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SUSTAINABILITY, KNOWLEDGE SHARING AND FAMILY VALUES: BUSINESS MODELLING AND BUSINESS MODEL AS AN INNOVATIVE "NAVIGATOR" OF NEW BUSINESS PARADIGMS

PHD THESIS

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to my father

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INTRODUCTION

Nowadays we are going through not only an economic crisis, but also an ethical, moral, relational and civic one. The word "crisis" is related to concepts such as evaluation and reasoning and it requires a changing phase. This situation must not be seen as a difficulty, but as an opportunity to review business models and to create different economic paradigms based on them.

The new business paradigms are not based on money and profit, but on people, society and, above all, on values, shifting from a Profit-Centred-Economy to a People-Value centred Economy. In other words, these global challenges require a holistic view of doing business and, consequently, an innovation of their business models in order to remain competitive.

So, this study analyses three main business paradigms: (1) attention to the environment and society where the firm operates, (2) collaboration and sharing between different firms, and (3) the rediscovery of the value and the principles of business family.

These three paradigms are to be considered as key factors without which, in the present context, it is increasingly difficult to obtain and maintain positive results. They are linked, on the one hand, to the rediscovery of values such as social and environmental sensitivity, cooperation, collaboration and ethical values of the family, and on the other hand, to the degree of social openness. Today, the importance of such paradigms is evident.

About environmental and social sustainability, the Pope in his encyclical criticizes consumerism, irresponsible development and environmental and social degradation. Moreover, in 2015, the United Nations introduced a new global framework for sustainable development: Agenda 2030. This agenda states the inefficiency of the current model of development not only from an environmental perspective but also from an economic and social one. The EU's answer to the United Nations Agenda is represented by the European 2020 Strategic Plan. That is, sustainability is not only an idea analysed by business scholars and by a few illuminated business managers, but it must be placed in the centre of management practice.

Like environmental and social sustainability, other business paradigms such as “co-operation and sharing” become a new synonym of competitiveness in order to create innovation.

Today, indeed, many of the economic and social phenomena are based on the same concepts: exchange, sharing, collaboration, and comparison. They go beyond traditional industrial districts or network contracts including new forms of funding, such as crowd funding and new business paradigms for example, sharing economics, peer economics, or collaborative consumption in terms of co-housing, co- working, car sharing, etc.

Therefore, in this economic context the *extrapreneurs* (Etzkowitz & Klofsten, 2005) act as mediators between different firms or, in other words, as business brokers where collective co-creation and shared value creation (Porter & Kramer, 2006) become the protagonists of this economic change.

The third paradigm is the rediscovery of good family management values and principles. The business family – a team of family members dedicated across generations to implement various entrepreneurial and financial activities – is the "F" factor of the economy (Habbershon & Pistrui, 2002; Habbershon et al, 2003;

Uhlaner 2006) because it is the main wealth producer not only for itself but also for the entire economic system.

Consequently, in order to be competitive, all firms must rediscover the principles and values of "*good pater familias*": its programmes are flexible, analyses the environment and chooses means in function of the ends, confronts people around and creates relationships. At the base of business family firms there are strong ethical and moral values and, as in the previous paradigms, a strong opening attitude towards the outside can be found, in other words, towards the environment in which it operates.

So, these three fundamental paradigms for the competitiveness of a firm are not based on the action of "first mover", but on new forms of social openness that allow the passage from a model of absolute autonomy and independence to a broader shared system where different benefits can be gained in terms of value creation.

Consequently, based on this economic context that requires a return to a centric-value system and a greater degree of openness towards the outside, a more comprehensive framework is necessary in order to get a holistic view on how these paradigms pervade the logic of doing business.

For that reason, I use business modelling as a holistic approach that allows us to observe different elements simultaneously and to control their alignment and coherence, using the business model canvas as a tool. "Business model concept" has a great potential to explain how diverse managerial issues can be included in a holistic mode under the same theoretical umbrella.

Thus, the aim of my thesis is to extend the management theory about the business model and to go back to the scientific roots of the business model canvas in order to explore its great potential to be applied to a large spectrum of business issues where the internal complexity can be explained only through a holistic perspective of the investigated phenomena.

To achieve this goal, I would like to structure the thesis as follows: it will be composed by three chapters, each characterized by a specific research question.

The first study (chapter One), entitled "*the perspective of triple business' competitiveness: the "business sustainability model"*", starting from the study of the evolution of the concept of sustainability mainly in economics, shows that the so called "triple bottom line" is becoming a competitiveness factor. The chapter is born from the study of the business model literature and a consequential theoretical gap. I found that the traditional business model concept presents some limitations; when the concept of sustainability is referred, only the economic dimension is considered without referring to environmental and social aspects. Consequently, the literature that combines the concept of business model with that of triple sustainability is almost inexistent.

I will try to answer the following research question: "*is the traditional business model able to represent the three dimensions of sustainability (economic, social and environmental) in order to improve the economy?"*

This first study provides a new and more complete definition of the business model that includes the concept of triple bottom line and in particular makes an important contribution: a reconfiguration of "business model canvas" by Alex Osterwalder (2010). So I provide a new management tool for business sustainability management called "business sustainability model" that allows firms and practitioners to create more value by integrating social, environmental and business activities.

The second study (chapter two), entitled *"Open innovation paradigm: business model canvas as a knowledge management tool in an innovative process*", starts from the knowledge management theory because, among intangible assets, knowledge is arguably the most important resource that a firm controls and one of the principal inputs into the innovation. In terms of knowledge management initiatives, most researchers have focused their attention on its technical side, seen as the set of IT infrastructure, data warehouses and so on, and consequently have neglected the external social aspects that view the knowledge management as a social relationship. Moreover, the knowledge management theory is originally based on the way to create tools in order to collect and consolidate internal knowledge. In spite of this, the open innovation trend of how to manage knowledge sharing in open collaborative innovation effectively is not yet fully understood. In particular, there is still a lack of effective knowledge management tools to implement openness in practical business environments. To fill this gap, I consider business model canvas as a tool to manage knowledge sharing in open innovation process effectively.

So, while most studies focus on individual and intra organizational knowledge sharing, the research questions on the base of this study are: (1) *in practice, how do firms apply the values of sharing and collaboration within their business model? (2) Is business model canvas useful in order to communicate in an open innovation process or useful in order to interpret this process?*

So, the aim of this paper is to extend the approach of knowledge view to the management and knowledge sharing among different organizations.

The third study (chapter three) entitled *"From family business to business family: business family model canvas as an interpretative and predictive tool***"**, gives relevance to family in general and to family business in particular. The same word "economy" of Greek origin is composed of *oikos* meaning "home" and *nomos* meaning "disciplining or managing"; literally, therefore, "family management".

Consequently, the research question is: "*can various phenomena within family business management, family firms, family companies, and family enterprises be analysed under different lenses, not focusing on business itself but on business family?*

In order to achieve this goal, a more comprehensive framework is required to get a holistic view on how family behaves in entrepreneurial, financial, social activities which pervade the logic of doing business. So, I propose using business modeling as a holistic approach which allows us to observe different elements simultaneously and to verify their alignment and coherence. This approach is based on two main actions: the business modularization, that is the activity aimed at dividing a complex system like the enterprise, in several interconnected elements (Simon, 1991; Aversa et al, 2015), and the business manipulation, that is the management of all identified individual variables and their relationship. I can consider the business model as a modular and manipulable tool (Morgan, 2012; Aversa et al., 2015) and as the result of the business modeling process. So, I will try to elaborate a useful theoretical model to describe and, above all, to anticipate family behavior trends in business management using the business model canvas.

In order to test the model, a qualitative research will be carried out through the use of the case study approach (Yin, 1994), because this methodology allows me to explore and understand complex phenomena and problems and to maintain a global view of the observed cases.

In sum, in the three chapters I use the business model as a "business navigator" to explain how firms should integrate the three new business paradigms, based on the rediscovery of ethical and moral values and corporate social openness, in their choices, in their value proposition, in their internal processes, and in their customer and stakeholder management.

REFERENCES

Aversa, P., Haefliger, S., Rossi, A., & Baden-Fuller, C. (2015). From business model to business modelling: Modularity and manipulation. In Business models and modelling (pp. 151-185). Emerald Group Publishing Limited.

Etzkowitz, H., & Klofsten, M. (2005). The innovating region: toward a theory of knowledge-based regional development. R&D Management, 35(3), 243-255.

Habbershon, T.G. and Pistrui, J. (2002) 'Enterprising families domain: family-influenced ownership groups in pursuit of transgenerational wealth', Family Business Review, Vol. 15, No. 3, pp.223–237.

Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. Journal of business venturing, 18(4), 451-465.

Morgan, M. S. (2012). The world in the model: How economists work and think. Cambridge University Press.

Osterwalder, A., & Pigneur, Y. (2010). Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.

Porter M, Kramer M. (2006). Strategy and Society: The link between competitive advantage and corporate social responsibility. HBR December, pp. 91.

Simon, H. A. (1991). The architecture of complexity. In Facets of systems science (pp. 457-476). Springer US.

Uhlaner, L. M. (2006). Business family as a team: Underlying force for sustained competitive advantage. Handbook of research on family business, 125, 144.

Yin, R. (1994*). Case Study Research 2nd Ed.*, Sage, Thousand Oaks, CA.

1. THE PERSPECTIVE OF TRIPLE BUSINESS' COMPETITIVENESS: THE "BUSINESS SUSTAINABILITY MODEL" [1]

ABSTRACT

Today "competitiveness" is shifting toward "sustainability": firms need to change their business model in order to obtain not only economic performance, but also social and environmental results. The relevance of this topic has been highlighted by United Nation in the Agenda 2030, by EU in the European 2020 Strategic Plan and also by the the Pope in the encyclical "Laudato Si'" where he laments environmental and social degradation. Consequently, the economic-environment-social sustainability became a hot topic.

The aim of this paper is to integrate triple sustainability into the theory of business model and so to enrich the literature.

In order to reach the goal, the paper first introduces the concept of triple sustainability and reviews all managerial studies on this topic and then it analyzes in depth the existing literature on business model.

This study provides a new and more complete definition of business model that includes the concept of triple bottom line and a reconfiguration of "business model canvas" by Alex Osterwalder. I provide a new management tool for business sustainability management called "business sustainability model" that allows firms and practitioners to create more value by integrating social, environmental and business activities.

Keywords: business model, triple sustainability, social value, business sustainability model, business model canvas.

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[1] The previous version of this paper has been presented to "International Marketing Trend Conference" - Venice 2016

1.1 INTRODUCTION

Today the culture of sustainability is more widespread than it was a few years ago. Firms, realizing the negative effects of their actions, have paid more attention to social and environmental aspects. The serious economic crisis that is affecting the whole world, raises the causes of the instability of current development in terms of the relationship between the environment system and the economy one (Broken et al., 2014). The failure of globalization requires an epistemological review of economic and managerial models.

Resource scarcity, social tensions, the financial crisis showed that the short-term objectives and strategies can lead firms to an economic, ecological and ethical crisis. As for the other side of a coin, the current economic crisis can be a great opportunity to structural economy’s change (Brand, 2012). The situation is mature to draw a new growth; it will be the result of innovative models, which combines environmental aspect with the individual and social one.

This gives rise to the interest in the prospect of triple sustainability and the search for synergic policies between ecology and economy, and the need to turn sustainability into process and/or product innovation, to gain a competitive advantage. Today eco-innovation and social innovation are, therefore, the key to the challenge for a firm that wants to be competitive. The green economy is based on the inevitable need to invest in product quality, to develop a sustainable resource and to rely on drastic reduction of environmental and social impacts in order to improve overall quality of life (Bina, 2013).

The importance of this topic has been emphasized by the Pope in his encyclical, that criticizes consumerism and irresponsible development, environmental and social degradation: citizens, firms, academics and researchers must take action to make a change. The objective is to reduce the structural causes of economic dysfunctions in order to respect the environment and society (Pope Francesco – Encyclical, 2015).

The USA President Obama, also, has indicated the green economy as a wait-out of the last global crisis: the Clean Power Plan is firstly a stimulus to change the mentality (Vaughan, 2015).

Moreover, in 2015, at the 70th United Nations General Assembly, world leaders adopted a new global framework for sustainable development: Agenda 2030 focused on 17 strategic goals. The Agenda expresses a clear opinion on the inefficiency of the current model of development not only in the environmental perspective but also in the economic and social context. In this way, this is the highly innovative character of the document, it is definitely overcome by the idea, typical of political institutions, that sustainability is only an environmental issue and affirms an integrated view of the triple bottom line.

The EU's answer to United Nations Agenda 2030 is represented by the European 2020 Strategic Plan. The European Commission has committed itself to using all the tools to ensure that current and future policies take into account the three pillars of sustainable development.

In addition, in order to confirm that environmental, economic and social sustainability can generate tangible value as well as other financial information, the Italian legislator with dlgs n.254/2016 transposes within Italian law the European Directive 2014/95/EU (Barnier Directive) on non-financial information. This event represents a breakthrough in terms of greater transparency of communication of non-financial information.

So, it is a widespread opinion of the existence of different challenges arising from society and the environment that affect the choices of the firms (Giddings et al., 2002). Today, firms translate the concept of sustainability into cost-efficiency, reputation, need of differentiating and improving market position. The biggest challenge is to combine a macro-dimension represented by the state of the society and the environment with a micro-dimension represented by firm's business models (Dyllick, & Muff, 2016). There seems to be a disconnection between these two levels; what the economy requires in terms of real sustainable development is the integration of the concept of triple sustainability into the whole business, from governance to organizational structure, from customer management to enterprise culture, from internal infrastructure to systems of reporting. Therefore, it is necessary that firms should review the way to act and consequently change its business model (e.g. Boons et al., 2013; Boons and Ludeke-Freud, 2013). If the topic of sustainability has been analyzed for a long time through studies on corporate social responsibility (Porter & Kramer, 2006; 2011), on social innovation (e.g. Yunus et al., 2010), on green processes (e.g. Curzons, 2001), on green economy (e.g. Brand, 2012) and so on, a study is needed to enable these concepts to be translated in practice.

So it seemed correct to analyze, in this paper, the concept of business models. I consider important to analyze the business model because it is based on the logic of creating value within an organization and its effects on both the external environment and the internal infrastructure. The business model thus enables stimulation of sustainability management analysis (Schaltegger et al, 2016). From the study of the literature, I found that the traditional business model concept presents any limitations; even if the authors refer to sustainable, they consider only the economic dimension without reference to the environmental and social aspects. This study aims to fill this gap and to provide a more complete definition of business model that includes all aspects of competitiveness. Consequently, I will try to answer the following research question:

is the traditional business model able to represent the three dimensions of sustainability (economic, social and environmental) in order to describe the business performance?

By answering these questions, I contribute to the literature and to extend the previous knowledge of the mentioned topic.

This paper is structured as follows: first, I provide insight into the ways in which the sustainability has been analyzed by managerial literature. In the second section of this paper, I analyze in depth the existing literature on business model in order to understand if the concept of triple sustainability has been included into the business model's studies. Thirdly I incorporate the issue of sustainability in the literature on business models and finally I propose a reconfiguration of "business model canvas" of Alex Osterwalder in order to provide a new management tool. To conclude, I will discuss the results and practical implications of my research.

1.2 THE TRIPLE SUSTAINABILITY IN LITERATURE

The concept of economic sustainable development is now widespread in the management and scientific-academic culture (e.g. Broken et al. 2014; Boon and

Ludeke-Freund, 2013). In particular, the sustainability value has become more important as a result of the scandals of recent decades: economic and political events and changes have led to the urgent need for change in business management as well as a greater awareness of the phenomenon in the political and academic area. In order to overcome the current crisis it is necessary to promote a sustainable inter-sectoral and interdisciplinary approach to be able to ensure a sustainable product and process.

This topic has its roots in 1987 with the Brundtland Commission Report "Our Common Future" of the United Nations and before that in 1980, with the World Conservation Strategy. According to this definition, sustainability is seen as "*development that meets the needs of the present generations without compromising the ability of the future generations to meet their needs and aspirations*" (UNWCED, 1987).

Since the 1990s, the concept of sustainability has been enriched with a more complex perspective, including the analysis of the capabilities of the environment to provide resources and absorb waste produced by human activity (Birkin & Woodward, 1997). Sustainable development thus translates into a modification of production and consumption patterns, which encourages the development of production processes in which resources recycled to the ecosystem are equal to the number of employed ones (Hart, 1995; McDonough & Braungart 2002). The general idea was to have a qualitative concept that include ideas of improvement and cultural, social and economic progress (Abrahamson, 1997). Firms are understanding that a good financial and economic performance can ensure the short-term survival, but may not necessarily guarantee good long-term results

(Barnett, 2007); not consider the impacts on the environment and the social issues could be an obstacle to long-term firms' survival (Doane & MacGillivray, 2001; Crane & Matten, 2007). So it's important to highlight that the environmental and social sustainability is compatible with the firms' performance (Melville, 2010; Starik et al., 2012; Savitz & Weber, 2006).

Consequently, in the mid '90s John Elkington coined the term "triple bottom line" (TBL) to indicate the need for companies to consider the three main dimensions of their performance: economic, social and environmental (Elkington, 1997). The definition of "triple bottom line" has become a reference point in studies on sustainability (Adams et al., 2004; Henriques & Richardson, 2004). According to this model, firms that adapt the levels of profitability to value of individual and community, respect the conditions of Corporate Sustainability, creating a Sustainability Revolution (Edwards, 2005; Quaddus & Siddique, 2011). In other words, to generate success, a firms must set his action considering 3P: Profit, Planet, People (Elkington, 2004).

So over the years, sustainability studies have focused not only on economic aspects in terms of costs and revenues, but also on the social and environmental issues.

From the *social point of view,* studies of strategic management introduced a concept of corporate social responsibility in order to adopt socially responsible behaviors (Carroll, 1993), that respect the expectations of all stakeholders (Freeman, 1984). So it is required not only the economic ability to survive on the market, but also the attention to the society in which it operates.

Carroll, with its pyramid of responsibilities (Fig. 1.1), highlights the importance of ethical and discretionary responsibilities concerning the activities carried out by the company in favor of the community. (Carroll, 1979). First he underlines economic responsibilities, considered an inevitable priority for a business and then he identifies other responsibilities: legal, ethical and discretionary ones concerning purely voluntary activities carried out by the enterprise in favor of the community. According to Carroll, Corporate Social Responsibility translates into how a company is able to implement all these four responsibilities towards society at a given point of time (Carroll, 1979). The four categories of the pyramid embrace the five dimensions of CSI introduced later by Dahlsrud (Dahlsrud, 2006). He wants to establish a new corporate structure in which the economic, environmental, social, ethical and philanthropic dimensions delineate always the essential features (Dahlsrud, 2006).

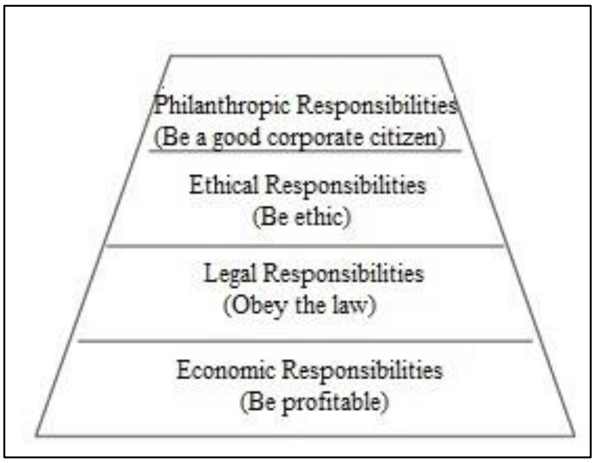

FIG. 1.1 Carrol Pyramid

The solution is not to put into conflict the Corporate Social Responsibility and firms' objectives and move from "corporate social responsibility" to "social integration" and "shared value" (Porter & Kramer, 2006). The shared value represents the value for all stakeholders; this concept replaces the topic of "shareholder value" (Porter & Kramer, 2011).

According to Porter and Kramer, the "socially integrated" firm does not just internalize the social aspect in its strategies, but it also researches and develops investments that can bring significant benefits to society and, at the same time, increase its competitive advantage and their economic performances. I consider the Porter’s view not exhaustive because the author limits the social integration to the only convenient situations for the enterprise; the focus is always the firm’s competitive advantage. They analyze the situations where investments affect the firm, but above all allow to increase the performance of the organization.

In my opinion, sustainability is a broader concept based on the well-being of the whole community, not just on the firm one. So even if the outcome of the actions analyzed by Porter is the same as that of main sustainability researches, the starting motivations are different.

The result of Porter research seems to be an expression of a competitive strategy that identifies business opportunities, rather than an expression of a path aimed to integrate economic dimension and social one.

Today, some social responsibility instruments are the focus on health, safety and satisfaction of employee, social actions in favor to the territory, philanthropic actions, charitable partnerships etc. (Ozanne et al, 2016)

From the *environmental point of view*, over the years, the concept of green economy has developed. It is not a substitute or a synonym for sustainable development; it becomes a necessary step and sustainability remains a key long-term goal (Hart, 1997). The United Nations Environment Program (UNEP) has developed a widely-used green economy definition. In particular, this program defines it as "a growth engine" that "improves improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities " (UNEP, 2011: p1). The green economy is based on the inevitable need to invest in product quality, to develop a sustainable resource and to rely on drastic reduction of environmental and social impacts in order to improve overall quality of life.

Today the model of green economy is overcome by the concept of blue economy, a new business model that represent the base of “circular economy”. This strategic orientation, proposed by Gunter Pauli (Gunter, 2010), sees nature as a tool for improving the health status of the ecosystem and the global economy. This idea is based on biomimetics, that is, on the application of biomechanical and biological processes that occur in nature transposed into human activities and technologies. So, this new concept finds inspiration in the imitation of nature in order to generate a really sustainable. I speak about the so-called "cradle-to-cradle", which replaces the old model pick-use-throws (Braungart & McDonough, 2002; Braungart, 1990). The cradle-to-cradle product is made up of materials that will be 100% reused, without scrap, easily disassembled and contains no toxic substance.

What is needed is a change in industrial processes that must give up the logic "cradle to grave". It is not just a dream but a transition already in progress because, according to latest estimates, the circular economy, only in the market for consumer products, could save $ 630 billion annually, approximately equal to 3.5% of European GDP (Report "Towards the circular economy", McKinsey, 2013).

1.3 BUSINESS MODEL AND SUSTAINABILITY

Once established the relevance of the topic of sustainability, it becomes necessary to put the attention on methods that allow to apply theoretical concepts on the management area in order to help the implementation of a truly sustainable business. In a business area, indeed, the firms that decide to invest in sustainability must not lose the goal of increased competitiveness and profitability. So to reach this goal it is necessary to adopt a different business models that consider the needs of a new complex context.

In this section I briefly review the main definitions that literature on business models offers, in order to highlight the possible interest shown by the authors.

Starting from more synthetic definitions, I can mention Linder and Catrell who claim that the business model is "*the organization's core logic for creating value*" (Linder & Catrell, 2001), or Magretta who speaks about "*a story that explains how an enterprise works*" (Magretta, 2002) or I find the definition of Bienstock, "*the way we make money*" (Bienstock et al., 2002). I can show that in these early definitions there isn’t reference to the objectives of triple sustainability, but only in general they talk about the need to create value, that means “making money".

Then I analyze a broader definition of the term "business model"(BM). Let's start with the definition provided by Timmers who say that the BM is "*an architecture for the product, service and information flows, including the various business actors and their roles; a description of the potential benefits for the various business actors and a description of the sources of revenues*" (Timmers, 1998). This definition seems to highlight the constituent elements of a business model, rather than its purpose. There isn’t any connection with environmental problems. The same gap exists in the definition of Amit and Zott that emphasize only value creation and exploration of business opportunities (Amit & Zott, 2001).

From the late ‘90s to the early 2000s, the interest of the authors is directed generally to the structure of the BM and its components (Hamel, 2000; Rayport & Jaworsky, 2000; Hedman & Kalling, 2002).

In 2002 Chesbrough and Rosenbloom speak about economic value: "*The business model is the heuristic logic that connects technical potential with the realization of economic value*" (Chesbrough & Rosenbloom, 2002). The authors emphasize the economic objectives and profitability that the firms must achieve to survive.

In 2005, Osterwalder introduced a definition of business model that is actually the most used in the academic world. He defines them as "*a conceptual tool that contains a set of elements and their relationships and expressing allows the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, to generate profitable and sustainable revenue streams*" (Osterwalder, 2005). The author emphasizes the purpose of the BM to generate revenue streams. It is clear that he considers only economic dimension.

The same problem exists in the definition by Teece where the business model clearly indicates “*the logic, data and other evidence supporting the value proposition for the customer, that is a sustainable structure of profits and costs for that company that offers that value*” (Teece, 2010).

Small efforts towards a different aspect of sustainability come from the definition of Seelos and Mair who conceptualize the BM as “*a set of capabilities configured* *to allow the creation of value consistent with strategic objectives or economic and social."* (Seelos & Mair, 2005). These authors seem to want to go beyond the purely economic logic, but they cannot face the problem in its strategic complexity, both from economic standpoint in general and specifically from social/ethics point of view. The environmental dimension is absent.

In 2013 Boons et al. try to combine sustainability with the concept of the BM, but do not provide any definition. They just talk about technological and social innovation (Boons et al., 2013; Boons & Lüdeke-Freund).

In 2014, Brocken et al. analyzed the topic of the "sustainable business model" seen as an architecture composed by three differnet areas: ttechnological, social and organizational area. The aim of the authors is to combine the different concepts of a fragmented topic such as triple sustainability research (Brocken et al, 2014).

In 2017, Lüdeke-Freund with other authors deepen the topic and, in general, they provide clarity on the importance of social and environmental logic within the four elements that make up the business model: value proposition, customer interface, business infracture and the financial model (Lüdeke-Freund et al, 2017).

In the same year, some authors (Evans et al, 2017) analyze the topic of triple sustainability within the business model innovation field. They emphasize the need for a sustainable business model and talk about value creation and value network. Their studies focus on the need for change, innovation, adjustments, and on the importance of business capability in order to introduce a radical or incremental innovation. However, no business model definition is provided because the focus of their study is innovation.

Therefore, from literature analysis I note only in the last year more attention to the concept of triple sustainability and the need to integrate it into all the business logic and into the business model studies.

1.4 BUSINESS SUSTAINABILITY MODEL

After my analysis, I propose a new definition of business model in the perspective of triple sustainability. In my opinion, it is correct to describe the business model as “*an instrument characterized by a set of elements interconnected each other, which allows the realization of economic, social and environmental value that is sustainable over time*."

I must recognize the importance of the environmental and social aspect in achieving a sustainable long- term competitive advantage. Consequently, it seems necessary to create a tool that expresses this new value of business model.

Among the various tools proposed over the years, such as the Value Chain (Porter, 1985), the Balanced Scorecard (Kaplan & Norton, 1996), the Business Model Canvas (Osterwalder, 2010), I chose the latter because I consider it very innovative and able to explain effectively the firms’ business logic. In my opinion the advantage of this tool is the logic of “visual thinking” ("think in pictures"). The visual thinking favors the use of images to convey messages and concepts; through the senses, especially sight, man is able to process and better organize information (Arnheim, 1969).

But in the perspective of triple sustainability, the tool as proposed by Osterwalder seems to be incomplete and not exhaustive. Consequently, I feel the need to move towards a “broader vision”: I create what I might call the *business sustainability model.*

Triple sustainable value proposition

I begin the analysis of the elements of the new framework. The content of the value proposition is expanded and it becomes the *triple sustainable value proposition*. It represents the value, the meaning, the message that sustainable firms want to communicate to their customer segments. You can identify in the awareness that the resources of the planet are limited and that industrial production has an impact on the environment and so in greater attention to the environment. The firms put an ethical choice and show the importance of transparency and trust. They want to communicate that products respect the 3P: people, planet, prosperity. Honesty, fairness and transparency, for example, represent some of the fundamental ethical values that a firm must incorporate and transmit to all stakeholders. They allow the creation of trust. Being transparent also allows the company to get more feedback on its operations that can be the basis for effective strategic decisions.

Customers’s blocks

The value proposition cannot be analyzed separately from “the right side” of the tool, the side of the *customer*. Customers play an important role because their choices can reward or punish the producers; certainly I reward those firms that have a “triple sustainable value proposition” and that transfer this new value to new product/service.

The customer is interested in how the product is done and then he is taken to evaluate and discriminate in its consumption choices between different companies. Customer segments that show greater sensitivity to environmental issues are those with greater economic and cultural resources. Customers with higher spending capability are also willing to spend a premium price to buy environmentally-friendly products. All of this is also a consequence of greater education that influences the sensitivity to environmental issues. This sensitivity to the issues of eco-sustainability and social responsibility tends to be greater in women and especially among young women with young children. Moreover, all activities relating to CRM should highlight the firms' green value, avoiding the risk of "greenwashing".

Business Infracture

Turning to the blocks on the left side of the tool, the company moves to a new sustainable perspective to establish relations with *partners* who share the same values; it is useless to be green in a process step and to buy raw materials from a supplier who does not consider important the environmental issue. The partnership, in general, can involve national and international organizations, private or public such as research centers or universities. The building block of Canvas that Osterwalder calls key partners, could be renamed "Partner/Cooperation" and will include, overall business relationships, even the set of actions carried out in collaboration with public and private stakeholders in order to enhance economic and social progress, such as cooperation with public bodies in order to promote reforestation.

To reach the sustainability aim, the company could control their *key activities*, for example using "the analysis of the life cycle", in order to see which steps generate significant impacts on the environment and take action to improve and define the degree of sustainability of products or services. Starting from this point the company could schedule tasks of eco-design.

All this is connected with the need to rationalize the choice of *key resources* that in this business model are water, food and energy. The importance of control over the use of these resources starts from the assumption that natural resources are not unlimited. There are balances that can be irremediably altered by inadequate production and consumption patterns and by an incorrect environmental policy. It is important for human well-being that the environment continues to provide resources and consequently absorb waste.

Social- Eco Costs and Benefits

Near the cost and revenue blocks that include the traditional economic performance, I add two new blocks, not present in the Canvas of Osterwalder, concerning social-eco costs and benefits.

Social-eco costs are virtual elements that make up part of the quantity that a firm will be forced to pay in the next years as a result of their unsustainable actions. Obvious examples of eco-costs are those related to CO_2 emissions that I'm already starting to pay, or the costs of energy and those related to the depletion of raw materials. Social costs can result from improper care of the employees who are experiencing a failure to respect rights could slow the rhythm of the work, with repercussions on the productivity. This block responds to the question: What are the social and environmental costs deriving from the business model of the business?

Next to social-eco costs I find the *social-eco benefits* for which are valid the opposite considerations; for example, the use of alternative sources for the production of energy or think of production processes that use more efficiently the resource "water", in other words the benefit resulting from eco-innovative products or/and processes. This block responds to the question: What are the social and environmental benefits deriving from the business model of the business?

Environment and Society

The model includes two new blocks: "Environment" and "Society" blocks.

The block *Environment* includes any possible effect that the business model of the company has on the environment. In other words, the consequences in terms of increased pollution, increased drought, changing climate. This block responds to the question: What is the environmental aspect (climate, water health ...) affect the firm? The elements placed inside will have an impact primarily on the choice of partner, on the key resources and on costs. Therefore, the block is placed on the left side of the tool.

The block *Society* represents the change of social values for example change in technology or politics, the creation of new needs and the macro trends. All these aspects will affect customers. For this reason, the block is placed on the right side of the diagram. This block responds to the questions: how does the firms relate to the society? What are the social trends?

I decided to represent everything with a circular instrument to recall the idea of the planet. (Fig. 1.2). The block Environment is connected with the block Society in order to highlight that the two elements cannot be considered individually. For the same reason the boundaries of the inner blocks become dashed lines. The circular shape is also useful to underline the fact that all elements are interconnected to each other and that the “green” dimensions influence the “core” firms’ organization.

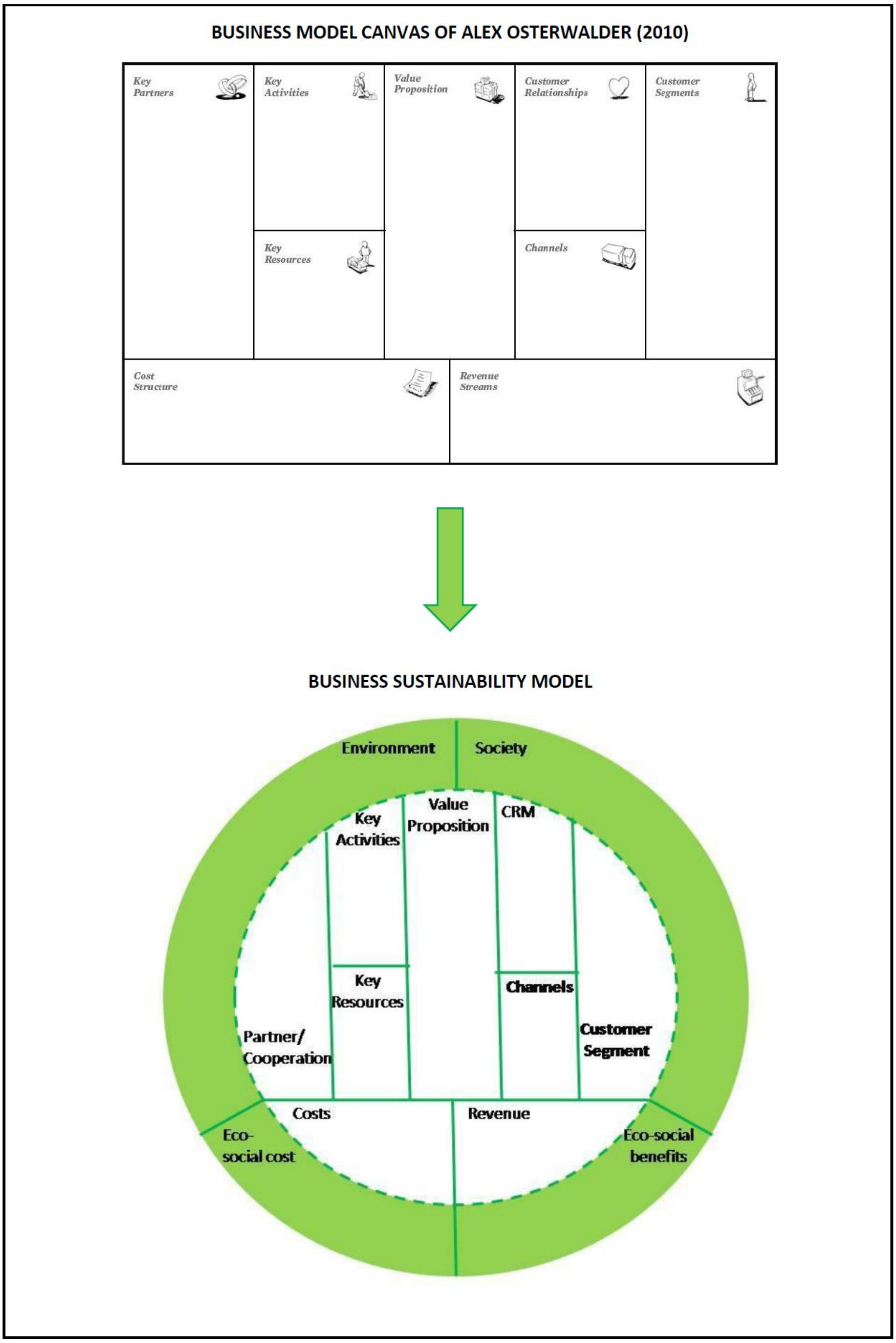

Fig. 1.2 - Business sustainability model. Souce: Own elaboration

1.5 DISCUSSION

The triple sustainability is a new business paradigm (Elkington, 1997; Edwards, 2005). Even the Nobel Prize Munasinghe, founder of the branch of studies called "sustainomics", said that environment, society and economy are key elements that must be harmonized (Munasinghe, 2010).

So the sustainable development calls for a change in patterns of production and consumption, which encourages the development of processes in which the number of ecosystem's resources generated are equal to the number of those employed by the many processes (E. Daly, 1994; Hart 1995; McDonough & Braungart 2002, Birkin & Woodward, 1997).

The plan “Europe 2020” pushes the transition to a more "regenerative" economy, based on substantial and lasting improvements in the use of resources. But the success of the transition will depend primarily on the ability of the private sector to adopt and develop new business models (EC, 2010).

These considerations lead to the growing interest of management scholars to the topic; for many years it remained the prerogative of philosophers, sociologists or macro-economists.

Nevertheless the management literature on sustainability is not very developed and it is almost absent that one relating to sustainable business models. This article provides a contribution to the literature on business models, making the concept closer to current reality and it offers a new tool for the practitioners in order to reconfigure the way to firms operate.

Limitation and future researches

The article has the aim to make understood that the sustainable idea does not refuse the logic of growth which is always present, even in its green form. It is also true that philosophers, first, (Latouche, 2004) and economists then (Schneider et al., 2010 Jackson, 2009), brought the debate of sustainability towards a concept of “degrowth” in order to move forward. The authors who support this “vision”, that is alternative to continuous development and pursuit of profit, aspire to autonomous and independent communities: nothing is imported. A place consumes only the foods and the energy that it produces and uses only the tools that it creates (Latouche, 2004).

These are two opposing views which might be the basis of future researches that can highlight, also in an empirical way, the correctness of one or the other vision.

Future studies may also validate the model that I proposed, with empirical methods; for example, using a case studies approach (Eisenhardt, 1989; Yin, 1981). Real data can show the achievement of positive results, even going beyond the economic logic. The manager, indeed, are more prone to changes when they see real opportunities for their firm.

Managerial implications

The prospect of the BM allows managers to act in order to create a social, environmental and business, through the identification of its components.

Specifically, "sustainability business model" that I proposed provides a great help to managers. This new tool becomes a strategic framework; for the first time the firms are able to compare the value of a product/service with its environmental cost/benefits.

Thanks to an innovative approach, it is possible to assess the current state of the firms' portfolio, defining a degree of economic, social and environmental sustainability. This allows to get core information in order to define the future strategic plan more effectively, useful to innovate their business towards more sustainable systems; both for start-ups and mature firms.

I see the business model as an important tool for researchers, practitioners and managers in order to understand how to develop this sustainable innovation.

Managers will have to consider new elements and change it, with the evolution of society. The "business sustainability model" can help facilitate these processes of reconfiguration.

1.6 CONCLUSION

Starting from the study of the evolution of the concept of sustainability, I have shown that the triple bottom line is becoming a competitiveness factor.

Any significant alteration of the dominant economic logic involves the application of new BM by actors who promote more sustainable ideas, which may also lead to different types of sustainable innovations. This new model can be the result of simple evolution of the previous one or it is a radical change; the value proposition needs to reflect the value for society and the performance should be defined by other indicators.

At this stage it’s important to analyze the literature in order to evaluate if any authors who have shown interest about this topic. From my research, I have recognized as the traditional business model have some limitations; even if the authors speak about “sustainable business model”, they consider only the economic dimension, without any reference to the environmental and social aspects.

Consequently, the literature that combines the concept of BM with that of triple sustainability is almost absent. This can be explained by the fact that the change in attitude is a process in place that academics and managers are slowly assimilating.

The first contribution of this article is to provide a new definition of business model that it is not different from previous ones, but that is extended in order to include the new concept of competitiveness.

Later, I found that the gap highlighted in the literature is also reflected in the existing management tools. The second contribution, therefore, was to provide a practical tool that represents a new way of organizing and acting business, from the operational dimension to marketing.

Consequently, there is a clear answer to my research question: the traditional business models do not consider the three dimensions of sustainability all together. Moreover, the link between the topics of sustainability and business model is relevant both for researches and practitioners because business model help to understand how to act in order to create customer and social value and consequently to increase the competitiveness in the market getting not only economic results but also high environmental and social performance.

However, other aspects are yet to be defined, it would have opened the way to a process of development of managerial studies that emphasize the strategic importance of the business model in the perspective of sustainability.

REFERENCES

Abrahamson K.V. (1997). Paradigms of Sustainability. Sörlin S. (ed.), The Road towards Sustainability, A Historical Perspective, The Baltic University Programme, Uppsalla University, 30 ss.

Adams C., Frost G., Webber W. (2004). Triple bottom line: a review of the literature. In Henriques & Richardson (Eds.), The Triple Bottom Line. Does it All Add Up? Assessing the Sustainability of Business and CSR. 26-33. Earthscan Publications.

Arnheim R. (1969) . Visual Thinking. University of California Press.

Baden-Fuller C., Morgan M.S. (2010). Business models as models. Long Range Planning, 43, 156-171.

Barnett M.L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. Academy of Management Review, 32, 794–816.

Bienstock C.C., Gillenson M.L., Sanders T.C. (2002). The complete taxonomy of web Business Models. Quarterly Journal of Electronic Commerce, 3: 2, 173-182.

Bina, O. (2013). The green economy and sustainable development: an uneasy balance?. Environment and Planning C: Government and Policy, 31(6), 1023-1047.

Birkin F., Woodward D. (1997). Management accounting for sustainable development. Management Accounting: Magazine for Chartered Management Accountants, 75:7, 42 ss.

Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. Journal of cleaner production, 65, 42-56.

Boons, F., Lüdeke-Freund, F. (2013). Business models for sustainable innovation: state-of-the-art and steps towards a research agenda. Journal of Cleaner Production, 45, 9-19.

Boons F., Montalvo C., Quist J., Wagner M. (2013). Sustainable innovation, business models and economic performance: an overview. Journal of cleaner production. 45,1-8

Carroll A.B. (1991). The pyramid of corporate social responsibility. Business Horizons, 34.

Carrol A.B. (1993). Business & Society. Ethics and Stakeholder Management. Cincinnati: South Western Publishing Co.

Chesbrough H., Rosenbloom R. (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, 11: 3, 529-555

Crane A., Matten D. (2007). Business Ethics. 2nd ed., Oxford University Press. New York.

Curzons, A. D., Constable, D. J., Mortimer, D. N., & Cunningham, V. L. (2001). So you think your process is green, how do you know?—Using principles of sustainability to determine what is green–a corporate perspective. Green Chemistry, 3(1), 1-6.

Dahlsrud A. (2006). How corporate social responsibility is defined: an analysis of 37 definitions. Corporate Social Responsibility and Environmental Management, September.

Daly E., (1994). For the common good: redirecting the economy toward community, the environment, and a sustainable future. Beacon Press, 54 ss.

Dyllick, T., Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability. Organization & Environment, 29(2), 156-174.

Doane D., MacGillivray A. (2001). Economic Sustainability. The business of staying in business, The SIGMA Project, R&D report; http://projectsigma.co.uk/RnDStreams/RD_economic_sustain.pdf.

Edwards A.R. (2005). The Sustainability Revolution, Potrait of a Paradigm shift, New Society Publichers, Gabriola Island, B.C., Canada.

Eisenhardt K.M., Kathleen M. (1989). Building Theories from Case Study Research. The Academy of Management Review, n. 4.

Elkington J. (1997). Cannibals with Forks. The Triple Bottom Line of 21st Century Business, Capstone Publishing, Oxford.

Elkington J. (2004). Enter the Triple Bottom Line. In A. Henriques & J. Richardson (Eds.), The Triple Bottom Line: Does it All Add Up? Assessing the Sustainability of Business and CSR. pp. 1-16. London: Earthscan Publications.

Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E. A., & Barlow, C. Y. (2017). Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models. Business Strategy and the Environment.

Francesco (Pope) (2015). Lett. encyclical. "Laudato Si'", May 2015.

Freeman R.E. (1984). Strategic Management: a Stakeholder Approach. London: Pitman.

Giddings, B., Hopwood, B., & O'brien, G. (2002). Environment, economy and society: fitting them together into sustainable development. Sustainable development, 10(4), 187-196.

Gunter P. (2010). The Blue Economy: 10 years - 10 innovations - 100 million jobs. Paradigm Publications

Hambrick D.C., Snow C.C. (1977). A contextual model of strategic decision making in organizations. Acad. of Man. Proceedings, 109-112.

Hamel G. (2000). Leading the Revolution. Harvard Business School Press, Boston.

Hart S.L. (1997). Beyond Greening: Strategies for a Sustainable World. Harward Business review January – February, 67-76.

Hart S.L. (1995). A natural-resource-based view of the firm, Academy of Management Review, 20:4, 986-1014.

Hedman J., Kalling T. (2002). IT and Business Models: Concepts and Theories. Copenhagen Business School, Copenhagen.

Henriques A., Richardson J. (Eds.). (2004). The Triple Bottom Line: Does it All Add Up? Assessing the Sustainability of Business and CSR. London: Earthscan Publications.

Kaplan R.S., Norton D.P. (1996). Linking the balanced scorecard to strategy - California management rev. 39. pp. 53-79.

Jackson T. (2009). Prosperity without Growth: Economics for a Finite Planet. Earthscan, London Uk.

Johnson M. W., Christensen C.C., Kagermann, H. (2008). Reinventing your business model. HBR 86, n. 12.

Latouche S. (2004). Why Less Should Be So Much More: Degrowth Economics. Le Monde diplomatique. December.

Lüdeke-Freund, F., Freudenreich, B., Schaltegger, S., Saviuc, I., & Stock, M. (2017). Sustainability-Oriented Business Model Assessment—A Conceptual Foundation. In Analytics, Innovation, and Excellence-Driven Enterprise Sustainability (pp. 169-206). Palgrave Macmillan US

Marlier E., Natali D. (2010). Europe 2020: Towards a More Social EU?. Peter Lang Editor.

MacArthur Foundation (2013). Towards the circular economy Economic and business rationale for an accelerated transition.

McDonough W., Braungart M. (2002). Cradle to cradle: Remaking the Way We Make Things. New York: North Point Press.

Melville N.P. (2010). Information systems innovation for environmental sustainability. MIS Quarterly, 34:1, 1-21.

Morris M., Schindehutte M., Allen J. (2005). The entrepreneur's business model: Toward a unified perspective. Journ. of Business Res. 58:6, 726-735.

Munasinghe M. (2010). Making Development More Sustainable: Sustainomics Framework and Practical Applications. MIND Press - Munasinghe Institute for Development.

Osterwalder A. (2004). The Business Model Ontology - a proposition in a design approach. http://www.hec.unil.ch/aosterwa/PhD/Osterwalder_PhD_BM_Ontology.pdf.

Osterwalder A., Pigneur Y. (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Wiley, New Jersey.

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 16, 1-25.

Ozanne, L. K., Phipps, M., Weaver, T., Carrington, M., Luchs, M., Catlin, J., ... & Williams, J. (2016). Managing the Tensions at the Intersection of the Triple Bottom Line: A Paradox Theory Approach to Sustainability Management. Journal of Public Policy & Marketing, 35(2), 249-261.

Palo T., Tahtinen J. (2013). Networked business model development for emerging technology-based services. Industrial Marketing Management 42,773-782.

Porter M (1985). Competitive Advantage: Creating and Sustaining Superior Performance. NY: Free Press. (Republished 1998.)

Porter M, Kramer M. (2006). Strategy and Society: The link between competitive advantage and corporate social responsibility. HBR December, pp. 91.

Porter M, Kramer M. (2011). Creating shared value. HBR, January, pp. 38 e ss.

Quaddus M.A., Siddique M.A.B. (2011). Handbook of Corporate Sustainability: Frameworks, Strategy and Tools, Edward Elgar Publishing, London.

Rayport F., Jaworski B.J. (2000). E-Commerce. McGraw-Hill/Irwin, New York.

Ricart J.E., Casadesus Masanell R. (2011). How to design a winning business model? HBR 89, n. 1-2, 100–107.

Richardson J. (2008). The business model: An integrative framework for strategy execution. Strategic Change, 17:5-6, 133-144.

Savitz A., Weber K. (2006). The Triple Bottom Line, How Today’s best-run companies are achieving economic, social and environmental success, and how you can too, Jossey Bass, San Francisco, CA.

Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). Business models for sustainability: Origins, present research, and future avenues.

Schneider F., Kallis G., Martinez-Alier J. (2010). Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. Journal of Cleaner Prod. 18, 511-518.

Seelos C , Mair J (2005). Social entrepreneurship: Creating new business models to serve the poor. Business Horizons. 48:3, May–June , 241–246

Starik M., Holliday S., Paton B. (2012). Strategic Environmental Sustainability Management: Highlighting the Need and Opportunities to Recognize Environmentally- Hidden Economic Sectors. International Journal of Business Insights & Transformation. Special Issue, 4, 8-15.

Storbacka K., Frow P., Nenonen S., Payne A. (2012). Designing Business Models for Value Co-Creation. Review of Marketing Research, 9, 51-78.

Teece D.J. (2010). Business models, business strategy and innovation. Long Range Planning 43:2-3, 172-194.

Thompson J.D., MacMillan I.C. (2010). Business models: creating new markets and societal wealth. Long Range Planning 43, 291-307.

Timmers P. (1998). Business models for electronic markets. Electronic Markets, 8:2, 3-8.

Vaughan A. (2015). Obama's clean power plan hailed as US's strongest ever climate action. The Guardian. 3 Aug. 2015.

UNEP United Nations Environment Programme (2011) Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication. A Synthesis for Policy Makers.

Vermeulen W., Seuring S. (2009) Sustainability through the market: the impacts of sustainable supply chain management. Sustainable Development, 17 :5, 269-273.

Wirtz B.W., Pistoia A, Ullrich S., Gottel V. (2015). Business Models: Origin, development and future research perspectives, Long Range Planning, 1-19.

Yin R. (1981). The case study as a serious research strategy. Knowledge, September.

Yunus, M., Moingeon, B., Lehmann-Ortega, L. (2010). Building social business models: Lessons from the Grameen experience. Long range planning, 43(2), 308-325.

Zott C., Amit R. (2010). Business Model Design: An Activity System Perspective. Long Range Planning 43:2-3, 216-226.

Zoot C., Amit R., Massa L. (2011). The business model: theoretical roots, recent developments and future research. IESE Business School – University of Navarra, September 2010 pp 6.

2. OPEN INNOVATION PARADIGM: BUSINESS MODEL CANVAS AS A KNOWLEDGE MANAGEMENT TOOL IN A INNOVATIVE PROCESS.

ABSTRACT

Today the knowledge has a great influence on managerial strategies, on competition and relationship on the market; so among intangible assets, knowledge is arguably the most important resource that a firm controls and one of the principal inputs into the innovation process. Knowledge-based theory focused on the stock of firms' knowledge and on understanding what knowledge is and how firms must use this resources in order to get a better performance.

I use this theory in order to explain the open innovation process. The core of open innovation, that is the collaborative innovation, combines knowledge inflows and outflows Furthermore in an open innovation process there are high failure rates of the initiatives due to the inability to manage interactions between internal and external knowledge.

Consequently, in this paper I propose a framework that links knowledge management theory, knowledge sharing activities and open innovation paradigms.

I also propose a tool, the business model canvas of A. Osterwalder, in order to manage the knowledge in an innovation process and to enhance knowledge absorption capabilities.

Keywords: Knowledge management theory, knowledge sharing, business opportunities, open innovation, business model canvas

2.1 INTRODUCTION

The human is not an island and neither the enterprise, as an organization made by people, is an isolated entity: both to prosper need other people and other firms. This feature emerges more aggressively following the economic context that requires new collaborative business paradigms. The *extrapreneurs* (Etzkowitz & Klofsten, 2005) acts as a connector between different firms or as a business brokers and so collective co-creation and shared value creation (Porter & Kramer, 2006) become the protagonists of this economic change.

Today, indeed, many of the economic and social phenomena are based on the same concepts: exchange, sharing, collaboration, and comparison. They go beyond traditional industrial districts or network contracts, but also include new forms of funding such as crowdfunding and new business paradigms for example, sharing economics, peer economics, or collaborative consumption in terms of co-housing, co- working, car sharing and so on.

Collaboration is the result of a wide social openness that for firms translates into a passage from a model of absolute autonomy and independence to a broader shared system where different benefits can be gained in terms of material and intangible resources, implementation of productive processes and greater innovation. The basis is not contractual bonds, but values such as dialogue and cooperation and the main principles of actual innovation are primarily the project and risk sharing and the exchange of ideas and knowledge.

Consequently, in terms of innovation, scholars stress the importance of intangible assets for achieving superior performance and a sustainable competitive advantage: to innovate a firm must continually acquire a diverse and novel body of knowledge that will serve as the seed for future technological developments. Among intangible assets, knowledge is arguably the most important resource that a firm controls and one of the principal inputs into the innovation process and consequently knowledge management represent a fundamental strategic element and the most important guarantor of sustainable competitive advantage for firms (Grant, 1996) and of firm's prosperity and survival in a dynamic and discontinuous environment (Esterby-Smith & Prieto, 2008).

In terms of knowledge management initiatives most researchers have focused their attention on its technical side, seen as the set of IT infrastructure, data warehouses and so on, and consequently neglect the external social aspects that view the knowledge management as social relationship. Today, the 'do-it-yourself' mentality in innovation management just became outdated (Gassman, 2006) and so I note the importance of social processes, and thus both intra-organizational and inter-organizational social networks in order to share knowledge. The knowledge management research instead is often limited to specific internal social knowledge processes, e.g. knowledge creation or exploitation (Grant, 1996; Nonaka, 1994). The perspectives that consider share of knowledge outside a firm's boundaries, are relatively limited in the knowledge management theory (Grant and Baden-Fuller, 2004; Argote et al., 2003) and in the relational capability theory (Grant, 1996; Dyer & Singh, 1998). Consequently, in terms of innovation, Chesbrough (2006) introduces the paradigm of open innovation that consider social network as one of effective way in order to implement a new process. The core of open innovation, the collaborative innovation, combines knowledge inflows and outflows. In particular, according to the author open innovation means that new ideas come from inside or outside the firm's boundaries and can go to market from inside or outside the firms as well. In this paper I consider the knowledge sharing as a main driver of successful open innovation process.

Moreover, as it can be seen from the literature and definitions presented, the knowledge management theory is originally based on way to create tools for collecting and to consolidate internal knowledge. Despite the open innovation's trend, how to effectively manage knowledge sharing in open collaborative innovation is not yet fully understood. In particular, still there is lack of effective knowledge management tools to implement openness in practical business environments.

In order to achieve fill in this gap, I consider business model canvas as a tool to effectively manage knowledge sharing in open innovation process.

So, while most studies focus on individual and intra organizational knowledge sharing, we ask: (1) In practice, how do firms apply the values of sharing and collaboration within their business model? (2) Is business model canvas useful in order to communicate in an open innovation process or to interpret this process?

So, the aim of this paper is to extend the approach of knowledge view to the management and sharing of knowledge among different organizations.

This article is structured as follows. In the first section I analyze the theoretical background about knowledge management. In the second section I link the knowledge management with open innovation paradigm. In the last part I provide a tool useful for firms that implement an open innovation process.

2.2 THEORETICAL BACKGROUND

KNOWLEDGE MANAGEMENT

In an environment characterized by rapid technological changes, intellectual capital is the primary dynamic of the firm's value creation. Traditional business models based on organizational routines aimed at achieving a specific goal, were suitable for a stable environment and a slow evolution. The new era is characterized by disruptive changes and by hypercompetition (D'Aveni, 1995) that require a reconceptualization of knowledge management systems. Recognition of the importance of knowledge in modern economies has found expression in the *knowledge economy*, in the *information society* and in *economy of ideas*. The centrality of the person and knowledge become the key factor to ensure the soundness and sustainability of firms. It is expected that the emphasis on the creation of knowledge will continue to be the prime focus for improving society.

Entrepreneurs are constantly looking for ways to improve performance and results of their activity. The disappointment of past management initiatives leads managers to want to acquire new knowledge. Studies show that to be competitive firms need to create and sustain a balanced portfolio of intellectual capital; they need to set broad priorities and to integrate the management objectives with processes of acquisition of effective knowledge.

I can define knowledge as the set of ideas, abilities, experiences of a single individual or an organization (Bartol & Srivastava, 2002; Wang et al, 2011). I can distinguish between explicit and tacit knowledge (Nonaka & Takeuchi, 1995): the explicit knowledge is codified and written and for this reason they are easy to capture and distribute; the tacit knowledge is associated with personal skills, capabilities and experience and therefore it is difficult to capture and distribute. Informal personal skills often referred to as “know how”. Tacit and explicit knowledge are not separate but complementary because they dynamically interact with each other in creative activities by individuals and groups (Nonaka, 1994; Alavi & Leidner, 2001).

So, knowledge management concerns the identification, the organization and the exploitation of knowledge in order to increase performance and competitive advantage; the greater the ability to manage, the greater the value for the enterprise in terms of higher productivity and higher quality of the products /services offered (Donate & De Pablo, 2015; Nguyen & Mohamed, 2011). In other word, the ultimate goal is to create greater innovation thought knowledge creation, retention and transfer (Alegre et al, 2011; Spincer & Sadler-Smith, 2006; Zhang et al, 2006). Consequently, the knowledge-based view proposes knowledge as a key resource for firms and therefore it represents an evolution of the resource based view (Grant, 1996); through knowledge management, a firm identifies, develops and leverages knowledge in organizations in order to help them to compete (Alavi & Leidner, 2001). So knowledge is a key of competitive advantage (Reus et al, 2009) and in particular, with the rise of the knowledge based economy, there was a shift in focus from tangibles to intangibles or human intellectual capital (Grant, 2002).

Knowledge based view focused on the stock of firms’ knowledge and on understanding what knowledge is and how firms must use these resources in order to obtain the better performance. So, the Knowledge management becomes a new paradigm because knowledge as an evolutionary resource, is able to engender and develop capabilities that have direct effects in terms of competition and profits

(Dagnino, 2015). The important point is not the ownership of stock of knowledge but the ability to create new knowledge and innovate continuously (Teece et all, 1997; Kogut & Zander, 1992). Knowledge management is not only a technology for knowledge sharing (Wang et al, 2011), but it is a driving factor that ultimately determines the success or failure of firm's initiatives. Indeed, the emphasis only on technology may limits the growth and the success in a dynamic market. (Rubenstein-Montano et al., 2001).

According to Martensson (2000) the definition of Knowledge Management consists on four stages. At the first step in the process, there is the acquisition of information. In the second stage, the information is entered into a storage system. Once the information is stored in the various databases, the third stage is initiated. In this stage, the stored information is made accessible. The final stage is about utilization of information.

The studies of Crossan, Lane and White (1999) focus on strategic renewal process, involving both the creation of new knowledge (exploration) and the use of existing knowledge (exploitation). Exploration activities are primarily aimed to introduce the variations that generate new ideas and to select the most appropriate ones through, for example, alliances (Das, 2006) and organizational networking (Hendry and Brown, 2006). Exploitation involves the replication of existing methods into new contexts. The benefits of exploitation are thus based on increased efficiency, while those of exploration are based on increased innovation. Scholars have concluded that the degree of success of firms lies in their potential to conduct both exploration and exploitation activities simultaneously (Levinthal and March, 1993; Oshri, Pan and Newell, 2006). Consequently, I can define knowledge management capabilities as the firm's ability to manage knowledge base over time in order to reconfigure the process of exploration and exploitation inside and outside the organization. Firms need to continuously transform these capabilities in order to fit with environmental evolution in terms of market and technologies change (Eisenhardt and Martin, 2000).

Both forms of knowledge can originate from outside the organization, through the absorption capacity (Zahra and George, 2002) and inter-organizational processes, or from inside the organization through the intra-organizational processes of knowledge sharing (Tsai, 2002). Several authors have spoken about relational capability in order to indicate the importance of relationships between firms created through relationship-specific assets and routines in order to achieve a sustainable competitive advantage (Dyer & Singh, 1998; Capaldo, 2007; Zaheer et al., 1998).

Moreover, in the current context, innovations become more knowledge intensive and organizations have recognized the key advantage of collaborative learning, co-operation, and synergy that come from utilizing inter-organizational networks. (Scharmer, 2001). Using external innovative ideas, the organizations become aware of unknown variables and so the source of competitive advantage is linked to the capability to discover, create and share new knowledge in a different business environment (Cook & Brown, 1999). Consequently, the innovative entrepreneurship essence consists in how to connect the stock of existing knowledge (past) with their new applications (future) (Shane, 2003, Shane & Venkataraman, 2000).

2.3 KNOWLEDGE MANAGEMENT AND OPEN INNOVATION PARADIGM

Today partnerships and knowledge sharing are not only a need for firms, but also a challenge (O'Doherty, 1990). Firms indeed can achieve more profits from innovation and this also through the implementation of a collective knowledge sharing process (Leonard & Sensiper, 1998). The goal of innovation process is the survival and the renewal of organizations, particularly for firms in fast-paced markets (Brown & Eisenhardt, 1995). The emergence of innovative firms is affected by the context in which they are located; environmental dynamism linked with its innovative developments make the emergence of innovation riskier and complicated.

In particular, to respond to external changes, firms have reorganized their innovative processes becoming more open to the acquisition and integration of information, knowledge and skills from external organizations. So, there has been a recombination of existing technologies (Schumpeter, 1947) and a vertical disintegration process by which relations are established with other actors.

Indeed, traditionally, in many firms there are large internal R&D labs that are a a considerable entry barrier for potential competitors. These firms could outperform smaller rivals (Teece, 1986; Van De Vrande, 2009). This process in which large firms discover, develop and commercialize technologies internally has been labeled the closed innovation model (Chesbrough, 2003). But the current innovation landscape has changed. Due to labor mobility, abundant venture capital and widely dispersed knowledge across multiple public and private organizations, enterprises cannot longer afford to innovate on their own, but rather need to engage in alternative innovation practices. As a result, a growing number of firms has moved to an open innovation model according to which firms begin to acquire ideas and technologies from outside and, at the same time, they make exploit their ideas and unused technologies to other firms (Chesbrough, 2003; 2013; 2014). It has become one of the hottest topics in innovation management studies and many different disciplines such as economics, psychology, sociology, have shown interest in it.

Open Innovation focused around opening up firms' boundaries in order to use and recombine internal and external knowledge to create and develop innovation (Chesbrough, 2003). In particular, the author defines this paradigm as "*the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and to expand the markets for external use of innovation, respectively*" (Chesbrough et al, 2006). So the open innovation paradigm argues that the company as part of its innovation creation process, cannot use only their own internal forces, but also should appeal to external sources to collect the ideas in order to promote growth and firm's success. Of course, this activity is not aimed exclusively to take the outside resources that are used, but it is a real inflow and outflows in order to improve the ability to innovate all parties involved in this open process.

About this some authors point out that the process of open innovation cannot be considered as standard for all firms: it depends not only on the historical economic period in which it is implemented, but also on the specific features of the enterprise, eg internal organization, size, product complexity, research capability, and on the industry in which it operates (Trot & Hartman, 2009; Almirall & Casadesus-Masanell, 2010; Laursen & Salter, 2006; West et al, 2014; Saebi & Foss, 2015; Huizingh, 2011; Chesbrough, 2010; Mortara & Minshall, 2011).

About variables that influence the innovation process, according to Gassman, open innovation is more appropriate in contexts characterized by globalization and technology intensity (Van de Vrande, 2009; Gassman, 2006). Possible other relevant characteristics include typical innovation risk patterns (Bianchi et al., 2011), goods versus services, the importance of patenting and other forms intellectual property protection, market turbulence and competitive intensity. Indeed, the internal variables that can influence the adoption of an open process are demographics variables and strategic variables (Huizingh, 2011). Demographics variables include number of employees, sales, profits, age, location, market share, and ownership type. Strategy characteristics include strategic orientation, aspects or goals of the innovation strategy, incumbents versus new entrants, organizational culture.

The Open Innovation adoption may concern, at first time, customer engagement, then also the employees, the external networks to the use of licenses and the external investments (Chesbrough, 2010; Kovacs et al., 2014).

The spread of the paradigm of Open Innovation changes the way of firms to interface with each other. Firms begin to interact differently especially in the early stages of R&D, providing a "neutral platform" in which big and small enterprises jointly study new and emerging technologies by sharing risks and costs (Zampi et al. 2018).

Many studies (Von Krogh, 2003; Chesbrough, 2003, Chesbrough et al., 2014; Chesbrough and Crowther, 2006 Waalkens ,2001; Kovacs et al., 2014) have analyzed the motives and the incentives that lead firms to participate in an open innovation process. Some firms started to implement open innovation as a necessary organizational adaptation to changes in the environment (Chesbrough, 2003). In a dynamic environment most enterprises cannot longer afford to innovate on their own. Chesbrough and Crowther (2006) also show that some firms link the external technology acquisition with the growth (Van de Vrande, 2009), with revenue and profit and with the easy access to knowledge (Koruna, 2004).

Waalkens (2001) say that the organizations 'innovate their innovation processes' to reduce time-to-market and to better utilize internal creativity. Hence, market considerations and knowledge creation are key motives for open innovation.

Other considerations that emerge from the analysis of the literature are that enterprises may engage in collaboration to acquire missing knowledge, complementary resources or finance, to spread risks, to enlarge its social networks, or to reduce costs of R&D activity, exploration of new market, search and discover new opportunities, the technological transfer and so on. (Hoffman and Schlosser, 2001; Mohr and Spekman, 1994; Zampi et al., 2014).

Huizingh (2011) represents the open innovation paradigm through a matrix that linked the innovation process, closed and open, and the outcome (fig. 2.1). It has an closed innovation when a innovation is developed in-house. In the second part of the matrix the outcome is closed (a proprietary innovation) but the process is opened up. The third block represents the Public innovation where the process is conduct inside the firm, but the outcome is public. The fourth block refers to "open source innovation" because both the process and the outcome are open.

Innovation Process:	Innovation Outcome: Closed	Innovation Outcome: Open
Closed	1. Closed innovation	3. Public Innovation
Open	2. Private Open Innovation	4. Open Source Innovation

Figure 2.1. Various ways of innovation. Huizingh, 2011.

Using a Knowledge Based theory, I say that the open innovation approach pushes the collaboration of firms, regardless of their size and creates new opportunities for small ones. So the open innovation focuses on knowledge sharing.

Managers might be required to intervene on Knowledge Management systems to promote the introduction of the new innovation management paradigm. In an open innovation process are high failure rates of the initiatives due to the inability to manage the interactions between internal and external knowledge (Griffin & Hauser, 1992). Consequently, firms have to reconfigure their knowledge capabilities in order to optimize their performance and minimize conflicts. The realignment of knowledge also helps firms to integrate internal and external knowledge processes.

So without openness some useful knowledge may never be created, but it is important in order to achieve the success that all the activities of the innovation process are coordinated and structured. Judge et al. (1997) say that the that the management’s ability to create a sense of community is an important factor for innovation.

The exchange of open knowledge is facilitated when knowledge-creating actors are motivated to commit to a common goal in a given knowledge domain (Mu J. et al., 2008).

Taking into account the studies highlighted in my research, I propose a framework that emphasizes the link between the studies of knowledge management and open innovation paradigm (fig. 2.2).

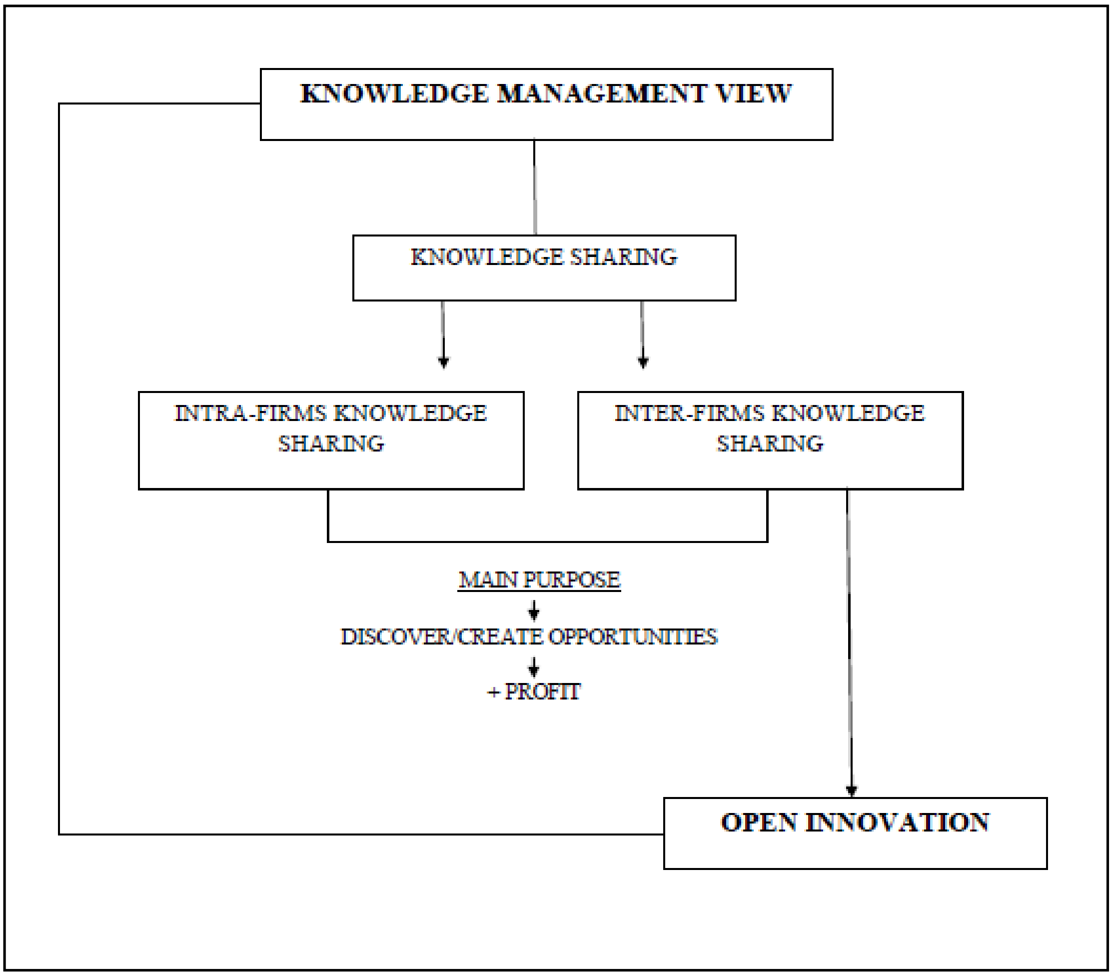

Figure **2.**2. Framework Knowledge Management theory and Open Innovation Paradigm

2.4 “OPEN KNOWLEDGE SHARING” AND BUSINESS MODEL

The open innovation paradigm is based on the reinvent and the transformation of the firm’s business process (Pilav-Velic & Marjanovic, 2016) in order to introduce a new business model which include opening of firms innovation process to the external environment and analyzing the exchange of knowledge among firms to accelerate the innovations and to expand the markets through the use of innovation (Chesbrough, 2011).

I report in this chapter the definition of business model provides by A. Osterwalder (2005) because it is actually the most used in the academic world. He defines them as "*a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm. Therefore, we must consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is done and with which financial consequences*" (Osterwalder et al., 2005:5).

The open business model is an enrichment of internal knowledge through the integration of external knowledge provide by other firms or by suppliers, customers and competitors or in the transfer of internal ideas and innovation to the outside environment. This last process could be referred as knowledge externalization (Enkel et al. 2009).

Bianchi et all (2011) analyzes the modes to apply a outside-in process and inside-in process. The outside-in process is applied in different ways: e.g. licensing-in, acquisitions or R&D contracts while the inside-out open innovation model is applied through licensing out, spinning out of new ventures, sale of innovation projects, joint venture for technology commercialization, supply of technical and scientific services, corporate venturing investments and non-equity alliances.

Moreover, it's possible to create a collaborative business model that consists in a co-creation with complementary partners. I can define this model as a *knowledge co-creation model*. In this case, collaborative and sharing innovation combines the processes of open innovation by allowing firms to jointly develop (West et al 2014), to create a firm-firm partnership with mutual benefits such as the creation and commercialization of new products, new services and new processes (Pilav-Velic & Marjanovic, 2016). There is a shift from a business model based on a single firm and the value created for itself and for its customers to a model based on sharing and on external participation where the user becomes a key resource for an efficient result of knowledge exchange (Hienerth et al, 2011; Saebi & Foss, 2015).

Knowledge creation represent the way to create tools for collecting knowledge that are needed to enhance knowledge absorption capabilities. They are a good way for the management of the ever-increasing knowledge and for the creation of knowledge relations. If knowledge is not well transferred through the use of appropriate tools it may not be understood by the user and therefore the exchange becomes useless.

In this study I consider business model canvas proposed by Osterwalder as a tool useful to effectively manage knowledge sharing in open innovation process. In my opinion the advantage of this tool is the logic of "visual thinking" ("think in pictures"). The visual thinking favors the use of images to convey messages and concepts; through the senses, especially sight, man is able to process and better organize information (Arnheim, 1969).

Through business model canvas I can analyze not only the value proposition for knowledge management in open innovation process but also the resources, the activities, the relationship, the knowledge channel, cost and revenue streams that derived to this value proposition.

Below I analyze every single building block of the business model canvas in a perspective of knowledge sharing in an open innovation process.

VALUE PROPOSITION

The value proposition changes on the base of what motivates stakeholders to participate into the innovation process of innovation. So the first thing to do is to understand what motivates them. For example, if I consider the researchers, the value is created by the advancement of science and the development of further knowledge. Researchers are also satisfied if they receive recognition for their research and are able to create knowledge networks. If I consider firms the value of the innovative process results in new projects to be developed, in success and recognition. In addition, entrepreneurs are motivated by the idea of getting an edge over the competition. The risk of failure must be minimized. Another motivation of firms to collaborate, as I saw in the first part of the paper, is the discovery or creation of opportunities.

So, through the value proposition block a firm can communicate the value of innovation process.

CUSTOMER'S BLOCKS

Innovation system customers: System customers are the members of the innovation community. They can be represented by researchers, innovators and firms, or customers, or suppliers, or competitors, or other enterprises.

This block can be useful to understand and communicate who are the members of the network involved in the innovation process.

Relationship: As community members, system customers are directly involved in their community's operation and the direction it takes. Therefore, it is important, continuous communication between members. In particular communication of issues, challenges, opportunities and proposals.

Channels: Channels are the vehicles whereby stakeholders get what they want from knowledge management. A channel is the direct communication that takes place in the space of co-working, the communication that takes place in blogs or in forums and in general all knowledge sharing channels.

INTERNAL INFRASTUCTURE

Key activities: In an open innovation process, key activities are: generation and development of innovative ideas, use of knowledge, research, exchange of ideas and knowledge, the acquisition of knowledge through for example the organization of events favoring the creation of an appropriate environment where equality and difference are balanced.

So, this block can be used to communicate key innovative activities that a community should implement.

Key resources: key resources in an open innovation process are mainly represented by the human resources that make up the community of innovators. These resources are the keepers of ideas and knowledge, either explicit or tacit. It's important that members of the community not only are willing to share knowledge but have an interest in doing so. These human resources must have adsorptive capacity or, in other words, they must possess the ability to create, discover, assimilate and transform external knowledge (DeSanctis et al, 2002; Zahra & George, 2002; Saebi & Foss, 2015; Pilav-Velic & Marjanovic, 2016). Adsorptive capacities allow the assimilation and the exploration of new knowledge in order to merge external with the basic ones already owned by the enterprise. So, these capacity assume the role of mediator between knowledge and the final innovation.

Another important resource is the collaboration platform, a co-working space where the tacit knowledge becomes explicit. This platform allows and facilitates communication.

In an innovative process also the financial resources represent another key element. So, this block can be used to analyze what resources are needed to develop the innovative process.

Key partners: the knowledge management system should include external members within its communities. These members, coming from the scientific community, from the user community, or from the supplier community, shall enrich the sharing by bringing different points of view, new knowledge, and original ideas.

COST STRUCTURE AND REVENUE STREAMS

The building block “cost structure” includes all costs necessary to develop an innovative process, for example the cost of research and the participation costs. Instead, the notion of "revenue streams" must be understood as being the mode of financing of the process, that is the "revenue" that will cover the operating costs of the process.

An overall picture of the revisited building blocks of business model canvas is presented in fig.2.3.

<table>
<tr>
<td rowspan="2">KEY PARTNERS

External members of the communities:
-scientific community,
- user community,
-supplier community.</td>
<td>KEY ACTIVITIES

-generation and development of ideas;
-research;
-circulation of knowledge;
-knowledge sharing;
-knowledge acquisition.</td>
<td rowspan="2">VALUE PROPOSITION

Value generated by innovation process.

To understand what motivates the system customers.
For example:
RESEARCHERS → the advancement of science and the development of further knowledge.

FIRMS → new projects/ success and recognition.</td>
<td>RELATIONSHIP

-Involvement

-Continuous communication</td>
<td rowspan="2">SYSTEM CUSTOMERS

-Entrepreneur

-Ideator/Innovator

-Researcher</td>
</tr>
<tr>
<td>KEY RESOUCES

-Human resources of community

-Collaboration Platform/co-working space

-Financial resources</td>
<td>CHANNELS

-Direct communication

-Forum/blog/social network</td>
</tr>
<tr>
<td colspan="2">COST STRUCTURE

Cost of innovation process

For example:
-Research costs
-Participation cost</td>
<td colspan="3">REVENUE STREAM

The mode of financing of the process</td>
</tr>
</table>

Figure 2.3 Open business model canvas.

2.5 DISCUSSION AND CONCLUSION

Knowledge management capabilities refer to the firm's ability to manage its knowledge over time. The knowledge management research is often limited to specific internal knowledge sharing processes, e.g. knowledge creation or exploitation. The perspectives that consider sharing of knowledge outside a firm's boundaries, are relatively limited. This research has considered the interaction between internal and external knowledge in order to implement an open innovation process. In particular, I use knowledge management theory in order to describe an integrative perspective on managing a firm's knowledge in open innovation processes. Furthermore, I have proposed a knowledge management tool, business model canvas, because it is needed to enhance knowledge absorption capabilities. it is a good way for the management of the ever-increasing knowledge and for the creation of knowledge relations. A knowledge tool could be very important also for learning process. I have demonstrated that the business model canvas is a valuable tool in order to facilitate dialogue between community members and allow better management of the innovation process.

In summary, this article offers several contributions:

- I use knowledge management theory as a theoretical foundation of open innovation.
- It develops a conceptual framework which may contribute to operationalizing knowledge management theory.
- It provides a tool useful to dialogue in order to implement an open innovation process
- it provides a basis for future empirical studies.

Theoretical implication

This research has implications for studies about knowledge management, open innovation and business model.

In regards of knowledge management studies, the research integrates prior knowledge research studies analyzing not only the internal interactions in terms of organizational routines and IT infrastructure systems but applying the concept to the exchange and management of inter-organizational knowledge.

Connected with this element of analysis, in regards of the studies of open innovation, this research provides a theoretical approach to a widespread firms' phenomenon. So, it helps to overcome the theoretical gap of prior open innovation studies that analyzed in most case only the open innovation processes using for example case studies or other qualitative method of research.

About business model studies, this research provides an example to apply business model canvas of A. Osterwalder in a new field: the open innovation.

Managerial implications

This research has implications for practitioners. In particular, it helps to expand the knowledge management vision beyond internal knowledge exploration. I argument the importance of innovation for the firms that want meet the challenges that offers a changing environment. So, firms need to develop the knowledge capabilities to address their current knowledge processes. The change of element of knowledge management required experience, time and effective knowledge intrafirm's integration (Crossan et al, 1999).

I provide a managerial tool useful to communicate within innovation process in order to enhance knowledge absorption capabilities and to creation knowledge relations in an open process.

REFERENCES

Alavi, M., Leidner D.E. (2001). ‘Review: Knowledge management and knowledge management systems conceptual foundations and research issues’, MIS Quarterly, 25 (1), 107–136.

Alegre, J., Sengupta, K., & Lapiedra, R. (2013). Knowledge management and innovation performance in a high-tech SMEs industry. International Small Business Journal, 31(4), 454-470.

Almirall, E., & Casadesus-Masanell, R. (2010). Open versus closed innovation: A model of discovery and divergence. Academy of management review, 35(1), 27-47.

Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. Journal of Leadership & Organizational Studies, 9(1), 64-76.

Bender, S. and A. Fish (2000). ‘The transfer of knowledge and the retention of expertise: the continuing need for global assignments’, Journal of Knowledge Management, 4 (2), 125–150.

Bianchi M., Cavaliere A., Chiaroni D., Frattini F., Chiesa V. (2011) Organisational modes for Open Innovation in the bio-pharmaceutical industry: An exploratory analysis. Technovation, vol. 31, pp. 22–33.

Brown S., Eisenhardt K.M. (1995). Product development: Past research, present findings, and future directions. Academy of Management Journal, 20: 343-378.

Cook S.D.N., Brown J.S. (1999). Bridging epistemologies: The generative dance between organizational knowledge and organizational knowing. Organization. Science, 10 (4), 381–400.

Chesbrough, H. (2010). Business model innovation: opportunities and barriers. Long range planning, 43(2), 354-363.

Chesbrough, H., Di Minin, A., & Piccaluga, A. (2013). Business model innovation paths. In New business models and value creation: A service science perspective (pp. 45-66). Springer Milan.

Chesbrough H., Vanhaverbeke W., West J. (2006). Open innovation. Researching a new paradigm. Oxford university press.

Chesbrough, H., Vanhaverbeke, W., & West, J. (Eds.). (2014). New frontiers in open innovation. Oup Oxford.

Crossan M., Lane H. W., White R. E. (1999). An organizational learning framework: from intuition to institution. Academy of Management Review, 24, 522–37.

D'aveni, R. A. (1995). Coping with hypercompetition: Utilizing the new 7S's framework. The Academy of Management Executive, 9(3), 45-57.

Dagnino G.B. (2015). Evolutionary Lineage of the Dominant Paradigms in Strategic Management Research. In Dagnino G.B. and Cinici M.C. (Eds). Research Methods in Strategic Management. London: Routledge.

Das, T. K. (2006). 'Strategic alliance temporalities and partner opportunism', British Journal of Management, 17 (1), pp. 1–22.

DeSanctis, G., Glass, J. T., & Ensing, I. M. (2002). Organizational designs for R&D. The Academy of Management Executive, 16(3), 55-66.

Donate, M. J., & de Pablo, J. D. S. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. Journal of Business Research, 68(2), 360-370.

Dyer J.H. e Singh H. (1998), The relational view: Cooperative strategy and sources of interorganizational competitive advantage, The Academy of Management Review, vol. 23, n. 4, pp. 660- 679.

Eisenhardt K. M., Martin, J. A. (2000). 'Dynamic capabilities: what are they?'. Strategic Management Journal, 21, 1105–21.

Enkel E., Gassmann O., Chesbrough H. (2009). Open R&D and open innovation: exploring the phenomenon. R&D Management, 39: 311 316.

Esterby-Smith M., Prieto I, (2008) Dynamic Capabilities and Knowledge Management: an Integrative Role for Learning? British Journal of Management, 19 235-249.

Etzkowitz, H., & Klofsten, M. (2005). The innovating region: toward a theory of knowledge-based regional development. R&D Management, 35(3), 243-255.

Gassmann O., (2006). Opening up the innovation process: towards an agenda. R&D Management 36 (3), 223–228.

Grant R. M. (2002). The Knowledge-Based View of the Firm . In Choo, C. W., & Bontis, N. (Eds.), The Strategic Management of Intellectual Capital and Organizational Knowledge (pp. 133–148). New York: Oxford University Press.

Grant R. (1996). ‘Toward a knowledge-based theory of the firm’, Strategic Management Journal, 17 (Winter special issue). 199–122.

Griffin A., Hauser J. R. (1992). ‘Patterns of communication among marketing, engineering, and manufacturing: a comparison between two new product teams’. Management Science, 38, 360–73.

Hendry C., J. Brown (2006). ‘Organizational networking in UK biotechnology clusters’, British Journal of Management, 17 (1), pp. 55–74.

Hienerth, C., Keinz, P., & Lettl, C. (2011). Exploring the nature and implementation process of user-centric business models. Long Range Planning, 44(5), 344-374.

Huizingh E.K.R.E. (2011). Open innovation: State of the art and future perspectives. Technovation, 31. 2-9.

Judge W. Q., Fryxell G. E., Dooley R. S. (1997). The new task of R&D management: Creating goal directed communities for innovation. California Management Review, 39(3), 72–85.

Karl M. W., (1997) "Knowledge Management: An Introduction and Perspective", Journal of Knowledge Management, Vol. 1 Iss: 1, pp.6 - 14

Kogut B., Zander U. "Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology," Organization Science (3:3), August, 1992, pp. 383-397.

Koruna, S., 2004. External technology commercialization-policy guide- lines. International Journal of Technology Management 27 (2/3), 241–254.

Kovacs A., Van Looy B. e Cassiman B. (2014), Exploring the scope of Open Innovation: a Bibliometric Review of a Decade of Research, KU Leuven, MSI 1401.

Laursen, K., & Salter, A. (2006). Open for innovation: the role of openness in explaining innovation performance among UK manufacturing firms. Strategic management journal, 27(2), 131-150.

Leonard, D. & Sensiper, S. (1998). The role of tacit knowledge in group innovation. California Management Review, 40(3), 112–132.

Levinthal D.A., March G.J. (1993). The myopia of learning. Strategic Management Journal, 14, pp. 95–112.

Martensson M. (2000). A critical review of Knowledge Management as a management tool. Journal of Knowledge Management. v. 4, n.3, pp. 204-216.

Mortara, L., & Minshall, T. (2011). How do large multinational companies implement open innovation?. Technovation, 31(10), 586-597.

Mu J., Peng G., Love E., (2008) "Interfirm networks, social capital, and knowledge flow", Journal of Knowledge Management, 12 Iss: 4, pp.86 – 100.

Nam Nguyen, H., & Mohamed, S. (2011). Leadership behaviors, organizational culture and knowledge management practices: An empirical investigation. Journal of Management Development, 30(2), 206-221.

Nonaka I. (1994). A dynamic theory of organizational knowledge creation. Organisation Science, 5(1), 14–37.

Nonaka I., Takeuchi H. (1995). The Knowledge Creating Company: How Japanese Companies create the dynamics of innovation. New York: Oxford University Press.

O'Doherty D. (1990). Strategic Alliance, an SME and small economy prospective. Science e Public Policy. Oxford Journal. Vol. 17 Issue 5. 303-310

Oshri I., Pan S.L., Newell S. (2006). 'Managing trade-offs and tensions between knowledge management initiatives and expertise development practices', Management Learning, 37 (1), pp. 63–82.

Osterwalder A. (2004). The Business Model Ontology - a proposition in a design approach. http://www.hec.unil.ch/aosterwa/PhD/Osterwalder_PhD_BM_Ontology.pdf.

Osterwalder A., Pigneur Y. (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Wiley, New Jersey.

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 16, 1-25.

Pilav-Velić, A., & Marjanovic, O. (2016). Integrating open innovation and business process innovation: Insights from a large-scale study on a transition economy. Information & Management, 53(3), 398-408.

Porter M, Kramer M. (2006). Strategy and Society: The link between competitive advantage and corporate social responsibility. HBR December, pp. 91.

Reus T.H., Ranft A.L., Lamont B.T., Adams G.L. (2009) An interpretative systems view of knowledge investments. Academic Management Review, 34 Vol.3 382-400.

Rubenstein-Montano B., Liebowitz J, Buchwalter J, McCaw D, Newman B., Rebeck K., (2001). The Knowledge Management Methodology Team. A systems thinking framework for knowledge management. Decision Support Systems, 31, 1, May 2001, 5_16.

Saebi, T., & Foss, N. J. (2015). Business models for open innovation: Matching heterogeneous open innovation strategies with business model dimensions. European Management Journal, 33(3), 201-213.

Scharmer, O.C. (2001). Self-transcending knowledge: sensing and organizing around emerging opportunities. Journal of Knowledge Management, 5(2), 137–150.

Seger S.P. (2013) Strategic Partnership and Open Innovation in the Biotechnology Industry in Belgium. Technology Innovation Management Review. April 2013 pp. 23-28.

Shane S, Venkataraman S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review 25(1): 217.

Shane S. (2003). A General Theory of Entrepreneurship. The Individual-opportunity Nexus. Edward Elgar: Northampton, MA.

Spicer, D. P., & Sadler-Smith, E. (2006). Organizational learning in smaller manufacturing firms. International Small Business Journal, 24(2), 133-158.

Teece D., (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. Research Policy 15, 285–305.

Teece D.J., Pisano G., Shuen A. (1997) Dynamic capabilities and strategic management. Strategic management Journal. 18 Vol.7 509-533.

Trott P., Hartman D. (2009), “Why ‘open innovation’ is old wine in new bottles”, International Journal of Innovation Management, vol. 13, n. 4, pp. 715-736.

Tsai W. (2002). ‘Social structure of ‘‘coopetition’’ within a multinational organization: coordination, competition, and intra-organizational knowledge sharing’, Organization Science, 13 (2), pp. 179–190.

Van De Vrande V., D Jong J.P.J., Vanhaverbeke W., De Rochemont M..(2009) Open innovation in SMEs: Trends, motives and management challenges. Technovation Vol. 29. 423-437.

Von Krogh G. (2003). Open-source software development. MIT Sloan Management Review. 2, 14–18.

Wang, S., Noe, R. A., & Wang, Z. M. (2014). Motivating knowledge sharing in knowledge management systems: A quasi–field experiment. Journal of Management, 40(4), 978-1009.

West J., Gallagher S. (2006). Challenges of open innovation: The paradox of firm investment in open-source software. R & D Management, 36(3), 319–331.

West J, Salter A., Vanhaverbeke W., Chesbrough H. (2014). Open Innovation: the next decade. Research Policy. Vol.43. 805-811.

Zampi V., Capone F., Innocenti N., (2018), ‘How innovation processes open up. The adoption of open innovation practices throughout R&D projects’, forthcoming in Sinergie Italian Journal of Management.

Zahra S. A., G. George (2002). ‘Absorptive capacity: a review, reconceptualization, and extension’, Academy of Management Review, 27 (2), pp. 185–203.

Zhang, M., Macpherson, A., & Jones, O. (2006). Conceptualizing the learning process in SMEs: improving innovation through external orientation. International Small Business Journal, 24(3), 299-323.

3. FROM FAMILY BUSINESS TO BUSINESS FAMILY: BUSINESS FAMILY MODEL CANVAS AS AN INTERPRETATIVE AND PREDICTIVE TOOL[2]

ABSTRACT

In the contemporary context of economic crisis, the *business family* – that is the team of family members dedicated across generations to implement various entrepreneurial and financial activities – is among the best potential engines for economic development. The family group is identified the same as the "F" factor of the economy given that is the main wealth producer not only for itself, but also for the entire community in which the family acts and operates.

The aim of this study is to understand whether the set of phenomena encompassed within family business management, family firms, family companies, and family enterprises can be analysed with different lenses: *not focusing on the family business itself, but instead concentrating on the business family*.

In order to accomplish this conceptual goal, I propose to use *business modelling* as a holistic conceptual approach that allows simultaneously to analyse heterogeneous business features within an existing organization and to verify their alignment and consistency with the business mission. Consequently, I use the *business model canvas* as the leading, even not the sole, means of my conceptual analysis.

My work, therefore, contributes to increase the knowledge of family business and to enrich that on business modelling and the business model. In addition to the development of the existing literature, I convey a more practical examination of the analysed phenomena thanks to three unprecedented interviews with business

[2] The preliminary version of this chapter will be presented to the "SIDREA International Workshop – Family involvement in management and firm growth"- Naples 2017

families; so I used the case study approach to validate some propositions included in this chapter.

The *business family model canvas* (BFMC) is proposed in this paper with the specific aim to apply the business model canvas to business families. This conceptual apparatus endorses the examination of the family business phenomena both in an interpretative and predictive way. In addition, managers and consultants may use the BFMC to build up the management of family business.

Key words: business family, family business, business modelling, business model canvas, family business model canvas

3.1 INTRODUCTION

A *family-based economy* of a country is that characterized by a massive presence of families in businesses, in property and real estate management, as well as in financial investments into securities or deposits.

Along the European history, there are several examples of families whose businesses have been traditionally associated to the prosperity, richness and development of their home country: the Medici's in Italy, the Rothschild's in England, the Fugger's in Germany are the most remarkable instances. Today, households such as the Agnelli's, the Benetton's, the Barilla's, the Hilton's and the Swarovski's represent the world leading symbols of business success.

There is an etymological association between the economy and the family terms. The name "economy", that has a Greek origin, is composed of two words: *oikos* meaning "home" and *nomos* indicating "discipline or management"; literally, therefore, "home administration" or "family management". Leon Battista Alberti, a prominent author and artist of the Italian Florentine humanism, already in the late 1400's, laid the pillars of proper family management that is nothing but the foundation for good business management (Alberti, 2004). In his interpretation, the figure of the "*good pater familias*" is comparable to that of the modern manager. The virtuous housekeeper is a worker, capable of knowledge and action, living in a world perennially endangered by mutation and instability. He or she has managerial as well as entrepreneurial capabilities that represent the underpinnings of a good family-like economy (Gadol, 1970).

So, the *business family* – a team of family members dedicated across generations to implement various entrepreneurial and financial activities – becomes the "F" factor of the economy (Habbershon & Pistrui, 2002; Habbershon et al, 2003; Uhlaner 2006) as it is the main wealth producer not only for itself but also for the entire economic system (Pounder, 2015, Sharma, 2004).

Given the relevance of family in general and of family business in particular, the following essay question drives my research. Due to existence of various phenomena encompassed within family business management, family firms, family companies, and family enterprises, can be they analysed with alternative lenses, *not focusing on the business itself but relying on the business family*? To date, management studies on family firms have not responded completely to this inquiry. In order to achieve my goal, a more comprehensive framework becomes necessary to get an all-inclusive view about how family behaves in entrepreneurial, financial and social activities that permeate the rationale of doing business. So, I propose to use business modelling as a holistic approach that allows simultaneously to analyse heterogeneous business features within an existing organization and to verify their alignment and consistency with the business mission. Two main conceptual patterns accomplish this method: the *business modularization*, that is the activity aimed at dividing a complex system, like the enterprise, into several interconnected elements (Simon, 1991; Aversa et al, 2015), and the *business manipulation,* that is the management of all identified individual variables and their interaction. I can consider business model as a modular and manipulable tool (Morgan, 2012; Aversa et al., 2015) and as the result of the business modelling process.

The business model is a concept very frequently used in the managerial literature to analyse and understand the "logic of doing business" and, among the various frames, the *business model canvas* is a fancy and very intuitive archetype that includes nine building blocks (Osterwalder et al, 2005; Magretta, 2002; Johnson, 2010). Consequently, I will use the business model canvas as the leading, even not the sole, means of my conceptual analysis. Using the business model, I integrate the concept of business modelling with several considerations and applications such as the effects of family businesses management on wealth creation and on the development of a territory (Baumol, & Strom, 2007).

So, I will try to elaborate a theoretical model useful to describe and, above all, to predict family behaviour routes in business management.

In order to test the model, a qualitative research will be carried out and, in particular, through the use of the case study approach (Yin, 1994), because this methodology consents to explore and understand complex phenomena and problems and to support a global view of the observed cases.

Three Sicilian business families have been selected: the Drago's, the Nicosia's and the Zappalà's .

This paper is structured as follows. The first section sees theoretical analysis of the two sides of the same coin: the concept of family and that of business modelling. Subsequently, in the second section I apply the business model canvas to families to analyse a set of phenomena comprised within the terms "family business", "family firm", "family company" and "family enterprise". The third section exploits the case study approach in order to test the above mentioned model. To conclude, I will discuss the results and practical implications of my research.

3.2 THEORETICAL BACKGROUND

It consists of a literature review that goes back to theories, concepts and topics in two different streams of research: the family business and the business modelling.

FAMILY BUSINESS

Studies on family business have privileged different approaches. For instance, the first problem is how to define the conceptual boundaries of family business. Some scholars (Dieguez-Soto et al., 2015; Chua et al., 1999; Habbershon & Williams; 1999; Astrachan & Shanker 2003) attempted *to define the family business.* For example, in his studies, Dyer (2006) anchored classification of family firms to indisputable elements such as the ownership percentage or the number of participants in management activity (Dieguez-Soto et al., 2015).

Starting from this definition, although there is no consensus about it, studies are categorized in numerous streams that combine issues in family business with theories of the firm.

About the issues in family business, there are numerous studies on *governance* in terms of ownership, management and family control (Astrachan et al., 2002; Klein et al., 2005; De Falco & Vagnani, 2008). Another feature used to classify the family business is the *intention of transferring* the corporate entity to future generations (Liz, 1995; Kellemarnns et al., 2012; Berrone et al., 2012; Kotlar & De Massis, 2013; Chrisman & Chua, 2012). Other papers (Chrisman et al., 2004; Habbershon and Williams, 1999) however analysed the difference between goals, structures, resources and performance of family businesses compared to those of non-family businesses.

The *intergenerational succession* is another issue related to governance studies (e.g. Carr et al, 2016; Mussolino & Calabrò, 2014; Daspit et al, 2016; Yu & Cai, 2017). If the succession is not well managed, it becomes a destabilizing event that compromises the continuity and survival of the business system; on the contrary, a well-planned succession represents a favourable condition of the development of family businesses.

Other studies have emphasized *organizational culture* (Fletcher et al., 2012, Ainsworth & Cox, 2003; Athanassiou et al., 2002; Chirico & Nordqvist, 2010; Zahra, Hayton, & Salvato, 2004), and *relationship with customers* (e.g. Sharma et al. 1997; Brady, 2001, Brown, 2002).

Another important issue analyzed in family business studies is the linkage to *innovation* and the propensity to innovate (De Massis et al, 2015; 2013). Some studies have highlighted the low propensity of family business to the open innovation (e.g. Gómez-Mejía et al., 2014; Kotlar et al., 2013; Kammerlander & Ganter, 2015). Others have coupled the heterogeneity of family members with a lesser or greater propensity to innovation (Clark & Fujimoto, 1991; Van der Vegt & Janssen, 2003) or with preference of incremental rather than radical innovation (De Massis et Al. 2016).

Managerial theories support such analyses on family business. Studies based on *Agency Theory* investigate, for example, the relationship between family ownership and agency costs (Anderson et al, 2003; Morck & Yeung, 2003); the difference in performance between family and non-family businesses (e.g. Chrisman et al, 2004); and even the relationship between mangers and family members (Schulze et al, 2001).

The *Resouce Based View* (Barney 1991), for instance, states that the heterogeneity of family businesses is often linked to the possessed resources and accumulated tacit knowledge in the long run together with social capital (Lichtenthaler & Muethel, 2012; Comi & Eppler, 2014; Mazzi, 2011). The term "familiness" was introduced to indicate how such resources come from the involvement and integration between two systems: the family system and the enterprise system (Handler, 1989, Habbershon and Williams, 1999).

Gomez-Meja (2007) and other scholars instead have analysed "family business" through the *Socio-Emotional Wealth Theory* (SEW) (Gomez-Meja et.al, 2007; Cennamo et al., 2012; Breton-Miller & Miller, 2013; Cruz et al, 2011) and through the *Stewardship Theory* (Miller et al, 2008) in which the main business purpose is the maximization of the well-being of the organization.

In particular, SEW suggests that "family firms are typically motivated by, and committed to the preservation of their SEW, referring to nonfinancial aspects or 'affective endowments' of family owners" (Berrone et al., 2012, p. 259; Pukall & Calabrò, 2014). For example, the affective endowment refers to the attention to good corporate image, the desire to invest in quality, the care of human relationships, and the wish to preserve the family "castle".

The literature review above presented is not exhaustive of all the topics and theories employed in family business studies. However, such revision is enough to state that existing studies tended to consider the firm as the main unit of analysis of the family, but not the opposite. Indeed, a family business is only a vehicle for business families to contribute to the entire economy.

BUSINESS MODELLING AND BUSINESS MODEL

Every organization, private or public, small or large, profit or non-profit, can be defined as a system or process consisting of a set of elements. In this regard, the managerial literature defines *business modelling* as a series of actions that simply represent business processes by subdividing them into individual elements and manipulating the latter to get the planned results (Aversa et al, 2015).

Business modelling is therefore a holistic approach to analyse simultaneously all variables influencing the main business processes. The term "holistic" is of Greek origin and is currently used in various contexts to indicate an all-inclusive approach that takes into account the overall view of phenomena to be analysed (Feurer, R., & Chaharbaghi, K., 1994; Fletcher, R., 2001).

In a rapidly changing context, business modelling also plays a key role in shifting from a static view to a dynamic approach considering the variability and evolution of the various factors that affect the business (Bouwman & Mac Innes, 2006; Dittrich & VandenEnde, 2006).

This approach is based on two main patterns: (a) the *business modularization*, that is the activity aimed at dividing a complex system like the enterprise, in several interconnected elements (Simon, 1991; Aversa et al, 2015), and (b) the business *manipulation*, that is the management of all identified individual variables and their relationship.

(a) The concept of *modularization* has been extensively studied and applied in management studies, especially in the field of business policy and strategy (Garud, et al, 2009, Schilling, 2000, Baldwin et al, 2006; Garud & Kumaraswamy, 1995).

(b) The *manipulation* process has been analysed in the field of business innovation (Baden-Fuller & Haeflinger, 2013, Chesbrough, 2010).

Managers, though acknowledging the importance of creating and spreading value for stakeholders, are often unable to understand what are individual parts to manage and, above all, how they interact each other to contribute to business performance. The actual turbulent and dynamic context drives most businesses, regardless of the industry in which they operate, to face and anticipate successfully the environmental change. Many scientific contributions have developed useful tools to manage different changes (Abrahamson, 2000, Beer et al, 1990), but they neither addressed the central issue of change or even proposed a model to support organizations in building an autonomous adaptation's capacity to the transformation of market conditions, customer needs and innovation of competitors (Kerber & Buono, 2005).

The *business model* (BM) responds to this challenge as an example of modular and manipulable framework that is the result of the business modelling process (Morgan, 2012; Aversa et al., 2015).

Zott et al. (2008) claim that BM has the capacity to capture the common threads that orchestrate and connect the focal firm's transactions with external parties.

The business model therefore emphasizes the use of a systematic and holistic approach to describe the business-economic rationale behind the firm as opposed to the particular and functional logic that is found very often in managerial studies. In other words, it represents the ideal business modelling tool to check alignment and consistency across all elements; allows to analyse, validate, and test business choices by entrusting the actors involved with the management of the present and the foreseeable future (Wirtz et al., 2015).

The business model follows, therefore, the logic of modularity or, as Alex Osterwalder (2004) states in his doctoral thesis, the “ontological approach”. In fact, the author intends for the ontology of the business model, "the set of elements and their relationship that have the purpose of describing the logic through which the business creates profit" (Osterwalder, 2004).

Influenced by the balanced scorecard (Kaplan and Norton, 1996) and by a broad analysis of the existing literature, Osterwalder created a framework that includes four areas: product and value proposition, client interface, internal infrastructure and the cost-benefit economic rationale. These four areas represent the answer to same questions: what does an organization propose, to whom, how, and what are the consequences. Thus, in order to create value companies should pay attention to the product or service offered (Osterwalder, 2004, Bonaccorsi et al 2006), to the customer satisfaction (Hedman & Kalling 2002, Mahadevan, 2004, Yip 2004, Magretta, 2002), to relationships with partners (Hamel, 2000, Voelpel et al 2004), to the activity they develop (Afuah 2004, Johnson, 2010), to the resources they use (Afuah, 2004, Demil & Lecocq, 2010, Osterwalder et al., 2005), and to the economic structure (Osterwalder et al 2005; Osterwalder & Pigneur, 2010).

In the following years, this study has given rise to *the business model canvas*, a strategic device that utilizes visual language to create and develop or reinvent the models of corporate business. In a full ontological vision, the canvas shares complex concepts in a simple way and creates a universal language that is understandable to everyone (Osterwalder and Pigneur, 2010).

The nine building blocks identified by Osterwalder et al. are: value proposition, customer segments, customer relationship, communication and distribution channels, key activities, key resources, key partners, costs and revenue flows (Osterwalder & Pigneur, 2010).

Today, BM Canvas is tested and applied by renowned global companies such as Capgemini, Toyota, IBM, Benetton, Allianz, and is being taught in masters and international degree programs.

The business model canvas is applied not only at *organizational level*, but it has been extended at an *individual level* in the “Business Model You” (Clark et al, 2012), and at a *team level* in the “Team Canvas” (Ivanov, 2017).

So, all the three levels of BMC will be useful for the analysis: in the "family" perspective, indeed, I can identify simultaneously a micro-level represented by the founder or “*pater familias” level*, a meso-level of analysis referring to the *family* as a group and also a macro-level that depicts the entire *family firm*.

3.3 FROM THE BUSINESS MODEL CANVAS TO THE BUSINESS FAMILY MODEL CANVAS

As it has been emphasized, philosophical and psychological studies say that the perception of reality depends on the point of view from where I observe phenomena and that the "set" of the entire picture is different from the sum of individual parts that compose it (Putnam, 1991; Clarke , 2015).

By doing our own reflections based on the theoretical ideas highlighted in the previous sections, I use the business model canvas (Osterwalder & Pigneur, 2010) to propose a new business model from a different point of view: the *business family*. This model is the Business Family Model Canvas (BFMC) and it consists of nine building blocks as that of Osterwalder.

THE VALUE PROPOSITION OF FAMILY

Value proposition is the central block of business model canvas and it includes the set of values that a firm wants to transfer to customers through the products or services offered. The value proposition is a promise of commitment that explains *how to satisfy needs, to solve problems and to create opportunities*.

The family value proposition is a set of identifiable family values that permeate the family business, the family as a set of members, the local territory and even the entire society.

The first value is the *ability to listen*. The family trainees its members to listening, that is considered a virtue capable of creating cohesion and a sense of belonging. The more complex the reality becomes, the more relevant is the ability to listen and to communicate (Schein, 1993). Furthermore, in an organization, through active listening and communication, members explore the various ways of thinking and acting, and they understand the structure of needs to be satisfied and the problems to be solved (Querubin, 2011). Listening is not, therefore, passivity but mutual exchange and it can turn conflicts into dialogue and misunderstandings into fruitful confrontations (Bunderson, & Sutcliffe, 2003).

The second set of values are *beauty, culture, and quality* (Martin, 2006). Culture itself is a search for beauty. In the 1900's, Italian entrepreneur Adriano Olivetti linked the concept of beauty with innovation, self-realization of workers, knowledge and social harmony (Tronti, 2014). Today, Brunello Cucinelli, another protagonist of Italian family businesses, says that culture and beauty are essential values that enhance human creativity; "they are treasures to be protected, ideals that inspire and resources to be valued. They make it easy to combine business goals and human needs, work in harmony between the local dimension and the global dimension" (Invernizzi & Romenti, 2014). Beauty, therefore, creates wealth that generates more beauty in a circular and virtuous relationship among them.

The third value is *the pride of the territorial origins* (Corbetta, 2011, Metallo and Gallucci, 2013). One of the features of family culture consists in paying attention to local, personal and historical linkages with the area in which the family was born. The business family does not consider the territory merely as a physical location, but as a living element with great complexity, a source of synergic processes between the man and the context, the origin of cultural memory of the generations which have lived there and the history that shaped it (D'Aurizio & Romano, 2013). According to this perspective, "family capitalism" is less mobile than financial capitalism (Jones & Rose, 1993) because the family in business has not only invested human capital but also a collection of social relationships (Colli, 2013; Gomez-Mejia et al., 2007).

The fourth set of values is constituted by *honesty, trust and respect*. The honesty of the activity ensures that the family name is not associated with false and dishonest practices and so it removes the risk of image and reputation damage (Balemr, 2001). Trust is a value that increases the sense of engagement and that of commitment within the members of the family. Respect is an attitude, not only a behaviour.

All these values are tied to a family's social reputation and presence over time (Tàpies, & Fernández Moya, 2012). Hoffman et al (2006) define reputation as an intangible value that originates from the set of expectations that customers place on the future conduct of the business family. In addition, the family's reputation is a component of the family brand name and it derives from expectations, perceptions and opinions that various stakeholders have developed over time based on the quality of the products and services offered by the family firm (Gotsi & Wilson, 2001) (Fig. 3.1)

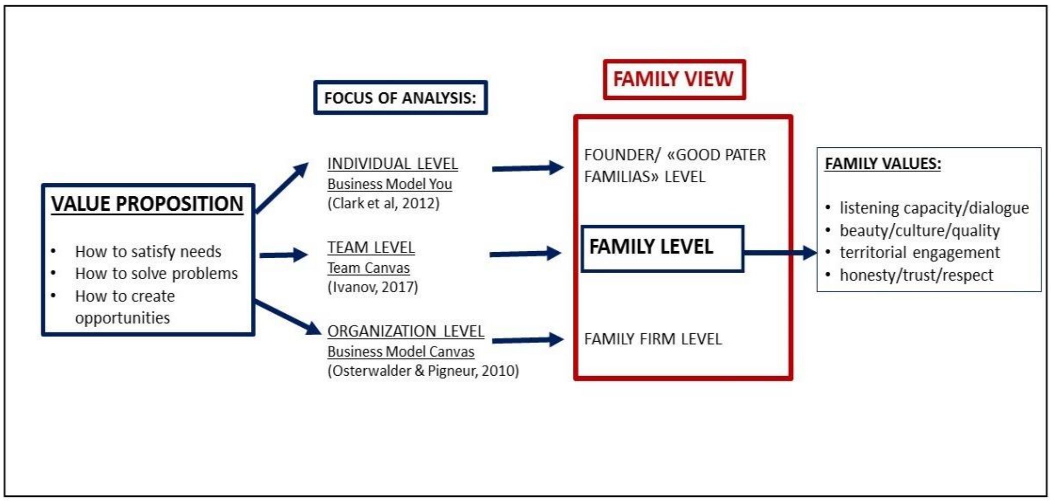

FIG. 3.1 Family Value Proposition

CUSTOMERS, MARKETS AND CHANNELS

In the model created by Osterwalder, the right section is the marketing side of an organization. It consists of three building blocks that represent the targets of a value proposition (customers) and the ways how such proposition is channelled, communicated and engaged with customers (Osterwalder, 2004). Similarly, in the BFMC, this section refers to how families merchandise, exchange and share values and principles with the overall community of stakeholders, employees and customers (fig. 3.2).

Customer relationships

Once entered into business, the family aims at achieving fame, establishing trustful relationships that are stable over time, building a good reputation and social recognition. So, family relationships management are built on three main instruments: brand family storytelling, heritage marketing and informal instruments.

The first instrument of relationship management is the *"Brand Family Storytelling"* or, in other words, the narrative of the family history. Storytelling has been part of human culture since the dawn of time. It transcends traditional marketing and is not limited to the intrinsic features of products, but it involves those emotions the family is able to elicit. Every business family has a story: stories of success and failure, hardships and recovery, lessons learned and long forgotten.

The second instrument, strongly connected to the first, is the "*Heritage Marketing*" that includes all those tools based on business and family history such as the establishment of historical archives and business museums or communication initiatives such as celebratory events (Balmer, 2013; Balmer & Burghausen, 2015). The value of these marketing instruments is mainly to be unique and unrepeatable, enabling the company to stand out on the market from its competitors.

The third instrument include all the "*informal instruments"* that families implement to strengthen relations with their stakeholders. I can interpret them as "one to one marketing" practices because the family understands the importance of treating each stakeholder differently and recognizes the strength or weakness of relationships with any single person. Often entrepreneurial families are happy to unlock the doors of the firm and to organize factory tours for their key stakeholders. Another informal relationships instrument is the habit of invitations to private family events such as weddings, baptisms, graduation parties, birthdays or simply to lunch or dinner events; so, external stakeholders act as family members and they feel more engaged to the family.

Channels

In the business family model canvas, this block includes the channels through which the values and principles of family are distributed and communicated. I can distinguish between formal communication and informal communication.

Formal communication includes *traditional channels,* for instance the use of media and information channels, from traditional television or radio to current web and digital channels.

Informal communication is based on personal relationships, direct contacts and interpersonal relationships. Messages disclosed through non-corporate sources have a greater impact than the intentionally ruled family communication. The effectiveness of informal communication is rooted into the "contagion theory": the knowledge, attitudes and behaviours of individuals come together with those of other people they are in contact within a network of relationships (Monge & Contractor, 2001). The *relational factor* is the first element of this communication system. The family uses the relational factor to root their own image and transmit the values. The territory becomes an accumulator of relational factors and takes a leading role in influencing the family communication strategies. The second key element of informal communication *is behaviours*. They are the real bearers of family values and the basis of "communicating without communicating" (Baccarini, 2004; Grunic, 1993). This variable includes all observable behaviours and facts: products and services, behaviours towards employees, towards customers, social and environmental impacts.

In practical terms, the main informal channels used by the family are the affiliations to private cultural circles, trade associations or charitable organizations that create a family reputation and strengthen the credibility of a family.

Customer Segments

In the BFMC the block “Customer Segments” includes all stakeholders who benefit from family activities, so they are not just firm’s customers as in the Osterwalder's business model canvas, but this block encompasses employees, suppliers and the entire community. They may be considered as "family indirect customers".

Employees benefit from the family in two ways. In economic terms, because through their job within family businesses they accumulate wealth to match their needs. In intangible terms, because the values transferred by the business family to its employees are passed to their respective families.

Suppliers can be also considered as family customers because they benefit from the network and the relationships that arise; is therefore not only an economic benefit but also a relational advantage.

Furthermore, I could include not only individuals, but also *larger communities*, such as the local neighbourhood in which the family operates. In fact, on the one hand, the community supports the family to create and develop their business; on the other hand, the family with various initiatives and events supports the development of the territory.

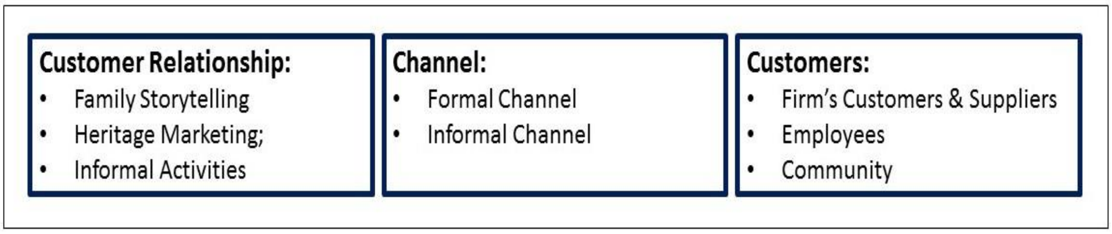

FIG. 3.2 Customer's blocks

KEY INTERNAL INFRASTRUCTURE: KEY ACTIVITIES, KEY RESOURCES AND PARTNERSHIP

In Osterwalder BMC, this left side of the model includes the key infrastructures that represent the internal source of competitiveness for a company. Similarly, in the BMFC, the family internal infrastructure includes key activities, key resources, and key partners. All of them are relevant for the organization of a business family (fig. 3.3).

Key Activities

The key activities for a family are those having the following characteristics: 1) they are not delegable and outsourceable because the family must have the greatest control; 2) they are activities based on tacit knowledge that in accordance with the value of continuity are passed down from generation to generation; 3) they are considered by the family necessary to ensure survival.

I can divide the family key activities into economic and financial activities and social and cultural ones.

About economic and financial activities, the first one is the *real estate.* Generally, real estate investment is governed by financial rules: in the periods of inflation, the only positive performance may be the one that comes from the real estate, while as inflation lowers the investment it is no longer convenient. This is the rationale of a manager in diversifying assets and spreading the risk in the entire portfolio of investments. However, the family is not driven only by financial reasons, but is shaped by the value of continuity and generational passage; real estate is acquired to ensure a “roof over their sons's head”. The second set of key activities are the *commercial* ones that include mainly *the buying activities*, *the sales* and *the customer care*. A mix of relational and emotional factors are created with customers which must be preserved over time (Rust., & Zahorik, 1993) to ensure a competitive advantage. Sales and post-sales abilities mean the speed with which a company solves the customers' problems and finds solutions (Batt, 2002). The third key activity is linked to the *finance* considering the importance of maintaining independence from banks and other financial institutions and respecting the budget constraints, that is, being careful not to spend more than what it has been produced (Gallo et al, 2004). The other activity is the *selection of the human resources*: no deal can be successful in the long run without capable, dynamic collaborators who believe in what they do and know how to do it (Delaney & Huselid, 1996). The characteristics, therefore, sought in the selection of the internal staff are, among others, competence, commitment, trust and honesty.

About social and cultural activities**,** I can include the philanthropic and the cultural activities. In order to increase the positive opinion over the family name, it is important to communicate family values outside. So, there is the tendency to *philanthropy* as in the launch of social programs or cultural projects. It finds its basis in the so-called willingness to "manage the spiritual heritage": what does it remain of the father's work? Furthermore, I do not forget all those activities aimed at *preserving the artistic/cultural heritage* of the own local area. Today, entrepreneurial families are the main promoters of activities related to culture and art: the Benetton family, for example, has recently restored an important palace in Venice (Colli, 2017)**.**

Key Resources

The first key resource of a family is the human capital: *family members and family-descendant members* that include collaborators and employees.

Family members are the most devoted employees and they adopt an attitude based on mutual well-being and support (Metallo & Gallucci, 2013), from family members involved in business it is expected the maximum collaboration and the relationship goes beyond any contractual form. *Collaborators and employees* are not treated as “numbers”, but similar to family members who obviously have to do their job, show commitment, skills and capabilities.

The second key resource is the *family name*. It becomes synonym of quality, prestige and this creates confidence, trust and a good image (Okoroafo and Koh 2009, Orth & Green, 2009; Kotler et al 2009). Unlike in large and anonymous organizations, the family name is not impersonal and it displays always a sense of responsibility towards customers, suppliers, and all the relevant stakeholders (Fombrun and Shanley 1990, Tsai and Ghoshal, 1998).

The third key intangible resource is represented by *family involvement*. It strengthens "familiness", that is the ability to discover and develop unique resources and skills through the interaction between business and family (Habbershon & Williams, 1999; Habbershon et al., 2003), which has inevitably a positive impact on performance and results in competitive advantage (Comi and Eppler, 2014).

Key Partners

With regard to key partners, I include the network of relationships that revolve around a family business. In the business sphere an important figure is that of the company *supplier* whose selection is based on whether or not the family's vision is shared. The entrepreneur asks suppliers to be willing to engage in a stable relationship characterized by harmonic synergies among the participants. This will be a long-term relationship, that is, an engagement in medium to long-term projects. Key partners among the outsiders are the *consultants* whose involvement is very useful in family conflicts because they act as neutral mediators (Colli, 2017). The accountant is, among the various consultants, the professional who is closer to the entrepreneur (Lewis et al., 2007; Handler & Kram, 1988) and he or she acts frequently as a “gatekeeper” of the family affairs. Several empirical studies show that business culture often depends not only on the entrepreneur's vision, but also on that of his first associate, who without any doubt is the accountant (Aronoff, 1998; Kaye & Hamilton, 2004 Lewis et al., 2007).

The third key partner is represented by *financial institutions such as commercial banks*. The entrepreneur creates with the bank's staff a close relationship based on trust in the management of the financial assets. This relationship, however, may be worsened due to financial scandals and countless mergers and acquisitions; so banks are often perceived as enemies.

Linked to the social and philanthropic activity highlighted in the previous point, I also include *local communities* among external partners. The community, therefore, supports families seeking to pursue business and create wealth, and on the other side, families have to help the region in which they thrive to create a virtuous circle founded on the "win to win" logic.

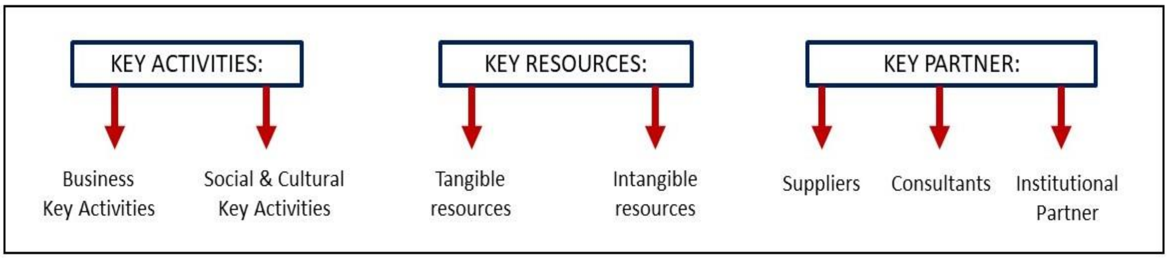

FIG. 3.3 Key Internal Infrastructure

COSTS AND BENEFITS

In the management of the company, benefits and costs are the results of all the accomplished activities. According to the model of Osterwalder, revenues and cost are at the base of the business model canvas, since they represent the economic output of the building blocks above described. In the perspective of the business family model canvas as depicted in this paper, costs and benefits have a broader connotation. Costs are similar to the efforts and risks a family have to incur to generate value for a large spectrum of stakeholders; benefits are social, not only economic, advantages when the reputation of a family is well recognized and appreciated.

As previously said, the family guarantees quality and reliability with their own name. Consequently, any behaviour of family members falls into good or bad on company's reputation and vice versa. If a family component engages in unfair behaviours, these will affect the family image first, and the entire business then. Following the same logic in a diversified family business, the consequences of an erroneous decision in a business will affect the others (Craig et al., 2008; Krappe et al., 2011). On the other hand, a good reputation produces faster, more stable and long-lasting relationships with partners and makes easier the acquisition of key resources (Zellweger et al., 2013).

Business management based on family values creates engagement and cohesion within the group. Ideas and thoughts may, however, generate conflicts within the family which, in the most serious cases, might lead to the end of the activity or failure of the company itself.

Other improper family business responsibilities are related to psychological factors: many choices are dictated by feelings such as attachment, loyalty, and friendship, and not by the logic of economic rationality. Involvement and attachment may result in the lack of separation between free time and work. Crucial decisions are never left on office desks and working life enters home affairs and vice versa.

In the field of wealth production, family benefits (Gersick, 1997) generate welfare externalities for the local community when they use portions of the created wealth in favour of the territory according to a logic of corporate social responsibility (Zellweger et al. 2013).

The chart below (Fig 3.4) is the “big picture” of my business family model canvas (BFMC) and its theoretical background.

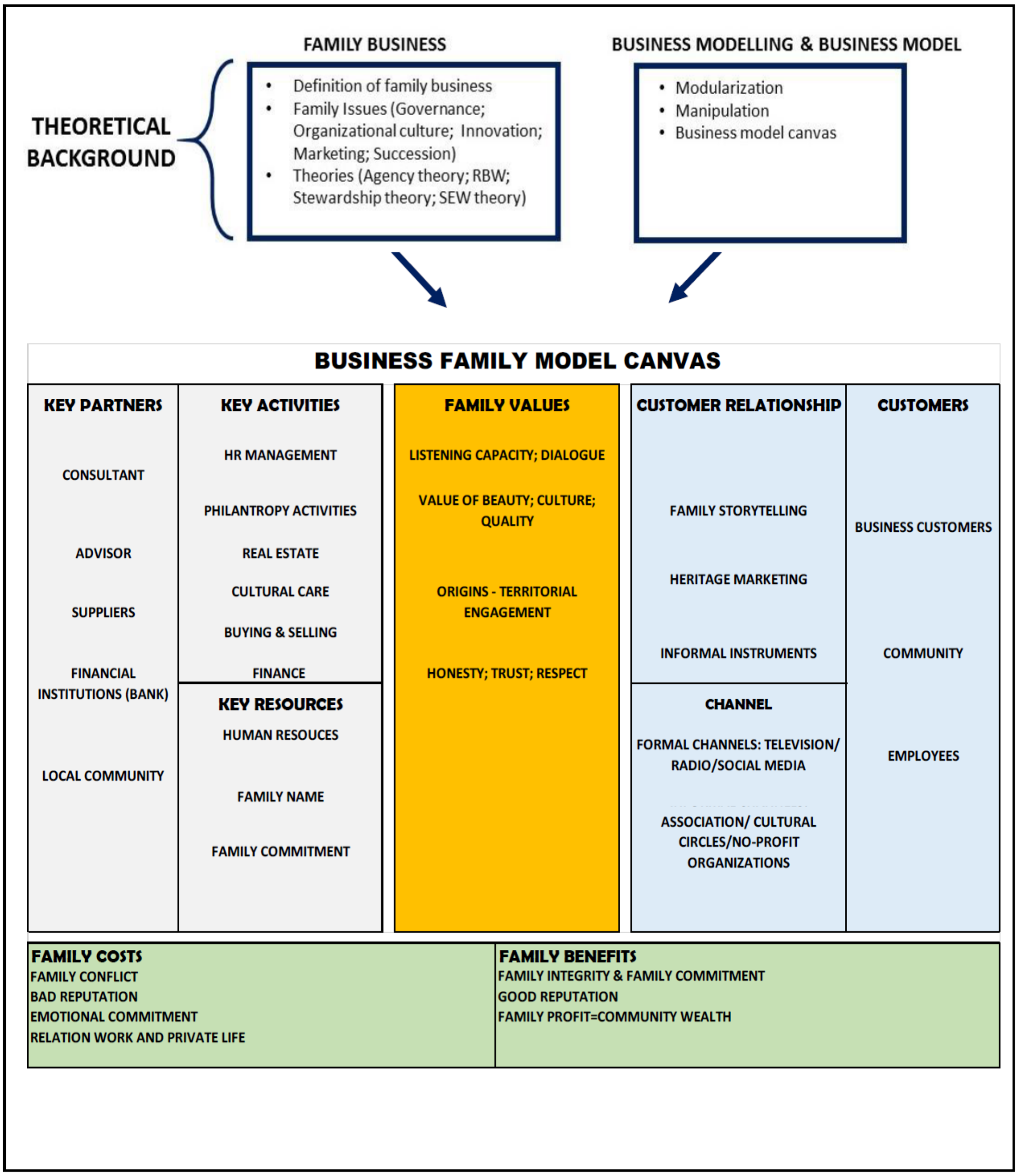

FIG. 3.4 BUSINESS FAMILY MODEL CANVAS

3.4 CASE STUDY APPROACH: TESTING THE BUSINESS FAMILY MODEL CANVAS

To test the validity of the business family model canvas (BFMC) I adopted the case study approach to analyse a particular phenomenon placed into its real life context. Case studies are a useful way to look around the world using data from multiple sources: direct observations, interviews, and documents (Yin, 2009; Dawson, 2013; Pettigrew, 1990; Hassett & Paavilainen-Mantrymaki, 2013). They can be employed to accomplish various goals: to provide description, to test existing assumptions or generate new theory (Eisenhardt, 1989). The reason why I have chosen this methodology is dependent on two main advantages.

The first benefit of the case study approach is the ability to explore and understand complex issues and phenomena; social sciences recognize this methodology to address societal and behavioural issues, difficult to be analysed through a quantitative approach. The second advantage, therefore, is that there are many factors working simultaneously and consequently, the identification of the overall vision is beneficial for research carried out in a holistic approach. There is a close parallel between the business model canvas and the case study approach.

By applying this methodology, I consider a single unit of analysis, the family, and its evolution along a number of years; so a longitudinal search is accomplished (Taylor & Søndergaard, 2017). I have indeed analysed the different elements of BFMC by collecting data from family members belonging to different generations.

Research Process

After the identification of theory, the creation of theoretical model, and the selection of research methodology to test it, I identified the system to be analysed; in other words, I selected case studies. After having selected and collected data, the analysis is completed.

In summary, the research process is based on these phases: 1) develop the theory and the object that you want to test; 2) establish case selection criteria; 3) select case studies; 4) choose the method for data collection; 5) collect data; 6) proceed to case analysis.

Selection criteria and sample

I have used different *criteria* for choosing the companies under investigation.

The first criterion concerns the *family reputation and visibility* on the territory. I have selected only business families with a good reputation and high visibility.

The second criterion concerns the *territory* in which family affairs are carried out. I have selected several realities in southern Italy where family conception, family values and trust relationships assume a stronger meaning, business management becomes social affirmation of the family and there is a greater overlap between business and family.

The third criterion is related to *the age of the family firm*; it was decided to choose families that have business experience at least from three generations as they can provide data on longer business periods that have taken place in different historical periods.

The last criterion concerns *the industry of family firm*. I have selected cases studies related to one of the most important industry of the Italian economy ie the food & beverage. In 2015, the turnover of the Italian agri-food industry reached 135 billion (approximately 8% of GDP). Italy is also the first country in Europe to count certified food products (280 food and 523 wines) and the world's first wine producer with 48.9 million hectoliters (CDR Communiation, 2016).

The *size of the sample* is a very discussed topic in the literature. On the one hand, there are statistical theories that require large samples to generalize the test results; on the other hand, the supporters of the qualitative methodologies say that the greater the sample, the more in-depth is the analysis of the chosen cases (Eisenhardt, 1989). So it is less likely that the author can provide a "thick description" (Taylor & Søndergaard, 2017).

Based on the criteria and considerations on the sample above highlighted, I have selected three Sicilian business families: Drago, Nicosia and Zappalà. (Tab. 3.1)

Family Name	NAME MAIN FAMILY ACTIVITY	Number of family generations	Sales Volume (2015)	Firm's Location
DRAGO	DRAGO of Sebastiano Drago	4	€ 2.500.000,00	Syracuse (Sicily)
NICOSIA	Nicosia S.p.a.	5	€ 6.400.000,00	Catania (Sicily)
ZAPPALA'	Zappalà S.p.a.	3	€ 35.000.000,00	Catania (Sicily)

Tab. 3.1 Sample informations

Analysis Tool: the interviews

For the purpose of research, the semi-structured and in-depth interview was used as the primary data collection tool (Taylor & Søndergaard, 2017). The interviews were conducted at the headquarters of the main family company in presence of various family members. The interview protocol has been dynamically adjusted and improved based on the evidence that emerged during the various discussions.

With regard to the adopted technique, following the approach proposed by Patton (1999), a first phase was based on an informal conversation asking respondents to provide some information on the business family history and on evolution of the business, followed by a second phase in which a programmed interview of about 30 questions was used, aiming to deepen and test the BFMC and its contents. Each interview lasted about two hours. This informal-structured interview mix made it possible to reconcile the need for flexibility and adaptability with the emergence of new information to ensure coverage of a specific set of topics with each interviewee. (Appendix A).

The interviewed people were selected on the basis of their generation; in particular I interviewed different family generations in order to better obtain a longitudinal retrospective analysis (Dawson, 2013; Pettigrew, 1990; Hassett & Paavilainen-Mantrymaki, 2013).

The following table gives you some information about the interviews. (Tab. 3.2)

Family Name	Number of interviewees	Person interviewed	Time duration
DRAGO	1	Alessandro Drago (marketing and communications manager)	1:00 h
NICOSIA	2	Carmelo Nicosia (general manager)	1:30 h
		Graziano Nicosia (marketing and communications manager)	
ZAPPALA'	4	Luigi Zappalà (general manager)	2:30 h
		Salvatore Zappalà (sales manager)	
		Mariangela Zappalà (distribution manager - HORECA)	
		Rosella Zappalà (student)	

Tab. 3.2 Interview data

Case Analysis

All interviews will be analysed on the basis of the BFMC and, therefore, in all three cases, the collected data and information are divided into 4 sections: 1) Value Proposition; 2) Customer Segment/ Channels / Customer Relationship; 3) Key resources / key activities / key partners; 4) Family costs and benefits. The division of all three cases into the same sections of analysis has allowed us to make a comparative analysis more easily.

The cases

DRAGO FAMILY

The Drago family is an entrepreneurial family that operates in Syracuse (Sicily - Italy) in the "food preserves" industry since 1929. It has come to the fourth generation in the ownership and management of the company “Ditta Drago Sebastiano”. The core business of the firm is the conservation of fish products both in brine and olive and seeds oil. I run interview with the marketing and communications manager, a family member of the last generation (fig. 3.5).

1. Family Values

According to the BFMC, the main values that drive the Drago family are respect, honesty and trust. They are all values that pass down from generation to generation and, therefore, become part of the individuals' behaviour. The family firm has ethics and social responsibility codes not formalized in a paper but owned by people. Another value is the quality of the offered products as both a sign of respect for the customers and a symbol of the passion, the enthusiasm and the love possessed by the company's management. The attachment of the family to their country of origin emerges from the continuity of their business in Sicily; producing in the home country and not relocating the manufacturing abroad is a way of combining community, territory and business family.

2. Customer Segment/ Channels / Customer Relationship

Family customers are primarily the members of the territory not only because the family secures business matters with the beauty of the location where they are placed, but also in terms of relationships and opportunities they create, for instance in job opportunities.

About the communication's channels, in addition to formal avenues represented by TV commercials, a massive presence in social networks and the participation to thematic events such as EXPO 2016, the Drago family uses many informal routes. Family values are communicated primarily through behaviour within and outside the organization. Networking is promoted through the participation of the Drago family into local clubs services such as the Rotary Club or the affiliation to business associations such as the Fishing District.

Good reputation and family name are the two elements on which the family's customer relationships are based. For the family "the name is essential, it's all", they say.

3. Key activities / Key resources / key partners

Manufacturing and corporate finance are those key activities that Drago family is reluctant to delegate to family members which are not involved in the business. Indeed, intergenerational succession has always preserved this tradition. Instead, administrative and commercial activities are partially delegated even to outsiders. The selection of non family members is not made through recruiting agencies, because other skills are evaluated by Drago's family in addition to those technical possessed by the candidates. Indeed, one of the key feature that Drago's family looks in the recruitment process is the individuals ability to create relationships based on respect, honesty and trust.

So, the real key resource is the human capital as people make the difference. In addition to human resources, a lot of importance relies on the name of Drago family and the family union; the trust and the close relationships between the father and the sons is an irreplaceable and essential resource in managing any business.

Main partners are suppliers who share the same values as the family; for example, special certification is required to suppliers to guarantee the quality of the Drago family products. For this reason, there is a lot of care in their selection. Other key partners are the accountant and food security consultant. The accountant is a historical figure of the family and he is considered a faithful advisor.

Competitors can become valuable partners: when family members are doubtful about a potential customer, they exchange information with other companies. So, fairness becomes another inestimable value in market relationships.

4. Family Costs and Benefits

The main family costs are related to the lack of separation between private and business life; business thoughts follow the family even during private moments. The main benefits rely on the capacity of the family to boost internal relationships among family members; this unique element is not easily reproducible.

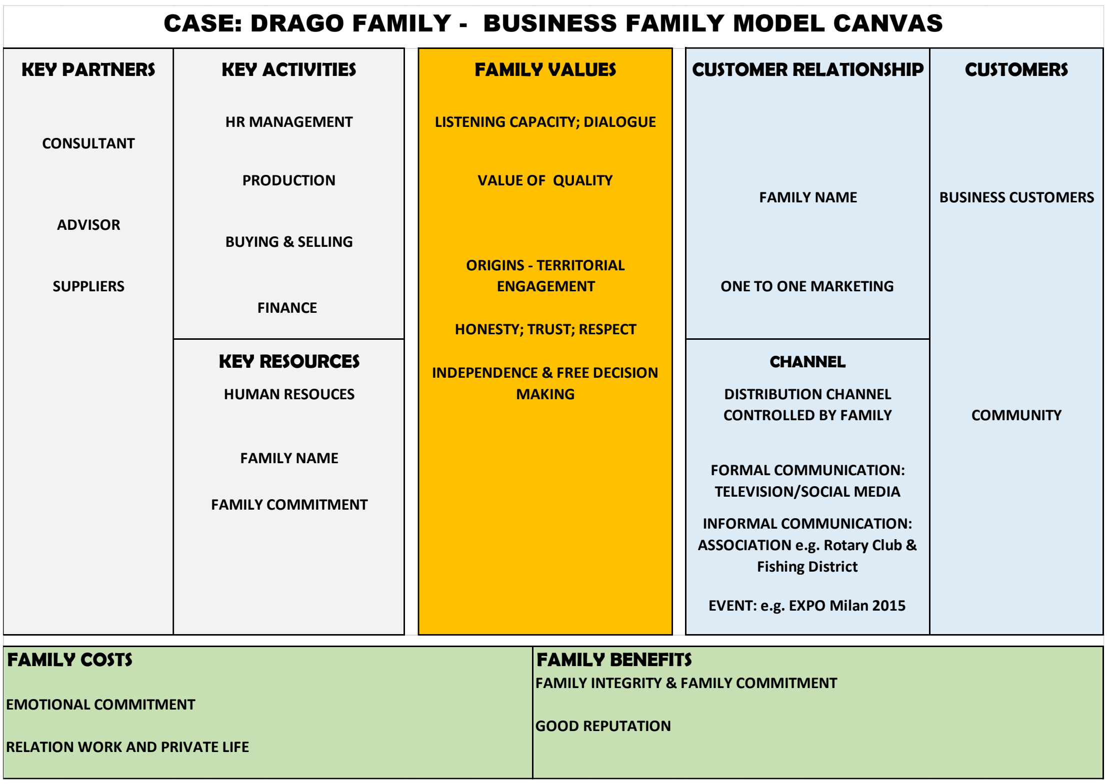

FIG. 3.5 Drago BFMC

NICOSIA FAMILY

The Nicosia family is an entrepreneurial family that operates on the slopes of the Volcano Etna, very close to Catania. They are very active in the wine industry since 1898 when the great-grandfather of the current owner decided to open the first wine shop. The main company, named *Cantine Nicosia*, has approached to the fifth family generation. The family that combines tradition and innovation has a portfolio of diversified businesses ranging from the core business of wine production and distribution, to restaurant and catering business and also to pet foods industry. The interview was run with the current owner and his son who is the marketing and communication manager of Cantine Nicosia (fig. 3.6).

1. Family Values

The current owner cited Luigi Einaudi to introduce some of the values possessed by the family. He argued that the entrepreneur, despite the legislative, economic and financial adversity, pursues in his own way, having the awareness of his vocation and responsibility towards his family, his employees, and the future. The value of environmental and social sustainability is acknowledged by numerous obtained international certifications: i.e. UNI EN ISO 9001: 2008, BRC Food & Beverage, SEDEX-Supplier Ethical Data Exchange. The other values highlighted by the interviewees are work, commitment, and fatigue. These values are impressed in the firm’s logo and they underline the proudness of the family’s origins.

Another value of the Nicosia family is the attachment to territory of origin; over time, there have been several opportunities to relocate business, such as buying property in Romania, but the family has always been faithful to the family origin's country: "the family history is closely linked to the Sicilian territory", they say.

The beauty is a value recognized by the current family leader. Already as a young man, he dreamed about beautiful and pleasant places to run his business. His ambition was to start a wine cellar that had to be elegant, far from "big greenhouses", while the firm headquarters surrounded by so many green areas.

2. Customer Segment/Channels/Customer Relationship

The Nicosia family brings usefulness to the entire community; it becomes a point of reference for the territory. For example, the public greening of neighbouring areas has been a stimulus and an example for other businesses to pay attention to common goods and the entire territory has benefited from these initiatives. Employees and their families are other people who benefit by various family activities.

One of the communication's channels of family values is the affiliation to private business associations, for example the consortium Etna Doc, the association "Wine Road - Cerasuolo di Vittoria", and the network "La sosta di Ulisse". The latter association operates in the restaurant with starred chefs.

The customer relationships are based primarily on the family name also used as a corporate brand and considered the true added value of the family: "The name represents 120 years of history. Deleting the name is equivalent to losing the link with the origins ", they say. Another customer relationships instrument is "family storytelling" through traditional communication channels, events, and participation in symposiums and seminars.

3. Key activities / Key resources / key partners

The most important and non-delegable activity is the buying, both for the peculiarities of the product - the wine requires particular skills – "wine is not an object, it is art", they say – and for the trusted relationships created with suppliers. Another non-outsourced activity is the selection of staff; the ultimate decision belongs always to the "head of family". The requirements in selecting non-family members are skills, honesty and goodwill.

The current generation is not very inclined to invest in the real estate business; profits are reinvested in the company to finance innovation. Real estate purchases, carried out massively from previous generations, are now accomplished only in case of family needs. Corporate finance is delegated to the CEO who benefits from family trust or, sometimes, to the managing director.

With regard to key resources, the three very important resources are human resources, the family name and the family commitment. All the members of the family, wife, children etc, work in harmony.

The key partners mentioned during the interview are suppliers and consultants. Both with suppliers and with consultants, the family has established long-lasting relationships. About the criteria to choose a supplier, the family assesses primarily the firm's seriousness, which also depends on the quality of the products. The accountant and the lawyer are consultants who have worked with the family for more than 15 years; so they are considered family’s friends.

4. Family Costs and Benefits

The family emotional commitment with the firm influences the management. Often the presence of external individuals that work with family members ensures greater objectivity in choices and it represents a worthy control method. Conflicts in the family are present, but they are considered positively as a time for discussion and sources of innovative ideas. The well-being of the Nicosia family translates into greater prosperity both in the territory and in the whole Sicily island.

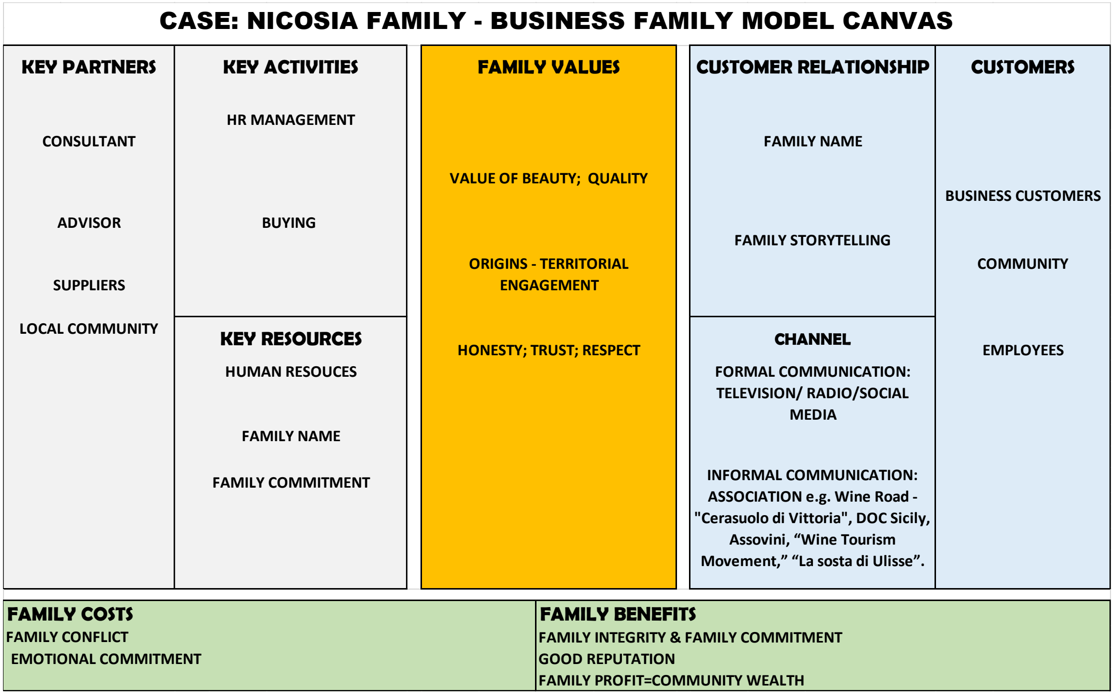

FIG. 3.6 Nicosia BFMC

ZAPPALA’ FAMILY

The Zappalà family is a Sicilian entrepreneurial family that has been operating in the province of Catania since 1973. The entrepreneurial activity, now approached at the third generation, was born thanks to the founder's wife's desire to hold together the three brothers. Over time, the small cheese factory becomes a modern and efficient company, Zappalà SpA, that currently produces and export various cheeses and dairy products.

The interview was conducted with the general manager (second generation family), the manager of the HORECA distribution channel (third generation family) and another third generation's member who is not yet in the family firm, because she is a student (fig. 3.7).

1. Family Values

The first values highlighted during the interview are family harmony and cohesion. Family cohesion, that represents the real competitive advantage of the company, arises from listening capacity of all family members. Hence the importance of dialogue, if there are different opinions, family members are confronted. Other values are ethics, abnegation that evolves in respect of roles and responsibilities, fairness in relationships and honesty. The value of attachment to the territory of origin is still present and it turns into the ambition to trade abroad the made-in-Sicily thanks to the family name. Despite the development of an international strategy, the headquarters remained always at the same place of origin.

Moreover, the interviewees have stressed the importance of respecting of what has been said and always seeking peace as intended to minimize disputes. Furthermore, the current CEO has inherited his father's risk inclination and courage. Audacity means the desire to engage in business and bring new ideas and, therefore, business innovation.

2. Customer Segment/Channels/Customer Relationship

Family customers are the employees and the territory: if the family has the opportunity, they invest in the country of origin. Doing so, the family becomes an example and a stimulus for other small entrepreneurs. The business activity, also, is a social asset that transfers skills from the business family to the entire society. The family teaches to its collaborators values such as ethics, responsibility, honesty and respect; these values absorbed by the workers overcome the company's boundaries and are received by their families which have a positive sentiment toward the Zappala's.

In addition to talking to customers and suppliers, channels used by the family to transfer values to third parties and to society are the actions and events that are organized in favour of the territory. The Zappalà family is not present in local associations or private clubs; they are affiliated only to national business associations, which represent another channel to spread the family name and increase its visibility. They are very active in cultural activities promoted in their territory of origin.

Customer Relationships are based on the use of the family name: an important goal is to put the face and the name by telling a solid and strong family who believes in their own land and the possibility of its growth.

In the last months, however, a strong communication has started with the "family storytelling" and the "heritage family marketing", two alternative modes of social marketing activities strictly tied with the family's history and tradition.

3. Key activities / Key resources / key partners

The main activity is commercial, but the family is present in all the activities from marketing, to exporting and administration; according to their different skills, family members have different roles and they exert a tight control over the external managers.

In addition to the family name, human resources represent the key resource for family. There is an exchange of mutual knowledge between external members and the family: “outside-in” processes are favoured by managers who bring new ideas and valuable know-how; “inside-out” practices are encouraged by family members when they transmit to others the entrepreneurial culture and the experience gained with their business activities.

Suppliers are the main partners and they are selected by the Zappala’s accordingly to the values of trust and honesty.

4. Family Costs and Benefits

Among the main family benefits, the most important is the opportunity to share problems and opportunities within the family members: “the problem of a family member becomes a problem for everyone”, they say. New generations are seldom in conflict, some divergences are present in the penultimate generation of brothers but they represents moments of confrontation and family enrichment. Another benefit is the interconnection of the welfare of the family and the business and the welfare of the whole community.

The only cost that emerged from the interview is the fact that "the family firm is the business gym", they say. In other words, family members start to work in the company without doing business experiences outside. This is a disadvantage because the opportunity of exchanging with other business communities is extremely beneficial for the new generations who are trained for the family succession.

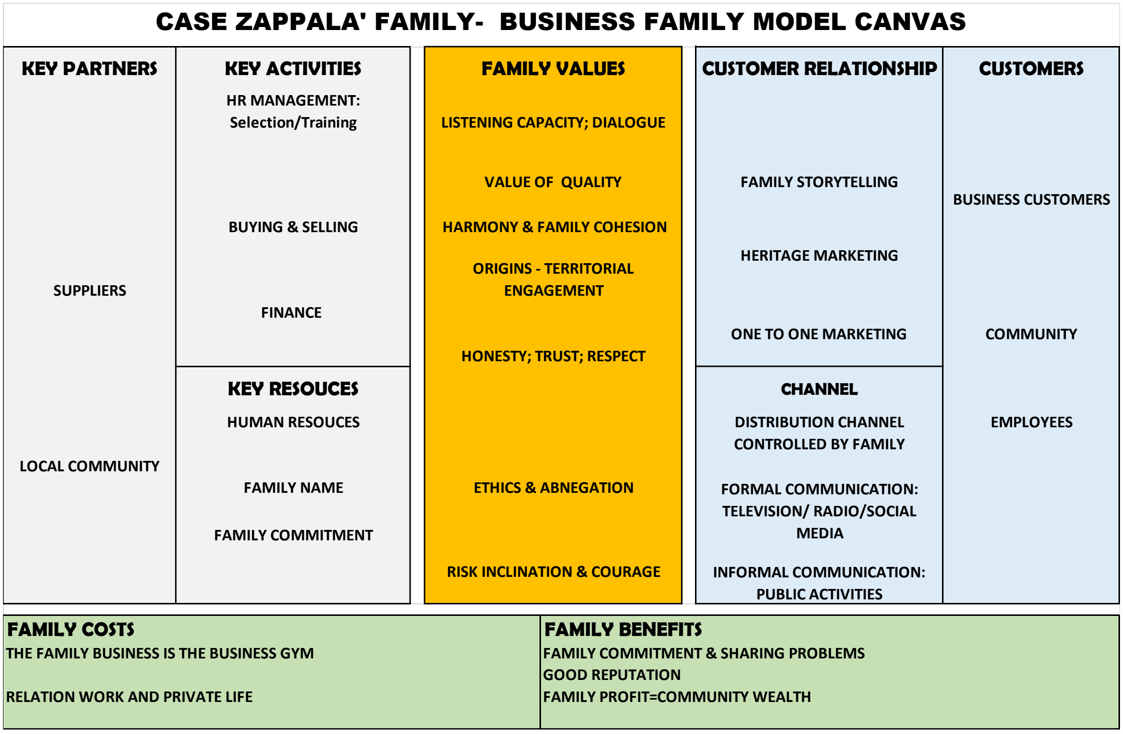

FIG. 3.7 Zappalà BFMC

3.5 DISCUSSION AND CONCLUSION

Over the years, the phenomenon of family business has attracted the interest of many scholars and researchers who have theoretically and empirically analysed every aspect related to business management, events and strategies associated with this issue.

The starting point of our study is the term “business family”, that I consider as a team of family members dedicated across generations to implement various entrepreneurial and financial activities. In this paper, indeed, I emphasized how this term refers to all family activities, including asset management and financial wealth, and therefore not just to the governance of family firms. Starting from this, in order to enrich the scientific studies and to provide new elements for future insights, I have decided to shift the focus from the family business to the business family, inverting the two words: the family and the business.

To take advantage of the holistic approach and, therefore, of a wider vision than the functional one offered by the previous scientific work, I have laid the foundation of my study on *business modelling theory* and used the business model canvas of Alex Osterwalder (2004) as a primary tool of the analysis. Moreover, the *business family model canvas* (BFMC) was tested using multiple case studies that allowed us to preserve the unique and significant characteristics of the events analysed without neglecting the complexity of the situation.

The three business families analyzed were: Drago, Nicosia and Zappalà. The three interviews have confirmed the validity of the conceptual elements of the model.

My study presents several innovative contributions. My work contributes to expanding the literature on family business and to enrich that on the business model. From the application of the business model canvas to business families, therefore, I have developed the business family model canvas (BFMC) with the intention to facilitate a predictive vision of the family behaviours.

The *first predictive element* is linked to the long-run rationale of the family who acts with a generative vision of the business. So, in order to transfer successfully the family business to their successors, families must be encouraged by policy makers to preserve the continuity of the firm. Fiscal and economic benefits may be introduced by the State to reinforce the business families role in the national economy.

A *second predictive element* is linked to the family's need for independence and to the desire to keep control over the business activity. Such a need turns easily into a severe necessity when the family business is only a vehicle to preserve some family values, i.e the family brand name, the reputation, and the trust and respect for various stakeholders. So, the BFMC may predict the trajectories of governance within the company. For instance, I expect that the financial need of a family company is better satisfied when accessing the banking system instead of the private equity market. This because families do not love interferences neither in their business activities or in their family affairs.

The *third predictive element of BFMC* is linked to the family's proudness for their origins. It can help to understand and anticipate some internationalization patterns of the family business. The attachment of the family to the territory is a mean of engagement, commitment and respect for the local community and the most common values spread among the people. The drawback of this rooting into the territory is that it may represent a constraint to the expansion of the family business activities abroad. The more family values are embedded in family business, the more international strategies of firms are led by other decisions, i.e. that of going abroad only via exporting strategies instead of greenfield investments or the choice of maintaining the headquarter of the company in the territory of origins.

In addition to the predictive elements, the BFMC has many descriptive benefits. Among the others, it allows primarily to show the "big picture" of the overlap existing between the founding family, their business activities and the governance of the possessed firms.

Managerial and Practical Implications

The elements exposed above also show the broad practical implications of the study. The model can be used by consultants and managers to improve the management of family businesses; it can diminish confusion and prevent some critical moments. I see the model as a valid support in managing selection, in preventing family conflicts, or in the transition of the entrepreneurial power. It also goes without saying that from a macroeconomic point of view, the family business model canvas can be useful for politicians and legislators in pursuing an economic policy really aimed at increasing the wealth of the country via the role exerted by business families.

Limitations

In this paper the main limitation is that this study is not liable to quantitative analysis because it would need to transform each block into measurable indicators and then proceed with a quantitative analysis methodology. Another drawback is related to the qualitative methodology used. The case study approach has been often criticized because of its extreme subjectivity in interpreting collected data and evaluating the correctness of the conclusions.

Moreover, the three case studies analysed concern only families based in Southern Italy; qualitative analysis could be carried out through a multiple case study that compares the context of Northern vs Southern Italy or even different countries around the world. The qualitative approach can also be extended to large family businesses to assess whether dimensional growth affects some model variables. These limitations are the starting points for future scientific work.

APPENDIX A: INTERVIEW

SECTION 1: VALUE PROPOSITION

- What are the core values of your business?
- Are these values shared by other family members?
- How important do you think is a beautiful, comfortable, sunny and clean business location?
- What link do you find between the term "beauty" and your business management?
- Do you think that the concept of "beauty" affects employee performance and so firm’s performance?
- How important do you have for you the country, the city or the local territory in which you operate?
- How does attachment to the origin’s country affect the firm's choices?
- How important is your independence and decision-making freedom? How do you translate independence and decision-making freedom into business choices?
- For you, how important is the dialogue with family members or collaborators / employees for you? For you, Are the divergence of opinions a wealth or an element to worry about?
- For you, how important is honesty, trust and estimate? In which business decisions you apply these values?

SECTION 2: CUSTOMER

- How important is it to use your "name" in business management?
- Do you think that using your name influences the behaviour of your consumers?
- For you, how important is a good personal and family reputation and a good firm’s reputation?
- How do you make your customers loyal?
- What are the methods that you use?

SECTION 3: KEY ACTIVITIES/ KEY RESOUCES/KEY PARTNER

- For you, what activities are important for the firm's business? Do you think that your sales activity is a key activity for your business? And the accounting and financial activities?
- How important is the selection of human resources for you? What requirements do you use to select employees and collaborators?
- Do you do social, philanthropic or cultural activities?

- What are your business key resources?
- What are your key business partners?
- What role and importance do you attribute to consultants (eg, accountant)?
- How long have you been working with your accountant or your lawyer?

SECTION 4: COST & BENEFITS

- Do family conflicts affect business management?
- For you, how important is family cohesion for a good deal of business?
- Do you think that your private life is influencing decisively on company well-being, or business management? If so, how?
- Do you believe that the privacy of employees or family members and non-family members can affect your reputation and consequently business performance?

REFERENCES

Abrahamson, E. (2000). Change without pain. Harvard business review, 78(4), 75-81.

Afuah, A. (2004). Business models: A strategic management approach. New York: Irwin/McGraw-Hill.

Afuah, A., Tucci, C. L. (2001). Internet business models and strategies: Text and cases. New York: McGraw-Hill.

Ainsworth, S., & Cox, J. W. (2003). Families divided: culture and control in small family business. Organization Studies, 24(9), 1463-1485.

Alberti, L. B. (2004). The Family in Renaissance Florence: Books One-Four; I Libri Della Famiglia. Waveland Press.

Amit, R., Zott, C. (2001). Value creation in e-business. Strategic Management Journal, 22, pp. 493-520.

Anderson, R., Mansi, S.A., & Reeb, D. (2003a). Founding family ownership and the agency cost of debt, Journal of Financial Economics, 68, 263-285.

Aronoff, C. E. (1998). Megatrends in family business. Family business review, 11(3), 181-185.

Astrachan, J. H., & Shanker, M. C. (2003). Family businesses' contribution to the US economy: A closer look. Family business review, 16(3), 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 problem1. Family business review, 15(1), 45-58.

Athanassiou, N., Crittenden, W. F., Kelly, L. M., & Marquez, P. (2002). Founder centrality effects on the Mexican family firm's top management group: Firm culture, strategic vision and goals, and firm performance. Journal of World Business, 37(2), 139-150.

Aversa, P., Haefliger, S., Rossi, A., & Baden-Fuller, C. (2015). From business model to business modelling: Modularity and manipulation. In Business models and modelling (pp. 151-185). Emerald Group Publishing Limited.

Baccarani C., "Comunicare senza comunicare" (engl. "Communication without Communication"), in MAZZEI, Comunicazione e reputazione nelle università, Franco Angeli, 2004.

Baden-Fuller, C., & Haefliger, S. (2013). Business models and technological innovation. Long range planning, 46(6), 419-426.

Baldwin, C., Hienerth, C., & Von Hippel, E. (2006). How user innovations become commercial products: A theoretical investigation and case study. Research policy, 35(9), 1291-1313.

Balmer, J. M. (2013). Corporate heritage, corporate heritage marketing, and total corporate heritage communications: What are they? What of them? Corporate Communications: An International Journal, 18(3), 290-326.

Balmer, J. M., & Burghausen, M. (2015). Explicating corporate heritage, corporate heritage brands and organisational heritage. Journal of Brand Management, 22(5), 364-384.

Barnes, C., Helen, B., Pinder, D., (2009). Creating & Delivering your Value Proposition. Managing Customer Experience for Profit. London (UK) - Philadelphia (USA): Kogan Page.

Barney, J., (1991). Firm resources and sustained competitive advantage. Journal of Management, 17 (1), pp. 99–120.

Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. Academy of management Journal, 45(3), 587-597.

Baumol, W. J., & Strom, R. J. (2007). Entrepreneurship and economic growth. Strategic entrepreneurship journal, 1(3-4), 233-237.

Beer, M., Eisenstat, R. A., & Spector, B. (1990). Why change programs don't produce change.

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, 25(3), 258-279.

Bonaccorsi, A., Giannangeli, S., Rossi, C. (2006). Entry strategies under competing standards: Hybrid business models in the open source software industry. Management Science, 52, pp. 1085-1098.

Bouwman, H., & MacInnes, I. (2006, January). Dynamic business model framework for value webs. In System Sciences, 2006. HICSS'06. Proceedings of the 39th Annual Hawaii International Conference on (Vol. 2, pp. 43-43). IEEE.

Brady, M. K., & Cronin Jr, J. J. (2001). Customer orientation: Effects on customer service perceptions and outcome behaviors. Journal of service Research, 3(3), 241-251.

Breton-Miller, L., & Miller, D. (2013). Socioemotional wealth across the family firm life cycle: A commentary on “Family Business Survival and the Role of Boards”. Entrepreneurship Theory and Practice, 37(6), 1391-1397.

Brown, T. J., Mowen, J. C., Donavan, D. T., & Licata, J. W. (2002). The customer orientation of service workers: Personality trait effects on self-and supervisor performance ratings. Journal of Marketing Research, 39(1), 110-119.

Bunderson, J. S., & Sutcliffe, K. M. (2003). Management team learning orientation and business unit performance. Journal of Applied Psychology, 88(3), 552.

Camponovo, G., & Pigneur, Y. (2003, April). Business Model Analysis Applied to Mobile Business. In ICEIS (4) (pp. 173-183).

Carr, J. C., Chrisman, J. J., Chua, J. H., & Steier, L. P. (2016). Family Firm Challenges in Intergenerational Wealth Transfer. Entrepreneurship Theory and Practice, 40(6), 1197-1208.

Cennamo, C., Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth and proactive stakeholder engagement: Why family-controlled firms care more about their stakeholders. Entrepreneurship Theory and Practice, 36(6), 1153-1173.

Chesbrough, H. (2010). Business model innovation: opportunities and barriers. Long range planning, 43(2), 354-363.

Chirico, F., & Nordqvist, M. (2010). Dynamic capabilities and trans-generational value creation in family firms: The role of organizational culture. International Small Business Journal, 28(5), 487-504.

Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence. Entrepreneurship Theory and practice, 28(4), 335-354.

Chrisman, J. J., Chua, J. H., Pearson, A. W., & Barnett, T. (2012). Family involvement, family influence, and family-centered non-economic goals in small firms. Entrepreneurship theory and practice, 36(2), 267-293.

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. Entrepreneurship: theory and practice, 23(4), 19-19.

Clarke, S. J. (2015). The one and the many: a contemporary Thomistic metaphysics. University of Notre Dame Pess.

Clark, K., Fujimoto, T., 1991. Product Development Performance: Strategy, Organization, and Management in the World Auto Industry. Harvard Business School Press, Boston, MA

Craig, J. B., Dibrell, C., & Davis, P. S. (2008). Leveraging family-based brand identity to enhance firm competitiveness and performance in family businesses. Journal of Small Business Management, 46(3), 351-371.

Cruz, C., Firfiray, S., & Gomez-Mejia, L. R. (2011). Socioemotional wealth and human resource management (HRM) in family-controlled firms. In Research in personnel and human resources management (pp. 159-217). Emerald Group Publishing Limited.

Colli, A (2017). Familglia, Management e Diversificazione. EDIZIONE. Storia della holding Benetton 1986-2016. Il Mulino. Milano.

Colli, A., Howorth, C., & Rose, M. (2013). Long-term perspectives on family business.

Comi, A., & Eppler, M. J. (2014). Diagnosing capabilities in family firms: An overview of visual research methods and suggestions for future applications. Journal of Family Business Strategy, 5(1), 41-51.

Corbetta, G. (1995). Patterns of development of family businesses in Italy. Family Business Review, 8(4), 255-265.

Corbetta, G. (2011). Le aziende familiari: strategie per il lungo periodo. ("Families: Long-term strategies.") EGEA spa.

D'Aurizio L. e Romano L. (2013) "Family firms and the Great Recession: out of sight, out of mind?" topic discussion n. 905, Bank of Italy.

Daspit, J. J., Holt, D. T., Chrisman, J. J., & Long, R. G. (2016). Examining family firm succession from a social exchange perspective: a multiphase, multistakeholder review. Family Business Review, 29(1), 44-64.

Dawson, P. (2013). 12. the use of time in the design, conduct and write-up of longitudinal processual case study research. Handbook of Longitudinal Research Methods in Organisation and Business Studies, 249.

De Falco, S. E., & Vagnani, G. (2008). Una classificazione delle imprese familiari: tra valori della famiglia, proprietà e management. ("A classification of family enterprises: between family values, property and management") C. Devecchi, G. Fraquelli, Dinamiche di sviluppo e internazionalizzazione del family business, Il Mulino, Bologna, 157-172.

Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. Academy of Management journal, 39(4), 949-969.

De Massis, A., Di Minin, A., & Frattini, F. (2015). Family-driven innovation. California Management Review, 58(1), 5-19.

De Massis, A., Frattini, F., & Lichtenthaler, U. (2013). Research on technological innovation in family firms: Present debates and future directions. Family Business Review, 26(1), 10-31.

De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A. M., & Wright, M. (2016). Innovation through tradition: lessons from innovative family businesses and directions for future research. The Academy of Management Perspectives, 30(1), 93-116.

Demil, B., & Lecocq, X. (2010). Business model evolution: in search of dynamic consistency. Long range planning, 43(2), 227-246.

Diéguez-Soto, J., López-Delgado, P., & Rojo-Ramírez, A. (2015). Identifying and classifying family businesses. Review of Managerial Science, 9(3), 603-634.

Dittrich, K., & VandenEnde, J. (2006, June). Organizational forms for the development of new broadband services: a dynamic model for the degree of integration between collaborating firms. In DRUID Summer Conference, Copenhagen, Denmark (pp. 10-12).

Dowling, G. (2006). How good corporate reputations create corporate value. Corporate Reputation Review, 9(2), 134-143.

Dubosson-Torbay, M., Osterwalder, A., e Pigneur, Y. (2002). E-business model design, classification, and measurements. Thunderbird International Business Review, 44(1), pp. 5-23.

Dyer, W. G. (1988). Culture and continuity in family firms. Family Business Review, 1(1), 37-50.

Dyer, W. G. (2006). Examining the "family effect" on firm performance. Family business review, 19(4), 253-273.

Eisenhardt, K. M. (1989). Building theories from case study research. Academy of management review, 14(4), 532-550.

Feurer, R., & Chaharbaghi, K. (1994). Defining competitiveness: a holistic approach. Management Decision, 32(2), 49-58.

Fielt, E. (2013). Conceptualising business models: Definitions, frameworks and classifications. Journal of Business Models, 1(1), 85.

Fletcher, R. (2001). A holistic approach to internationalisation. International business review, 10(1), 25-49.

Fletcher, D., Melin, L., & Gimeno, A. (2012). Culture and values in family business—A review and suggestions for future research. Journal of Family Business Strategy, 3(3), 127-131.

Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. Academy of management Journal, 33(2), 233-258.

Gadol, J. (1970). Leon Battista Alberti, universal man of the early Renaissance.

Gallo, M. Á., Tàpies, J., & Cappuyns, K. (2004). Comparison of family and nonfamily business: Financial logic and personal preferences. Family Business Review, 17(4), 303-318.

Gambardella, A., & McGahan, A. M. (2010). Business-model innovation: General purpose technologies and their implications for industry structure. Long range planning, 43(2), 262-271.

Garud, R., & Kumaraswamy, A. (1995). Technological and organizational designs for realizing economies of substitution. Strategic management journal, 16(S1), 93-109.

Garud, R., Kumaraswamy, A., & Langlois, R. (Eds.). (2009). Managing in the modular age: architectures, networks, and organizations. John Wiley & Sons.

Gersick, K. E. (1997). Generation to generation: Life cycles of the family business. Harvard Business Press.

George, G., Bock, A. (2009). The business model in practice and its implications for entrepreneurship research.Working paper, Imperial College, London.

Gilbert, J., Henske, P., & Singh, A. (2003). Rebuilding big pharma's business model. In Vivo-New York Then Norwalk, 21(10), 73-80.

Gomez-Mejia, L. R., Haynes, K. T., Nunez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in familycontrolled firms:Evidence fromSpanish olive oilmills. Administrative Science Quarterly, 52(1), 106–137.

Gomez-Mejia, L. R., Campbell, J. T., Martin, G., Hoskisson, R. E., Makri, M., & Sirmon, D. G. (2014). Socioemotional wealth as a mixed gamble: Revisiting family firm R&D investments with the behavioral agency model. Entrepreneurship Theory and Practice, 38(6), 1351-1374.

Gotsi, M., & Wilson, A. M. (2001). Corporate reputation: seeking a definition. Corporate Communications: An International Journal, 6(1), 24-30.

Grunig J. (1993), Image and Substance: From Symbolic to Behavioral Relationships, 1993, Balmer J. M. T., Greyser S. A., Revealing the Corporation, Routledge, London 2003.

Habbershon, T. G., & Williams, M. L. (1999). A resource-based framework for assessing the strategic advantages of family firms. Family business review, 12(1), 1-25.

Habbershon, T.G. and Pistrui, J. (2002) 'Enterprising families domain: family-influenced ownership groups in pursuit of transgenerational wealth', Family Business Review, Vol. 15, No. 3, pp.223–237.

Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. Journal of business venturing, 18(4), 451-465.

Hamel, G. 2000. Leading the revolution. Boston: Harvard Business School Press

Handler, W. C., & Kram, K. E. (1988). Succession in family firms: The problem of resistance. Family Business Review, 1(4), 361-381.

Handler, W. C. (1989). Methodological issues and considerations in studying family businesses. Family business review, 2(3), 257-276.

Hassett, M. E., & Paavilainen-Mäntymäki, E. (Eds.). (2013). Handbook of longitudinal research methods in organisation and business studies. Edward Elgar Publishing.

Hedman, J., & Kalling, T. (2003). The business model concept: theoretical underpinnings and empirical illustrations. European journal of information systems, 12(1), 49-59.

Hoffman J., Hoelscher M., Sorenson R. (2006), "Achieving sustained competitive advantage: A family capital theory", Family Business Review, vol. 19, n. 2, pp. 135- 145.

Johnson, M. W. (2010). Seizing the white space. Business Model Innovation for Growth and Renewal; Harvard Business School Press: Boston, MA, USA.

Jones, G., & Rose, M. B. (1993). Family capitalism. Business History, 35(4), 1-16.

Kammerlander, N., & Ganter, M. (2015). An Attention-Based View of Family Firm Adaptation to Discontinuous Technological Change: Exploring the Role of Family CEOs' Noneconomic Goals. Journal of Product Innovation Management, 32(3), 361-383.

Kaplan, R.S., Norton, D.P. (1996). The balanced scorecard: measures that drive performance. Harvard Business Review Jan–Feb, pp. 71–79.

Kaye, K., & Hamilton, S. (2004). Roles of trust in consulting to financial families. Family Business Review, 17(2), 151-163.

Kellermanns, F. W., & Eddleston, K. A. (2004). Feuding families: When conflict does a family firm good. Entrepreneurship theory and Practice, 28(3), 209-228.

Kellemarnns FW, Eddleston KA, Sarathy R, and Murphy F (2012) Innovativeness in family firms: a family influence perspective. Small Bus Econ 38(1):85–101

Kerber, K. W., & Buono, A. F. (2007). Migliorare le capacità di cambiamento nella relazione cliente-consulente aziendale.

Klein, S. B., Astrachan, J. H., & Smyrnios, K. X. (2005). The F-PEC scale of family influence: Construction, validation, and further implication for theory. Entrepreneurship Theory and Practice, 29(3), 321-339.

Krappe, A., Goutas, L., & von Schlippe, A. (2011). The "family business brand": an enquiry into the construction of the image of family businesses. Journal of Family Business Management, 1(1), 37-46.

Kotlar, J., & De Massis, A. (2013). Goal setting in family firms: Goal diversity, social interactions, and collective commitment to family-centered goals. Entrepreneurship Theory and Practice, 37(6), 1263-1288.

Kotlar, J., De Massis, A., Frattini, F., Bianchi, M., & Fang, H. (2013). Technology acquisition in family and nonfamily firms: A longitudinal analysis of Spanish manufacturing firms. Journal of Product Innovation Management, 30(6), 1073-1088.

Kotlar, J., Fang, H., De Massis, A., & Frattini, F. (2014). Profitability goals, control goals, and the R&D investment decisions of family and nonfamily firms. Journal of Product Innovation Management, 31(6), 1128-1145.

Kotler P.H., Keller K.L., Brady M., Goodman M., Hansen T. (2009), Marketing management, England, Pearson Education Limited, Harlow

Invernizzi, E., & Romenti, S. (2014). Progetti di comunicazione per la reputazione aziendale. ("Communication protocols for corporate reputation."). FrancoAngeli.

Lazonick, W., & Tulum, Ö. (2011). US biopharmaceutical finance and the sustainability of the biotech business model. Research Policy, 40(9), 1170-1187.

Lewis K., Massey C., Asby M., Coetzer A., Harris C., Business assistance for SMEs: New Zealand ownermanagers make their assessment, Journal of Small Business and Enterprise Development 4/2007, pag. 551 e ss

Lewis, K. V., Cassells, S., & Roxas, H. (2015). SMEs and the potential for a collaborative path to environmental responsibility. Business Strategy and the Environment, 24(8), 750-764.

Lichtenthaler, U., & Muethel, M. (2012). Retracted: The impact of family involvement on dynamic innovation capabilities: Evidence from German manufacturing firms. Entrepreneurship Theory and Practice, 36(6), 1235-1253.

Litz R (1995) The family business: toward definitional clarity. Acad Manag J 8:100–104

Magretta, J. (2002). Why business models matter. Harvard Business Review, 80(5), pp. 86-92.

Mahadevan, B. (2004, December). A framework for business model innovation. In IMRC Conference, Bangalore (pp. 16-18).

Martin, M. (2006). Philanthropy in Italy: In Search of Social Impact (May 1, 2006). Prospettive, pp. 66-74.

Mazzi, C. (2011). Family business and financial performance: Current state of knowledge and future research challenges. Journal of Family Business Strategy, 2(3), 166-181.

Metallo, G., & Gallucci, C. (2013). An in-depth analysis of family effect through family business reputation: asset or liability?. Sinergie rivista di studi e ricerche.

Miller, D., Breton-Miller, L., & Scholnick, B. (2008). Stewardship vs. stagnation: An empirical comparison of small family and non-family businesses. Journal of management studies, 45(1), 51-78.

Monge P.R., Contractor N.S.(2001). Emergence of Communication Networks, in JABLIN F.M., PUTNAM L.L. (eds), Handbook of Organizational Communication, Sage, Thousand Oaks.

Morck, R., & Yeung, B. (2003). Agency problems in large family business groups. Entrepreneurship theory and practice, 27(4), 367-382.

Morgan, M. S. (2012). The world in the model: How economists work and think. Cambridge University Press.

Morris, M., Schindehutte, M., Allen, J. 2005. The entrepreneur's business model: Toward a unified perspective. Journal of Business Research, 58: 726-35.

Mussolino, D., & Calabrò, A. (2014). Paternalistic leadership in family firms: Types and implications for intergenerational succession. Journal of Family Business Strategy, 5(2), 197-210.

Okoroafo, S. C., & Koh, A. (2009). The impact of the marketing activities of family owned businesses. International Journal of Business and Management, 4(10), 3.

Orth, U. R., & Green, M. T. (2009). Consumer loyalty to family versus non-family business: The roles of store image, trust and satisfaction. Journal of Retailing and Consumer Services, 16(4), 248-259.

Osterwalder, A. (2004). The business model ontology. A proposition in a design science approach. Dissertation 173, University of Lausanne, Switzerland.

Osterwalder, A., & Pigneur, Y. (2002). An eBusiness model ontology for modeling eBusiness. BLED 2002 Proceedings, 2.

Osterwalder, A., & Pigneur, Y. (2010). Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.

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 16 (1), pp. 1–25.

Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. Organization science, 1(3), 267-292.

Pinfield, L. T. (1986). A field evaluation of perspectives on organizational decision making. Administrative science quarterly, 365-388.

Pohle, G., & Chapman, M. (2006). IBM's global CEO report 2006: business model innovation matters. Strategy & Leadership, 34(5), 34-40.

Porter, M. E. (1985). Competitive advantage: creating and sustaining superior performance. New York, NY: The Free Press.

Pounder, P. (2015). Family business insights: an overview of the literature. Journal of Family Business Management, 5(1), 116-127.

Pukall, T. J., & Calabrò, A. (2014). The internationalization of family firms: A critical review and integrative model. Family Business Review, 27(2), 103-125.

Putnam, H. (1991). Representation and reality. MIT press.

Querubin, C. (2011, September). Dialogue: Creating shared meaning and other benefits for business. In Proceedings of the 55th Annual Meeting of the ISSS-2011, Hull, UK (Vol. 55, No. 1).

Roehling, M. V., Boswell, W. R., Caligiuri, P., Feldman, D., Graham, M. E., Guthrie, J. P., ... & Tansky, J. W. (2005). The future of HR management: Research needs and directions. Human Resource Management, 44(2), 207-216.

Romano, C. A., Tanewski, G. A., & Smyrnios, K. X. (2001). Capital structure decision making: A model for family business. Journal of business venturing, 16(3), 285-310.

Rust, R. T., & Zahorik, A. J. (1993). Customer satisfaction, customer retention, and market share. Journal of retailing, 69(2), 193-215.

Schein, E. H. (1993). On dialogue, culture, and organizational learning. Organizational dynamics, 22(2), 40-51.

Schilling, M. A. (2000). Toward a general modular systems theory and its application to interfirm product modularity. Academy of management review, 25(2), 312-334.

Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. Organization science, 12(2), 99-116.

Sharma, P. (2004). An overview of the field of family business studies: Current status and directions for the future. Family business review, 17(1), 1-36.

Sharma, P., Christman, J. J., & Chua, J. H. (1997). Strategic management of the family business: Past research and future challenges. Family Business Review, 10(1), 1-35

Simon, H. A. (1991). The architecture of complexity. In Facets of systems science (pp. 457-476). Springer US.

Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. Journal of marketing, 66(1), 15-37.

Smith, A. (2005). Wealth of nations. University of Chicago Bookstore.

Stathopoulou, A., & Balabanis, G. (2016). The effects of loyalty programs on customer satisfaction, trust, and loyalty toward high-and low-end fashion retailers. Journal of Business Research, 69(12), 5801-5808.

Tàpies, J., & Fernández Moya, M. (2012). Values and longevity in family business: Evidence from a cross-cultural analysis. Journal of Family Business Management, 2(2), 130-146.

Taylor, M. L., & Søndergaard, M. (2017). Unraveling the Mysteries of Case Study Research: A Guide for Business and Management Students. Edward Elgar Publishing.

Timmers, P. (1998). Business models for electronic markets. Electronic markets, 8(2), 3-8.

Tronti, L. (2014). L'idea di cultura in Adriano Olivetti. Valore e attualità di un'esperienza intellettuale e imprenditoriale. Economia & lavoro, 48(2), 171-190.

Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. Academy of management Journal, 41(4), 464-476.

Uhlaner, L. M. (2006). Business family as a team: Underlying force for sustained competitive advantage. Handbook of research on family business, 125, 144.

Van der Vegt, G. S., & Janssen, O. (2003). Joint impact of interdependence and group diversity on innovation. Journal of management, 29(5), 729-751.

Voelpel, S. C., Leibold, M., & Tekie, E. B. (2004). The wheel of business model reinvention: how to reshape your business model to leapfrog competitors. Journal of change management, 4(3), 259-276.

Wilkes, K. V. (1978). The good man and the good for man in Aristotle's ethics. Mind, 87(348), 553-571.

Williamson, O. E. (1987). Transaction cost economics: The comparative contracting perspective. Journal of economic behavior & organization, 8(4), 617-625.

Wirtz, B. W., Pistoia, A., Ullrich, S., & Göttel, V. (2016). Business models: Origin, development and future research perspectives. Long Range Planning, 49(1), 36-54.

Yin, R. (1994*). Case Study Research 2nd Ed.*, Sage, Thousand Oaks, CA.

Yip, G. S. (2004). Using strategy to change your business model. London Business School Review, 15(2), 17-24.

Yu, J., & Cai, X. (2017). The Influence of Intergenerational Succession of Family Business on Its Performance—Taking Enterprise Innovation as a Mediating Variable. American Journal of Industrial and Business Management, 7(06), 798.

Zahra, S. A., Hayton, J. C., & Salvato, C. (2004). Entrepreneurship in family vs. Non-Family firms: A Resource-Based analysis of the effect of organizational culture. Entrepreneurship theory and Practice, 28(4), 363-381.

Zellweger, T. M., Nason, R. S., Nordqvist, M., & Brush, C. G. (2013). Why do family firms strive for nonfinancial goals? An organizational identity perspective. Entrepreneurship Theory and Practice, 37(2), 229-248.

Zott, C., Amit, R. (2008). The fit between product market strategy and business model: Implications for firm performance. Strategic Management Journal, 29, pp. 1-26.

Zott, C., Amit, R, Massa L. (2011). The Business Model: Recent Developments and Future Research. Journal of Management, published on line 2 May 2011, pp.1-25.

FINAL CONSIDERATIONS

From the studies carried out I have noticed how the business modeling process and especially the business model as a tool represent an excellent “business navigator” to analyze different business phenomena under the same theoretical umbrella.

The business modeling and, in particular, the use of the business model canvas with its ontological and holistic vision, allows me to share complex concepts in a simple way and to create a universal language that is understandable to everyone. Therefore, this work contributes to expanding the literature of the business model.

In particular, in the first chapter starting from the study of the evolution of the concept of sustainability, and from the research about existing literature, I have identified some limitations of the traditional business model. Even if the authors speak about “sustainable business model”, only the economic dimension is considered without referring to environmental and social aspects. Consequently, the first contribution of this article is to provide a new definition of the business model that is not different from previous ones, but extended in order to include the new concept of competitiveness. The second contribution is to provide a practical tool, that is the “business sustainability canvas”, which represents a new way of organizing and acting business.

In the second chapter I have considered the interaction between internal and external knowledge in order to implement an open innovation process. In particular, I use knowledge management theory in order to describe an integrative perspective on managing a firm’s knowledge in open innovation processes. Furthermore, I have proposed a knowledge management tool because it is needed to enhance knowledge absorption capabilities. It is a good way for both, the management of the ever-increasing knowledge and the creation of knowledge relations. I have demonstrated that the business model canvas is a valuable tool in order to facilitate dialogue between community members and allows better management of the innovation process.

In the third chapter I have decided to shift the observation focus from the family business to the business family in order to understand whether various phenomena within family business management, family firms, family companies, and family enterprises can be analyzed under different lenses. I have elaborated a theoretical model, the "business family model canvas" useful in order to describe and, above all, to anticipate family behavior trends in business management.

This tool indeed, allows analyzing the whole family business phenomena in both an interpretative and in a predictive way. In addition to being a highly conceptual and scientific tool, it can be used by managers and consultants to improve the management of family businesses.

In order to test the model, a qualitative research was carried out using the case study approach: three Sicilian business families were selected. This test confirms the elements of the theoretical model and gives a positive answer to the research question.

To sum up, my research activities and consequently my dissertation is focused on the concept of the business model, looking at a wide range of both theoretical and practical issues. In this study I have explored the usefulness of the concept of the business model to explain some important business topics related to the management of firms to be applied to various business phenomena which are relevant to firms, organizations and people.