportunities.

The present research addresses this issue through the study of the information that destinations need about how their image is perceived by their target markets, using as case study the Italian region of Molise. Molise is the youngest and smallest Italian region. It is spread over 4460 km^2 with 310.449 inhabitants in 2017, divided into 136 municipalities (density 70 inhabitants/km^2). According to the Italian National Institute of Statistics (ISTAT), Molise is the Italian region with the lowest percentage of tourism and the last for arrivals. Compared to the large flows of cultural tourism that affect some regions of central-northern Italy, the Molise territory has a peripheral position just as it is marginal for southern Italian tourism that relies on the climate and the beauty of the sea and the coasts. For most commentators, Molise is an absent territory, a blank of definitions (https://www.ilfattoquotidiano.it/2015/10/05/il-molise-non-esiste/2095667/). Therefore, tourism in Molise, instead of needing encouragement, has still in many ways to be invented (Minguzzi *et al.*, 2006).

To deepen the knowledge on the role of tourism image for unknown tourism destinations, this study provides empirical evidence of how different segments of tourists perceive the image of Molise region. The paper also assess whether information sources and destination familiarity are significant discriminators among the identified clusters in forming the choice of Molise as a potential holiday destination.

The paper is structured as follows. Section 2 summarizes the recent theoretical studies related to the understanding of the tourism destination image as well as to the sources of information that influence the tourists' perceptions about a destination. Section 3 gives details about the empirical analysis describing the sample and the methodology. Section 4 provides a discussion of the main findings, while Section 5 discusses the results. The final section presents the relevant theoretical and managerial implications and concludes with some limitations of the study.

2. Theoretical background

2.1 Destination image

Destination image is recognized as playing a key role during the various moments that make up a tourist experience (Agapito *et al.*, 2013): in choosing a destination (before the trip), in comparing expectations with experience (during the trip), and in revisiting and recommending the destination to friends and relatives (after the trip).

Numerous studies focus on the importance of destination image illustrating that tourist behavior is largely affected by perception of a destination (for a review see Gallarza *et al.*, 2002; Pike, 2002 Nghiêm-Phú, 2014). As stated by Chen and Tsai (2007, p. 1116) "individuals having a favorable destination image would perceive their on-site experiences (i.e. trip quality) positively, which in turn would lead to greater satisfaction levels and behavioral intentions".

On the other hand, further studies (Govers *et al.*, 2007; Tasci and Gartner, 2007) make clear that destination image is also significant for marketers that use it for positioning purposes and as a promotional tool to gain an advantage over other competing destinations. Consequently, it is important to distinguish between the *perceived* image, that is how audiences of a destination perceive the image of that destination, and the *projected* image, that is the image created by government authority and private businesses (Nghiêm-Phú, 2014). The former consists of a subjective interpretation of a destination by individuals that influences their tourist behavior. The latter is the intentionally created image to fulfill tourism development strategies. Perceived destination image has been analyzed in various ways without a consensus on how to define or measure it. However a general agreement exists in the literature that a destination image is a mental/psychological construct and that its understanding requires a multidimensional model.

A first attempt to conceptualize and measure destination image was proposed by Echter and Ritchie (1991; 1993) who used three dimensions organized as a continuum: attribute-holistic, functional-psychological, and common-unique. Their contribution was further developed by other scholars (Baloglu and McCleary, 1999; Tasci *et al.*, 2007; Beerli and Martin, 2004; Bigné *et al.*, 2009; Caber *et al.*, 2012; Stylidis *et al.*, 2017; Assaker, 2017; Atadil *et al.*, 2017) who highlighted how the previous dimensions are deeper insights forming an interactive system based on three basic components of destination image: cognitive (that is, knowledge about resources available at the tourism destination), affective (that is, feelings or emotional response about the destination), and overall component (that is, a composite image of tourism destination based on both cognitive and affective components). The most common approach used in defining and measuring a tourism destination image is a cognitive-affective model based on a hierarchical structure linking together a list of attributes (both cognitive and affective) and their underlying sub-dimensions that highlight what a tourist is searching in choosing a destination. Empirical evidence shows that there is no universally and reliable measurement of individuals' perceptions of tourist destinations (Assaker, 2017). Thereby, the list of attributes is usually chosen according to the destination being investigated as each destination differs from one another. Such a difference is based on certain attributes that distinguish that destination from others. Consequently, it makes sense to examine the attributes that are unique to the destination in question and develop an ad-hoc hierarchical model of that destination image.

Tourism destination images are usually used as proxies for the measurement of pull factors according to the push-pull framework (Crompton, 1979; Klenosky, 2002). Such a framework suggests that people travel because they are pushed by their own internal forces (needs and wants of the traveler) and simultaneously pulled by external forces of the destination (attributes, features, attractions). The relative importance of pull factors may be different for each visitor and, consequently, it makes sense to approach the analysis of destination image from a market segmentation perspective (Klenosky, 2002). The idea is to identify a classification of tourists based on the perceived importance of pull factors for the prediction of tourist behavior. In particular, a *post-hoc* segmentation approach is usually used in conducting tourism destination image studies

(Prayag, 2010), enabling tourists' perceptions of pull factors that influence the choice of a destination to be described and assessed. Moreover *post-hoc* segmentation provides marketers with actionable information for the identification and differentiation of homogeneous groups of tourists (Prayag, 2010).

Previous research examining pull factors has neglected small and unknown areas located in the Southern Italy. This study attempts to fill the gap by providing empirical evidence of how potential tourists perceive the image of Molise region as a tourism destination, and classifying them in a typology of market segments. Accordingly, the first research question is as follows:

RQ1: Which are the market segments of potential tourists of Molise region based on their image perception of that destination?

2.2 Information sources and destination image

The perception of a tourist destination is based on the information processed by potential tourists from different sources over time (San Martin and Rodriguez del Bosque, 2008). This information is organized into a mental concept that is meaningful to the individual and influences the selection of a particular holiday destination. The variety, amount, and quality of the information that are available to a person tend to determine the image that will be constructed in that person's mind (Atadil and al., 2017; Suarez, 2011).

Govers *et al.* (2007) empirically tested a model trying to understand the various sources of information that consumers use to form destination images. Sources of information explain the formation of destination image as a process in which separate agents act independently or in some combination to form a destination image unique to the individual tourist (Gartner, 1993).

Typologies of agents involved in providing information sources are as follows: *induced* and *organic* agents. Induced images emanate from the destination area and are a function of the marketing efforts of destination promoters, whereas organic images are formed from sources not directly associated with a destination area. The main difference between organic and induced image formation agents is the control the destination area has over what is presented (Gartner, 1993). A more detailed list of agents includes the following categories: (a) different forms of advertising (both print and broadcast media) from destination area promoters, such as the use of television, radio, billboards, brochures, direct mail, special interest magazines; (b) information received from travel agents, tour operators, airlines, and cruise lines which have a vested interest in the travel decision choice but are not directly associated with a particular tourism destination; (c) spokespersons (usually satisfied customers) endorsing a specific destination through internet reviews; (d) news and popular culture (such as documentaries and movies) produced independently by destination area promoters; (e) information received through social interaction with friends and family members (such as word-of-mouth and word-of-mouse).

Within the context of unknown or neglected tourism areas, the issue of information sources contributing to form destination images is particularly relevant. Thus it makes sense to provide empirical evidence of which are the sources of information used by potential tourists of Molise region. Accordingly, the second research question is as follows:

RQ2: Which sources of information contribute to form the image of Molise as a tourism destination?

2.3 Destination familiarity

Most of the studies attempted to answer the questions: what does "destination image" mean in the field of tourism research?, and how should destination image be measured in relation to tourism? Further contributions were focused on building a comprehensive framework explaining the process of destination image formation. One of these, developed by Baloglu and McCleary

(1999), is focused on the formation of a destination image *before actual visitation*. The conceptual framework includes a set of stimulus factors (such as external information) and personal factors (such as the social and psychological characteristics of the perceiver) that impact on destination image. Specifically, the authors empirically tested the following variables: variety (amount) and type of information sources and as stimulus factors; and age, education, and socio-psychological travel motivations as personal factors. The results supported the conceptual framework and provided an initial understanding of destination image formation process. The Baloglu and McCleary framework is based on the assumption that potential tourists would process intensive destination-related information in order to make reasonable decisions. Moreover, tourists show different levels of destination familiarity based on exposure to destination related information (Chen and Lin, 2012; Milman and Pizam, 1995). Informational familiarity differs from experiential familiarity gained through actual visitations, however the former plays a key role in building the awareness of potential tourists about the tourism destination as the perceived destination image is mostly generated by the information available to an individual who does not have any personal experience with a destination (Atadil *et al.*, 2017). It means that destination promoters should ask first: is the destination known? Have potential tourists heard of the destination? Have potential tourists recognized the destination? If the answer to these questions is yes, then destination promoters should ask: have potential tourists developed a favorable impression of destination?

It is usually taken for granted that any tourism destination is already known within a potential audience even though people might show different degrees of familiarity. Perhaps someone has once visited the specific destination and the evaluation is mainly based on direct experience. Someone else has never been there but has gathered information through different sources that allow a vicarious experience. The situation is particularly difficult for small tourism destinations far from the main tourism routes usually built around famous cities and attractions. Such a situation is very common in some areas of the southern Italy like Molise region. The lack of research on how destination familiarity about unknown places influences tourism destination image suggests a need for further empirical evidence and analysis. Accordingly, the third research question is as follows:

RQ3: Has destination familiarity an impact on the perception of Molise as a tourism destination?

3. Methods

3.1 Measurement

The distinction between the cognitive and affective component, from the measurement perspective, is usually dealt with using quantitative methods based on surveys and structured questionnaires (Gallarza *et al.*, 2002; Stepchenkova and Mills, 2010).

A list of attributes was created derived from the literature (see Baloglu and McCleary, 1999; Beerli and Martin, 2004; Echtner and Ritchie, 1991, 1993; Gallarza *et al.*, 2002; Jenkins, 1999; Pike, 2002; Prayag, 2007; Tasci *et al.*, 2007) and these were measured by asking respondents to indicate the importance attributed to these items.

Cognitive image was measured using a multi-dimensional scale that covered seven dimensions, that are: good hotels, sport facilities, good services, pleasant weather, local cultural places, natural environment, clean environment. The destination cognitive image has been analyzed using a five-point scale (1 = not at all important, 2 = unimportant, 3 = neither important nor unimportant, 4 = important, 5 = very important).

The affective component of image was evaluated using seven affective image attributes on a 5-point semantic differential scale (Baloglu and McCleary, 1999; Kim and Richardson, 2003; Martin and del Bosque, 2008; Wang and Hsu, 2010). These attributes were: pleasant/unpleasant, intriguing/boring, character/uncharacter, accessible/inaccessible, genuine/artifact, quiet/ chaotic,

safe/unsafe. Table 1 shows the main theoretical references used to retrieve the items used for the cognitive image, affective image, over image, sources of information, intention to recommend.

Tab. 1: Measurement scales and literature sources

Constructs	Source
Cognitive Component (7 items)	
good hotels sport facilities good services pleasant weather local cultural places natural environment clean environment	Beerli and Martin, 2004; Chi and Qu, 2008; Chen and Tsai, 2007; Chen and Phou, 2013; Lin *et al.*, 2007; Martin and del Bosque, 2008; Wang and Hsu, 2010
Affective Component (7 items)	
pleasant/unpleasant intriguing/boring character/uncharacter accessible/inaccessible genuine/artefact quiet/ chaotic safe/unsafe	Baloglu and McCleary, 1999; Kim and Richardson, 2003; Martin and del Bosque, 2008; Qu *et al.*, 2011
Overall Image (1 item)	Baloglu and McCleary, 1999; Beerli and Martin, 2004; Bigne *et al.*, 2005; Qu *et al.*, 2011
Intention to Recommend (1 item)	Bigne *et al.*, 2005; Chi and Qu, 2008; Prayag and Ryan, 2012; Qu *et al.*, 2011
Sources of Information (7 items)	
Specialized journals Movies Websearch Internet reviews Publicity Word of mouth Travel agency	Chen and Lin, 2012; Milman and Pizam, 1995
Destination familiarity (3)	
Familiarity with the destination Familiarity with the natural Resources of the destination Familiarity with the cities of the destination	Gartner, 1993

Source: our elaboration

Following Stern and Krakover (1993), we determined that seven different information sources have been utilized: specialized journals, movies, web search (that is search engines such as Google, Qwant, Goodsearch, Bing, etc.), Internet Reviews (that is reviews on social media), word-of-mouth (that is offline comments from friends and relatives), travel agent, and publicity. Respondents were asked to rate each information category as to how important it was in forming their impressions about the destination Molise on a 5-point Likert type scale, ranging from "not at all important" to "very important". In this study, destination familiarity is regarded as the consumer's perception of how much he/she knows about the different attributes of the destination (Moorthy *et al.*, 1997). Familiarity influences tourists' perceptions and the attractiveness of a place (Reid and Reid, 1993; Hu and Ritchie, 1993). It follows that familiarity with a destination can positively influence the perception of that destination or products/services provided by particular destination. The destination familiarity was measured using three items: Familiarity with the destination (Molise); Familiarity with the natural resources of the destination (Molise); Familiarity with the cities of the destination (Molise). Familiarity is a mix of previous visits and information retrieved through different sources.

The last section of the questionnaire contained questions about the demographic characteristics of the respondents, including gender, age, educational level, marital status and income, useful to analyze the relationship between socio-demographic variables and destination image (Baloglu, 1997).

3.2 Data Collection

From May to September 2017, a randomly selected sample of non-residents of Molise participated in the study and completed at two-part on-line questionnaire, drafted in Italian. At the beginning, the questionnaire was pretested with 30 initial subjects that were students of the Master on "Tourism & Hospitality Management" at the University "Parthenope" of Naples (Italy) to ensure that its content and wording were free of misunderstandings; as a result, minor amendments were made to the wording of items. Then, a snowball sampling technique was used (Wrenn *et al.*, 2007). Students were invited to forward the online revised questionnaire using their emails and their Facebook profiles, to their friends, relatives and general contacts (over 18 years of age) who reside in Italy. To reach a high number of respondents, the link to the questionnaire plus a letter of explanation of the main goals of the research were also sent to a list of emails and Facebook profiles created with the contacts of the authors. As stated by Bhutta (2012), "online social networking sites (SNSs) offer new ways for researchers to conduct studies quickly, cheaply, and single-handedly, especially when seeking to construct 'snowball' samples for exploratory work". Through referral mechanisms, this technique provides researchers with an ever-expanding set of potential respondents (Goldenberg *et al.*, 2009) in a very inexpensive and efficient way. The main disadvantage is that it is based on a non-random sampling approach.

A total of 740 responses were received. After incomplete responses were deleted, 680 questionnaires were utilized. The respondent profile is summarized in Table 2.

The sample is composed by non-residents in Molise, equally represented for the age groups between 18 and 55 (between 15% and 27% per age group), and with 7.2% for the group 55-64 and only 2.5% over 64. In addition more than 60% have a university degree or higher qualification and 55% are female. There is a good representation of singles (56.4%) and married with children (43.6%), and 60% of the respondents had an income between 0 and 39.999 euros.

Tab. 2: Respondent profile

Variable	N	%
Gender		
Male	303	44.6
Female	376	53.3
Marital status		
Single	377	53.3
Married	303	44.6
Age		
18-24	167	24.6
25-34	162	23.8
35-44	184	27.1
45-54	101	14.9
55-64	49	7.2
Over 64	17	2.5
Level of education		
High school	182	26.8
GED or other	399	58.7
Currently studying (University)	99	14.6
Occupation		
Manager	26	3.8
Admin	166	24.4
Academic	88	12.9
Entrepreneour	21	3.1
Consultant	86	12.6
Blue collar worker	22	3.2
Unemployed	69	10.1
Pensionate	14	2.1
Student	187	27.5
Income		
0€ - 19.999€	206	30.3
20.000€ - 39,999€	217	31.9
40.000€ - 59.999€	97	14.2
60.000€ - 79.999€	35	5.1
80.000€ - 99.999€	22	3.2
>100.000€	14	2.1
N.A.	87	12.8

Source: our elaboration

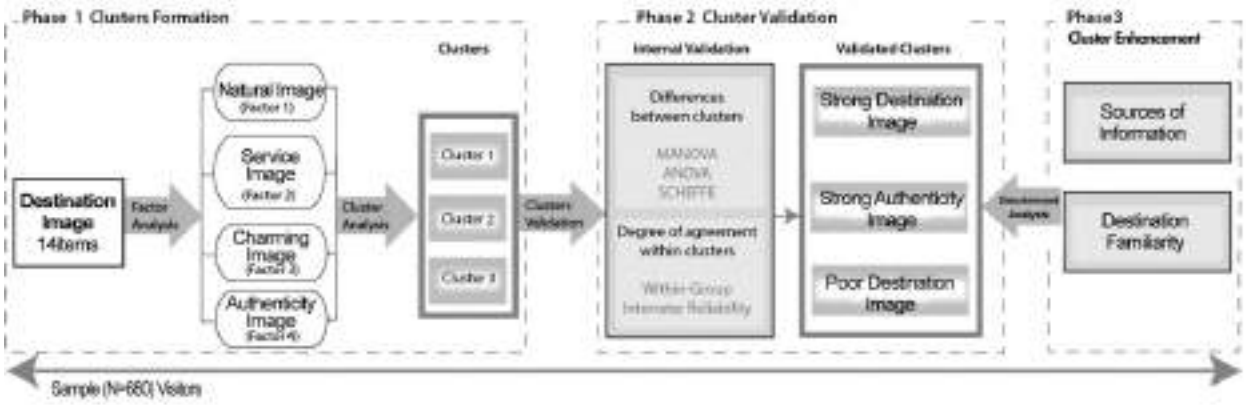
3.3 Statistical Methodology

Due to the larger sample (n=680), a two-step cluster method was used since hierarchical and K-means clustering, as used in the preliminary study, do not scale efficiently when "n" is very large. Also, in order to add even more explanation about the potential influence that other factors can play in the decision making process of tourists, external factors (source of information) and individual factors (degree of familiarity with the destination) were also measured by using discriminant analysis looking for significant correlations between the clusters (results of the two-step cluster analysis) and the functions (results from the discriminant analysis based individual and external factors). In addition to the cluster analysis, a discriminant analyses will be also used to assess the degree of influence that the different sources of information and familiarity with the destination play on the newly developed cluster in order to enrich the final clusters.

3.4 Data analysis overview

Figure 1 illustrates the process used to answer the three main research questions including the development and further validation of the clusters, and it also provides a visual highlight of the several methodologies used to analyze the survey data.

Fig. 1: Step by Step Research Process and used methodologies



Source: our elaboration

First, in Phase 1 the 14 items reflecting destination image (cognitive and affective, see Table 2) are factor analyzed in order to identify possible factors that summarize the main types of attributes (images) that tourists might search when assessing a particular touristic destination. Once the factors about the different destination images have been identified, the computed results of each factor are used in a cluster analysis in order to group tourists based on their perception about the image of the destination. As this is an exploratory study no a priori number of clusters is expected and therefore multiple cluster solutions are tested empirically and theoretically. The three clusters structure is chosen due to its strong internal consistency and significant external differences. In Phase 2, the paper uses two main tools to validate the three clusters: internal heterogeneity and internal homogeneity (Hair *et al.*, 2003). In this study we used MANOVA, ANOVA and Scheffe analysis to measure the differences between the three clusters (External heterogeneity). On the other hand, the within-group Interrater Reliability test (James *et al.*, 1993) was used to measure the degree of agreement between tourists within each cluster (internal homogeneity). In relation to James *et al.* (1984), building on the work of Finn (1970), proposed a technique for assessing interrater agreement when a single target is rated. With this procedure, within-group agreement is compared to agreement one would expect by chance. Multiple null response distributions can be

hypothesized a priori according to the types of response biases the researcher expects. In addition, the James *et al.* technique can be computed on both individual items (rwg(I) and multiple items or scales (rwg(J). Theoretically, these indices should range from 0 to 1. When proposing the rwg indices, James *et al.* (1993) demonstrated their use with hypothetical data for triangular and uniform null response distributions as well as large, moderate, and slightly skewed null response distributions. The rwg indices have been widely used in the applied psychology and management literatures for assessing interrater agreement with respect to group-level constructs such as group cohesiveness, group socialization emphasis, and prosocial behaviour (George and Bettenhausen, 1990); transformational and transactional leadership (Hater and Bass, 1988); positive and negative affective group tone (George, 1990); and organizational climate (Burke *et al.*, 1996, Kozlowski and Hults, 1987). Similar to assessments of reliability, rwg coefficients greater than .70 have generally been considered as indicative of acceptable interrater agreement in this literature. In this paper the multiple items or scales (rwg(J) by James *et al.* (1984) has been applied.

4. Findings

This section shows (I) the results from the factor analysis developing the four sub-scales, (II) two step cluster analysis based on the four destination image sub-scales, and (III) the results of the discriminant analysis of the influence of different sources of information and destination familiarity and how they relate to the clusters from the two steps cluster analysis.

4.1 Results from the Destination Image: Factor analysis

Exploratory Factor analysis was used on the results of the 14 items from the Destination Image, using SPSS version 25 using principle component and varimax rotation. The computed results of the four sub-dimensions of Destination Image were created (Table 3) and used as factors into cluster analysis in order to group tourists based on their perception about the image of the destination.

Tab. 3: Factor Analysis of Destination Image dimensions

Items	Factors/Cronbach-alpha			
	Factor 1 (.880)	Factor 2 (.912)	Factor 3 (.767)	Factor 4 (.691)
Good Hotels		.883		
Sport facilities		.822		
Good services		.837		
Pleasant weather	.763			
local cultural places	.807			
natural environment	.854			
clean environment	.736			
AC (pleasant)			.660	
AC (intriguing)			.817	
AC (character)			.772	
AC (accessible)			.626	
AC (genuine)				.623
AC (quiet)				.849
AC (safe)				.828

Source: our elaboration

4.2 Results of the two-step cluster analysis

Results of the two-step cluster analysis performed on three desired clusters indicated the following results, as shown in Table 4.

Cluster 1, which represents 39% (267 people) of the sample, performed as follows in relation to

the four sub-scales: 4.28 Natural Image, 3.45 Service Image, 3.89 Charming Image, and 4.44 Authenticity Image.

Cluster 2, which represents 31% (211 people) of the sample, performed as follows in relation to the four sub-scales: 3.87 Natural Image, 2.53 Service Image, 2.96 Charming Image and 4.01 Authenticity Image.

Cluster 3, which represents 30% (202 people) of the sample, performed as follows in relation to the four sub-scales: 2.43 Natural Image, 1.98 Service Image, 2.73 Charming Image and 3.58 Authenticity Image.

Internal validity: Manova, Anova, Scheffe, and Within-groups Interrater Reliability. The first part of the internal validity analysis about the three clusters is to validate the significant differences between of them. Manova showed that the three clusters were significantly different (F= 159.028, p < 0.000). Variations in dimensions of the four destination images among the three clusters were gleaned from ANOVA, as summarized in Table 3. Scheffe tests also highlighted the distinguishing qualities of the three profiles. In reviewing the profiles of the three clusters (Table 4), the reader should know that because the number and content of clusters were inseparable from the classification criteria used, the results of ANOVA were presented only to illustrate where the greatest differences existed among the clusters. The second part of the internal validation is to measure the degree of agreement inside each cluster. The results of the application of the degree of interrater agreement in within each of the three clusters are as follow: Cluster (1) 0.85, cluster (2) 0.79, and Cluster (3) 0.80. The results of the interrater agreement for the three clusters is between 0.79% and 0.85% which it is quite high and therefore it suggests that each tourist in within each cluster have strong agreement about their opinion in relation to the image of the chosen destination.

Tab. 4: Standardised means of the four Destination Image clusters: results of the two-step cluster, ANOVA, and Scheffe

Destination Image Sub-Scales *	(1) 267 (39%)	(2) 211 (31%)	(3) 202 (30%)	Scheffe Results
Natural Image	4.28	3.87	2.43	2>1; 3>1;3>2; 4>1; 4>2; 4>3
Service Image	3.45	2.53	1.98	2>1; 3>1;3>2; 4>1; 4>2; 4>3
Charming Image	3.89	2.96	2.73	2>1; 3>1;; 4>1; 4>2; 4>3
Authenticity Image	4.44	4.01	3.58	3>1;3>2; 4>1; 4>2

*p<0.000

Source: our elaboration

4.3 External Validity: Results of the Discriminant analysis testing the three clusters and the different sources of information for tourists

The importance of the discriminant function is analyzed through Wilks' Lambda. This measures the proportion of the total variance in the discriminant scores not explained by differences among groups. The chi-square for the mentioned value was calculated and it is possible to determine the level of significance on this basis. Table 5 shows the main parameters of the two discriminant functions. It can be observed that the discriminant functions 1 is significant, with values of p <0.05; however, Function 2 is not significant (see Table 6).

Tab. 5: Discriminant analysis: Function Structure of sources of information

	Function 1	Function 2
Specialised Journals	.735*	.473
Movies	.558*	.297
Web search	.479*	-.352
Internet Reviews	.411*	-.367
Publicity	-.084	.535*
Word of Mouth	.292	.351*
Travel Agent	.087	.137*

Source: our elaboration

Tab. 6: Discriminant Analysis: Function at Group Centroid of Sources of Information

Discriminant functions	Function 1**	Function 2
L de Wilks	.951	.996
Chi-square	33.706	2.416
Significance	.000	.878
Function in group centroid		
Cluster 1	.111	.068
Cluster 2	.178	-.075
Cluster 3	-.332	-.012

** Function 1 Sig .000: Specialised Journals, Movies, Web Search & Internet Reviews

Source: our elaboration

4.4 External Validity: Results of the Discriminant analysis testing the three clusters and the different levels of destination familiarity

As developed for different sources of information, the importance of the discriminant function is analyzed through Wilks' Lambda also for the different levels of destination familiarity. Table 7 shows the main parameters of the two discriminant functions. However, only Function 1 is significant and meaningful to better explain the differences between the three destination image clusters (see Table 8).

Tab. 7: Discriminant analysis: Function Structure of destination familiarity

	Function 1	Function 2
Familiarity with the destination (Molise)	.998*	-.033
Familiarity with the natural resources of the destination (Molise)	.881*	-.074
Familiarity with the cities of the destination (Molise)	.829*	.523

Source: our elaboration

Tab. 8: Discriminant Analysis: Function at Group Centroid of destination familiarity

Discriminant functions	Function 1**	Function 2**
L de Wilks	.844	.990
Chi-square	114.970	7.029
Significance	.000	.030
Function in group centroid		
Cluster 1	.400	-.080
Cluster 2	.072	.151
Cluster 3	-.603	-.052

** Function 1 Destination Familiarity, Natural Resources Familiarity and Destination Cities Familiarity

Source: our elaboration

5. Discussion

This section will first discuss the results of the cluster analysis to the destination images (Phase 2) and sub-sequentially correlate them with the results of discriminant analysis (Phase 3) in order to enrich their meaning. Those phases help to give answer to the three research questions proposed at the beginning.

The results from the two-step cluster analysis address the first RQ (Which are the market segments of potential tourists of Molise region based on their image perception of that

destination?). The findings confirm the existence of three separate images (clusters) that tourists can have about a particular destination. This study has found that a three-cluster structure reveals high internal homogeneity, which means that all respondents included in a particular cluster display very strong similarities in terms of their opinions about the image of a destination. In addition, each cluster shows a high external heterogeneity in maintaining significant differences between the clusters and therefore ensuring a unique mix of the opinion about different types of destination images. Due to the fact that no universal or strictly mathematical formula has been used to develop those clusters, each cluster will be discussed individually and inferences have been based on examination of the internal relationships between the scores of the four destination images.

Cluster 1 contains the highest scores across all four destination images suggesting that tourists in that cluster have a strong positive image about the chosen destination. Therefore, based on this unique pattern we called this cluster: "Strong Destination Image". On the opposite, Cluster 3 exhibited the lowest scores across all the destination images. This result leads to assume that tourists in this cluster have very low opinion of the image of the selected destination and therefore we named this cluster: "Poor Destination Image". The second Cluster has reasonably high scores on both Authenticity and Natural Image and quite low on Service and Charming Image. Out of the three clusters, this is the most difficult to understand. If the previous two either exhibit a very overall positive or negative opinion about the image of the chosen destination, this one displays a more critical analysis of the destination based on the different images. We named this cluster "Strong Authenticity Image".

From the results of both discriminant analyses (Phase 3), it is possible to suggest answers to the second RQ (Which sources of information contribute to form the image of Molise as a tourism destination?) and the third RQ (Has destination familiarity an impact on the perception of Molise as a tourism destination?).

Sources of information more relevant to support tourists' opinion about destination image are indirect ones (Specialized Journals, Movies, Web search and Internet Reviews). This result is in line with Jacobsen and Munar (2012, p. 40) who state that "to a proportion of tourists, it seems imperative to have ample knowledge of, for instance, renowned or previously 'secret' qualities of the destination, partly in order to establish their own travel narratives, partly in order to fulfill holiday dreams". In addition, it is evident that numerous tourists have become more independent of intermediaries such as traditional travel agencies and tour operators. This highlights how for unknown destinations that aspire to enter in the tourist market, it is more important to develop capabilities to appear somewhat different or even exotic than to compete directly with existing known destination.

The degree of direct familiarity with the destination and its resources has proven a paramount factor to support high or low destination image. This is in line with the preeminent literature (Tan and Wu, 2016). The paper underlines how familiarity is an important topic for tourism research. It explains how individuals are influenced in the choice of destinations and so it highlights how familiarity shapes the image of a destination (Chen and Lin, 2012). This is much more important when the destinations under investigation are relatively obscure, as Molise is. In fact, for unknown destinations to expand the degree of familiarity becomes a must due to the fact that more the tourist is familiar with the destination more he/she builds an image about it.

Therefore, the Poor Destination Image has shown a negative correlation with sources of information and destination familiarity, supporting the argument (Moorthy *et al.*, 1997) that destination image requires direct and indirect knowledge. On the opposite pole, people in the cluster called Strong Destination Image displayed a very strong positive correlation with direct experience and moderate indirect. Those tourists from the second cluster have shown moderate positive influence to both direct and indirect knowledge about the destination.

6. Conclusions and implications

This paper investigated the way in which non-residents create their own image in relation to a tourism destination. As highlighted in the previous paragraphs, tourism became one of the fastest growing economic sectors in the world. This growth goes hand in hand with an increasing diversification and competition among destinations and so their sustainable positioning in ever more complex national and international markets is more and more challenging. At the same time, it is evident that there is an interesting shift from artificial and contrived mass tourism to an increasing search for natural and authentic tourism proposals. Starting from that and using the Italian region of Molise as case study, the aim was to deepen the available knowledge and provide empirical evidence on how different segments of tourists perceive the image for the specific case of unknown destinations that try to have visibility in the hyper-competitive tourism market.

Our findings reveal how useful the segmentation process is. They have strategic implications in the choice of which target to serve (Kotler *et al.*, 2002), but also contribute to better identifying the requirements of current and potential tourists. It is evident that the classification of customers into different clusters helps to better understand the key factors influencing the choice of tourist destination (Hanlan *et al.*, 2006). For each cluster this research depicts the main factors that drive the image of Molise as a holiday destination. Second, the study gives a contribution to understand the impact of destination familiarity on the perception of Molise as a tourism destination. Third, it shows which information sources better helps to form the image of Molise region.

The implications are discussed from the theoretical and managerial perspectives.

In terms of its theoretical contribution this paper provides a useful understanding about non-residents' behavior (Prayag, 2010) by using a factor-cluster segmentation approach. Another theoretical finding relates to the nature and the number of attributes used to capture the clusters. The current study provides a more comprehensive framework to test different dimensions (factors) of destination image (Natural Image, Service Image, Charming Image, and Authenticity Image) and the impact that both sources of information and destination familiarity exercise on non-residents' behavior. As such, the study helps researchers understand a) how the differences in the future behavior of the three identified clusters develop, and b) the magnitude of external factors (source of information) and individual factors (degree of familiarity with the Molise region and its natural resources and cities) in the decision making process.

From a managerial perspective, the study provides recommendations for the development of different marketing strategies to achieve a suitable positioning for each cluster and, in particular, for the target ones (Cluster 1 and Cluster 2). Results emphasize the need to implement specialized marketing strategies based on the needs of homogeneous groups of tourists. Between the "Strong Destination Image" and the "Strong Authenticity Image" groups, the natural and authenticity components exert a greater influence than the serving and charming components. This result confirms previous research on the images formed of tourist destination by non-residents (Qu *et al.*, 2011; Stylidis *et al.* 2017) suggesting that the selection of Molise appears to be principally driven by its natural and genuine appeal as opposed to its physical attractions (i.e. hotels and facilities). As a consequence, the promotion strategy of Molise as a tourist destination should correctly identify the proper components to mix. Tourism policy-makers should focus on the natural and clean environment of the region, on its local cultural and historical places, as well as emphasizing its genuine, quiet and safe atmosphere. The implementation of tailor-made strategies makes it possible to improve the cost-effectiveness of the allocation of promotional resources (Prayag, 2010).

The second managerial implication regards the need to emphasize the central role of the image in stimulating non-residents to consider Molise as a future tourist destination. The three clusters show different levels of destination familiarity based on exposure to destination related images. Cluster 1 exhibits the highest familiarity followed by Cluster 2. The destination familiarity plays a key role in building the awareness of potential tourists. As stated in Stylidis *et al.* (2017) and according with the position taken by Baloglu and McCleary (1999), the development of a positive overall image is a pre-requisite for any potential destination to experience success in the tourism industry. In this context future marketing campaigns must build a positive image to raise the attractiveness of the Molise region.

Third, in the construction of the image, the role of information sources is crucial. Those who have a positive image of Molise search for information online and offline, read reviews and specialized magazines. It is therefore necessary to construct a communication policy that is able to best combine the information channels. In this context, it is appropriate to identify actions to actively involve those who show their intention to visit Molise. The discriminant analysis provides evidence regarding the information sources that exerted a greater influence on the formulation of non-residents' behavioral intentions. The study finds that among Cluster 1 and Cluster 2 such sources as specialized journals, movies, Internet reviews and web search are significant factors in constructing their desire to visit Molise. The traditional and digital media should convey images that address the interest of targeted clusters in order to prioritize Molise as their vacation choice. In this perspective, tourists of Cluster 1 are more likely to be seeking local cultural places and genuine landscape than sport facilities and luxury hotels.

As any, the study has some limitations. First of all, the sample of non-residents is based on a non-random sampling approach. This choice gives the possibility that the sample is non-representative of potential tourists to Molise. Therefore, the research should be perceived as a first explanatory attempt to enhance the comprehension of the differences between potential tourists. Second, the segmentation technique used has its own limitations (Prayag, 2010). As suggested by Chen and Uysal (2002), the use of non-linear techniques of segmentation and the inclusion of other segmentation criteria could enhance the understanding of tourist behavior of current and potential tourists. Third, the sample does not include residents of the region, focusing only on non-residents. For this reason it is not possible to differentiate between the roles of cognitive and affective components in influencing the image residents and non-residents have of Molise as a tourist destination (Henkel *et al.*, 2006; Stylidis *et al.*, 2016; 2017). Future studies could extend the results of this research by taking into account that the image residents have of the place where they live molds their behavior in promoting Molise as a tourist destination and in supporting tourism development initiatives.

References

AGAPITO D., VALLE P., MENDES J. (2013), "The cognitive-affective-conative model of destination image: A confirmatory analysis", *Journal of Travel & Tourism Marketin*g, vol. 30, n. 5, pp. 471-481.

ASSAKER G. (2017), "Examining a hierarchical model of Australia's destination image", *Journal of Vacation Marketing*, vol. 20, n. 3, pp. 195-210.

ATADIL H.A., SIRAKAYA-TURK E., ALTINTAS V. (2017), "An analysis of destination image for emerging markets of Turkey", *Journal of Vacation Marketing*, vol. 23, n. 1, pp. 37-54.

BALOGLU S. (1997), "The relationship between destination images and sociodemographic and trip characteristics of international travelers", *Journal of Vacation Marketing*, vol. 3, n. 3, pp. 221-233.

BALOGLU S., MCCLEARY K.W. (1999), "A model of destination image formation", *Journal of Tourism Studies*, vol. 26, n. 4, pp. 868-897.

BEERLI A., MARTIN J.D. (2004), "Factors Influencing Destination Image", *Annals of Tourism Research*, vol. 31, n. 4, pp. 657-681.

BHUTTA C.B. (2012), "Not by the Book: Facebook as a Sampling Frame", *Sociological Methods & Research*, vol. 41, n. 1, pp. 57-88.

BIGNÉ E., SÁNCHEZ I., SANZ S. (2009), "The functional-psychological continuum in the cognitive image of a destination: A confirmatory analysis", *Tourism Management*, vol. 3, n. 5, pp. 715-723.

BURKE M., RAPINSKI M., DUNLAP W., DAVISON,H. (1996), "Do situational variables act as substantive causes of relation- ships between individual difference variables? Two large- scale tests of common cause models", *Personnel Psychology*, vol. 49, n. 3, pp. 573-598.

CABER M., ALBAYRAK T., MATZLER K. (2012), "Classification of the destination attributes in the content of competitiveness (by revised importance-performance analysis)", *Journal of Vacation Marketing*, vol. 18, n. 1, pp. 43-56.

CHEN J.S., UYSAL M. (2002), "Market positioning analysis-a hybrid approach", *Annals of Tourism Research*, vol. 29, n. 4, pp. 987-1003.

CHEN C.F., TSAI D. (2007), "How destination image and evaluative factors affect behavioral intentions?", *Tourism management*, vol. 28, n. 4, pp. 1115-1122.

CHEN C.C., LIN Y.H. (2012), "Segmenting mainland Chinese tourists to Taiwan by destination familiarity: A factor-cluster approach", *International Journal of Tourism Research*, vol. 14, n. 4, pp. 339-352.
CRACOLICI M.F., NIJKAMP P. (2008), "The attractiveness and competitiveness of tourist destinations: A study of southern Italian regions", *Tourism Management*, vol. 30, n. 3, pp. 336-344.
CROMPTON J.L. (1979), "Motivations for pleasure vacation", *Annals of Tourism Research*, vol. 6, n. 4, pp. 408-424.
DEL BOSQUE, I.R., MARTIN H.S. (2008), "Tourist satisfaction a cognitive-affective model", *Annals of Tourism Research*, vol. 35, n. 2, pp. 551-573.
DWYER L., FORSYTH P., RAO P. (2000), "The price competitiveness of travel and tourism: a comparison of 19 destinations", *Tourism Management*, vol. 21, n. 1, pp. 9-22.
ECHTNER C.M., RITCHIE B.J.R. (1991), "The meaning and measurement of destination image", *Annals of Tourism Research*, vol. 2, n. 2, pp. 2-12.
ECHTNER C.M., RITCHIE B.J.R. (1993), "The measurement of destination image: an empirical assessment", *Journal of Travel Research*, vol. 31, n. 4, pp. 3-13.
FAKEYE P.C., CROMPTON J.L. (1991), "Image differences between prospective, first-time, and repeat visitors to the lower Rio Grande Valley", *Journal of Travel Research*, vol. 30, n. 2, pp. 10-16.
FINN R.H. (1970), "A note on estimating the reliability of categorical data", *Educational and Psychological Measurement*, vol. 30, n. 1, pp. 71-76.
FONT X. (1997), "Managing the tourist destination's image", *Journal of Vacation Marketing*, vol. 3, n. 2, pp. 123-131.
GALLARZA M.G., SAURA I.G., GARCIA H.C. (2002), "Destination image. Towards a conceptual framework", *Annals of Tourism Research*, vol. 29, n. 1, pp. 56-78.
GARTNER W. C., HUNT J. D. (1987), "An analysis of state image change over a twelve-year period (1971-1983)", *Journal of* T*ravel Research*, vol. 26, n. 2, pp. 5-19.
GARTNER W.C. (1993), "Image formation process", *Journal of Travel and Tourism Marketing*, vol. 2, n. 2/3, pp. 191-215.
GEORGE J.M., BETTENHAUSEN K. (1990), "Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context", *Journal of Applied Psychology*, vol. 75, n. 6, pp. 698-709.
GEORGE J. M. (1990), "Personality, affect, and behavior in groups", *Journal of Applied Psychology*, vol. 75, n. 2, pp. 107-116.
GOLDENBERG J., HAN S., LEHMANN D., HONG J. (2009), "The Role of Hubs in the Adoption Processes", *Journal of Marketing*, vol. 73, n. 2, pp. 1-13.
GOODRICH J.N. (1977), "A new approach to image analysis through multi-dimensional scaling", *Journal of Travel Research*, vol. 16, n. 3, pp. 3-7.
GOVERS R., GO F.M., KUMAR K. (2007), "Promoting tourism destination image", *Journal of Travel Research*, vol. 46, n. 1, pp. 15-23.
HAIR J.F., SARSTEDT M., HOPSKINS L., KUPPERLWIESER (2014), "Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research", *European Business Review*, vol. 26, n. 2, pp. 106-121.
HANLAN J., FULLER D., WILDE S. (2006), "An evaluation of how market segmentation approaches aid destination marketing", *Journal of Hospitality & Leisure Marketing*, vol. 15, n. 1, pp. 5-26.
HATER J. J., BASS B. M. (1988), "Superiors' Evaluations and Subordinates' Perceptions of Transformational and Transactional Leadership", *Journal of Applied Psychology*, vol. 73, pp. 695-702.
HENKEL R., HENKEL P., AGRUSA W., AGRUSA J., TANNER J. (2006), "Thailand as a tourist destination: perceptions of international tourists and Thai residents", *Asia Pacific Journal of Tourism Research*, vol. 11, n. 3, pp. 269-287.
HU Y, RITCHIE J.R. (1993), "Measuring destination attractiveness: a contextual approach", *Journal of Travel Research*, vol. 32, n. 2, pp. 25-34.
ISTAT (2016), Informazioni sui viaggi per vacanza o per lavoro in Italia, downloaded from http://www.istat.it/it/archivio/turismo
JACOBSEN, J.K.S., MUNAR A.M. (2012), "Tourist information search and destination choice in a digital age", *Tourism management perspectives*, vol. 1, n. 1, pp. 39-47.
JAMES L.R., DEMAREE R.G., WOLF G. (1984), "Estimating within-group interrater reliability with and without response bias", *Journal of Applied Psychology*, vol. 69, n. 1, pp. 85-98.
JAMES L.R., DEMAREE R.G., WOLF G. (1993), "Rwg: An assessment of within-group interrater agreement", *Journal of Applied Psychology*, vol. 78, n. 2, pp. 306-309.
JENKINS O.H. (1999), "Understanding and measuring tourist destination images", *International Journal of Tourism Research*, vol. 1, pp. 1-15.
KIM H, RICHARDSON S.L. (2003), "Motion picture impacts on destination images", *Annals of Tourism Research*, vol. 30, n. 1, pp. 216-237.
KLENOSKY D.B. (2002), "The 'pull' of tourism destination: a means-end investigation", *Journal of Travel Research*, vol. 40, n. 4, pp. 3-13.
KOTLER P., ARMSTRONG G., SAUNDERS J., WONG V. (2002), *Principles of marketing* (4th ed.), Englewood Cliffs, NJ, Prentice Hall.
KOTLER P., HAIDER D., REIN I. (1993), *Marketing Places. Attracting Investment, Industry and Tourism to Cities,*

States, and Nations, Maxwell Macmillan Int., New York, NY.
KOZLOWSKI S.W.J., HULTS, B.M. (1987), "An exploration of climates for technical updating and performance", *Personnel Psychology*, vol. 40, pp. 539-563.
MILMAN A., PIZAM A. (1995), "The role of awareness and familiarity with a destination: the Central Florida case", *Journal of Travel Research*, vol. 33, n. 3, pp. 21-27
MINGUZZI A., PRESENZA A., QUINTILIANI A., MAROTTA G. (2006), *Analisi delle problematiche di sviluppo e promozione del sistema turistico della regione Molise*, Università del Molise, Campobasso.
MOORTHY S., RATCHFORD B., TALUKDAR D. (1997). "Consumer information search revisited: Theory and empirical analysis", *Journal of Consumer Research* , vol. 23, n. 4, pp. 263-277.
NGHIÊM-PHÚ B. (2014). A review of destination image studies from 2008 to 2012. *European Journal of Tourism Research* 8, pp. 35-65
PEARCE D.G., BUTLER R. (1999), *Contemporary Issues in Tourism Development*, Psychology Press.
PHELPS A. (1986), "Holiday destination image - the problem of assessment: an example developed in Menorca", *Tourism Management*, vol. 7, n. 3, pp. 168-180.
PIKE S. (2002), "Destination image analysis. A review of 142 papers from 1973 to 2000", *International Journal of Quality &Reliability Management*, vol. 24, n. 5, pp. 492-514.
PIKE S., RYAN C. (2004), "Destination positioning analysis through a comparison of cognitive, affective, and conative perceptions", *Journal of Travel Research*., vol. 42, n. 4, pp. 333-342.
PRAYAG G. (2007), "Assessing international tourists' perceptions of service quality at Air Mauritius", *Tourism*, vol. 55, n. 2, pp. 139-155.
PRAYAG G. (2010), "Image as pull factors of a tourist destination: a factor-cluster segmentation analysis", *Tourism Analysis*, vol. 15, n. 2, pp. 213-226.
QU H., KIM L.H., IM H.H. (2011), "A model of destination branding: Integrating the concepts of the branding and destination image", *Tourism Management*, vol. 32, n. 3, pp. 465-476.
SAN MARTIN H., RODRIGUEZ DEL BOSQUE I.A. (2008), "Exploring the cognitive-affective nature of destination image and the role of psychological factors in its formation", *Tourism Management*, vol. 29, n. 2, pp. 263-277.
SCHEYENS R. (2011), "The challenge of sustainable tourism development in the Maldives: Understanding the social and political dimensions of sustainability", *Asia Pacific Viewpoint*, vol. 52, pp. 148-164.
SHARPLEY R. (2014), "Host perceptions of tourism: A review of the research", *Tourism Management*, vol. 42, pp. 37-49.
STEPCHENKOVA S., MILLS J.E. (2010), "Destination image: a meta-analysis of 2000-2007 research", *Journal of Hospitality Marketing & Management*, vol. 19, n. 6, pp. 575-609.
STERN E., KRAKOVER S. (1993), "The formation of a composite urban image", *Geographical Analysis*, vol. 25, n. 2, pp. 130-146.
STYLIDIS D., SHANI A., BELHASSEN Y. (2017), "Testing an integrated destination image model across residents and tourists", *Tourism Management*, vol. 58, n. 2, pp. 184-195.
STYLIDIS D., SIT J., BIRAN A. (2016), "An exploratory study of residents' perception of place image: The case of Kavala", *Journal of Travel Research*, vol. 55, n. 5, pp. 659-674.
SUÁREZ M.J.A. (2011), "The impact of secondary information sources on the formation of the tourist image: The case of rural tourism in Galicia, *European Journal of Tourism, Hospitality and Recreation*, vol. 2, n. 1, pp. 72-94.
TAN W.K., WU C.E. (2016), "An investigation of the relationships among destination familiarity, destination image and future visit intention", *Journal of Destination Marketing & Management*, vol. 5, n. 3, pp. 214-226.
TASCI A.D.A., GARTNER W.C. (2007), "Destination image and its functional relationships", *Journal of Travel Research*, vol. 45, n. 4, pp. 413-425.
TASCI A.D.A., GARTNER W.C., CAVUISGIL S.T. (2007), "Conceptualization and operationalization of destination image", *Journal of Hospitality & Tourism Research*, vol. 31, n. 2, pp. 194-223.
TOSUN C., TIMOTHY D.J., OZTURK Y. (2003), Tourism growth, national development and regional inequality in Turkey", *Journal of Sustainable Tourism*, vol. 11, n. 2-3, pp. 133-161.
WANG C.Y., HSU M.K. (2010), "The relationships of destination image, satisfaction, and behavioral intentions: An integrated model", *Journal of Travel and Tourism Marketing*, vol. 27, n. 8, pp. 829-843.
WRENN B., STEVENS R.E., LOUDON D.L. (2007), *Marketing Research. Text and cases*, Haworth Press, New York.

TRACK - SUSTAINABILITY

Sustainability in footwear industry: a big data analysis
FRANCESCO POLESE, MARIA VINCENZA CIASULLO, ORLANDO TROISI, GENNARO MAIONE

Scelte strategiche e pratiche ambientali nelle PMI alberghiere. Verso un nuovo modello di business sostenibile
FEDERICA BUFFA, MARIANGELA FRANCH, UMBERTO MARTINI, ALESSIO TAMANINI

Sustainability in footwear industry: a big data analysis

FRANCESCO POLESE[*] MARIA VINCENZA CIASULLO[•]
ORLANDO TROISI[♠] GENNARO MAIONE[**]

Abstract

Objectives. *The work aims to achieve a dual research objective: highlighting the consumers' perception about the concept of sustainability in the footwear sector and providing some considerations regarding the opportunities for companies to adequately manage the decision-making process.*

Methodology. *A text analytics study has been carried out with the objective to understand the main variables that people consider in adopting their shoes purchasing behavior. In particular, the collection of the people's opinions has been realized on Twitter, a very known and widespread social network community*

Findings. *According to the big data analysis carried out, sustainability is ranked last among the factors capable of orienting consumers' purchasing choice, as demonstrated by the only 1311 posts on Twitter.*

Research limits. *The automated collection of people's posts has prevented from going more in depth in understanding their real ideas about the variables more capable of orienting their shoes purchasing behavior.*

Practical implications. *The study can be used as a tool to enhance managerial capabilities for those footwear companies actively engaged in the development of a sustainable business model. The systematic analysis of points of view, preferences and expectations would allow the development of innovative eco-value propositions in terms of both products (i.e. environmentally friendly shoes) and services (i.e. reverse logistics).*

Originality of the study. *The paper is based on an innovative technique of data analysis, carried out by means of a web crawler that has fostered data assembling in nearly real time as background activity. With this technique, the authors have benefited of an automatic procedure to identify, collect and classify a big number of terms, capable of facilitating the understanding of the investigated phenomenon.*

Key words: s*ustainability; footwear industry; big data; big data analysis; Twitter; web crawler; decision making*

[*] Full Professor of *Management* - University of Salerno
e-mail: fpolese@unisa.it

[•] Associate Professor of *Management* - University of Salerno
e-mail: mciasullo@unisa.it

[♠] Assistant Professor of *Management* - University of Salerno
e-mail: otroisi@unisa.it

[**] Ph.D. Student in *Management & Information Technology* - University of Salerno
e-mail: gmaione@unisa.it

1. Introduction

With the advent of the new millennium, many unexplored themes have received the attention of scholars and practitioners for disparate reasons, due to economic development, environmental protection, protection of workers' rights, and so on. Among these, one of the most debated topics in recent years is certainly the concept of sustainability, which, over time, has taken on different meanings, in most cases related to the environmental sphere, other times referring to social or economic events (Baccarani, 2016; Golinelli *et al.*, 2015; Douglas, 2015).

However, the early definition of sustainability promoted by Brundtland (1987) appears as still current, being conceptualized as the process of change such that the exploitation of resources, direction of investments, orientation of technological development and institutional changes are rendered consistent with present and future needs.

In this scenario, characterized by the considerable and growing interest in sustainability and, above all, in the positive or negative effect that the adoption of sustainable practices could derive for companies, the work aims to achieve a dual research objective: on the one hand, it tries to highlight, through a big data analysis, the consumers' perception about the concept of sustainability in the footwear sector; on the other hand, it seeks to provide some considerations regarding the opportunities for companies to adequately manage the decision-making process in order to maximize the benefits and minimize the risks deriving from the definition and implementation of sustainable business strategies.

To this end, the paper is structured in 7 sections. It opens with a theoretical overview on the concept of sustainability in the footwear sector and on the use of big data analysis to provide support for company decision-making processes. Later, the research design is deepened, with particular regard to the operations performed to carry out data mining and data analysis. Subsequently, the results are first described and then discussed. Subsequently theoretical and practical implications are debated and conclusions are presented.

2. Theoretical overview

2.1 Footwear industry and sustainability

The last decade has seen a growing attention to sustainability in each commodity sector (Brunetti *et al.*, 2013; Golinelli and Volpe, 2012; Polese, 2009; Frey and Iraldo, 2008) and, in particular, in the footwear sector, where several interventions have been carried out in order to provide a concrete response to the need to adopt sustainable behaviors, such as minimization of chemical compounds typically used in the past, reduction of the noise produced by the machines operating in the plants, greater energy efficiency, improvement of the working conditions of the individuals involved in the design or production of footwear, and so on (Tartaglione and Corradini, 2013).

All these interventions have contributed to ensuring an acceptable level of sustainability in the footwear sector, especially whether compared to what achieved in other production contexts, with overall beneficial effects not only in terms of environmental protection but also of improved social conditions and, for certain verses, even economic ones (Dardanello and Realacci, 2012). Not by chance, the topic is widely debated in literature and several studies (Vescovi, 2015; Pastore, 2012; Ugolini, 2010; Polese and Minguzzi, 2009) show a growing consumers' sensitivity towards issues related to sustainability as a whole: always more often, they assess the history of the product they are buying and the "sacrifice" that has been made for its production in terms of sustainability (Michelini *et al.*, 2018; Herva *et al.*, 2011).

These reflections have given rise to a cultural phenomenon of great importance, by virtue of which consumers seem strongly conditioned by the desire to ensure that their products are realized in the maximum respect of environmental, social and economic sustainability, for example without

having determined the exploitation of cheap labor in poor areas of the world or without contributing to the depletion of natural resources (Tartaglione and Corradini, 2013). This phenomenon, so interpreted, would lead to think that sustainability is not merely a result to be achieved, but rather a process deriving from the implementation of business models capable of guaranteeing an improvement in the environmental, economic and social conditions of both producers and of consumers at every stage of the production process (logistics, distribution, packaging, etc.). Actually, from some years, some footwear companies have already adopted more or less sustainable policies (Jacques *et al.*, 2010), probably also thanks to the national and international enactment of numerous regulations and laws to protect the environment and occupational safety and pressures of local communities living in those districts where the concentration of companies in the footwear sector has highlighted emergencies from the point of view of pollution risk factors (Dardanello and Realacci, 2012, Tartaglione and Corradini, 2013).

However, whether, on the one hand, society has acquired a considerable awareness of the benefits deriving from the adoption of sustainable behaviors, on the other hand, a migration of shoe production has occurred exponentially from the countries traditionally known for being quality footwear producers (like the European Union and USA) to alternative countries (Fornasiero *et al.*, 2011). This tendency to relocate footwear production plants to other countries has grown to the point that, today, 99% of shoes sold in USA is imported, whilst almost 90% of the shoes sold in EU comes from plants situated outside somewhere else. All this for the benefit of some countries, first Asian ones (China, Taiwan, Indonesia, Vietnam, India and Korea), and recently Brazil, Mexico and Cambodia (Tartaglione and Corradini, 2013).

This phenomenon, which affects all the economies of the world, has had repercussions from the sustainability point of view, since it has made vanish the certainty of transparency of relations between producers and consumers. In fact, the totality of companies adopting sustainable practices tends to highlight this aspect and let it known to market, in order to use sustainability as a marketing lever to retain customers and attract new ones (Lee and Rahimifard, 2010). However, the considerable complexity that characterizes the production process of footwear and the decomposition of the different phases of the footwear production process (supply of raw materials, design of models, construction of single components, assembly of footwear, sale, after-sales service) in more countries in the world make difficult, whether not impossible, the customers' conscious consumption, given that each economy operates under different political, legislative, economic, social and moral constraints (Ciasullo *et al.*, 2017).

2.2 Big data analysis for supporting decision-making

The development of the "Mass Digitization" and the interest in Google and in other internet search engines, have produced and keep on generating a big social and economic impact (Coyle, 2006). Furthermore, the strong growth of artificial objects that act together without any human interaction, known with the name of "Internet of Things" (Atzori *et al.*, 2010; Estrin *et al.*, 2002) has led to the rapid expansion of large amounts of data. Through these phenomena, information can be viewed as structured data and become a knowledge activity that may create value for businesses (Rowlley, 2007; Cricelli and Grimaldi, 2008). Therefore, there is a greater access to massive amounts of information about people, objects, and interactions in a continuously faster and more consistent manner, as defined by Laney's "3Vs" model, which represents the three-dimensional increase in volume, speed and variety of data (Zikopoulos and Eaton, 2011; Beyer and Laney 2012).

Nowadays, the model is evolved and big data are composed by various properties like volume, velocity, variety, variability, value and complexity, that put forward many challenges (Katal *et al.*, 2013). Thus, big data can be captured, communicated, aggregated, stored and analyzed in every sector and function of global economy, and this can be considered like a social-cultural phenomenon as well as the technology influenced significantly the human culture (Boyd and Crawford, 2012).

These large-scale data are designed to create better tools, services and public goods, becoming more and more comprehensible to computers. In fact, innovative IT tools with advanced artificial intelligence techniques can understand more data and be applied to many useful fields for human society (Lohr, 2012). In particular, data-driven management is spreading in many American companies and those which have adopted "data-driven decision-making" have achieved higher earnings (Provost and Fawcett, 2013). Using the big data allows deciding on the basis of evidence rather than intuition, and it is representing a real revolution for management.

Thus, these huge data sets will become a key to gain a competitive advantage, supporting the productivity growth, innovation, and better relation with customers, according to research by MGI and McKinsey's Business Technology Office. In every sector, managers will have to deal with the implications of big data. This scenario will tend to increase. In fact, the increasing volume and detail of information captured by enterprises, the rise of multimedia, social media, and the Internet of Things will exponentially grow up in data for the near future (Brown *et al.*, 2011).

For this reason, companies will have to decide what kind of strategy to use to manage and implement big data, especially with regard to the possibility to move all information to new big data environment and to execute all the reports, models and interrogation by means of new business intelligence based on big data (Sathi, 2012).

2.2.1 Big data challenge to gain a competitive advantage

Understanding the strategic role played by IT is, today more than in the past, extremely important. In fact, big data era has started a new competitive scenario, changing the rules of the economic game and the concept of "competitive advantage" (LaValle, 2011). The benefits associated with using big data are different. Firstly, big data can be useful to perform marketing analysis. In fact, technology helps companies to capture rich and abundant data on consumer phenomena in real time and to reach a competitive advantage through the collection, extraction and use of information on the market (Erevelles *et al.*, 2016).

Another relevant aspect concerns the chance to use the amount of data to segment and target customers (Brown *et al.*, 2011). In particular, considering the huge amount of data extractable from Social Network, it is possible to analyse them and define a collective behaviour with respect to a product or a service (Lohr, 2012).

Therefore, the phenomenon of big data appear as closely correlated to the concept of "collective awareness", which enables, integrating social and sensor networks, to transform data, if treated as a common knowledge, into a higher form of collective awareness that can stimulate users to self-organize and create innovative solutions to several socioeconomic issues (Pitt *et al.*, 2013). Moreover, big data can enable to monitor and analyse the increasingly complex enterprise systems, allowing companies to reach and maintain over time a better level of performance. (Rabl, *et al.* 2012).

Furthermore, big data can also help to reach an advantage from an urban viewpoint: nowadays, the digital devices and infrastructure present in Smart Cities produce a large number of data that enable real-time analysis of city life, new modes of urban governance, and provide the rare material for envisioning and enacting more efficient, sustainable, competitive, productive, open and transparent cities (Kitchin, 2014).

Therefore, big data remain a big challenge. The most important future challenges to exploit the potential of big data could regard different actions (Wang, H., *et al.*, 2016):

- Data capture, storage and curation, with particular attention to the security related to sensitive information, such as medical records and banking transactions. In fact, privacy should be resolved before defining the strategy of information sharing;
- Data analysis and visualization. This problematic involves how to formulate and depict the complexity of big data quantitatively. Again, data complexity can also be caused by spare, uncertain, incomplete and dynamic data;
- Systematic challenge, focalized on the development of appropriate system architecture, useful

to support decisions managing a diversity of complex information and conduct complex computation of big data;
- Non-technical challenge, focused on the management of service suppliers and users problems.

2.2.2 Big data and Data-Driven Decision-Making

One of the most important things in decision-making process is to define how to gather information capable of enabling the achievement satisfying outcomes. This aspect could represent a key factor more than decisions themselves (Mallinger and Stefl, 2015). Nowadays, the capacity of data-driven decision-making is being mostly recognized, and there is a growing interest for the concept of big data.

In fact, considering data science like that set of principles, processes, and techniques for understanding phenomena via the (automated) analysis of data, the most important goal of data science is improving decision-making, as this is generally of paramount interest to companies (Provost and Fawcett, 2013).

The benefits of data-driven decision-making have been conclusively demonstrated through the studies of Brynjolfsson and McElheran (2016) on how DDD (Data-Driven Decision-Making) affects firm performance: the authors developed a measure of DDD that rates firms on the basis of how they use data to make decisions, demonstrating that the more data-driven a firm is, the more productive it is. In addition, DDD also seems to be correlated with higher return on assets, equity, and market value (Brynjolfsson *et al.*, 2011).

Therefore, the factors theoretically capable of influencing decision-making process should be adequately. More in detail, to determine the quality of the process, it is important to manage variables like veracity (manipulation, noise), variety (heterogeneity of data) and velocity (constantly changing data sources) of big data. Surely, taking advantage of big data is an evolutionary procedure in which the gradual understanding of their potential plays a crucial role for reaching a better quality of a decision making process (Janssen *et al.*,, 2017). At the same time, it is important for managers to keep a broad perspective in evaluating big data. To this aim, as suggested by Mallinger and Stefl (2015), it could be useful to keep in mind the following principles:
- It is very important to set clear goals and mission for supporting decision-making process from the beginning;
- It should be considered that the data are "inanimate and silent" and need to be analysed and contextualized to take on meaning;
- Sensations should not be totally abandoned by decision-makers, particularly in the early stages, but it is important to incorporate those feelings in a process that verifies their substance, in accordance to data;
- Decision-makers have to recognize emotions and be aware of the emotions related to the issue associated with the decision. It can be very helpful in understanding the extent to the feelings may bias your action. Indeed, the optimism or pessimism can influence an objective decision;
- It is significant to conduct a reflective inquiry. In particular, it can be useful writing what allows the decision-maker to consider the ways in which the initial decision could be improved;
- It could be very advantageous searching a contrary opinion to strengthen the process of decision-making and to evaluate previously unexplained aspects.

3. Research design

A text analytics study has been carried out with the objective to understand the main variables that people consider in adopting their shoes purchasing behavior. In particular, the collection of the people's opinions has been realized on Twitter, a very known and widespread social network community. The decision to choose Twitter has depended on its high popularity: in fact, only in

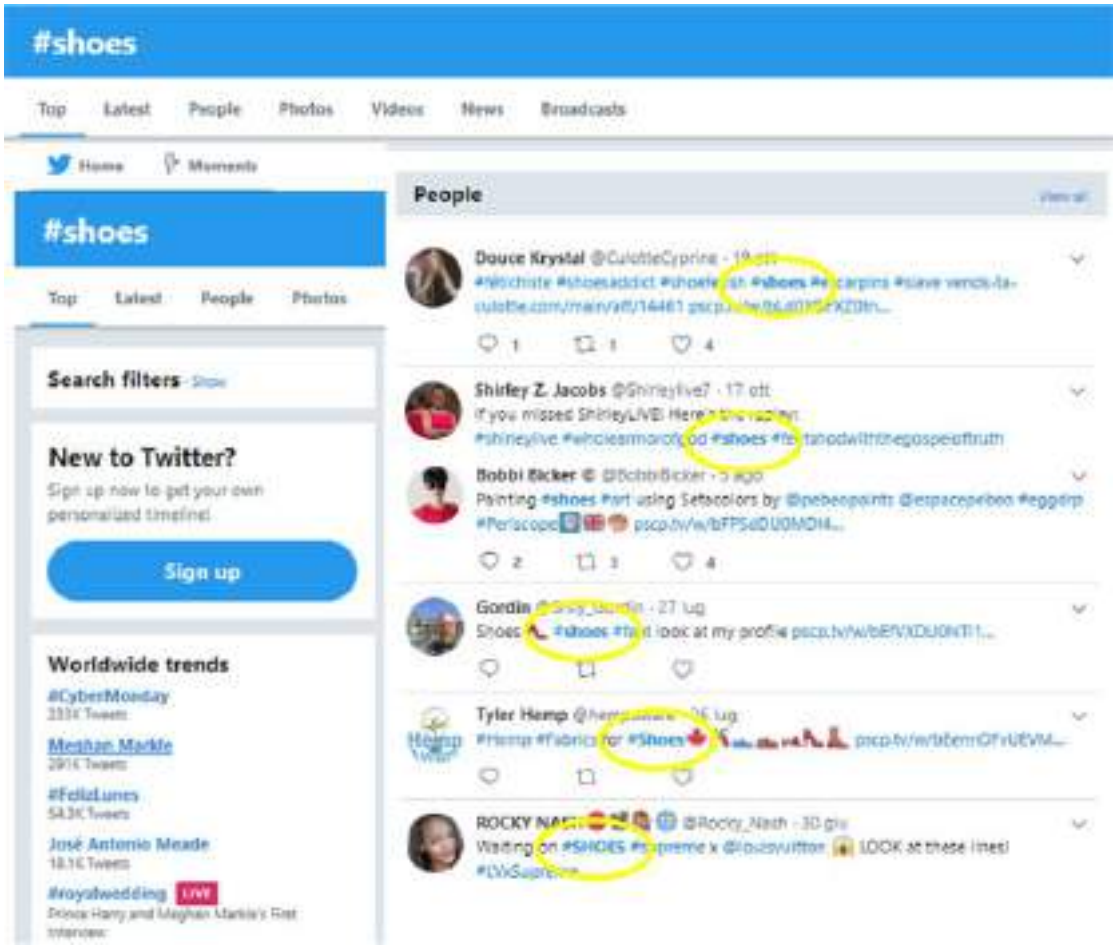
2012, more than 100 million users posted about 340 million tweets a day , and the service handled an average of 1.6 billion search queries per day.

The analysis has been completed in nine-month period, starting from the beginning of January 2017 to the end of September 2017, to elude interpretative falsifications of the comments posted by Twitter users. Actually, carrying out a big data analysis in a tiny timespan could have determined the development of results conditioned by specific factors.

3.1 Data mining

A web crawled, named Twitter4J, allowed realizing the data collection process. Practically, it has permitted assembling data in nearly real time as background activity. The crawled is based on the use of API, which has provided access to the public accounts on the chosen virtual community. In detail, the data collection has been performed by establishing and then implementing specific filters in order to identify all Twitter users' comments including the hashtag #shoes (see Fig. 1).

Fig. 1: Screenshot of Twitter users' posts including the hashtag #shoes



Source: Authors' elaboration from *https://twitter.com*

Specifically, the crawler has allowed identifying, selecting, gathering and classifying an extremely large amount of words, providing a classification capable of highlighting many keywords connected to the considered phenomenon. Consequently, a further skimming of the extracted words has been made to avoid that some terms could complicate the interpretation of the results. For example, the crawler has automatically ignored individual letters, definite and indefinite articles (a, an, the), prepositions (from, by, with, etc.) and other terms that, taken individually, would not have helped in any way the understanding of the findings.

3.2 Data analysis

After their mining, the collected data have been treated through a sentiment analysis, realized by means of "SentiWordNet", a software that, considering lexical resources for opinion mining (Ohana and Tierney, 2009; Denecke, 2008), has enabled identifying people's perceptions, allowing understanding the overall polarity of a set of words (Hung and Lin, 2013). Indeed, the most frequently used words identified and extracted in the previous stage have been passed to the sub module responsible for the sentiment check.

Specifically, for each word, the adjectives and expressions related to it have been checked against a lexicon annotated with sentiment values in order to establish their potential positive, negative or neutral value (Baccianella, 2010). The submodule has returned, for each adjective/expression, values in the [0,1] range, that represents the adjective/expression's positivity, negativity, or objectivity, whose sum total is 1. For the i-eth word, its corresponding positivity (Sp_i), negativity (Sn_i) or neutrality (S_u) values have been computed as follows:

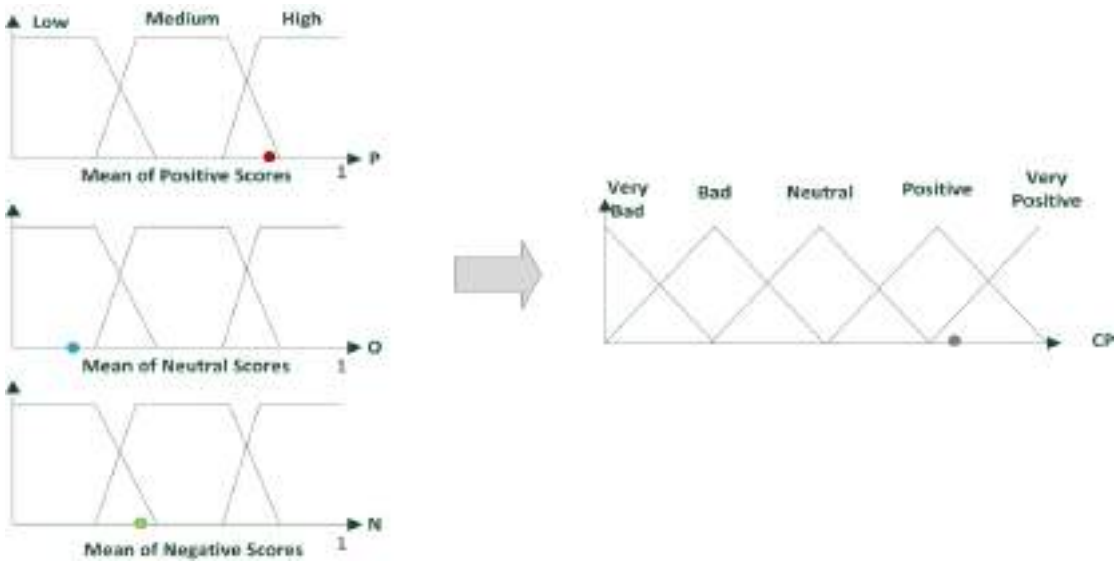
$$Sn_i = \frac{\sum_{k=1}^{K} n_k}{K} \qquad Sp_i = \frac{\sum_{k=1}^{K} p_k}{K}$$

$$Su_i = \frac{\sum_{k=1}^{K} u_k}{K}$$

where K is the total number of adjectives/expressions found and evaluated, and p_k, n_k and u_k are the k_{th} positivity, negativity and neutrality value, respectively, for the kth adjective/expression.

Then, in order to estimate the collective perception related to a single word, a Fuzzy Inference System (FIS) (Guillaume, S., 2001) has been used for obtaining the value of the CP starting from the sentiment scores Sp_i, Sn_i and Su_i of the word computed by the SDA module with the formulas previously described. Such scores represent the inputs of the FIS and their membership functions are reported in figure 2. The FIS has allowed obtaining a value for the collective perception by "defuzzifying" the output (Kasabov and Song, 2002; Jang, 1993). The CP value has helped with the assessment of the community's perception about the analyzed words and with the understanding of the strengths and weaknesses felt by people (Chang and Chang, 2006) about their preferences about shoes.

Fig. 2: Fuzzy variables and membership of the FIS for computing the collective perception



Source: Authors' elaboration

4. Results

With the aim to give an answer to the research aim, the software selected for the data collection (Twitter4J) has allowed gathering the 10% of all tweets containing the hashtag #shoes published during the period of analysis. The filter has permitted to extract about one hundred thousand words (precisely 91.223), within which about two thousand (1837) different terms have been analyzed. Figure 3 shows a word cloud that includes the words most frequently used by users on Twitter in their posts about #shoes.

Fig. 3: The most used terms in the tweets containing the hashtag #shoes

Source: Authors' elaboration

At this point, it is worth pointing out that the size of the terms showed in the figure 3 depends on the number of times that they have been extracted by the web crawler: more the times the words are used, more their size is. Subsequently, with the purpose to better understand the users' opinion expressed by means of posts on Twitter, a sentiment analysis has been performed. Furthermore, it is necessary to underline that, in order to make the graphic representation clear, all the stopwords (such as articles, conjunctions, prepositions, etc.) have been preventively removed. After that, the words with a similar meaning posted more than 200 times on Twitter during the period if analysis have been grouped in a single concept and listed in descending order, as shown in in Table 1:

Tab. 1: The most frequently used concepts within tweets containing the hashtag #shoes

RANKING POSITION	CONCEPT	TERM
1st	Quality (4966)	#quality (1258)
		#comfortable (1008)
		#manufacture (833)
		#comfort (777)
		#manufacturing (558)
		#resistant (322)
		#breathable (210)
2nd	Image (3732)	#fashionable (998)
		#beautiful (654)
		#design (616)
		#nice (557)
		#style (408)
		#chic (288)
		#stylish (211)
		#swish (205)
3rd	Price (2987)	#cheap (955) #price (558) #expansive (500) #money (442) #saving (300) #moneysaving (232)
4th	Sustainability (1311)	#environment (351) #sustainability (348) #environmentalism (210) #environmental (201) #protection (201)

Source: our elaboration

5. Discussion

5.1 Quality

Although, as pointed out by Fandos and Flavian (2006), the concept of quality, or more precisely, its perception, varies depending on lots of factors (such as the moment at which the consumer makes the purchase or consumes a product, the place where it is bought or enjoyed, and so on), according to the findings, regardless of all its possible forms, it would seem to be the variable mostly taken into consideration by people in purchasing their shoes, with a number of 4966 tweets.

This result is consistent with several studies, both dated (Juster, 1975; Triplett, 1975; Parasuraman *et al.*, 1985) and recent (Wang, 2017; Dedeke, 2016), from which what emerge is a high eligibility of quality in affecting people's purchasing choices. Not by chance, companies, both public and private, besides increasingly tending to be concerned with ensuring a high quality standard of goods and services, also seek to ensure that the quality of their products is actually perceived by recipients. All this depends on the awareness of the growing consumer's attention to the concept of quality not only as goodness of good/service, but as the overall value gained from its use. In this regard, several scholars (Yang *et al.*, 2010; Sanchez-Rodriguez and Martínez-Lorente, 2004) have conducted empirical research to assess the actual capacity of quality to influence consumers' purchasing choices, demonstrating how in many cases it can even influence their thinking.

In this regard, Stanley and Wisner (2002) justify the ability of quality to guide the purchasing process, arguing that it is due to the fact that nowadays consumers are used to gather information about the tangible and intangible characteristics of the products that they intend to purchase and this indices companies not to underestimate the quality of the proposed goods and services. This tendency to use a multiplicity of information channels, both direct and indirect, leads to the consideration that consumers can no longer be understood as purely passive recipients of business

offerings (Troisi *et al.*, 2017; Loia *et al.*, 2016), but, on the contrary, as value co-creators (Polese 2018; Polese *et al.*, 2017a, 2017b; Ciasullo *et al.*, 2016).

5.2 Image

The reading of the 3732 comments posted by people on Twitter, in fact, emphasizes the great attention paid to the image of the shoes. In this regard, it is worth specifying that, in this paper, the concept of "image" does not refer (only) to the external appearance of a product, but. Rather, to all those features that contribute to the overall people's opinion about it. In this case, the image of a pair of shoes consists of those characteristics capable of inducing consumers to consider it as trendy, fashionable, swish, and so on.

Furthermore, besides including features properly linkable to the product, the image also refers to properties belonging to the company selling that product. In this perspective, Reza Jalilvand and Samiei (2012) state that one of the most important things in which a company should interest is trying to create a good image in the consumer's head, since only products (and brand) with clear and recognizable can be remembered in the complex process that leads to the purchase.

Consistently, Wang *et al.* (2012) suggest that companies, in order to position or reposition themselves on the market, should necessarily focus on the planning and implementation of communication strategies designed to build an image capable of making the product appetizing. To this end, as Wu *et al.* (2011) argue that companies have to define or enrich the image through the brand-product associations able to convey positive elements or concepts within customers' minds, both current (retention of existing consumers) and potential (acquisition of new consumers).

Therefore, since every market, from a cultural, social and mental point of view, is constantly evolving, in order to reach and maintain a successful competitive position over time, companies cannot ignore the need to adapt to the evolution of consumers' mental images (Pope and Voges, 2000), combining communication strategies immediately working to other ones projected on longer-term prospects. Such strategies can be used to reinforce existing mental associations (for example, making recipients more sensitive and responsive to certain themes or issues) or to create new mental associations (for example, by disseminating information capable of determining a good product placement in the consumer's mind).

5.3 Price

As easily predictable and demonstrated by the 2987 tweets, price represents one of the most important variables that people assess in adopting their own purchasing behaviour. In the choice of shoes, as for any other products, people more or less carefully assess their availability to support a certain price in exchange of specific merchandise characteristics. Purchase is finalized only whether the perceive benefits of using the good/service exceed the price to be paid to buy it.

Over the years, numerous authors (Deaton and Muellbauer, 1980; Lichtenstein *et al.*, 1993; Degeratu and Rangaswamy, 2000; Arnould *et al.*, 2002; Haucap and Heimeshoff, 2011) have dealt with the issue of price fluctuation on consumers' behaviour, highlighting that only in particularly exceptional cases it is completely ignored (for example, in the circumstance in which the price to be sustained to buy the product is quite trifling or very low compared to the consumer's economic availability). In all other cases, in line with what Mian (2013) has pointed out, consumers tend to highly take into account the price, often considering it as the main variable.

In light of this statement, Cho *et al.*, (2013) define the price as the most important lever to be managed to make efficacy any company's marketing strategy: in addition to affecting the company's profitability, the price is also a powerful tool for communicating the brand or product image outside, since it allows the company to segment the market and thus choose the recipients of its offer.

Over the years, for a number of reasons, especially linked (but not limited to) to the global economic crisis, the attention to pricing has exponentially grown (Cohen and Garrett, 2010), to the

point that, nowadays, consumers seem to show a great sensitivity in this regard. Undoubtedly, the economic crisis has been a strong catalyst for this tendency, but it is not possible to deny that it has been alongside by the emergence of a new system of values, oriented towards a more cautious and selective consumption (Stavrianea and Siomkos, 2016).

In other words, consumers' behaviour appears as influenced not so much by the desire to save money, but rather by the willingness to spend it sparingly. This approach is the basis of the concept of value for money (Andersen, 2000), an axiom aimed at valorising money, without any self-imposing spending limit, which suggest that this kind of price attention should not be meant as consumer aversion, but rather as a propensity to a smart spending.

5.4 Sustainability

According to the big data analysis carried out, sustainability is ranked last of the factors capable of orienting consumers' purchasing choice, as demonstrated by the only 1311 posts on Twitter. However, this finding is not consistent with the results arising from several other studies (Schaltegger and Wagner 2017; Ciasullo *et al.*, 2017b; Douglas, 2015; McKinnon *et al.*, 2015; Vlek and Steg, 2007) in which it is supposed to be one of the main variables taken into consideration by people in their purchases.

In this regard, it is worth underlining that, especially recently, the number of contributions that highlight the primary role played by sustainability in current markets is increasingly enhancing. In fact, some authors (Partridge 2014; Johnsen *et al.*, 2014) emphasize the great attention paid to environmental issues by people, who seem to be more and more concerned about the dangerous effects of climate change (Schipper and Pelling, 2006), such as the melting glaciers caused by global warming, the depletion of natural resources, etc. Likewise, Ciasullo *et al.* (2017a) even state that the adoption of sustainable practices can be understood as the driving force of the competition, the winning strategy to enable companies to reach and defend the success.

However, the results of the performed big data analysis show that, regardless of what is stated in literature, sustainability seems even to be ignored by consumers of shoes. In an attempt to provide an explanation to this finding, it is possible to imagine that it depends on the fact that in the present socio-economic context, the term "sustainable" seems to have been emptied of its true meaning: the feeling is that many people are not entirely convinced of the effective sustainability of business practices, which often are focused on sustainable activities, which at best are only a little less unsustainable than their conventional alternatives (Engelman, 2013).

In other words, whether on the one hand the widespread use of the term "sustainable" reflects a greater public awareness of the critical environmental situation, on the other hand the actions until now undertaken to address the related problems are still far from producing tangible and concrete results.

6. Theoretical and practical implications

The aim of this paper is to provide new insights into corporate sustainability management related to footwear companies. Although sustainability represents a widely discussed topic when related to footwear companies it is still in a primordial state. In fact, sustainability needs to be engaged in corporate management as a proactive strategic choice to enhance business competitiveness. In this respect, sustainability could be managed as a fundamental competitive differentiation lever to increase market share. In such a perspective, managers need to improve their understanding in terms of both effective actions and implications that lie behind these multifaceted choices. The role played by the abundance of information and, through it, by the possibility of exploring new actionable knowledge, in the wide domain of behavioral dynamics of the demand, appears critical and relevant. In an explorative way, this research has embraced a big data analysis through an important social network such as Twitter.

As a whole, this study provides some important both theoretical and managerial contributions.

In the first case, the proposed study highlights the opportunity to ennoble an interdisciplinary convergence between technological know-how (and, in particular, connected to digital technologies) and managerial knowledge in order to capture the relevance and the impacts that the former can take on managerial choices. More in depth, the development of an advanced research framework in this study was not yet illustrated in the sustainability management literature in general and in the footwear context in particular. Although literature has proposed tools to support sustainability management such as guidelines, indicators, or international standards, their effectiveness in terms of decision making is vain. On the contrary, the analysis proposed in this study can represent a useful tool for a better decision making in terms for a strategic analysis and for measure the effectiveness of implemented actions. In this regard, this work could contribute to give an impulse to the development of the scientific debate that involves academics, NGOs, professional bodies, government agencies to reflect on more complying tools related to corporate sustainability management.

Practical implications also emerge from the study. First of all, the proposed study can be used as a tool to enhance managerial capabilities for those footwear companies actively engaged in the development of a sustainable business model. The systematic analysis of points of view, preferences and expectations would allow the development of innovative eco-value propositions in terms of both products (i.e. environmentally friendly shoes) and services (i.e. reverse logistics). By doing this, companies could improve ecological and social value in concert with financial value. Furthermore, as many practitioners are not familiar whit Operations Research techniques, the study can be implemented such as a decision support system (DSS) through which practitioners, despite not having the detailed knowledge of the underpinning mathematics, can analyze and measure corporate sustainability.

Last but not least, findings emerging from this work invite managers of footwear companies, engaged in sustainable strategies, to reflect on the most appropriate actions. According to the big data analysis carried out, consumers' behaviour appears as influenced not so much by sustainability but by others factors considered relevant such as quality, image and price. This implies two main considerations. First of all, sustainability has not been fully popularized yet in the shoes market and in particular in the shoes fashion' one. Secondly, consumers who are involved in fashion footwear do not assume a negative attitude towards sustainability. These considerations suggest the need to adopt coherent marketing advertisement strategies. In particular, marketers should place many efforts in communicating value and values that sustainable shoes consumption can generate for both individual consumers and society. For example, marketing messages should emphasize that sustainability is synonymous with high-quality because, for example, it is related to handmade shoes realized with respect for the environment and human health; or emphasize that sustainability is product innovation complying with the actual more dynamic life style, or, even to launch a lifestyle. In any case, it is important that marketers spread sustainability information through the use of various promotional tools to enhance a more positive attitude about their sustainable brands. In sum, a strategic communication assuming also an education role should be pursued whit the aim to make consumers able to understand that sustainability incorporates a sustainable well-being.

7. Conclusions

This work takes part to the wide and complex scenario of studies devoted to the theme of the variables that people tend to take into consideration in their purchasing choices. To this end, the authors have made a big data analysis with the help of specific software. In detail, the data collection has been realized by deploying a web crawler on one of the most popular social networks, Twitter. Subsequently, the extracted tweets have been analyzed by using SentiWordNet, a software capable of distinguishing people's positive and negative opinions.

The analysis has been carrying out for a rather extended period (about one year) to avoid distortions associated with seasonality and, consequently, to allow for a sufficiently reliable generalization of the results. Basically, the strength of this work is that the research has been conducted by analyzing a very large number of opinions (tweets) expressed by means of people's posts on a social network. However, this modus operandi also presents a limit, due to the fact that the automated collection of people's posts has prevented from going more in depth in understanding their real ideas about the variables more capable of orienting their shoes purchasing behavior. Therefore, in the future, it could be useful and interesting to realize another work related to the same theme but by using a qualitative approach (i.e. the in depth interview technique) in order to compare its possible findings with the result emerged from this research.

References

ARNOULD E.J., PRICE L., ZINKHAN G.M. (2002), *Consumers*, McGraw-Hill, New York.

ATZORI L., IERA A., MORABITO G. (2010), "The internet of things: a survey", *Computer Networks*, vol. 54, n. 15, pp. 2787-2805.

AVITA K., WAZID M., GOUDAR R.H. (2013), "Big data: issues, challenges, tools and good practices", *Sixth International Conference on IEEE*.

BACCARANI C. (2016), "L'impresa Pedrollo Spa tra innovazione, tecnologia e sostenibilità", *Sinergie*, vol. 33, n. 98, pp. 61-65.

BACCIANELLA S., ESULI A., SEBASTIANI F. (2010), "SentiWordNet 3.0: An Enhanced Lexical Resource for Sentiment Analysis and Opinion Mining", *LREC*, vol. 10, pp. 2200-2204.

BEYER M.A., LANEY D. (2012), *The Importance of* "*Big data*"*: A Definition*, Gartner, Stamford.

BROWN B., CHUI M., MANYIKA J. (2011)"Are you ready for the era of 'big data", *McKinsey Quarterly*, vol. 4, n. 1, pp. 24-35.

BRUNDTLAND G.H. (1987), Report of the World Commission on environment and development: "our common future.", United Nations.

BRUNETTI F., CASSIA F., UGOLINI M. (2013), Evidenze da una destinazione ad alta intensità turistica: il caso Gardaland tra insostenibilità presunta e sustainability in use, in Franch M., Martini U. (Eds.), *Management per la sostenibilità dello sviluppo turistico e la competitività delle destinazioni*, Il Mulino, Bologna.

BRYNJOLFSSON E., HITT L.M., KIM H.H. (2011), *Strength in numbers: How does data-driven decision making affect firm performance?*, Working paper, SSRN working paper. Available at SSRN: http://ssrn.com/abstract = 1819486

BRYNJOLFSSON E., MCELHERAN K. (2016), "Digitization and innovation the rapid adoption of data-driven decision-making", *The American Economic Review*, vol. 106, n. 5, pp. 133-139.

CHANG F.J., CHANG Y.T. (2006), "Adaptive neuro-fuzzy inference system for prediction of water level in reservoir", *Advances in water resources*, vol. 29, n.1, pp.1-10.

CHO J., JOO H.H., KANG H.G. (2013), "Analysis of Consumer Buying Behavior: Price Discounts through Consumption Patterns of In-stant Ramen", *Journal of Economic Research*, vol. 18, n. 1, pp. 35-88.

CIASULLO M.V., CRESPO GARRIDO M.J., MAIONE G., TORRE C., TROISI O. (2017), "Money saving or what? Carpooling as melting pot of smart technology and environmental sustainability", *1st WOSC Conference Science with and for Society: Contribution of Cybernetics and Systems*, January 25 - 27, 2017 - Sapienza University of Rome - Italy. Forthcoming

CIASULLO M.V., MAIONE G., TORRE C., TROISI O. (2017), "What about Sustainability? An Empirical Analysis of Consumers' Purchasing Behavior in Fashion Context", *Sustainability*, vol. 9, n. 9, pp. 1617-1635.

COHEN M.J., GARRETT J.L. (2010), "The food price crisis and urban food (in) security", *Environment and Urbanization*, vol. 22, n. 2, pp. 467-482.

COYLE K. (2006) "Mass digitization of books", *The Journal of Academic Librarianship*, vol. 32, n. 6, pp. 641-645.

CRICELLI L., GRIMALDI M. (2008), "A dynamic view of knowledge and information: a stock and flow based methodology", *International Journal of Management and Decision Making* , vol. 9, n. 6, pp. 686-698.

DANAH B., CRAWFORD K. (2012), "Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon", *Information, communication & society*, vol. 15, n. 5, pp. 662-679.

DARDANELLO F., REALACCI E. (2012), *Report GreenItaly*, Fondazione Symbola & Unioncamere, Roma.

DEATON A., MUELLBAUER J. (1980), *Economics and consumer behavior*, Cambridge university press, London.

DEDEKE A.N. (2016), "Travel web-site design: Information task-fit, service quality and purchase intention", *Tourism Management*, vol. 54, n. 1, pp. 541-554.

DEGERATU A.M., RANGASWAMY A., Wu, J. (2000), "Consumer choice behavior in online and traditional supermarkets: The effects of brand name, price, and other search attributes", *International Journal of Research in Marketing*, vol. 17, n. 1, pp. 55-78.

DENECKE K. (2008), "Using sentiwordnet for multilingual sentiment analysis", in *Data Engineering Workshop ICDEW 2008, IEEE 24th International Conference, IEEE*, United States, pp. 507-512.

DOUGLAS A. (2015), "TQM and Sustainability", *Sinergie Italian Journal of Management*, vol. 6, n. 1, pp. 213-218.

ENGELMAN R. (2013), "Beyond sustainababble", in *State of the World 2013* (pp. 3-16), Island Press/Center for Resource Economics.

ERSEN A. (2000), *Value for money drivers in the private finance initiative*, Arthur Andersen and Company, London.

ESTRIN D, CULLER D., PISTER K. SUKHATME G. (2002), "Connecting the physical world with pervasive networks", *IEEE Pervasive Computing*, vol. 1, n. 1, pp. 59-69.

FORNASIERO R., FRANCHINI V., CARPANZANO E. (2011), "A Reference Model for Sustainable and Collaborative Supply Chain of small series production in Textile, Clothing and Footwear Industry", *44th CIRP Conference on Manufacturing Systems*, 31 May 31 - 3 June 2011, Madison, USA.

FOSTER P., FAWCETT T. (2013), "Data science and its relationship to big data and data-driven decision making", *Big data*, vol. 1, n. 1, pp. 51-59.

FREY M., IRALDO F. (2008), *Il management dell'ambiente e della sostenibilità oltre i confini aziendali*, Franco Angeli, Milano.

GOLINELLI G.M., BARILE S., SAVIANO M., FARIOLI F., MASARU Y. (2015),"Towards a common framework for knowledge co-creation: opportunities of collaboration between Service Science and Sustainability Science", in Service Dominant Logic, Network and Systems Theory and Service Science: Integrating three Perspectives for a New Service Agenda, pp. 1-30.

GOLINELLI G.M., VOLPE L. (2012), *Consonanza, valore, sostenibilità: verso l'impresa sostenibile*, Cedam, Padova.

GUILLAUME S. (2001), "Designing fuzzy inference systems from data: An interpretability-oriented review", *IEEE Transactions on fuzzy systems*, vol. 9, n. 3, pp.426-443.

HARRISON E.F. (1995), *The managerial decision-making process*, Houghton Mifflin, Boston.

HAUCAP J., HEIMESHOFF U. (2011), "Consumer behavior towards on-net/off-net price differentiation", *Telecommunications Policy*, vol. 35, n. 4, pp. 325-332.

HERVA M., ÁLVAREZ A., ROCA E. (2011), "Sustainable and safe design of footwear integrating ecological footprint and risk criteria", *Journal of hazardous materials*, vol. 192, n. 3, pp. 1876-1881.

HUNG C. LIN H. K. (2013), "Using objective words in SentiWordNet to improve sentiment classification for word of mouth", *IEEE Intelligent Systems*, vol. 28, n.2, pp. 47-54.

JACQUES J.J., AGOGINO A.M., GUIMARÃES L.B. (2010), "Sustainable product development initiatives in the footwear industry based on the cradle to cradle concept", in *ASME 2010 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference*, August 26-29 2018, Quebec City, Canada.

JANG J.S. (1993), "ANFIS: adaptive-network-based fuzzy inference system", *IEEE transactions on systems, man, and cybernetics*, vol. 23, n. 3, pp. 665-685.

JANSSEN, MARIJN, HAIKO VAN DER VOORT, AGUNG WAHYUDI (2017), "Factors influencing big data decision-making quality", *Journal of Business Research*, vol. 70, n. 7, pp. 338-345.

JOHNSEN T., HOWARD M., MIEMCZYK J. (2014), *Purchasing and supply chain management: A sustainability perspective*, Routledge, Abingdon-on-Thames, Regno Unito.

KASABOV N.K. SONG Q. (2002), "DENFIS: dynamic evolving neural-fuzzy inference system and its application for time-series prediction", *IEEE transactions on Fuzzy Systems*, vol. 10, n. 2, pp.144-154.

KITCHIN R. (2014), "The real-time city? Big data and smart urbanism", *GeoJournal*, vol. 79, n. 1, pp. 1-14.

LAVALLE S. (2011), "Big data, analytics and the path from insights to value", *MIT Sloan Management Review*, vol. 52, n. 2, pp. 21-37.

LEE M., RAHIMIFARD S. (2010), "Development of an economically sustainable recycling process for the footwear sector, in *Proceedings of the 17th CIRP Life Cycle Engineering Conference*, 19-21 May 2010, Hefei, China.

LICHTENSTEIN D.R., RIDGWAY N.M., NETEMEYER R.G. (1993), "Price perceptions and consumer shopping behavior: a field study", *Journal of Marketing Research*, vol. 30, n. 2, pp. 234-245.

LOHR S. (2012), *The age of big data*, New York Times.

LOIA V., MAIONE G., TOMMASETTI A., TORRE C., TROISI O., BOTTI A. (2016), "Toward Smart Value Co-education", in *Smart Education and e-Learning 2016 (pp. 61-71*), *Springer International Publishing*.

MALLINGER, M., MATT S., (2015), "Big data Decision Making", *Graziadio Business Review*, vol.18, n. 2, pp. 138-159.

MCAFEE A., BRYNJOLFSSON E (2012) "Big data: the management revolution," *Harvard Business Review*, vol. 90, n. 10, pp. 60-68.

MCKINNON A., BROWNE M., WHITEING A. PIECYK M. (2015), *Green logistics: Improving the environmental sustainability of logistic*, Kogan Page Publishers, London.

MIAN S. (2013), *The Effect of Price Sensitivity on Consumer Behavior* (Doctoral dissertation, © Lahore School of Economics),

MICHELINI L., PRINCIPATO L., IASEVOLI G. (2018), "Understanding Food Sharing Models to Tackle Sustainability Challenges", *Ecological Economics*, vol. 145, n. 4, pp. 205-217.

OHANA B., TIERNEY B. (2009), "Sentiment classification of reviews using SentiWordNet", paper presented at *9th IT&T conference*, 22-23 October, Dublin, Ireland.

PARTRIDGE E. (2014), *Social Sustainability, Encyclopedia of Quality of Life and Well-Being Research*, Alex C. Michalos, Ohio.

PASTORE A. (2012), "Green marketing e mobilità sostenibile", *Mercati e Competitività*, vol. 1, n. 2, pp. 13-20.

PITT J. (2013), "Transforming big data into collective awareness", *Computer*, vol. 46, n. 6, pp. 40-45.

POLESE F. (2009), "Local government and networking trends supporting sustainable tourism: some empirical evidences", in *Fusco Girard L., Nijkamp N. (eds), Cultural Tourism and Sustainable Local Development*, Ashgate, London, pp. 131-148.

POLESE F. (2018), *Successful Value Co-creation Exchanges: A VSA Contribution. In Social Dynamics in a Systems Perspective*, Springer, Cham.

POLESE F., CARRUBBO L., BRUNI R., MAIONE G. (2017), "The viable system perspective of actors in eco-systems", *The TQM Journal*, vol. 29, n. 6, pp. 783-799.

POLESE F., MELE, C., GUMMESSON E. (2017b), "Value co-creation as a complex adaptive process", *Journal of Service Theory and Practice*, vol. 27, n. 5, pp. 926-929.

POLESE F., MINGUZZI A. (2009), Networking approaches for sustainable destination management: an Italian case study, in Kozac M., Andreu L., Knoth J. (eds.), Advances in Tourism Marketing. Managing Networks, Routledge, London, pp. 113- 124.

POPE N.K., VOGES K.E. (2000), "The impact of sport sponsorship activities, corporate image, and prior use on consumer purchase intention", *Sport Marketing Quarterly*, vol. 9, n. 2, pp. 96-102.

RABL T., GÓMEZ-VILLAMOR S., SADOGHI M., MUNTÉS-MULERO V., JACOBSEN H.A., MANKOVSKII, S. (2012), "Solving big data challenges for enterprise application performance management", *VLDB Endowment*, vol. 5, n. 12, pp. 1724-1735.

REZA JALILVAND M., SAMIEI N. (2012), "The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran", *Marketing Intelligence & Planning*, vol. 30, n. 4, pp. 460-476.

ROWLEY J. (2007), "The wisdom hierarchy: representations of the DIKW hierarchy", *Journal of Information Science*, vol. 33, n. 2, pp. 163-180.

SANCHEZ-RODRIGUEZ C., MARTÍNEZ-LORENTE Á.R. (2004), "Quality management practices in the purchasing function: an empirical study", *International Journal of Operations & Production Management*, vol. 24, n. 7, pp. 666-687.

SATHI A. (2012), *Big data analytics: disruptive technologies for changing the game*, Mc Press, New York.

SCHALTEGGER S., WAGNER M. (2017), *Managing the business case for sustainability: The integration of social, environmental and economic performance*, Routledge, Abingdon-on-Thames.

SCHIPPER L., PELLING M. (2006), "Disaster risk, climate change and international development: scope for, and challenges to integration", *Disasters*, vol. 30, n. 1, pp. 19-38.

STANLEY L.L., WISNER J.D. (2002), "The determinants of service quality: issues for purchasing", *European Journal of Purchasing & Supply Management*, vol. 8, n. 2, pp. 97-109.

STAVRIANEA A., SIOMKOS G. (2016), "Crisis Marketing: Effects on the consumers' behavior and their materialistic values", in *Procedings of the ICCMI 2016, 4th International Conference on Contemporary Marketing Issues*.

SUNIL E., FUKAWA N., SWAYNE L., (2016), "Big data consumer analytics and the transformation of marketing", *Journal of Business Research*, vol. 69, n. 2, pp. 897-904.

TARTAGLIONE C., CORRADINI S. (2013), "Stare al passo con la sostenibilità, il settore calzaturiero e l'approccio sostenibile", *Report Ares2.0 Piano settoriale calzature* "*PROTODESIGN - Creatività, Ingegnerizzazione, Sviluppo della collezione e Commercializzazione della scarpa*, Roma.

TROISI O., CARRUBBO L., MAIONE G., TORRE C. (2017), "Unity is Strength: Co-Creating Value in Working Context", *Journal of Business and Economics*, vol. 8, n. 1, pp. 97-104.

TSUR O. RAPPOPORT A. (2012), "What's in a hashtag?: content based prediction of the spread of ideas in microblogging communities", presented in *fifth ACM international conference on Web search and data mining*, 08-12 February, Seattle, Washington, United States.

UGOLINI P. (2010), *Approccio alla sostenibilità nella governance del territorio*, Franco Angeli, Milano.

VESCOVI T. (2015), *Lezioni inattese di management*, Giappichelli Editore, Torino.

VLEK C. STEG L. (2007), "Human Behavior and Environmental Sustainability: Problems, Driving Forces, and Research Topics", *Journal of Social Issues*, vol. 63, n. 1, pp. 1-19.

WANG C.L., LI D., BARNES B.R., AHN J. (2012), "Country image, product image and consumer purchase intention: Evidence from an emerging economy", *International Business Review*, vol. 21, n. 6, pp. 1041-1051.

WANG E.S.T. (2017), "Different Effects of Utilitarian and Hedonic Benefits of Retail Food Packaging on Perceived Product Quality and Purchase Intention", *Journal of Food Products Marketing*, vol. 23, n. 3, pp. 239-250.

WANG H., XU Z., FUJITA H., LIU S. (2016), "Towards felicitous decision making: An overview on challenges and trends of Big Data", *Information Sciences*, vol. 367, n. 1 pp. 747-765.

WU P.C., YEH G.Y.Y., HSIAO C.R. (2011), "The effect of store image and service quality on brand image and purchase intention for private label brands", *Australasian Marketing Journal*, vol. 19, n. 1, pp. 30-39.

YANG D.J., WU J.M., WANG K.I. (2010), "Relationship quality, relationship value, purchasing intention: An empirical study in the retail industry in the USA, Japan and Taiwan", *Asian Journal of Arts and Sciences*, vol. 1, n. 2, pp. 155-166.

ZIKOPOULOS P., EATON C., (2011), *Understanding big data: Analytics for enterprise class hadoop and streaming data*, McGraw-Hill, Osborne.

Websites

https://twitter.com

Scelte strategiche e pratiche ambientali nelle Pmi alberghiere. Verso un nuovo modello di business sostenibile

FEDERICA BUFFA[*] MARIANGELA FRANCH[•] UMBERTO MARTINI[♠] ALESSIO TAMANINI[**]

Abstract

Obiettivi. *Analisi delle scelte di sostenibilità ambientale delle Pmi alberghiere nelle destinazioni community al fine di indagare se e come è cambiata l'adozione di pratiche di gestione ambientali (EMPs), se e come ente pubblico e key stakeholder territoriali influenzano l'adozione di comportamenti eco friendly.*

Metodologia. *La ricerca condotta nel 2015 in collaborazione con l'istituto di statistica provinciale ha coinvolto la totalità di alberghi del Trentino (N=1.514) attraverso un'indagine CAWI (redemption 88,9%). L'analisi è stata svolta a due livelli: 1) analisi di frequenze volta a identificare le EMPs adottate e confronto longitudinale rispetto al 2005; 2) analisi delle corrispondenze multiple e hierarchical ascendant cluster analysis per identificare profili di imprese con diverso environmental commitment.*

Risultati*. Aumento degli investimenti in EMPs grazie a incentivi pubblici finalizzati al contenimento degli impatti ambientali. Il ruolo dell'ente pubblico si conferma rilevante ma non esclusivo: la scelta di investire in EMPs è spiegato anche dalla maggiore consapevolezza acquisita dalle imprese "proactive" e "reactive" verso la sostenibilità ambientale, dal valore etico che esse vi attribuiscono e dall'influenza (stakeholder power and pressure) esercitata dalle DMO.*

Limiti della ricerca. *Focus su un'unica destinazione community.*

Implicazioni pratiche. *L'adozione di EMPs è accessibile anche alle Pmi ma questo richiede in primis di modificare il tradizionale modello di business includendovi obiettivi di sostenibilità ambientale. Gli incentivi pubblici e la pressione di key stakeholder esterni non sono sufficienti a modificare le scelte strategiche delle imprese.*

Originalità del lavoro. *La ricerca contribuisce all'attuale dibattito scientifico riguardo all'adozione di pratiche ambientali e all'influenza di stakeholder esterni sulle scelte di sostenibilità ambientale delle Pmi alberghiere.*

Parole chiave: *pratiche di gestione ambientale; imprese alberghiere; environmental commitment; Trentino*

Objectives. *Analysis of the environmental sustainability strategies of small and medium hotel enterprises (SMHEs) in community destinations. The goal is to investigate whether and how the adoption of environmental management practices (EMPs) have changed, and whether and how public body and local key stakeholders have influenced eco-friendly behaviour.*

Methodology. *The research carried out in 2015 in joint with the Statistical Office of Province of Trento involved all the hotels of Trentino (N=1.514) though a CAWI survey (redemption rate 88,9%). The data analysis followed two steps: 1) frequencies analysis addressed to identify the EMPs adopted and to compare the data with the survey conducted in 2005; 2) Multiple Correspondence Analysis and hierarchical ascendant cluster analysis to identify hotel profiles with different environmental commitment.*

Findings. *Increase of EMPs investments due to public incentives aimed to reduce environmental impact. The importance of public body is confirmed but its role is not exclusive: the adoption of EMPs depends also on the "proactive" and "reactive" clusters sustainability awareness, on the acknowledged ethical value and on the stakeholders' power and pressure on the DMO.*

Research limits. *Focus on a single community destination.*

Practical implications. *Small hotels can also adopt EMPs but that would require in primis a change in the traditional business model adding environmental sustainability aims. Since public incentives and stakeholder pressure are not enough to modify the enterprise strategies.*

Originality of the study. *The research contributes to the scientific debate on EMPs adoption and stakeholder power and pressure on environmental sustainability strategies of SMHEs.*

Key words: *environmental management practices; hotel enterprises; environmental commitment; Trentino*

[*] Ricercatrice in *Economia e Gestione delle Imprese* - Università degli Studi di Trento
e-mail: federica.buffa@unitn.it

[•] Ordinario di *Marketing* - Università degli Studi di Trento
e-mail: mariangela.franch@unitn.it

[♠] Ordinario di *Economia e Gestione delle Imprese* - Università degli Studi di Trento
e-mail: umberto.martini@unitn.it

[**] Research Assistant - Università degli Studi di Trento e Istituto di Statistica della Provincia di Trento (ISPAT)
e-mail: alessio.tamanini90@gmail.com

1. Introduzione

Negli ultimi decenni l'attenzione al tema della sostenibilità e la ricerca di equilibrio tra i tre pilastri sui cui essa poggia (Inskeep, 1997; Swarbrooke, 1999) ha assunto importanza a livello globale influenzando in maniera graduale lo sviluppo di tutti i settori economici, ivi compreso quello turistico (Font e McCabe, 2017). La messa in discussione della relazione positiva fra attività turistica, benessere e sviluppo economico del territorio (Bramwell e Lane, 1993; McKercher, 1993), orienta la comunità scientifica a ricercare nuovi modelli di sviluppo (Hunter, 1997; Butler, 1999; Ryan, 2002; Hardy *et al.*, 2002). Da un punto di vista manageriale coniugare i principi della sostenibilità con la gestione d'impresa, induce a riflettere sull'adeguatezza dei tradizionali modelli di business e a considerare gli impatti di medio-lungo periodo derivanti dall'attività turistica dal punto di vista ambientale e sociale oltre che economico. Particolare rilievo assumono pertanto le scelte strategiche e le pratiche operative con cui le imprese coinvolte nella filiera turistica svolgono la propria attività.

Il settore turistico si contraddistingue per la presenza di una molteplicità di imprese che con i propri servizi e prodotti (es. ricettività, trasporti, intrattenimento, ristorazione, ecc.) contribuisce a definire l'offerta di un territorio. Tra le diverse attività, quella ricettiva è un elemento cardine del sistema (Buhalis e Main, 1998; Kozak e Rimmington, 1998; Keller e Bieger, 2004; Casarin, 2007) ed è rispetto a questa categoria di imprese che, sino ad oggi, si sono indirizzati maggiormente gli studi aventi per oggetto ciò che la letteratura internazionale definisce *environmental management practices* (Blanco *et al.*, 2009; El Dief e Font 2010). In particolare tali studi evidenziano che l'adozione di pratiche ambientali non distoglie l'attenzione dell'impresa dalla dimensione economica e dal perseguimento dell'obiettivo di profitto, ma quest'ultimo è ricercato congiuntamente ad obiettivi di sostenibilità ambientale.

L'adozione di pratiche ambientali da parte delle imprese alberghiere assume particolare valenza se contestualizzata all'interno di territori turistici riconducibili alle *destinazioni community*. Esse si contraddistinguono per essere contesti territoriali multi-stakeholder in cui risorse, attori e attività sono diffuse tra una molteplicità di attori pubblici e privati, ivi inclusa la comunità locale (Murphy, 1985; Kaspar, 1995; Murphy e Murphy, 2004; Beeton, 2006). In queste destinazioni sono il territorio con le risorse naturali e paesaggistiche[1] che contribuiscono a dare *unicità* all'offerta. La particolarità del legame impresa - territorio che si configura nelle destinazioni community giustifica la rilevanza che assume l'attore pubblico per lo sviluppo socio-economico di questi territori. Ancor più che in altri contesti, l'ente pubblico assolve un ruolo fondamentale poiché, oltre a emanare norme e regolamenti a tutela e salvaguardia delle risorse naturali e paesaggistiche, può favorire comportamenti virtuosi da parte delle imprese (in prevalenza di piccole dimensioni) attraverso politiche di incentivazione orientate all'adozione di pratiche ambientali sostenibili.

Il presente lavoro discute le scelte delle imprese in tema di sostenibilità facendo esplicito riferimento alle pratiche di gestione ambientale adottate dalle imprese alberghiere all'interno di una tipica destinazione community. L'obiettivo è duplice: *1)* comprendere se e come sono cambiate le scelte delle imprese alberghiere riguardo alle pratiche ambientali e *2)* analizzare se e come l'ente pubblico ha contribuito e/o supportato l'adozione di comportamenti eco-friendly da parte delle imprese alberghiere.

Il paper illustra i risultati emersi da una ricerca che ha coinvolto la totalità di imprese alberghiere del Trentino, ossia 1.514 strutture, ottenendo una *redemption* di circa il 90%. La scelta del Trentino quale area in cui indagare strategie e pratiche ambientali delle imprese alberghiere è dipesa da tre ragioni principali:

1. il Trentino è un emblematico esempio di destinazione community e, come tale, l'attività turistica rappresenta un'attività economica fondamentale per lo sviluppo locale e le imprese

[1] Per approfondimenti riguardo al legame tra turismo e importanza dell'ambiente e delle risorse naturali si rinvia alla rassegna di studi illustrata da Farrell e Runyan (1991); per una disamina di come il paesaggio influenza l'immagine e la scelta della destinazione si rinvia a MacKay e Fesenmaier (1997). Si veda altresì il contributo di Carneiro *et al.* (2015) per un'analisi del ruolo della dimensione paesaggistica nell'ambito del turismo rurale.

alberghiere sono un elemento cardine per il funzionamento di tale sistema;
2. in Trentino l'ente pubblico (Provincia autonoma di Trento) svolge un ruolo importante in termini di regolamentazione e politiche di incentivazione a supporto dell'imprenditoria e a favore della salvaguardia ambientale[2] e ciò consente di indagare il ruolo dell'attore pubblico rispetto alle scelte strategiche delle imprese alberghiere in tema di sostenibilità ambientale;
3. la collaborazione con l'istituto di statistica provinciale (Ispat)[3] ha permesso di condurre la ricerca sull'intera popolazione di imprese alberghiere del Trentino che, con cadenza decennale, vengono coinvolte in indagini censuarie. Ciò ha consentito altresì di avvalersi di un'analisi longitudinale di come si sono modificate le scelte delle imprese in tema di gestione ambientale.

La ricerca ha profilato le imprese alberghiere in base al loro *environmental commitment*, ossia alle pratiche di gestione ambientale adottate all'interno della struttura. Una volta individuati i diversi profili, si sono analizzate le principali motivazioni alla base degli investimenti ambientali, indagando se essi fossero legati a logiche di mercato o se fossero invece riconducibili a consapevolezza e sensibilità ambientale dell'albergatore. La ricerca ha analizzato altresì il ruolo dell'attore pubblico per l'adozione di pratiche ambientali da parte delle imprese alberghiere e la relazione tra l'investimento in tali pratiche e il grado di collaborazione con alcuni *key player* locali (in particolare le Aziende per il Turismo e i parchi naturali)[4].

Il paper si articola in cinque sezioni. Dopo aver illustrato i principali contributi che discutono il tema delle pratiche ambientali nella gestione delle imprese alberghiere (par. 2), il paper illustra la metodologia adottata per svolgere la ricerca (par. 3) e i principali risultati emersi (par. 4). Le considerazioni conclusione e gli sviluppi futuri della ricerca sono illustrati nel paragrafo finale.

2. Rassegna della letteratura

L'attività turistica impatta sull'ambiente in diversi modi e attraverso attività molteplici, creando, soprattutto in particolari periodi dell'anno, esigenze di consumo (quali, ad esempio, energia, acqua, trasporti) sproporzionate rispetto a quelle tipiche della zona (Martini, 2013). I diversi trend emergenti nel turismo a livello internazionale convergono sulla necessità di considerare centrale il paradigma della sostenibilità, e le implicazioni che ne derivano a livello di politiche e approcci di gestione delle imprese e del territorio (Gössling *et al.*, 2009; Dwyer *et al.*, 2009; Weaver, 2011). L'approccio alla sostenibilità, infatti, viene considerato un fattore di competitività primario delle destinazioni (Crouch, 2007; Mazanec *et al.*, 2007): i requisiti della sostenibilità divengono, anzi, le pre-condizioni per la competitività di una destinazione, assumendo che l'azione manageriale debba coniugare le esigenze di sviluppo dell'offerta e dei servizi non solo con la conservazione e la valorizzazione del paesaggio, ma anche con il mantenimento dell'equilibrio sociale (Middleton e Hawkins, 1998; Mihalic, 2000; Ritchie e Crouch, 2005).

Oltre all'esigenza di una specifica sensibilità da parte delle singole imprese, assume una rilevanza particolare il ruolo degli enti pubblici territoriali. L'intervento pubblico (dello stato, delle regioni, delle municipalità) nel turismo è un fenomeno consolidato a livello internazionale (Hall, 1994, 1999 e 2011; Hall e Jenkins, 1995; Bramwell e Lane, 2000). Nella gestione strategica di una destinazione, l'adozione di una prospettiva di lungo termine è, infatti, essenziale per garantire l'equilibrio dei flussi turistici, considerando il loro impatto sul capitale naturale e socio-culturale (Bramwell e Lane, 2003): la gestione dell'attività turistica deve essere inserita in un processo di

[2] Ne sono esempi alcune leggi provinciali (LP) promulgate dall'ente provinciale in questi ultimi anni, tra i quali, l'art. 4 della LP 6/1999 ovvero la legge che regola gli incentivi provinciali per gli investimenti di protezione ambientale anche attraverso il programma FESR comunitario; l'art. 6 della LP 20/2012 sull'energia che prevede incentivi per investimenti nei settori dell'efficienza energetica e l'utilizzo di risorse energetiche rinnovabili; l'articolo 5 della LP 16/2007 che ha lo scopo di concedere contributi per la realizzazione di interventi e misure finalizzati alla riduzione dell'inquinamento luminoso.

[3] Per informazioni su Ispat - Istituto di statistica della Provincia di Trento si rinvia al sito www.statistica.provincia.tn.it/

[4] In Trentino, due delle tre grandi aree naturali protette, sono in possesso della Carta Europea per il Turismo Sostenibile nelle Aree Protette (CETS) e negli ultimi anni hanno creato un marchio di qualità ambientale per premiare le strutture limitrofe sensibili alla tematica ambientale. Ulteriori indicazioni a riguardo sono disponibili al sito www.areeprotette.provincia.tn.it/turismo_sostenibile/

pianificazione territoriale, integrandosi con l'attività legislativa per garantire il controllo delle ricadute (positive e negative) sul territorio (Hunter e Green, 1995; Hjalager, 1996; Godfrey e Clarke, 2000; BumYong *et al.*, 2002). L'obiettivo della sostenibilità deve essere quindi perseguito anche attraverso una specifica politica turistica, partendo dal presupposto che un'efficace azione di governance sia un requisito chiave per l'implementazione di un modello di turismo sostenibile (Ritchie e Crouch, 2000; Bramwell e Lane, 2011).

All'interno delle *destinazioni community*, in particolare, le imprese che adottano scelte strategiche orientate alla sostenibilità non si limitano a conseguire obiettivi a beneficio della singola struttura, ma contribuiscono a salvaguardare e a valorizzare il territorio in cui sono localizzate, ossia uno dei principali fattori di attrattiva su cui si basa l'offerta turistica dell'intera destinazione. L'adozione di un nuovo modello di business da parte delle imprese alberghiere pertanto, è a vantaggio dell'intero sistema locale in cui esse sono inserite.

In relazione all'attività alberghiera, le interazioni con l'ambiente sono particolarmente evidenti e si manifestano con diversa frequenza ed intensità a seconda che si considerino fasi di infrastrutturazione (quali ad esempio, la costruzione degli edifici adibiti ad alberghi e *dependance*), piuttosto che le più frequenti attività routinarie che coincidono con l'erogazione di prodotti e servizi connessi all'attività di accoglienza (Rizio, 2016). Tali attività si esplicano attraverso l'utilizzo e il consumo di risorse quali energia, acqua, cibo, carta, causando inevitabilmente il depauperamento delle materie prime e l'innalzamento del livello di emissioni[5]. Prese singolarmente tali attività potrebbero non apparire impattanti, ma così non è, soprattutto se ci si riferisce all'impatto globale dell'industria alberghiera sull'ambiente (Kirk, 1995; Bohdanowicz, 2005).

Alla luce di tali considerazioni, attualmente l'analisi delle pratiche ambientali adottate dalle imprese alberghiere è una tematica di particolare interesse per la comunità scientifica dato che presenta ancora significativi gap conoscitivi soprattutto con riferimento alle *environmental management practices* (d'ora in avanti EMPs) accessibili alle imprese di più piccole dimensioni (Chan e Hawkins, 2010). Le maggiori evidenze si riscontrano, infatti, da studi condotti su hotel di grandi dimensioni o appartenenti a catene alberghiere come illustrano, tra gli altri, Álvarez *et al.* (2001), Lòpez-Gamero *et al.* (2009) e Molina-Azorín *et al.* (2009). Queste ricerche hanno contribuito al dibattito sulle diverse modalità, tempistiche e investimenti, con cui grandi imprese e Pmi possono accedere alle EMPs. Álvarez *et al.* (2001, p. 460) evidenziano che "large-size hotels deploy more extensive EMPs than their smaller size counterparts". Lòpez-Gamero *et al.* (2009, p. 3117) sottolineano che "larger firms tend to integrate environmental practices into their organization earlier than smaller ones". La possibilità per le Pmi alberghiere di adottare EMPs non è tuttavia preclusa, ma richiede di adottare scelte strategiche ed organizzative che permettano loro di superare i tipici limiti connessi alla piccola dimensione dell'impresa[6]. Tali scelte richiedono pertanto l'adozione di un nuovo modello di business orientato al raggiungimento non solo di un vantaggio competitivo per l'impresa, bensì anche per il territorio. A tal proposito Porter e Kramer (2011) si riferiscono a un business model win-win e Boons *et al.* (2012) specificano "win-win for firm and system" al quale sottostà un approccio aperto alla sostenibilità. L'adozione di EMPs da parte delle Pmi alberghiere è giustificata dalle evidenze positive che si riscontrano sia in termini di performance ambientali ed economiche (Molina-Azorín *et al.*, 2009; Tarí *et al.*, 2010), sia di competitività (Fraj *et al.*, 2015).

Le scelte dell'impresa verso pratiche di sostenibilità ambientale possono essere influenzate da specifici stakeholder con cui interagisce l'hotel (Sánchez-Medina *et al.*, 2016). A riguardo Céspedes-Lorente *et al.* (2003) evidenziano che l'adozione di EMPs nelle imprese alberghiere è influenzata dallo *stakeholders' power* e dalla diversa percezione che questi ultimi hanno rispetto alle tematiche ambientali e alle performance che l'impresa può conseguire. Analogamente Ayuso (2006), Gonzalez-Benito (2006), Tang *et al.* (2014) discutono di *stakeholder pressure* sottolineando

[5] Per quanto riguarda il dibattito sull'utilizzo dell'acqua e l'attività turistica si rinvia a Gössling *et al.* (2012).

[6] Numerosi sono i contributi degli studiosi che si sono indirizzati a studiare specificità e criticità delle Pmi. In tale sede si richiamano i contributi di Golinelli (1992), Pencarelli (1992), Marchini (1997), Ferrero (2001), Mattiacci e Ceccotti (2005), Pencarelli e Cioppi (2009). Per una rassegna della letteratura sulle Pmi si rinvia a Buffa (2013).

l'influenza che stakeholder esterni all'impresa alberghiera possono esercitare sulle scelte strategiche di sostenibilità ambientale.

L'analisi della letteratura evidenzia l'attualità del tema trattato e il gap conoscitivo riferito all'adozione delle EMPs soprattutto riferito alle Pmi alberghiere. La ricerca condotta sull'universo degli hotel in Trentino contribuisce al dibattito scientifico poiché in questo territorio prevalgono Pmi alberghiere a gestione familiare. All'interno di tale contesto risulta inoltre interessante indagare se all'ente pubblico e ad alcuni key stakeholder locali sono riconducibili le dimensioni di *stakeholder's power* e *stakeholder pressure* evidenziate in letteratura. È anche a tal fine che la ricerca analizza se il grado di investimento ambientale sia uniforme all'interno del territorio o se emergono invece differenze imputabili ad un diverso legame, ovvero influenza, della DMO sulle scelte degli albergatori. Un altro tipo di pressione può provenire da stakeholder ambientali come i parchi naturali (Jamal e Stronza, 2009), ed è anche in virtù dell'importanza che essi ricoprono per l'offerta turistica del Trentino che la ricerca ha approfondito anche tale legame.

3. Metodo della ricerca

3.1 Popolazione indagata e focus della ricerca

I dati della ricerca sono stati raccolti attraverso un'indagine CAWI condotta nel 2015 e hanno permesso di ricostruire per la prima volta i profili di *environmental commitment* delle imprese alberghiere. L'indagine ha coinvolto tutte le strutture alberghiere del Trentino, ossia 1514 imprese. Il tasso di risposta è stato dell'88,9% e pertanto l'analisi si basa su 1347 imprese alberghiere. Le imprese sono prevalentemente alberghi a 3 stelle e presentano una dimensione media di 61 posti letto. Gli hotel sono imprese indipendenti (gli hotel affiliati a catene sono il 3,3%) a gestione familiare (l'87% è gestito dal titolare in modo autonomo o assieme ai famigliari).

Il questionario sottoposto agli albergatori era organizzato in due sezioni principali:

- nella prima si sono rilevati dati concernenti l'adozione di specifiche EMPs;
- nella seconda si sono analizzate le motivazioni che hanno spinto gli intervistati ad intraprendere azioni di sostenibilità ambientale.

Le domande presenti nella prima sezione del questionario riguardavano specifici investimenti a valenza ambientale per il risparmio energetico e idrico, l'incentivo alla mobilità green, l'utilizzo di prodotti meno dannosi per l'ambiente e di prodotti biologici in cucina. Le opzioni di risposta possibili erano tre: indicare quali misure erano state adottate dall'impresa, quali non lo erano e quali invece erano in previsione. Quest'ultima opzione di risposta permette di catturare l'intenzionalità futura dichiarata dall'albergatore, aspetto che è risultato determinante per la ricostruzione dei profili delle imprese alberghiere attraverso la *cluster analysis* (cfr *infra*). Le pratiche ambientali analizzate e le possibili opzioni di risposta sono illustrate in Tabella 1.

Tab. 1: Pratiche ambientali analizzate nelle imprese alberghiere in Trentino

PRATICHE AMBIENTALI	OPZIONI DI RISPOSTA
Installazione di pannelli solari/fotovoltaici	0 = misura non adottata 1 = misura in previsione 2 = misura adottata
Isolazione termica	
Temporizzatore delle luci	
WC a flusso differenziato	
Riutilizzo acque bianche	
Ricambio asciugamani solo su richiesta	
Impianto di irrigazione con acque meteoriche	
Uso di detersivi senza fosforo e/o ad elevata biodegradabilità	
Noleggio gratuito biciclette	
Convenzioni/agevolazioni per servizi di trasporto pubblico	

Fonte: ns. elaborazione

La scelta di indagare le EMPs sopra descritte è dipesa dalla volontà di considerare sia pratiche che richiedono cospicui investimenti alle imprese e che, potenzialmente, le Pmi possono essere in difficoltà a sostenerle autonomamente, sia pratiche facilmente accessibili anche ad imprese di piccole dimensioni (quali WC a flusso differenziato, uso di detersivi, ricambio non giornaliero di asciugamani). Queste ultime possono contribuire alla riduzione dell'impatto dell'attività alberghiera sull'ambiente circostante in termini di minore utilizzo di acqua, energia ed emissioni.

Per quanto concerne il *risparmio energetico* si sono considerate pratiche che stanno incontrando un crescente interesse da parte della cittadinanza e delle imprese (si pensi alla crescita di investimenti per l'installazione di pannelli fotovoltaici come evidenziano dai più recenti dati Istat, 2017) ed è quindi ipotizzabile che anche le imprese alberghiere manifestino attenzione per tale pratica. La rilevazione di questi dati è di particolare interesse non solo per analizzare gli investimenti effettuati o in previsioni da parte delle imprese, ma anche per confrontare se e come, rispetto alla precedente indagine condotta da Ispat nel 2005, gli investimenti delle imprese alberghiere si sono indirizzati verso l'adozione di EMPs che contribuiscono al risparmio energetico.

Per quanto riguarda il *risparmio idrico*, la ricerca si è orientata a comprendere se e in che misura gli albergatori trentini stanno affrontando tale tematica analizzando gli investimenti relativi all'installazione di WC a flusso differenziato (si passa in media dai 10 litri del pulsante completo ai 3 litri del pulsante parziale), di sistemi di riutilizzo delle acque bianche e di impianti di irrigazione mediante acque meteoriche. La rilevanza di tale analisi è ampiamente sottolineata dai dati ENEA[7] secondo cui i consumi idrici all'interno degli alberghi italiani sono elevatissimi (dai 200 ai 600 litri/giorno per presenza in funzione della bassa o alta stagione turistica), soprattutto in relazione all'utilizzo delle docce e dei lavabi (70-120 litri), lo scarico dei WC (dai 30 a 70 litri), la cucina e gli usi alimentari (20-40 litri), i lavaggi interni ed esterni e l'irrigazione. Attraverso l'installazione di accorgimenti per il risparmio e il riutilizzo dell'acqua e dei nutrienti, e la separazione dei flussi, si stima una riduzione dei consumi fino a 80 litri/giorno per presenza.

In tale logica si inserisce anche l'interesse per il *ricambio degli asciugamani* solo su richiesta dei clienti. Tale pratica è oramai molto diffusa nelle imprese alberghiere e consente di analizzare, oltre alle scelte dell'impresa, anche l'atteggiamento del cliente, rilevando se vi è interesse verso le tematiche ambientali e un atteggiamento collaborativo verso le scelte dell'hotel.

Oltre all'analisi di pratiche maggiormente riconducibili alla riduzione degli impatti sull'ambiente, quali l'utilizzo di detersivi senza fosforo e a elevata biodegradabilità, la ricerca ha indagato anche la promozione di alcune pratiche connesse alla *mobilità*. Nello specifico si è osservata la disponibilità presso la struttura alberghiera di servizi di noleggio gratuito delle biciclette ai clienti dell'hotel e di agevolazioni per l'utilizzo dei servizi di trasporto pubblico. Tale analisi risulta di particolare interesse a fronte delle scelte che la DMO con il supporto dell'ente pubblico ha fatto (e continua a fare) in tema di *guest card*. Tali card promuovono lo spostamento sul territorio con un utilizzo gratuito/agevolato dei mezzi pubblici e l'ingresso a tariffa ridotta a numerose attrazioni/punti d'interesse della Provincia[8].

A completamento di tale analisi, in questa prima sezione del questionario sono state inserite due domande volte a indagare l'utilizzo e l'offerta di prodotti biologici all'interno della cucina e l'adozione di certificazioni. Rispetto ai prodotti si è rilevato se essi provenivano da coltivazione biologica. In riferimento alle certificazioni si è rilevato invece se le imprese alberghiere avessero ottenuto, o fossero in procinto di richiedere, una certificazione di qualità di processo (ISO 9001), di

[7] ENEA è l'Agenzia Nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (www.enea.it/it). Per approfondimenti riguardo ai dati sul consumo idrico si rinvia al documento online accessibile dal link http://progettoegadi.enea.it/it/partecipa/copy2_of_ConteBG29508_2.pdf

[8] *Trentino Guest Card* è la principale card disponibile sul territorio provinciale (www.visittrentino.info/it/esperienze/trentino-guest-card). Iiniziative simili sono state sviluppate anche da alcune DMO all'interno di specifiche aree turistiche (si vedano, ad esempio, i casi della Valle di Fiemme www.visitfiemme.it/it/green-emotion/fiemme-motion, della Valle di Fassa www.fassa.com/IT/Card/ o dell'area Madonna di Campiglio, Pinzolo e Val Rendena www.campigliodolomiti.it, sezione DoloMeetCard).

gestione ambientale, o etichetta ambientale (ISO 14001, Emas, Ecolabel, Marchio *Qualità Parco*[9]).

Nella seconda parte del questionario le domande erano finalizzate a comprendere le motivazioni delle imprese alberghiere ad investire in pratiche di gestione ambientale. Le dimensioni analizzate consideravano sia motivazioni riconducibili a vantaggi economici e di competitività, sia a fattori etici e culturali. Rispetto ad ogni motivazione gli albergatori hanno dichiarato il proprio grado di accordo in base ad una scala Likert graduata su quattro posizioni. Nella Tabella 2 sono elencate le motivazioni degli investimenti da parte delle imprese alberghiere e le possibili opzioni di risposta.

Tab. 2: Motivazioni dell'investimento in EMPs delle imprese alberghiere in Trentino

MOTIVAZIONI	OPZIONI DI RISPOSTA
Perché sono apprezzate dai clienti	1 = per nulla d'accordo 2 = poco d'accordo 3 = abbastanza d'accordo 4 = molto d'accordo
Perché mi stanno a cuore per ragioni etiche	
Perché permettono un risparmio in termini di costo	
Perché possono costituire un vantaggio competitivo	
Perché sono un fattore imprescindibile per rimanere sul mercato	
In Trentino sono importanti per veicolare una cultura di forte radicamento e simbiosi con il territorio	

Fonte: ns. elaborazione

3.2 Analisi dei dati

L'analisi dei dati è stata svolta a due livelli. Inizialmente sono state analizzate frequenze e percentuali di risposta delle imprese alberghiere riferite alle EMPs adottate. I dati sono stati confrontati con i risultati conseguiti nella precedente analisi condotta da Ispat nel 2005 al fine di verificare se e come gli investimenti in sostenibilità ambientale hanno subito dei cambiamenti. Come si avrà modo di illustrare nel corso del lavoro, non è stato possibile confrontare tutte le EMPs adottate poiché, a distanza di dieci anni, si è ritenuto opportuno introdurre alcune modifiche sia rispetto alle pratiche analizzate sia rispetto all'orientamento delle imprese ad investire. Ad esempio nel 2015 si è rilevato l'investimento rispetto all'adozione di card magnetiche per l'elettricità mentre nel 2005 tale pratica non era stata considerata. Rispetto all'intenzionalità delle imprese ad investire, invece, la modifica è stata apportata in relazione alle opzioni di risposta. Nel 2005 si sono rilevati i dati senza distinguere se l'investimento dell'impresa era già stato sostenuto oppure fosse in previsione. Nel 2015 invece è stata introdotta tale distinzione al fine di identificare con maggiore dettaglio la propensione delle imprese alberghiere ad adottare scelte riconducibili ad un profilo identificabile come "green". Nel set di domande quindi si riscontrano alcune differenze che non permettono sempre un confronto dei dati. I risultati dell'analisi descrittiva sono illustrati nel paragrafo 4.1.

Il secondo livello di analisi si è orientato a ricostruire i profili delle imprese alberghiere a seconda del loro *environmental commitment*. A tal fine, è risultato fondamentale analizzare l'intenzione futura degli albergatori, ossia considerare quali pratiche, sebbene non ancora adottate, fossero di prossima implementazione. Per effettuare l'analisi di raggruppamento sono state utilizzate tutte le dieci variabili legate all'adozione di EMPs (cfr Tab.1) più un'undicesima, ossia quella che misurava l'utilizzo di prodotti biologici in cucina. Tutte le undici variabili sono qualitative categoriche. Al fine di ricostruire i profili si è proceduto seguendo due step. In primo luogo si è condotta un'analisi delle corrispondenze multiple (ACM) e, solo successivamente, una

[9] Il marchio *Qualità Parco* si riferisce al Parco Naturale Adamello Brenta ed è *"*un progetto di attestazione ambientale/marketing territoriale, avviato dopo la Certificazione ISO 14001 ottenuta dal Parco nel 2001 (1° in Europa) per diffondere la filosofia della qualità ambientale, coinvolgendo il tessuto economico/sociale: aziende ricettivo turistiche, agro alimentari, scuole e strutture tipiche. Il progetto premia le aziende che rispondono a requisiti di tutela ambientale e legame col territorio e aderiscono alla cultura del Parco, concedendo l'uso del logo Qualità Parco*"* (il testo è tratto dal link www.pnab.it/cosa-facciamo/qualita-parco.html a cui si rinvia per ulteriori approfondimenti).

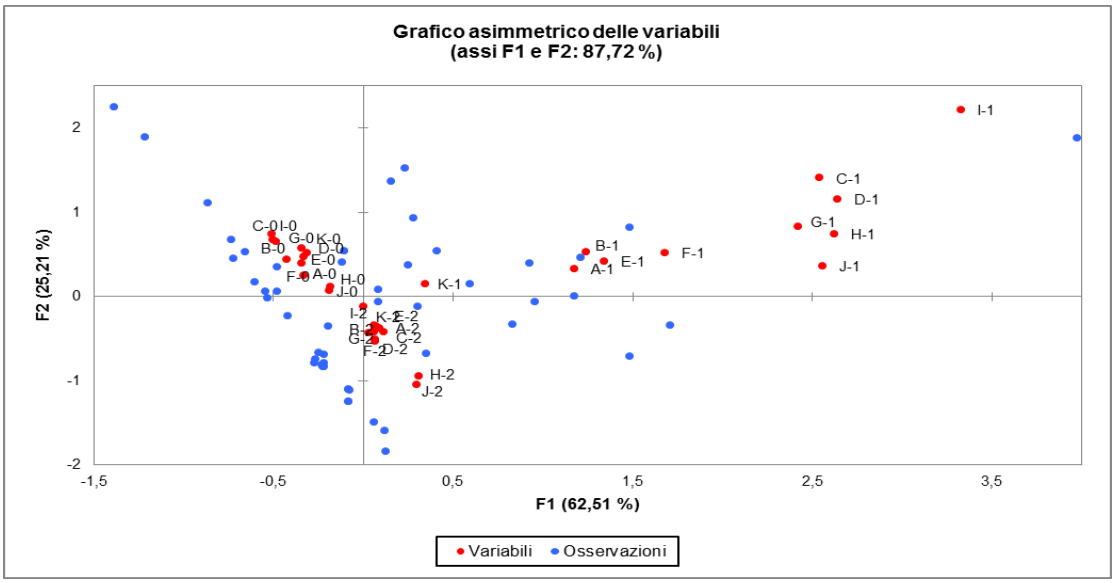
cluster analysis. La natura delle variabili, infatti, non permetteva di condurre l'analisi dei cluster sui dati originali.

La ACM era finalizzata a ridurre il numero di variabili e riposizionare i dati all'interno di un nuovo piano cartesiano, individuando due nuovi assi principali; la *cluster analysis* invece è stata condotta allo scopo di profilare le imprese in base all'investimento ambientale (passato e futuro) ricostruendone motivazioni e legami con alcuni key player del territorio. Nello specifico:

- La ACM ha restituito un output in cui i due nuovi assi individuati spiegano l'87,72% dell'inerzia totale. Dall'output grafico ottenuto avvalendoci del software XLstat 2017 (cfr Figura 1), emerge che l'asse orizzontale misura il livello d'intenzionalità futura relativo all'investimento ambientale, mentre l'asse verticale rileva la presenza (o assenza in caso di valore pari a 0) delle EMPs considerate all'interno dell'albergo. La posizione delle imprese all'interno della mappa dipende pertanto dagli investimenti già sostenuti in pratiche ambientali e dalle intenzioni future a tal proposito.
- L'individuazione dei due nuovi assi principali in cui collocare variabili e osservazioni ha permesso di condurre una *hierarchical ascendant cluster analysis* e, disponendo in questa fase di dati quantitativi, si è utilizzata la matrice di distanza euclidea. La *cluster analysis* ha restituito 3 gruppi che si differenziano per livello di investimento nelle pratiche ambientali e intenzioni future.

L'analisi multivariata ha ricostruito i profili di albergatori ed ha permesso di analizzare, per ciascun profilo, le motivazioni che spingono a sostenere investimenti in EMPs e se le DMO e i parchi influenzanole scelte strategiche delle imprese. I risultati emersi dall'analisi multivariata sono illustrati nei paragrafi 4.2-4.4.

Fig. 1: Output analisi delle corrispondenze multiple



Legenda		
	A	Pannelli solari
	B	Isolazione termica
	C	Temporizzatore luci
	D	WC a flusso differenziato
	E	Uso detersivi bio
	F	Noleggio bici
	G	Convenzione trasporti
	H	Riutilizzo acque bianche
	I	Ricambio asciugamani
	J	Irrigazione con acque meteoriche
	K	Prodotti bio

Legenda: l'etichetta "variabili" si riferisce a 11 EMPs analizzate congiuntamente alle tre possibili opzioni di risposta (0, 1, 2). Le "osservazioni" identificano le 1347 imprese alberghiere che hanno partecipato alla ricerca.
Fonte: ns. elaborazione

4. Risultati della ricerca

4.1 EMPs adottate dalle imprese alberghiere in Trentino

L'analisi descrittiva illustra le EMPs adottate dalle imprese alberghiere e come sono cambiati gli investimenti nell'arco del decennio 2005-2015. Come già anticipato (cfr par. 3.2) non è stato possibile compiere l'analisi longitudinale rispetto a tutte le pratiche adottate. È tuttavia possibile, cogliere le differenze negli investimenti di specifiche EMPs facendo riferimento all'opzione di risposta "non adottate". Tale analisi evidenzia la crescita degli investimenti in pratiche ambientali da parte delle imprese alberghiere (cfr Tabella 3 e 4).

Gli aumenti più evidenti hanno riguardato le pratiche ambientali a favore del *risparmio energetico*, con un aumento dei pannelli solari/fotovoltaici, rispettivamente, dal 22,4% e 6% (anno 2005) al 41,7% del decennio successivo (52,1% se si considerano gli investimenti dichiarati in previsione). Un aumento significativo anche nell'adozione dell'isolazione termica: dal 44% al 59,3% (70% se si considerano gli investimenti in previsione).

La pratica maggiormente presente è il temporizzatore delle luci, adottato dal 70,4% delle imprese. Questa particolare misura permette di ridurre sensibilmente gli sprechi energetici, impostando al minimo la durata dell'illuminazione di corridoi, scale o passaggi della struttura. Diversa la situazione relativa all'utilizzo della card magnetica per il funzionamento dell'elettricità nelle camere, adottata dal 33% degli albergatori.

Per quanto riguarda il *risparmio idrico*, l'aumento è visibile solo considerando l'installazione di WC a flusso differenziato, adottato dal 54% (58% se si considerano gli investimenti in previsione) contro il 44% registrato nel 2005. Le altre due misure afferenti al risparmio idrico, "riutilizzo delle acque bianche" e "irrigazione mediante acque meteoriche" sono investimenti più complessi, che richiedono un intervento sulla struttura ed è ragionevole ipotizzare che sia per tale ragione che l'aumento sia più contenuto rispetto ad altre pratiche.

Per quanto concerne *il ricambio degli asciugamani solo su richiesta del cliente* si osserva che è una pratica adottata da oltre l'87,3% degli alberghi. Come già evidenziato, tale risultato è coerente con i dati ENEA (cfr par. 3.1) e con quanto dichiarato da EPA (United States Environmental Protection Agency) che riscontra un risparmio sui carichi di lavaggio sino al 17% nei consumi di acqua. In riferimento alle pratiche connesse alla *mobilità*, infine, si osserva un aumento di interesse da parte delle imprese alberghiere, dato che rafforza quanto già riscontrato nel 2005.

Tab. 3: Adozione di EMPs nelle imprese alberghiere (anno 2005)

EMPs	ADOTTATA E IN PREVISIONE	NON ADOTTATA
RISPARMIO ENERGETICO		
- Pannelli solari	22,40%	77,6%
- Pannelli fotovoltaici	6,00%	94,0%
- Isolazione termica	44,00%	56,0%
RISPARMIO IDRICO		
- Wc a flusso differenziato	43,20%	56,8%
- Riutilizzo acque bianche	8,70%	91,3%
- Irrigazione con acque meteoriche	7,80%	92,2%
ALTRO		
- Uso di detersivi senza fosforo	44,30%	55,7%
- Uso di detersivi biodegradabili > 90%	67,50%	32,5%
- Agevolazione con servizi pubblici di trasporto	44,10%	55,9%
- Noleggio gratuito di biciclette	41,80%	58,2%

Fonte: ISPAT, 2006

Tab. 4: Adozione di EMPs nelle imprese alberghiere (anno 2015)

EMPs	ADOTTATA	IN PREVISIONE	NON ADOTTATA
RISPARMIO ENERGETICO			
- Pannelli solari/fotovoltaici	41,7%	10,4%	48,0%
- Isolazione termica	59,3%	10,7%	30,0%
- Card magnetica per l'elettricità	33,1%	8,4%	58,5%
- Temporizzatore delle luci	70,4%	3,6%	26,0%
RISPARMIO IDRICO			
- Wc a flusso differenziato	54,0%	4,1%	42,0%
- Riutilizzo acque bianche	10,0%	5,0%	85,0%
- Irrigazione con acque meteoriche	10,6%	4,7%	84,7%
ALTRO			
- Uso di detersivi senza fosforo/biodegradabili > 90%	54,7%	8,7%	36,6%
- Agevolazione con servizi pubblici di trasporto	54,5%	4,2%	41,3%
- Noleggio gratuito di biciclette	43,8%	7,9%	48,3%
- Ricambio asciugamani solo su richiesta dei clienti	87,3%	1,6%	11,1%

Fonte: ns. elaborazione

4.2 EMPs ed environmental commitment: identificazione dei profili di imprese alberghiere

Come anticipato, la *cluster analysis* è stata effettuata al fine di profilare le imprese alberghiere rispetto al livello di *environmental commitment*. A tale scopo si è deciso di analizzare gli investimenti effettuati dalle imprese per l'adozione delle EMPs osservando se gli investimenti erano già stati sostenuti o se erano in previsione. Si è proceduto pertanto a calcolare - per ogni albergo - il numero di EMPs adottate e il numero di EMPs in previsione e, successivamente - per ogni cluster - si è calcolata la media dei due valori. In relazione alle EMPs indagate dalla ricerca, il valore massimo di pratiche adottabili era pari a undici, ossia le dieci pratiche illustrate in Tabella 1 più l'utilizzo di prodotti biologici in cucina I risultati ottenuti da questa analisi sono illustrati in Tabella 5.

Tab. 5: EMPs adottate e in previsione per ogni cluster di imprese alberghiere

	Media di EMPs adottate (*investimenti effettuati*)	Media di EMPs in previsione (*investimenti futuri*)	% di imprese alberghiere presenti nel cluster (n=1347)
Cluster 1 NOT ECO FRIENDLY	4,1	0,4	55,3%
Cluster 2 PROACTIVE	7,7	0,3	31,6%
Cluster 3 REACTIVE	5,2	3,0	13,1%

Fonte: ns. elaborazione

Il *primo cluster* presenta un basso grado d'investimento ambientale e include tutti gli imprenditori che negli ultimi anni non hanno investito, o hanno investito in minima parte, nelle pratiche ambientali analizzate. Bassa risulta anche l'intenzionalità futura a investire in questa direzione. Questo gruppo è costituito dal 55,3% delle imprese alberghiere ed è identificabile come cluster poco propenso a compiere investimenti in sostenibilità ambientale. Per tale ragione è stato denominato *not eco friedly*.

Il *secondo cluster* si caratterizza per un aver adottato un elevato numero di pratiche ambientali (mediamente 7,7 su 10 possibili) e per una bassa intenzionalità futura. Gli investimenti già effettuati dalle imprese paiono giustificare una minore propensione ad investire in un prossimo futuro proprio perché già dotate di numerose EMPs. Questo gruppo è costituito da circa un terzo delle imprese alberghiere ed è riconducibile ad un profilo di albergatori in grado di cogliere, prima di altri, le

opportunità offerte da investimenti nell'ambito della sostenibilità ambientale. Per tali ragioni si è deciso di denominare questo cluster *proactive*.

Il *terzo cluster* mostra una significativa intenzionalità futura ad investire in EMPs e include due tipi di imprese: gli albergatori aventi già investito in passato ed intenzionati ad investire ulteriormente in futuro e gli albergatori intenzionati a rendere la propria struttura maggiormente eco-friendly attraverso investimenti a valenza ambientale. Questo gruppo è costituito dal 13% delle imprese alberghiere ed è stato denominato *reactive* poiché, nonostante il minor grado d'investimento effettuato, ha dichiarato di essere intenzionato a investire in un prossimo futuro riducendo pertanto il gap rispetto agli albergatori *proactive*.

I risultati della *cluster analisys* si arricchiscono di significato se confrontati con la precedente indagine condotta nel 2005. Sebbene non sia possibile un confronto puntuale dei dati (in virtù delle differenze metodologiche tra le due indagine come già illustrato nel par. 3.1), a distanza di dieci anni si riscontra una crescita di interesse delle imprese alberghiere per la dimensione della sostenibilità ambientale. Nel 2005, infatti, le imprese alberghiere riconducibili al *cluster proactive* erano pari al 9,1% del totale degli alberghi in Trentino.

Al fine di comprendere elementi distintivi dei tre cluster si è proceduto ad analizzare le motivazioni che hanno indirizzato le imprese a sostenere e/o programmare investimenti per l'adozione di pratiche ambientali e la diffusione di certificazioni e/o etichette ambientali. L'analisi di questi risultati è illustrata nel paragrafo che segue.

La ricerca ha indagato infine se il *cluster proactive* coinvolge maggiormente imprese localizzate in ambiti turistici in cui la DMO è particolarmente sensibile alle dimensioni della sostenibilità, e se vi è un legame tra questo cluster e la presenza sul territorio di parchi e/o aree naturali protette. I risultati di questa analisi sono illustrati nel paragrafo 4.4.

4.3 Motivazioni ad investire in EMPs e diffusione delle certificazioni

La ricerca ha analizzato se vi sono differenze tra i tre cluster rispetto alle motivazioni che hanno spinto le imprese alberghiere ad investire per l'adozione di pratiche ambientali. Le motivazioni, come già illustrato (cfr par. 3.1), fanno riferimento sia alla ricerca di vantaggi di costo e di competitività, sia a dimensioni di carattere etico e culturale. Il confronto tra le dichiarazioni degli albergatori rispetto al grado di accordo con le motivazioni analizzate è illustrato in Tabella 6.

I test del chi quadro evidenziano differenze significative (con valori del p-value che, ad eccezione di un caso, è sempre inferiore allo 0,0001) sulla percezione e l'opinione da parte dei tre cluster riguardo alle motivazioni per cui investire in pratiche ambientali. Le ragioni possono essere ricondotte sia a logiche di mercato (vantaggio economico e competitivo), sia alla sensibilità dell'albergatore. I risultati evidenziano due aspetti di particolare rilievo:

- il maggior grado di accordo rispetto alle motivazioni è associato ai cluster *proactive* e *reactive*;
- il maggior grado di accordo si riscontra in motivazioni non strettamente riconducibili a logiche di mercato quali ragioni etiche (il 49,3% dei *proactive* e il 53,1% dei *reactive* è completamente d'accordo) e l'importanza di veicolare una cultura di forte simbiosi e radicamento con il territorio (il 48,1% dei *proactive* e dei *reactive* è completamente d'accordo).

Da tale analisi emergono alcune specificità che differenziano i tre cluster.

Rispetto al cluster *reactive* emerge una motivazione di stampo etico che descrive questo gruppo di imprese come tendenzialmente consapevoli dell'importanza della sostenibilità ambientale e potenzialmente intenzionati a colmare il gap con il cluster *proactive* investendo in EMPs in un prossimo futuro.

Il cluster *not eco-friendly* mostra invece risultati sensibilmente inferiori rispetto agli altri due gruppi e le motivazioni per sostenere investimenti appaiono guidate dalla ricerca di vantaggi di natura economica. I risparmi in termini di costo risultano l'elemento più importante per questo cluster. Minore accordo si riscontra invece rispetto alle motivazioni che guidano gli investimenti in sostenibilità ambientale perché ritenuti fonte di vantaggio competitivo o fattore imprescindibile per rimanere sul mercato.

Tab. 6: Livello di accordo dei tre cluster rispetto alle motivazioni ad investire in EMPs.

	MOLTO D'ACCORDO	ABBASTANZA D'ACCORDO	POCO D'ACCORDO	PER NULLA DISACCORDO	CHI-SQUARED	P-VALUE
Sono apprezzate dai clienti					**57,4833**	**<0,0001**
NOT ECO-FRIENDLY	21,0%	46,4%	27,3%	5,4%		
PROACTIVE	36,9%	44,8%	17,4%	0,9%		
REACTIVE	35,6%	40,7%	21,5%	2,3%		
Permettono un risparmio in termini di costo					**24,9060**	**0,0004**
NOT ECO-FRIENDLY	25,7%	51,1%	18,7%	4,6%		
PROACTIVE	33,8%	46,7%	18,1%	1,4%		
REACTIVE	26,6%	57,1%	16,4%	0,0%		
Possono costituire un vantaggio competitivo					**39,6892**	**<0,0001**
NOT ECO-FRIENDLY	15,7%	42,5%	33,1%	8,7%		
PROACTIVE	25,8%	43,4%	27,2%	3,5%		
REACTIVE	27,7%	43,5%	26,6%	2,3%		
Possono essere un fattore imprescindibile per rimanere sul mercato					**34,1991**	**<0,0001**
NOT ECO-FRIENDLY	11,2%	40,5%	37,5%	10,9%		
PROACTIVE	17,8%	46,7%	30,1%	5,4%		
REACTIVE	14,1%	52,0%	29,9%	4,0%		
Mi stanno a cuore per ragioni etiche					**75,0996**	**<0,0001**
NOT ECO-FRIENDLY	30,0%	50,9%	14,3%	4,8%		
PROACTIVE	49,3%	43,2%	6,3%	1,2%		
REACTIVE	53,1%	39,0%	6,8%	1,1%		
In Trentino sono importanti per veicolare una cultura di forte simbiosi col territorio					**69,5510**	**<0,0001**
NOT ECO-FRIENDLY	29,0%	51,5%	15,2%	4,3%		
PROACTIVE	48,1%	41,1%	10,6%	0,2%		
REACTIVE	48,0%	45,2%	5,1%	1,7%		

Fonte: ns. elaborazione

Le informazioni riguardo alle certificazioni di processo, e/o di gestione ambientali, e/o etichette ambientali ne evidenziano una limitata diffusione. Un primo riscontro emerge già ad un livello descrittivo di analisi confrontando le variazioni intercorse tra il 2005 e 2015. Le imprese alberghiere in possesso di certificazione sono passate dal 4,8% al 10,8%. Nel complesso si osserva che gli investimenti in processi di certificazione da parte delle imprese alberghiere non sono stati particolarmente numerosi nonostante vi sia stato, da un lato, un generale aumento di interesse verso la dimensione ambientale, dall'altro lato, politiche di incentivazione promosse dall'attore pubblico sino al 2010 finalizzate all'adozione di etichette ambientali.

L'analisi multivariata dei dati mette in luce una differenza statisticamente significativa tra i cluster (chi-squared 117,4609; p-value <0,0001) sia rispetto all'attuale disponibilità di certificazioni, sia riguardo alla pianificazione di investimenti nel prossimo futuro (cfr Tabella 7).

Tab. 7: Diffusione delle certificazioni (attuali e future) tra i tre cluster

	% di alberghi in possesso di certificazione	% di alberghi con procedimento di certificazione in corso	% di alberghi senza certificazione
NOT ECO FRIENDLY	5,0%	2,2%	92,8%
PROACTIVE	19,3%	6,8%	73,9%
REACTIVE	14,1%	4,5%	81,4%

Fonte: ns. elaborazione

4.4 Legami tra le scelte in investimenti ambientali delle imprese alberghiere e alcuni key player locali

La ricerca ha analizzato se i tre cluster presentassero differenze rispetto alla collaborazione delle imprese alberghiere con alcuni key player locali coinvolti nello sviluppo e nella promozione del territorio. Nello specifico si è osservato se vi è un diverso coinvolgimento delle imprese alberghiere nelle attività svolte con le DMO territoriali e con gli altri albergatori e se emergono altresì differenze nell'adesione a club di prodotto (sia a livello provinciale che nazionale)[10].

I risultati dimostrano che il cluster *proactive* si differenzia in modo statisticamente significativo per maggiore collaborazione con le DMO e con gli altri albergatori ed evidenzia anche maggiore propensione ad aderire a forme di aggregazione quali i club di prodotto (cfr Tabella 8). La maggiore disponibilità a collaborare con soggetti esterni all'impresa può essersi rivelata uno dei fattori facilitanti la sensibilizzazione e la consapevolezza di questo cluster di imprese verso la sostenibilità ambientale.

Tab. 8: Analisi del legame con il territorio dei tre cluster individuati

	Sì	**No**	**chi-squared**	**p-value**
Collaborazione con DMO			**29,606**	**<0,0001**
NOT ECO FRIENDLY	62,6%	37,4%		
PROACTIVE	77,9%	22,1%		
REACTIVE	70,1%	29,4%		
Collaborazione con altri albergatori			**45,337**	**<0,0001**
NOT ECO FRIENDLY	19,9%	80,1%		
PROACTIVE	36,4%	63,6%		
REACTIVE	36,2%	63,8%		
Appartenenza a club di prodotto			**86,886**	**<0,0001**
NOT ECO FRIENDLY	8,6%	91,4%		
PROACTIVE	27,7%	72,3%		
REACTIVE	7,9%	92,1%		

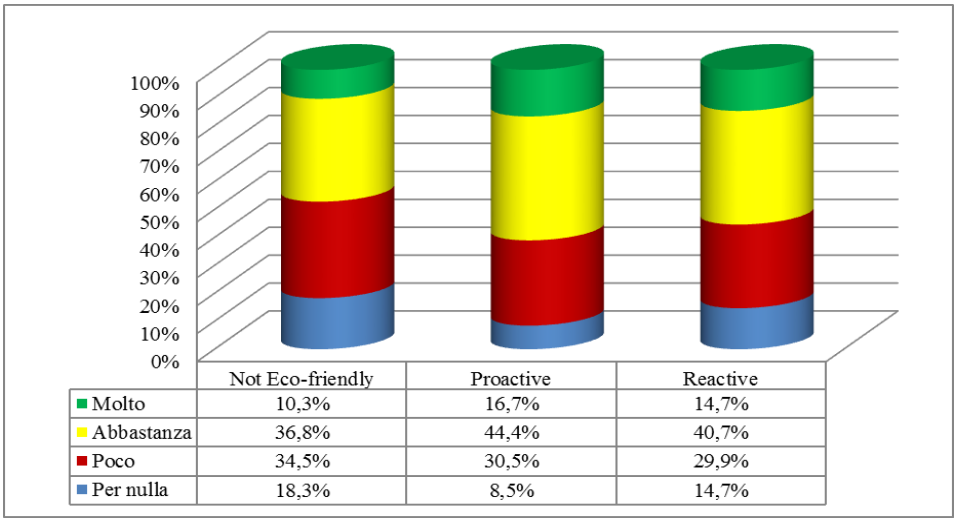
Fonte: ns. elaborazione

La ricerca ha rilevato anche il giudizio degli albergatori riguardo al livello di collaborazione con le DMO territoriali. Anche in questo caso, la differenza tra i tre cluster è statisticamente significativa (chi-squared 32,397; p-value < 0,0001) ed è particolarmente marcata tra il cluster *not eco friendy* (cluster 1) e il *cluster proactive* (cluster 2) (cfr Figura 1). Tale analisi evidenzia inoltre una maggiore somiglianza del cluster *reactive* (cluster 3) a quello *proactive* a conferma di quanto già evidenziato dall'analisi delle motivazioni a supporto degli investimenti in EMPs, ossia la tendenza di questo terzo cluster a ridurre il gap che lo separa dal cluster *proactive*.

[10] Per un elenco esaustivo dei club di prodotto che coinvolgono le imprese ricettive alberghiere in Trentino si rinvia al link www.turismo.provincia.tn.it/osservatorio/Laboratorio/Laboratorio_Ricettivita/

Dall'analisi del grado di collaborazione delle imprese alberghiere con le DMO si riscontra pertanto un legame tra i cluster 2 e 3 e la pressione che questi key player esercitano sulle scelte di investimento in EMPs. L'influenza della DMO risulterebbe uno dei fattori determinanti della proattività ambientale delle imprese alberghiere.

Fig. 2: Analisi del grado di collaborazione dei tre cluster con le DMO locali



	Not Eco-friendly	Proactive	Reactive
Molto	10,3%	16,7%	14,7%
Abbastanza	36,8%	44,4%	40,7%
Poco	34,5%	30,5%	29,9%
Per nulla	18,3%	8,5%	14,7%

Fonte: ns. elaborazione

Un ulteriore livello di analisi ha riguardato la diffusione del cluster *proactive* all'interno delle diverse aree turistiche del Trentino. Obiettivo era evidenziare se vi fosse una relazione tra ambiti più turisticizzati (in cui si riscontra anche la presenza di una DMO) e imprese alberghiere orientate ad investimenti green. Per determinare il livello di turisticità dell'ambito ci si è avvalsi del grado di utilizzo netto delle strutture alberghiere. I risultati così ottenuti sono illustrati in Tabella 9.

Ciò che emerge è che l'ambito più turisticizzato non necessariamente è anche quello con maggiore presenza di imprese *proactive*. Emblematici gli esempi di Garda Trentino e Valle di Fiemme. Da questa analisi emergono due principali considerazioni:

- il supporto dell'ente pubblico è stato efficace nell'aumentare a livello provinciale il grado d'investimento in pratiche ambientali da parte delle imprese alberghiere;
- permangono differenze territoriali nelle scelte di investimento delle imprese nonostante l'impegno dell'attore pubblico e le dimensioni contenute della destinazione.

Una ulteriore evidenza emerge dalle cosiddette "zone fuori ambito", ossia aree meno turisticizzate e prive di una vera e propria DMO (prevalgono infatti pro loco). In esse la presenza di imprese *proactive* è del 22,6% contro il 31,6% della media provinciale, inoltre (sebbene non visibile in Tabella 9) in esse è inferiore anche la quota di imprese reattive: 7,1% contro il 13,1% provinciale. La particolarità delle "zone fuori ambito" è la mancanza di un importante ruolo d'indirizzo della DMO. Tale attività viene svolta invece da consorzi e/o associazioni pro-loco, piuttosto che enti di livello inferiore con una minore capacità di direzione e di manovra gestione. È possibile quindi che la bassa attenzione agli investimenti ambientali non sia dovuta solamente ad una decisione o alla mancanza di sensibilità del singolo albergatore, ma anche all'assenza di una spinta dall'alto o di una rete che coinvolga tutti i soggetti turistici locali e che favorisca e diffonda iniziative di questo tipo.

Tab. 9: Analisi delle aree turistiche in termini di presenza del profilo pro-active

AMBITO TURISTICO DEL TRENTINO	GRADO DI UTILIZZO NETTO	% IMPRESE APPARTENENTI AL CLUSTER PROACTIVE
Garda Trentino	**63,0%**	29,4%
Val di Fassa	60,4%	32,6%
Val di Sole	59,1%	32,3%
Val di Fiemme	55,7%	**44,9%**
Madonna di Campiglio - Pinzolo - Rendena	51,7%	27,4%
Trento, Bondone e Valle dei Laghi	48,6%	32,7%
Altipiani Cimbri	46,3%	35,0%
Primiero e Vanoi	42,8%	32,1%
Dolomiti Brenta - Paganella	39,7%	38,2%
Rovereto	36,2%	20,6%
Terme di Comano - Brenta	34,7%	32,1%
Valsugana - Tesino	31,0%	25,3%
Valle di Non	30,3%	29,6%
Altopiano di Piné - Cembra	25,0%	25,0%
Zone fuori ambito*	23,5%	22,6%
Totale Risultato	**48,8%**	**31,6%**

Legenda: Le zone fuori ambito sono prive di una DMO di riferimento.

Fonte: ns. elaborazione

L'ultima analisi ha riguardato se le scelte di investimento delle imprese alberghiere fossero influenzate dalla localizzazione della struttura all'interno dell'area di uno dei tre parchi naturali. Questo tipo di analisi è stata effettuata sia riguardo all'investimento ambientale sia rispetto all'adesione a strumenti volontari di certificazione (di processo, di gestione ambientale, etichette ambientali e marchio "qualità parco"). Come si può osservare, la posizione geografica non discrimina gli investimenti in pratiche ambientali (Tabella 10). Il risultato è evidenziato dai valori assunti dal chi-quadro (4,9734) e dal p-value (0,08).

Tab. 10: Localizzazione dei tre cluster in relazione ad un'area parco

	Imprese interne all'area parco	Imprese esterne all'area parco
NOT ECO FRIENDLY	37,8%	62,2%
PROACTIVE	36,2%	63,9%
REACTIVE	28,8%	71,2%

Fonte: ns. elaborazione

5. Conclusioni

La ricerca ha messo in luce aspetti nuovi ed originali rispetto alla propensione delle imprese alberghiere in Trentino ad investimenti che limitino gli impatti ambientali ed ha sottolineato l'importanza che alcuni *key stakeholder* della destinazione svolgono nell'incentivare l'adozione di EMPs. L'analisi dei cluster ha permesso di graduare la sensibilità degli albergatori trentini verso l'introduzione di pratiche ambientali individuando tre diversi profili: *not eco friendly*, *proactive* e *reactive.*

Negli ultimi dieci anni l'investimento a valenza ambientale delle imprese alberghiere è aumentato di pari passo con l'attenzione delle politiche pubbliche verso interventi a favore del contenimento degli impatti ambientali. Il ruolo determinante dei sussidi pubblici (anche attraverso il FESR comunitario) è spiegato dall'aumento dal 9,1% al 31,6% di imprese alberghiere appartenenti al cluster *proactive*.

L'incentivo pubblico è stato sicuramente il punto di partenza verso scelte green, soprattutto considerando le caratteristiche e gli oneri collegati agli investimenti a valenza ambientale particolarmente critici per le Pmi. Tuttavia l'incentivo non è stato l'unico motore in quanto i risultati evidenziano che gli albergatori *proactive* e *reactive* dimostrano una propensione maggiore alla collaborazione con la DMO e con gli altri albergatori, così come all'adesione a club di prodotto.

Il maggior numero di albergatori che hanno investito in EMPs, è spiegato sia dalla maggiore consapevolezza da essi acquisita verso le tematiche di sostenibilità ambientale e il valore etico che ad esse riconnettono, sia dall'influenza esercitata da alcuni key stakeholder locali che richiamano i tratti di *stakeholder power* e *stakeholder pressure* illustrate in letteratura. Si conferma pertanto l'orientamento di queste imprese alberghiere a considerare interessi ed influenze di alcuni soggetti esterni. Si ritiene che tale scelta imprenditoriale sia coerente con l'adozione di un nuovo business model capace di generare vantaggio competitivo sia per l'impresa che per il contesto in cui sono inserite conseguendo, come stressato da Porter e Kramer (2011) e Boons *et al.* (2012), un risultato "win-win for firm and system".

La ricerca condotta sulla totalità di imprese alberghiere in Trentino incontra il limite della estendibilità dei risultati ad altri territori poiché concentrata su di un'unica destinazione *community*. Anche in ragione di questo limite, in futuro si prevede che la ricerca si estenderà sia a livello territoriale, sia a livello temporale e settoriale.

A *livello territoriale*, si prevede di indagare le scelte delle imprese alberghiere anche in altre destinazioni. Tale analisi consentirà di verificare se i tre profili emersi dalla ricerca sono coerenti anche con quanto accade in altre destinazioni, e se e quali key player supportano le imprese nell'adozione di EMPs.

A *livello temporale*, si prevede di replicare l'analisi longitudinale condotta nel 2015 verificando se e come i profili descritti si modificheranno nel corso dei prossimi dieci anni.

A *livello settoriale*, infine, si prevede di estendere l'analisi anche ad altre imprese coinvolte nella filiera turistica, quali ad esempio le imprese funiviarie. L'obiettivo è analizzare se e come la sensibilità ambientale riscontrata nelle imprese alberghiere interessi anche altri key players che con la propria attività impattano inevitabilmente sull'ambiente, ossia su una risorsa scarsa che risulta fondamentale per la competitività delle destinazioni.

Bibliografia

ÁLVAREZ GIL M.J., BURGOS JIMÉNEZ J., CÉSPEDES LORENTE J.J. (2001), "An analysis of environmental management, organizational context and performance of Spanish hotels", *Omega*, vol. 29, n. 6, pp. 457-471.

AYUSO S. (2006), "Adoption of Voluntary Environmental Tools for sustainable tourism", *Corporate Social Responsibility and Environmental Management*, vol. 13, n. 4, pp. 207-220.

BECCALI M., LA GENNUSA M., LO COCO L., RIZZO G. (2009), "An empirical approach for ranking environmental and energy saving measures in the hotel sector", *Renewable Energy*, vol. 34, n. 1, pp. 82-90.

BEETON S. (2006), *Community development through tourism*, Landlinks Press, Collingwood.

BLANCO E., REY-MAQUIEIRA J., LOZANO J. (2009), "Economic incentives for tourism firms to undertake voluntary environmental management", *Tourism Management*, vol. 30, n. 1, pp. 112-122.

BOHDANOWICZ P. (2005), "European hoteliers' environmental attitudes. Greening the Business", *Cornell Hotel and Restaurant Administration Quarterly*, vol. 46, n. 2, pp. 188-204.

BOONS F., LÜDEKE-FREUND F. (2013), "Business models for sustainable innovation", *Journal of Cleaner Production*, vol. 45, pp. 9-19.

BORNHORST T., RITCHIE B.J.R., SHEEHAN L. (2010), "Determinants of tourism success for DMOs & destinations", *Tourism Management*, vol. 31, n. 5, pp. 572-589.

BRAMWELL B., LANE B. (1993), "Sustainable tourism: An evolving global approach", *Journal of Sustainable Tourism*, vol. 1, n. 1, pp. 1-5.

BRAMWELL B., LANE B. (2000) (Eds.), *Tourism collaboration and partnerships: Politics, practice and sustainability*, Channel View Publications, Clevedon.

BRAMWELL B., LANE B. (2011), "Critical research on the governance of tourism and sustainability", *Journal of Sustainable Tourism*, Vol. 19, n. 4-5, pp. 411-421.

BRAMWELL B., SHARMAN A. (1999), "Collaboration in local tourism policymaking", *Annals of Tourism Research*, Vol. 26, n. 2, pp. 392-415.

BUFFA F. (2013), *Struttura e dinamiche di relazione tra Pmi. approcci di metodo nelle destinazioni turistiche di tipo community*, Cedam, Padova.

BUHALIS D., MAIN H. (1998), "Information technology in peripheral small and medium hospitality enterprises", *International Journal of Contemporary Hospitality Management*, vol. 10, n. 5, pp. 198-202.

BUMYONG A., BONGKOO L., SCOTT SHAFER C. (2002), "Operationalizing sustainability in regional tourism planning: An application of the limits of acceptable change framework", *Tourism Management*, Vol. 23, n. 1, pp. 1-15.

BUTLER R.W. (1999), "Sustainable Tourism: A state-of-the-art review", *Tourism Geographies*, vol. 1, n.1, pp. 7-25.

BYRD E.T. (2007), "Stakeholders in sustainable tourism development and their role", *Tourism Review*, vol. 62, n. 2, pp. 6-13.

CARNEIRO M.J., LIMA J., SILVA A.L. (2015), "Landscape and the rural tourism experience: identifying key elements, addressing potential, and implications for the future", *Journal of Sustainable Tourism*, vol. 23, n. 8-9, pp. 1217-1235.

CASARIN F. (2007), *Il marketing dei prodotti turistici. Specificità e varietà*. Vol. I, Giappichelli, Torino.

CÉSPEDES-LORENTE J., DE BURGOS-JIMÉNEZ J., ÁLVAREZ-GIL M. (2003), "Stakeholders' environmental influence. An empirical analysis in the Spanish hotel industry", *Scandinavian Journal of Management*, vol. 19, n. 3, pp. 333-358.

CHAN E.S.W., HAWKINS R. (2010), "Attitude towards EMSs in an international hotel", *International Journal of Hospitality Management*, vol. 29, n. 4, pp. 641-651.

CROUCH G.I., (2007), "Modelling destination competitiveness: A survey and analysis of the impact of competitiveness", *Report of the Cooperative Research Centre for Sustainable Tourism*.

DWYER L., EDWARDS D., MISTILIS N., ROMAN C. SCOTT, N. (2009), "Destination and enterprise management for a tourism future", *Tourism Management*, Vol. 30, n. 1, pp. 63-74.

EL DIEF M., FONT X. (2010), "Determinants of Environmental Management in the Red Sea hotels", *Journal of Hospitality and Tourism Research*, vol. 36, n. 1, pp. 115-137.

FARRELL B.H., RUNYAN D. (1991), "Ecology and tourism", *Annals of Tourism Research*, vol. 18, n. 1, pp. 26-40.

FERRERO G. (2001), "Nuove tendenze negli studi sulla piccola impresa", *Piccola Impresa/Small Business*, n. 1, pp. 3-7.

FONT X., MCCABE S. (2017), "Sustainability and marketing in tourism", *Journal of Sustainable Tourism*, vol. 25, n. 7, pp. 869-883.

FRAJ E., MATUTE J., MELERO I. (2015), "Environmental strategies and organizational competitiveness in the hotel industry", *Tourism Management*, vol. 46, February, pp. 30-42.

FRANCH M. (a cura di) (2010), *Marketing delle destinazioni turistiche. Metodi, approccio e strumenti*, McGraw-Hill, Milano.

FRANCH M., MARTINI U. (a cura di) (2013), *Management per la sostenibilità dello sviluppo turistico e la competitività delle destinazioni*, Il Mulino, Bologna.

GOLINELLI G.M. (1992), "I problemi strategici delle imprese minori", *Sinergie*, n. 27, pp. 25-31.

GONZÁLEZ-BENITO J., GONZÁLEZ-BENITO Ó. (2006), "A review of determinant factors of environmental proactivity", *Business Strategy and the Environment*, vol. 15, n. 2, pp. 87-102.

GÖSSLING S., HALL, C.M., WEAVER D.B. (2009), *Sustainable tourism futures*, Routledge, New York.

GÖSSLING S., PEETERS P., HALL C.M., CERON J.P., DUBOIS G., LEHMANN L.V., SCOTT D. (2012), "Tourism and water use: Supply, demand, and security. An international review", *Tourism Management*, vol. 33, n.1, pp. 1-15.

HALL C.M. (1994), *Tourism and politics: Policy, power and place*, John Wiley, Chichester.

HALL C.M. (1999), "Rethinking collaboration and partnership: A public policy perspective", *Journal of Sustainable Tourism*, vol. 7, n. 3-4, pp. 274-289.

HALL C.M. (2011), "A typology of governance and its implications for tourism policy analysis", *Journal of Sustainable Tourism*, vol. 19, n. 4-5, pp. 437-457.

HALL, C.M., JENKINS, J.M. (1995), *Tourism and public policy*, Routledge, London.

HARDY A., BEETON R.J.S., PEARSON L. (2002), "Sustainable tourism: An overview of the concept and its position in relation to conceptualisations of tourism", *Journal of Sustainable Tourism*, vol. 10, n. 6, pp. 475-496.

HJALAGER A.M. (1996), "Tourism and the environment: The innovation connection", *Journal of Sustainable Tourism*, vol. 4, n. 4, pp. 201-218.

HUNTER C. (1997), "Sustainable tourism as an adaptive paradigm", *Annals of Tourism Research*, vol. 24, n. 4, pp. 850-867.

HUNTER C., GREEN H. (1995), *Tourism and Environment: a sustainable relationship*?, Routledge, London.

INSKEEP E. (1997), *Tourism Planning*; Van Nostrand Reinhold, New York.

ISPAT - SERVIZIO STATISTICA DELLA PROVINCIA AUTONOMA DI TRENTO (2006), L'imprenditoria alberghiera nella Provincia di Trento 2004, Servizio Statistica, Trento.

ISTAT (2017), *Annuario statistico italiano 2017*, Istat, Roma.

JAMAL T., STRONZA A. (2009), "Collaboration theory and tourism practice in protected areas", *Journal of Sustainability Tourism*, vol. 17, n. 2, pp. 169-189.

KASPAR C. (1995), *Management im Tourismus*. Verlag Paul Haupt, Bern.

KELLER P., BIEGER T. (Eds.) (2004), *The Future of Small and Medium Sized Enterprises in Tourism*, 54th Aiest Congress (Petra, Jordan), Editions AIEST, St. Gallen, CH.

KIRK D. (1995), "Environmental management in hotels", *International Journal of Contemporary Hospitality Management*, vol. 7, n.6, pp. 3-8.

KOZAK M., RIMMINGTON M. (1998), "Benchmarking: destination attractiveness and small hospitality business performance", *International Journal of Contemporary Hospitality Management*, vol. 10, n. 5, pp. 184-191.

LÓPEZ-GAMERO M.D., MOLINA-AZORÍN J.F., CLAVER-CORTÉS E. (2009), "The whole relationship between environmental variables and firm performance", *Journal of Environmental Management*, vol. 90, n. 10, pp. 3110-3121.

MACKAY K.J, FESENMAIER D.R (1997), "Pictorial element of destination in image formation", *Annals of Tourism Research*, vol. 24, n. 3, pp. 537-565.

MARCHINI I. (1997), "Il difficile rapporto tra piccola impresa e marketing: lo stato delle conoscenze", *Piccola Impresa/Small Business*, n. 1, pp. 3-12.

MARTINI U. (2013), "Introduzione. Approccio alla sostenibilità, governance e competitività delle destinazioni turistiche: stato dell'arte e prospettive", In Franch M., Martini U. (a cura di) *Management per la sostenibilità dello sviluppo turistico e la competitività delle destinazioni*, Il Mulino, Bologna.

MATTIACCI A., CECCOTTI F. (2005), "Lo sviluppo del marketing nella Pmi: riflessioni a margine di un'esperienza d'impresa", *Micro & Macro Marketing*, n. 1, pp. 65-92.

MAZANEC J.A., WOEBER K., ZINS A.H. (2007), "Tourism destination competitiveness: From definition to explanation?", *Journal of Travel Research*, vol. 46, n. 1, August, pp. 86-95.

MCKERCHER B. (1993), "Some Fundamental Truths about Tourism", *Journal of Sustainable Tourism*, vol. 1, n. 1, pp. 6-16.

MIDDLETON V.T.C, HAWKINS R. (1998), *Sustainable tourism: A marketing perspective*, Butterworth-Heinemann, Oxford.

MIHALIC T. (2000), "Environmental management of a tourist destination. A factor of tourism competitiveness", *Tourism Management*, vol. 21, n. 1, pp. 65-78.

MOLINA-AZORÍN J.F., CLAVER-CORTÉS E., PEREIRA-MOLINER J., TARÍ J.J. (2009), "Environmental practices and firm performance", in *Journal of Cleaner Production*, vol. 17, n. 5, pp. 516-524.

MURPHY P.E. (1985), *Tourism: A community approach*, Methuen, New York.

MURPHY P.E., MURPHY A.E. (2004), *Strategic Management for Tourism Communities: Bridging the Gaps*, Channel View Books, Clevedon.

PENCARELLI T. (1992), "Riflessioni sulle possibili linee di sviluppo delle PMI negli anni '90", *Sinergie*, n. 27, pp. 153-178.

PORTER M.E., KRAMER M.R. (2011), "Creating Shared Value", *Harvard Business Review*, vol. 89, pp. 62-77.

RITCHIE J.R.B., CROUCH G.I. (2005), *The competitive destination: A sustainable tourism perspective*, CABI Publishing, Oxon.

RIZIO D. (2016), *A multicriteria perspective to integrate environmental management and environmental accounting in the tourism industry. The case of Small and Medium-sized Hotel Enterprises (SMHEs) in the Alpine Province of Trento*, PhD thesis, University of Trento.

RYAN C. (2002), "Equity, management, power sharing and sustainability. Issues of the 'new tourism'", *Tourism Management*, vol. 23, n. 1, pp. 17-26.

SÁNCHEZ-MEDINA, P.S., DÍAZ-PICHARDO, R., CRUZ-BAUTISTA, M. (2016), "Stakeholder Influence on the Implementation of Environmental Management Practices in the Hotel Industry", *International Journal of Tourism Research*, vol. 18, n. 4, pp. 387-398.

SHEEHAN L.R., RITCHIE J.R.B., HUDSON S. (2007), "The destination promotion triad", *Journal of Travel Research*, vol. 46, n. 1, pp. 64-74.

SWARBROOKE J. (1999), *Sustainable Tourism Management*, CABI: Wallingford (UK).

TANG Y.H., AMRAN A., GOH Y.N. (2014), "Environmental management practices of hotels in Malaysia", *International Journal of Tourism Research*, vol. 16, n. 6, pp. 586-595.

TARÍ J.J., CLAVER-CORTÉS E., PEREIRA-MOLINER J., MOLINA-AZORÍN J.F. (2010), "Levels of quality and environmental management in the hotel industry", *International Journal of Hospitality Management*, vol. 29, n. 3, pp. 500-510.

WALIGO V.M, CLARKE J., HAWKINS R. (2013), "Implementing sustainable tourism. A multi-stakeholder involvement management framework", *Tourism Management*, vol. 36, June, pp. 342-353.

WEAVER D.B (2011), "Organic, incremental and induced paths to sustainable mass tourism convergence", *Tourism Management*, vol. 30, n. 1, pp. 1-8.

TRACK - SMALL AND FAMILY BUSINESS

Modes of organizational learning in entrepreneurial firms: lessons from the Open Factory network
FEDERICO BRUNETTI, ANGELO BONFANTI, PAOLA CASTELLANI, ELENA GIARETTA

Innovative family startups for value creation
MELITA NICOTRA, CARMELA ELITA SCHILLACI, MARCO ROMANO

Modes of organizational learning in entrepreneurial firms: Lessons from the Open Factory Network

GIARETTA ELENA[*] BRUNETTI FEDERICO[•] BONFANTI ANGELO[♠] CASTELLANI PAOLA[**]

Abstract

Objectives. *This paper aims to investigate the modes of organizational learning in some Italian entrepreneurial small-medium firms that have participated in Open Factory (OF), the biggest open-doors event in the world of industrial manufacturing culture in North Eastern Italy.*

Methodology. *The present research is based on in-depth interviews with seven Italian entrepreneurial firms participating in the OF network in order to investigate their modes of OL.*

Findings. *This study highlights that entrepreneurial firms participating in the OF are led to reflect deeply on their identity, characteristics, strengths and weaknesses. In this way, they improve their informational and interactive modes of organizational learning and portray themselves better to stakeholders.*

Research limits. *The limitations of this research come from the number of firms taken part in this study, taking a single person in every firm, and carrying out the interviews after the OF event ended.*

Practical implications. *This study suggests to firms that participating to OF network allows them to present and portray themselves better to (internal and external) stakeholders once they had learned to reflect on their identity and characteristics in terms of, for example, employees' skills, production technologies and products. In addition, this paper proposes a number of advantages in terms of OL provided to firms by their participation in the OF event.*

Originality of the study. *In studies about management learning the modes of learning in entrepreneurial firms remain one of the less explored topics in practical terms. This paper provides practical evidence by proposing the Open Factory Network as analysis context.*

Key words: *knowledge management; learning obstacles; reflections; informational learning; interactive learning; entrepreneur mentoring*

[*] Full Professor of *Management* - University of Verona
e-mail: elena.giaretta@univr.it

[•] Full Professor of *Management* - University of Verona
e-mail: federico.brunetti@univr.it

[♠] Associate Professor of *Management* - University of Verona
e-mail: angelo.bonfanti@univr.it

[**] Reseacher of *Management* - University of Verona
e-mail: paola.castellani@univr.it

1. Introduction

In today's competitive environment, organizational learning (OL) is a core ability (Argote, 2013; Michailova and Sidorova, 2010) that allows top management to solve problems, make decisions and develop new strategies (Dimovski *et al.*, 2008; Isaksson *et al.*, 2017). Therefore, understanding the ways firms learn represents a key challenge (Yongbin, 2011; Antonacopoulou and Sheaffer, 2014) in terms of organizational competitive advantage. Firms can learn in different ways. Some scholars argued that OL includes knowledge acquisition, information distribution and interpretation, as well as organizational memory (Huber, 1991; Macdonald, 1995), while others highlighted it is important a discussion and dialogue platform to create shared mental models (von Krogh *et al.*, 1994). Given that learning is based on individuals (Dodgson, 1993), modes of learning are examined in the literature in terms of both human learning (Russ, 2012) and OL (Gnyawall and Stewart, 2003). In the former case, learning modes include learning by experiencing, watching, thinking, and experimenting while, in the latter case, informational and interactive modes can be found. Modes of OL have been explored in theoretical terms (Gnyawali and Stewart, 2003) but they have not yet been examined from a practical point of view.

The study of the learning modes appears to be important in entrepreneurial firms, such as family owned firms (Dess, 2011). Here learning can be hindered by context variables that characterize the entrepreneur's decision making process. In this regard it was noted that, by virtue of her/his position, the entrepreneur bears the burden of an image of omniscience that not only does not allow her/him to admit a need for knowledge, but also blocks any attempt to propose different perspectives to her/him (Florén, 2003) that are the basis for the most effective learning systems (Kolb, 1976). According to Hatum and Pettigrew (2004), this 'decision-isolation' and the lack of exposure to different perspectives limits the entrepreneur's and the firm's possibilities for learning and growth. Ozgen and Baron (2007), supported by empirical evidence (Florén, 2003), argue that external sources (mentors, informal networks, professional forums, collaborative approaches within peer groups) have a direct and positive effect on opportunity recognition by entrepreneurs and their learning processes. Nevertheless, the issue of the learning process in the entrepreneurial firms doesn't appear to have been much explored from an organizational perspective.

This paper, therefore, aims to fill these gaps in the extant literature by exploring the modes of learning OL of entrepreneurial firms. More specifically, this study investigates the modes of organizational learning in some Italian entrepreneurial small-medium firms that have participated in Open Factory (OF), the biggest open-doors event in the world of industrial manufacturing culture in North Eastern Italy. It involves mainly a variety of entrepreneurial firms of various types, sizes and industrial sectors. Two are the research questions: a) Can the participation to the OF event facilitate the organizational learning of firms? and b) What are the modes of organizational learning more developed from these firms? The choice of examining OF in terms of OL depends on the peculiarities of this cultural event that helps firms develop different learning modes starting from a greater understanding and awareness of themselves.

The remainder of this paper is organized as follows: first, it provides a literature review about modes of learning in the entrepreneurial context; it then describes the OF initiative after which the methodological approach is explained; then the findings are presented and discussed; finally, implications, limitations and the future research agenda are proposed.

2. Literature review

In the past three decades there has been an exponential growth in the number of academic articles about OL in the entrepreneurial field. In this section, we focus on the management and organization literature offering a review of articles on the dimensions and modes of OL.

2.1. Epistemological and ontological dimensions of OL

OL is a broad concept (Wang and Ahmed, 2003) that has been heavily discussed for a long time. As long ago as the 1970s Argyris and Schon (1978) first focussed on OL especially examining how, when and why OL occurs (Pedler *et al.,* 1989; Dodgson, 1993; Ben-Horin Naot *et al.,* 2004; Baškarada *et al.,* 2016).

According to Moreno-Luzon and Lloria (2008), the concepts of learning, knowledge and information are closely linked together. More specifically, "information acts as a meaningful input that generates the learning processes and constitutes the basis for acquiring knowledge. The discussion and reflection concerning these concepts and their relationships forge a link between the two concepts and integrates them into two aspects of the same reality: learning and knowledge creation. Here, learning is the process of creating knowledge and knowledge is something people learn" (Begoña Lloria and Moreno-Luzon, 2014: 693).

In the management and organization literature, OL is defined in different ways. It can basically be understood in terms of a change in a firm's knowledge (Argote and Miron-Spektor, 2011) or in terms of the capacity or the process of acquisition and development of cognitive and behavioural skills, knowledge and know-how by firm's members (Leroy and Ramanantsoa, 1997; Koening, 1994). This does not mean that OL is the sum of each member's learning (Dodgson, 1993; Argyris and Schon, 1978). Even if learning, knowledge building, and knowledge creation are social processes (Nonaka and Takeuchi, 1995; Frid, 2000; von Krogh *et al.,* 2000) whereby firms learn through their members (Kim, 1993), OL is knowledge that is transmitted over time by means of organizational routines, procedures, norms and cultures (Nielsen, 2015). Thus, individual learning and OL are different concepts that do not exclude each other but rather complement each other. Given that 'knowledge is embodied in the people' (Leonard, 1998), individual learning provides the grounding for OL (Leroy and Ramanantsoa, 1997).

These aspects have been examined in terms of the epistemological and ontological dimensions of OL. The epistemological dimension refers to explicit and tacit human knowledge (Nonaka, 1994; Nonaka and Takeuchi, 1995; Nonaka and Toyama, 2005; Lam, 2000; Chang *et al.*, 2012). Tacit knowledge is personal, intuitive and contextual, and it can be acquired through shared understanding and practical experience, i.e. learning by doing. Explicit knowledge, in contrast, can be codified and generated through logical deduction and acquired via formal study. Essentially, knowledge creation occurs through the dynamic interaction and combination of tacit and explicit knowledge.

The ontological dimension, on the other hand, distinguishes between different levels of learning by individuals, groups and organizations, exploring their interaction (Lam, 2000; Dodgson, 1993). Thus individual learning is knowledge of the firm owned by each of its members in terms of ideas and skills. Group learning includes the ways knowledge is distributed and shared among members of a firm such as routines and knowledge bases. Individual and group learning feed OL through which people change their shared mental models (Senge and Sterman, 1994). These three ontological levels highlight that the OL process is dynamic in nature.

Another definition of OL highlights that it occurs as firm acquires experience. According to Levitt and March (1988: 319), OL is "the learning from direct experience, how organizations learn from the experience of others, and how organizations develop conceptual frameworks or paradigms for interpreting that experience". This link between knowledge and experience (Davenport and Prusak, 1998; Leonard and Sensiper, 1998) emphasizes the importance of the experiential learning approach (Kolb, 1984), examined more at individual (Kolb and Kolb, 2005) rather than organizational level.

2.2. Human and organizational learning as modes of learning

"A mode of learning is a systematic organizational process through which shared understanding is enhanced in organizations" (Gnyawall and Stewart, 2003: 69). In the literature, this topic is

examined in terms of both human learning and OL.

From the human learning point of view, experiential learning theory (Kolb, 1984) argues that people learn through a recursive, holistic, and dialectic cycle of four learning modes: concrete experience, reflective observation, abstract conceptualization, and active experimentation. More specifically, concrete experience is learning by experiencing, given that people learn through immediate, receptive, involving and here-and-now experiences. Reflective observation is learning by watching the attitudes, thoughts, and/or behaviours that emerge during the concrete experience. These observations from the concrete experience lead people to abstract conceptualization, based on learning by thinking, given that people conceptually build an idea, generalization, or personal theory to critically analyse, elaborate new implications for action, and draw conclusions. Active experimentation is connected to concrete experience and it enables one to reassess one's attitudes, thoughts, or behaviours into future situations and new experiences. These four learning modes can be subsumed into following two dimensions:

1) the perceiving (or 'grasping experience') dimension that includes concrete experience and abstract conceptualization, and
2) the processing (or 'transforming experience') dimension that includes reflective observation and active experimentation.

From the OL point of view there are essentially two learning modes, informational and interactive. The informational mode of learning is a structural process developed by a firm to acquire, analyse, distribute, share, and store information in its memory (Huber, 1991; Walsh and Ungson, 1991; Macdonald, 1995). This learning mode is based on the following aspects:

a) acquiring information gained from outside the organization;
b) learning from the experience of other firms;
c) gathering new and explicit data;
d) taking an adaptive learning approach;
e) developing analytical and structural learning (Gnyawali and Stewart, 2003).

The interactive mode of learning is instead a social process highlighting the importance of a firm's interactions inside and outside of organizational boundaries to develop shared understanding "in an effort to resolve and make sense of multiple interpretations of events" (Nonaka, 1994; Senge, 1990; von Krogh *et al.*, 1994, cited in Gnyawali and Stewart, 2003, p. 71). This learning mode is based on dialogue among firm's members, learning from direct experience, simulating experience, learning while innovating, and learning from discovery, exploration and experimentation.

This study analyses how entrepreneurial firms have developed different modes of OL through their participation in the Open Factory event.

3. The Open Factory (OF) Network

The OF event is the biggest open-doors event in the world of industrialized manufacturing culture in North-East Italy that involves many companies.

The idea was born in 2015 from two historical cultural events supervised by the promoter of OF in collaboration with some local public organizations called "Festival città impresa" and "Salone europeo della cultura". In particular, "Festival città impresa" is an event where entrepreneurs, opinion leaders and local actors debate about economy, politics and culture. It provided for the "open factories" day which enjoyed a lot of interest from visitors. "Salone europeo della cultura" is a project that aims to build a system of relations through the creation of cultural events. It promoted craftshow edited by artisans showing the production process of a product (a table, a vase, a mosaic...). This proposal involved so much the audience that it expressed the wish to visit directly the "places of doing". So, in 2015, from the original idea of the "Festival città impresa", the format of the "Salone europeo della cultura" was transformed in OF event.

The participating firms open their doors to everyone who wishes to live an unconventional experience between the production lines of a plant, a construction site or another business place.

During these encounters the firms' story is told to the public, each in their own way, by the founder and/or their employees.

OF is a cultural event that is based on an intense interaction of several public and private local stakeholders. The participants in this network are: 1) VeneziePost, the organizer and promoter, 2) firms (50 in 2015, 72 in 2016), 3) audience (15,277 visitors in 2016), 98% from the North-East of Italy, and 4) partners (13 including main partners, patrons, collaborators, media partners) who view OF as a platform that enables them to get in touch with many firms.

VeneziePost (veneziepost.it) is a non-political network for reflection, observation, analysis, study that looks at the North-East of Italy as a socio-economic laboratory. It is based on a complex network of more than 300 members (private subjects, local associations and institutions) and promotes/organizes about 100 events, with a function of news aggregator and place for discussion and analysis. Within OF, VeneziePost performs the following activities:

a) it defines the communication plan (website, social campaign, printed guide, relationship with the press, interface with the public until the day of the event);
b) it provides firms with a info-communication kit with which firms can promote OF in coordination with VeneziePost;
c) it directs and coordinates the events promoted as part of OF;
d) it draws up, in collaboration with each participating firm, the program of activities that each firm chooses to offer the public;
e) it manages the visitor registration to the event; and
f) it facilitates the comparison between the various business experiences and encourages the relationship between those participating, either in the pre- or post- event, by trying to promote ways for cooperation and stimulating firms in a positive perception of belonging to a unique phenomenon and to a ever developing network.

The firms involved in OF operate in different industries, from mechanics to green innovation factory and mechatronics, from design to food and wine, from logistics to construction and craft workshops and from healthcare to services. These include small, medium and large enterprises. Also company museums. All these companies are characterized by a common 'open approach', i.e. they have a philosophy of openness and sharing. If a firm wanted to put limitations on the visit, for example, for fear of imitation, it would not allowed to join the network because it would not be able to represent the true spirit of the initiative. Among the participating firms, 40% had already established a working relationship with VeneziePost, 30% has been reported by observer experts (e.g., teachers and journalists), while the remaining 30% had heard of the event and decided to participate. Moreover, all the participating firms are entrepreneurial in nature (second and third generation): the entrepreneur wishing to be at the forefront in the story. These companies feel an ethical duty to share their history and their social values.

From an organizational point of view, firms participating in OF offer visitors an unconventional experience of knowledge about their history and business through a program of activities which can include guided tours of the production departments and laboratories, workshops, talks, book presentations, and special events. Each business event is generally organized for a Sunday afternoon and can last more than four hours during which each firm, inter alia, presents and describes itself, displays what it does, shows their accomplishments in progress or completed, tries to exhibit a building in an original way, explains how their products are made, teaches visitors how to read a label in order to promote an informed purchasing choice and offers tastings of their products.

4. Methodology

4.1. Research strategy

The present research was conducted following an inductive and phenomenon-driven approach, that generally allows to test a theory, motivate a research question, inspire new ideas and, ultimately, generate new theory by starting from a concrete business case (Gioia *et al.*, 2013; Klag

and Langley, 2013; Eisenhardt *et al.*, 2016). This method was chosen for the uniqueness and importance of the case we encountered, which represented a phenomenon so particular that was considered worthy of interest to scientific research.

This study was based on interviews with seven Italian firms participating in the OF scheme in order to investigate their modes of OL. The use of this method enables a holistic understanding of respondents' experiences that could not have otherwise been achieved (Kulik *et al.*, 2012).

The singularity of the event under examination justified such a choice. We did not start from a literature review according to a gap-spotting approach (Alvesson and Sandberg, 2011), but rather we observed an innovative business experience following a discovery-oriented attitude. Therefore, we gained significant insights both in theoretical and practical terms.

Without disregarding the requirements needed to ensure an acceptable degree of rigor in our research (Eisenhardt and Graebner, 2007; Gibbert *et al.*, 2008), we prioritised the relevance dimension (Lorsch, 2009; Pfeffer, 2009). Such a dimension is more suitable to yield more practicable knowledge (Gephart, 2004), as it ought to be with management research (Gummesson, 2001; Bartunek *et al.*, 2006) as theory should not just result in a "purely self-referential exercise rather than as an attempt to better understand the world" (Siggelkow, 2007, pp. 23-24).

4.2. Data collection and analysis

After contacting and interviewing VeneziePost (the promoter and organizer of the event), we proceeded to set up appointments for semi-structured in-depth interviews with each respondent firm to obtain detailed information in accordance with the aims of this study. Table 1 gives information on the seven firms considered. Based on time and availability of the informants, telephone and face to face interviews were conducted. This meant that we could not capture human emotions; however, it decreased the risk of the interviewer affecting the interviewees' responses (Silverman, 2011). Each interview lasted from 60 to 240 minutes. The interview questions were the seven following: a) Why did the company choose to participate the Open Factory event? b) What has the company offered visitors? c) In what ways has it applied its learning or what has it learned that it consider useful to introduce into the organization? d) In terms of OL, what advantages has the company obtained through to its participation in the Open Factory event?

Tab. 1: Main information about firms interviewed

Name	**Location in Italy (foundation year)**	**Core business**	**Interviewed**	**Proposal in OF**
Carraro Group	Campodarsego, Padua (1932)	Systems for the transmission of power and agriculture equipment	Head of Communication and Senior Specialist of Communication	Guided tour of the productive part of the plant involving employees as guides. Visit of a photo exhibition about the firm's origins. Aperitif with musical entertainment. Possibility of momento photo with the tractors exhibited.
Dolciaria A. Loison	Costabissara, Vicenza (1938)	Pandoro, panettone, colomba and other baked goods	President	Guided tour of the production site, visit to the multifunction hall usually dedicated to conferences, visit to the corporate museum, and tasting products as a final moment of the visit.
Grandi Molini Italiani (GMI)	Venice (1921)	Flour milling and bakery	Product marketing and communication manager	Presentation of the firm and its products (flour). Visit to the different departments: laboratories, packaging, automated warehouse and mill.
Seguso Vetri D'Arte	Campiello San Maffio a Murano, Venice (1397)	Custom-designed lighting and furniture for the residential sector, international hotel chains; private label production for major luxury and fashion brands	CEO	'Seguso experience': a multi-sensory journey guided by the Seguso family. Guests visit the furnace where they are able to observe the master craftsmen at work and attend glass processing steps. Visit to the archive and final discussion.
Unox	Cadoneghe, Padua (1990)	Intelligent and technologically advanced ovens, services and experiences for all businesses	Digital Public Relation, Marketing and Communication manager	'Live Show Cooking' with Corporate Chef and the use of ingredients and recipes of the firm. Participants taste the 3-course Gourmet meal created by Corporate Chef. 'Live Experience': the participants try their skills in making pastry.
VeneziePost	Padua (2004)	Platform for meetings and discussion to provide adequate services to the world's business growth	Programme Director	Definition of the OF program along with the participating firms, promotion of OF, management of the visitor registrations and production of the OF brochure.

Source: Our elaboration

Based on the approach of Eisenhardt and Graebner (2007) data collection was performed by multiple investigators. The collected data were later discussed together among the researchers. Given the exploratory nature of the study, this choice allowed the maximum possible breadth of interpretations, thus enriching the resulting research with different insights.

The interviews were audio recorded and later transcribed and checked for accuracy. To examine the data, conventional content analysis was undertaken (Stemler, 2001) via Qualitative Solutions and Research (QSR) NVivo 10 software. In this regard, we have made to flow categories from the data by avoiding using preconceived categories (Kondracki and Wellman, 2002) and, only subsequently, we have associated the categories emerged from data to names for categories about the modes of OL defined by Gnyawali and Stewart (2003). The coding of themes was inductively carried out (Saldana, 2009) in relation to the study's purpose. Table 2 presents the research findings.

Tab. 2: Modes of OL: description and application in the entrepreneurial firms

Modes of OL	**Description**	**Application of the mode of OL in the entrepreneurial firms**
Informational mode	• Reflection about existing methods of acquiring, distributing, and interpreting information • Refinement of what is already known and transferring the knowledge to other individuals in the company	• Obtaining information from different stakeholders • Learning from the experience of other organizations • Developing analytical and structural learning
Interactive mode	• Stimulation of the entrepreneur to reflexive knowledge of the firm's history, future prospects, elements of differentiation • Activation of a 'process of dialogue' among organizational members • Experimentation with different set-ups for some internal spaces and different roles for people within the firm • Strengthening of a form of social learning gathering opinions, feelings and perceptions of the visitors on the business reality • Promotion of learning from a direct experience, for example in the case of organizational change or as an instrument of organizational intelligence • Realization of learning from a simulating experience (for example a training or socialising experience) • Support of learning from insight development and discovery • Development of tacit knowledge • Development of embedded knowledge in the minds of company members, in their social relationships, in norms, attitudes and information flows	• Acquiring the right way of communication with stakeholders, understanding how to succeed in focusing the objectives and the contents to be transmitted during OF • Suspending own judgments, assumptions and theories-in-use and thinking as a team • Adopting different points of view by grasping more strongly the character of the intra and inter organizational interdependence • An overall understanding of the real-time relational and competitive environment in which the firm operates • Learning can improve performance, and thus intelligence, as confirmed by studies of learning by doing, by case observations, by theoretical analyses • Designing or performing structured experiences and measuring targeted teamwork competencies and learning objectives • Implementing knowledge in an active way, from an explicit '*know what*' to an implicit '*know how*' and even 'know why', in order to create new knowledge through discovery and reflection • Working at different stages with different people to make a multi-sensory message, in an unconscious way • Reflecting on how the company can improve its competences and capabilities

Source: Our elaboration

5. Findings and discussion

5.1. Informational mode of OL

Given that OF is not a trade exhibition or a business-to-business exchange with people that already know that specific industrial area, entrepreneurial firms that participated in this event need to build a communication path suitable to portray themselves in a new and unusual way. To better learn how they can focus on the main objectives and content to be transmitted, the firms need to reflect on their existing methods of acquiring, distributing, and interpreting information. More

specifically, the firms interviewed have obtained informative and operational support from different stakeholders. The Carraro Group highlighted this by commenting:

> *'We have learned to acquire information on how the registration to the event can be carried out through the help of VeneziePost, how to organize the event with experts, how to ensure safety, and how to manage the children's entertainment during the corporate visit'.*

In addition, they have gained information from outside the organization, also by learning from the experience of other organizations. Again Carraro Group stated:

> *'We have created contact opportunities with other firms such as Birrificio Antoniano and Loison that have collaborated during OF. Seeing their relationship enabled us to understand that we too can develop relationships with some firms that have a similar mindset to ours'.*

In order to prepare each event, firms develop analytical and structural learning. They study in detail how they can better portray themselves by examining what information is important to collect, who should be involved, what rolesare required, how to redefine the functionality of the interior and exterior spaces in the company, how to articulate the visit proposal, the timing of the event and handle the flowof visitors. In this regard, Carraro Group stated:

> *'To portray ourselves in the best way, we have chosen to make use of technical and institutional guides and we learned how to organize the event in detail. We have tried to be analytical in all phases of the planning of the event, such as training of work teams, promotion of the recruitment of employees who participated voluntarily in the various activities, definition of roles within the event management team and establishment of equal rules for everyone'.*

The choice of these entrepreneurial firms to present and portray themselves to firm's members and stakeholders has led these firms to refine what they already know about the firm and what information it is important to transfer to other individuals and units of firm. Grandi Molini Italiani stated this as follows:

> *'We have strengthened our firm's know-how about the events organization and communication. In addition, the direct dialogue with consumers always brings ideas and consumer insights as well as perceptions that they have about the company and our products'.*

5.2. Interactive mode of OL

Interaction is a critical component in reconciling conflicting perspectives and in developing shared understanding. All entrepreneurial firms interviewed have seen, in their participation in OF, an opportunity to interact inside and outside their organizational boundaries. An in-depth analysis of their experiences in Open Factory has led to the identification of a number of the instances of the interactive mode through which participating firms realized organizational learning. These modes include: 1) Reflexive knowledge, 2) Process of dialogue, 3) Social learning, 4) Organizational learning from direct experience, 5) Learning from simulating experience, 6) Learning from insight development and discovery, 7) Development of tacit knowledge, and 8) Development of embedded knowledge. Each of these is described in more detailed as follows.

1. The interaction with VeneziePost has been important to acquire the right way of communicating with stakeholders, also leading the entrepreneur to reflexive knowledge

(Schirato and Webb, 2002). Indeed within the context of OF, they needed to adopt a way of communicating that was different from the one used for trade exhibitions or for a B2B exchange with experienced industry partners. The interaction with VeneziePost has been important to better understand how to succeed in focusing the objectives and the contents to be transmitted. VeneziePost has supported them in defining the 'narrative plot' to be proposed. And this kind of commitment has often implied for the firm the necessity of deep internal reflection. After initial contact aimed at understanding the firm's history, its future prospects and its elements of differentiation, VeneziePost usually helps to define the format which each firm can use to enhance the experiential dimension of visitors during OF. In this regard, VeneziePost activates with the firm a process of reflection, discussion and knowledge exchange, often with a Socratic approach, aimed at outlining a proposed 'trip' through which the public can discover the firm's history and its social value. A case in point is Bios Line, a Paduan leader in the research and distribution of supplements and cosmetics based on plant extract. Since a large part of the production process is carried out in external specialized laboratories, VeneziePost worked with Bios Line about on what and how the firm could show themselves best to visitors.

'VeneziePost asked the President of Bios Line what he believed to be the most representative product, one that could incorporate the firm's philosophy and reflect the great attention always placed on research. The entrepreneur initially panicked because he could not provide an immediate response. He had to think a few days, then he responded by telephone, one morning at 6 am.!

As the firm focuses much attention on the scientific nature of what it does, producing supplements that sell in health food stores and investing heavily on post-sales assistance (when you phone the Bios Line call center you do not talk to the receptionist but to the herbalist scientist), VeneziePost suggested they describe the science behind the products through the organization of seminars. It suggested they describe how a new product is developed, what scientific principles underline it, what university collaborations have been activated and how they identified the limitations of their products'.

2. A second interactive mode of OL is the 'process of dialogue' among organizational members. When engaged in dialogue, team members suspend their own judgments, assumptions and theories-in-use and genuinely think as one.

   In this regard, managers organizing the Carraro OF promoted a coordination meeting with the company guides of visitor groups and they together developed the planned tour of the firm. This commitment has enhanced the interaction among internal personnel belonging to different corporate levels. As Carraro Group highlighted:

   'It was great to see entering the factory in the production area for the first or second time, someone who is only concerned with numbers or finance or administration; it was a way for executives to see the factory workers'.

   Besides, they learnt through some organizational experiments the uses of spaces and the roles of people. Imagining different set-ups for some of its spaces and experiencing roles different from those these workers perform during their ordinary professional life, the adoption of different points of view has been facilitated helping to grasp more strongly the character of the intra and inter organizational interdependence. In OF, Carraro Group has interpreted different spaces and roles from those usually adopted. As they stated:

   'The firm has, for example, turned the entrance area in a space dedicated to the reception of visitors. It has created a play area for children where personnel walk to reach their offices during their daily work routine and an outside area has been set aside for a purpose of designed photo exhibition and to exhibit the firm's tractors. The canteen has been completely rearranged to provide a buffet and musical entertainment. Moreover, several corporate figures have voluntarily covered different roles: coordination team, reception staff, internal security service, technical guides and R&D guides'.

3. Through observation and interaction, entrepreneurial firms have strengthened a form of social

learning because they were able to gather the level of satisfaction of the visitors, their opinions, feelings and perceptions on the business reality, its organizational aspects and products. This can contribute to the firm's overall understanding of the real-time relational and competitive environment in which it operates. In this regard some interviewees commented:

'We learned that communicating with people is both positive and necessary to capture perception of our brand outside the enterprise' (Loison).

'Our offering and the good experience of visitors triggered a positive word of mouth' (Unox).

The companies analysed in this study have put their reasons for success down to OF public learning at several nested levels within the organization. They were prompted to consider if and how they might change or refine some organizational routines in order to improve competencies, behaviours, procedures, outcomes and strategies.

4. Organizational learning from direct experience is a useful perspective to describe organizational change but it is also an important instrument of organizational intelligence. The speculation that learning can for example improve performance, and thus intelligence, of organizations is confirmed by numerous studies of learning by doing, by case observations, by theoretical analyses.

   Grandi Molini Italiani has focused on an important objective in terms of improvement of internal relations that is a form of organizational intelligence. They commented:

   'We developed the idea of engaging in similar initiatives with our workforce in order to create awareness, pride, team building, and strengthen the sense of belonging'.

5. Some entrepreneurial firms have also realized a learning from simulating experience. Simulating substantial aspects of an experience (for example a training or social experience) can be used as a platform to provide a valuable tool in organizational learning. It can enable retraining and practice until one can master the procedures or skills. It can be applied in designing or performing structured experiences, as well as be used as a measurement tool linked to targeted teamwork competencies and learning objectives.

   Teamwork training in a simulated environment may offer additional benefits to the traditional didactic instruction, enhancement of performance, error reduction and the development of trust and attitudes. The Carraro Group staff have waited for OF with great trepidation, afraid to look bad to their families, colleagues and top management. They have simulated the experience aimed at excellent event management. As one employee observed:

   'We simulated the unwinding times (with specific tests) of the firm's guided tour (speech and walk transfers) to avoid 'bottlenecks' among the numerous groups of guests expected to visit. And the narrators have even memorized their speech, and they have used a stopwatch in the tests to check compliance with time schedules'.

   Their simulations have helped the organization to understand how to improve the management of other important corporate events such as inter alia road shows and participation in trade exhibitions.

6. The research has also highlighted the concept of learning from insight development and discovery, implementing knowledge in an active way which involves a shift from an explicit 'know what' to an implicit 'know how' and even 'know why', in order to create new knowledge through discovery and reflection. Organizational learning can occur if learning agents' discoveries, inventions and evaluations are embedded in the organizational memory that is the means to retain and transmit information from past to future members. Carraro Group has acknowledged the role of organizational memory and its impact on OL, stating:

   'With some photos recovered from a storeroom, we have set up a photo exhibition illustrating the history of the firm and the plant built in the 60s in the architectural style of the Carlo Scarpa school.

   We have understood that it is important to archive our photographic material and create a firm archive, useful for preserving and transmitting the memory of our firm and its entrepreneurship'.

7. A further interactive mode of OL is to develop tacit knowledge. Learning occurs largely

without the explicit intention to learn and in many cases without feedback from the environment to guide the learning process. As CEO of Seguso Vetri D'Arte commented:
'We worked at different stages with different people to make a multi-sensory message, in an unconscious way. What we build day by day requires respect and care. Seguso experience has become a business model, an internal training method ... before it happens, then it grows and evolves… no employee learns a script, he expresses his knowledge of the company in his own words'.

8. A very important concept experienced in some of the cases analyzed is learning to develop embedded knowledge, that resides in specialized relationships between individuals and groups, in norms, attitudes, information flows, ways of making decisions that shape their dealings with each other.
Carraro Group has learned some complex skills and knowledge embedded in the minds of its members and in the formal and informal social relationships that orchestrate their efforts and has reflected about how it can improve its competences and capabilities. As one company manager stated:
'We realized the level of emotional attachment of our employees to the firm. We have discussed about the message to be transmitted and have produced other useful documentation that represents today a 'written heritage'. Before OF many people didn't know how the axle is made. Many human resources have proven project skills. The experience allowed the 'enhancement of some talent', has been a form of 'indirect evidence which revealed the internal climate' and has supported the development of a unified culture'.

6. Implications and conclusions

This study highlighted how entrepreneurial firms have developed both informational and interactive modes of organizational learning through their participation in the Open Factory event. This study found that modes of OL in a firm occur in response not only to competitive pressures associated with technological changes, changes in customers' values or environmental uncertainty (Grossan *et al.*, 1999), but also to meet the needs of internal and external communications, when the companies have to interact with stakeholders inside and outside their organizational boundaries.

OF provided these entrepreneurial firms with the opportunity for in-depth reflections on their strengths and weaknesses, allowing them to develop systematic organizational processes of learning under the guidance of a mentor (VeneziePost). More specifically, the firms interviewed highlighted that they have been able to present and portray themselves better to (internal and external) stakeholders once they had learned to reflect on their identity and characteristics in terms of, for example, employees' skills, production technologies and products. Also they were able to refine what they already knew about themselves. In this sense, this research supports the study of Piaget (1974) who found that learning is triggered by awareness.

In addition, the firms interviewed for this study have learned to portray themselves better to stakeholders through a guided path of internal discovery of their core characteristics through the inspiring and supporting role of VeneziePost. The Socratic approach of VeneziePost has been crucial to enable firms participating in OF to define their identity better, trigger real processes of reflection about themselves and, thus, present themselves in effective ways to local stakeholders, supporting the idea of mentoring as a mean of learning. Although the literature about mentoring appears mostly limited to the internal interpersonal relationships (e.g., Ozkalp *et al.*, 2008), more recently, reports of support experiences to the enterprise by external mentoring figures appear also in the technology transfer literature (Giaretta, 2014). The findings of the study support the importance of using mentoring to transfer knowledge (Swap *et al.*, 2001) and reveals the mentoring mode as additional mode of OL, particularly suitable to entrepreneurial firms, given that it helps entrepreneurs overcome learning obstacles (Florén, 2003) such as decision isolation (Hatum and Pettigrew, 2004).

More generally this study draws attention to the OF event as an external (and social) context that not only helps overcome the learning obstacles of entrepreneurial firms, but also facilitates learning by peer modes (Giaretta, 2014). In particular, this context can be seen as an external source, much more effective than a trade fair and able to have a direct and positive effect on opportunity recognition by entrepreneurs (Ozgen and Baron, 2007) and impacting mostly on their learning processes. Our research thus confirms interactions outside organizational boundaries as an interactive mode of learning.

In summary, this paper offers empirical evidence to support conceptual studies about informational and interactive modes of OL, providing some cues for reflection to future studies about organizational learning. In fact, entrepreneurial firms experimented with different informational and interactive modes of OL through their participation in the OF event, with a predominance of interactive modes, allowing us to conclude that these are particularly suitable for entrepreneurial firms.

A number of advantages in terms of OL are provided to firms that in the future will participate in events such as OF. More specifically, some advantages are the following:

a) mutual knowledge between different organizational units is fostered along with an improved and greater efficiency of internal communication;
b) shared experiences among organizational members develop, sharpen and renew the sense of purpose and of belonging, pride and motivation held by employees, and co-creates the organization's vision and strategy (Taylor *et al.*, 2002);
c) developed ability to better know itself and increase internal awareness within the firm about its history, culture, role and social value; and
d) new forms of interaction outside organizational boundaries with (local) stakeholders are acquired to facilitate business opportunities, also due to involvement in the OF network. In this last regard, this study highlights that an exchange of knowledge and ideas among more firms can create opportunities for partnerships (Kreiser, 2011) and co-branding and new forms of storytelling that we can call co-storytelling.

This research is of course not without limitations. Given that OF is a recently started event and it is still in its infancy, the findings are necessarily related to its current evolutionary stage. Hopefully future events will take place and not be geographically limited to the North-East regions of Italy so that this cultural event can be studied in a wider perspective in terms of OL modes. In addition, OF is a very singular initiative and it is strongly entrenched in the social and cultural context of the Veneto region of Italy. Accordingly, the generalizability of the findings of this study have to be carefully evaluated.

As for the research procedures themselves, the first limitation comes from the number of firms taken part in this study: six firms is a good number but, of course, the more firms involved the better the study would be. Secondly, we talked to just a single person in every firm, namely the male or female entrepreneur or his/her assistant. The research would benefit from a larger number of interviewees in every company. Finally, it must be considered that our research took place shortly after the OF event ended. It may be that a longer passing of time would change the informants' perceptions of the meaning, advantages, disadvantages and overall effects of OF.

Future research could overcome each of these limitations, through a larger sample of firms, a larger number of interviewees in every firm and a greater elapsed time span since the firm's participation in the initiative.

References

ALVESSON M., SANDBERG J. (2011), "Generating research questions through problematization", *Academy of Management Review*, vol. 36, n. 2, pp. 247-271.

ANTONACOPOULOU E.P., SHEAFFER Z. (2014), "Learning in crisis: Rethinking the relationship between organizational learning and crisis management", *Journal of Management Inquiry*, vol. 23, n. 1, pp. 5-21.

ARGOTE L. (2013), *Organizational learning: Creating, retaining and transferring knowledge*, 2nd ed. Springer Science Business Media, New York, NY.

ARGOTE L., MIRON-SPEKTOR E. (2011), "Organizational learning: From experience to knowledge", *Organization Science*, vol. 22, n. 5, pp. 1123-1137.

ARGYRIS C., SCHON D. (1978), *Organizational learning: A theory of action perspective*, Addison-Wesley, Reading, MA.

BARTUNEK J.M., RYNES S.L., IRELAND R.D. (2006), "What makes management research interesting, and why does it matter?", *Academy of Management Journal*, vol. 49, n. 1, pp. 9-15.

BAŠKARADA S., CHANDRAN A., SHOKR M., STEWART C. (2016), "Facilitating organizational learning through agent-based modeling and simulation experimentation", *The Learning Organization*, vol. 23, n. 6, pp. 429-443.

BEGOÑA LLORIA M., MORENO-LUZON M. (2014), "Organizational learning: Proposal of an integrative scale and research instrument", *Journal of Business Research*, vol. 67, pp. 692-697.

BEN-HORIN NAOT Y., LIPSHITZ R., POPPER M. (2004), "Discerning the quality of organizational learning", *Management Learning*, vol. 35, n. 4, pp. 451-472.

CHANG C.-M., HSU M.H., YEN C. (2012), "Factors affecting knowledge management success. The fit perspective", *Journal of Knowledge Management*, vol. 16, n. 6, pp. 847-861.

DAVENPORT T.H., PRUSAK L. (1998), *Working knowledge: How organizations manage what they know*, Harvard Business School Press, Boston.

DESS G.G., PINKHAM B.C., YANG H (2011), "Entrepreneurial orientation: Assessing the construct's validity and addressing some of its implications for research in the areas of family business and organizational learning", *Entrepreneurship: Theory & Practice*, vol. 35, n. 5, pp. 1077-1090.

DIMOVSKI V., HERNAUS T., KIMMAN M., ŠKERLAVAJ M. (2008), "Comparative analysis of the organisational learning process in Slovenia, Croatia, and Malaysia", *Expert Systems with Applications*, vol. 34, pp. 3063-3070.

DODGSON M. (1993), "Organization learning: A review of some literatures", *Organization Studies*, vol. H, n. 3, pp. 375-394.

EISENHARDT K.M., GRAEBNER M.E. (2007), "Theory building from cases: Opportunities and challenges", *Academy of Management Journal*, vol. 50, pp. 25-32.

EISENHARDT K.M., GRAEBNER M.E., SONENSHEIN S. (2016), "Grand challenges and inductive methods: Rigor without rigor mortis", *Academy of Management Journal*, vol. 59 n. 4, pp. 1113-1123.

FLORÉN H. (2003), "Collaborative approaches to management learning in small firms", *Journal of Workplace Learning*, vol. 15, n. 5, pp. 203-216.

FRID R.J. (2000), *Infrastructure for knowledge management*, Writers Club Press, Lincoln, NE.

GEPHART R.P. (2004), "Qualitative research and the Academy of Management Journal", *Academy of Management Journal*, vol. 47, n. 4, pp. 454-462.

GIARETTA E. (2014), "The trust "builders" in the technology transfer relationships: An Italian science park experience", *The Journal of Technology Transfer*, vol. 39, n. 5, pp. 675-687.

GIBBERT M., RUIGROK W., WICKI B. (2008), "What passes as a rigorous case study?", *Strategic Management Journal*, vol. 29, n. 13, pp. 1465-1474.

GIOIA D.A., CORLEY K.G., HAMILTON A.L. (2013), "Seeking qualitative rigor in inductive research: notes on the Gioia Methodology", *Organizational Research Methods*, vol. 16, pp. 15-31.

GNYAWALI D.R., STEWART A.C. (2003), "A contingency perspective on organizational learning: Integrating environmental context, organizational learning processes, and types of learning", *Management Learning*, vol. 34, n. 1, pp. 63-89.

GROSSAN M.M., LANE H.W., WHITE R.E. (1999), "An organizational learning framework: From intuition to institution", *Academy of Management Review*, vol. 24, n. 3, pp. 522-537.

GUMMESSON E. (2001), "Are current research approaches in marketing leading us astray?", *Marketing Theory*, vol. 1, n. 1, pp. 27-48.

HATUM A., PETTIGREW A. (2004), "Adaptation under environmental turmoil: Organizational flexibility in family owned firms", *Family Business Review*, vol. 17, n. 3, pp. 237-258.

HUBER G.P. (1991), "Organizational learning: The contributing processes and the literatures", *Organizational Science*, vol. 2, n. 1, pp. 88-115.

ISAKSSON R., YAMAMOTO Y., GARVARE R. (2017), "Towards a perfect learning process - where is Sweden?", *Sinergie Italian Journal of Management*, vol. 34, n. 100, pp. 57-75.

KIM D.H. (1993), "The link between individual and organizational learning", *Sloan Management Review*, vol. 35, n. I, pp. 37-50.

KLAG M., LANGLEY A. (2013), "Approaching the conceptual leap in qualitative research", *International Journal of Management Reviews*, vol. 15, pp. 149-166.

KOLB A.Y., KOLB D.A. (2005), *The Kolb learning style inventory-version 3.1: Technical specifications*, Hay Group Transforming Learning, Boston, MA.

KOLB D.A. (1976), "Management and the learning process", *California Management Review*, vol. 18, n. 3, pp. 21-31.

KOLB D.A. (1984), *Experiential learning: Experience as the source of learning and development*, Prentice-Hall, Englewood Cliffs, NJ.

KONDRACKI N.L., WELLMAN N.S. (2002). "Content analysis: Review of methods and their applications in nutrition education". *Journal of Nutrition Education and Behavior*, vol. 34, pp. 224-230.
KREISER P.M. (2011), "Entrepreneurial orientation and organizational learning: The impact of network range and network closure", *Entrepreneurship: Theory & Practice*, vol. 35, n. 5, pp. 1025-1050.
KULIK C.T., TREUREN G., BORDIA P. (2012), "Shocks and final straws: Using exit-interview data to examine the unfolding model's decision paths", *Human Resource Management*, vol. 51, n. 1, pp. 25-46.
LAM A. (2000), "Tacit knowledge, organizational learning and societal institutions: An integrated framework", *Organization Studies*, vol. 21, n. 3, pp. 487-513.
LEONARD D. (1998), *Wellsprings of knowledge: Building and sustaining the source of innovation*, Harvard Business School Press, Boston.
LEONARD D., SENSIPER S. (1998), "The role of tacit knowledge in group innovation", *California Management Review*, vol. 40, n. 3, pp. 112-132.
LEROY F., RAMANANTSOA B. (1997), "The cognitive and behavioural dimensions of organizational learning in a merger: An empirical study", *Journal of Management Studies*, vol. 34, n. 6, pp. 871-894.
LEVITT B., MARCH J.G. (1988), "Organizational learning", *Annual Review of Sociology*, vol. 14, pp. 319-338.
LORSCH J.W. (2009), "Regaining lost relevance", *Journal of Management Inquiry*, vol. 18, n. 2, pp. 108-117.
MICHAILOVA S., SIDOROVA E. (2010), "Knowledge management in transition economies: Selected key issues and possible research avenues", *Organizations and Markets in Emerging Economies*, vol. 1, n. 1, pp. 68-81.
MORENO-LUZON M.D., LLORIA M.B. (2008), "The role of non-structural and informal mechanisms of integration and coordination as forces in knowledge creation", *British Journal of Management*, vol. 19, pp. 250-276.
NIELSEN J.E. (2015), "Corporate entrepreneurship, organizational learning and knowledge implementation", *Economic Horizons*, vol. 17, n. 3, pp. 199-214.
NONAKA I. (1994), "A dynamic theory of knowledge creation", *Organizational Science*, vol. 5, n. 1, pp. 14-37.
NONAKA I., TAKEUCHI H. (1995), *The knowledge creating company: How Japanese companies create the dynamics of innovations*, Oxford University Press, Oxford, UK.
NONAKA I., TOYAMA R. (2005), "The theory of the knowledge-creating firm: Subjectivity, objectivity and synthesis", *Industrial and Corporate Change*, vol. 14, n. 3, pp. 419-436.
OZGEN E., BARON R.A. (2007), "Social sources of information in opportunity recognition: Effects of mentors, industry networks and professional forums", *Journal of Business Venturing*, vol. 22, n. 2, pp. 174-192.
OZKALP E., KIREL C., SANGUR Z., OZDEMIR A. (2008), "Mentoring relations in the aircraft industry: A case study in Turkey", *International Journal of Evidence Based Coaching & Mentoring*, vol. 6, n. 2, pp. 67-77.
PEDLER M., BOYDELL T., BURGOYNE J. (1989), "Towards the learning company", *Management Education and Development*, vol. 20, n. 1, pp. 1-8.
PFEFFER J. (2009), "Renaissance and renewal in management studies: Relevance regained", *European Management Review*, vol. 6, n. 3, pp. 141-148.
PIAGET J. (1974), *La prise de Conscience*, PU, Paris.
RUSS T.L. (2012), The relationship between communication apprehension and learning preferences in an organizational setting, *Journal of Business Communication*, vol. 49, n. 4, pp. 312-331.
SALDANA J. (2009), *The coding manual for qualitative researchers*, Sage, Los Angeles, CA.
SCHIRATO T., WEBB J. (2002), "Bourdieu's notion of reflexive knowledge", *Social Semiotics*, vol. 12, n. 3, pp. 255-268.
SENGE P.M. (1990), *The fifth discipline: Art and practice of the learning organizations*, Doubleday, New York.
SIGGELKOW N. (2007), "Persuasion with case studies", *Academy of Management Journal*, vol. 50, n. 1, p. 20.
SILVERMAN D. (2011), *Interpreting qualitative data*, Sage Publications, London.
STEMLER S. (2001), "An overview of content analysis", *Practical Assessment, Research & Evaluation*, vol. 7, n. 17, pp. 1-5.
SWAP W., LEONARD D., SHIELDS M., ABRAMS L. (2001), "Using mentoring and storytelling to transfer knowledge in the workplace", *Journal of Management Information Systems*, vol. 18, n. 1, pp. 95-114.
TAYLOR S.S., FISHER D., DUFRESNE R.L. (2002), "The aesthetics of management storytelling: A key to organizational learning", *Management Learning*, vol. 33, n. 3, pp. 313-330.
VON KROGH G., ICHIJO K., NONAKA I. (2000), *Enabling knowledge creation: How to unlock the mastery of tacit knowledge and release the power of innovation*, Oxford University Press, New York, NY.
VON KROGH G., ROOS J., SLOCUM K. (1994), "An essay on corporate epistemology", *Strategic Management Journal*, vol. 15, n. Supplement S2, pp. 53-71.
WALSH J.P., UNGSON G.R. (1991), "Organizational Memory", *Academy of Management Review*, vol. 10, pp. 57-91.
WANG C.L., AHMED P.K. (2003), "Organisational learning: A critical review, *The Learning Organization*, vol. 10, n. 1, pp. 8-17.
YONGBIN Z., YUAN L., SOO H.L., LONG B.C. (2011), "Entrepreneurial orientation, organizational learning, and performance: Evidence from China", *Entrepreneurship: Theory & Practice*, vol. 35, n. 2, pp. 293-317.

Innovative Family Startups for Value Creation

MELITA NICOTRA[*] CARMELA ELITA SCHILLACI[•] MARCO ROMANO[♠]

Abstract

Objectives. *The paper aims to study the value creation and sustainability of Innovative Pure Family Startups (IPFS), which are innovative startups characterized by a simple family governance, as compared to the Total population of Innovative Startups (TIS).*

Methodology. *Adopting the T-test analysis, the contribution detect if significant differences in terms of financial and profitability performance exist between IPFS and TIS.*

Findings. *Results show the best performances in terms of profitability of the IPFS. Moreover, it is clear the preference of IPFS for debt, as opposed to opening up firm equity to external investors.*

Research limits. *Our results are limited to IPFS and not generalizable to all Innovative Family Startups that include also Innovative Professional Family Startups. Moreover, no distinction is made between Innovative Family Spin-off and Innovative Family Newco.*

Practical implications. *Implications are related to business governance structure and organizational governance to support managerial decision-making process.*

Originality of the study. *The paper tries to fill a gap in both the literature on family business and on entrepreneurshi*p. *On the one hand, it analyzes the start-up phase of family business, generally neglected in family business studies. On the other hand, it detects the contribution of family governance to the innovative startup phenomenon, focusing also on the role of family firms in innovative high tech industries, traditionally under-participated by family businesses as compared to their non-family counterparts.*

Keywords: *family startups; family business; innovative startups.*

[*] Assegnista di ricerca di of *Management* -University of Catania
e-mail: menicotra@unict.it

[•] Full Professor of Management – University of Catania
e-mail: cschilla@unict.it

[♠] Associate Professor of Management - University of Catania
e-mail: romanom@unict.it

1. Introduction

The stereotype of the innovative startupper considers him as a technologist and brilliant guy, without a family business behind him, with no business or consulting experience, who starts his innovative and high-tech activity with some trusted friends in a garage. In parallel, another stereotype sees family businesses' birth and growth in a comfortable context, in traditional sectors not characterized by innovativeness. To confirm or refute such stereotypes, in this work we try to verify if family startups exist in innovative contexts and what are their characteristics and performances, as compared with the rest of innovative startups.

Family businesses represent an important value creator in both industrialized countries and developing economies, contributing to socio-economic growth, affecting market dynamics and offering employment opportunities (Zahra and Sharma, 2004; Anderson and Reeb,2003; Yu *et al.*, 2012; O'Boyle Jr. *et al.*, 2012; Mazzi, 2011; Jiang and Peng, 2011; Chrisman *et al.*, 2008). Various studies suggest that much of the economic activity worldwide unveils a family dimension (e.g. Astrachan and Shanker 2003; Morck and Steier 2005). According to the Family Firm Institute (2018), family firms account for 2/3 of all businesses around the world, contributing annually to an estimated 70%-90% of global GDP. Between 50%-80% of jobs in the majority of countries worldwide are created by family businesses and the 85% of start-up companies are established with family money.

As far as the literature on family business is regarded, numerous works have dealt with family business management and succession issues (Dyer and Handler 1994). Less studied has been the role of family business in nascent entrepreneurial activity, except few works dealing with the entrepreneurial attitude of incumbent family businesses (e.g. Eddleston *et al.*, 2012, Miller *et al.*, 2015). In general, we can affirm that the start-up phase of family businesses has been a stadium neglected by literature.

On the other side, as far as the literature on entrepreneurship is regarded, while there has been a significant body of research focusing on resource requirements, little research has been devoted to the role that family governance plays in startup firms, especially in innovative and high-tech sectors. To fill this gap, we aim to detect the contribution of family firms to the startup phenomenon, to analyze which is the role of family governance in innovative high tech industries.

To sum up, in the present contribution we examine, through an empirical analysis, the phenomenon of "Innovative Family Startups" as compared with the total Innovative Startups in Italy. Thus, under investigation is the phenomenon of family startups with innovative and high-tech characteristics. Actually, since 2012 the Italian Government has been engaged in the creation of a legislation intended to promote the establishment and the growth of new innovative enterprises with a high technological value which has culminated in the Decree-Law 179/2012. The Decree has introduced into the Italian legal system a definition of a new innovative enterprise of high technological value, the "innovative startup". In the paper we will deal with the portion of innovative startups in Italy that are "family businesses". To the best of our knowledge, no studies have captured the phenomenon of the creation of new ventures in high-tech sectors by family members o by existent family firms. As anticipated, family firms are considered to be more likely active in traditional sectors and to under-participate in high-tech industries than their non-family counterparts.

The analysis considers an Innovative Family Startup as a new venture in high-tech sector in which founders are members of the same family: two or more siblings; husbands and wives; parents and sons, cousins and other relatives in law. Family startups can be both "Family Innovative Spin-offs", that are new business projects emerged from strategic processes, vertical integration or diversification strategies of already established family businesses (family intrapreneurship), or "Family Innovative Newco" that are new business projects created by members of the same household and not related to previous business activities (family entrepreneurship). Both typologies are included in the following empirical analysis.

Generally, a vast part of the literature supports the idea that family participation to both the governance structure and the organizational governance can strengthen the business (Tagiuri and Davis 1996; Neubauer and Lank 1998, Villalonga and Amit, 2006; Habbershon *et al.*, 2003; Olson *et al.*, 2003; Van Essen *et al.*, 2011; Martinez *et al.*, 2007; Lee, 2006; Anderson and Reeb, 2003; Andres, 2008; Bjuggren and Palmerg, 2010). However, another part of the literature believes that there is a distortion of the family effect on performance, due to the greater complexity that characterizes family businesses value creation (Milton, 2008; Lubatkin *et al.*, 2005; Morresi, 2009; Westhead and Howorth, 2006).

Therefore, we aim to detect whether, referring to the start-up phase of innovative businesses, the presence of family ties in the governance can affect the performance of innovative startups, as compared to the performance of Total Innovative Startups in Italy. The research objective is to detect if significant differences in terms of financial and profitability performance exist between Family Innovative Startups and Total Innovative Startups founded from 2012.

2. Literature review

When dealing with family business literature, you can note that there is not a single, coherent definition of family business (Astrachan *et al.* 2002; Brockhaus, 2004; Chua *et al.*, 1999; Handler, 1989a e b, Litz, 1995). Chua, Chrisman and Sharma (1999) carried out a review of 250 papers on the argument and got 21 definitions. All of them agreed that all business that are owned and managed by families are family businesses. However, not all the definitions agreed whether a business owned but not managed or managed but not owned by a family constitutes a family business. Sharma (2004) suggested that there are different family business typologies. Astrachan *et al.* (2002) developed the F-PEC scale considering three dimensions of (f)amily influence that are (p)ower, (e)xperience and (c)ulture. The power dimension is the influence of a family on ownership, governance and management. The experience element relates to succession and the number of family members working in the business, and the culture aspect relates to family and business values. Such a scale has been reviewed and used by a number of authors capturing various "souls" of the phenomenon of family business (Björnberg and Nicholson, 2007; Chrisman *et al.*, 2005; Corbetta and Salvato, 2004; Jaskiewicz *et al.*, 2005). Chua *et al.* (1999) developed a definition that could be considered the most inclusive one: "The family business is a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families." (p. 25). Even if in the present paper to develop our thesis we are oriented by such a definition, in the empirical analysis, for issues related to secondary source of data, we take into consideration businesses owned by family members, assuming the existence of a family vision but not checking the real presence of such a vision.

As far as family business studies is concerned, Sharma (2004) identifies four level of studies: the individual level that deals with the characteristics of the founder, the next generation, women, and non-family members. Second, the interpersonal level that deals with contractual agreements, sources of conflict, management strategies and intergenerational transitions. Third, it is the organizational level which looks at the unique resources and capabilities a family business gets as compared to other forms of governance. Fourth, it is the societal level which focuses on the economic importance of family businesses in various countries.

In the present contribution, we adopt the third level of analysis, the organizational level, empirically studying the differences in the performance got by Innovative Family Startups in relation to Total Innovative Start-ups. The interest in the connection between family business and performance, in particular the economic-financial performance, is motivated by the specific nature of family businesses, deriving from the interaction between family and business systems, from

which a complex of unique, rare, precious, non-imitable and non-replaceable resource emerge (Habbershon and Williams, 1999; Schillaci, 2008).

In relation to their performance, a vast part of the literature supports the idea that family members' participation can strengthen the business (Koiranen 2000, 18, 106; Tagiuri and Davis 1996; Neubauer and Lank 1998, Villalonga e Amit, 2006; Habbershon *et al.*, 2003; Olson *et al.*, 2003; Van Essen *et al.*, 2011; Gallucci and Nave, 2011; Martinez *et al.*, 2007; Lee, 2006; Anderson and Reeb, 2003; Andres, 2008; Bjuggren and Palmerg, 2010). However, another part of the literature believes that there is a distortion of the family effect on performance, due to the greater complexity that characterizes family businesses which cause a vicious circle in the processes of value creation (Milton, 2008; Lubatkin *et al.*, 2005; Morresi, 2009; Westhead and Howorth, 2006). The positive performances of family businesses are attributed to the fact that family ties generally give rise to great communication, cooperation and trust, and create understanding (Tagiuri and Davis 1996; Neubauer and Lank 1998). The family brings to the business a series of specific inputs in terms of capital, work, intellectual capacity, culture and trust. The combination of these factors could lead to an improvement in the decision-making processes and the governance mechanisms implemented in the firm. Zahra *et al.* (2008) indicate that the presence of the family stimulates the promotion of a strong corporate culture, enhancing active participation. This family involvement is considered an important element in the longevity and sustainability of the family business. Furthermore, some believe that decision-making process is more centralized and efficient in the family firm (Tagiuri and Davis 1996). It is for this reason that the family business is the type of organization that has the longest life expectancy in the world (Miller, 2005). On the contrary, negative performances are generally attributed to the contextual presence of family members in property and management that can negatively influence the business tending to protect their own interests, regardless of the interests of other investors (Lee, 2006). In addition, they can be too generous towards the members of the entrepreneurial family by providing them with work or other privileges they would otherwise not obtain (Ward, 1987). Achmad *et al.* (2009) show that a concentration of equity in the hands of family members hinders corporate performance in terms of ROA; Bennedsen *et al.* (2007) suggest that, if a family member is also a CEO, the company's performance is negatively affected; Escribá-Esteve *et al.* (2009) stress that the presence of family members in the top management team is negatively correlated with the proactive strategic orientation. The family business may also have problems in internationalization and growth, in the succession process and in the emergence of conflicts based on the ownership and the exercise of power (Tagiuri and Davis 1996; Koiranen 2000; Neubauer and Lank 1998).

Declared that our object is to empirically analyze differences in the performance of family business as compared to the rest of population, we specifically aim to study family business in their start-up phase, that is a stadium generally neglected by the literature on family business.

In recent times, a big emphasis is given to innovative startup firms. It is now assumed that startups can create job, reducing unemployment both for people taking up self-employed occupations and for employees. Various studies have found evidence that increased business ownership rates is positive related to employment generation (Fritsch, 1997, Fritsch and Mueller 2008; Mueller *et al.* 2008, Acs and Mueller, 2008; Baptista *et al.*, 2008). Besides, new businesses are seen as innovators, exploring new markets and defining the way for the jobs of the future. There are many examples of radical innovations introduced by new firms (Audretsch, 1995; Baumol, 2004). Moreover, startups produce new knowledge about the economic feasibility of business concepts and, specifically, reveal consumer preferences that may lead to the creation of new markets and new entrepreneurial opportunities (Kirzner, 1997, 2009). Startups are also a way of commercialising new ideas or new technologies. Due to the reluctance of incumbent firms to adopt new ideas, setting up one's own business may appear to be the only or the most promising possibility for inventors seeking to exploit their knowledge (Audretsch, 1995; Klepper, 2009). Finally, startups increase competition rising the efficiency of a market and improving people welfare. Increased variety due to new supplies may intensify the division of labour, as well as

follow-up innovation, generating significant economic development (Boschma, 2004; Saviotti and Pyka, 2004).

And so the objective here is to detect the contribution of family firms to the startup phenomenon, to analyze which is the role of family governance in innovative high tech industries, since traditionally family businesses have under-participate to high-tech industries than their non-family counterparts.

Literature has dealt with the reasons why a family business can set-up new businesses. First, it can represent a means of creating new products with a view to growing the business. The risk of failure in this case can be mitigated in order that if the start-up so that if it fails, the parent company does not suffer financially (Miller *et al.*, 2015). Second, it provides the family firm with a means of training the next generation, before they take over the parent firm. In addition, for the new firm, the parent firm could provide an element of sustainability by providing additional resources such as funding, access to its networks of stakeholders (skilled workforce, customers, and suppliers), and additional human resources such as management expertise.

In all such studies, the focus has been on family business as able to generate entrepreneurship. On the contrary, in the present study the focus is on the entrepreneurial momentum, on the start-up phase of a family business that can also have no prior business legacy in the family. This is a field still not well explored. It is interesting to understand how the startup firm is affected by family ties among founders, both if they have or not have a prior business legacy, and how this in turn affects its sustainability in the longer term. There is a gap in the literature on the role family governance play in the start-up phase and in particular the effect that this has on start-up performance. Moreover, to the best of our knowledge, no studies have captured the phenomenon of the creation of new venture in high-tech sectors (innovative startup) by family members o by existent family firms. Generally, family firms are considered to be more likely active in traditional sectors and to under-participate in high-tech industries than their non-family counterparts.

3. Research design

Variables

In order to feel the gaps in literature, differencess between Innovative Family Startups and Total Innovative Startups are here analyzed in terms of the following dimensions.

1. *Size and location.* We investigate the differences with respect to some demographic issue. Several authors have indicated that observed differences between family and non-family firms in empirical research often are not caused by the family character, but by 'demographic sample' differences relating to firm size and geographical location of the business. By trying to control for size and geographical we can analyze the impact of family ties, not influenced by demographic issue.
2. *Financial indicators.* Differences/similarities between the two groups are detected in relation to some financial variables, specifically, Debt/Equity ratio, Bank debt/Revenue ratio, Debt/EBITDA ratio, Invested Capital Turnover, Net Debt, Equity, Total Assets, Current ratio, Cash and cash equivalents + Current receivable - Current liabilities, Equity - fixed asset, Operating Cash Flow, Net Working Capital.
3. *Profitability indicators.* Differences/similarities between the two groups are detected in relation to the following performance variables: Revenue, EBITDA, EBITDA/Revenue, Profit, ROE, ROI, ROA
4. *Financial and profitability indicators in relation to the age.* Family innovative start-ups and the rest of innovative start-ups have been analyzed in relation of their age. In this way, we have compared more homogeneous groups of firms, composed by firms of the same age that could probably provide more significant results. Furthermore, we have also observed the evolution of the two groups over time.

Empirical data

Data have been gathered by the database AIDA of Bureau van Dijk that contains comprehensive information on companies in Italy, with up to ten years of history. Among the others, AIDA provides information on demographic, governance and financial data on "Innovative startups in Italy". Actually, since 2012 the Italian Government has been engaged in the creation of a legislation intended to promote the establishment and the growth of new innovative enterprises with a high technological value. Such endeavour has culminated in the Decree-Law 179/2012 on "Further urgent measures for Italy's economic growth", also known as "Decreto Crescita 2.0" ("Growth Decree 2.0"), converted into Law 221/2012. The Decree has introduced into the Italian legal system a definition of a new innovative enterprise of high technological value, the "innovative startup". The legislation in support of innovative startups does not apply to all newly-established enterprises, but only to those that present a clear character of technological innovation. Innovative startup is any companies with shared capital (i.e. limited companies, "società di capitali") that are newly incorporated or have been operational for less than 5 years (in any case, not before 18 December 2012), have their headquarters in Italy or in another EU country, but with at least a production site branch in Italy; have a yearly turnover lower than €5 million; do not distribute profits; have as exclusive or prevalent company object - as stated in the deeds of incorporation - the production, development and commercialisation of innovative goods or services of high technological value; are not the result of a merger, split-up or selling-off of a company or branch. The innovative character of the enterprises is identified by at least one of the following criteria: 1. at least 15% of the company's expenses can be attributed to R&D activities; 2. at least 1/3 of the total workforce are PhD students, the holders of a PhD or researchers; or, alternatively, 2/3 of the total workforce must hold a Master's degree; 3. the enterprise is the holder, depositary or licensee of a registered patent (industrial property), or the owner and author of a registered software.

We have gathered data on the total population of innovative startups at the data 01/01/2018, that are 8.205. We have selected all of them that are active (7778) and among them all of them that have all financial data (4968). Basing on such sample we have distinguished 3 group of startups on the base of their governance. We have selected all the startups where the majority parts of owners have the same family name, we called them Innovative Pure Family Startups. They represent the 9,48% of all the sample with a list of 471 startups. We have then selected all the startups where a certain parts of owners (<50%) have the same family name, characterized also by the presence of venture capitalists and other society in the governance. We called them Innovative Professional Family startups. They represent the 3,3% of all the sample with a list of 164 startups. The third group is called Innovative Non Family Startups and they are not characterized by evident family ties. They are 4333 and represent the 87% of the Total Innovative Startups.

Given that our goal is to analyze the phenomenon of family innovative start-ups in all its facets, in this contribution we have focused only on Innovative Pure Family Startups presenting bivariate comparison with Total Innovative Startups. To make reading easier, in chapter 4, we will refer to "Family Startup" to indicate the "Innovative Pure Family Startups" and to "Total Startups" to indicate "Total Innovative Startups".

Metodology

To verify if Innovative Pure Family Startups are different from Total Innovative Startups in terms of financial and economic performance, we have adopted the T-test which is used to determine if two distributions of data are statistically different from one another. The result of the test is a p-value. We have set three level of significance: the 0.1, 0.05 and 0.01 levels. For a p-value lower than the chosen level of significance, the means of the two datasets are different in a statistically significant manner; for a p-value higher than the chosen significance level it cannot be concluded that the averages are different. In this work, the averages of indicators relating to pure family innovative startups are tested against those of the rest of innovative startups. For p-values lower than the significance level, the two averages are significantly different. The value of the average establishes whether pure family innovative startups perform better, or worse, than the rest

of family startups. Since it is impossible to know a priori which one has better performance, the probability distribution is tested to the right side of the average (Innovative Pure Family Startups get better results than Total Innovative Startups), and to the left side of the average (Innovative Pure Family Startups get worse results than Total Innovative Startups). Therefore, the chosen distribution is two-tailed. Since the variances of the two data samples are unknown, the standard deviation of each sample is used as a variance estimator.

4. Analysis and results

4.1 Location and size

Several authors have expressed their concern that observed differences between family firms and non-family firms in empirical research may be caused by size and geographical location differences between both groups of firms, and not by the family character (Westhead and Cowling, 1998). Therefore, we verify whether such 'demographic' differences (size, location) is relevant between Family Startups and Total Startups (Tab.1 and Tab. 2).

Tab. 1: Differences between Family Startups and Total Startups concerning location

	N. Family Startups	**% Family Startups**	**N. Total Startups**	**% Total Startups**
Trentino- South Tyrol	10	2%	138	3%
Veneto	38	8%	356	8%
Friuli-Venezia Giulia	12	3%	98	2%
Lombardy	77	17%	1032	24%
Piedmont	20	4%	251	6%
Aosta Valley	3	1%	6	0%
Emilia-Romagna	53	11%	483	11%
Liguria	3	1%	78	2%
Tuscany	18	4%	214	5%
Marches	18	4%	198	5%
Umbria	7	2%	72	2%
Lazio	38	8%	433	10%
Abruzzo	18	4%	90	2%
Molise	0	0%	16	0%
Apulia	18	4%	165	4%
Campania	58	13%	293	7%
Sardinia	8	2%	81	2%
Basilicata	8	2%	29	1%
Calabria	8	2%	98	2%
Sicily	46	10%	192	4%

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Tab. 2: Differences between Family Startups and Total Startups concerning firm size

	Family Startups			**Total Startups**			**p**
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Employment	472	1	3,12	4332	2	4,58	0,1221
Assets (EUR thousand)	472	234	556,11	4332	279	850,86	0,1165
Revenue (EUR thousand)	472	147	734,36	4332	125	366,53	0,5195

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

In the case of location, the T-test obtains a p-value of 0,5930. In addition, also when dealing with firm size, in relation to employment, assets and revenue p-values are not significant. Therefore,

the location and the size are not significant in determining differences between the two groups of startups

4.2 Financial indicators

Generally, family members tends to keep the shares within the family business and thus avoid equity financing (Schillaci, 2012; Dunn and Hughes, 1995). Furthermore, according to Poutziouris *et al.* (1997) family businesses have a fairly limited understanding of the sources of funding and, because of their desire for privacy, they are reluctant to discuss finances with outsiders. The desire for control, independence and privacy, which drives the family business to avoid external equity financing is less common in non-family businesses. In parallel, in a 1998 study, Bopaia notes that lenders tend to more easily grant credit to family businesses than non-family businesses. One reason is that family businesses are able and willing to offer personal guarantees. Therefore, we expect a higher level of equity in Total Startups and a higher level of debt in Family Startups.

Tab. 3: Differences between Family Startups and Total Startups concerning financial indicators

	Family Startups			**Total Startups**			**p**
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Debt/ Equity ratio (%)	472	1,63	12,41	4332	1,00	37,69	0,6008
Bank debt/ Revenue ratio (%)	472	9,33	20,20	4332	7,48	18,39	0,2811
Debt/ EBITDA ratio (%)	472	1,86	18,79	4332	-1,10	25,26	0,0370**
Invested Capital Turnover (times)	472	0,55	0,73	4332	0,54	0,73	0,8747
Net Debt (Thousand EUR)	472	53,25	264,22	4332	4,40	420,38	0,0167**
Equity (Thousand EUR)	472	43,75	111,81	4332	94,71	561,45	3,2416E-07***
Current ratio	472	1,60	1,69	4332	1,76	1,77	0,0661*
% of Working Capital (%)	472	-5,64	122,38	4332	-15,55	129,80	0,3413
Cash and cash equivalents + Current receivable - Current liabilities (Thousand EUR)	472	-40,97	201,87	4332	0,41	344,37	0,0092***
Equity - fixed asset (Thousand EUR)	472	-29,28	173,66	4332	-11,29	326,96	0,0725*
Operating Cash Flow (Thousand EUR)	472	1,68	49,88	4332	-5,93	122,14	0,0099***
Net Working Capital (Thousand EUR)	472	18,76	134,55	4332	36,94	283,28	0,0155**

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

From the Debt/EBITDA ratio (see Tab. 3), we can derive that Family Startups have significantly more debts than Total Startups. It is also true that, as we shall see, the EBITDA of Family Startups is significantly higher than the EBITDA of Total Startups, so the Debt/EBITDA ratio can be influenced by the high levels of profitability of Family Startups with the same level of debt of Total Startups. However, confirming the hypothesis of greater debts of Family Startups, we can notice the significance of the variable "Net Debt". This variable is given by debts minus current assets and it is significantly higher in Family Startups.

On the other hand, the Equity indicator is significantly higher in Total Startups. Probably this result is given because Family Startups are companies of a simple nature, without external investors in the governance.

The Current Ratio is significantly (even if with a very low level of significance) higher in Total Startups than in Family Startups. The Current Ratio measures a company's ability to pay obligations. To gauge this ability, the current ratio considers the current total assets of a company relative to that company's current total liabilities. The formula for calculating a company's current ratio is: Current Ratio = Current Assets / Current Liabilities. The Current Ratio give the idea of a company's ability to pay back its liabilities with its assets. As such, Current Ratio gives an idea of startups' financial health. The higher the current ratio, the more capable the company is to pay its obligations. The higher level of debts in Family Startups reduce also their Current Ratio. For the same reason, the indicator that is composed by "Cash and cash equivalents + Current receivable - Current liabilities" is significantly higher in Total Startups than in Family Startups.

The indicator derived by the expression "Equity - fixed asset" is, also in this case, higher in Total Startups since they have more Equity (also because of the participation of venture capitalists and in general of financial investors) than Family Startups. In the same way, the Net Working Capital that in the database AIDA is composed by Current Assets - Current Liabilities is significantly low in Family Startups, probably because their level of indebtedness. A more positive value of the Net Working Capital is an indicator that current liabilities are sufficiently covered by current assets. The fact that such an index is low in Family Startups can indicate a financial situation in which the company finances with short-term sources also part of the assets that are immobilized, exposing itself to a high financial risk.

However, the Operating Cash Flow is significantly higher in Family Startups. Operating Cash Flow is the net amount of cash and cash-equivalents moving into and out of a business. Positive Operating Cash Flow indicates that a company's liquid assets are increasing, enabling it to settle debts, reinvest in its business, return money to shareholders, pay expenses and provide a buffer against future financial challenges. Negative Operating Cash Flow indicates that a company's liquid assets are decreasing. Here the operating cash flow is composed by Profit + Amortization and depreciation.

4.3 Profitability indicators

With reference to profitability performance, part of the literature states that family businesses show higher levels of efficiency (value added per worker) and higher ROE and ROA values than non-family businesses (Gorriz and Fumas, 1996, Gallo and Estapé, 1992; Coleman and Carsky, 1999. In addition, Davis (1982) argues that family businesses have a higher level of perseverance and commitment to see the business succeed. Other studies (eg Pajarinen and Ylä-Anttila 2006; Perheyritystyöryhmä 2005) have found some evidence that small family businesses achieve better levels of profitability and growth than large ones. It is necessary however to underline that other scholars have considered family involvement in governance as having a negative influence on commercial practices, leading to corruption and non-rational behavior (Perrow, 1972; Dyer, 1994).

Tab. 4: Differences between Family Startups and Total Startups concerning profitability indicators

	Family Startups			**Total Startups**			**p**
	N	***mean***	std.	N	***mean***	std.	t-test
EBITDA (Thousand EUR)	472	4,65	57,78	4332	-4,41	128,48	0,0061***
EBITDA/ Revenue (%)	472	-16,97	100,98	4332	-32,38	140,773	0,0102**
Profit (Thousand EUR)	472	-7,81	53,33	4332	-18,39	128,44	0,0007***
ROS (%)	472	1,09	16,76	4332	1,74	15,54	0,5654
ROA (%)	472	-8,74	40,90	4332	-12,45	52,25	0,0676*
ROE (%)	472	-2,08	44,76	4332	-1,01	45,36	0,6739

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Concerning profitability indicators we can derive from Tab. 4 that Family Startups achieve higher levels of EBITDA and of Profit. This support the hypothesis that family firms achieve higher profitability levels than the rest of population, also in the start-up phases and in innovative fields.

4.4 Financial and economic performance on the base of the age

We selected among Family Startups and Total Startups, firms born last year (Tab 5 and 6). In the first year, as we can see, there are no significant differences between the two groups, neither from the financially nor from the profitably point of view. Only the Net Working Capital is significantly reduced in Family Startups. Probably Family Startups start their activity already with high levels of debts not covered by Current Assets.

Tab. 5: Differences between Family Startups and Total Startups born in 2016 concerning financial indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Debt/ Equity ratio (%)	109	1,31	7,48	1069	0,62	4,63	0,6188
Bank debt/ Revenue ratio (%)	109	2,67	10,59	1069	2,47	9,85	0,9379
Debt/ EBITDA ratio (%)	109	0,03	0,95	1069	-1,62	37,78	0,4258
Invested Capital Turnover (times)	109	0,34	0,59	1069	0,34	0,59	0,9709
Net Debt (Thousand EUR)	109	-11,99	73,39	1069	-36,34	298,22	0,2388
Equity (Thousand EUR)	109	30,48	77,52	1069	45,11	206,10	0,1351
Total Assets (Thousand EUR)	109	117,76	317,34	1069	123,71	373,36	0,8553
Current ratio	109	1,82	1,82	1069	1,89	1,92	0,7336
% of Working Capital (%)	109	-1,64	61,64	1069	-10,42	144,46	0,6390
Cash and cash equivalents + Current receivable - Current liabilities (Thousand EUR)	109	-16,74	67,71	1069	4,69	384,23	0,3633
Equity - fixed asset (Thousand EUR)	109	-0,50	141,34	1069	13,28	222,95	0,3899
Operating Cash Flow (Thousand EUR)	109	-1,70	29,18	1069	-3,28	33,17	0,5982
Net Working Capital (Thousand EUR)	109	-5,11	87,20	1069	23,29	182,55	0,0052***

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Tab. 6: Differences between Family Startups and Total Startups born in 2016 concerning profitability indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Revenue (Thousand EUR)	109	51,52	239,74	1069	37,27	149,64	0,5455
EBITDA (Thousand EUR)	109	-0,61	31,29	1069	-2,84	36,11	0,4875
EBITDA/ Revenue (%)	109	-13,29	87,83	1069	-30,16	146,25	0,2176
Profit (Thousand EUR)	109	-3,75	27,10	1069	-6,36	43,51	0,3729
ROS (%)	109	2,09	14,96	1069	1,80	16,63	0,9182
ROA (%)	109	-10,28	41,31	1069	-14,39	55,20	0,3438
ROE (%)	109	-6,41	35,34	1069	-4,55	41,95	0,6301

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

For startups that are two years old (born in 2015), the paths between the two analyzed groups here begin to diverge (see Tab. 7 and 8). The Debt/EBITDA ratio starts to be slightly significant, still identifying a higher level of Debt in relation to EBITDA in Family Startups. Indicators of Equity, Net Working Capital, on the other hand, confirm that they are already significantly higher in Total Startups than in Family Startups for the same reasons outlined above. The Operating Cash Flow is significantly higher in Family Startups as well as some profitability variables such as EBITDA and Profit.

Tab. 7: Differences between Family Startups and Total Startups born in 2015 concerning financial indicators

	Family Startups			**Total Startups**			**p**
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Debt/ Equity ratio (%)	136	0,24	13,88	1341	3,42	51,85	0,2398
Bank debt/ Revenue ratio (%)	136	5,51	18,43	1341	5,62	16,15	0,9681
Debt/ EBITDA ratio (%)	136	-0,30	3,82	1341	-2,84	30,74	0,0583*
Invested Capital Turnover (times)	136	0,58	0,78	1341	0,61	0,80	0,6501
Net Debt (Thousand EUR)	136	5,50	161,75	1341	-13,04	369,58	0,4584
Equity (Thousand EUR)	136	43,37	132,48	1341	82,35	477,66	0,0248**
Total Assets (Thousand EUR)	136	236,76	754,65	1341	233,06	677,01	0,9564
Current ratio	136	1,61	1,67	1341	1,78	1,76	0,3100
% of Working Capital (%)	136	-59,38	195,78	1341	-28,16	136,58	0,3288
Cash and cash equivalents + Current receivable - Current liabilities (Thousand EUR)	136	-63,20	301,59	1341	17,81	354,28	0,0520*
Equity - fixed asset (Thousand EUR)	136	-23,95	187,33	1341	6,23	322,59	0,1238
Operating Cash Flow (Thousand EUR)	136	0,44	45,87	1341	-10,21	113,89	0,0347**
Net Working Capital (Thousand EUR)	136	10,97	133,08	1341	39,92	312,71	0,0435**

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Tab. 8: Differences between Family Startups and Total Startups born in 2015 concerning profitability indicators

	Family Startups			**Total Startups**			**p**
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Revenue (Thousand EUR)	136	174,90	1237,02	1341	102,38	294,41	0,4981
EBITDA (Thousand EUR)	136	2,03	52,87	1341	-9,00	122,17	0,0513*
EBITDA/ Revenue (%)	136	-30,95	114,54	1341	-41,18	149,89	0,4185
Profit (Thousand EUR)	136	-6,91	39,37	1341	-18,71	124,58	0,01436**
ROS (%)	136	-1,36	19,60	1341	0,28	16,10	0,51234
ROA (%)	136	-8,83	40,40	1341	-12,67	48,76	0,30349
ROE (%)	136	-1,02	51,15	1341	0,03	47,90	0,8356

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Among companies with three years of life, born in 2014, there are no significant differences between Family Startups and Total Startups in terms of profitability (Tab 10). The level of debts of Family Startups remains still significantly higher than of Total Startups (Tab. 9). In fact, the Debt/Equity ratio is significant. However, even in this case, it should also be noted that supposing the same level of debt in the two groups, a lower value of this index for Total Startups could derive from their greater level of Equity compared to Family Startups. Actually, the variable equity is also very significant, higher in Total Startups than in the Family Startups. However, the variable Net Debt, significantly higher in Family Startups confirm that the assumption of higher level of debts of Family Startups compared to Total Startups is true.

Tab. 9: Differences between Family Startups and Total Startups born in 2014 concerning financial indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Debt/ Equity ratio (%)	137	2,20	9,97	1131	-1,71	43,10	0,0693*
Bank debt/ Revenue ratio (%)	137	10,50	19,40	1131	9,18	20,10	0,6506
Debt/ EBITDA ratio (%)	137	4,32	30,02	1131	0,45	12,60	0,2866
Invested Capital Turnover (times)	137	0,52	0,71	1131	0,59	0,73	0,2768
Net Debt (Thousand EUR)	137	91,37	337,40	1131	10,53	463,06	0,0702*
Equity (Thousand EUR)	137	50,10	126,05	1131	99,85	419,46	0,0026***
Total Assets (Thousand EUR)	137	271,92	517, 69	1131	315,49	702,07	0,3754
Current ratio	137	1,54	1,77	1131	1,65	1,66	0,4952
% of Working Capital (%)	137	4,12	63,13	1131	-8,38	113,05	0,2099
Cash and cash equivalents + Current receivable - Current liabilities (Thousand EUR)	137	-25,92	134,29	1131	-4,98	268,77	0,2766
Equity - fixed asset (Thousand EUR)	137	-52,61	195,89	1131	-26,69	278,02	0,19
Operating Cash Flow (Thousand EUR)	137	-0,96	56,31	1131	-1,79	136,13	0,89
Net Working Capital (Thousand EUR)	137	33,30	158,89	1131	33,54	243,29	0,98

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Tab. 10: Differences between Family Startups and Total Startups born in 2014 concerning profitability indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Revenue (Thousand EUR)	137	148,15	396,23	1131	148,78	385,63	0,9858
EBITDA (Thousand EUR)	137	1,75	65,41	1131	-0,52	144,87	0,7486
EBITDA/ Revenue (%)	137	-19,42	107,96	1131	-27,63	131,88	0,4639
Profit (Thousand EUR)	137	-15,82	76,14	1131	-19,23	131,48	0,6546
ROS (%)	137	0,37	16,93	1131	2,66	14,54	0,2394
ROA (%)	137	-10,90	40,96	1131	-11,40	46,82	0,8951
ROE (%)	137	-6,13	43,76	1131	0,76	43,19	0,1249

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

For companies with 4 years of life, born in 2013 (Tab 11 and 12), focusing first on profitability indicators, almost all them are significantly better in Family Startups than in Total Startups (EBITDA, EBITDA/Sales, Profit). However, when reference is made to the Return on Activities, it is significantly higher in Total Startups than in Family Startups. The ROA gives an idea of the value generated from assets, and therefore it is an indicator of the ability of a firm to make profitable and to give value to its assets. A higher ROA is the representation of a company that is able to enhance the resources under its control, while a low value is symptomatic of a company that is not able to create value.

A significantly higher Equity indicator in Total Startups gives us an indication of the larger presence of investors compared to Family Startups. Besides, the higher significantly level of Total Assets in Total Startups indicates greater investments. Maybe this is one of the reason of the higher level of Profit in Family Startups. Pure families adopt more conservative strategies than the rest of the population.

Tab. 11: Differences between Family Startups and Total Startups born in 2013 concerning financial indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Debt/ Equity ratio (%)	83	3,23	16,38	724	0,93	9,31	0,3861
Bank debt/ Revenue ratio (%)	83	14,46	22,24	724	10,65	21,14	0,3526
Debt/ EBITDA ratio (%)	83	2,39	13,90	724	-0,80	14,42	0,1696
Invested Capital Turnover (times)	83	0,82	0,74	724	0,62	0,70	0,0242
Net Debt (Thousand EUR)	83	109,30	321,16	724	51,75	516,56	0,3127
Equity (Thousand EUR)	83	52,65	73,74	724	165,80	1013,90	0,0034***
Total Assets (Thousand EUR)	83	312,59	464,13	724	476,59	1425,43	0,0268**
Current ratio	83	1,47	1,41	724	1,72	1,72	0,1395
% of Working Capital (%)	83	21,98	42,47	724	-12,86	133,38	0,0007***
Cash and cash equivalents + Current receivable - Current liabilities (Thousand EUR)	83	-45,90	159,18	724	-10,88	374,28	0,2709
Equity - fixed asset (Thousand EUR)	83	-40,38	144,55	724	-41,00	413,21	0,9789
Operating Cash Flow (Thousand EUR)	83	14,35	48,79	724	-6,46	164,57	0,0111**
Net Working Capital (Thousand EUR)	83	39,35	134,03	724	55,47	358,00	0,4189

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Tab. 12: Differences between Family Startups and Total Startups born in 2013 concerning profitability indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Revenue (Thousand EUR)	83	220,10	435,53	724	234,32	554,40	0,78631
EBITDA (Thousand EUR)	83	21,47	60,30	724	-1,55	174,13	0,01377**
EBITDA/ Revenue (%)	83	-0,33	77,95	724	-27,97	132,97	0,0084***
Profit (Thousand EUR)	83	0,85	35,05	724	-29,53	176,24	7,35775E-05***
ROS (%)	83	3,84	12,26	724	2,24	15,41	0,3569
ROA (%)	83	220,10	435,53	724	234,32	554,40	0,0378**
ROE (%)	83	8,06	48,19	724	-1,34	45,60	0,1244

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

We also took into consideration companies born in 2012 (Tab 13 and 14), however the small number of companies in the two groups, especially in Family Startups (only 6), does not allow a meaningful survey.

Tab. 13: Differences between Family Startups and Total Startups born in 2012 concerning financial indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Debt/ Equity ratio (%)	6	0,06	1,06	48	1,18	3,08	0,2126
Bank debt/ Revenue ratio (%)	6	32,75	39,87	48	11,46	23,87	0,5306
Debt/ EBITDA ratio (%)	6	0,42	1,41	48	4,69	16,77	0,1876
Invested Capital Turnover (times)	6	0,53	0,47	48	0,77	0,64	0,3225
Net Debt (Thousand EUR)	6	62,46	75,69	48	96,35	426,87	0,7074
Equity (Thousand EUR)	6	25,90	175,87	48	161,86	482,60	0,2170
Total Assets (Thousand EUR)	6	292,27	268,48	48	580,08	908,43	0,1222
Current ratio	6	0,86	0,48	48	1,81	1,69	0,0153**
% of Working Capital (%)	6	173,33	234,34	48	-5,62	111,91	0,3931
Cash and cash equivalents + Current receivable - Current liabilities (Thousand EUR)	6	-126,5	311,65	48	-63,08	344,54	0,8041
Equity - fixed asset (Thousand EUR)	6	23,53	102,70	48	-100,97	457,40	0,1891
Operating Cash Flow (Thousand EUR)	6	-23,97	153,40	48	-6,38	237,23	0,8248
Net Working Capital (Thousand EUR)	6	11,95	184,66	48	23,16	319,83	0,9085

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

Tab. 14: Differences between Family Startups and Total Startups born in 2012 concerning profitability indicators

	Family Startups			Total Startups			p
	N	**mean**	**std.**	**N**	**mean**	**std.**	**t-test**
Revenue (Thousand EUR)	6	219,8	364,79	48	317,96	483,30	0,5978
EBITDA (Thousand EUR)	6	-7,54	167,53	48	-25,81	218,69	0,8289
EBITDA/ Revenue (%)	6	17,11	20,36	48	-19,44	117,15	0,1082
Profit (Thousand EUR)	6	-37,85	147,39	48	-48,09	265,73	0,8964
ROS (%)	6	6,80	25,52	48	5,38	9,01	0,9300
ROA (%)	6	-31,9	58,60	48	-7,77	43,67	0,4075
ROE (%)	6	5,76	50,78	48	7,82	41,63	0,9491

*: statistically significant at the 0.1 level of significance
**: statistically significant at the 0.05 level of significance
***: statistically significant at the 0.01 level of significance

Source: our elaboration from AIDA, Bureau van Dijk, 2018

5. Discussion

Results show the best performances in terms of profitability of the Innovative Pure Family Startups. As claimed in some mentioned contributions, a family governance turns out to be a competitive advantage and to provide best economic results. The superior performance of Innovative Pure Family Startups can be explained by the fact that family owners usually aim to preserve their "family name". Because of their strong identification with the business and their desire to create a sustainable firm to succeeding generations, family-owned companies show a greater concern for the reputation and image of the family (Schillaci and Romano, 2012). A long-term orientation, the importance given to the reputation of the family business to maintain good relations with stakeholders and lower agency costs allow them to obtain positive economic performance and to overcome the liability of newness (Freeman, 1983).

To prove the positive relationship between the presence of family members in the governance and the business's performance, we can also refer to the concept of "antifragile" (Taleb, 2013). Family involvement seems to improve the "antifragility" and flexibility through less formalism and procedures, thus improving the ability of the organization to tackle with uncertain situations, in the start-up phase of the business, in an innovative way. Antifragility goes beyond the concept of "resilience" (Bauweraerts, 2014). A resilient thing resists to shocks but remains the same as before; the antifragile gives rise to a better thing. The antifragile organization manages to build a guide to non-predictive decision-making processes in conditions of uncertainty. Any situation in which there is uncertainty, unpredictability, or incomplete understanding of things is promoted because it gives the organization the opportunity to start better with unusual responses. Therefore, family involvement contributes positively to the creation of value through a constant concern for the preservation of the family name (Schillaci and Romano, 2012; Gomez-Mejia *et al.*, 2007; Berrone *et al.*, 2012) and for the creation of a lean, chaotic and antifragile organization.

From a financial point of view, family businesses are generally unlikely to open their property to source of external finance (see Schillaci 2008, Demsetz and Lehn, 1985; James, 1999; Romano *et al.*, 2001; Blanco-Mazagatos *et al.*, 2007). When internal finance is insufficient, family-owned firms prefer debt to external equity (Poutziouris, 2001; Romano *et al.*, 2001; López-Gracia and Sánchez-Andújar, 2007), in order to maintain the firm and the capital in the hands of the family. From our results, it is clear the preference of Innovative Pure Family Starups for debt, as opposed to opening up firm equity to external investors. This contribute to higher levels of debt of Innovative Pure Family Startups compared Total Innovative Startups. The more cohesive governance of family firms (Bopaiah, 1998), the goal of family firm owners in maintaining family reputation and firm control reduce the risk for creditors, implying lower agency costs of debt and allowing longer relationships between family firms and creditors (MenéndezRequejo, 2006). In this setting, we can expect that these firms easily obtain debt than do non-family firms.

As opposite, the Total Innovative Startups are more inclined to external equity source and to subsequent higher level of investments (see the level of Total Assets) that can emerge also by the lower level of profit. On the contrary, Innovative Pure Family Startups adopt a more conservative strategy that is probably not suitable for rapid scale-ups. If this is true in our survey of Innovative Pure Family Startups, probably significant strategic differences can be found in the analysis of Innovative Professional Family Startups, as well as in the analysis of the differences between Innovative Family Spin-off and Innovative Family New-co.

6. Conclusion and future research

In the present contribution we have dealt with the phenomenon of Innovative Family Startups as compared with Total Innovative Startups. The focus of the analysis is the Innovative Family Startup as a new venture in high-tech sector in which founders are members of the same family: two or more siblings; husbands and wives; parents and sons, cousins and other relatives in law.

Generally, a vast part of the literature supports the idea that family governance can strengthen the business. However, another part of the literature sustains that there is a distortion of the family governance on performance, due to the greater complexity characterizing family businesses which cause vicious circles in the processes of value creation.

In the paper we investigate Innovative Startups and specifically if the presence of a family governance can influence their economic and financial performance. Results show the best performances in terms of profitability of the Innovative Pure Family Startups. From a financial point of view, in our study, it is clear the preference of Innovative Pure Family Startups for debt, as opposed to opening up firm equity to external investors. This contribute to higher levels of debt of Innovative Pure Family Startups as compared to Total Innovative Startups. In addition, Total Innovative Startups are more inclined to external equity sources and to subsequent higher level of investments (see the level of activity) that can emerge also by their lower level of Profits. On the contrary, Innovative Pure Family Startups adopt a more conservative strategy that is probably not suitable for rapid scale-ups.

If this is true in our survey of Innovative Pure Family Startups, probably significant strategic differences can be found in the analysis the analysis of Innovative Professional Family Startups, as well as in the study of the differences between Innovative Family Spin-off and Innovative Family New-co. This contribution presents the first results of a broader study that is being carried out on Innovative Family Startups that will also investigate Innovative Professional Family Startups, Innovative Family Spin-off and Innovative Family New-co as different expressions of the same phenomenon.

Moreover, in this work, the focus has been on financial and profitability indicators. Future contributions can also investigate other variable such as the individual characteristics of the founders (Costa and McCrae, 1985; Rotter, 1966; Krueger *et al.*, 2000); their initial motivations to start the entrepreneurial process (Shapero and Sokol, 1981), the level of innovation in family startups, the risk propensity (Berrone et al 2010; Gómez-Mejía et al 2007), their internationalization, the strength of their network with stakeholders or their connections with support structures (e.g. science parks, incubators).

References

ANDERSON R., REEB D. (2003), "Founding-family ownership and firm performance: evidence from the S&P 500", *Journal of Finance*, vol. 58, n. 3, pp. 1301-1327.

ANDRES C. (2008), "Large shareholders and firm performance: An empirical examination of founding-family ownership", *Journal of Corporate Finance*, vol. 14, n. 4, pp. 431-445.

ASTRACHAN J.H., SHANKER M.C. (2003), "Family businesses' contribution to the US economy: a closer look", *Family Business Review*, vol. 16, n.3, pp. 211–219.

ASTRACHAN J.H., KLEIN S.B., SMYRNIOS K.X. (2002), "The F-PEC scale of family influence: a proposal for solving the family business definition problem", *Family Business Review*, vol. 15, n.1, pp. 45-58.

BERRONE P., CRUZ C., GOMEZ-MEJIA L.R. (2012), "Socioemotional Wealth in Family Firms Theoretical Dimensions, Assessment Approaches, and Agenda for Future Research", *Family Business Review*, vol. 25, n. 3, pp. 258-279.

BJUGGREN P.O., PALMBERG J. (2010), "The impact of vote differentiation on investment performance in listed family firms", *Family business Review*, vol. 23, n. 4, pp. 327-340.

BLANCO-MAZAGATOS V., QUEVEDO-PUENTE E., CASTRILLO L. (2007), "The Trade-Off Between financial Resources and Agency Costs in the Family Business", *Family Business Review*, vol. 20, n. 3, pp. 199-213.

BOPAIAH C. (1998), "Availability of credit to family businesses", Small Business Economics, vol. 11, n. 1, pp. 75-86.

CHRISMAN J.J., CHUA J.H., STEIER L. (2005), "Sources and consequences of distinctive familiness: An introduction", *Entrepreneurship, Theory and Practice*, vol. 29, n. 5, pp. 555-575.

CHRISMAN J.J., STEIER L.P., CHUA J.H. (2008), "Toward a Theoretical Basis for Understanding the Dynamics of Strategic Performance in Family firms", *Entrepreneurship Theory and Practice*, vol. 25, n. 2, pp. 59-65.

CHUA J., CHRISMAN J., SHARMA P. (1999), "Defining the Family Business by Behavior", *Entrepreneurship Theory and Practice*, vol. 23, n. 4, pp. 19-39.

DEMSETZ H., LEHN K. (1985), "The structure of corporate ownership: causes and consequences", *Journal of Political Economy*, vol. 93, n. 6, pp. 1155-1177.

EDDLESTON K.A., KELLERMANNS F.W., ZELLWEGER T.M. (2012), "Exploring the entrepreneurial behavior of family firms: does the stewardship perspective explain differences?", *Entrepreneurship Theory and Practice*, vol. 36, n. 2, pp. 347-367.

GOMEZ-MEJIA L.R., WISEMAN R.M. (2007), "Does agency theory have universal relevance?", *Journal of Organizational Behavior*, vol. 28, n. 1, pp. 81-88.

HABBERSHON T., WILLIAMS M.L., MCMILLAN I. (2003), "A unified Systems Perspective of Family firm Performance", *Journal of Business Venturing*, vol. 18, n. 4, pp. 451-465.

JAMES H. (1999), "Owner as Manager, Extended Horizons and the Family Firms", *International Journal of the Economics of Business*, vol. 6, pp. 41-55.

JIANG Y., PENG M.K.W. (2011), "Are family ownership and control in large firms good, bad, or irrelevant?", *Asia Pacific Journal of Management*, vol. 28, n. 1, pp. 15-39.

LEE M. (2006), "*F*amily firm performance: Further evidence", *Family business Review*, vol. 19, n. 2, pp. 103-114.

LENGNICK-HALL C., BECK T. (2005), "Adaptive Fit Versus Robust Transformation: How Organizations Respond to Environmental Change", *Journal of Management*, vol. 31, n. 5, pp. 738-757.

LÓPEZ-GRACIA J., SÁNCHEZ-ANDÚJAR S. (2007), "Financial Structure of the Family Business: Evidence From a Group of Small Spanish Firms", *Family Business Review*, vol. 20, n. 4, pp. 269- 287.

LUBATKIN M., SCHULZE W., LING Y. DINO R. (2005), "The effects of parental altruism on the governance of family-managed firms", *Journal of Organizational Behavior*, vol. 26, n. 3, pp. 313-330.

MAZZI C. (2011), "*F*amily business and financial performance: Current state of knowledge and future research challenges", *Journal of Family Business Strategy*, vol. 2, n. 3, pp. 166-181.

MENÉNDEZ-REQUEJO S. (2006), "Ownership Structure and Firm Performance: Evidence from Spanish Family Firms", in Poutziouris P., Smyrnios K., Klein S. (Eds), *Handbook of Research on Family Business*, Edward Elgar, USA.

MILTON L.P. (2008), "Unleashing the relationship power of family firms: identity confirmation as a catalyst for performance", *Entrepreneurship Theory and Practice*, vol. 32, n. 6, pp. 1063-1081.

MORRESI O. (2009), "Impresa familiare e performance: una verifica empirica sulle imprese italiane quotate", *Finanza, Marketing & Produzione*, n. 3, pp. 7-30.

NEUBAUER F., LANK A.G. (1998), *The Family Business: Its Governance for Sustainability*. Macmillan, Basingstoke.

O'BOYLE JR. E.H., POLLACK J.M., RUTHERFORD M.W. (2012), "Exploring the relation between family involvement and firms financial performance: A meta-analysis of main and moderator effect", *Journal of Business Venturing*, vol. 27, n. 1, pp. 1-18.

OLSON P., ZUIKER V., DANES S.M., STAFFORD K., HECK R.K.Z., DUNCAN K.A. (2003), "The impact of the family and the business on family business sustainability", *Journal of Business Venturing*, vol. 18, n. 5, pp. 639-666.

POUTZIOURIS P. (2001), "The Views of Family Firms on Venture Capital: Empirical Evidence From the UK Small to Medium-Size Enterprising Economy" *Family Business Review*, vol. 14, n. 3, pp. 277-291.

ROMANO C., TANEWSKI G. SMYRNIOS K. (2001), "Capital Structure Decision Making: A Model for Family", Business. *Journal of Business Venturing*, vol. 16, n. 3, pp. 285-310.

SCHILLACI C.E., ROMANO M. (2012), *Le Fondazioni tra mito di famiglia e sostenibilità intergenerazionale*, McGraw-Hill Education, Milano.

SCHILLACI C.E. (2008), "Famiglia, impresa e paradosso co-evolutivo. Una diversa prospettiva di indagine sul family business" in Devecchi C., Fraquelli G. (Eds), *Dinamiche di sviluppo e internazionalizzazione del family business*, Il Mulino, Bologna, p. 105-130.

TAGIURI R., DAVIS J. (1996), "Bivalent Attributes of the Family Firm", *Family Business Review*, vol. 9, n. 2, pp. 199-208.

TALEB N.N. (2013), *Antifragile. Prosperare nel disordine*, Il Saggiatore, Milano.

VAN ESSEN M., VAN OOSTERHOUT J., CARNEY M. (2011), "Corporate board sand the performance of Asian firms: A meta-analysis", *Asia Pacific Journal of Management*, vol. 29, n. 4, pp. 873-905.

VILLALONGA B., AMIT R. (2006), "How do family ownership, control and management effect firm value?", *Journal of Financial Economics*, vol. 80, n. 2, pp. 385-417.

WESTHEAD P., HOWORTH C. (2006), "Ownership and management issues associated with family firm performance and company objectives", *Family business Review*, vol. 19, n. 4, pp. 301-314.

WESTHEAD P., COWLING M. (1998), "Family Firm Research: the need for a methodological rethink", *Entrepreneurship Theory and Practice*, vol. 23, n.1, pp. 31-56.

WILDAVSKY A. (1988), *Searching for Safety*, New Brunswick, CT: Transaction Books.

YU A., LUMPKIN G.T., SORENSON R.L., BRIGHAM K.H. (2012), "The landscape of family business outcomes", *Family business Review*, vol. 25, n. 1, pp. 33-57.

TRACK - MARKETING & COMMUNICATION

L'evoluzione delle relazioni tra agenzia e cliente nel communication network. La prospettiva dei partner di comunicazione

FEDERICA CECCOTTI, MARIA VERNUCCIO, ALBERTO MATTIACCI

L'evoluzione delle relazioni tra agenzia e cliente nel communication network. La prospettiva dei partner di comunicazione

FEDERICA CECCOTTI[*] MARIA VERNUCCIO[•] ALBERTO MATTIACCI[♠]

Abstract

Obiettivi. *Il paper intende contribuire alla letteratura accademica sugli attori della comunicazione di marketing, analizzando in modo olistico un aspetto finora poco approfondito nell'ambito del nuovo scenario comunicativo: le fondamentali direttrici del cambiamento nelle relazioni tra clienti (inserzionisti) e partner della comunicazione (es. agenzia pubblicitaria, centro media, digital agency).*

Metodologia. *È stata condotta una ricerca qualitativa esplorativa basata su interviste in profondità (n=53) a figure apicali di diverse categorie di attori del communication network. I dati sono stati elaborati con la "cognitive mapping technique".*

Risultati. *Adottando il punto di vista dei partner di comunicazione, sono stati delineati due framework interpretativi relativi, da una parte, ai driver e agli aspetti chiave che qualificano il nuovo scenario comunicativo, e dall'altra, ai conseguenti effetti in termini relazionali (agenzia-cliente).*

Limiti della ricerca. *Lo studio presenta i limiti della ricerca qualitativa in merito alla non rappresentatività dei risultati, che non possono essere estesi a individui non compresi nel set d'indagine. Inoltre, la ricerca si concentra su agenzie operanti in Italia.*

Implicazioni pratiche. *L'approfondimento olistico degli aspetti chiave del mutato scenario, unitamente alla comprensione delle conseguenze dirette e indirette in termini relazionali per i diversi attori, può contribuire al miglioramento delle performance complessive del communication network e dei singoli player.*

Originalità del lavoro. *Il lavoro propone per la prima volta sia una visione dell'evoluzione relazionale trasversale (olistica) alle diverse categorie di attori (tradizionali e nuovi) sia una lettura "verticale", focalizzata sulle specificità dei punti di vista in base alle differenti tipologie di agenzia.*

Parole chiave: *Partner di comunicazione; relazioni agenzia-cliente; communication network; rivoluzione digitale; comunicazione integrata di marketing; mappe cognitive.*

Objectives. *The paper aims to contribute to the academic literature on the marketing communication players by analyzing in a holistic way a key issue so far little depth within the new communication scenario: the main lines of change in the relationship between clients (advertisers) and communication partners (e.g. advertising agency, media center, digital agency).*

Methodology. *Qualitative exploratory research was conducted based on in-depth interviews (n= 53) with senior consultants belonging to different actors's categories within the communication network. The data were analyzed using the cognitive mapping technique.*

Findings. *Adopting the communication partners' standpoint, two interpretative frameworks were developed with respect to: (1) drivers and key issues that qualify the new communication scenario, and (2) consequent effects in terms of relationships' evolution (agency-client).*

Research limits. *This study shows the limits of qualitative research on the non-representativeness of results. Furthermore, the research has been concentrated on agencies operating in Italy.*

Practical implications. *The holistic interpretation of key issues that qualify the new scenario, along with the understanding of the direct and indirect consequences in terms of relationships for the various actors, could contribute to improving the performance of both the overall communication network and single players.*

Originality of the study. *The article proposes for the first time a twofold vision of the client-agency relational evolution: the first is transversal (holistic) to the different agency's categories (traditional and digital), while the second is "vertical", emphasiziyng the specificity of points of views according to the different types of agency.*

Key words: *Communication partner; agency-client relationship; communication network; digital revolution; integrated marketing communication; cognitive mapping technique.*

[*] Ricercatore di *Economia e Gestione delle Imprese* - Sapienza Università di Roma
e-mail: federica.ceccotti@uniroma1.it

[•] Associato di *Economia e Gestione delle Imprese* - Sapienza Università di Roma
e-mail: maria.vernuccio@uniroma1.it.

[♠] Ordinario di *Economia e Gestione delle Imprese* - Sapienza Università di Roma
e-mail: alberto.mattiacci@uniroma1.it.

1. Introduzione

La rivoluzione digitale rappresenta un fattore di forte discontinuità nella comunicazione integrata di marketing (IMC) (Batra e Keller, 2016; Mulhern, 2009; Winer, 2009). Tale trasformazione è segnata dal passaggio dalla supremazia di modelli di comunicazione tradizionali centrati sull'impresa e di tipo *push* (*inside-out*) alla crescente rilevanza di modelli centrati sul consumatore, di tipo *pull* (outside-in) e *social* (*outside-out*) (Bruhn e Schnebelen, 2017). A fronte dell'evoluzione dell'IMC, nuove sfide strategiche e organizzative si dischiudono a tutti i professionisti della comunicazione (Vernuccio e Ceccotti, 2015). I partner di comunicazione "tradizionali" delle imprese (es. agenzie pubblicitarie creative) hanno sperimentato in breve tempo importanti trasformazioni nelle attività svolte, nelle strutture, nei processi e, infine, nelle relazioni con le imprese clienti (Bush e Bush, 2000; Horsky, 2006; Kitchen *et al.*, 2004; Wagler, 2013). Al contempo, nuovi attori (es. digital agency) hanno fatto il loro ingresso nel mercato di fornitura di servizi di comunicazione (Guercini, 2008; Kassaye, 1997; Mallia e Windels, 2011). Come evidenziato da Taylor (2017), in questo scenario comunicativo, reso complicato dalla molteplicità di media digitali e tradizionali da utilizzare in modo integrato, dalla confusione dovuta all'*overload* di contenuti di marketing a cui i consumatori sono esposti e dall'affannosa ricerca di sempre nuove soluzioni per ottimizzare il ritorno sull'investimento in comunicazione, soprattutto nel breve periodo, ciò che appare davvero centrale è la costruzione di una "buona" relazione tra agenzia di comunicazione e cliente (o inserzionista). Sul tema delle relazioni si rinviene, invece, un gap nella letteratura accademica, con particolare riferimento all'analisi dell'evoluzione che oggi vede protagoniste le dinamiche relazionali tra cliente e fornitori di servizi di comunicazione ("agenzie" o "partner di comunicazione"). Da qui, l'obiettivo conoscitivo alla base del presente lavoro, ossia quello di fare luce su un punto chiave finora poco approfondito (Biraghi, 2017): le fondamentali direttrici del cambiamento nelle relazioni agenzia-cliente. Inoltre, lo studio proposto intende contribuire all'avanzamento della letteratura sul tema, analizzando le specificità nelle dinamiche relazionali in base alle differenti tipologie di agenzia.

A questo fine, il focus è rivolto sui principali partner di comunicazione, ovvero quelle strutture più o meno specializzate, che affiancano in vario modo gli inserzionisti nelle fasi di: ideazione, pianificazione, realizzazione, diffusione e misurazione della comunicazione di marca. Si tratta, quindi, degli attori chiave che soddisfano la "domanda" di servizi di comunicazione dell'impresa inserzionista (Vollero, 2008): agenzia pubblicitaria, centro media, agenzia di relazioni pubbliche e digital agency.

Nel paragrafo seguente verrà delineata la letteratura fondamentale sulle dinamiche relazionali tra agenzia e cliente. Successivamente, dopo aver esplicitato gli obiettivi conoscitivi specifici e descritto il metodo seguito, verranno presentati i principali risultati emersi dall'indagine empirica. Il lavoro si chiude con la discussione dei risultati, le riflessioni conclusive e l'evidenza dei limiti e delle future linee di ricerca.

2. Dinamiche relazionali tra agenzia e cliente

Le relazioni che intercorrono tra agenzia e impresa cliente rappresentano un tema "classico" degli studi sugli attori della comunicazione di marketing (Cagley, 1986; West *et al.*, 1996). Tuttavia, nella prospettiva qui adottata, metteremo in luce solo gli aspetti delle dinamiche relazionali che sono più legati all'evoluzione in atto.

Tradizionalmente, la gran parte degli studi sul tema ha adottato la logica diadica che approfondisce esclusivamente le relazioni intercorrenti tra cliente-agenzia (soprattutto agenzia pubblicitaria e di relazioni pubbliche). Alla luce dei cambiamenti sopra accennati, contributi di ricerca più recenti hanno iniziato ad abbracciare una chiave di lettura più ampia, comprendente tutte le molteplici relazioni che intercorrono tra l'inserzionista e i diversi partner di comunicazione (Eagle e Kitchen, 2000). Tale prospettiva sembra essere più adeguata per rappresentare l'attuale

complessità relazionale innescata dall'adozione della logica di comunicazione integrata nel nuovo scenario comunicativo di tipo *push-pull-social*. Si configura così quello che alcuni Autori chiamano "*communication network*" (Grant e McLeod, 2007), ossia la rete di relazioni multiple che s'instaura tra l'inserzionista, l'agenzia pubblicitaria, il centro media, le agenzie specializzate e gli istituti di ricerca. Se questa è la versione "classica" del network, studi empirici ancora più recenti si sono interrogati sull'evoluzione dello stesso a fronte dei processi innovativi in atto nella comunicazione di marketing. In particolare, potrebbero venirsi a creare e convivere due architetture relazionali assai diverse (Ceccotti e Vernuccio, 2014): l'*integrated network* e lo *specialised network*. La prima forma di network sarebbe determinata dal processo in atto di ampliamento dei ruoli dei differenti partner di comunicazione; consisterebbe nella comparsa sul mercato dell'"agenzia integrata", ovvero una struttura che offre consulenza alle imprese su differenti strumenti della comunicazione di marketing (dall'advertising alle relazioni pubbliche, al branding), sia su mezzi digitali che tradizionali. Lo *specialised network* si configura, invece, quando lo sviluppo di una campagna integrata è demandato a una pluralità di partner specializzati in strumenti, mezzi, settori e target differenti. Infine, ulteriori configurazioni relazionali più innovative sembrano emergere con la comparsa nel mercato di nuovi attori della comunicazione, di "matrice digitale" (Ceccotti, 2012; Vernuccio e Ceccotti, 2017), come ad esempio: gli OTT[1] (Over-the-Top, es. *Google* e *Facebook*), le piattaforme automatizzate per la creatività (es. *Zooppa, eYeka*) e quelle per la pianificazione e l'acquisto degli spazi (es. *Rocket Fuel, Vivaki-Publicis*) (Ceccotti, 2018).

Con particolare riferimento alla configurazione dello *specialised network*, emerge il tema del *coordinamento dei differenti partner*; in tal senso, non sembrano esserci posizioni univoche da parte degli studiosi in merito a chi, tra l'impresa inserzionista e i diversi attori, debba farsi carico del coordinamento. Infatti, mentre alcuni contributi hanno posto l'enfasi sul ruolo fondamentale svolto in tal senso dal cliente (Beard, 1996; Kitchen *et al*., 2004; Kitchen *et al*., 2009; Kliatchko, 2009), altri hanno sottolineato, invece, il contributo centrale svolto dall'account planner all'interno dell'agenzia pubblicitaria (Crosier *et al.*, 2003) o, infine, del centro media (Grant e McLeod, 2007).

Oltre all'evoluzione delle architetture relazionali, un tema fondamentale che emerge dall'analisi della letteratura è quello della *proactivity*, intesa come la propensione al cambiamento e alla promozione dell'innovazione (Beverland *et al*., 2007; Lace, 2004). Difatti, le trasformazioni innescate dalla rivoluzione digitale non sono state accolte in modo proattivo dalle agenzie, soprattutto quelle pubblicitarie, che anzi hanno mostrato segnali di resistenza al cambiamento (Ceccotti e Vernuccio, 2014; Kitchen *et al*., 2007). Tali partner, preoccupati anche dai cambiamneti strutturali da porre in essere affrontare il nuovo scenario, hanno assunto un atteggiamento di tipo *"wait and see"* (Durkin e Lawlor, 2001), avendo inizialmente considerando Internet come una moda destinata a passare. Le agenzie di relazioni pubbliche, invece, sembrano aver opposto una minore resistenza al cambiamento, abbracciando con maggiore facilità i nuovi paradigmi della comunicazione *pull* e *social* (Valentini, 2015). Ruolo fondamentale viene invece attribuito ai clienti nello stimolare l'adozione dei nuovi mezzi e di un approccio integrato da parte delle agenzie (Mortimer e Laurie, 2017) oltre che, in termini più generali, nella promozione di cambiamenti strutturali, organizzativi e culturali delle agenzie (Masiello *et al*., 2013). Tale ruolo è tanto più frequente tanto maggiori sono la motivazione, l'expertise, l'apertura alla sperimentazione e, infine, la capacità di spesa del cliente.

La letteratura recente si è soffermata, inoltre, sugli *aspetti critici della relazione agenzia-cliente*, ponendo l'enfasi sul "lato oscuro" della stessa (Biraghi, 2017; Ots e Nyilasy, 2015). Infatti, alla base delle dinamiche relazionali possono esserci divergenze negli obiettivi dei partner (Eisenhardt, 1989), asimmetrie informative (Bergen *et al*., 1992), conflitti di interesse (Grant *et al*., 2012) e differenze nell'attitudine al rischio. Con riferimento a quest'ultimo punto, basti pensare alla logica di orientamento al risultato di breve termine, che anima spesso gli inserzionisti (Ceccotti e Vernuccio, 2014), rispetto alle velleità di sperimentazione creativa auspicate dall'agenzia

[1] Gli OTT sono fornitori di servizi di comunicazione che si appoggiano alle reti per il trasporto dei dati già esistenti (costruite e gestite dalle Telco) (Agcom, 2014).

pubblicitaria. Altro tema a questo collegato è quello del *controllo nell'ambito del network*, che chiama in causa anche i rapporti di forza tra gli operatori (Eagle e Kitchen, 2000; Grant *et al*., 2012). In particolare, la distribuzione del potere è spesso legata a condizioni di asimmetria informativa e di scarsa trasparenza, che possono generare il rischio di comportamenti opportunistici da parte di uno o entrambi gli interlocutori (Biraghi, 2017; Heo e Sutherland, 2015).

Il *difetto di trasparenza* - sia lato cliente sia lato agenzia - caratterizza anche tutto il sistema delle gare. In questo ambito, comportamenti poco trasparenti o addirittura opportunistici, possono essere adottati sia dall'inserzionista (che, ad esempio, può non rendere noti i criteri di scelta del partner) sia dall'agenzia pubblicitaria (che potrebbe sottrarre risorse umane dedicate ai clienti attuali per destinarle all'acquisizione di nuovi clienti) (Biraghi, 2017). Allo stesso modo, anche la relazione tra cliente e centro media (o agenzia media) sembra caratterizzata da una notevole opacità in due ambiti: (i) il processo di negoziazione e di acquisto di mezzi e veicoli per conto dei clienti, in un quadro di definizione dei prezzi poco chiaro[2] e in assenza di contratti standard che disciplinano la negoziazione degli spazi; (ii) il sistema dei diritti di negoziazione, premi di fine anno riconosciuti alle agenzie media da parte delle concessionarie al fine di incentivare l'intermediario a operare nell'interesse dell'editore (AgCom, 2012).

Un ultimo aspetto delle relazioni tra agenzia e cliente sembra, a nostro avviso, degno di nota ed attiene alla *stabilità/volatilità dei rapporti tra le parti*. Infatti, alcuni studi mettono in evidenza come la relazione tra impresa inserzionista e consulente di comunicazione possa essere improntata a una logica di vera e propria partnership di medio/lungo termine (che alcuni definiscono di *co-makership*). Questa si configura soprattutto quando esiste una sostanziale simmetria tra gli interlocutori (ad esempio in termini di dimensioni di impresa e agenzia), una continuità nella relazione, una elevata complessità della consulenza, degli obiettivi condivisi e, infine, una fitta di rete di contatti - formali e informali - tra l'agenzia e il cliente (Marcati, 1997; Vollero, 2008). Accanto ai rapporti di partnership di questo tipo, esistono rapporti di collaborazione tra agenzia e cliente più improntati alla logica "transazionale", di breve termine. Secondo alcuni studi (Marcati, 1997) queste due fattispecie si devono ritenere come complementari piuttosto che alternative; nella scelta dei consulenti di comunicazione, infatti, le imprese clienti dovrebbero adottare una logica di portafoglio, abbinando a relazioni di partnership stabili altre più volatili.

Sebbene la letteratura accademica offra, come visto, alcuni *focus* sulle dinamiche relazionali tra agenzia e cliente, ad oggi sembra mancare un'analisi sistematica, approfondita e al contempo trasversale rispetto ai diversi partner di comunicazione (agenzia pubblicitaria, centro media, agenzia di relazioni pubbliche, digital agency) sull'evoluzione di tali relazioni. Gli studi attuali, inoltre, si focalizzano principalmente sulle strutture tradizionali, quali l'agenzia pubblicitaria e quella di relazioni pubbliche (Kitchen e Schultz, 1998; Turnbull e Wheeler, 2017; Valentini, 2015), prestando un'attenzione minore alle altre categorie di fornitori. Tra le tipologie di agenzia meno indagate vi sono senz'altro, oltre ai centri media, i nuovi player, ossia le digital agency che hanno fatto il loro ingresso sul mercato dei servizi per la comunicazione a partire dagli anni Novanta del secolo scorso. Solo indagando in modo olistico (trasversale) le direttrici del cambiamento relative alle dinamiche relazionali tra inserzionista e partner di comunicazione, sarà possibile interpretare come va configurandosi il nuovo scenario comunicativo e, sotto il profilo manageriale, migliorare le performance complessive sia del communication network sia dei singoli attori (Taylor, 2017).

3. Obiettivi e metodologia

Nel quadro sopradescritto, la ricerca condotta si è posta anzitutto l'obiettivo di delineare dei *framework interpretativi* delle determinanti dell'evoluzione delle dinamiche relazionali tra agenzia e cliente, nonché delle conseguenti direttrici di tale evoluzione, analizzando empiricamente, in

[2] Basti pensare, ad esempio, alla scontistica applicata dalle concessionarie ai centri media, una prassi che rende il prezzo di listino pubblicato un valore poco più che indicativo e simbolico (AgCom, 2012).

modo trasversale rispetto alle diverse categorie di attori, la percezione dei professionisti della comunicazione in merito a:

1. i *driver*, ovvero i fenomeni di scenario, che, a monte, hanno innescato il cambiamento dello stesso e, per questa via, anche delle relazioni agenzia-cliente;
2. i *temi*, intesi come gli aspetti chiave che qualificano il nuovo scenario della comunicazione di marketing;
3. gli *effetti del cambiamento in termini relazionali*, ossia le conseguenze dirette e indirette che gli aspetti chiave peculiari del nuovo scenario determinano sulle relazioni agenzia-cliente.

Oltre all'analisi di tipo trasversale, lo studio si è posto anche l'obiettivo di un approfondimento "verticale", volto all'identificazione e all'analisi di eventuali specificità a seconda della categoria di partner di comunicazione.

L'ampiezza degli obiettivi conoscitivi e la volontà di approfondire le criticità relazionali, così come vengono percepite dai professionisti della comunicazione, ha fatto propendere per l'adozione di un approccio esplorativo di tipo qualitativo. La ricerca qualitativa è la più adeguata in tali circostanze, perché permette di descrivere e interpretare in modo profondo le diverse prospettive, consentendo di pervenire a una visione olistica dei fenomeni (Daymond e Holloway, 2002). La scelta di un approccio qualitativo è legata anche alla natura dell'oggetto d'indagine, che presenta contorni sfumati e in continuo mutamento che mal si prestano a una misurazione puntuale (Molteni e Troilo, 2003). L'assenza di ipotesi di partenza, infine, ha fatto propendere per lo svolgimento di un field qualitativo basato su interviste personali in profondità (Creswell, 1998). La traccia d'intervista semi-strutturata è stata articolata sulla base di ancoraggi collegati agli obiettivi sopra esposti: 1) perché (driver) e come (temi) è cambiato lo scenario degli attori della comunicazione; 2) i principali effetti del cambiamento sulle dinamiche relazionali verticali (agenzia-cliente). Complessivamente, sono stati intervistati 53 professionisti in posizioni apicali appartenenti a tre fondamentali gruppi:

- *Gruppo 1 - i "punti di vista più alti"* (n=17), ovvero associazioni di categoria (n=9), lato agenzie e lato imprese inserzioniste (es. *UPA, Assocom, IAB, Centromarca*), grandi inserzionisti (n=6; es. *Enel, L'Oréal*) e network internazionali (n=2; es. *Publicis Communications*). In questo caso, l'obiettivo è quello di avere una visione "alta" e trasversale delle cause e degli effetti inerenti alle dinamiche relazionali per le diverse tipologie di attori, grazie alla loro prospettiva privilegiata in qualità di osservatori (associazioni di categoria), di utilizzatori evoluti (*advertiser "big spender"*) e di coordinatori (network internazionali) delle differenti realtà di agenzia, tradizionali e nuove.
- *Gruppo 2 - gli "attori tradizionali"* (n=26), ovvero agenzie pubblicitarie creative (n=5; es. *Ogilvy & Mather Italia, Leo Burnett*), agenzie integrate (n=7; es. *Gruppo Roncaglia, Acqua Group*), centri media (n=4; es. *Havas Media Group, Omnicom Media Group Italia*), agenzie di relazioni pubbliche (n=6; es. *Edelman Italia, Weber Shandwick Italia*) e specializzate (n=1; *Relata*), concessionarie (n=3; es. *Rai Pubblicità, Hearst*)[3]. L'obiettivo conoscitivo è quello di approfondire le traiettorie evolutive di tipo relazionale riferendosi alla singola categoria di appartenenza dell'intervistato.
- *Gruppo 3 - i "nuovi attori"* (n=10), le agenzie digitali (es. *Doing, We are social, Alkemy*). In tale ambito, l'obiettivo è quello di approfondire le specificità delle dinamiche relazionali riferite alle nuove agenzie.

L'individuazione delle organizzazioni in target è stata realizzata attraverso l'utilizzo congiunto di diversi criteri, in modo da rendere il più ampio possibile l'universo di partenza. Per quel che concerne il primo gruppo, sono state considerate le principali associazioni di categoria del settore della comunicazione, i grandi *network* della comunicazione e gli inserzionisti che, per dimensione, budget investito e/o approccio innovativo alla comunicazione, possono essere collocati in una posizione di leadership nei diversi settori di riferimento. Per l'individuazione delle agenzie

[3] Le interviste ai professionisti appartenenti alle concessionarie sono state finalizzate ad acquisire un quadro più completo sulle relazioni che vedono coinvolti i centri media e l'agenzia pubblicitaria.

tradizionali e nuove sono state utilizzate differenti fonti, quali: elenchi degli associati delle principali associazioni di categoria; siti dei principali gruppi della comunicazione per individuare le agenzie operanti in Italia; stampa specializzata nella comunicazione; partecipanti e vincitori dei principali premi della comunicazione a livello internazionale e nazionale, così da poter acquisire il punto di vista dei "*best in class*" nelle differenti categorie. Le agenzie coinvolte, pur operando a livello internazionale, si trovano in Italia. Tale scelta è dettata sia da ragioni di convenienza sia dalla volontà di indagare eventuali specificità del cambiamento nel nostro Paese.

Nella selezione dei professionisti da includere nel set d'indagine è stato adottato il *key informant approach* (Robson e Foster, 1989): sono stati contattati esclusivamente soggetti con ruolo apicale nell'ambito dell'agenzia (es. CEO, Presidente, Founder, Partner), delle imprese inserzioniste (es. Direttore marketing, Head of digital, Head of global advertising) e delle associazioni di categoria (Presidente, Direttore generale, Responsabile Centro Studi). Dato il tema, infatti, sono stati inseriti nel "*theoretical sample*" solo profili esperti in grado di fornire una visione ampia e profonda del fenomeno, proprio in virtù dell'esperienza maturata in Italia e all'estero e delle responsabilità detenute (Dexter, 1970). Ai potenziali intervistati (n=200) in tal modo individuati, sono stati inviati via email l'invito a partecipare allo studio e il progetto della ricerca con l'illustrazione degli obiettivi, del metodo e delle modalità di diffusione dei risultati[4]. In media, gli intervistati hanno 23 anni di esperienza professionale di cui 22 nell'ambito della comunicazione, hanno lavorato in quattro organizzazioni differenti nel corso della loro carriera e sono per il 78% uomini (cfr. Appendice - *Il set d'indagine*).

Le interviste, condotte nel periodo maggio-luglio 2017, sono state svolte telefonicamente/via Skype o presso la sede dell'intervistato e hanno avuto una durata tra i quaranta e i sessanta minuti. Ogni conversazione è stata registrata e successivamente trascritta per intero. Le interviste sono state trattate con l'analisi qualitativa del contenuto (Braun e Clarke, 2006; Langdrige, 2004).

Per l'elaborazione dei framework interpretativi del cambiamento è stata utilizzata la tecnica delle mappe cognitive (Chaney, 2010), che consente di mettere in evidenza i concetti alla base della rappresentazione mentale dei fenomeni da parte dell'intervistato e le relazioni tra tali concetti. In particolare, sono state seguite le fasi del "*documentary coding method*" (Wrightson, 1976), ossia:

1) la codifica del testo, consistente nell'identificazione dei concetti che sono stati ricondotti ai driver, ai temi e agli effetti relazionali da questi generati. Nel dettaglio, è stata condotta l'analisi tematica del contenuto (Kassarjian, 1977), individuando il tema come criterio per l'identificazione delle unità di analisi e la codifica del testo (Bernard e Ryan, 2010; Krippendorff, 2004). I testi delle interviste sono stati divisi in segmenti di contenuto associati alle categorie tematiche che, dato l'approccio esplorativo seguito, sono state individuate a posteriori, dopo un'attenta analisi del *corpus* di partenza;
2) la preparazione del dizionario, ovvero la lista di tutti i concetti utilizzati dagli intervistati e i relativi *verbatim*, al fine di identificare e unificare tutti i frammenti di testo con lo stesso significato (processo di *merging*);
3) la preparazione della "*relationship card*" per l'individuazione delle relazioni tra i concetti individuati. Più nel dettaglio, sono state individuate due tipologie di legami: relazioni di categoria (nel caso in cui un concetto venga descritto come un elemento costitutivo di un ulteriore concetto) e relazioni di causazione (nel momento in cui un concetto venga identificato come causa del verificarsi di alcuni effetti) (Molteni e Troilo, 2003);
4) il disegno delle mappe cognitive collettive (Swan, 1997), modellizzazioni olistiche frutto della sistematizzazione delle posizioni emerse dalla lettura delle interviste condotte. In particolare, sono state elaborate due mappe cognitive per gli ambiti osservati: (a) i driver e i temi del cambiamento (§ 4.1), (b) l'evoluzione delle relazioni agenzia-cliente (§ 4.2).

Con specifico riferimento all'analisi delle mappe, in linea con la finalità esplorativa del lavoro, si è scelto di non ricorrere all'analisi strutturale delle stesse, ma, come suggerito dalla letteratura

[4] Il *response rate* (26,5%) risulta in linea con quello riscontrato in studi con respondents simili (Waldman *et al.*, 2006).

(Chaney, 2010), alla loro lettura qualitativa: è stata, dunque, preferita un'analisi del contenuto dei nodi e, soprattutto, l'approfondimento dei nessi causali tra i driver, i temi e gli effetti del cambiamento sulle relazioni agenzia-cliente. L'analisi così condotta ha rappresentato la base di partenza anche per l'approfondimento successivo delle specificità dei differenti partner, sia tradizionali che digitali.

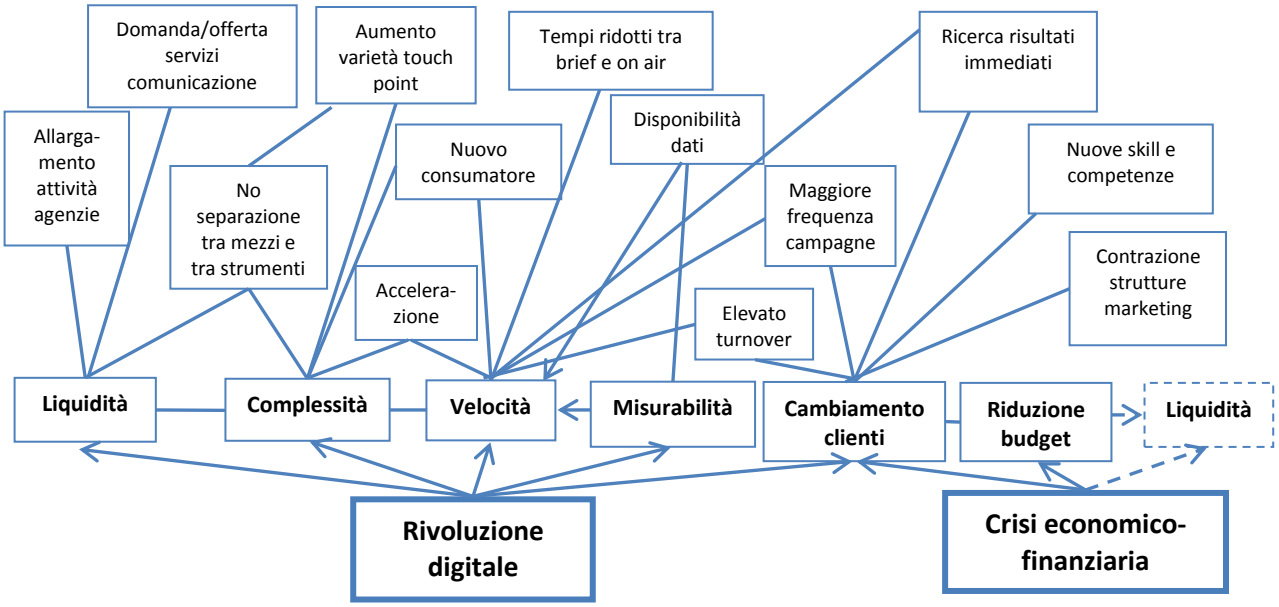
4. Risultati

In risposta agli obiettivi conoscitivi descritti sopra, l'analisi qualitativa del contenuto e l'applicazione del "*documentary coding method*" sono state finalizzate all'elaborazione di due framework intepretativi: il primo relativo ai driver e ai temi del cambiamento (§ 4.1) e il secondo riferito agli effetti in termini relazionali (§ 4.2). Il framework sui driver e i temi (figura 1) è stato sviluppato con la finalità di approfondire in modo trasversale i differenti significati del cambiamento, andando a qualificare ogni macro-tema con i principali sotto-temi a questo legati da nessi di categoria. Invece, l'elaborazione del framework relativo agli effetti di tali macro-temi sull'evoluzione delle relazioni agenzia-cliente (figura 2) è stata guidata dalla finalità di mettere in luce esclusivamente le "catene" di causa-effetto (direttrici causali), che legano tali macro-temi a molteplici conseguenze intermedie, per arrivare quindi agli effetti finali di tipo relazionale.

4.1 I driver e i temi del cambiamento

I driver del cambiamento percepiti trasversalmente alle diverse categorie di rispondenti sono sostanzialmente due: *in primis*, la rivoluzione digitale a livello globale, con l'avvento di Internet, dei social media e lo sviluppo dei device mobili; in secondo luogo, e con particolare riferimento al nostro Paese, la crisi economico-finanziaria (fig. 1).

Fig. 1: I driver e i temi del cambiamento nella comunicazione di marketing



Fonte: nostra elaborazione.

La transizione digitale delle imprese clienti e delle agenzie è un processo ancora in divenire; secondo diversi intervistati, infatti, siamo nella fase del "*missmatch*", nella quale ancora non sono pienamente maturati gli effetti della rivoluzione digitale e gli attori tradizionali non sono in grado di concretizzare tutte le potenzialità che il digital offre loro. Numerosi rispondenti, soprattutto

appartenti alla categoria delle digital agency, mettono in luce il ruolo centrale del consumatore nella diffusione del digitale.

«*È un cambiamento che non è guidato da player del mercato, dalle agenzie o dai clienti, ma è guidato dai clienti dei nostri clienti, quindi dalle persone che comprano i prodotti e che vogliono interagire col brand*» (Managing Director, Digital agency).

Come detto, dalle interviste emerge come la crisi economico-finanziaria venga percepita alla stregua di un secondo driver di cambiamento. Infatti, la crisi ha determinato il cambiamento delle strutture e dei budget dei clienti e, di conseguenza, ha portato a una profonda trasformazione delle agenzie e delle dinamiche relazionali tra queste e le imprese inserzioniste.

Dalla combinazione della rivoluzione digitale e della crisi economico-finanziaria discendono alcuni macro-temi che caratterizzano il nuovo scenario della comunicazione di marketing nel percepito degli intervistati (fig. 1), ovvero: *a) la complessità; b) la liquidità; c) la velocità; d) la misurabilità; e) il cambiamento dei clienti; f) la riduzione dei budget.*

Secondo i rispondenti, la rivoluzione digitale rappresenta il driver più importante del cambiamento delle agenzie, determinando (nesso causale) tutti i macro-temi emersi dalle risposte degli intervistati, ad eccezione della riduzione del budget delle imprese inserzioniste, che deriva invece esclusivamente dalla crisi.

I macro-temi individuati sono stati declinati con nessi di categoria in diversi sotto-temi (fig. 1). In tal modo, è possibile fornire una rappresentazione approfondita dei significati assunti da ciascun tema, per poi comprendere meglio gli effetti generati da ciascuno di essi in termini relazionali (§ 4.2).

a) La *complessità* è la parola più ricorrente nelle risposte degli intervistati, i quali descrivono il nuovo scenario e le nuove prassi di comunicazione come "più complessi" rispetto al passato. Tale tema, che è visto come effetto diretto ed esclusivo della rivoluzione digitale, viene declinato dai rispondenti in due ambiti principali: *l'aumento della varietà dei touch point e il nuovo ruolo del consumatore.* Con riferimento all'ambito dei *touch point*, si segnala l'utilizzo di quest'ultimo termine in un'accezione ampia, intendendo qualsiasi punto di contatto utilizzabile dal brand per raggiungere il consumatore. I *touch point* non solo aumentano in termini di varietà, ma come vedremo a proposito della liquidità, sono sempre meno separati tra loro e sempre più utilizzati in una logica multicanale e integrata. Inoltre, considerando il collegato tema della velocità, possiamo evidenziare come i cambiamenti tecnologici alla base di tale moltiplicazione dei *touch point* siano molto rapidi e in continua accelerazione, andando a configurare uno scenario caratterizzato anche da elevata variabilità. La conseguenza dell'aumento di varietà di *touch point* (e, conseguentemente, dei partner di comunicazione specializzati) e della variabilità degli stessi genera una situazione di indeterminatezza, soprattutto dal punto di vista delle imprese clienti.

Il secondo significato di complessità, che viene sottolineato soprattutto dalle agenzie digitali e da quelle di relazioni pubbliche, è il cambiamento del ruolo del consumatore, che diventa protagonista, *always-on* e multi-canale e cerca una relazione più diretta, trasparente e "democratica" con le imprese.

b) La liquidità è generata congiuntamente dalla rivoluzione digitale e dalla crisi economico-finanziaria ed è parte della complessità. L'accezione di questo termine non è quella propria dell'economia aziendale e del management, risultando più affine all'ambito sociologico (Bauman, 2000), poiché viene legata al progressivo venir meno di confini ben definiti di oggetti e soggetti (Mattiacci, 2014) che operano nel mondo della comunicazione. Nel percepito degli intervistati, anche tale tema presenta differenti declinazioni, ossia: (1) la progressiva scomparsa della separazione tra gli strumenti e tra i mezzi; (2) l'"allargamento" delle attività svolte dai player tradizionali; (3) il venir meno della tradizionale corrispondenza tra le dimensioni dell'impresa cliente e quelle del partner di comunicazione.

In primo luogo, la liquidità è legata al venir meno della separazione tra gli strumenti e tra i mezzi, grazie alla progressiva digitalizzazione:

«*La linea di confine fra ciò che era la pubblicità classica e ciò che non lo era e ciò che era relazioni pubbliche e tutto quello che era sotto la pubblicità classica, tutto l'advertising… non è più*

così netto. La distinzione tra ATL e BTL, che aveva funzionato per anni, ora non ha più senso in un contesto liquido in cui i mezzi e gli strumenti si ibridano a vicenda e devono essere sempre più integrati» (Managing director, agenzia di RP).

In secondo luogo, la liquidità dello scenario è legata all'allargamento delle attività svolte dai player tradizionali su strumenti differenti da quelli "*core*". Il termine "allargamento" utilizzato dagli intervistati può essere ricondotto a due differenti fattispecie: (1) l'estensione dello *scope* di attività svolte e servizi offerti (è questo il caso, ad esempio, dell'agenzia pubblicitaria che abbina anche la consulenza nell'ambito delle relazioni pubbliche o delle promozioni); (2) l'integrazione verticale delle attività (è la situazione, ad esempio, del centro media che cura anche l'attività di content marketing). Questo fenomeno è ascrivibile senz'altro alla rivoluzione digitale, ma anche alla crisi economico-finanziaria, che ha imposto alle agenzie la ricerca di nuove opportunità di business.

Un'ultima accezione della liquidità, anch'essa riconducibile a entrambi i driver, fa riferimento al venir meno della tradizionale corrispondenza tra dimensione dei clienti e delle rispettive agenzie. In passato, infatti, si verificava prevalentemente il ricorso a partner di grandi dimensioni da parte di grandi imprese inserzioniste e, viceversa, l'utilizzo di agenzie più piccole da parte di clienti dalla scala dimensionale più ridotta. Nel nuovo scenario, invece, si assiste a due fenomeni, uno sul fronte dell'offerta di servizi di comunicazione e l'altro su quello della domanda. Sul primo versante, le grandi agenzie iniziano a prestare attenzione anche ai clienti più piccoli, che, pur non avendo carattere strategico per la crescita dell'agenzia, consentono almeno di coprire le spese in tempi di crisi. Sul fronte della domanda da parte delle grandi imprese, invece, si riscontra un crescente ricorso ai servizi forniti da agenzie di piccole e medie dimensioni, specializzate soprattutto in ambito digitale. Se fino a due o tre anni fa, tale scelta era legata alla volontà del cliente di sperimentare nuovi ambiti di comunicazione - attribuendo loro budget molto limitati - oggi, invece, è dovuta soprattutto alla ricerca di un servizio altamente specializzato, fornito da strutture più snelle e più flessibili, che possano garantire al cliente un livello di *caring* più elevato rispetto ai partner di di-mensioni più grandi.

c) *La velocità* è la seconda dimensione della complessità (oltre alla liquidità) e attiene alla variabilità dei fenomeni nel tempo. Nelle parole degli intervistati, questa dimensione è una delle principali conseguenze della rivoluzione digitale. Come anticipato sopra a proposito del macro-tema complessità, oltre all'aumento della varietà dei *touch point*, gli intervistati segnalano da un lato il ritmo accelerato del cambiamento negli ultimi anni e la costante tensione verso le novità soprattutto in virtù della continua introduzione sul mercato di nuove tecnologie. Il tema della velocità è riconducibile nelle risposte degli intervistati a tre dimensioni fondamentali che riguardano: (1) il consumatore; (2) le imprese clienti (nell'ambito del più ampio cambiamento che le riguarda e sul quale torneremo tra breve); (3) le agenzie. (1) Sul fronte del "nuovo consumatore", la velocità è riferita: all'immediatezza di reazione ai diversi stimoli di comunicazione, alla rapidità nel consumo dei messaggi, nonché alla celerità nell'esaurimento dell'attenzione e dell'interesse da parte di individui distratti e sempre alla ricerca di nuovi stimoli. (2) Con riferimento, invece, alle imprese inserzioniste, gli intervistati hanno messo in evidenza in primo luogo la velocità nella ricerca dei risultati da parte dei manager delle imprese clienti, effetto non solo della digitalizzazione - che consente la misurazione puntuale e rapida dei ritorni delle iniziative di comunicazione - quanto della crisi economico-finanziaria - che accorcia i tempi nei quali tali ritorni devono essere ottenuti. Collegata alla rapidità del consumo dei messaggi da parte del consumatore e alla necessità di avere dei risultati immediati è sicuramente la maggiore frequenza nella richiesta di campagne di comunicazione da parte dei clienti. Sono in molti, infatti, che ritengono opportuno oggi adottare strategie di continuità nel presidio dei media - soprattutto quelli digitali e sociali - contrariamente al passato quando si preferiva concentrare gli sforzi di comunicazione in periodi di tempo più limitati.

(3) Per quel che concerne le agenzie, infine, la velocità è associata alla riduzione dei tempi che intercorrono tra il *brief* del cliente all'uscita *on air* della campagna. In particolare, questa contrazione dei tempi è conseguenza di processi decisionali più ridotti, anche in virtù delle reazioni immediate dei destinatari della comunicazione (che richiedono talvolta risposte tempestive da parte dell'agenzia, di concerto col cliente). Oltre ai tempi di decisione più ristretti, si riscontra una

progressiva contrazione anche dei tempi di produzione dei messaggi, sempre più spesso rivisti in corso d'opera per seguire la persona nelle differenti fasi del *customer journey* e nel progressivo avvicinamento all'acquisto. Infine, sono più brevi i tempi di acquisto per i mezzi digitali che, grazie ai processi di automazione, possono essere pianificati e acquistati in *real time (programmatic buying)*.

d) Collegato alla velocità è il quarto macro-tema del nuovo scenario, la misurabilità, che deriva direttamente dalla rivoluzione digitale e che ha modificato completamente l'approccio alla comunicazione, prima basato sulla "stima" invece che sulla "misurazione".

«*La rivoluzione digitale ha instillato nella testa dell'inserzionista il concetto della misurazione. Prima non c'era questo concetto… la comunicazione era basata sulla stima, mentre con l'avvento del digitale si può misurare tutto, sia prima che dopo. La comunicazione oggi è più informata, perché richiama l'utilizzo dei dati sia in pre che post. Oggi si hanno delle capacità di analisi e di tracciamento dei comportamenti del consumatore prima impensabili*» (CEO, Centro media).

Evidente in tal senso è la relazione causale che lega la misurabilità alla velocità. Quest'ultima, infatti, è resa possibile grazie all'utilizzo di dati che rendono più rapide le decisioni e i processi di acquisto e, per questa via, l'ottimizzazione delle campagne digitali in tempo reale.

e) Il combinato effetto della crisi economica e della rivoluzione digitale ha portato anche a una *profonda trasformazione delle imprese clienti*. Si deve alla crisi la tensione verso risultati di breve periodo (già messa in evidenza a proposito della velocità), la contrazione delle strutture di marketing a seguito della fuoriuscita dalle imprese di un numero importante di risorse e, talvolta, l'accorpamento della funzione marketing con le vendite. Accanto alla riduzione numerica delle risorse del marketing (causata dalla crisi), diversi rispondenti delle agenzie hanno sottolineato anche il cambiamento qualitativo delle strutture (causato dalla rivoluzione digitale) con l'introduzione nell'organico di nuove skill e competenze per gestire gli aspetti più tecnici del digital. In quest'ambito, sono state inserite figure più giovani che, secondo gli intervistati, sono caratterizzate da un *turnover* molto più alto rispetto a quello che caratterizza le figure più "tradizionali". Inoltre, viene sottolineato come questa sia una tendenza ormai diffusa anche per tutti i manager (non solo del digitale) che, soprattutto nelle grandi multinazionali, vengono valutati nel breve/medio periodo in base alla loro capacità di raggiungere gli obiettivi prefissati.

f) La riduzione del budget, infine, pur rappresentando uno degli aspetti del cambiamento del cliente derivante dalla crisi, assume nella nostra analisi il rango di tema a sé, proprio per la rilevanza degli effetti generati da questo fattore sull'evoluzione delle agenzie e sulle relazioni tra queste e gli utilizzatori dei loro servizi.

4.2 Gli effetti sull'evoluzione delle relazioni agenzia-cliente

Il cambiamento sopra delineato innesca una serie di effetti sull'evoluzione delle relazioni tra agenzia e cliente. In particolare, i principali effetti relazionali sono (fig. 2): a) *la confusione del cliente; b) la scarsa trasparenza nella filiera; c) l'aumento dell'intensità delle relazioni; d) l'oggettività nella valutazione del servizio offerto dall'agenzia; e) il percorso virtuoso: maggiore stabilità delle relazioni; f) il percorso vizioso: maggiore volatilità delle relazioni; g) il livello e la competenza dell'interlocutore nell'impresa cliente.*

a) Confusione del cliente. A fronte della frammentazione della filiera della comunicazione di marketing (aumento della varietà di attori come conseguenza della complessità) e della diluizione dei confini tra i differenti player (in virtù della liquidità), emerge il rischio di confusione da parte del cliente, che potrebbe non riuscire ad orientarsi efficacemente nel nuovo scenario. Il disorientamento del cliente è induttivamente confermato anche dalla sua difficoltà a individuare i partner più adeguati da invitare alle gare. Alcuni tra gli intervistati ritengono che questa confusione stia gradualmente venendo meno e che i clienti stiano acquisendo maggiore consapevolezza circa lo specifico contributo che è corretto aspettarsi dalle diverse tipologie di agenzia.

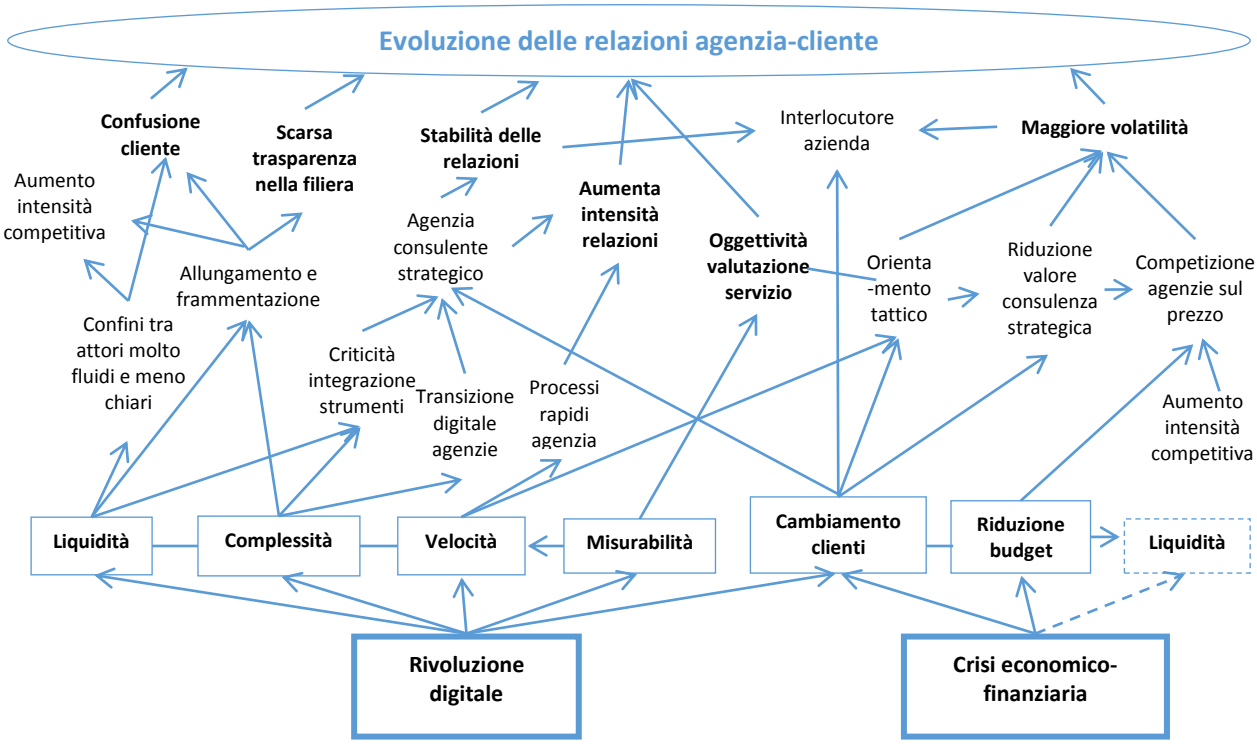
«*Fino a tre o quattro anni fa ci invitavano a delle gare che tu ti chiedevi 'come mai è arrivato a noi questo invito in gara?' Ti trovavi in gara con un'agenzia che non c'entrava assolutamente*

niente con te. Il cambiamento aveva creato grande confusione anche all'interno della committenza. Oggi è diverso, oggi finalmente hanno capito di nuovo che cosa facciamo» (Managing Director, Agenzia di RP).

Gli intervistati delle agenzie digital sottolineano, tuttavia, la permanenza di una difficoltà da parte dei clienti a valutare in modo adeguato il contributo da loro fornito soprattutto nel caso di iniziative di branding: gli investitori, infatti, si aspettano di ottenere anche in quest'ambito i risultati in tempi rapidi che sono soliti ottenere da iniziative digital più orientate alla performance.

«Quando fanno investimenti nel digital, tutti vogliono la performance. Solo che siamo al punto che anche su iniziative di branding di più ampio respiro i clienti chiedono le conversioni, vogliono risultati nel breve, che naturalmente non possono arrivare» (CEO, Digital agency).

Fig. 2: L'evoluzione delle relazioni agenzia-cliente



Fonte: nostra elaborazione.

b) Scarsa trasparenza nella filiera. Oltre alla frammentazione della filiera, si è assistito a un allungamento della stessa. Questo ha fatto emergere il rischio della riduzione di trasparenza dei fornitori di servizi di comunicazione. Si tratta di un tema particolarmente sentito dagli inserzionisti e dalle associazioni di categoria in particolare verso l'operato dei centri media. Infatti, alcuni rispondenti arrivano ad affermare che il cliente vede diminuire progressivamente la forza contrattuale nei confronti di tali attori e che questi ultimi oggi siano quasi *«competitor degli inserzionisti»* (Presidente, Associazione di categoria), nel momento in cui gli interessi dell'intermediario vengano anteposti a quelli del cliente.

c) Aumento dell'intensità relazionale. Dal tema della velocità e, in particolar modo, dall'accezione più legata all'attuale *modus operandi* delle agenzie (che adottano processi rapidi per rispondere alla velocità del consumatore) e del cliente (che richiede campagne sempre più frequentemente), discende un cambiamento delle relazioni cliente-fornitore nel solco di una maggiore intensità rispetto al passato. L'intensità va intesa in termini di occasioni di confronto e di scambio tra le parti, che interagiscono con una frequenza sensibilmente superiore rispetto al tempo in cui si aveva la concentrazione temporale delle campagne in alcuni periodi dell'anno e la dinamica del confronto era scandita da pochi momenti: il *brief*, la presentazione delle proposte creative e della pianificazione media (in caso di agenzia a servizio completo) e l'approvazione finale. L'intensità

relazionale, inoltre, sembra aumentare anche nei casi in cui l'agenzia si pone verso il cliente come un vero e proprio consulente strategico di business e non solo di comunicazione.

«*Stiamo diventando sempre più consulenti dei nostri clienti… questo si traduce in una relazione che è continuativa, che prevede tante ore al giorno e tante giornate negli uffici dei nostri clienti e questa è l'unica chiave per fare business oggi*» (Agenzia pubblicitaria, Head of Digital).

d) Oggettività nella valutazione del servizio fornito dall'agenzia. Secondo alcuni intervistati, si riscontra oggi una maggiore oggettività nel valutare il servizio prestato dall'agenzia, grazie alla maggiore misurabilità dei risultati della comunicazione. Per questa via, le relazioni possono essere costruite sul "reale" valore fornito dall'agenzia e sembra ridursi il peso attribuito a fattori personali, che spesso guidavano in passato la scelta dell'agenzia e la valutazione del suo operato da parte del cliente.

«*Prima c'era il mondo dell'agenzia pubblicitaria, cioè l'account dell'agenzia pubblicitaria era poi quello che portava a cena il cliente, faceva i regali di Natale… oggi secondo me non c'è più spazio per quella roba lì. Cioè nessun cliente ha più questa attenzione ad essere coccolato, se poi non porti la delivery… cioè se lavori bene funziona, se non lavori bene funziona molto meno. Secondo me, c'è molta più sostanza e molta meno apparenza nella relazione. Cioè la relazione è fatta di risultati e le agenzie vengono valutate sulla base dei risultati. Siamo noi agenzie che abbiamo detto al cliente 'guarda che con il digital ogni euro che spendi puoi sapere quanto ti torna' … A quel punto se non gli torna, il cliente cambia!*» (Head of Strategy, Digital agency).

Questo vale non solo per il contributo fornito dalle agenzie digitali, ma si estende anche agli attori tradizionali, sempre più impegnati nel portare risultati misurabili ai clienti.

e) Percorso virtuoso: maggiore stabilità delle relazioni. Di fronte a uno scenario che diventa sempre più complesso, emerge il ruolo fondamentale delle agenzie nel semplificare la complessità e nel fornire una consulenza di elevato livello alle imprese clienti.

«*Tanto più la comunicazione è 'complicata', tanto più c'è bisogno per le aziende di consulenti che aiutino a semplificare la difficoltà. Tanto più, lato nostro, è necessario sviluppare approfondimenti e capire che cosa funziona, come e quando*» (CEO, Centro media).

Sul fronte della domanda di servizi di comunicazione, la contestuale contrazione delle strutture delle imprese clienti non fa che aumentare la propensione a ricorrere ad agenzie integrate, che possano orientare al meglio la strategia di comunicazione, salvaguardando la coerenza tra i differenti strumenti e mezzi utilizzati e, per questa via, il valore del brand.

«*I clienti cercano un interlocutore unico, proprio perché vogliono demandare all'agenzia un ruolo consulenziale per attività, che una volta, magari, svolgevano all'interno. Prima, infatti, si decideva internamente che cosa fare e poi l'agenzia proponeva come farlo… Invece adesso sempre più spesso arrivano dei brief che dicono 'abbiamo questo problema, questo bisogno, questo obiettivo: cosa facciamo?*'» (Presidente, Associazione di categoria).

In relazione a tale necessità, le agenzie hanno intrapreso percorsi differenti, uno di tipo virtuoso e l'altro, invece, vizioso. Le realtà che sono cresciute negli ultimi anni sono quelle che sono riuscite a porsi, in virtù dell'elevato contributo fornito ai clienti, come partner strategici per le imprese e come dei veri e propri consulenti di business, oltre che di comunicazione. Tale percorso è quello intrapreso in primo luogo dai centri media, che, nonostante il rischio di scarsa trasparenza sopra descritto, si propongono e vengono percepiti dai clienti come dei veri e propri partner strategici, in virtù di diversi fattori: (1) la loro proattività ad adottare i cambiamenti innescati dalla rivoluzione digitale semplificando la complessità del nuovo scenario per il cliente; (2) la loro *expertise* sui dati per orientare - in modo più efficace ed efficiente - le campagne di comunicazione delle imprese; (3) la stabilità finanziaria che consente loro di acquisire i migliori talenti sul mercato.

In aggiunta, i centri media assumono un ruolo sempre più centrale nel communication network, proponendosi come un'agenzia a servizio completo (a seguito dell'acquisizione di competenze anche nella creatività *data-driven*) o assumendo il ruolo di coordinatore del network dei differenti partner specializzati eventualmente coinvolti, ruolo che in passato veniva svolto principalmente direttamente dal cliente o dalle agenzie pubblicitarie. Tra queste ultime, solo poche possono dire di

aver intrapreso tale percorso, essendo invece il più delle volte ancorate a modelli piuttosto tradizionali.

Ambiscono, infine, a svolgere invece un ruolo sempre più strategico le agenzie di relazioni pubbliche: tali attori hanno affrontato il cambiamento con maggiore rapidità rispetto a quanto non sia accaduto nelle agenzie pubblicitarie, avendo dalla loro parte un'*expertise* nel dialogo, nella narrazione dei contenuti di marca e nell'abilità di conquistare l'attenzione e l'interesse dei pubblici di riferimento, senza contare su un supporto media a pagamento. Avendo una forte esperienza nel contenuto, queste agenzie si propongono come consulenti strategici nella costruzione e nel mantenimento della brand equity e della brand reputation. Tale processo, tuttavia, è ancora in divenire e dunque dagli esiti assai incerti.

Sul fronte dei nuovi attori, questo percorso virtuoso ha caratterizzato soprattutto le agenzie che si propongono come consulenti digitali dei clienti (es. i *digital enabler e* i *system integrator*) che accompagnano il cliente nella transizione digitale e non solo nello sviluppo di campagne di comunicazione.

f) Percorso vizioso: maggiore volatilità delle relazioni. Si tratta di una spinta esattamente opposta rispetto alla precedente, che prende le mosse dalla frammentazione della filiera e dall'aumento dell'intensità competitiva tra le agenzie, dovuta, da una parte, alla liquidità (e in particolare ai confini più sfumati tra gli attori e al venir meno della tradizionale omogeneità di dimensioni tra agenzie e clienti) e, dall'altra, alla complessità, in termini di crescente varietà di attori specializzati. Questo ha portato il cliente a sperimentare nuove alternative, soprattutto quando queste ultime richiedono investimenti più contenuti. Di conseguenza, si ravvisa una maggiore difficoltà di partnership di lungo termine tra agenzie e clienti e, dunque, un aumento della volatilità delle relazioni.

«*Io ricevo continuamente e-mail di agenzie che si propongono e ogni volta mi meraviglio di quante agenzie che lavorano sul digitale, per esempio, possano esistere in Italia. C'è più possibilità di scelta e si diventa meno fedeli…*» (Direttore marketing, Advertiser).

Inoltre, l'aumento dell'intensità competitiva in un mercato in contrazione come quello della comunicazione, sposta il *focus* della competizione tra le agenzie sul prezzo. Quest'ultimo fenomeno dipende anche da un altro importante fattore, ossia la riduzione del valore della consulenza strategica percepita da alcuni clienti. Infatti, se l'agenzia non compie il salto verso una *value proposition* integrata e a supporto della strategia del cliente, diventa elevato il rischio di veder sminuito il contributo da questa fornito. A queste cause, si deve aggiungere anche che sempre più spesso il cliente è mosso da un orientamento tattico (che prevede la ricerca di risultati di breve termine) e, pertanto, non è portato a riconoscere - e, dunque, a pagare - il valore della consulenza strategica che il partner potrebbe offrire. In tali casi, l'agenzia viene percepita come un fornitore altamente fungibile: il criterio principale di scelta del partner è di tipo economico e il cliente, alla continua ricerca di efficienza, preferirà l'agenzia che offre il servizio richiesto al minor prezzo possibile.

Come anticipato sopra, tale percorso involutivo sta coinvolgendo in particolare le agenzie pubblicitarie e, anche se in misura inferiore, le agenzie di relazioni pubbliche.

«Le agenzie pubblicitarie non hanno saputo fare un salto di qualità, non hanno saputo mantenersi il ruolo di consulenti al fianco delle aziende, i detentori del know-how della marca. Si sono lasciati emarginare e, di conseguenza, anziché mantenere il ruolo di direttore di orchestra di tutti gli altri orchestrali, si sono messi al livello degli altri, motivo per cui oggi le agenzie di pubblicità sono in concorrenza con tutti per riprendersi questo ruolo» (CEO, Agenzia integrata).

La responsabilità di questo circolo vizioso viene ascritta dai professionisti del mondo d'agenzia ai manager delle imprese clienti che, secondo alcuni rispondenti, sottovalutano gli effetti del continuo cambiamento: pur non essendoci degli apparenti costi elevati nel cambiare un fornitore, si rischia di indebolire il posizionamento del brand e di perdere in termini di brand equity nel medio-lungo termine. La fungibilità delle agenzie è induttivamente confermata anche dalla tendenza crescente da parte dei clienti a ricorrere alle gare per la selezione del partner di comunicazione, pure

per l'assegnazione di budget contenuti, per i quali in passato si procedeva a un'attività di *scouting* meno strutturata e, per le agenzie, meno onerosa.

g) Il livello e la competenza dell'interlocutore nell'impresa cliente. Strettamente legata alla tipologia di percorso (virtuoso o vizioso) posto in essere nelle dinamiche relazionali agenzia-cliente, è la questione del livello manageriale dell'interlocutore, che, nell'ambito dell'impresa cliente si relaziona con l'agenzia. Infatti, come abbiamo visto poc'anzi, nel momento in cui propone una consulenza strategica, l'agenzia riesce a sottrarsi alla competizione di prezzo e ad ottenere una relazione più matura e più duratura. Proprio per questo, il partner strategico riesce ad avere un referente nell'impresa cliente di livello più alto. Tale evenienza si verifica soprattutto per i centri media che, trattando di grandi investimenti, interagiscono spesso col top management.

Invece, laddove le agenzie intraprendano il percorso vizioso della volatilità relazionale, si riscontra una dequalificazione dell'interlocutore aziendale, di livello sempre più basso. Questo è il caso più frequente per le agenzie pubblicitarie e di relazioni pubbliche.

«*Si è persa la cultura del rispetto del partner di comunicazione, l'agenzia non è più un partner, ma è un fornitore da spremere. Tant'è vero che molto spesso ti fanno parlare con il responsabile dell'ufficio acquisti, che è anche quello che compra le penne o le sedie; l'ufficio acquisti ti firma un contratto dove va sempre al risparmio. Allora tu già hai investito sulla gara, e poi non hai avuto il rimborso per la gara, e poi l'ufficio acquisti che dice: 'Non mi interessa quello che dice il direttore marketing, io devo risparmiare'… alla fine, sempre con meno clienti io mi sento partner, con molti clienti io mi sento trattato come un fornitore. E ti dico è cambiato molto negli ultimi 5-6 anni*» (Senior Vice President Marketing, Agenzia di RP).

Un importante aspetto legato alle competenze dell'interlocultore lato cliente, riguarda l'introduzione in azienda di nuove skill in ambito digitale, con un conseguente rinnovamento manageriale. Questo cambiamento può rappresentare, secondo alcuni rispondenti del mondo delle agenzie tradizionali, un potenziale rischio relazionale nel momento in cui la competenza specialistica dei nuovi manager non risulti sostenuta da quella manageriale. Infatti, se così fosse, potrebbero crearsi delle criticità relazionali, soprattutto nel caso di una consistente differenza d'età e di "esperienza" tra le risorse più giovani - lato cliente - e quelle più mature - fronte communication partner.

Infine, un ultimo aspetto da sottolineare attiene all'elevato *turnover* nelle imprese clienti, soprattutto per quel che riguarda le figure manageriali digitali. Questo influenza naturalmente la durata della relazione, in una duplice direzione. Da una parte, nel momento in cui cambia il manager, viene sostituita l'agenzia e, dunque, si ha un'ulteriore spinta alla volatilità delle relazioni.

Dall'altra parte, il professionista che cambia azienda mantiene solitamente vivi i rapporti con l'agenzia e, dunque, si ha una fedeltà del manager piuttosto che dell'impresa cliente. A detta dei rispondenti, questo fenomeno si registra più di frequente nel caso delle agenzie digitali rispetto a quelle tradizionali.

5. Discussione e conclusioni

Il presente lavoro si inserisce nel filone di studi sugli attori della comunicazione di marketing, per indagare in particolare l'evoluzione delle dinamiche relazionali tra agenzia e cliente in una prospettiva olistica che metta a sistema i driver del cambiamento, i conseguenti temi e, infine, gli effetti da questi innescati sulle relazioni.

Un primo contributo accademico riguarda l'ampiezza della prospettiva d'indagine adottata, in relazione alla notevole varietà di categorie di player prese in esame, proponendo un avanzamento rispetto alla letteratura più recente sull'evoluzione del communication network nel nuovo scenario (Biraghi, 2017; Vernuccio e Ceccotti, 2015). I risultati dello studio superano il campo ristretto dei contributi precedenti, concentrati quasi esclusivamente su singole o poche categorie di attori come l'agenzia pubblicitaria e quella di relazioni pubbliche (Kitchen e Schultz, 1998; Turnbull e Wheeler, 2017; Valentini, 2015). L'originalità del lavoro si rinviene anche nella duplice chiave di lettura

adottatata, sia "trasversale" che "verticale". In primo luogo, infatti, l'elaborazione delle mappe cognitive è stata guidata dalla finalità di lettura inter-categoria ("trasversale") dei fenomeni osservati per delineare i principali "fattori comuni". Tuttavia, la necessità di considerare anche le diverse fattispecie di agenzia - non più riconducibili realisticamente ad un'unica e ideale categoria omogenea - è stata soddisfatta elaborando anche una lettura qualitativa di tipo "verticale" (intra-categoria), grazie alla quale è stato preso in esame il punto di vista peculiare di rispondenti appartenenti a categorie di agenzia molto differenti in termini di *heritage* e *value proposition*.

Dall'analisi delle interviste, sono emersi due importanti driver del cambiamento nelle relazioni, ovvero la *rivoluzione digitale* e la *crisi economico-finanziaria*. In particolare, questo secondo fattore assume nel percepito dei rispondenti una rilevanza notevole sull'evoluzione degli attori e, di conseguenza, delle relazioni. Gli studi precedenti che hanno affrontato gli effetti della crisi sulla comunicazione hanno messo in evidenza principalmente gli effetti "macro" da questa generati sul livello complessivo degli investimenti in comunicazione e sulle scelte degli investitori pubblicitari in termini di media mix (Baudi di Vesme e Brigida, 2009; Collesei e Checchinato, 2010; Picard, 2001; Van der Wurff *et al.*, 2008). La ricerca condotta ha, invece, consentito di far luce sugli effetti della crisi nella prospettiva degli attori della comunicazione e, per questa via, sull'evoluzione delle dinamiche relazionali agenzia-cliente.

Accanto ai driver, lo studio ha consentito di individuare sei macro-temi di discontinuità, che qualificano il nuovo scenario della comunicazione di marketing: la *complessità*, la *liquidità*, la *velocità*, la *misurabilità*, il *cambiamento dei clienti* e, infine, la *riduzione del budget*. Oltre ad approfondire temi finora poco indagati dalla letteratura di riferimento, quali la liquidità, la velocità e il cambiamento dei clienti, la ricerca ha consentito di delineare interessanti relazioni tra tali macro-temi, come ad esempio quelle di categoria tra la liquidità, la velocità e la complessità. Inoltre, l'analisi condotta ha approfondito i significati associati a ciascuno di essi dagli intervistati in modo da pervenire a un framework sintetico, ma al tempo stesso dettagliato, del nuovo scenario della comunicazione di marketing.

Sul piano degli effetti del cambiamento sull'evoluzione delle relazioni sono state individuate sette diverse direttrici (§ 4.2): a) *la confusione del cliente*; b) *la scarsa trasparenza nella filiera*; c) *l'aumento dell'intensità delle relazioni*; d) *l'oggettività nella valutazione del servizio offerto dall'agenzia*; e) *il percorso virtuoso: maggiore stabilità delle relazioni*; f) *il percorso vizioso: maggiore volatilità delle relazioni*; g) *il livello e la competenza dell'interlocutore nell'impresa cliente*.

I risultati rappresentano un contributo originale rispetto agli studi pregressi sul tema delle relazioni agenzia-cliente, oltre a fornire interessanti implicazioni manageriali per i differenti nodi del network. Difatti, l'approfondimento olistico degli aspetti chiave del mutato scenario, unitamente alla comprensione delle conseguenze dirette e indirette in termini relazionali per i diversi attori, può contribuire al miglioramento delle performance complessive del communication network e dei singoli player.

In particolare, emerge un ruolo sempre più rilevante del centro media come consulente strategico e interlocutore unico del cliente nell'ideazione e nell'esecuzione di campagne di comunicazione integrata. Tale attore, poco indagato dalla letteratura accademica, ha mostrato una *proattività* superiore rispetto a quella delle agenzie pubblicitarie che, come evidenziato anche dagli studi precedenti (Durkin e Lawlor, 2001; Kassaye, 1997; Mortimer e Laurie, 2017) si sono mostrate più restie ad affrontare le sfide aperte dalla rivoluzione digitale. Inoltre, con riferimento alle architetture relazionali (§ 2), i centri media si pongono sempre più spesso come *coordinatori dello specialised network* (come ipotizzato da Grant e McLeod, 2007) o, addirittura, come agenzie "*full service*" nell'*integrated network* (Ceccotti e Vernuccio, 2014), avendo acquisito competenze rilevanti anche nell'ambito della creatività *data-driven*. In virtù di questo nuovo ruolo, più strategico, possono contare su interlocutori di livello molto alto nell'ambito dell'impresa cliente e su una maggiore stabilità delle relazioni, avendo trasformato la collaborazione con i clienti in veri e propri rapporti di *comakership* (Marcati, 1997; Vollero, 2008). Tuttavia, dalle interviste viene confermata la situazione di *scarsa trasparenza nella relazione tra clienti e centri media* evidenziata

dalla letteratura (AgCom, 2012), a fronte di asimmetrie informative e distribuzione non simmetrica del potere (Eagle e Kitchen, 2000). In linea con quanto riportato sul tema negli studi precedenti (Marcati, 2007), questo potrebbe rappresentare una minaccia alla stabilità della relazione con le imprese clienti.

La relazione può tendere a una maggiore volatilità anche in virtù della *liquidità* del nuovo scenario della comunicazione. Considerando la progressiva riduzione della tradizionale omogeneità dimensionale tra agenzia e cliente, possono venire a mancare i presupposti per rapporti di lungo periodo (Marcati, 1997), con un'adozione di una logica squisitamente transazionale da parte delle grandi agenzie verso i piccoli clienti e, viceversa, delle grandi imprese verso le piccole agenzie.

Inoltre, lo studio mette in evidenza la perdita del ruolo strategico da parte dell'agenzia pubblicitaria, in ragione della riduzione del valore che l'inserzionista attribuisce alla sua consulenza. Per tale motivo, questa viene considerata come un fornitore facilmente sostituibile e non come un partner col quale intrattenere relazioni di lungo termine. Da qui, discendono la dequalificazione del livello di interlocutore dell'agenzia presso l'impresa cliente e la volatilità della relazione: il rapporto col cliente, dunque, viene ispirato a una logica di fornitura temporanea di servizi e non di partnership vera e propria (Marcati, 1997). Per l'agenzia pubblicitaria, dunque, si impone la necessità di ritrovare il ruolo strategico - avviando un processo che la porti a proporsi come consulente di business delle imprese - nonché un ruolo formativo importante di orientamento dei clienti di fronte alla complessità del nuovo scenario.

Crescente rilevanza sul piano relazionale inizia ad avere anche l'agenzia digitale, finora poco indagata dalla letteratura accademica. A tal proposito, la ricerca sottolinea come l'intensità delle relazioni e, soprattutto, la possibilità di valutare questo attore sulla base di criteri più oggettivi rispetto a quelli utilizzati per le agenzie tradizionali, abbiano portato a una crescita del ruolo di consulente per tale categoria di agenzia. Sul fronte dell'inserzionista, le interviste hanno infine evidenziato il permanere di una situazione di confusione a fronte di un'elevata varietà dell'offerta di servizi di comunicazione e della ancora insufficiente dotazione interna di competenze tecniche digitali utili per orientarsi al meglio di fronte allo scenario sempre più complesso. Questa criticità è destinata a ridursi nel tempo a seguito della piena maturazione degli effetti della rivoluzione digitale; tuttavia, è necessario uno sforzo congiunto del cliente - nell'acquisizione delle competenze necessarie per una migliore scelta e valutazione del partner - e delle agenzie tradizionali e nuove - nella definizione di una *value proposition* più chiara e distintiva.

5.1 Limiti e future linea di ricerca

Lo studio condotto presenta tutti i limiti della ricerca qualitativa in merito alla non rappresentatività dei risultati, che non possono essere estesi a individui non compresi nel set d'indagine. Inoltre, la focalizzazione delle interviste sulle agenzie operanti in Italia può rappresentare una limitazione, soprattutto perché il nostro Paese, con riferimento alla comunicazione, presenta caratteristiche peculiari rispetto ad altre realtà: ad esempio, un media mix ancora sbilanciato sulla televisione e una digitalizzazione della comunicazione di marketing ampiamente avviata, ma non ancora giunta a maturità, come in altri mercati (es. USA, UK). Per ovviare a questo limite, sono state inserite nel set d'indagine filiali italiane di agenzie appartenenti ai grandi gruppi della comunicazione, caratterizzati da una lunga esperienza anche in ambito internazionale. In tal modo, è stato possibile individuare talune peculiarità del nostro Paese, rispetto ad altri contesti europei e al Nord America (ad esempio, il focus sulla crisi). Un'auspicabile futura linea di ricerca dovrebbe, quindi, interessare ambiti di mercato diversi, sia molto "maturi" (USA) che in rapida crescita (Asia).

Un ultimo aspetto è a nostro avviso degno di nota. Come si può evincere dalla composizione del set d'indagine, la prospettiva privilegiata in questo studio è quella dei partner di comunicazione (tradizionali e nuovi) e non del cliente. In virtù di tale scelta, tutte le considerazioni che attengono all'impresa inserzionista, così come sono state presentate nella lettura del cambiamento, sono in prevalenza il frutto della percezione dei professionisti che li supportano nella comunicazione e non

di un approfondimento verticale su tale parte della relazione. Proprio per questo motivo, non si evincono i particolari tratti di varietà che pure caratterizzano l'impresa. A nostro avviso, questo rappresenta il più promettente filone di ricerca sul quale proseguire con un percorso di approfondimento empirico.

Bibliografia

AUTORITÀ PER LE GARANZIE NELLE COMUNICAZIONI (AGCOM) (2012), *Indagine conoscitiva sul settore della raccolta pubblicitaria*.

AUTORITÀ PER LE GARANZIE NELLE COMUNICAZIONI (AGCOM) (2014), Indagine conoscititva sul settore dei servizi Internet e sulla pubblicità online.

BATRA R., KELLER K.L. (2016), "Integrating Marketing Communications: New findings, new lessons, and new ideas", *Journal of Marketing*, vol. 80, n. 6, pp. 122-145.

BAUDI DI VESME P., BRIGIDA F. (2009), *L'evoluzione dei media e della pubblicità in Italia*, FrancoAngeli, Milano.

BAUMAN Z. (2000), *Liquid modernity*, Polity, Cambridge.

BEARD F. (1996), "Integrated marketing communications: New role expectations and performance issues in the client-ad agency relationship", *Journal of Business Research*, vol. 37, n. 3, pp. 207-215.

BERGEN M., DUTTA S., WALKER O.C. (1992), "Agency relationships in marketing: a review of the implications and applications of agency and related theories", *Journal of Marketing*, vol. 56, n. 5, pp. 1-24.

BERNARD H.R., RYAN G.W. (2010), *Analyzing qualitative data. Systematic approaches*, Sage, Thousand Oaks, CA.

BEVERLAND M., FARRELLY F., WOODHATCH Z. (2007), "Exploring the dimensions of proactivity within advertising agency-client relationships", *Journal of Advertising*, vol. 36, n. 4, pp. 49-60.

BIRAGHI S. (2017), *Agenzie di comunicazione e clienti. Come cambiano le relazioni nel tempo della discontinuità*, FrancoAngeli, Milano.

BRAUN V., CLARKE V. (2006), "Using thematic analysis in psychology", *Qualitative Research in Psychology*, vol. 3, n. 2, pp. 77-101.

BRUHN M., SCHNEBELEN S. (2017), "Integrated marketing communication-from an instrumental to a customer-centric perspective", *European Journal of Marketing*, vol. 51, n. 3, pp. 464-489.

BUSH A.J., BUSH V.D. (2000), "Potential challenges the internet brings to the agency-advertiser relationship", *Journal of Advertising Research*, vol. 40, n. 4, pp. 7-16.

CAGLEY J.W. (1986), "A comparison of advertising agency selection factors-advertiser and agency perceptions", *Journal of Advertising Research*, vol. 26, n. 3, pp. 39-44.

CECCOTTI F. (2018), *Le agenzie di comunicazione nel nuovo scenario dell'Integrated Marketing Communication. Innovazione, competizione e relazioni*, McGraw-Hill education, Milano.

CECCOTTI F. (2012), *Scenario II - Il communication network: architettura, player, relazioni di oggi e di domani*, in Mattiacci A., Ceccotti F. (a cura di), Touch point. Comunicare nell'iperconnessione, Fausto Lupetti editore, Bologna, pp. 201-237.

CECCOTTI F., VERNUCCIO M. (2014), "L'architettura del communication network: criticità relazionali e dinamiche evolutive secondo i professionisti della comunicazione di marketing", XI Convegno annuale della Società Italiana Marketing, *Food Marketing: mercati, filiere, sostenibilità e strategie di marca*, 18-19 settembre, Modena.

CHANEY D. (2010), "Analyzing mental representations: the contribution of cognitive maps", *Recherche et Applications en Marketing*, vol. 25, n. 2, pp. 93-115.

COLLESEI U., CHECCHINATO F. (2010), "Evoluzione degli investimenti pubblicitari in Italia in periodi di crisi", *Finanza, Marketing e Produzione*, vol. 4, pp. 160-186.

CRESWELL J. W. (1998), *Qualitative inquiry and research design: Choosing among five traditions*, Sage, Thousand Oaks, CA.

CROSIER K., GRANT I., GILMORE, C. (2003), "Account planning in Scottish advertising agencies: a discipline in transition", *Journal of Marketing Communications*, vol. 9, n. 1, pp. 1-15.

DAYMOND C., HOLLOWAY I. (2002), *Qualitative research methods in public relations, marketing communications*, Routledge, Abingdon.

DEXTER L.A. (1970), *Elite and Specialized Interviewing*, North-Western Press, Evanston.

DURKIN M., LAWLOR M.A. (2001), "The implications of the Internet on the advertising agency-client relationship", *Service Industries Journal*, vol. 21, n. 2, pp. 175-190.

EAGLE L., KITCHEN P.J. (2000), "IMC, brand communications, and corporate cultures: client/advertising agency co-ordination and cohesion", *European Journal of Marketing*, vol. 34, n. 5/6, pp. 667-686.

EISENHARDT K.A. (1989), "Agency theory: an assessment and review", *Academy of Management Review*, vol 14, n. 1, pp. 57-74.

GRANT I., MCLEOD C. (2007), "Advertising agency planning-conceptualising network relationships", *Journal of Marketing Management*, vol. 23, n. 5, pp. 425-442.

GRANT I., MCLEOD C., SHAW E. (2012), "Conflict and advertising planning: consequences of networking for advertising planning", *European Journal of Marketing*, vol. 46, n. 1/2, pp. 73-91.

GUERCINI S. (2008), "Le nuove agenzie di comunicazione nell'on line media market", *Economia e Diritto del Terziario*, vol. 2, pp. 315-343.

HEO J., SUTHERLAND J. C. (2015), "Why Marketers Should Be More Transparent with the Ad Agencies They Hire", *Journal of Advertising Research*, vol. 55, n. 4, pp. 380-389.

HORSKY S. (2006), "The changing architecture of advertising agencies", *Marketing Science*, vol. 25, n. 4, pp. 367-383.

KASSARJIAN H. (1977), "Content analysis in consumer research", *Journal of Consumer Research*, vol. 4, n. 1, pp. 8-17.

KASSAYE W.W. (1997), "The Effect of the World Wide Web on Agency-Advertiser Relationships: Towards A Strategic Framework", *International Journal of Advertising*, vol. 16, n. 2, pp. 85-103.

KRIPPENDORFF K. (2004), *Content analysis: An introduction to its methodology*. Sage, Thousand Oaks, CA.

KITCHEN P.J., SCHULTZ D.E. (1998), "IMC-a UK ad'agency perspective", *Journal of Marketing Management*, vol. 4, n. 5, pp. 465-485.

KITCHEN P.J., SCHULTZ D.E. (2009), "IMC: New horizon/false dawn for a marketplace in turmoil?", *Journal of marketing communications*, vol. 15, n. 2-3, pp. 197-204.

KITCHEN P.J., SCHULTZ D.E., KIM I., HAN D., LI T. (2004), "Will agencies ever 'get' (or understand) IMC?", *European Journal of Marketing*, vol . 38, n. 11/12, pp. 1417-1436.

KITCHEN P.J., GRAHAM SPICKETT-JONES J., GRIMES T. (2007), "Inhibition of brand integration amid changing agency structures", *Journal of Marketing Communications*, vol. 13, n. 2, pp. 149-168.

KLIATCHKO J. (2009). "IMC 20 Years after: A Second Look at IMC Definitions", *International Journal of Integrated Marketing Communications*, vol .1, n. 2, pp. 7-12.

LACE J.M. (2004), "At the crossroads of marketing communications and the Internet: experiences of UK advertisers", Internet Research, vol. 14, n. 3, pp. 236-244.

LANGDRIDGE D. (2004), *Introduction to Research Methods and Data Analysis in Psychology*, Pearson Prentice Hall, Harlow.

MALLIA K. L., WINDELS K. (2011), "Will changing media change the world? An exploratory investigation of the impact of digital advertising on opportunities for creative women", *Journal of Interactive Advertising*, vol. 11, n. 2, pp. 30-44.

MARCATI A. (1997), "Collaborazione tra imprese e comunicazione. Aspetti e peculiarità della comunicazione nelle relazioni di partnership tra agenzie ed utenti di pubblicità", *Sinergie*, n. 43-44, pp. 129-137.

MASIELLO B., MARASCO A., IZZO F. (2013), "Co-creation in creative services: the role of client in advertising agencies' innovation", in *Mercati e Competitività*, n. 2, pp. 131-144.

MATTIACCI A., (2014), "Mercati liquidi e fasce di valore", in Dalli D., Fornari D. (a cura di), *Le discontinuità d'impresa. Dal mondo degli orologi al mondo delle nuvole*, Egea, Milano.

MOLTENI L., TROILO G. (2003), *Ricerche di marketing*, McGraw-Hill, Milano.

MORTIMER K., LAURIE S. (2017), "The internal and external challenges facing clients in implementing IMC", *European Journal of Marketing*, vol. 51, n. 3, pp. 511-527.

MULHERN F. (2009), "Integrated marketing communications: From media channels to digital connectivity", *Journal of Marketing Communications*, vol. 15, n. 2-3, pp. 85-101.

OTS M., NYILASY G. (2015), "Just doing it: theorising integrated marketing communications (IMC) practices", *European Journal of Marketing*, vol. 51, n. 3, pp. 490–510.

PASTORE A., VERNUCCIO M. (2008), *Impresa e comunicazione. Principi e strumenti per il management*, Apogeo Editore, Milano.

PICARD R.G. (2001), "Effects of recessions on advertising expenditures: an exploratory study of economic downturns in nine developed nations", *Journal of Media Economics*, vol. 14, n. 1, pp. 1-14.

ROBSON S., FOSTER A. (1989), *Qualitative research in action*, Hodder and Stoughton, London.

SWAN J. (1997). "Using cognitive mapping in management research: decisions about technical innovation", *British Journal of Management*, vol. 8, n. 2, pp. 183-198.

TAYLOR C.R. (2017), "Where has the research on client-agency relationships gone? The need for a deeper understanding of the future of account management", *International Journal of Advertising*, vol. 36, n. 3, pp. 393-395.

TURNBULL S., WHEELER C. (2017), "The advertising creative process: A study of UK agencies", *Journal of Marketing Communications*, vol. 23, n. 2, pp. 176-194.

VALENTINI C. (2015), "Is using social media "good" for the public relations profession? A critical reflection", *Public Relations Review*, vol. 41, n. 2, pp. 170-177.

VAN DER WURFF R., BAKKER P., PICARD R. G. (2008), "Economic growth and advertising expenditures in different media in different countries", *Journal of Media Economics*, vol. 21, n. 1, pp. 28-52.

VERNUCCIO M., CECCOTTI F., PASTORE A. (2012), "L'innovazione nella comunicazione integrata di marketing secondo gli attori del network. Una lettura con le mappe cognitive", *Sinergie Italian Management Journal*, n. 88, pp. 93-113.

VERNUCCIO M., CECCOTTI F. (2015), "Strategic and organisational challenges in the integrated marketing communication paradigm shift: A holistic vision", *European Management Journal*, vol. 33, n. 6, pp. 438-449.
VERNUCCIO M., CECCOTTI F. (2017), "Creative crowdsourcing e dinamiche relazionali nella comunicazione di marketing. Il caso del network di Zooppa", in *Sinergie Italian Management Journal*, n. 103, pp. 57-80.
VOLLERO A. (2008), "Il sovra-sistema della comunicazione e i rapporti col sistema d'impresa: il ruolo dei corporate communication consultants", in *Esperienze d'impresa*, n. 2, pp. 69-91.
WALDMAN D.A., SIEGEL D.S., JAVIDAN M. (2006), "Components of CEO transformational leadership and corporate social responsibility", *Journal of Management Studies*, vol. 43 n. 8, pp. 1703-1725.
WAGLER A. (2013), "Embracing change: Exploring how creative professionals use interactive media in advertising campaigns", *Journal of Interactive Advertising*, vol. 13, n. 2, pp. 118-127.
WEST D.C., PALIWODA S.J. (1996), "Advertising client-agency relationships: the decision-making structure of clients", *European Journal of Marketing*, vol. 30, n. 8, pp. 22-39.
WINER R.S. (2009), "New communications approaches in marketing: Issues and research directions", *Journal of Interactive Marketing*, vol. 23, n. 2, pp. 108-117.
WRIGHTSON M.T. (1976). "The Documentary Coding Method". In R.M. Axelrod (Ed.), *The structure of decision: cognitive maps of political elites*. Princeton, NJ: Princeton University Press.

APPENDICE - Il set d'indagine

Gruppo	Categoria	Organizzazione	Ruolo intervistato
"Punti di vista più alti"	Associazione di categoria	ADCI	Presidente
		Assocom	Presidente e Direttore generale *(n=2)*
		Assorel	Direttore generale
		HUB PR	Presidente
		IAB	Direttore marketing
		UNICOM	Presidente
		Centromarca	Direttore Comunicazione e relazioni esterne
		UPA	Responsabile centro studi
	Network internazionale	Publicis Communications	Communication & external relations director
		WPP Italy	Responsabile relazioni esterne
	Advertiser	BNL	Retail communication manager
		Enel	Head of global advertising
		Ferrovie dello Stato	Responsabile branding e comunicazione
		Findus	Direttore marketing
		Garofalo	Global marketing director
		L'Oreal	Digital & communication director Cosmetique Active
Attori tradizionali	Agenzia pubblicitaria	J. Walter Thompson	Head of digital
		Leo Burnett	Managing director
		Ogilvy & Mather Italia	CEO e Direttore Creativo *(n=2)*
		Y&R Italia	Managing director (Roma)
	Agenzia di comunicazione integrata	Acqua Group	CEO e Presidente *(n=2)*
		Enfants terribles	Responsabile new business
		Gruppo Roncaglia	General manager e Strategic planner *(n=2)*
		Red Cell	CEO e Head of strategy
		Zero starting ideas	CEO
	Centro media	Havas media group	CEO
		IPG Mediabrands	Direttore marketing
		Mec Italy	CEO
		Omnicom Media Group Italia	CEO
	Agenzia di relazioni pubbliche (RP)	Comin & Partners	Founder
		Edelman Italia	Senior vice president marketing and creative director
		Istituto Nazionale per la Comunicazione	Project manager
		SEC RP	CEO
		Soluzione Group	Founder
		Weber Shandwick italia	Managing director
	A. specializzata	Relata	Partner
	Concessionaria	Hearst	Digital director
		Rai Pubblicità	Direttore ricerche e comunicazione
		Concessionaria Beta*	Direttore marketing e adv digitale
Nuovi attori	Digital agency	Alkemy	VP Communication
		77 agency	Direttore sede di Roma
		AKQA	VP Sales and marketing Italy
		BizUp-Upstory	CEO
		Connexia	CEO
		Digital agency Alfa*	Head of strategy
		Doing	Partner
		Seolab	CEO
		We are social	Managing director
		Webranking	Presidente

* Nomi di fantasia.