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**BUSINESS MODEL INNOVATION
IN SMALL COMPANIES:
THE CASE OF DESIGN ITALIAN SHOES.**

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Introduction

The interest toward the topic of the business model and business model innovation has increased since the 1990s, starting the diffusion of academic publications, books and articles. Moreover, the latest happenings in the economic environment (e.g. globalization, technology evolution and market internationalization) strongly contributed to shed a light on more and more competitive business models for firms. Hence, this work is intended to analyze business model and business model innovation, since these topics belong to a recent stream of literature about which many academics still do not agree with each other, therefore implying still a lot to be studied and discovered. Moreover, most of the material available until now predominantly regards large firms and corporations, while little has been done for small and medium enterprises.

The aim of this research is to provide a complete framework on business model and discuss the potentialities that business model innovation could bring to modern small businesses. By doing so, it explores the motivations and the critical conditions that lead a firm to a (r)evolution of the business model and how these changes are interconnected among them. In particular, the study focuses on small and medium enterprises, with a specific emphasis on how they deal with business model innovation practices in order to compensate their limited size and scarcity of resources.

This analysis has been supported by a practical case: the one concerning an Italian micro-enterprise, Design Italian Shoes (DIS). For this reason, it has been conducted a qualitative research, making use of a series of in-depth interviews in order to examine the evolutions occurred to DIS' business model.

The work has been structured in four chapters: the first one analyses the business model theory and the various definitions and core components retrieved from the academic literature. Moreover, it discusses its relationship with the firm's strategy in order to achieve a sustainable competitive advantage, supported by strategical tools like the Business Model Canvas.

The second chapter highlights the evolutionary nature of the business model and examines external and internal drivers of BMI, analyzing their influence and relationship with the firm's organizational capabilities to engage in BMI practices. After a brief excursus on European SMEs, the third chapter presents the core topic of this research, that is business model innovation applied in the context of small-sized firms: it is analyzed how they can remain competitive under the condition of resource scarcity and how their informal and flexible structure better fits the practices of BMI, compared to large enterprises. Moreover, it reports those SMEs-specific external and internal drivers that foster business model innovation, together with those skills, such as absorptive capacity and knowledge management, that support managers in their innovation processes.

In conclusion, the fourth chapter introduces the subject of this case study, Design Italian Shoes, going through the whole life of the firm. Indeed, it analyzes each evolution experienced by the firm's business model, putting an accent on the main motivations and drivers leading the change.

This work made possible to have an insight on how small and medium enterprises approach business model innovation and its main results will be explained in detail in the conclusions.

Chapter One: The business model theory

The business model is a complex concept considered to be a frame of reference for a company. However, it is a widely disputed issue that still has not found a definition to which scholars agree to this time. Clearly, this is motivated by the fact that there is nothing like a stereotyped manual of instructions with which companies can develop a standardized business model, otherwise there would not be so much interest into the business model field.

It is worth mentioning immediately that it does not coincide with the strategy of the enterprise, however it is a tool through which the strategy can be effectively implemented. Nonetheless, the discover and the understanding of the business model is fundamental to gain specific knowledge regards the value creation process and structure of a company.

1.1. The origins of the business model

The concept of business model is quite old since it had its first mentions in studies dating back to 1957 from Clark and Bellman in which the term is used just once: “And many more problems arise to plague us in the construction of these business models than ever confronted an engineer” (p. 474).

The concept remained unused for several years until the 1990s, when more relevant researches started appearing in the managerial literature, as scholars linked the notion to a firm’s key business process. Since that moment the attention to the issue

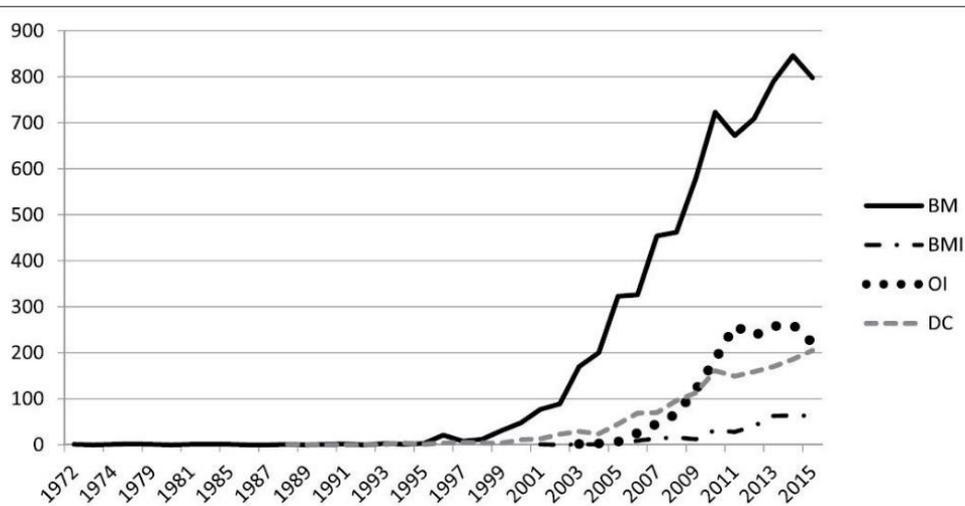
promoted the publication of books and articles in business and management journals. Thereafter, during the last 20 years, the word “business model” has been quite inflated by scholars and managers; however, still, its meaning has not found a shared consensus in theory and practice among the business community.

The diffusion of the term was mainly due to changes happened in the business sector, in which new information and communication technologies and particularly Internet triggered the spread of the issue.

At those times, the business model issue was considered mainly a tool to deliver complex business ideas to potential investors; while in the last years it has experienced an upgrade growing up to be an instrument for systemic analysis, planning, communication of the design and implementation of organizational units and a strategic asset for competitive advantage and firm performance (Geissdoerfer, Vladimirova and Evans, 2018).

According to Ghaziani and Ventresca (2005), the BM terminology had been used in various contexts from the business planning and strategy to the organizational design and globalization, and it circulated among various communities from marketing to management, banking and ICT.

Figure 1.1: Use in the scholarly literature of some key, related macroconstructs



Source: Foss and Saebi (2016)

Figure 1.1 reports the great expansion of the BM literature over the last years starting exactly from the end of the 20th century and peaking during the first two decades of the 21st one: the Scopus database, from which data has been retrieved, included 7,391 publications on the topic of “business model” over the period 1980–2015.

Comparing it with the related dynamic capabilities literature that emerged at about the same time, it is possible to observe that it spread even faster.

Furthermore, since the last decade, the graph shows an increasing trend for the business model innovation (BMI) topic, which is a recent branch of the business model literature, which will be widely analyzed in the second chapter.

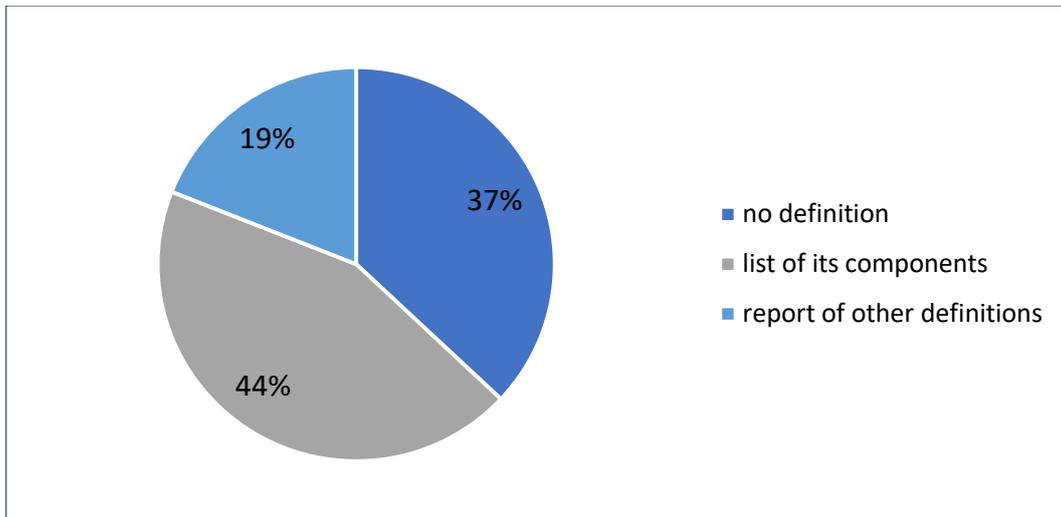
Moreover, interestingly, looking closer at the trend it is possible to observe a change in focus: in fact, there has been an increasing interest switching from the business model for internet-based companies to business models for all kind of businesses from brick-and-mortar companies to industries or airlines (DaSilva and Trkman, 2014).

There have been several factors influencing the raise of interest in business models: globalization and the rising power of Internet in organizations and everyday life; innovative technologies and the growth of emerging markets. Moreover, the topic affected both scholars and companies: in fact, due to globalization and the internationalization of foreign firms, entrepreneurs have witnessed a huge change in competition during the last years. As it will be explained later in chapter 1.5.1, the implementation of an efficient and innovative business model proved to be an element of competitive advantage against competitors.

1.2. The definition of business model

Basing on the research from Zott, Amit and Massa (2011), the chart 1.2 provides the data examined from 103 business model publications: it is interesting to highlight that 37% of them do not provide a definition (taking it for granted); 44% describes it by enlisting its components and functions; while the remaining 19% report the studies and definition of other scholars.

Figure 1.2: Distribution of business model definition among the literature



Source: Zott, Amit and Massa (2011)

Most of the definitions provided on sectoral studies do not coincide: the majority just partially overlap. This lack of definitional consistency creates great confusion on the matter and prevent a cumulative research progress on the issue.

In addition, none of the definitions provided by the scholars appear to be fully accepted: probably, it may be due to the fact that there are many different streams of thought and lenses analyzing the matter. In fact, the business model has been researched in the e-business, in the strategy, technology and information systems fields. Consequently, this ended up with an “identity crisis” of the business model (Shafer, Smith and Linder, 2005).

Apparently, the term “business model” seems to include everything from strategy to economic model and revenue model (DaSilva and Trkman, 2014).

Indeed, the business model has been defined as a description (Applegate, 2000; Weill and Vitale, 2001), a statement (Stewart and Zhao, 2000), an architecture (Dubosson-Torbay, Osterwalder and Pigneur, 2002; Timmers, 1998), a conceptual tool or model (Osterwalder, 2004; Osterwalder, Pigneur and Tucci, 2005; Teece, 2010), a representation (Morris, Schindehutte and Allen, 2005; Shafer, Smith and Linder, 2005), a structural template (Amit and Zott, 2001), a pattern (Brousseau and Penard, 2006), a method (Afuah and Tucci, 2001), a framework (Afuah, 2004), and as a set (Seelos and Mair, 2007).

The table below highlights the main relevant contributes to the business model literature from 2011 to 2017, providing the definitions developed by the most prominent scholars in chronological order:

Table 1.1: Selected business model definitions

Author, Year	Definition
Amit, Zott, 2001	“A business model is the architectural configuration of the components of transactions designed to exploit business opportunities” (pag. 493)
Magretta, 2002	“A system, how the pieces of a business fit together” (pag. 6)

Johnson, Christensen, Kagermann, 2008	Business models “consist of four interlocking elements, that, taken together, create and deliver value” (p. 52). These are customer value proposition, profit formula, key resources, and key processes.
Zott, Amit, 2010	“We conceptualize a firm's business model as a system of interdependent activities that transcends the focal firm and spans its boundaries.” (p. 216).
Teece, 2010	“A business model articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value” (p. 179).
Demil, Lecocq, 2010	“The business model concept generally refers to the articulation between different areas of a firm's activity designed to produce a proposition of value to customers. Two different uses of the term can be noted. The first is the static approach - as a blueprint for the coherence between core business model components. The second refers to a more transformational approach, using the concept as a tool to address change and innovation in the organization, or in the model itself.” (p. 227)
Osterwalder, Pigneur, 2010	“A business model describes the rationale of how an organization creates, delivers, and captures value” (p. 14)
Casadesus-Masanell, Ricart, 2010	“A business model is [...] a reflection of the firm's realized strategy” (p. 195).
Foss, Saebi, Lien, 2016	“The firm’s value proposition and market segments, the structure of the value chain required for realizing the value proposition, the

	mechanisms of value capture that the firm deploys, and how these elements are linked together in an architecture.” (p. 567)
Massa et al., 2017	“A business model is a description of an organisation and how that organisation functions in achieving its goals (e.g., profitability, growth, social impact, ...).” (p. 73)

Source: author’s processing

A business model defines how the company creates value for customers while creating value for itself at the same time. The organization needs to reflect on why the business model could be useful and how to take advantage of it. Also, it should consider who is the customer and what they consider as valuable. Ultimately, the manager must reason on how to deliver such value at an appropriate cost, in such a way that the revenues meet the expectation of the stakeholders (Magretta, 2002). Answering correctly to these questions can be the key to a great success for a company.

1.3. The dynamic and transformational approach to the business model

In their work “Business model evolution: in search of dynamic consistency” (2010), Demil and Lecoq gave an interesting and dynamic insight on the business model theme. The aim is to fill the gap between two distinct approaches: the static and the transformational approach. They argument that these two points of view can be seen

as complementary rather than opposites: in fact, despite having two different objectives and several weaknesses, their union provides a clearer and stronger BM. The static approach identifies the business model as the combination of the diverse activities that the firms performs, whose interaction and functioning mechanisms allow the creation value. Moreover, they highlight the necessity of coherence between the base components of the BM.

In particular, this approach enables the firm to analyze the positive relationship between the business model and the firm performance, a research field that was also covered by several authors, among which Afuah and Tucci (2001) and Zott and Amit (2007).

The approach just mentioned provides an analytic and interesting point of view, however it is not exhaustive for what concerns the evolution to which a business model can be subjected over time. In opposition, the transformational approach is more dynamic and tries to understand the mechanisms through which a business model evolves. The name “transformational” is due to the fact that in this view the BM performs the function of addressing change and innovation both in the organization and in the business model. This approach deals and answers the managerial issues on how to handle the business model (Demil and Lecoq, 2010).

1.4. Functions and components of a business model

As mentioned in Figure 1.2 above, 44% of the papers reviewed by Amit, Zott and Massa did not provide a definition of a business model, but just a list of its functions and components.

According to Chesbrough (2007), a business model performs two fundamental functions: value creation and value capture. In the first case, it creates value through defining a series of activities (for instance, procuring raw materials or satisfying the customer). Creating net value is fundamental, otherwise no other company involved in the set of activities would participate. Secondly, the value capture consists in catching value for the firm from those activities, which is crucial since actions can't be sustained if there is no profit gained from them.

Moreover, following the reasoning of Chesbrough and Rosenbloom, the business model fulfils other main critical functions such as:

- It defines the value proposition;
- It identifies the market segment to which the offer is addressed and articulates the mechanism through which revenues are made and the firm will be paid;
- It structures the value chain required to create and distribute the offer
- It gives an estimate on the potential costs and profits;

- It locates the firm's position inside the network of suppliers, customers and competitors in which it is involved;
- It formulates the competitive strategy that will attribute a competitive advantage to the firm with respect to rivals.

Furthermore, according to the definition cited before provided by Johnson, Christensen and Kagermann, the business model is composed of four interlocking elements whose combined action creates and captures value: the customer value proposition (CVP), the profit formula, key resources and key processes. The first two blocks represent the value created for the customer, while the last two explain how the value will be shared both between the client and the company.

The aim of a CVP is to create value for the final customer: it firstly targets the customer and finds a solution for a latent problem or need by developing an offering which satisfies it. Surely, the success of a CVP it is determined both by the product itself and both by the way in which it is sold.

Since the CVP is a value-creating mechanism addressed to final customers only, the profit formula reports how the company creates value for itself. It includes the revenue model, cost structure, margin model and resource velocity. In addition to this, the business model takes into account also key resources and processes: the former encompasses those fundamental elements such as people,

technology, products, facilities and channels needed to deliver the offer to customers and create value for the firm; the latter refers to those operational and managerial mechanisms (like training, development, planning, budgeting, sales etc...) that deliver such value in order to increase in scale.

Finally, to be successful, the firm should keep in mind that these four blocks are interdependent among them: it means that each change in a feature will affect also all the other components linked to it.

In addition to this, according to Demil and Lecoq, a BM includes three core components, among which each of them involves different elements:

- Resources and competences: the former can be external or internal to the organization, physical or human; while the latter (referring to the knowledge and skills developed by the people constituting the structure) are developed to improve the performance of the firm. There are infinite potential combinations of services that a firm's bundle of resources and capabilities can create, generating a competitive advantage based on differentiation: then, it is up to the management's capacity of generating value from their use giving birth to more or less innovative sources of profit.
- Organizational structure: it regards the activities that the firms install with the network of other organizations.

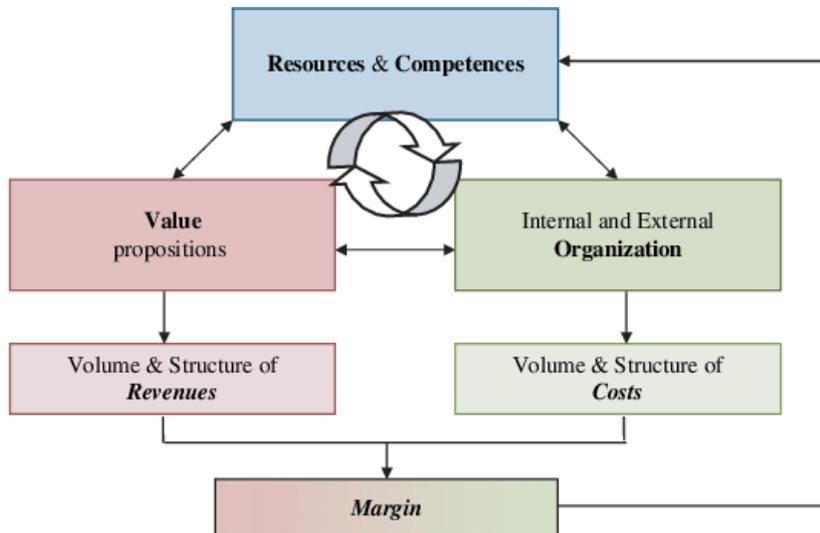
- Value propositions, which is basically the product or service offered by the firm that creates value to the customer.

According to this theory, the growth of the firm depends on the interaction among these three components that together constitute the RCOV framework.

1.4.1. The RCOV framework

The RCOV framework is a tool to overcome the use of the business model in a static or in dynamic approach only: their union allows the firm to have a clear and complete vision of the business model as a whole.

Figure 1.3: The RCOV Framework: Business Model components and their relationship



Source: Demil and Lecoq, (2010)

In particular, as showed in figure 1.3, the business model is as a combination and interaction of resources and competences (RC), the organization (O) and the value proposition (V).

Penrose states that the interaction between these three core components determines the volume of costs and revenues of a business, thus its growth and sustainability over time. In fact, the framework highlights changes in the implementation of the business model in relation to the performance of the firm: the business model helps the organization increase its performance when its core components are perfectly integrated among them.

Moreover, the business model experiences a constant evolution due to several factors: for instance, changes can happen internally at a cost or profit level, but they can also concern external environmental alterations at a political, fiscal or natural level.

In the case of change in the business model, a sustainable performance is possible only when managers are able to foresee and anticipate change to adapt the business model in a context in continuous evolution: this ability is also called “dynamic consistency” (Demil and Lecoq, 2010).

In order to proactively control these kinds of mutations it is necessary for managers, together with the whole organization, to use the RCOV framework tool to monitor risks and uncertain scenarios in order to anticipate potential

threats in such a way that there could be coherence between the business model and the firm's objectives.

1.5. Business model and strategy: differences and similarities

It has become necessary for firms to protect the competitive advantage deriving from the design of innovative business model: in this respect, it is important to couple the business strategy and the business model analysis.

Having already widely discussed the meaning and numerous definitions of the business model, it is necessary to properly introduce the strategy.

In 2002 Porter defined the strategy as “how all the elements of what a firm does, fit together”, which seems to be very similar to the definition already mentioned above provided by Magretta in the same year: “a system, how the pieces of a business fit together”.

Indeed, the strategy generally sets the base for how the company will handle the competition through achieving superior performance thanks to unique and different sources of advantage. However, along with the strategy, the business model can be a tool to achieve a competitive advantage that is different from the market strategy.

Even though the terms business model and strategy are interchangeably used among people today, they are clearly two different aspects in the organization: the business model represents a tool that supports the competitive analysis and improve the

strategic thinking of the management, but clearly it can't be a substitute of a strategy (Shafer, Smith and Linder, 2005).

There are firms that, despite pursuing similar market strategies for the same customer target, build different business models: the two concepts are complementary, not substitutes (Zott and Amit, 2008) since the BM lacks in the capacity of dealing with competition (which is competitive strategy's job).

In fact, the strategic analysis makes it possible to select a specific business model (together with other strategic assets like the market segmentation and others) and sometimes to dismiss an old one to embrace a new one that keeps (or at least maintains) the firm's competitive advantage (Teece D., 2018).

Overall, the main differences observed by the scholars consists in:

- General concept: while the business model moves around the value proposition and the customer-centered value creation, the literature does not associate these issues with the strategy research stream (Chesbrough and Rosenbloom, 2002; Amit and Zott, 2001)
- Focus: while the product-market strategy is mainly centered to handle the competition by differentiation schemes and competitive advantage objectives, the business model emphasizes sustainable value creation and cooperation.

The substantial difference among the two emerges when there is an unexpected event in which the strategic plan requires a change in the business model: for instance, it could be an entrant competitor or a crisis. In that case the strategy formulates a contingent plan that states which kind of business model responds better to the upcoming event.

Since the beginning of the business model popularity across the business community, lots of scholars have debated over the relationship between strategy and BM. Among them, in 2010 Casadesus-Masanell and Ricart have published a paper on The Long Range Planning dealing with this specific issue. In the article, the strategy has been defined as a “plan of action”, whose goal is to reach a specific objective. By doing this, the choices made by the management cover a crucial role since they must consider the changing dynamics in the competitive scenario and determine the positioning of the company inside the market. Finally, strategic decisions also have implications in the business model.

Every organization develops a sort of business model, but not all of them successfully implement a strategy (an action plan responding to the several potential consequences or scenarios). A business model can be considered a direct result of a strategy, but not a strategy itself: in fact, the strategy reflects the future objectives set for the company, while the business model is a reflection of its realized strategy at a given moment (Casadeus, Masanell, Ricart, 2010).

However, despite the conceptual differences listed above, in the last years scholars have agreed on the fact that the business model can cover a fundamental role in determining the strategy: in fact, it links the strategy formulation and implementation by explaining how the various components and processes of a firm cooperates together to perform its strategy (Zott et al., 2011). Indeed, there should be a coherence between the various elements of a strategy itself, but also between the firm's business model and business strategy.

1.5.1. How to achieve a sustainable competitive advantage

Even though over the past decades strategy has been the primary defensive weapon against the competition, it is well-founded to state that in the foreseeable future “the quest for sustainable advantage may well begin with the business model” (Casadesus-Masanell and Ricart, 2011).

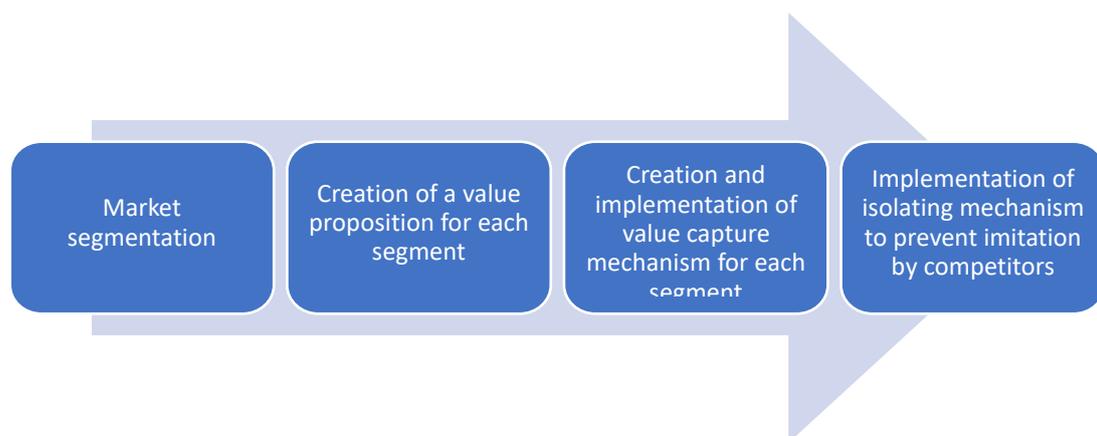
As Teece stated in his paper “Business Models, Business Strategy and Innovation” published in 2010 on the Long Range Planning, strategy analysis puts filters that lead to the construction of a competitively sustainable business model.

Business models can be structured using different dimension or shapes; however, they will be always characterized by a common denominator: their generality. As a consequence, it becomes difficult for the firm to protect its business model from the imitation of the competition.

The presence of a differentiated and unique (thus difficult to replicate) architecture of business model is fundamental to reach a competitive advantage in the market. The key aspect in the designing of a business model is to understand how to offer value and capture it at the same time.

Figure 1.4 below contextualizes the role of the strategy analysis in the construction of a sustainable business model: when paring competitive strategy ad business model design, the essential steps are to first segment the market basing on the needs perceived by the customer; then, to create a value proposition for each segment in order to fulfil those expectations and subsequently to plan an mechanism to deliver that value. In the end, it is fundamental to figure out “isolating mechanisms” that prevent and block the imitation by the firm’s rivals.

Figure 1.4: Steps to a competitive sustainable business mode



Source: Teece (2010)

Business models might seem easy to replicate since they are seldom subject of a legal protection (like copyrights): in particular, most of the times new business models do not qualify for a patent. Nevertheless, there are three main factors that help prevent the imitation of a business model:

- Competitors may be discouraged by the difficulty to replicate systems, processes and assets: for instance, a lack in professional competences or, in addition, huge investments can't be sustained by smaller rivals that enter a market facing bigger competition.
- According to Rumelt, there may be an “uncertain imitability” characterizing the business model: it means that competitors are not able to have an in-depth understanding on how the business model is built and what are the elements that grant its effectiveness towards the market.
- In the case in which it is easy to imitate someone's BM, new entrants can be discouraged to steal market shares from already existing firms in order not to upset them or even to prevent a missed response by the customers (Teece, 2010).

During their lives, firms do experiment, refine, improve and reshape their business models that must not be neither too general nor too specific. There is nothing like a standard winning version of the business model: it is by mixing the components

(technologies, resources, capabilities, products and so on) and creating a synergy among them that a firm develops the proper and optimal BM that fits the organization. Unluckily, not every management has the capacity and the ability to objectively analyze and understand the current stage of the business model and react accordingly.

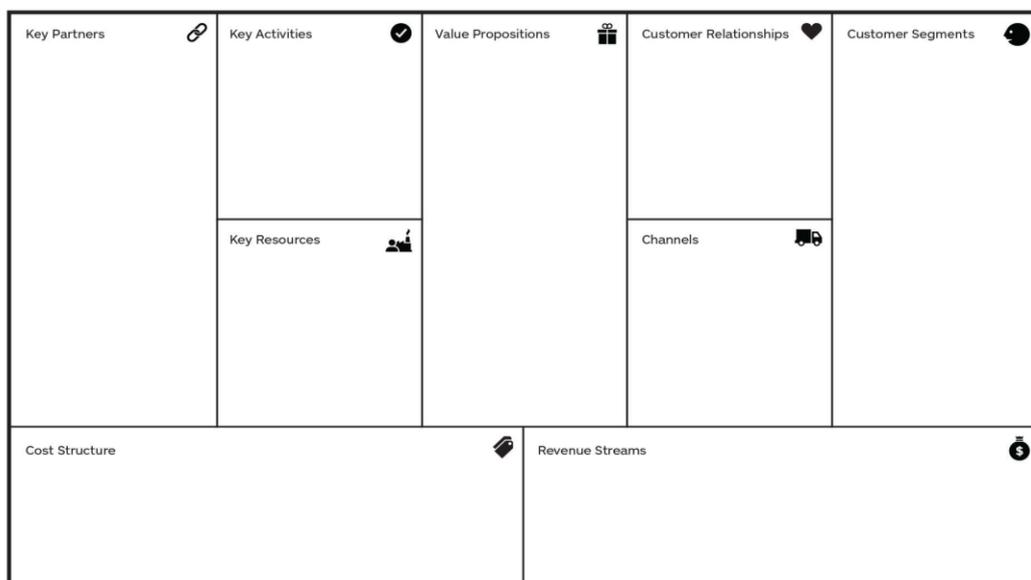
1.6. The Business Model Canvas

As mentioned above, in 2010 in the bestseller book “Business Model Generation” Osterwalder and Pigneur defined the BM as “the rationale of how an organization creates, delivers, and captures value”. In the same book, the authors firstly introduced a new and revolutionary way to represent a business model: the business model canvas (BMC), which is now used both scholarly and professionally at an international level. Their focus was to create a simple and relevant concept without oversimplifying the complexities that might be hidden behind the functioning of enterprises.

The result was a strategic tool that supports managers and entrepreneurs in the designing and innovation of the firm’s business model. It uses the visual language to represent the way in which a company creates, distributes and captures value: thanks to its graphical features it allows people to have the whole business model at sight.

On a practical level, the canvas (figure 1.5) is a big printed sheet divided into nine blocks (one for each basic element of the BM) that include the three main areas of a business: the customers, the value proposition and the financial asset.

Figure 1.5: Business Model Canvas



Source: Osterwalder, Pigneur, Clark and Smith (2010)

Observing figure 1.5, on the right there are those BM elements that contributes to the value creation., while on the left those linked to the efficiency of the firm. In the middle the value proposition connects to itself the other components.

Before dealing in depth with these nine blocks, it is worth mentioning the benefits found by those firms implementing the BMC:

- Easiness of use and immediacy due to the visual thinking
- Creativity and flexibility enhancement
- Acceleration of problem-solving processes
- Universal language that is understandable to all the roles covered in the firm
- Facilitation of the development of alternative business hypothesis

At this point, it is appropriate to analyze the nine blocks constituting the business model canvas:

1. **Customer Segments.** These segments include different groups of people to which the firm wants to deliver value: they represent the core of any business model. Through the customer segmentation process, the company divides them in clusters basing on common needs, behaviors or different channels used to reach them. Moreover, it is crucial for the firm to distinguish from those to target and those to ignore. In particular, according to the authors, there can be different types of customer segments:
 - In the mass market the offer is quite standard and little diversified since customers have similar needs and problems.
 - Niche markets regards very specific customer segments that requires a tailor-made value proposition, channels and customer relationship.
 - In the segmented market it is required a certain degree of differentiation for different clusters with slightly different needs and problems.

- The diversified market considers segments that are not linked among them since clients at their inside that have totally different needs.
 - Multi-sided platforms include two or more interdependent customer segments.
2. **Value proposition.** It includes the bundle of products and services that satisfies the needs of a specific customer segment, thus creating value and benefit for them: it is the reason why customers decide to choose a company instead of another. The value created can be translated through a qualitative or quantitative offer: the former may regard the design or the customer experience, while the latter refer to features like price or speed of service. In this respect, the book¹ lists a series of characteristics that contributes to the create value:
- Introduction of a whole new set of needs that the customer did not realize to have.
 - Improvement or customization of the product or service performance.
 - Superior design (especially in fashion and electronics industries).
 - Development and improvement of the brand image to create status benefits for the customer.

¹ Osterwalder, A., Pigneur, Y., In Clark, T., & Smith, A. (2010). Business model generation: A handbook for visionaries, game changers, and challengers.

- Lowering the prices while maintaining a similar value to attract the price-sensitive segment.
 - Risk reduction for the customers through warranties.
 - Offering accessibility to that share of customers that previously did not have access to the product or service.
 - Improving convenience and easiness of use of a product.
3. **Channels.** They represent the touch point between companies and customers: thanks to them, firms engage with their segments and build the customer experience. They can be both direct (in this case the company owns the channels and has both more costs and higher profits) or indirect (when the property belongs to the firm's partners and requires less costs, but lower margins). Among their main functions, channels deliver the value proposition and help customers evaluate the firm's CVP; moreover, they raise the brand awareness and provide post-purchase customer support.
4. **Customer relationship.** It represents the way in which companies build and retain customer loyalty aiming to the creation of a community linked to the brand. Clearly, each segment requires a different kind of relationship basing on the firm's need to raise or maintain the customer quantity or increase sales. In addition, the company can decide whether to focus on personal assistance, self-service, automated service, the community or co-creation.

The key is to create awareness and equilibrium between the business model and the different kind of relationships.

5. **Revenue streams.** Having generated value for the customers, they, in turn, generate value for the firm. Clearly, costs must be subtracted to the revenues to obtain the actual earnings. Each revenue stream can be characterized by different pricing mechanisms (such as fixed or dynamic) and different terms of payment (one-time or recurring payments). Moreover, revenues can be produced through product sales, usage fee, subscription fees, lending or leasing, licensing, brokerage fees or advertising.
6. **Key resources.** They are the fundamental strategic asset of an enterprise that make the business model work. Resources are categorized in:
 - Physical resources, which include manufacturing facilities, vehicles, machines, distribution networks etc.
 - Financial resources, that ensures the equilibrium between revenues and costs.
 - Intellectual resources, that refers to the know-how owned, patents or copyrights which are fundamental to retain a competitive advantage against the competition.
 - Human resources are the people inside and outside the organization together with their experiences and expertise.

Key resources can change and acquire different roles basing on the context and the activities developed by the firm.

7. **Key activities.** This block works together with the key resources and partnerships to better implement the business model. They change basing on the different type of BMC and are fundamental in order to create a competitive advantage. Activities are classified in production activities (in manufacturing companies), problem-solving (for those firms involved in the service business) and platform/network development (regarding businesses networks based on relationship such as Facebook).
8. **Key partnerships.** Lately, the interaction between the inside and the outside of the firm has become crucial: in fact, it is this network of suppliers and partners that allow the functioning of the BM, since it allows an optimization due to the acquisition and sharing of knowledge and resources, while sharing risks and uncertainties and increasing economies of scale. There are four different kinds of partnerships: strategic alliances between non-competitors or competitors, joint ventures and buyer-supplier relationships to ensure reliability among suppliers. Lately, these relationships are needed since the competitive scenario has become more and more complex due to rapidly evolving technologies, intangible and hardly imitable assets of rivals etc.

This block, together with the two previously mentioned determines the cost structure that the firm must sustain.

9. **Cost structure.** It regards all the costs that allow the functioning of the BM. Generally, business models can be driven by costs or value: in the first case, the firms should keep prices low (such as low-cost airlines), while on the other side it should deliver a qualitative offer of a perceived higher value (for instance high end fashion brands).

In conclusion, the BMC is one of those indispensable tools to create, distribute and capture value. Thanks to the immediate image of the business logic, it gives the entrepreneur the possibility to identify and correct potential errors.

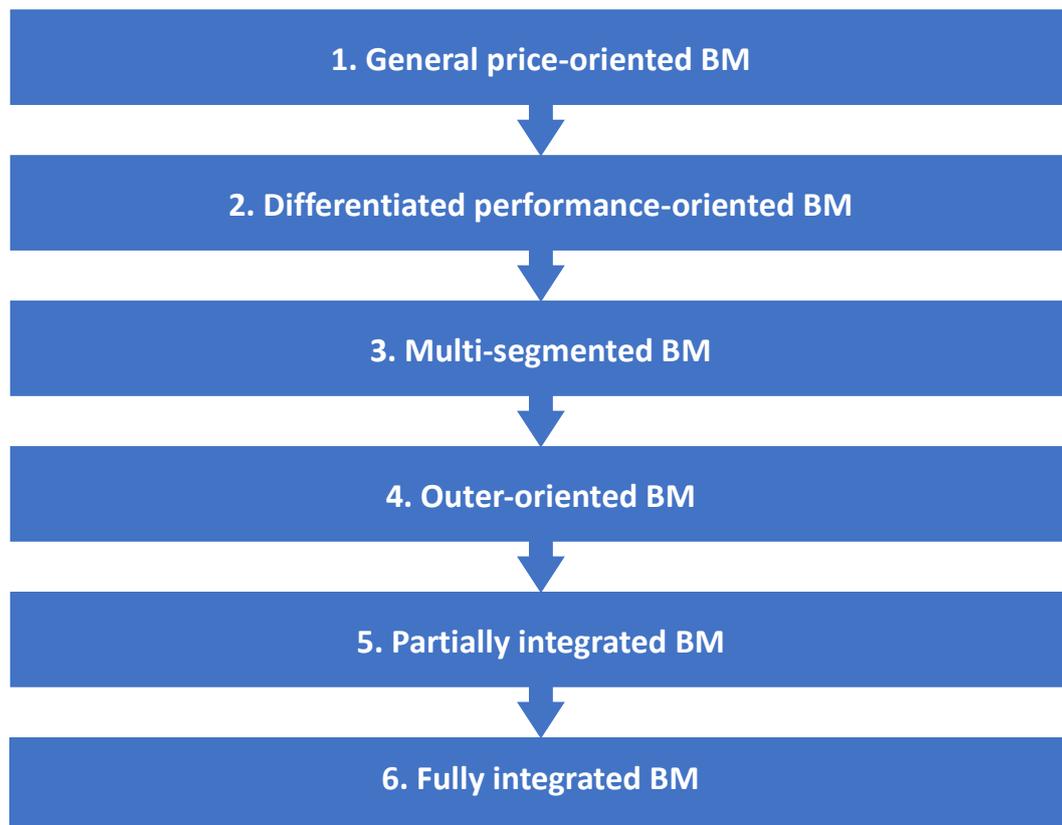
1.7. Understanding your current business model: the business model framework

As mentioned earlier, it is easy to lose objectivity when analyzing your own business model: it is necessary to select the most appropriate one basing on the allocation of resources and investments at disposal, the reference framework and the external environment.

The business model framework (BMF) is a tool developed by Henry Chesbrough in 2007 and published in his paper “Business model innovation: it’s not just about technology anymore”: it classifies business models basing on their structure complexity and advancement from very basic to far advanced models. Moreover, it

helps companies to evaluate their current stage and suggests potential improvement that can be made.

Figure 1.6: The business model framework stages



Source: author's processing based on Chesborough (2007)

There are six stages that characterize the framework:

1. "Type one" business model uses a general model that is similar to many other firms and easy replicable. It is mainly targeted to customers that base their purchases on price and availability.

2. “Type two” company has introduced a certain degree of differentiation in its product or services. This allows the firm to focus on a different market segment which is more oriented on performance rather than just on price. However, this kind of firm often lack the resources to sustain innovation processes and differentiation over time.
3. “Type three” company implements a segmented business model that allows to serve more segments at the same time: from the price sensitive to the performance-oriented one or diverse market niches In this way, it possible extract more profit from the market and improve a more differentiated and effective BM; however it remains vulnerable to innovation and shifts coming from the outside.
4. “Type four” business model is more projected towards the external environment: in fact, it takes into account relationships with outsiders (suppliers and customers) that reduce costs and share the risks with external parties.
5. “Type five” business model is integrated with the firm’s innovation process. Suppliers and customer have institutional access to the company’s innovation mechanism and vice-versa. Moreover, resources are spent to have an in-depth insight on the supply chain and on the customer’s customer to gain knowledge about potential opportunities in the market.

6. Finally, “type six” business model is an open and adaptive platform that commits into BM experimentation. At this stage there is a complete integration of business model throughout the whole value chain: firms, suppliers and customer become partners, sharing both technical and business risks. The technology of the firm is the basis for the innovation platform that pulls investments from other companies.

This tool is useful to objectively observe the current status of a firm’s business model and suggests how to project it to a future stage.

Clearly, reaching the last two stages means having a profitable and unique BM that can be hardly attacked by the competition; however, managers should keep in mind that no business model is everlasting: over time, costs are going to rise, markets will get saturated and failure can reach anyone that do not keep up with the pace. Therefore, business model sustainability and innovation become the key words for everyone wanting to remain in activity.

CHAPTER TWO: Business Model Innovation

2.1. What does innovation mean?

Generally, innovation means exploiting new ideas or changing an existing status to generate something new.

Joseph Schumpeter (1882-1950) is considered one of the most relevant economists that dealt with the theory of economic development with a particular focus on the crucial role played by innovation and its influencing factors. In 1934 he defined innovation (or “development”, as he called it at that time) as “new combinations” of new or existing knowledge, resources, equipment, and other factors. Moreover, in contrast with the passive neoclassical view of economics, he introduced the concept of innovation as “a source of energy within the economic system which would of itself disrupt any equilibrium that might be attained” (Schumpeter 1937/1989).

It is useful to distinguish between the notion of invention and innovation, in fact, an invention does not necessarily lead to an innovation. According to Freeman (1987), an invention is an idea or a sketch for “a new or improved device, product, process or system”, while an innovation is the first commercialization of the idea and it is “accomplished only with the first commercial transaction involving the new product, process, system or device”.

Generally, inventions can be developed anywhere (for instance centers of research or universities) without any intent of commercialization, while innovations mainly occur into commercial firms: the ability to transform an invention into an innovation relies in the capabilities, skills, resources and knowledge of a firm.

The combination of these activities (or “the entrepreneurial function”) are carried out by the entrepreneur, which is considered by the author the key to innovation and long-run economic change.

Schumpeter clustered innovation into five different types: new products, new methods of production, new sources of supply, exploitation of new markets and new ways to organize business. Nonetheless, the first two gained more attention compared to the others and will be analyzed more in depth in the next chapters. Product innovation regards a new or improved product or service; while process innovation includes taking up new or improved manufacturing and distribution processes (Neely and Hii, 1998). In addition to this, the already mentioned organizational innovation, which can be explained as the effective use of resources, has been found to be important in the successful exploitation of ideas.

Furthermore, three main aspects about innovation had been highlighted:

- The fundamental uncertainty in all innovation projects.
- The necessity to act as a first mover before anybody else.
- The inertia that forces innovation back.

New and quick way to survive in the market are necessary: this includes leadership and vision. However, there is a prevalence of resistance to innovation, especially when firms engage in path dependency mechanisms in which companies get stuck into a particular innovation, while the optimal strategy should be to remain open to different competing solutions. Indeed, the openness to new ideas are fundamental for innovation projects.

Therefore, the core of innovation is ideas: in fact, since the shift from the economics of goods to the economics of ideas, they represent the engine of economic growth. Lately, globalization and pressure deriving from international competition have increased the importance of innovation which has become the key to success in nowadays turbulent competitive scenario, since it guarantees a leadership position in the market and a competitive advantage over other rivals.

Clearly, an accurate and studied strategy is required: firms should elaborate it in such a way that it is coherent with its resources, objectives and capabilities. A common mistake could be to underestimate the planning process and jump directly into an unsustainable project which does not fit with the firm. In fact, the innovation needs to be combined inside the organization with resources and competencies that are able to attribute value to that idea.

2.2. Business Model Innovation

As pointed out in figure 1.1 in chapter one, the issues of business model and business model innovation have become popular in the micromanagement research during the last decades (Spieth, Schneckenberg and Ricart, 2014). In fact, academics agree that firms should go beyond the simple product, service or product innovation and rely more on the entire business model innovation which becomes the core of innovation efforts and investments (Chesbrough, 2007, 2010; Lindgardt et al., 2009).

However, despite the rising level of interest and attention on the business model innovation topic, the issue still represents a “slippery construct to study” (Casadesus-Masanell and Zhu, 2013). The lack of clarity surrounding the phenomenon is mainly due to the fact that, as mentioned in the chapter above, it is a recent literature and there are inconsistencies in the conceptual framework of the business model itself, which belongs both to the innovation management, business strategy and entrepreneurship fields.

Basically, BMI regards the search of new mechanisms of the firm and new ways to create and capture value for customers, suppliers and partners and influence the whole enterprise (Casadesus-Masanell and Zhu, 2013). Therefore, business model change or transformation can be described as the process that allows the intentional and deliberate mutation of intra-organizational and/or extra-organizational

activities and relations of a BM as a consequence of some alteration in the environment (Saebi, 2014).

No clear and agreed definition is available, hence table 2.1 below summarizes in chronological order the most relevant definitions provided by scholars in the last decades:

Table 2.1: Selected definitions of business model innovation

Authors	Definition
Mitchell and Coles (2004)	“By business model innovation, we mean business model replacements that provide product or service offerings to customers and end users that were not previously available. We also refer to the process of developing these novel replacements as business model innovation.”
Santos et al. (2009)	“Business model innovation is a reconfiguration of activities in the existing business model of a firm that is new to the product service market in which the firm competes.”
Amit and Zott (2012)	“Innovate business model by redefining (a) content (adding new activities), (b) structure (linking activities differently), and (c) governance (changing parties that do the activities).”
Bucherer et al. (2012)	“We define business model innovation as a process that deliberately changes the core elements of a firm and its business logic.”
Casadesus-Masanell and Zhu (2013)	“At root, business model innovation refers to the search for new logics of the firm and new ways to create and capture value for its

	stakeholders; it focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers, and partners.”
Cucculelli and Bettinelli (2015)	“We define business model (BM) innovation as the action of modifying the firm’s existing activity system and renewing its core business logic, to enact and exploit opportunities.”
Foss and Saebi (2017)	“Designed, novel, nontrivial changes to the key elements of a firm’s business model and/or the architecture linking these elements.”

Source: author’s processing

As Johnson et al. stated, “one secret to maintaining a thriving business is recognizing when it needs a fundamental change”. In the last two decades the business environment became a breeding ground for disruptive business models: firstly, because of the diffusion of revolutionary technologies like ICT that reshaped how industries work and gave the opportunity to implement innovative business models. Secondly, globalization linked together global and national markets and induced companies to project their business models on a large worldwide scale. Ultimately, developing and emergent markets joined the international ones pushing western multinational to adapt their strategies in the new changed equilibrium. In fact, firms were forced to acknowledge that conventional ways of doing business were not convenient anymore and gave birth to new approaches to achieve

competitive advantage. These new forms of competition disrupted entire industries (for instance the airline and retailing industries) and induced companies to think about the redeployment and usage of existing resources and capabilities to develop new value offerings or forms of value creation (Bucherer, Eisert and Gassmann, 2012).

Business model innovation represents a fundamental asset of an enterprise especially in a turbulent and instable environment: in fact, it helps firms to fight competition and imitation and gain consensus around bold and disrupting moves (Lindgardt et al., 2009).

Indeed, in current times, product or process innovations are insufficient and less challenging, since they are hard to protect (Chesbrough, 2007): in contrast, new business models require consistent effort and resource investment to change different elements at the same time and also to be coherent with the firm's long-term strategy, capabilities and culture. Facing the competition basing a strategy on product quality or large-scale production it is simply not sufficient anymore: companies must invest and focus on new skills, capabilities and alliances that can't be attacked by competition.

Moreover, the multinational corporation IBM conducted a research that reported that, due to the rising difficulty to rely on product or service differentiation, 98% of the CEOs interviewed affirmed that their organization would engage in extensive

(69%) or moderate (29%) BMI within three years (Pohle and Chapman, 2006; Bucherer et al., 2012).

Moreover, according to the study carried out by Zott and Amit in 2007 (and confirmed later in 2015 by the academics Cucculelli and Bettinelli) innovative and novelty-centered BM represent a crucial source of sustained value creation and positively influence the firm performance.

There are times in which firms are able to survive without having to change the current business model: in particular, when the firm is able to satisfy a new customer value proposition with the current profit formula, employing most of the active resources and processes and using the same core metrics, rules and norms. In fact, changes in the BM can be slight: they might not disrupt an entire industry, but still bring advantages to the innovator.

However, on the other side, there are times in which the firms must recognize the impossibility to keep the old BM, especially in unknown market and business model territories. There are specific circumstances in which too many changes to all the elements of the existing model are required and firms must engage in BMI:

- When the firm has the possibility to reach (through the innovation) large market segments of customers with unaddressed needs since existing solutions are too expensive.

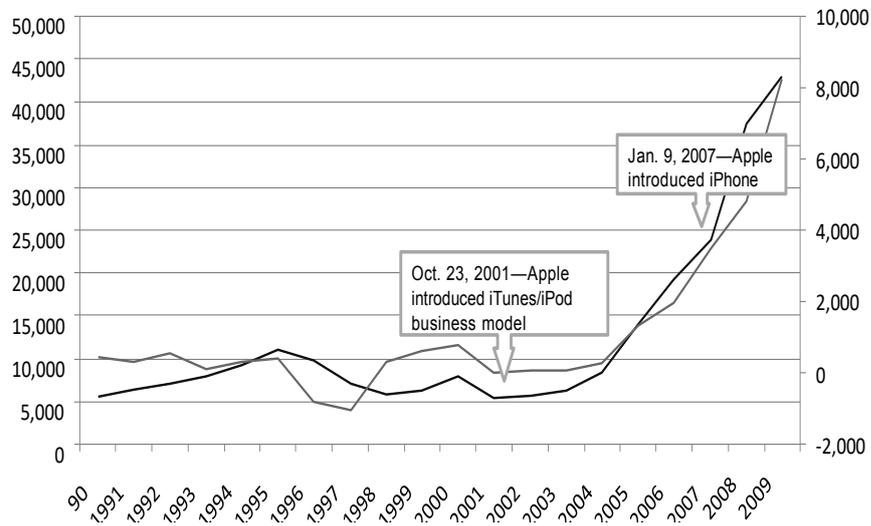
- When the firm has a brand-new technology as a pillar of the new BM or owns a proven technology that can be introduced in a new market.
- When there is an opportunity to bring a job focus to redefine industry profitability in a segment where one does not exist yet.
- When there is necessity to push low-end disrupters back.
- When the firm must react to a shifting basis of competition.

Clearly, companies engaging in such mission must be sure that there are strong resources in order to succeed (Johnson, Christensen and Kagermann, 2008).

For instance, there are huge multinationals that succeeded by introducing an innovative BM: to name a few Apple, Zara, IBM and many others more. In particular, Apple revolutionized the old BM based on hardware production thanks to the creation of the iPod and the relative music distribution activity iTunes. The company went beyond the mere product innovation, offering a new service to the customers while reducing additional costs for the firm.

As figure 2.1 shows, the BM change lead to a significant increase in the stock price of Apple, laying the foundation to the big enterprise it is now.

Figure 2.1: Revenues and Net Income of Apple (Before & After Business Model Change)



Source: Amit and Zott (2010)

This is why the issue of BMI should be brought to the attention of both academics and entrepreneurs:

- It is an underestimated and remunerative source of future value for the company.
- It is hardly imitable by the competition.
- It represents a powerful competitive advantage and a tool to identify threats in the traditional industry (Amit and Zott, 2010).

2.2.1. Key business model areas to innovate

Having already highlighted the uniqueness of a successful business model, it would be impossible to define a standard algorithm to determine whether the innovation implemented could be winning. According to Still et al. (2017) for each dimension of the business model, there are elements that can be innovated: for what concerns the value creation innovation, in fact, a firm can either invest on new capabilities, new technological resources or equipment or improved processes that define how each activity has a connection with another. Moreover, in innovating the value proposition, firms must think about focusing on new offerings (that can either satisfy new needs or old needs in a better way), new customer segments or markets, new channels or new ways to approach the relationship with the customers. Ultimately, it is proper for companies to rethink how value capture mechanisms can be innovated: in particular, they can review the way customer perceive the value proposition, hence the revenue model or design a new cost structure intervening on all direct and indirect costs.

However, among these, there are some key areas in which change can occur that are determinant in order to have success: firstly, the area that concerns the value proposition formulation to satisfy new needs of targeted customer is strategically fundamental and must be continuously revised. Firms must accumulate customer

knowledge in order to be ready to monitor and reevaluate in case of a possible reappraisal of the need.

Moreover, another key issue is the way in which the value proposition is channeled and delivered to targeted customers: for instance, the multinational Nespresso adopted its own distribution organization in order to deliver a more customized value and restoring a closer relationship with its customers (Bereznoy, 2019).

Finally, the restructuring of the revenue capture models basing on the introduction of new pricing models and an innovative value monetization approach definitively have the potential to differentiate a successful innovation from an unsuccessful one. When designing how new areas will function into the new BM, managers should recall that optimizing distinct activities can be challenging since they are often quite numerous; however, at the same time, it is very difficult to change a whole activity system. Indeed, managers are often reluctant to take such risks when new market opportunities occur (Amit and Zott, 2010).

Zhang, Zhao and Xu (2016) propose three different paths to achieve business model innovation:

- Original innovation derives from a new or existing enterprise that produces products or services by introducing a new business model due to new disposable technology, the entrepreneur's aspiration or talent. In particular, it is required that firms should look out for a potential market in which the innovated value

proposition meets the needs of the market demand. Moreover, in order to reduce transaction costs and increase profits, firms should implement operation processes (among which production and sales) to build an effective value chain structure.

- Induced innovation is triggered by an external factor that affects one or more elements of the existing business model and that could potentially lead to a radical change of the business system in which the firm operates. The innovation could be brought by a disruptive technology, knowledge and information flow or an industry evolution such as shifts in market demand and competition.
- Imitation innovation differs from the two above because it is not considered a first mover initiative. However, innovation based on the imitation of others' plans constitutes the major source of BMI: most of the innovation implemented in developing countries are imitations of those occurred in developed countries. However, it is not easy to copy a business model with success: in some sectors, consumers could prefer the original innovation for several reasons among which brand loyalty and trust. This is way each imitation should be carried out taking advantage of the unique bundle of resources that each company has.

2.3. Research streams

Basing on the literature review, there are different distinct BMI research streams that stand out, according to the analysis conducted by Schneider and Spieth in 2013 and Foss and Saebi in 2017.

1. The first stream regards the *conceptualization* of the phenomenon itself, giving definitions and listing the dimensions and elements on which companies implement a business model innovation in order. The aim is to develop a classificatory scheme, however, as seen above, definitions are very different and often ambiguous.
2. The second stream includes all those studies dealing with the *prerequisites*, drivers and barriers of business model innovation: as will be explained more in the following chapters, there are factors that have been confirmed to have an influence on the BM innovation process. In particular, Chesbrough (2010) found out that obstruction and confusion negatively influence innovation, while Doz and Kosonen (2010) propose strategic agility as the main resource of a firm to proactively anticipate and react to a turbulent environment.
3. This third stream is characterized by an explorative approach and considers the BMI as a *dynamic and transformational change process* as a result of a continuous reaction to changes in the environment (Demil and Lecocq, 2010). Moreover, it includes the focus on the different stages of the BMI

process (Ghezzi and Cavallaro, 2016) and on the different capabilities (among which the role of leadership and decision-making) required to support the process. Finally, it covers also the importance of experimentation and trial-and-error learning (Sosna et al., 2010).

4. The fourth stream includes those studies concerning the *effects and consequences* of the business model innovation. On the organizational side, it is possible to distinguish between the outcome implication (Cucculelli and Bettinelli, 2015) and the performance implication (Amit and Zott, 2010).

On the other side, there are studies focusing on the effects of BMI on the industry structure and firm capabilities.

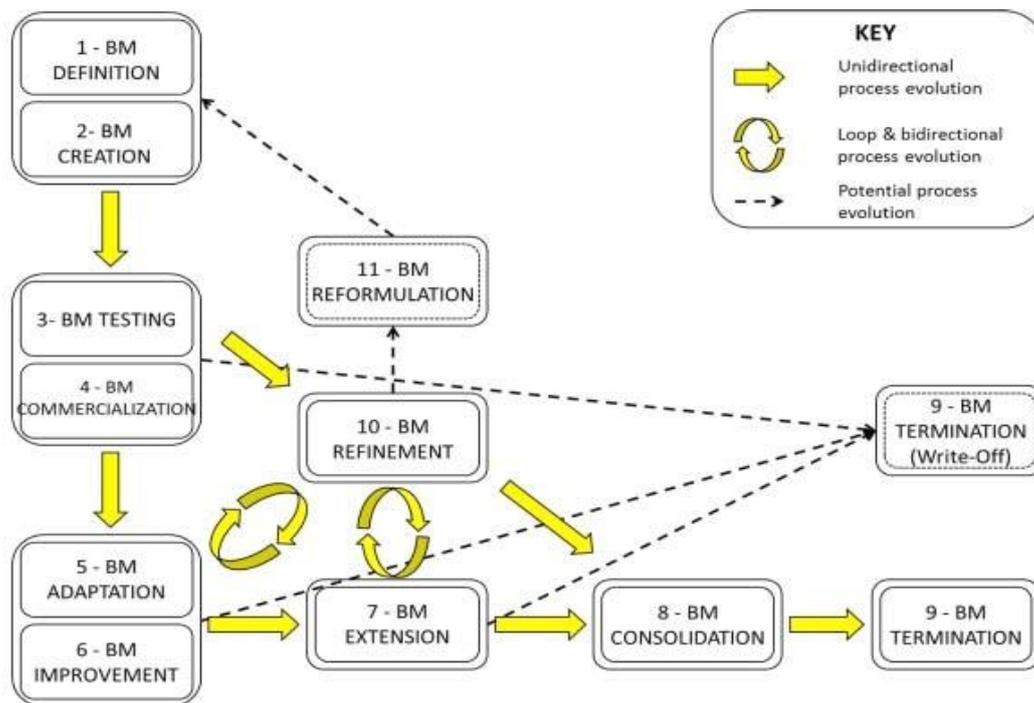
The following chapters will have the purpose to shed light on these issues in a more comprehensive and detailed way.

2.4. BM lifecycle

A firm goes through different development stages during its life and the BM tends to evolve and change accordingly. Professors Antonio Ghezzi and Andrea Cavallaro in their study “Business Model Change and Refinement along Business Model Lifecycle: Evidences From a Multiple Case Study on Mobile Telecommunications New Ventures” developed a BM lifecycle (figure 2.2) that carefully reports all the

stages of a BM's life from the design from the initial definition to the ultimate termination.

Figure 2.2: Business model lifecycle



Source: Ghezzi and Cavallaro (2016)

As it has already been explained in chapter one, during the first phase the company defines and design the BM (1,2): in this phase, the BM is a rough and theoretical idea. However, before refining the model, it is required to test and commercialize it (3,4) in a limited and controlled customer segment. The following step is to try to

reach a larger customer segment through the adaptation and improvement (5,6) of the current business model: in this phase the company receives multiple feedbacks from the outside that constitute the basis for further refinement trying to adapt the firm in the context in which it is operating. Moreover, the resources and capabilities acquired lay the foundation for an internal innovation through new products/services or technology. Afterwards, the firm needs to widen its offer in order to penetrate and consolidate the market (7,8) by including new activities covered in the value chain without changing the existing BM. The refinement process (10) can be applied at all stages of BM lifecycle, as “it is permanently in a state of transitory disequilibrium” (Demil and Lecocq, 2010). Termination (9) and reformulation (11) does not always necessarily happen in all firms, however termination can occur at every stage of the process (in the case in which the firm’s BM has reached its maturity): that is the reason why the process can’t be defined as sequential since several loops and leaps occur during the stages, in particular the refinement step (which can happen basically always) highly contributes to make the cycle non-linear.

2.4.1. Business model trial and error learning

Lately it is common to found out that companies’ success depends more frequently on the business model, however, it is not simple since a winning business model

does not go straight from ideation and implementation to success: in this case learning and adjustments will be necessary. Indeed, as specified in the BM lifecycle above, it seldom works on the first try and BM refinement happens at all stages: market uncertainty imply constant organizational realignment, the mobilization of resources, the implementation of capabilities and the promotion of learning, change and adaptation (Sosna et al., 2010). These events make the business model quite provisional because over time a new improved model, that benefits from further organizational or technological innovation, will replace the old one.

According to the dynamic approach on business model, the BM development begins with an initial draft that is followed by continuous revision and adaptation based on a trial-and-error learning in which discovery, learning and adaptation are key words. In particular, behavioral theories states that firm's past experience, routines and values influence the decisions, in fact they "remember-by-doing": on one side this is positive, because collective knowledge contribute to raise the chances of survival in turbulent environment; on the other side being rooted in past routines could prevent the firm to embrace the newness. Nonetheless, there are two processes that promote the change of beliefs and routines: trial-and-error experimentation and organizational search (Argyris, 1976). The first one supports the maintenance of those activities that contribute to create value, while ceasing those that do not: the process involves experimenting activities and monitoring them in order to detect and correct potential mistakes. This repeated procedure

generates learning and help the firm to reach the desired results. In this scenario the entrepreneur covers a fundamental role since it is also the main decision-maker who gives the first input to the initial BM design and influences the organization. In addition, it is important for the organization that the decision-making authority is shared among managers and employees to foster the switching from individual to organizational learning (Sosna et al., 2010).

2.5. Business model change dynamics

The business model is in a continuous flux that anticipates and proactively react to opportunities and threats in the outside environment. Saebi in her work “Business model evolution, adaptation or innovation? A contingency framework on business model dynamics, environmental change and dynamic capabilities” (2014) distinguishes three forms of business model dynamics: business model evolution, adaptation and innovation.

- Business model evolution refers to the maintenance, implementation and leveraging of the existing business model through some adjustments in the firm’s activities and relations. For instance, among the various feasible changes, the company can intervene in the value proposition or increasing the efficiency of the organizational routines. However, the aim is to change few areas at a time not to alter the standard BM.

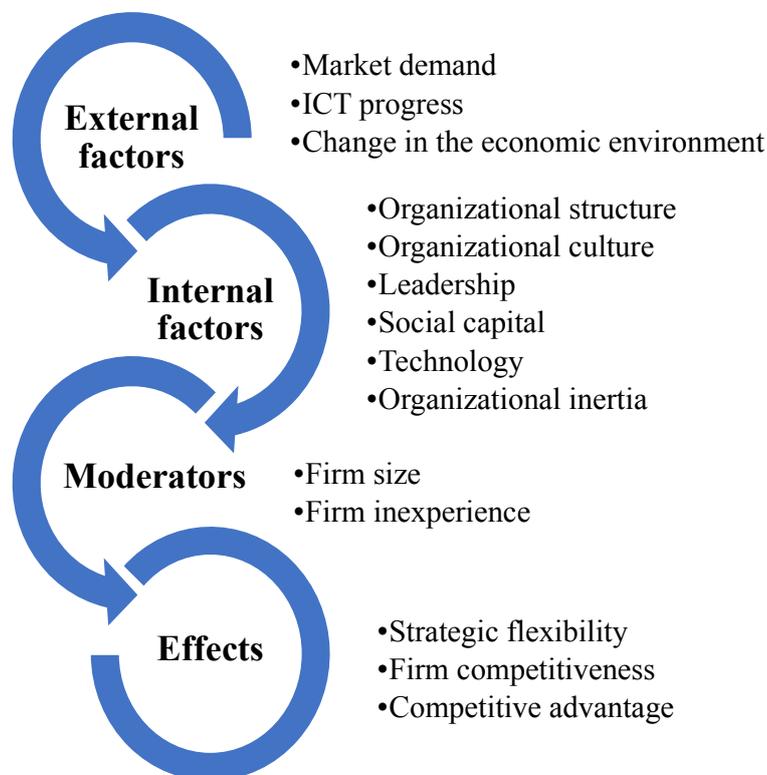
- Business model adaptation, also called BM replication by Landau et al. (2016), is the process by which the firm proactively matches its internal and external system of activities to the necessities of the changing environment; in addition, in this case, various elements of the BM can be changed simultaneously. Comparing it with BM evolution, the processes may seem similar since they both imply adjustments of the existing BM. However, the evolution happens gradually in the firm's BM lifecycle, while the adaptation implies changes that mirrors the alterations of the external environment.
- Business model innovation (BM renewal for Landau) affects and changes different elements of the BM at the same time causing a consistent reconfiguration or, alternatively, the introduction of new processes and activities. In this way, the firm creates a brand-new business model with the aim of reshaping an industry through the introduction of a disruptive innovation. Innovation can happen at different levels: for instance, industry redefinition, revenue mechanisms innovation or value chain change. The difference between BM adaptation and BM innovation lies in the fact that firstly, BMA can be non-innovative, secondly that BMI may be drive both by an internal and external input, while BMA only depends on an external cause (Bucherer et al., 2012).

2.6. Drivers and effects of business model innovation

Having already argued that a BM may evolve as a reaction to both external and internal factors, it is appropriate to further explore which forces drive innovation and how they influence the evolution path of an enterprise (fig. 2.3).

External factors include those environmental changes that hit the organizational structure of a company like new entrants, increasing costs or threat of substitutes. On the other side, internal sources of disruption include all those moves that are undertaken by the inside from the firm's management, skills and knowledge (Demil and Lecocq, 2010).

Figure 2.3: Internal and external factors and effects of business model innovation



Source: author's processing based on Bashir and Verma (2018) and Zhang, Zhao and Xu (2016)

2.6.1. External factors

It is not easy to calibrate the effect that external factors exert on single elements of the business model, since all of them influence the whole process of business model innovation.

Among the main exterior causes of innovations, Zhang, Zhao and Xu (2015) detected the changing nature of market demand that forces the firm's business model to keep up with the growing needs of the customer base. Secondly, the progress in the information and communication technology field promotes constant changes and adjustments to effectively take advantage of the technological disruption brought. In addition, the firm must always be aware of the mutations in the economic environment that mainly occur due to intense

Moreover, Saebi (2014) distinguishes three forms of environmental change:

- Regular environmental change, which happens in stable environments where firms are in the conditions of gradually adjust their business model since there is the possibility to foresee any deviation from the standard equilibrium.
- Environmental shifts imply a radical change in the corporate structure, strategy and culture: they happen in completely unpredictable and turbulent environments and cause the obsolescence and disruption of the previous regime. Examples of these shifts could be the arrival of new competitors,

major regulatory or political changes or disruptive technologies (Saebi, 2014).

- Environmental competitiveness occurs in high-velocity contexts where the pressure of competition pushes firms to constantly change the foundation of their competitive advantage.

2.6.2. Internal factors

According to the research “Internal factors & consequences of business model innovation” conducted by Bashir and Verma in 2019, organizational structure plays an important role in converting market opportunities into BMs: in fact, there is a positive relationship between flexible organizational architecture and routines and BMI. In order to take advantage of innovation, a company must develop new skills while rejecting those that up until that moment made the previous business model successful. Structural change can happen mainly by transforming the industry value chain or by revolutionizing the revenue mechanisms (Giesen et al., 2007).

Another positive relationship found by the author has been between organizational culture and BMI: in fact, cultures help the firm increase its possibility to recognize and exploit market opportunities (Doz and Kosonen, 2010). In particular, adhocracy culture, which is characterized by a flexible and risk-tolerant nature (Chandy and Tellis, 1998), is the best attitude that embraces an innovative attitude.

Moreover, both Bashir, Verma, Zang and others agree on the fact that the entrepreneur is the core internal driver to accomplish business model innovation, since it is the one responsible for the decision-making process. An innovative attitude complemented with learning ability, knowledge and communicative capabilities will positively affect the BM innovation process.

It is also worth mentioning the unique role that social capital plays in helping the firm achieve its objectives since it includes human capital that helps the firm exploit its resources and capabilities and ultimately reflects its innovation capabilities. In addition, technology represent an important predictor of BMI: indeed, the latter “flourishes especially when innovative technologies are applied” (Chesbrough, 2010).

Nonetheless, inertia has been detected as a negative predictor of business model innovation, especially in the case of incumbents with respect to new entrants in the market. Organizational inertia represents a tendency to remain passive in front of a need of social and organizational change: it is common that already established corporations are reluctant to abandon the old schemes and show resistance to innovate their business models.

Besides, firm size and inexperience have been found responsible of moderating the BMI process: indeed, the bargaining power, network and visibility of a big company are useful to convert opportunities into new BMs. On the other side, the lack of prior experience penalizes firms’ competitiveness.

2.6.3. Effects of business model innovation

Business model innovation helps firms reaching strategic flexibility, cutting costs, exploiting market opportunities, reducing risks and investments (Pohle and Chapman, 2006), which in turn improve the overall performance.

In particular, lately firms are investing more in BMI as a source of competitive advantage, since product and service innovations are suffering the pressure of imitation and competition: in fact, as mentioned before, imitating BMs is much harder than imitating a product or a service (Amit and Zott, 2012). Therefore, business model innovation represents a consistent predictor both of competitive advantage and firm's competitiveness.

Moreover, by focusing on BMI, firms develop the capability to react instantly by adapting and readjusting the organization to the new environment. Specifically, there are three orders of strategic flexibility that are needed to drive the change, which are respectively resource flexibility, coordination flexibility and managerial flexibility (Sanchez, 1995; Volberda, 1996; Bashir and Verma, 2019).

2.7. Explorative and exploitative approach

When companies face the hard decision about whether to react or not to a disruptive innovation in the market, there are two generic strategies: adjusting and strengthening the existing BM or adopting a disruptive BM, which are respectively named exploitative and explorative approaches (Osiyevskyy and Dewald, 2015). Both of them require a mutation in the existing model, however the first one

involves the exploitation of rooted certainties in organizational learning: it is a common reaction when an established company perceives an inferior disruption. Consequently, it decides to reach a more sophisticated niche by improving and customizing their value proposition (Christensen and Bower, 1996). On the other side, the contrary requires the exploration of new market possibilities, like new BM experimentation or offering different outputs or reengineering the current processes and value chain.

According to Casadesus-Masanell and Ricart (2010), while the exploitative strengthening of the existing model can lead to the “reinforcement of the existing rigid consequences”, the explorative approach might cause flexible or rigid consequences (or both). The chart below analyses all possible incumbent firm responses to disruptive innovation:

Table 2.2: Possible incumbent reaction to disruptive innovation

		Exploitative strengthening of the existing business model	
		No	Yes
Explorative adoption of the disruptive business model	Yes	Pure exploration: adoption of the new approach	Integration (in one company or spin-off)
	No	Defiant resistance: defend habitual routines	Pure exploitation: incremental innovating

Source: Osiyevskyy and Dewald (2015)

The company that adopts a defiant resistance tries to maintain the status quo and preserve the existing business model: it is often common in the early stages of the introduction of the innovation in which firms want to develop an in-depth analysis of the situation or simply collect more resources.

Pure exploration regards those enterprises that believe and want to invest in a novelty-centered BM: this is possible either by completely switching to the new business model or simply by ceasing the investments on the old one. According to Teece (2010), this approach mainly belongs to new entrants or young incumbents, which are very flexible and risk tolerant.

On the other side, pure exploitation strategy means that firms adjust and strengthen their old BM without completely adopting the new disruptive model. This mainly occur to those companies that are not able to ignore the innovation anymore but want to simultaneously maintain the status quo: doing this, they either conquer an upper segment or differentiate the offer.

Ultimately, through the integration firms try to benefit from both approaches by creating a synergy between conservation and innovation: indeed, they adopt the disruption, but still keeping active the current BM: it is achievable by combining the two models in the same business unit or by diversifying.

2.8. Fostering BM change: strategic agility and organizational capabilities

A stable business model would definitely be more efficient and predictable; however, in reality, this kind of stability would become rigidity over time which would definitely hinder a firm's strategic agility, hence the possibility to rejuvenate itself. According to Ghezzi and Cavallo (2018), agility means applying the acquired and current knowledge to adapt into a changing environment and deliver high-quality products respecting a fixed budget and time frame. Therefore, being agile includes being flexible, fast and proactive.

Doz and Kosonen (2010) observed that strategic agility is a good proxy for successful business model innovation through three meta-capabilities that support the firm to accelerate the BM renewal process:

- strategic sensitivity, which allows the firm to sharply perceive and foresee the need of BM renewal (however, it is important not to over-rely on foresight tools). This capability includes leading market tests and experiments to gain insights and discover where innovation can flourish more; taking advantage of the firm's relationships network to gain an "outside-in" perspective and reframing the need for BM renewal by opening into a strategic planning dialogue. This skill improves the executives' perceptions in terms of accuracy and awareness of both the external and internal activity systems.
- leadership unity, which is fundamental to make teams take decisions without having to be slowed down by top-level dynamics: it involves engaging in

dialogue and developing a common ground among top and down levels while promoting a climate of transparency and mutual respect. Moreover, in order to reach collective commitments and engagement, roles integration and interest alignment are necessary steps that reveal the team's ability to cooperate and build together.

- resource fluidity, which support firms in reconfiguring capabilities and reallocating financial and human resources to new activities. The changes mentioned above only can happen when there is flexibility enough to switch between parallel business models, modularizing business processes, decoupling activities and negotiating resource access and allocation.

Moreover, several researches confirm that dynamic capabilities contribute to achieve superior performances in business model innovation (Dottore, 2009; Saebi, 2014; Teece, 2018). Zahra et al. (2006) defines them as the ability to be adaptive in a way that is considered appropriate by the firm's main decision-makers. However, as Teece states, this capacity that the firm has to create, adjust and, in case, substitute a business model constitute a separate and granted foundation to these capabilities.

Dynamic capabilities allow firm to be prepared in case of business model change: they “include the sensing, seizing and transforming needed to implement a BM” (Teece, 2010). They differ into three groups (Saebi, 2014):

- operational capabilities, that support the efficient utilization of the current physical or human resources in the production of a specific good or activity, which is common and available in all firms;
- dynamic capabilities, that represent the intentional effort to create or modify the resource base and operational capabilities of a firm. This one differs from the operational capability since the ability to deploy and mutate resources can be different from firm to firm.
- meta-capabilities, which is the capacity to design or create new dynamic capabilities. These kinds of capabilities include routines, which are repeatedly executed activities that constitute the very foundation of the organization.

In addition to these, Saebi adds the need to develop “business model change capability” to facilitate the firm’s ability to adjust, adapt and innovate its business model in a turbulent environment and support it to overcome rigidity. There are three groups of capabilities to foster evolutionary and innovative change:

- evolutionary change capability, that support those firms are in constant need of adjusting and improving the activities performed: these capabilities are organizational processes that support the effective replication and maintenance of the current business model and guide its change process.
- adaptive change capability, which is the capacity of the firm to adapt its BM reacting to the changing market conditions. It regards mostly all firms since,

while evolution or innovation occur occasionally, BM adaptation often affects more than one business model element. However, it is fundamental to employ routines and processes to ease the adaptation process of the activities performed on a continuous basis. Moreover, if associated with strategic agility and flexibility and paired with exploitative learning process, it would lead to a smoother response to change.

- innovate change capability is the capacity to innovate a BM in case of environmental shifts whose responsibility belongs to the management. Furthermore, it is strongly affected by the firm's learning processes and explorative attitude.

2.9. Business model innovation barriers

Clearly, the process of simultaneous innovation of more than one BM element at a time is risky: and requires the overcoming of several barriers and potential mistakes.

In particular,

Chesbrough (2007) claims that business model innovation leadership gap is one of the reasons that prevents firm to successfully exploit BMI. It implies that no one in the organization has the responsibility and authority to innovate: in fact, the BMI process requires the involvement of the upper levels of the organization. In some businesses, managers rotate each two or three years, however this time horizon is

too short to plan and design a new model. This often ends up with sticking with the old model and the organizational inertia cited before: in fact, this is reinforced by the fact that top managers consider the current BM a comfort zone, since it is the one that made them reach their role.

In their work, Laudien and Daxbo (2015) identified this phenomenon as “path dependence”, according to which managerial decisions made in the past can narrow the actions taken to change the business model in the future: in fact, they trigger self-reinforcing dynamics that make alternative choices less attractive (Sydow et al. 2009). This usually leads the firm to be trapped in a lock-in phase in which endogenous change becomes hard and management tends to prefer patterns that are already familiar and ebbed into the organizational routines. This might not be harmful, however in the long run rigidity usually leads to inefficient or inferior performance, since the firm can't proactively operate under conditions of environmental competitiveness and detect new shifts in market demand.

Moreover, both Christensen, Amit and Zott recognized in the disruptive innovation a root of tension between the old BM and the one required to exploit the emerging technology. In contrast, Rosenbloom and Chesbrough (2010) found a cognitive barrier that confuse the management and makes the decision of the right business model unclear from the beginning.

For what concerns the management, there are common mistakes that should be avoided when innovating a business model:

- portfolio bloat occurs when a company overloads itself with too many uncoordinated innovations for which there are not enough resources;
- failure to scale up once the initial excitement for a project wanes;
- pet ideas are those projects that are not destined to be realized, but still are not put aside;
- autonomous work can cause isolated effort and consequently create a lack of credibility to win the organization's cooperation;
- being constantly stuck into the ideation phase prevents the firm to move on to the realization phase.

In conclusion, there are suggestions regarding how management can promote business model innovation: firstly, resource coordination and configuration should be supported with effective managerial skills in order to complement BMI; secondly, the firm should actively interact with the external environment to achieve the knowledge needed to handle the resource base; finally, the top management's entrepreneurial skills will be needed to support the firm into combining and configuring internal and external resources to effectively sense, seize and exploit opportunities (Amit and Zott, 2010; Sirmon et al., 2011).

Chapter 3: Business model innovation in SMEs

3.1. European SMEs background

“Jobs, growth and investment will only return to Europe if we create the right regulatory environment and promote a climate of entrepreneurship and job creation. We must not stifle innovation and competitiveness with too prescriptive and too detailed regulations, particularly when it comes to small and medium-sized enterprises (SMEs). SMEs are the backbone of our economy, creating more than 85% of new jobs in Europe and we have to free them from burdensome”.

Jean-Claude Juncker, Former President of the European Commission

Compared to the presence of large enterprises (0.2% in the European Union), small and medium-sized enterprises (SMEs) cover a crucial role in the European economy accounting for 99.8% (table 3.1) of all businesses in the EU. Moreover, they guide job creation (66.6% of total employment derives from the activities of small and medium businesses), ensure economic growth equal to 4,357,046 million euro each year and provide social stability. In particular, according to the report edited by the European Commission, micro-sized companies, among the other SMEs, are the ones that mainly contribute to the European economy accounting for almost the 30% of total companies and providing the 20.8% of total value added.

Table 3.1: Number of SMEs and large enterprises in 2018 in EU and their value added and employment

	Micro SMEs	Small SMEs	Medium-sized SMEs	All SMEs	Large enterpr.	TOTAL (SMEs+Large)
Number of firms	23,323,938	1,472,402	235,668	25,032,008	47,299	25,079,312
%	93.0%	5.9%	0.9%	99.8%	0.2%	100%
Value added in € (million)	1,610,134	1,358,496	1,388,416	4,357,046	3,367,321	7,723,625
%	20.8%	17.6%	18.0%	56.4%	43.6%	100.0%
Employment	43,527,668	29,541,260	24,670,024	97,738,952	49,045,644	146,784,592
%	29.7%	20.1%	16.8%	66.6%	33.4%	100.0%

Source: adapted from Annual Report in European SMEs 2018/2019, European Commission.

Even though a company might be very small in size (in terms of employees, turnover and balance sheet total), it still may have access to significant owned, linked or partnered resources: in that case it could be not eligible for the status of SME. Indeed, by definition, this category is made up of “enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million”.² Compared to other companies, SMEs require specific assistance and are

² Extract of Article 2 of the annex to Recommendation 2003/361/EC

characterized by unique issues: in fact, generally companies of this dimension tend to experience market failure, especially in areas like finance, innovation, research or environmental regulations. Moreover, failure can be due to limited access to finance or lack of the resources needed to invest in research and innovation.

In addition to this, they are forced to overcome limitations like lack of technical and managerial skills or limited knowledge opportunities which constitute proper structural barriers. Nonetheless, at the same time they also stimulate entrepreneurial spirit and innovation, therefore are fundamental in order to foster competitiveness and employment across the European Union.

Given their relevance inside the EU economy, it is fundamental for the European Commission to implement programs and funds to support these entities: in fact, SMEs are a major focus in the policy-making dynamics of the EU.

Entrepreneurship is an effective driver of economic growth and job creation, in fact it creates new companies and markets, provides employment, introduces and spreads knowledge and makes economies more competitive. SMEs create more than 4 million new jobs in Europe each year³, however in the last decade people preferring self-employment has considerably dropped due to the fact that new enterprises grow more slowly compared to the situation in other continents like USA or emerging countries: in fact, support structures and policies for SMEs in EU

³ Commission calculation based on Eurostat data (2009).

are still unbalanced and there is a need for cultural change, especially when it comes to facilitating second chances for honest bankrupt entrepreneurs.

Indeed, “Entrepreneurship 2020 Action Plan” is an initiative whose objective is to boost the entrepreneurial spirit and improve the business environment for SMEs after the severe effects of the economic crisis in 2008 that still affects the employment level and business activities. Among its main pillars, there is the need to invest in entrepreneurial education, training and to create an environment in which small businesses can flourish: this includes better access to finance, second chances in case of bankruptcy (96% of them happens due to late payments), new digital opportunities, support during the whole business lifecycle and clearer and simpler rules for small entrepreneurs⁴.

3.1.1. Small and medium enterprises in Italy

According to the last Small Business Act for Europe⁵ (SBA) published in 2019, Italian SMEs, which are particularly relevant in this research since the case study is based on an Italian small-sized company, generate 66.9% of overall value added in

⁴ Entrepreneurship 2020 Action Plan, European Commission, Brussels, 2013.

⁵ The Small Business Act for Europe (SBA) is an EU policy initiative to support small and medium-sized enterprises. It includes a set of policy measures organized around 10 main pillars ranging from entrepreneurship and responsive administration. It is published each year and reports recent trends and national policies that affect SMEs.

the Italian non-financial business economy (higher than the EU average of 56.4%). Moreover, it exceeds the European employment average by 11.5 points. In particular, the micro-firm category is important for the Italian economy accounting for 28.4% of overall value added and 44.8% of employment.

However, when it comes to the eight SBA principles, Italy's average, compared to the EU one, scores below in 8 out of the 9 principles, especially in the categories "responsive administration", "state aid and public procurement" and "entrepreneurship". The main concerns for Italian policy makers are to ensure a fiscal and administrative pressure that is proportional to company size; moreover, greater investments and fundings are needed to boost research, innovation, internationalization, education and eventually growth. In particular, taxation, bureaucracy, public administration inefficiency and the costs needed to start a new business are the most relevant challenges that SMEs face in Italy.

For what concern the skills & innovation principle, which is the main focus of this chapter, Italy's performance is in line with the EU average: indeed, there are good indicators for the percentage of SMEs introducing product, process or marketing innovations and those innovating in-house. Furthermore, the share of SMEs providing ICT training to their employees (16%) increased twice as much than in 2014. Among the main initiative launched by the Italian government since 2008, "Impresa 4.0" (2016) has introduced measures to boost the innovation of Italian firms through digital transformation and education.

3.2. SMEs and innovation

Innovation is a driver of competition and leads to significant success and wealth in the business area. Academic literature supports the thesis that there is a significant relationship between culture and innovation: in fact, innovation only happens when an organization shares its beliefs, knowledge, skills and values with the rest of the organizational structure. In addition, the firm must show a low resistance to change and high entrepreneurial activities. Once achieved a superiority through this strategic tool, the SME can use it to improve its performance and facilitate the development of a competitive advantage (Aksoy, 2017).

As mentioned in the previous chapters, innovation can take many forms: it may regard improved products, services or technologies, the development of better production processes, more efficient distribution channels and destination markets, new business models and ways of doing business (Loon and Chik, 2019).

Innovation is a core activity of many firms, from large to small ones. However, it is important to attribute a proper contextualization to SMEs and not to treat them as a “scalar version of large organizations” (McAdam et al., 2007): in fact, they constitute a phenomena per se, thus the innovation processes must be analyzed and understood under a different lens.

Both big and small business realities have significant advantages and disadvantages when embarking in an innovation path: in particular, SMEs tend to be more flexible in the area of ideas, motivation and organization, in fact they have flatter structures

and informal management approaches (McAdam et al, 2007). On the contrary, large firms tend to have more resources, previous experience, knowledge and control over external causalities, but at the same time they are often burdened by their overly formal hierarchical structure and approach.

In the current highly competitive framework SMEs need to gain the key access to innovation in order to survive and grow inside a turbulent market. Research, development and innovation is acknowledged by the academic literature as a key engine of economic growth and firm size highly influences the RD&I activity: smaller firms, in fact, are said to own behavioural advantages in terms of fast responsiveness and decision-making, structural flexibility and informal strategy, but they are penalized by constraints in their internal and external resources. Nonetheless, according to what reported the United States Small Business Administration (SBA), their failure rate is higher than that of large organizations: for instance, 24% of all new businesses in the US failed in a two year time horizon, while 63% within six years (Terziovski, 2010). The reason behind the lack of success lies mainly in the fact that SMEs tend to rely on an informal strategic planning process that does not keep track of its performance progresses (Wheelen and Hunger, 1999).

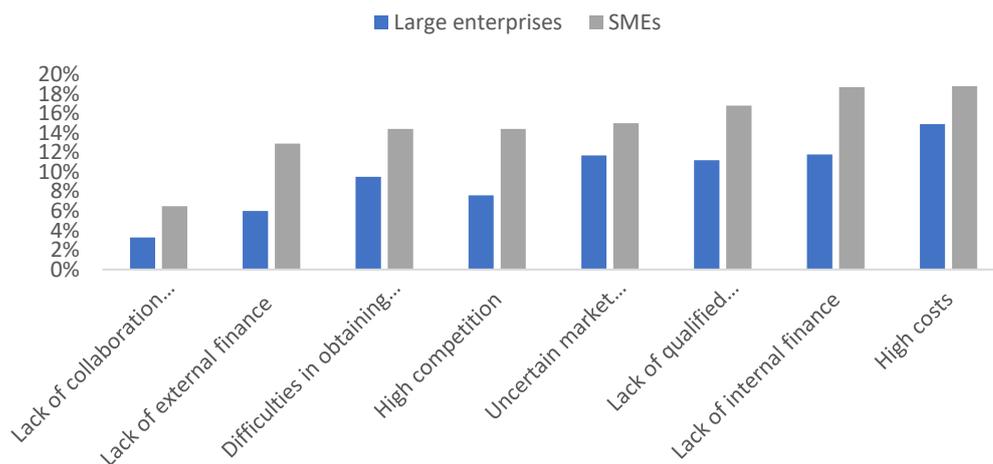
SMEs in the OECD countries are averagely less innovative than large companies. Lately their contribution to innovation has increased due to rise of niche markets, the shortening of the product life cycle and the constantly changing technologies

(Chesbrough, 2006). This has allowed SMEs to gain and strengthen competitive advantage and keep the pace together with fearsome competitors.

Between 2014 and 2016, the share of innovating SMEs in EU (among them those that focus on disruptive or incremental innovation) was around 50%: compared to the EU rankings, the proportion of innovative SMEs in Italy was slightly above the average.

A research conducted by SME associations and the CIS 2016 reports that the main barriers to innovation that hinder a firm's innovativeness are the lack of internal financial resources and the costs of innovation. Moreover, other negative factors are represented by the lack of external funds, skills and capabilities, financial support by government and institutions and the costs related to patents and copyrights.

Figure 3.1: Factors hampering innovation. Comparison between large enterprises and SMEs (2014-2016)



Source: Annual report of European SMEs, European Commission (2019)

Figure 3.1 reported above shows how many large and small-sized firms consider those variables as potentially hampering for their businesses. Clearly, innovative SMEs are called to face more challenges than large companies, thus considered each hampering factor of a higher importance. In particular, the most relevant barriers that prevent SMEs innovation activities regard the high costs needed to start and maintain a business and the lack of internal resources, both human and financial.

Moreover, the categories that mostly highlights the disparity between small and large size are the high competition, which worries more small-sized firms than large ones (7.6% of large companies against 14% of SMEs), and the lack of external finance (again, just 6% of large and 12.9% of small firms). This inequality between big and small business competitors is the reason why EU is improving its policy measures and funds to finance entrepreneurs and small businesses aiming to improve the quality of the innovation system and increase the availability of private funding for RD&I.

3.2.1. SME competitiveness under resource scarcity

Small-sized firms suffer both from size and resource related limitations that hamper their competitiveness and performance. Hofer and Schendel in 1978 listed the various types of firm resources into five categories: financial resources, physical

resources (e.g. machinery), human resources (e.g. employees), organizational resources (among which company culture) and technological resources. Among them, each firm chooses to rely on certain critical resources that constitute the base of their BM success: this reasoning is based on resource-based view (RBV), which is a theory about the connection established between the firm resources and the competitive advantage derived by them. According to it, the firm establishes a competitive advantage over its competitors when they build it on resources basing on the VRIO attributes: valuable, rare, inimitable and non-substitutable (Barney, 1991). Moreover, it is important to connect this framework with innovation and stress the importance of innovation capabilities as a way for SMEs to exploit their resources.

Nonetheless, small-sized firms suffer both from size and resource related limitations that hamper their competitiveness and performance: they are constituted by less personnel, smaller financial and physical assets, lower sales and fewer resources to exploit their competitive advantage. This condition is referred to as “resource scarcity”, in fact some SME fails to provide the proper prerequisites to engage in a potential innovation with the aim of pursuing a competitive advantage: without capital to invest, SMEs face financial risks and struggle to develop new products and services that would improve their value generation mechanisms (Löfqvist, 2011). Moreover, this also prevents them from having access to high

skilled and trained employees that have the required expertise to engage in opportunity identification practices (Garengo et al., 2005).

Due to the high competition that SMEs have to face in the market, it is important for them to reach and maintain a competitive advantage in alternative ways: in this sense business model innovation is considered an attractive alternative since it simply redesigns the way in which existing resources are used.

3.3. Business model innovation in SMEs

In the previous chapters it has been explained what is a SME, their distribution across Europe (with a particular focus on the Italian framework) and how they approach innovation (whether it is on a product, market, organizational or process level) compared to large firms. However, this does not equal business model innovation.

Basing on the findings from previous researches one may assume that the BMI topic has targeted just large-sized firms, however this perspective must be overcome and extended to the area of small businesses, which, as stated above, are the main driving economic force not only in Europe but also worldwide. Differences are related to size, but also on the design of the strategy and organization, smaller customer base and the management of the performance. Consequently, to innovate

their BMs, SMEs need a different and tailored approach that properly fits their value creation features and attributes (Cosenz and Bivona, 2020).

There are few empirical available studies on BMI in SMEs (Cucculelli and Bettinelli, 2015; Heikkilä, Bouwman and Heikkilä, 2018), most of the quantitative ones are mainly based on data provided by the Community Innovation Survey (CIS) and collected by statistical offices in Europe. Therefore, there is a consistent call of action for academics needing for knowledge considering BMI in the SMEs framework. Indeed, the Scopus research for “Business Model Innovation” and SMEs provides only 27 articles at the moment and leaves unclear the topic about how SMEs actually innovate their business model.

Heikkilä and Bouwman in their quantitative survey on the business model innovation in European SMEs (2018) report that 37% of European SMEs are innovating their BM: among them, some partner with new collaborators, some offer new product or services and some more target new customers. Moreover, it resulted that managers tended to change the BM gradually, modifying the most urgent components first.

In addition to this, most SMEs, when engaged in a BMI process, do not follow a structured implementation process and experience it as an emergent and unintended process (Lindgren, 2012): in fact, they still lack awareness and knowledge about which specific approaches and tools best fit their need for BM innovation. Some of them are not even aware of being committed in such a process simply due to the

fact that they would not label that in this way (Bowman, Molina-Castillo and De Reuver, 2016).

Pangaribuan et al. (2020) recently published an interesting and exhaustive article that reviews all the existent academic literature on BM innovation in SMEs: overall, the main topics that influenced the researches so far have been firstly the drivers that contribute to the business model innovation in the specific context of SMEs (Miroshnychenko et al., 2020; Gatautis et al., 2019; Pucihar et al., 2019; Marolt et al., 2018; De Reuver et al., 2016; Marolt et al., 2016; Lee et al., 2012). It has been found out that external factors considerably influence the process of business model change, in fact opportunity recognition capability has been broadly analyzed as an antecedent of improved business performance (Marolt et al., 2016; Guo et al., 2016).

In addition to this, scholars also mentioned that in order to perform BMI, small businesses need to develop their absorptive capacity, which occur through the acquisition, absorption and exploitation of knowledge (Miroshnychenko et al., 2020). Open innovation and organizational agility are also relevant and influencing topics of this field of literature since Chesborough firstly introduced the topics in 2003: the way in which companies use external and internal knowledge to commercialize its product or services (Chesborough, 2003).

Nonetheless, the topic BMI applied in the SMEs context is particularly recent and need focus on topics that are still undiscovered by academics.

3.3.1. SMEs value creation process and attributes in BMI processes

Compared to large-sized enterprises, SMEs present differences in the value generation process: there are several attributes that distinguish the complexity of value creation process and management procedures in small-sized firms.

First of all, the authority is not organized as in a highly structured and formal firm: in fact, there is a flatter and more flexible organizational structure composed of few managerial layers which ensure closer interactions among internal actors and quick responsiveness to external stimuli. Moreover, the customer base tends to be small, SMEs usually focus on a specific niche market in which the company offer a narrow yet highly specialized range of products or services. Finally, the severe resource constraint limits the strategic management and there is little devolution of authority. However, there is a significant innovatory potential due to the reactivity that characterizes these environments with informal and unstructured strategy design.

In particular, when it comes to innovating a business model, large firms and SMEs innovate differently: having enough resources to implement their BM projects, the former's priority objective is to overcome organizational inertia; on the other side, SMEs are more dynamic and flexible in managing new strategic directions and their

aim is to implement their cooperative capacity in order to overcome the scarcity of resources. Indeed, given the dynamic and uncertain market scenario, unlike large enterprises, SMEs must pay more attention in the BM experimentation process to prevent the deterioration of their limited (both financial and non-financial) resources (Cosenz and Bivona, 2020).

Basing on these premises, SME's BM design and innovation is informal and unstructured, often emerging from the management's prior experience and current thinking patterns (Heikkilä, Bouwman and Heikkilä, 2018). In this regard, Terziovski (2010) in his study found out mixed results about the formalization and informalization of organizational structures in SMEs. He assumed that is reasonable for SMEs to formalize their structures in order to increase their competitiveness and efficiency. In particular, SMEs should focus on improving procedures and organizational structures to clarify the employee's roles and commitment. On the other side, supporters of informality strongly defend SMEs flexibility that strongly contributes to form their competitive advantage over large firms and fosters innovation.

However, basing on the limited research available, having a formal strategy as main pillar is more useful for large companies than for SMEs, which are more likely to gradually transform their BM basing on the adversities they encounter in their path (Heikkilä, Bouwman and Heikkilä, 2018).

Therefore, while large companies are more inclined to use heavy and structured business model design tools, SMEs might not receive the same benefits though the adoption of the same strategy: in this respect, several authors agree on the fact that it could be appropriate for SMEs to use a formal but lean approach to BM design and innovation (Arbussa et al., 2017; Ghezzi and Cavallo, 2018; Guo et al., 2017; Cosenz and Bivona, 2020). Indeed, this philosophy combines the advantages of having a structured but at the same time flexible and agile perspective. It is based on a “build-measure-learn” scheme, through which the firm can create an innovation hypothesis, measure its results through feasibility tests and learn how to change the BM accordingly. This could support the decision-making process and improve the strategic and organizational capabilities of the firm while fostering its competitiveness through an innovation-oriented approach. For instance, the Business Model Canvas cited in the first chapter is considered a representation framework that fits SMEs in the strategic and organizational architecture of the business.

3.3.2. The relationship between BMI and strategic objectives of SMEs

Even though SMEs do not follow an explicitly formulated strategy, their strategic goals not only determine which kind of sequential change they apply to their business model, but also lead to different BMI paths.

The strategic literature reports three generic goals that SMEs pursue in their life cycle: starting a new business, generating growth and improving profitability. After the first step, which is the establishment of a new business activity, the firm face two options: focusing either on growth or on profitability. Adopting a SME perspective, growth usually means basing the strategy on a differentiation on a niche market rather than on scale economies. On the other side, profitability focuses on improving internal efficiency and base the competition on price. According to the survey conducted by Heikkilä, Bouwman and Heikkilä (2018), these three strategic goals correspond to three different BMI paths: SMEs that are starting a new business adopt a cyclical approach to BM transformation with the aim of improving it as a whole, not just the single elements. They cover most of those components while continuously testing and redesigning the viability of the model basing on the customer feedback.

On the contrary, growth-oriented companies use a front-end approach, starting from the right side of a BM Canvas: it means that they usually begin by upgrading their customer relationship management, then by improving their offering and partner and channels.

Finally, profit-oriented firms begin by modifying their back-end operations and use of resources (left side of the BM Canvas); then they focus on other BM components that involve customer relationship and offering. Overall, all three paths lead to improvements and changes in several of the BM components.

3.4. Drivers and effects BM innovation in SMEs

Albeit having broadly discussed this topic in chapter 2.6, it is worth to further investigate it under a different perspective which takes into consideration the features of small and medium enterprises. Drivers of business model innovation can be due both external and internal forces (Foss and Saebi, 2017).

Figure 3.2: Main drivers and outcomes of BMI in SMEs

External drivers	Internal drivers	Outcomes
<ul style="list-style-type: none"> •Technology turbulence •Competition intensity and behaviour •External opportunities •Changing in customers' preferences 	<ul style="list-style-type: none"> •Innovation activities •Strategical orientation •Strategic and organizational agility •Absorptive capacity •Knowledge management 	<ul style="list-style-type: none"> •Changes in the business processes and ICT •Firm performance •Competitive advantage

Source: author's processing based on Pucihar et al. (2019); Marolt et al. (2018); de Reuver et al. (2016)

Exploring the literature on SMEs, authors agree that innovation activities, strategical orientation, strategical and organizational agility, absorptive capacity

and knowledge management fall in the category of internal forces, while market technology turbulence, competition intensity and behaviours, external opportunities and changing in the customers' preferences are included in the external triggers (Fig.3.2). The surveys conducted by academics confirmed that the combination of internal and external BMI drivers have a statistically relevant impact on BMI mechanisms in SMEs (Miroshnychenko, 2020; De Reuver, Molina-Castillo, Bouwman, 2016; Marolt et al., 2018; Marolt et al., 2016; Vaiciukynaite and Tarutė, 2019; Lee, Shin and Park, 2012; Guo et al., 2016; Pucihar et al., 2019).

Indeed, overall, the results from their hypothesis suggest that both internal and external drivers have a positive effect on SMEs level of BMI: the pressure exerted from the outside business environment positively pushes SMEs to innovate their business models differently from those of their competitors.

Nonetheless, for what concerns the external drivers, there is disagreement for what concerns the rapidly changing and developing information technology (called "technology turbulence" by Vaiciukynaite and Tarutė) and competitive intensity. On the contrary of what it was assumed in the second chapter for large enterprises and previous studies (Casadesus-Masanell and Ricart, 2010), which identified competitive intensity as a major external driver stimulating BMI, the model designed by De Reuver (supported by Bouwman's thesis) shows that increased competition negatively impacts BM experimentation: in fact, in case of competitive

pressure, small business realities tend to struggle and focus on day-to-day operations and efficiency, leaving no resources for the innovation of the business model. Clearly, there is an urgency in the future in further validating the influence that competitive intensity has on BMI practices.

On the other side, according to Johnson, Christensen and Kagermann (2008) and Bouwman et al. (2018), technology turbulence has a considerable impact on BM experimentation. In the wake of this thesis, even though it is not considered a strong driver (since the size of the effect is quite moderate), De Reuver states that it has a positive impact on the resources dedicated to BMI. On the opposite, Marolt did not recognize information technology as an influencing factor for BMI in SMEs: in fact, among the wide variety of technologies available in the market, SMEs struggle to recognize the most suitable ones due to their resource scarcity (lack of employees, knowledge and capabilities).

Conversely, speaking of the internal forces influencing the BM innovation in SMEs, organizational agility refers to the firm's ability to search and retrieve relevant knowledge to apply it to new organizational processes and fight the competition. It includes two different but interdependent concepts: market capitalizing agility and operational adjustment agility. The former is the ability to proactively detect, respond and take advantage of external changes, while the latter is the capacity to promptly address the market changes reconfiguring internal operations and schemes

(Lu and Ramamurthy, 2011). Indeed, Liao et al. (2019) in their study discovered as significant the relationship between the possession of these capabilities and business model innovation.

Moreover, deepening the strategic agility framework presented in chapter two, Arbussa et al. (2016) studied the relevance of dynamic capabilities in the context of SMEs and discovered that being a SME facilitates two of the three meta-capabilities (Doz and Kosonen, 2010) cited before: resource fluidity, leadership unity and strategic sensitivity.

Resource fluidity in SMEs includes capabilities like assembling and disassembling units and processes, disassociating resources across different activities and grafting knowledge from acquisitions. Moreover, being a SME, it is easier to control employees due to the closeness of the relationship: this facilitates leadership unity since there is more responsiveness and openness in the workplace that allow communication. The last meta-capability (strategic sensitivity) represents a weakness for SMEs: in fact, it relies on foresight, exploration and perspective that is often limited in small-sized firms.

In their study, Arbussa et al. suggested a SME-specific meta-capability, namely resourcefulness, which was not present in the previous version of the framework since it did not represent an issue for large companies. It describes the resilience through which these small-sized firms overcome their limitations (mainly human and financial) adopting an attitude of motivation, competence development and

goal alignment (Arbussa, Bikfalvi and Marquès, 2016). This is coherent with the hypothesis that, being small-sized, they are more adaptive and have more flexible structure due to less bureaucratic inertia and flatter hierarchies.

Moreover, absorptive capacity and knowledge management capabilities represent important preconditions for the renewal of the firm's knowledge base which, in turn, makes it possible for the company to achieve higher BM innovation level and flexibility (Zahra and George, 2002; Miroshnychenko et al., 2020; Müller et al., 2020). These skills support competitive advantage by fostering the firm's strategic flexibility and shaping the way the firm pursues innovation activities, like the BMI (Clauss et al., 2019).

Overall, in summary, the influence exerted by external and internal stimuli leads to a positive transformation in the novelty of the SME's BM. This process mainly resulted in changes in business processes and ICT that, in turn, positively impact the overall firm performance. Moreover, it influences the way SMEs do business and help them to achieve better competitive advantages over their rivals (De Reuver, Molina-Castillo, Bouwman, 2016).

This outcome confirms that in nowadays digital economy, BM innovation is a core activity that has to be constantly revised by each SME, whether the objective is to survive or grow. Unfortunately, due to the several challenges that the size of these firms imply, BM practices are limitedly undertaken. However, managers and

owners should increase their awareness about the need for BMI to improve their performance, even during those times in which competition is very intense.

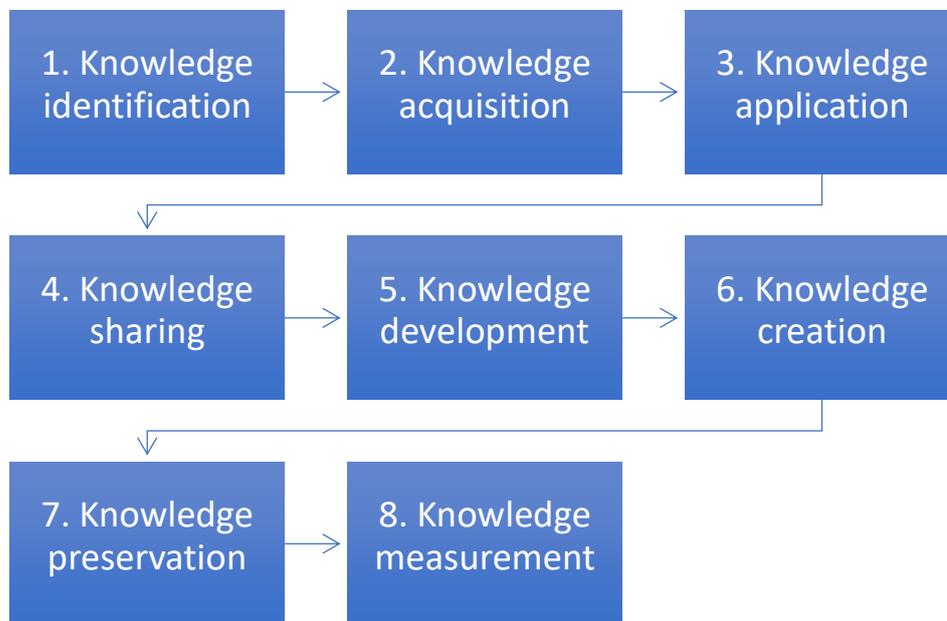
3.4.1. Absorptive capacity and knowledge management

As mentioned above, absorptive capacity and knowledge management (KM) represent consistent and positive drivers of BM innovation and increased performance. As Cohen and Levinthal (1990) stated, absorptive capacity is the ability to “recognize the value of new, external information, assimilate it and apply it to commercial ends”: it begins with the acquisition of external inputs and ends with their exploitation. This allow SMEs to engage both in exploitative and exploratory innovation strategies⁶ and search for external inspiration for new business models that are focused on efficiency and novelty (Müller et al., 2020). Absorptive capacity is an important precondition for knowledge management: indeed, KM capabilities allow firms (SMEs in particular) to identify previous and acquired knowledge and transform it into innovative business opportunities. Firms must recognize which KM capabilities are essential to them and use them timely and properly to innovate the business model and convert that knowledge into value creation (Hock-Doepgen et al., 2019).

⁶ v. chapter 2.7

Purcarea et al. (2013) distinguish SMEs' KM activities into eight chronological phases (fig. 3.3) that start from the identification of external knowledge and its subsequent acquisition. At that point the firm learns from what it has been acquired and applies it to improve its processes and activities in order to share it among the people inside the organization afterwards. Once the knowledge has been owned, collectivized and developed, it is time for the firm to take advantage from it and implement and create a unique process or activity that must be preserved in order to maintain the value generated in the future. Clearly, each improvement must be constantly analyzed and measured to state its efficacy.

Figure 3.3: Knowledge management activities



Source: Adapted from Purcarea et al. (2013)

In order to be efficient, this process requires an infrastructure and an environment that preserves and cultivates knowledge sharing and organizational learning aligning it with the business strategy. In particular, SMEs should rely on its absorptive capacity to acquire new external knowledge, assimilate it and apply it to transform and change the business model. On the contrary, internal knowledge capabilities have not been identified as significant in influencing the business model innovation according to the research conducted by Hock-Doepgen et al. in 2019. It is recommended for SMEs that want to embark into a novelty-centered business model to design an appropriate organizational network from which they can learn and share knowledge, rather than just improving the efficiency of the existent BM.

3.4.2. The entrepreneur's role in SMEs

The topic of innovation leadership and management has been discussed by academics in the last decades, but not particularly in the context of business model innovation and SMEs. In this specific context, the entrepreneur plays a significant role as the main orchestrator of the firm's strategy: in fact, in SMEs the same person usually covers both the role of the owner and manager, therefore he articulates the business model and formulates the strategy aimed to create value.

As a consequence, the personality and experience of the owner influences the whole SME path from the innovation strategy identification to the innovation adoption: he

combines knowledge and expertise from other industries and disciplines to develop and design the BM's innovation (Lukovszki, Rideg and Sipos, 2020).

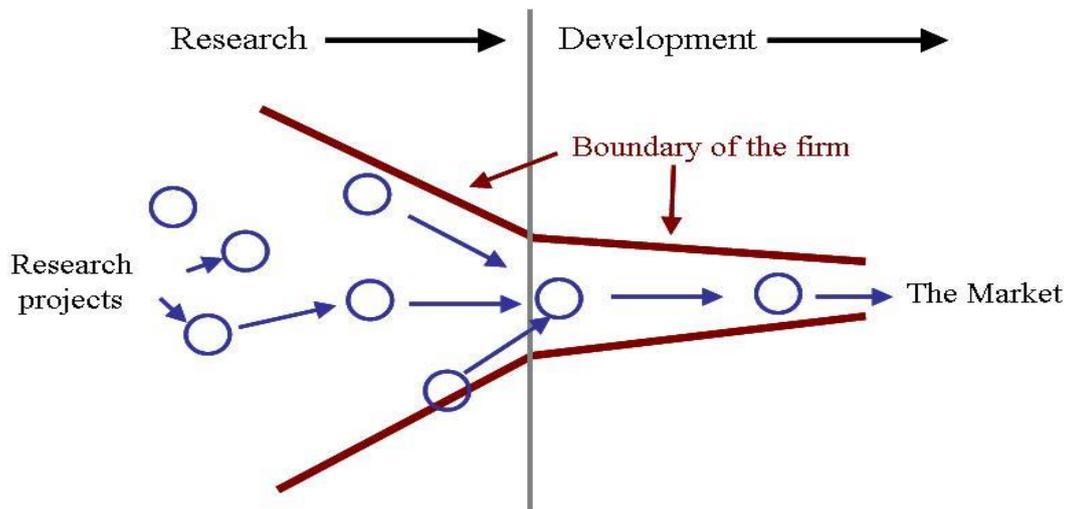
SMEs' business model innovation induces the entrepreneur to embark into a discovery-driven journey: in fact, since many success factors are unknown at the outset, conventional strategic thinking and planning is not applicable. According to McGrath (2010) innovative entrepreneurs evolve their BMs over time through BM experimentation: they rely more on actions rather than on available data.

However, generally SMEs are not able to mobilize enough resources to cope with the liability of smallness: in such situations open innovation represents a suitable solution for SMEs' managers aiming to resolve the lack of internal tangible and intangible resources; in fact it is a direct consequence of SME's ambition to transform its business model (Usman and Vanhaverbeke, 2018). In particular, managers of small-sized businesses should overcome the "endowment effect", for which the fear of the unknown and conservatism is stronger than the "attraction of gain", leading to a consequent resistance to change (Gray, 2002). In the forthcoming future, managers should learn how to orchestrate their ecosystem of innovation network if they want to explore new business opportunities.

3.5. Open innovation business model for SMEs

Before the advent of globalization, firms relied on the “traditional approach” (also called “closed innovation model”, fig. 3.4) which required that the internal RD&I activities contributed to generate internally developed products.

Figure 3.4: Closed innovation funnel



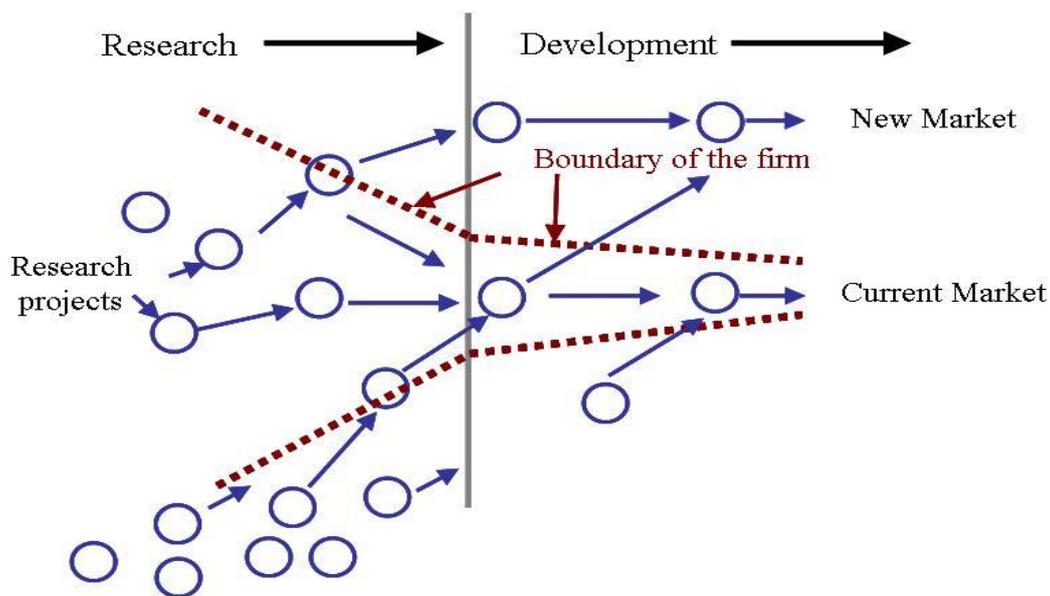
Source: Chesbrough, (2003)

On the contrary, open innovation (fig. 3.5) constitutes a direct response to the prevalent internal-oriented structure of many firms and is the main key for firms aspiring to grow.

The term was inaugurated by Chesbrough in 2003 basing on the belief that companies should broaden their BMs and use the open innovation to acquire external ideas and technologies in their own business (outbound open innovation)

while sharing their unused internal ideas and technologies with others (inbound open innovation): in this way they could effectively use their intellectual property to create and obtain value (Huang et al., 2012). Today the definition has become “a distributed innovation process based on purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organization's business model” (Chesbrough, 2014).

Figure 3.5: Open innovation funnel



Source: Chesbrough (2003)

Focusing on SMEs, open innovation can play a pivotal role in their innovation process and commercial performance: due to the rising of globalization and competitive pressure, prize battles and the fast changing policy regulations, SMEs

must opt for this strategic re-orientation in which external partners can contribute and compensate the few internal resources available (Usman and Vanhaverbeke, 2018). As creative and innovative ideas flow, the boundaries of the firm blur, resulting in the generation of more value: this new kind of labor partition consequently leads to innovative shared organizational models.

As a confirmation of this, Huang (2012) reports that open innovation has a significant positive influence on business model innovation, firm performance and profitability since it pushes SMEs to adapt and change their mindset and allows the free circulation of ideas. This “crowdsourcing innovation” also supports managers to overcome organizational inertia and the uncertainty about BM design and innovation (Anderson, Acur and Corney, 2018).

Open innovation allows firm to introduce new business models gaining knowledge and skills from the outside through which they can add new differentiated or changed products. Conversely, when firms remain trapped in closed innovation, they often maintain existing products and business models strategies that are insensitive to market’s demand.

Table 3.2: Open and closed innovation model

Business model	Open innovation	C-O Type Development for a while	O-O Type Sustainable Development
	Closed innovation	C-C Type Short-term rent seeking	O-C Type Maintenance for a while
		Knowledge strategy	
		Closed innovation	Open innovation

Source: Yun, Jung and Yang (2015)

According to table 3.2, C-C type SME (closed innovation BM – closed innovation knowledge strategy) uses close innovation approach both in KM and BM: their survival time horizon is very limited since they are not promptly reacting in case of market changes. C-O type SME (closed innovation KM – open innovation BM) continuously develops new products to satisfy customers’ demand: this kind of firms can survive just if they keep building diverse business model within their existent knowledge. O-C type SME (open innovation KM – closed innovation BM) are mostly large and medium firms that awarded an area and customers: they can survive as long as the market does not change rapidly since their business models

are slow. Finally, O-O type SME (open innovation KM – open innovation BM) changes major products following the customers' demand and constantly secures necessary knowledge and technology from the outside: it represents the SME that constantly keeps growing (Yun, Jung and Yang, 2015).

Indeed, during the adoption of the open innovation, managers have to learn how to deal with external partners in the value chain and base that relationship on transparency and mutual communication. Whenever tension might rise (e.g. due to intellectual property), entrepreneurs should manage the conflicts and keep the network sustainable, otherwise the joint value will not be maximized (Vanhaverbeke, 2018). Most SME managers are not used to manage a network of innovation partners and this is the main reason why SMEs tend to fail in open innovation.

3.6. Managerial implication and suggestions

It is concluded that in today's digital economy, business model innovation is a key activity that must be taken into consideration and undertaken by firms, both large and small ones. Considering the challenges that hinder SMEs' path towards innovation (limited personnel, knowledge, capabilities and weaknesses in networking with external partners influenced by organizational inertia), these firms should start adopting available BM methods and tools more systemically and

comprehensively (e.g. BM Canvas or spreadsheets). Overcoming such barriers is a responsibility for the leadership, who plays a crucial role in initiating and supporting the innovation process (Purcarea et al., 2013). However, often SMEs managers and owners act inefficiently and conservatively with the solely aim to improve the efficiency of the existent processes.

One potential way to overcome this slackness is to engage into a shared polycentric BMI to install new forms of bottom-up value creation. Moreover, instead of relying on basic intuitions and non-systematic approaches, SMEs should promote training and knowledge sharing about the proper tools to use in order to innovate. For instance, Pucihar (2019) in her study suggested the usage of free online resources and material that could support SMEs in their discovery journey:

- Business Makeover Portal (<http://businessmakeover.eu>) which lists case-studies and tools for business model innovation;
- Business model canvas and strategyzer tool for BMI (<https://strategyzer.com>);
- Online courses with a final certification;
- Seminars and coaching programs.

Nonetheless, sometimes it occurs that conservative SMEs tend to consider additional learning as unnecessary and time-consuming and prefer to focus on day-to-day activities: this represent one big mistake and it is the reason behind the organizational inertia that today hampers the innovation process in SMEs.

Lastly, as argued in the first chapter, there is an urgency for the government to provide funds and incentives for entrepreneurs and small business realities. In particular, SMEs should be supported through a consistent release in the fiscal pressure in order to boost their innovation potential. Moreover, there should be an ideal environment constituted by several stakeholders among which universities, research centers, regional agencies and more others to support business realities during their discovery and learning journey.

Chapter 4: Business model evolution in SMEs: the case study of Design Italian Shoes

4.1. Introduction to the research

In the following chapter it will be analyzed the case study based on the data retrieved by the Italian firm “Design Italian Shoes”. In order to fulfill the objectives of the dissertation, a qualitative research was held: the main characteristic of this investigative approach, which distinguishes it from quantitative methods, lies in the fact that it is very appropriate for small samples and offers a complete description of the research subject. Indeed, qualitative investigations collect information (e.g. opinions, impressions or points of view) in order to describe, rather than measure a topic. The reason behind the selection of this methodology is that the aim was to collect data regarding the motivations, thoughts and behaviours of the firm considered; however, even if this allows a deep understanding of the inquiry, on the other side it makes it more difficult to analyze the final impressions and results.

For the purposes of this research, in-depth interviews were used to collect data on individuals’ personal experiences and perspective: these face-to-face interviews require a personal and direct contact between interviewers and interviewees and are optimal to eliminate non-response rates. They were purposely semi-structured in order both to collect specific data and to offer flexibility in terms of the flow of the interview.

Meetings were held between January and July of 2020 with the founder and CEO Andrea Carpineti: the interviews took place both physically at his office and virtually through videoconferencing and they lasted approximately 30 to 40 minutes. During the discussion were taken notes and vocal recordings in order to support the researcher to eventually analyze the data collected. Moreover, participants were free to express their opinions even in issues not included in the program, so the conversation flowed smoothly.

4.2. DIS overview

Design Italian Shoes (DIS) is an Italian micro start-up conceived at the end of 2013 from an entrepreneurial idea of three partners: the founders (and brothers) Andrea and Francesco Carpineti, together with the contribution of the digital strategist Michele Luconi, nominated as Chief Digital Officer. The main objective of the brand is to preserve the “made in Italy” tradition through the innovative digital solutions, while restoring the value of the craftsmanship tradition in the Marche region.

The company was officially launched on February 2015 in Civitanova Marche, which is the core area of a highly specialized shoe district known all over the world for the skills of its artisans. The brand DIS footwear was born to be distributed worldwide through the website www.designitalianshoes.com, in which Michele Luconi, owner of a software development company, implemented DIS’ 3D

configurator that gives customers the possibility to become the real protagonists of the artisanal production process.

In this way, consumers are able to virtually design and assemble the features of their own shoe model among a great variety of choice amidst shape, color, textile, size, laces and other details, accounting for more than 50 million combinations. The result is a pair of perfect and customized shoes, unique and certified, as unrepeatably as the identity of the person who designed it.

Indeed, the characteristic that distinguishes DIS from other shoe companies online and offline, is the fact that the customer can free its imagination and translate it into a tailor-made shoe, thanks to professional photorealistic renderings.

That idea reconnects with the founders' desire to create an innovative digital solution, which has been named "DISruptive business model" in a highly traditional sector, while at the same time maintaining the great qualitative standards that characterizes the Made in Italy tradition.

4.3. DIS business model

According to DIS founder, Andrea Carpineti, the business model is the way in which an organization decides to combine different elements (among which the contents, the structure, the market, etc.) in order to create value for both the enterprise and the customers. Often, the same entrepreneurial idea can be realized

using different business models and can therefore end with various outcomes: the entrepreneur must recognize how that idea can be translated into an effective and efficient strategy.

DIS started by stating the basic assumption to understand whether a business proposal could have a potential market, i.e. identifying a solution for a problem: once they had identified a segment of the market with a specific need or problem, they addressed to them as the target of their business model.

The Business Model Canvas tool supported them in their strategic reasonings and helped them to identify and define the business model through a visual definition of the current situation and the prospective towards they were headed. As mentioned before, this specific instrument is very useful both for large and small enterprises and, more specifically, it fits SMEs for their strategic and organizational architecture of the business: in fact, DIS management declared to have used and kept using it on a regular basis. However, they also included other leaner tools deriving from the BMC to make hypothesis and predictions on market dynamics. Indeed, despite all those possible expected projections, the market dictates its laws no matter what: this is why DIS constantly collects external feedbacks to promptly modify the scenario and the strategy every three months.

In summary, in DIS case, the successful key finding was understanding that the main force driving the business model was finding the commercial offer that matches the needs both of the market and the producers.

4.4. Business model evolution

Since the beginning, DIS has constantly reinvented and readapted its business model and proposal according to the changing environment. The aim of this paper is to describe and analyze each change, as the interviewed Andrea Carpineti narrated them; in order to vehiculate the empiric problem of this research, which is understanding how the evolutions are connected among them.

The main focus will be the motivations and the critic conditions that push the entrepreneur to be forced to constantly change its way to make business. The main factors that are going to be enlisted will be due to internal and external forces, among which the environment, suppliers, customers, etc.

Being a startup, DIS' life is characterized by a lack of resources and time, so each step can be considered an evolution, not a revolution. Indeed, according to Mr. Carpineti, innovation does not necessarily mean to invent something, rather it implies rearranging differently something that already existed. It might involve the recombination of a production process (e.g. from standardized to customized) or the change of purpose of an internal element.

Innovation thrives from internal skills and key resources: many enterprises do not recognize the hidden potential of their capabilities and leave them unexpressed and unevolved. Nonetheless, through R&DI activities, firms should start rethinking their processes and dynamics to adapt them to new unmet necessities in the market.

For what concerns DIS, each plan is made on a trimestral horizon: when there is a new project, its revenue must be registered into the first three months in order to be efficient. The main questions that Mr. Carpineti always reminds himself when judging a new initiative are:

- How to maximize your assets?
- Is it possible to identify what was successful and what failed?
- How many new needs is possible to detect in the market?

The answers to these questions constitute the fundamental basis for new evolutions.

When a new entrepreneurial idea comes over, it does not take the place of the previous one: simply, the management decides to invest less resources in less profitable activities, while focusing them in the new potentially successful project. Indeed, SMES are always struggling to achieve is fast and large growth in a reduced time horizon.

For instance, DIS invested over 10,000 euro monthly on online advertising at the beginning; while, since its strategy changed over time, nowadays only one sixth of that amount is spent on online advertising, leaving the major investment of resources to the commercial development of the B2B2C model for fairs, travels and agents.

As a startup, DIS has learned to be flexible over time: they recognized the importance of having an internal technological asset and hired an IT professional (Mr. Luconi), so that each change in strategy and business model can be easily

realized quickly and with much fewer investments. This proactiveness has allowed them to promptly react to the changing environment whenever needed, adapting the new strategy to the incumbent needs.

Moreover, Mr Carpineti has revealed that he prefers to concentrate resources and effort in new market opportunities when there are few or inexistent competitors. That is partially the reason why the business model of this enterprise is constantly changing: once a new potential way to make large profits is identified, the management starts investing and adapting its organization to it.

4.4.1. BM0

The very initial idea, conceived by Andrea even before the actual starting, depicted DIS as a digital platform linking designers, artisans and final customers. Clients were given the possibility to find the collections designed by creators and link them to the craftsmen that would have realized them.

According to the founder, this platform would have implied three marketing costs:

- The cost of attracting and recruiting the designers on the website;
- The cost of the commercial development of conveying numerous artisans into a platform;
- The cost of channeling the final customer into the platform.

Indeed, the presence of these many subjects, the costs and the time implied to effectively produce the products, made the founders realize the impossibility of pursuing this specific business model. That was the moment in which one of the founder, Andrea, coming from an academic background, became conscious that not all potentially innovative ideas can be easily transformed into reality: the involvement of many designers could have been a significant comparative advantage in the market and would surely have given visibility to DIS. However, to financially survive, the organization needed to be simplified and slimmed down, so, eventually, they chose to arrange a partnership with only one artisan and came up with the BM1.

4.4.2. BM1

The business model number one is the natural adaptation to the hypothetical failure of the previous business model. It was elaborated through the Business Canvas Model by the team composed by Andrea, which is in charge of the economical asset of the company; Francesco, who had been working for years in the shoe manufacturing district and brought practical skills and hands-on experience; and Michele, the owner of a web developing company.

From the combination of each one's expertise, they elaborated a minimum value product (MVP): a first functioning prototype. In this new scenario, the key subject

was the supplier, since the BM1 had the aim to innovate the traditional mass production process, switching to a tailor-made production.

In order to effectively and efficiently achieve this purpose, they had to reorganize the whole production workflow and implement a change in the cultural mindset of the artisans in the shoe district area. Therefore, the key operation, that would have determined the effective start or failure of the project, was to take into consideration all the shoe-making companies that were willing to adequate their production processes to their standards. To effectively achieve that, the team carried out a screening questionnaire in which the candidates should have specified their terms on pricing, delivery time, manufacturing, etc. Eventually, they narrowed down the selection to about 50 firms and, after visiting the plants, they decided to rely on just one of them.

The launch included a mini collection whose aim was to understand if the BM1 could have had a positive response in the market. At the same time, they started promoting their business proposal to various institutional actors and relying on different communication channels: they took part to numerous competitions and started gaining approval and success.

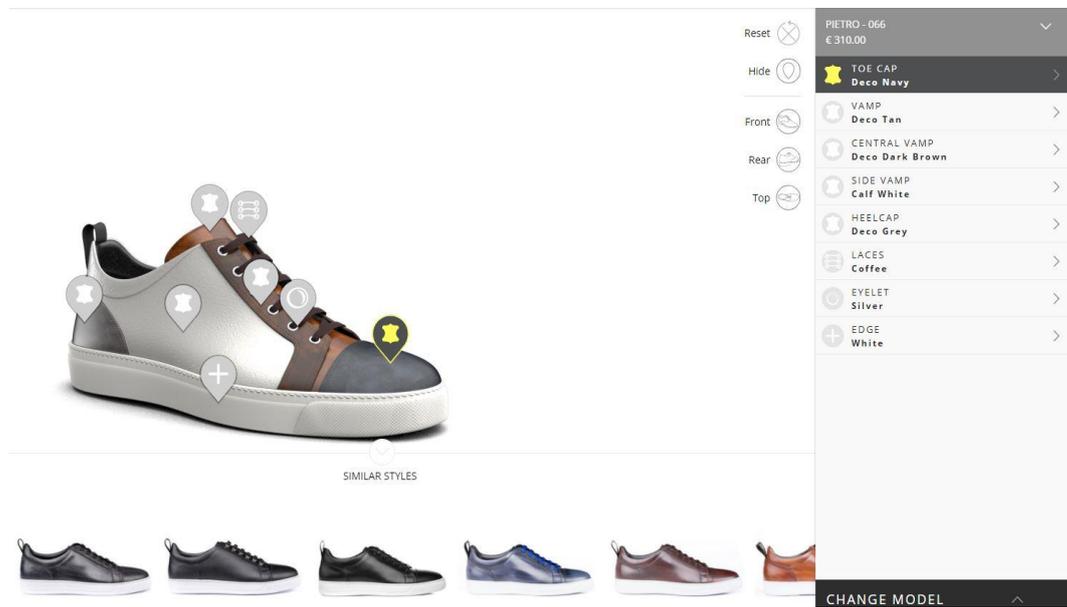
Among the diverse accomplishments, there was the winning of Capital competition, Unicredit startup contest and the achievement of finalist position at the Intesa San Paolo and Marzotto event. In short, in that year, they won or at least became finalists

(with the accomplishment of an award) in almost all the Italian start-up competitions.

Therefore, in the wake of the approval received during those times, in July 2014 they presented their first 3D configurator at the SMAO event in Florence, where they displayed the first functioning version of the site with five available models. Since that, an initial investment of 5.000 euros was made by the founders and destined to 3 months of online advertising. Thenceforth, the business model became active and shoes were starting to be sold.

The value proposition promised one of the fastest services offered all over the internet: only 10 working days to deliver the product once ordered thanks to the real time access to information by each stakeholder. The revolutionary part characterizing the 3D configurator (fig. 4.1), at the base of DIS business model and completely integrated within all DIS marketing platforms, is the fact that it provides a perfect sample of the pair of shoes that the customer idealizes: it offers different angulations from which the client is able to explore and study each minimum detail. Surely, it gives the customer the freedom to express his tastes and personality. Furthermore, simply registering an account, the user is able to save his preferences in a wishlist, while the configurator tries to combine all possible suggestions based on the choices expressed before.

Figure 4.1: DIS virtual 3D configurator



Source: designitalianshoes.com

Therefore, having on their side such a performing infrastructure, the owners were constantly looking for new investors that were willing to support their entrepreneurial idea. That is why in November 2014 DIS participated to a television show called “Shark Tank”, based on the Japanese TV format “Dragons’ Den”, in which aspirant entrepreneurs present their business idea to potential investors. In the first night of the show, Andrea closed a deal worth 300.000 euros with the investors and in the same night, the website sold 100 pair of shoes online.

That was a crucial moment for DIS: since that night, the business became a full-time job for the two brothers Andrea and Francesco, who resigned from their previous jobs and focused their efforts only on DIS project.

The first business model from which they started was based on a single channel strategy including exclusively an online presence: in fact, initially, they strongly believed in the power of the online business model. In contrast with the traditional shoe sector scenario, DIS adopted an inverse strategy compared to the majority of its competitors in the same geographical area. In fact, Design Italian Shoes was born as an online shoe manufacturing company, while others traditionally start by opening a physical store and, only after a period of time, take the chance to commit into an online business. Surely, at the base of this strategy there was the strong belief that it was the fastest way to make great returns.

Even if it was the easiest way to reach a greater variety of clientele, it proved to be difficult to manage as a result of the huge financial investments needed to oversee the online activities. Although having internal and external skills and the proper budget to implement their plan, as time went by, the return on the investments made (mainly on online advertising) was taking too much time to reenter the balance sheet: DIS management realized that building an online business from zero was anything than trivial, even when there is solid financial and expertise background.

4.4.3. BM2

Between December 2015 and January 2016 DIS management decided to sharply change the route and focus on the business model number two.

As mentioned above, the quick shift was mainly due to unsatisfactory revenues: the enthusiasm left by the participation to Shark Tank contest reduced over time and the sales started diminishing. The investments in advertising were taking too much time to return in opposition to what they had planned; therefore, the company started to struggle: the business plan would have failed in 6 months.

Hence, in 2016 DIS decided to cut some costs: they temporarily suspended the online advertising for few months and dismissed two employees, while focusing the majority of investment into the strengthening of the offline channel, which was the only option left to make the company survive.

In this new scenario, Andrea and his brother for the next months had to quickly focus on a new strategy to stimulate a new demand in the market. This led to a new revelation: the understanding that the main offer of their brand was not a customized product, rather a customized service. Indeed, DIS quickly changed its value proposition from a B2C business to a B2B2C one.

Since there was a new necessity of integrating the digital component with the physical stores, the new omnichannel strategy included the offline channel: they brought the same customization service inside chosen stores, creating corners inside selected shops, in which they could combine the traditional store experience with an innovative customer journey.

DIS management preferred not to found their company-owned stores; therefore, among the different categories of shops among which DIS could have been placed

(big departments stores, shoe-making shops, clothing stores, multi-brand stores, etc.), they targeted multi-brand stores, which were more appropriate for the kind of service they wanted to deliver and more cost-effective for what concerned the financial plan.

While continuing the development and the improvement of the online activities, in that period the strategy focused particularly on the B2B business. Specifically, in order to implement the offline business model, it was necessary to find and acquire new commercial partners through fairs and exhibitions, which are the most effective way to discover new clients in the shoe manufacturing sector.

Furthermore, the new business model was strategically interesting under the logistic point of view: since every order is carried out just-in-time, the firm does not risk unsold stocks of products that can be a cause of costs and uncertainty during market crisis. Basically, DIS is the only Made in Italy brand to solve the huge problem of the unsold goods at the end of the season: in fact, the order made by the retailer is processed only once the payment is fulfilled, without having to stock products or semi-finished materials. This implies also the significant advantage of cutting the CO2 emissions by 30% with respect to the average performance.

Surely, it must be mentioned the fact that, in contrast with the traditional formula “ready-to-order” to which the customer is accustomed, the use of the “made-to-order” binds the client to wait a certain amount of days until the delivery of the

product. However, this a necessary compromise when there is a customization process involved.

Once the strategy had been planned, the staff of the affiliate shops were trained in order to acquire the needed skills to handle the 3D configurator inside the shop (fig. 4.2): the latter was located trough tablets or laptops in the DIS corner together with a foot scanner, whose aim is to provide detailed information on the foot size and suggested shape, while collecting the information into the DIS database.

Figure 4.2: DIS corner



Source: designitalianshoes.com

Moreover, each product has a QR code that allows the totem to recognize it and instantly start the customization. Nonetheless, the QR code provides the customer with a complete tracking of the production process. This is advantageous both for the client, that feels empowered and in control from the starting order to the delivery, and for the value chain management, which is made stronger by the

communication and interconnection between each step. In fact, from this experience, DIS realized that the real added value of this new proposition lied in their supply chain. During those years they have been investing in the digitalization of the whole process: each time an order was made through the configurator (whether in the physical stores or in the online platform), the order was notified and transferred into the production process in real time through a backend application that daily reports all the transactions to manufacturers. Thanks to this service, the management was able to overall monitor the workflow while promptly detecting eventual bottlenecks.

The new value proposition provided a win-win situation for both the seller and the buyer: for what concerns the seller, this new business model solved the problem of the unsold at the end of the season, while offering an innovative experience inside the shop. On the other side, for what concerns the customers, it gave them the possibility to receive the help of the staff when needed or to individually create their own model without any further interaction.

Moreover, for the company there is a great advantage coming from this kind of commercial relationship with the stores: in fact, DIS could easily reduce the costs of the customer acquisition process while offering a seamless purchasing experience to the consumers that can have the same shopping experience both online and offline. Furthermore, they cut the investments in B2C marketing, since they could take advantage of the existing clientele of the physical shops while

increasing the brand awareness, reaching a wider range of users under the geographical point of view.

DIS now relies on a solid network of commercial partners spread worldwide among Europe, Asia and America (fig. 4.3). Moreover, not all their commercial partners are shoe sellers: the majority of them sell tailor-made suits and take advantage of DIS sale solution to offer an additional service to their clients, allowing them to pair their customized suit to matching custom-made shoes.

Figure 4.3: Worldwide distribution of DIS commercial partners



Source: designitalianshoes.com

However, according to Mr. Carpineti, the only sustainable business model that can survive is the one that involves a direct omnichannel strategy: indeed, the “hybrid”

solution they came up with readily started to cause doubts since the company was not in direct control of the offline channel.

In fact, analyzing the BM2, there are few negative aspects that pop up: for instance, there is no touchpoint with the final customer, since it was not possible for DIS management to be physically present in the shop to monitor the effective development of the sale. Moreover, even if properly trained, the affiliated staff was not directly employed by DIS, causing the correlated potential risk that they could not push their products appropriately: what if a new employee is hired without being properly trained on how to use the configurator?

This business model, except for a few adjustments that refined some raw implementations, has basically remained unchanged until the end of 2019, when the need for something more effective began to make its way, and then definitively in March 2020, when the COVID-19 pandemic shocked the certainties of physical retailers.

4.4.4. The evolution from BM2 to BM3

While the time interval between BM1 and BM2 was very narrow, the evolution from BM2 to BM3 took almost three years. The reason why the management hesitated to make a further step beyond was that they truly believed that the B2B2C strategy was the winning one. However, while the 2019 business plan expected a

consistent growth for the enterprise (with the possibility of great revenues through partnerships with big chains), the reality reserved a different destiny for the entrepreneurs.

Indeed, the need to evolve was mainly due both to internal and external factors: from the internal point of view, the business model was no longer financially sustainable since the revenues were not satisfactory; on the other side (outside), there was a changing environment that certainly pushed the evolution.

In fact, according to Mr. Carpineti, in the year 2019 there has been a drastic change in the market of the department stores mainly due to the strong takeover of the internet as the main channel of fashion purchases. Moreover, he foresees the disappearance of the wholesale channel in the next few years, while those who will not fail will eventually evolve. This change is already happening in the US, while it will eventually reach the European market with a certain delay.

Regarding the business model formula, DIS's manager stated that the BMs that will be working for the future are direct to market models with omnichannel strategy.

Given these premises, the initial idea thought by DIS was to go back to the combined online-offline experience with a new interactive and technological physical store in which the customer lives a truly innovative purchase experience that allows him to buy instore or online at the same price. On the other hand, DIS recognized an opportunity in developing partnerships with luxury brands that will have more chances to survive the incumbent revolution.

4.4.5. BM3

Since DIS describes itself as a fashion-tech start-up that works in fashion, but that invests also in marketing and technology, they recognized the value that the owned technological platform could deliver. Therefore, the new business model provides the same service developed in the past but delivering the value proposition to a different customer: this time they decided to partner with other brands through a white label service. In this new scenario, a luxury company (e.g. Dolce&Gabbana) can buy the personalization service from DIS together with the different modules that the firm offers (manufacturing ERP, the foot-scanner app, the management system of the selling corners and the customized made-to-order flux), respecting the same delivery time as before.

The difficulties linked to this new project, according to the owner, could be linked to adversities connected to the communication with foreign countries or complications during the registration of the orders or time effectiveness. However, Mr Carpineti believes in the positive outcome coming from the synergy of an open innovation between big enterprises and small startups: in fact, he is ready to make at their disposal their technology and know-how on the digitalization of productive and sales processes.

To date, the major concern in the market for companies is to sell the project and reach the final customer: however, as a matter of fact, this kind of complication can

be easily avoided if the seller finds another intermediary that deals with these tasks for the firm.

For what concerns the suppliers, the consequence should be an increase of the volume of the orders and the workload; however, this is considered an “happy problem” by the company. Nonetheless, it requires a new and revised organization of the communication in the relationship between supplier and buyer.

Starting from January 2020, the management has been mainly focused on the commercial development of this third business development, rather than on other projects; reporting the first delivery on March 2020. Moreover, DIS has already gained more than one customer on a private label contract and is still dealing with big luxurious brands. Indeed, the solely approval that these brands are showing towards the projects represents a great satisfaction for the company.

4.4.6. BM4

Despite having focused their strengths on the development of the BM3, the company still struggles to find new ways of becoming more and more competitive in the market and constantly keeps working on side projects. Following the recent trends in US, a further evolution could be represented by an affiliation with online personal stylists that will become the intermediate subjects between the physical store and a tailor.

According to this new entrepreneurial idea, these subjects would be equipped with a sartorial kit (worth about 500 euro) with which they will personally visit the customer at home to find their size and shape and eventually customize their shoes with the help of a professional.

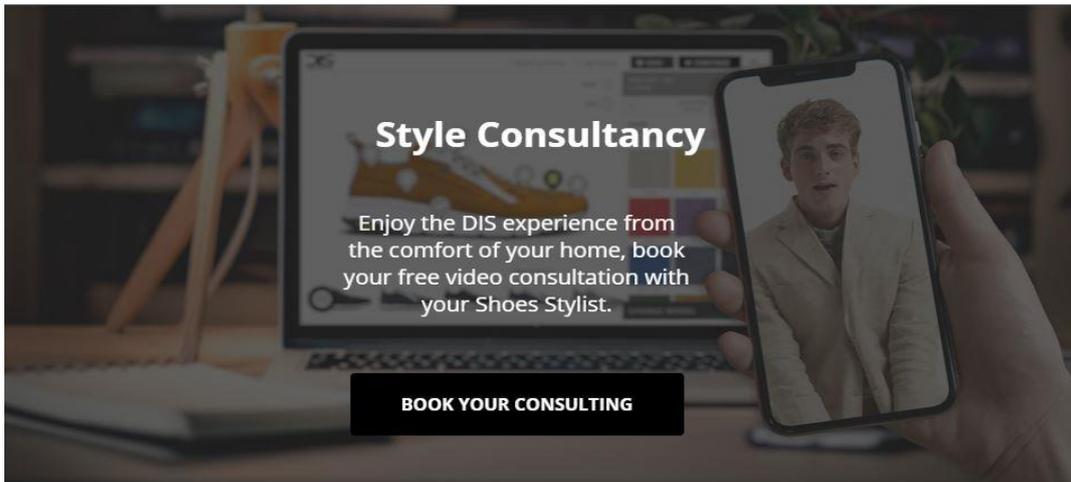
Furthermore, in order to train the personnel, the idea is to find an online “DIS Academy” that will officially certificate professionals as “DIS stylists”, allowed to carry out their services anywhere. The online academy can let DIS quickly scale up without significant material investments, other than video contents. Once the initial costs are sustained, additional expenditures include online advertising.

The aim is to build a network of 100 personal stylists all over the Italian territory: the customer will look for the nearest assistant among the ones available. Although the Italian plan that could be potentially successful, the company thinks that the ideal launch of this initiative should firstly occur in the US, whose market is more receptive and ready to embrace this kind of service. In fact, Americans have already developed similar activities in the tailoring business: DIS wants to fit in already existing networks of shopping assistance businesses that offers a home service of image consulting (including clothing, shoes and accessories).

Data and materials have been collected in the first months of 2020 and the first pilot tests started in May 2020: at the moment the service consists in a 15-minute free web conference that can be easily booked online with a company’s dedicated shoes

stylist. The video consultation aims at the personalization of the shoes in order to perfectly match the customer's style and outfit (fig. 4.4).

Figure 4.4: DIS virtual style consultancy interface



Style Consultancy

Enjoy the DIS experience from the comfort of your home, book your free video consultation with your Shoes Stylist.

BOOK YOUR CONSULTING

THE EXPERIENCE OF CUSTOMIZATION AT YOUR HOME.

Enjoy the DIS experience from the comfort of your home: from today you can book a virtual appointment in the company of a dedicated Shoes Stylist. A free video consultation to discover the products, services and create together the personalized shoe that perfectly matches your outfit.

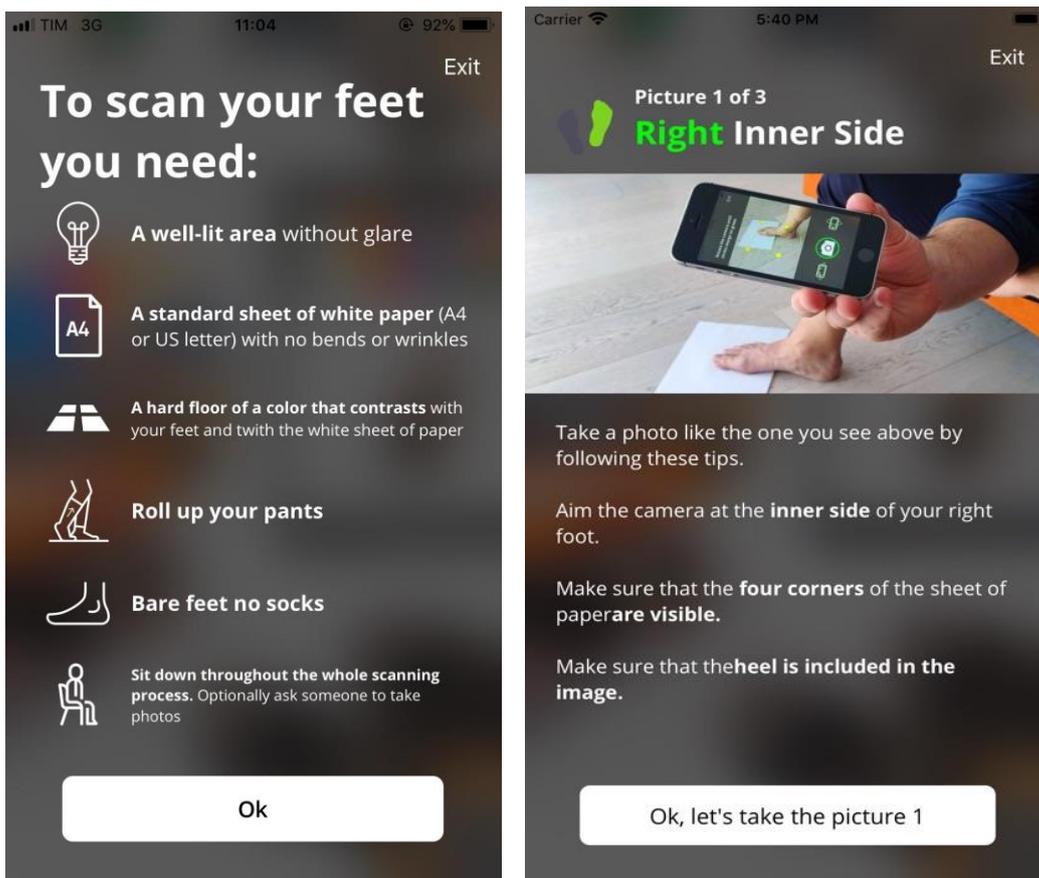
Source: designitalianshoes.com

In order to avoid problems due to the sizing, which previously forced the owners to provide a shoe sample in physical store, the management took advantage of its technological apparatus to develop a foot scanner application easily downloadable on mobile devices.

4.4.6.1. DIS Foot Scan App

After 18 months of research and development, DIS released on the market its app, currently available just in the iOS version. The application is based on a standardized algorithm that elaborates the measures of the foot (length, circumference, instep) and suggests the correspondent size and model to purchase (fig. 4.5 and 4.6).

Figure 4.5 and 4.6: DIS Foot Scan App



Source: DIS Foot Scan Application

The process should occur in a well illuminated place and it requires the customer to use a piece of paper in the format A4 to shoot three photographs for each bare foot (right inner, outer and back side) while the technology does all the rest.

Technically speaking, Mr. Luconi, who is the one in charge the technological development of DIS app, elaborated two different algorithms: the first aims to perform a mathematical reconstruction of the user feet through the use of the photographic material; the second, unique of its kind, matches the consumer's feet to the correspondent DIS shoe model, suggesting which size to purchase for each model.

Therefore, this second algorithm brings a huge added value to the company: in fact, it can be easily standardized and offered as a service to other shoe brands, customizing it with their shapes and models. The procedure is very simple, and it only requires whichever company to insert the standard shape parameters.

The release of this app represents the ultimate step towards the digitalization of the whole purchase and production process.

Therefore, considering this ulterior improvement, it will be easily offered the possibility to return the product, option that is currently not available on the website.

4.4.7. BM5

In the meanwhile, a new possible path is emerging for DIS: the opportunity for a whole differentiated business based on the ownership of a data platform.

Indeed, since the very beginning, DIS has been storing hundreds and hundreds of data about final customers and the characteristics of the shoes sold. This amount of data could represent a potential service that can be placed at the disposal of numerous companies or private individuals which are willing to conduct a research on the shoe market.

Furthermore, the bulk of data collected highlights not only trends on future seasons but offers also real data on what is in the fashion market in real time.

Doubtlessly, markets are changing very rapidly nowadays and fashion companies are struggling to stay on track: since the rise of fast fashion, seasons are not determining anymore the rules in the market and there are continuously sales, pre-sales and collections, which are designed with solution of continuity.

Considering that DIS has internalized the technological asset, implementing this new kind of business model might not require a huge financial investment.

The project considers the implementation of the foot scanner mobile application, that was developed by the internal IT department of the company, in order to distribute it on a large scale among the big chains partners that will buy the white label service by DIS. Once the amount of data is collected, they are subsequently matched with the already existing data coming from the sales managed by DIS.

The main idea is to create a data-analysis platform that aggregates all the data collected in which, whoever wants to subscribe, can do it through the payment of a monthly membership. Moreover, the subscription will allow the customer to get access to a dashboard (named “DIShboard” by the company) in which it will be possible to combine data according to the necessity.

The potential advantage for the customers consists in the fact that often most data reports can be downloadable online under a single payment that can reach sometimes over five thousand euros: on the contrary, the proposition elaborated by DIS has a competitive price and offers a particular formula that does not bind the consumer in the case he decides to unsubscribe once his needs are fulfilled.

However, this option has not been researched properly by the management yet and the currently amount of the data collected is not sufficient to successfully implement such a project. In fact, the strategy of the owners is to work to the construction of this possible business model during the development of collaborations of the BM4: partnerships with big chains and luxurious companies will allow them to lay their hands on a critical mass of data that will prove to be useful during a subsequent phase.

4.5. The financial asset

Due to the small dimensions and the limited resources available characterizing the organizational structure of a small enterprise, it was legitimate to ask Mr Carpineti how massive the role of the investors has been. Since the beginning, DIS did not struggle to find interested investors: as mentioned above, during 2016 the idea met the approval of numerous professionals. As time went by, they kept being interested in the different business models improved by the company: in 2017 DIS closed the first round of investments and started the offline activity.

According to the “shop in shop” structure, a company should rent a space into a shop, hire its staff and grant a percentage of the sales to the department store. However, since DIS could not financially afford this kind of strategy, they studied the business plan in such a way that it was the store owner to purchase from the company the DIS service. The minimum initial cost to make an order was set to 3,000 euros: with this amount of money DIS could be able to provide an exhibition corner, test samples and a consistent percentage on the sales made (it was the 30% in the past, while in the last years it has increased to 60%).

Consequently, since the costs became higher due to the approach of the omnichannel experience, DIS had no solution than rising the prices of the products. Indeed, when they first started the launch price was 199 euros for a basic pair of shoes. In contrast, now the price is about 365 on the online store, taking into account all the expenses linked to the intermediary channel.

As mentioned above in the paragraph 4.4.3, there were several incentives to attract the seller and buy the service from DIS. Firstly, the initial investment is minimum thanks to the “made-to-order” formula; consequently, since there is no need to buy a consistent amount of products in advance, there is no risks of stock or unsold products. Moreover, in addition to the customization service, DIS provides the seller with a specific reserved area in the website in which he can monitor the progress of the production process and have access to a database in which all the information about the clients are collected.

4.6. The supplier asset

During the years of DIS activity, there have been different suppliers, among which three of them were the main providers of the company in the last four years. The importance attributed to the supplier is evidenced by the large investment made by the company in order to digitalize the whole supply chain. As mentioned before, the manufacturer receives the bill-of-material in real time as the customer makes the order. The notification activates the whole production process and the production tracking system as well. At any time, it is possible for all the actors involved in the system (from the customer, to the management and the manufacturer) to monitor the status of the order, the scheduled delivery and the potential delays. Moreover, in order to smooth the process, smaller actors have been introduced in the supply chain, like sub-supplier of minor components.

Fortunately, the digitalization of the whole process led to the halving of the time needed to produce the products while meeting at the same time the expectations of the market, which was demanding for a quicker service. In fact, at the beginning, the estimated time to carry out an order was 20 days, while now the customer can have its pair of tailor-made shoes at home in only 10 days.

The several changes in the supplier market were mainly due to an unmet quality-price ratio or incompatibilities in the managing of the business relationship; in fact, during the years DIS experienced too many takeovers by the supplier side. Therefore, they eventually decided to eliminate those providers that were also dealing with their own brand and chose to deal only with sub-contractors.

The last adjustment happened in the first months of 2020, when the unsatisfactory organization of the supply chain managed by the contractor led to a termination of the agreement. To conclude, given the incoming projects for the future, DIS chose to start a relationship with a more structured contractor, which the company judges to be more inclined to an industrial organization.

4.7. The role of the customer

Reporting what Heinze wrote in the book *Digital and Social Media Marketing: A Results-Driven Approach* (2016), the buyer persona is identified as “the

representation of all your customers and consumers that you describe (in detail) as part of your strategic planning”.

In particular, the ideal customer that DIS has classified as its buyer persona is a 45-years-old businessman that covers a managerial position (CEO, executive): he works in finance, architecture or real estate and reads economic and financial magazines. He lives in Italy or US and is passionate about tailoring and precious watches.

Among the different models available, DIS offers collections thought to satisfy a heterogeneous market demand characterized by different necessities. Basing on the buyer persona detected, the brand arranged to categorize the shoe models depending on the occasion and the style:

- The premium collection, targeted for a wealthier audience, that includes luxury models manufactured using high quality raw materials.
- The business collection, classy and formal, is designed for businessmen that wants to tastefully stand out in the workplace.
- The wedding collection, that suits grooms, but also fits perfectly in other formal events.
- The weekend collection, characterized by vibrant colors, is perfect to match casual outfits and it is mainly addressed to a younger target.

When the brand decided to switch from the B2C to the B2B2C formula, the increased costs led to a corresponding increase in the final price of the product: in

fact, the customer had to deal with about 81% growth the shoes price, switching from 199 to about 360 euro. Overall, the management felt satisfied with the outcome of the strategic move: surprisingly, not all the customers went lost, since most of them kept their loyalty to the brand, while others prefer to purchase when there are significant sales or promotions.

Moreover, in the same period, DIS implemented a market research in order to determine its position in the market. Initially, they segmented the shoe market in three main areas:

- The mass market, in which there are fast-fashion collections and affordable prices.
- The premium market, positioned in the middle, whose offer reaches both middle and upper necessities.
- The luxury market, with high-end fashion products at very expensive prices.

In this framework, DIS covers a middle position, gaining a place as a premium brand.

From that moment, the team started working on an appropriate brand image and communication: the research started from an accurate study of the competitors, Franceschetti and Santoni, to cite some of them in the same geographical area.

DIS formulated a value proposition whose competitive advantage was highly distinguishable with respect to the others: in fact, the customization service offered

by the company is not provided by its near competition, which have on their side a similar high-quality product, however purchased at higher prices compared to DIS. At last, according to Andrea Carpineti, the consumer should prefer DIS to its competitors mainly because of the unique customization service sold at cheaper prices with respect to standardized models in the same manufacturing industry.

4.8. The future of the fashion industry in the post-COVID-19 era

Even before the outspread of the Coronavirus, the fashion industry was already on “red alert” and expressed pessimism about the year 2020: indeed, from January to March the average market capitalization of apparel, fashion and luxury players dropped almost 40% and the future revenues are estimated to experience a contraction of 27 to 30%. The crisis affected not only those industries reliant on offline channels, but also online sales have declined 5 to 20% in Europe, 30 to 40% in US and 15 to 25% in China⁷.

For what concerns the fashion economy, firms that will overcome the crisis will have to intervene rapidly to stabilize their core businesses and adapt their business models. In the short term they could be called to cut costs and production or adjust product assortments; however, in the long run they need to take into consideration a re-planning of their strategy. In particular, those companies relying on long lead

⁷ McKinsey Global Fashion Index estimate calculated in relation to the 2019 baseline figure.

times and inflexible supply chains have resulted to be the most vulnerable during these times and the re-opening of physical stores did not imply a “back to normal”. Each country will experience a different recovery phase basing on their healthcare and financial system: on one side countries in which the situation has begun to ease (e.g. China and South Korea) could potentially experience a quick recovery, while those markets which have been severely injured by the pandemic (e.g. Venezuela and Nigeria) will require more time to restore growth. For what concerns European countries, they will experience different rates of return of consumer confidence basing on the effectiveness of government support and the degree by which the country has been affected by the virus.

As regards the sentiments of consumers, there is a widespread pessimism: in the past, it took six months to recover from the 2003 SARS pandemic, one and a half year from 9/11 and two years from the 2008 financial crash⁸. In fact, McKinsey and Oxford Economics analysis reports that optimistically GDP will return to pre-crisis level by the end of 2020 or at the beginning of 2021⁹. These evidences show that it may take up to two years this time to take customers’ confidence back to the initial

⁸ Organization for Economic Cooperation and Development.

⁹ Safeguarding our lives and our livelihoods: The imperative of our time”, McKinsey & Company, March 2020, <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/safeguarding-our-lives-and-our-livelihoods-the-imperative-of-our-time>.

level: consumers interviewed by McKinsey & Company for the “Consumer Pulse Survey” declared that they are currently more careful on how they spend money and that the economic uncertainty is preventing from making purchases that they would have made otherwise¹⁰. In fact, over the last few months, consumers have seen changes to every aspect of their lives: from the way they work and learn, how, where and what they shop, the way in which they communicate and travel (Fabius et al., 2020). Basically, they revolutionized the way they normally lived.

Moreover, the pandemic will shed light on an already discussed issue in the last years, which is sustainability: in particular, Gen-Z and Millennial shoppers, whose attention had already been raised before the crisis, will be the leaders of the movement that could put an end on materialism, over-consumption and irresponsible business practices. In this sense, brands that will commit into redesigning their missions and business model in a more sustainable way (e.g. repurposing existing stock for new seasons instead of recycling or upcycling, re-evaluating the company fashion calendar or customer experience personalization) will be able to satisfy a larger share of customers.

This could be defined as a “Darwinian” moment for firms: those that will not be able to adapt, will not survive. In fact, all of a sudden, the global fashion industry’s reliance on digital tools has increased more than ever with consumers raising their

¹⁰ McKinsey analysis based on consumer interviews.

interest in digital shopping, entertainment and communication: during the pandemic, 13% of European consumers browsed e-tailers online for the first time. The “social distance issue” could be transformed into an opportunity for brands that want to become digital frontrunners and adopt next-level modes of virtual engagement (e.g. livestream commerce or virtual customer assistance).

Indeed, in the post-COVID-19 era, what will distinguish winners and losers will be organizational agility and future-oriented outlook. According to Dough Stephens, firms should “use this time to reinvent how they do what they do, bring consumers new alternatives, new value, and in the process even reinvent their own brand.” Initially, firms might strategically think about their future and modify some organizational features including identifying financial leverages, divestitures, acquisition opportunities, potential partners and networks in order to create financial stability. This re-appraisal of the business model will allow them to foster growth and to recognize market gaps that open as other enterprises shutter.

Moreover, in addition to the adjustment of the strategic direction, companies might have to increase the speed at which they do it: as reported in figure 4.7, fast organizations significantly outperform others by a wide margin on innovation, growth, resiliency and other features.

Figure 4.7: Share of companies reporting outperformance compared to industry peers, %



Source: McKinsey&Co., “The need for speed in the post-COVID-19 era and how to achieve it” (2020)

However, as analyzed in the first chapters, speeding up is not that easy: there are obstructions like organizational silos, unclear strategy, slow decision-making, rigid policies and formal hierarchies that usually burden the pace at which work gets done. In order to survive and thrive during this crisis is fundamental for leaders to set up three primary objectives that will increase agility: leaner decision-making mechanisms (e.g. fewer meetings and delegation of noncritical decisions); improvement of internal communication and collaboration (e.g. empowerment of

teams and employees and real-time performance monitoring) and the adoption of technology to assure flexibility and increased productivity (De Smet et al., 2020).

4.9. The future of DIS: new potential evolutions

DIS' manager Andrea Carpineti expressed his concern over the future of his firm for the next half of 2020: as already stated above, the scenario in the fashion industry is not promising and around 80% of the enterprises could not survive. The situation in Italy is slowly recovering; however, it is not the same for the US, which is still blocked since March, and the rest of the world, where, among the 34 DIS physical stores spread worldwide, only three of them are currently open.

For the first few months, DIS implemented online promotions and discounts in order to get the expected online returns with respect to the same period in 2019. However, at the moment, they are currently experiencing a downfall in sales accounting for -60/-70%: the scenario is truly dramatic.

Consequently they are now trying to develop new recovery plans and new business models: the objective set by DIS is to take advantage of common strengths and develop a big shared project to design a fashion business model that will embrace a whole new consumer and industry. Now more than ever, they are putting their efforts into the realization of a new business model with the aim of developing a network of business partnerships with other large brands in the fashion industry.

During these times, big enterprises find it hard to adapt and change due to their formal hierarchies and rigid structures: for this reason, DIS could represent a viable technological partner to support them in their re-organization.

Despite having enlisted before all the possible barriers hindering the growth of small and medium enterprises, in this very historical period SMEs could potentially have all the right credentials to survive if they are willing to reorganize the way they do business. Indeed, DIS brand has distinguished itself over time for the rapidity and easiness through which it has adapted its strategy and business model according to external and internal contingencies. During these hardest months, their BM supported the business, however now it is time to mobilize their internal resources to build an external network that can responsively adapt to market changes.

4.9.1. From BM3 to BM6 (BM3bis)

The latest developments are the reason why DIS is implementing what it has been just a project so far and which effectively becomes a spontaneous transformation from the BM3. In fact, the next step for DIS is to become owner and seller of the pure technology exploited until now. They already projected a demo version of what will be the new 3D configurator that will allow B2B clients to project and customize whichever item from whichever industrial sector (e.g. accessories, furniture, etc.).

The accurate renderings allow a perfect real-time and photorealistic visualization of the project thanks to the new WebGL technology. As for the shoes, each detail and characteristic can be customized: colors, shapes, engravings, personalized images etc. Consequently, the final step is to resell the pure technology and its services to external firms willing to customize their products.

Moreover, riding the wave of technological opportunity, which constitutes a crucial internal core resource for DIS, they linked this new project to a new business unit that consists in the implementation of a virtual showrooming that will give the buyers the opportunity to purchase remotely. This system offers to B2B customers a 360-degree-view of the collection through photorealistic renderings and catwalk videos.

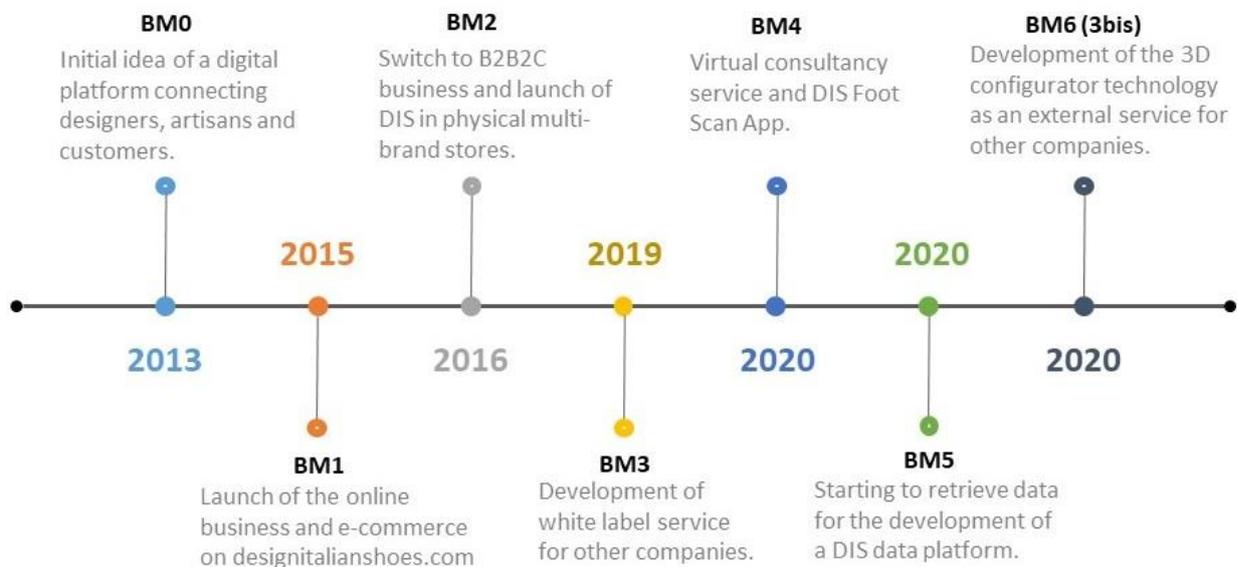
Clearly, due to the limited size and resources, the project has been developed in partnership with other enterprises in order to take advantage of the crowdsourcing innovation power and create more value for the final customer: on one side DIS offers the technological asset, on the other the network partners deal with the production process, ending up with a final shared output in the market.

Now it is a crucial moment for DIS to set the base for the future business and the next “new normal”.

4.9.2. Past, current and future business models

After a short, however full journey started in 2013, Design Italian Shoes came out with around six official (with more slight modifications) evolutions and refinements of the initial business model (fig. 4.8).

Figure 4.8: DIS BM evolution timeline



Source: author's processing

To date, the company is following three distinct business models (or “business units” as the founders call them), which are active at the moment:

- DIS omnichannel, which includes both the physical and virtual component, and it is processing the development of an innovative mono-brand that allows the client to experience a complete and full customer journey from

the online service to the physical one. Indeed, the customer is able to choose whether to book a consultancy with a DIS selected style expert online or by physically going to the shop.

- The white label project, that is the first attempt from the company to approach the industry of big fashion luxury brands offering their technological and manufacturing capabilities.
- The technological service, developed from the previous business unit and designed to seize another share of the B2B market.

Nonetheless, these do not include all the business models cited previously: there are still projects that are being researched in order to implement them at the right moment: this is the case of the data platform (BM5) which is still not mature enough to be placed into the market, and also the case of the “DIS Academy” project and the worldwide stylist network (BM4). Indeed, as the founders said, a company needs to establish priorities and act accordingly: these are all valid ideas and hypothesis that will reveal their potentialities as soon as the market will be ready to embrace them.

Discussion and conclusions

Business model design and innovation has become a key concern for companies in order to support competitiveness and survive the challenges that the business environment imply nowadays (Marolt et al., 2016).

This paper provides a general framework on the business model by integrating the already existing literature about BM design and innovation in large and small firms. Moreover, it contributes to deepen the topic of business model innovation in the context of small and medium enterprises.

The empirical problem that this research has attempted to explain regards the motivations and critical conditions that cause the evolution of the business model in small and medium enterprises. For this purpose, a qualitative investigation has been conducted, taking into consideration the business model developments of the micro Italian startup Design Italian Shoes. Consequently, a series of in-depth interviews with the chief Andrea Carpineti have been carried out in order to analyze the dynamics occurred to DIS' business model over the years.

Conversely to what Bowman, Molina-Castillo and De Reuver (2016) stated, this case study does not confirm the lack of awareness that often characterizes the commitment of SMEs in business model innovation: in fact, over time, DIS made of its flexibility in changing business model paths its trademark. The company strategically and purposively plans its evolutions ahead of time, calculating each

move basing on external and internal needs, while being supported from specific and ad-hoc tools, like Business Model Canvas and others similar. Moreover, the paper supports those researches cited in chapter three concerning the resource scarcity characterizing the context of small and medium enterprises: in its lifetime, DIS has struggled to achieve success, notwithstanding its limitations in size and financial resources. Indeed, these topics influenced the firm's decisions over the years: for instance, the choice of being supported from multi-brand stores (instead of founding mono-brand ones) was a necessary expedient due to the lack of finances needed to support such investment. In addition, the small size influenced the decision of finding support in larger organizations, leading to the outsourcing the DIS service in white label in order to make the business grow in income and popularity and thrive from the power of the network synergies. Furthermore, it has been explored which were the motivations guiding the change and how they were connected among them: as a result, DIS case confirmed the theory reported in chapters two and three exploring the main drivers of business model change: all the BMs and their transformed versions are linked and interconnected simply because each one is the direct and logical evolution from the previous one, following a developmental and evolutionary path up until nowadays.

For what concerns the main motivations leading the change, DIS proved to be strongly influenced by external drivers: changing market conditions such as modification in customers' needs, ICT advancements, changing technology and

external opportunities, all contributed to shape DIS business model over time. Each BM evolution is a response to the alterations occurred in the market: from the switch from B2C to B2B2C when the customers were not actively responding anymore to the online activity; to the digitalization of the supply chain to better monitor the production process from the order to the delivery both for the customer and the management; to the development of the white label service to take advantage of bigger network partners, with the consequent accumulation of knowledge and data needed to found the data platform; and finally to the implementation of the virtual consultancy as a reaction to the worldwide pandemic, which ultimately become a technological service for third parties not concerning only shoes anymore.

On the other hand, internal motivations were also fundamental in DIS evolutionary road: confirming the literature on business model innovation drivers, the strategical orientation and organizational agility characterizing DIS supported the firm throughout the whole innovation process; moreover, the internal technological asset was fundamental to implement a prompt reaction and adaptation to external stimuli (e.g. the digitalization of the supply chain). In addition to this, the role of organizational culture and leadership, which are constantly addressed to evolution and renewal, definitively helped the firm in adapting the business model. Besides, the willingness of the management in improving their absorptive capacity is also crucial to consistently acquire knowledge and innovate the organizational structure:

in fact, the firm has opened up to external entities implementing a wide network from which acquire connections, knowledge and skills.

However, it is important to keep in mind that this research presents some limitations that can give hints to future studies. First of all, it is important to highlight that this work has focused only on a single case study, while a research that includes more cases could better explain and justify the motivations and the implications associated with the implementation of business model innovation in small and medium enterprises. Moreover, the firm taken into consideration for this analysis is relatively young and based only in one country (Italy); therefore, it is representative and significative for just a small portion of small companies and startups.

Nonetheless, this research could still provide useful points of reflection for all those enterprises in the fashion industry willing to embark on a business model innovation path: in fact, as stated above, given the scarcity of literature focusing on BMI in relation to SMEs, the findings of this study contributes to the general existing knowledge, delivering some valuable insights regarding the BMI practices in SMEs.

Future researches should deepen the topic of business model innovation in small and medium enterprises in order to detect fundamental missing elements of BMI. Moreover, they should focus on a wider sample and include SMEs of different sizes, in different countries and belonging to different industries.

Bibliography

- Aksoy, H. (2017). How do innovation culture, marketing innovation and product innovation affect the market performance of small and medium-sized enterprises (SMEs)?. *Technology in Society*.
- Amed, I. et al. (2020). *The State of Fashion 2020 - Coronavirus Update*. McKinsey&Company.
- Ammar, O., Chereau, P. (2018). *Business model innovation from the strategic posture perspective: An exploration in manufacturing SMEs*. *European Business Review*, 30(1), 38-65. <https://doi.org/10.1108/EBR-09-2016-0119>.
- Anderson, R., Acur, N., Corney, J. (2018). *How do SMEs Use Open Innovation When Developing New Business Models?*. *Researching Open Innovation in SMEs*, pp.179-210.
- Arbussà, A., Bikfalvi, A., Marqués, P. (2017). *Strategic agility-driven business model renewal: the case of an SME*. *Management Decision*, 55, 271-293.
- Asemokha, A., Musona, J., Torkkeli, L., Saarenketo, S. (2019). *Business model innovation and entrepreneurial orientation relationships in SMEs: Implications for international performance*. *Journal of International Entrepreneurship*, 17, 425–453.
- Balboni, B., Bortoluzzi, G., Pugliese, R., Tracogna, A. (2019). *Business model evolution, contextual ambidexterity and the growth performance of high-tech start-ups*. *Journal of Business Research*, 99, 115-124.

- Barney, J. B. (1991). *Firm Resources and Sustained Competitive Advantage*. Journal of Management, Vol. 17, pp.99-120.
- Bereznoy, A. (2019). *Changing Competitive Landscape Through Business Model Innovation: the New Imperative for Corporate Market Strategy*. Journal of Knowledge Economics, 10:1362–1383.
- Bouwman, H., Heikkilä, M., Heikkilä, J., de Reuver, M., Madian, A. (2017). *Business Makeovers: Case Survey on SME Business Model Innovation*. the 1st Business Model Conference.
- Bouwman, H., Molina-Castillo, F.-J., & de Reuver, M. (2016). *Business Model Innovation in European SMEs: some preliminary findings*. 29th Bled EConference: Digital Economy, BLED 2016. Retrieved from <http://aisel.aisnet.org/bled2016/9>.
- Bouwman, H., Nikou, S., de Reuver, M. (2019). *Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs?*. Telecommunications Policy. 43.
- Bucherer, E., Eisert, U., Gassmann, O. (2012). *Towards Systematic Business Model Innovation: Lessons from Product Innovation Management*. Creativity and Innovation Management, Vol. 21, No. 2.
- Casadesus-Masanell, R., Ricart, J. E. (2010). *From Strategy to Business Models and onto Tactics*. Long Range Planning 43, 195-215.

- Casadesus-Masanell, R., Zhu, F. (2013). *Business model innovation and competitive imitation: the case of sponsor-based business models*. Strategic Management Journal, 34: 464 – 482.
- Chesbrough, H. (2007). *Business model innovation: it's not just about technology anymore*. Strategy & leadership. Vol. 35 No. 6, 12-17.
- Chesbrough, H. (2010). *Business model innovation: opportunities and barriers*. Long range planning, 43(2-3), 354-363.
- Chesbrough, H., Bogers, M. (2014). *Explicating open innovation: Clarifying an emerging paradigm for understanding innovation*. New Frontiers in Open Innovation, pp. 3-28.
- Chesbrough, H., Rosenbloom, R.S. (2002). *The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies*. Industrial and Corporate Change, Vol. 11 No. 3, pp. 529-555.
- Chester K.M., To, K.P., Chau, Chi Wai Kan (2020). *The logic of innovative value proposition: A schema for characterizing and predicting business model evolution*. Journal of Business Research, Vol. 112, 502-520.
- Clauß, T., Bouncken, R., Laudien, S., Kraus, S. (2019). *Business Model Reconfiguration and Innovation in SMEs: A Mixed-Methods Analysis from the Electronics Industry*. International Journal of Innovation Management, 24(2).

- Cohen, W., Levinthal, D. (1990). *Absorptive Capacity: A New Perspective on Learning and Innovation*. *Administrative Science Quarterly*, 35, pp. 128-152. 10.2307/2393553.
- Cortimiglia, M.N., Ghezzi, A., Frank, A.G. (2016). *Business model innovation and strategy making nexus: evidence from a cross-industry mixed-methods study*. *R&D Management* 46, 3.
- Cosenz, F., Bivona, E. (2020). *Fostering growth patterns of SMEs through business model innovation. A tailored dynamic business modelling approach*. *Journal of Business Research*.
- Cucculelli, M., Bettinelli, C. (2015). *Business models, intangibles and firm performance: evidence on corporate entrepreneurship from Italian manufacturing SMEs*. *Small Business Economics*, 45(2), 329–350.
- Cucculelli, M., Peruzzi, V. (2020). *Post-crisis firm survival, business model changes, and learning: evidence from the Italian manufacturing industry*. *Small Business Economics*, 54:459–474.
- DaSilva, C., Trkman, P., Desouza, K., and Lindic, J. (2013). *Disruptive technologies: a business model perspective on cloud computing*. *Technology Analysis & Strategic Management*, 25, 10, 1161–1173.
- DaSilva, C.M., Trkman, P. (2014). *Business Model: what it is and what it is not*. *Long Range Planning* 47, 379–389.

- De Reuver, M., Athanasopoulou, A., Haaker, T., Roelfsema, M., Riedl, A., Breitfuss, G. (2016). *Designing an ICT tooling platform to support SME business model innovation: Results of a first design cycle*. BLED 2016 Proceedings. 7.
- De Reuver, M., Molina-Castillo, F-J., Bouwman, H. (2016). *Business model innovation design and experimentation in SMEs: drivers and outcomes*. Strategic Management Journal.
- De Smet, A., Mygatt, E., Sheikh, I., Weddle, B. (2020). *The need for speed in the post-COVID-19 era and how to achieve it*. McKinsey&Company.
- Demil, B., & Lecocq, X. (2010). *Business model evolution: in search of dynamic consistency*. Long range planning, 43(2-3), 227-246.
- Dottore, A.G., (2009). *Business model adaptation as a dynamic capability: a theoretical lens for observing practitioner behavior*. BLED 2009 Proceedings, 11.
- Doz, Y.L., Kosonen, M. (2010). *Embedding Strategic Agility. A Leadership Agenda for Accelerating Business Model Renewal*. Long Range Planning 43, 370-382.
- Emami Langroodi, F. (2017). *Schumpeter's Theory of Economic Development: A Study of the Creative Destruction and Entrepreneurship Effects on the Economic Growth*. SSRN Electronic Journal. 10.2139/ssrn.3153744.
- European Commission. (2019). 2019 SBA Fact Sheet – Italy.
- Fabius, V., Kohli, S., Moulvad Veranen, S., Timelin, B. (2020). *Meet the next-normal consumer*. McKinsey&Company.

- Fagerberg, J. (2004). *Innovation: A Guide to the Literature*.
10.1093/oxfordhb/9780199286805.003.0001.
- Fagerberg, J. (2009). *A Guide to Schumpeter*. *Confluence. Interdisciplinary Communications* 2007/2008. 20-22.
- Foss, N. J., Saebi, T. (2017). *Fifteen years of research on business model innovation: How far have we come, and where should we go?* *Journal of Management*, 43(1), 200–227.
- Foss, N.J., Saebi, T. (2018). *Business models and business model innovation: Between wicked and paradigmatic problems*. *Long Range Planning*, Vol. 51, Issue 1, pp. 9-21.
- Freeman, C. (1987). *Technology Policy and Economic Performance: Lessons from Japan*.
Frances Printer Publishers, London, New York.
- Garengo, P., Biazzo, S., Bititci, U. (2005). *Performance Measurement Systems in SMEs: A Review for a Research Agenda*. *International Journal of Management Reviews*. 7(1).
- Gatautis, R., Vaiciukynaite, E., Tarute, A. (2019). *Impact of business model innovations on SME's innovativeness and performance*. *Baltic Journal of Management*, Vol. 14 No. 4, pp. 521-539. <https://doi.org/10.1108/BJM-01-2018-0035>
- Ghaziani, A., Ventresca, M.J. (2005) *Keywords and Cultural Change: Frame Analysis of Business Model Public Talk, 1975–2000*. *Sociological Forum*, Vol. 20, No. 4.

- Ghezzi, A., Cavallo, A. (2016). *Business Model Change and Refinement along Business Model Lifecycle: Evidences from a Multiple Case Study on Mobile Telecommunications New Ventures*. 49th Hawaii International Conference on System Sciences, 1477-1486.
- Ghezzi, A., Cavallo, A. (2018). *Agile business model innovation in digital entrepreneurship: Lean startup approaches*. Journal of business research.
- Gray, C. (2002). *Entrepreneurship, resistance to change and growth in small firms*. Journal of Small Business and Enterprise Development, 9(1). 10.1108/14626000210419491.
- Gunther McGrath, R. (2010). *Business Models: A Discovery Driven Approach*. Long Range Planning 43, pp. 247-261.
- Guo, H., Tang, J., Su, Z., Katz, J. (2016). *Opportunity recognition and SME performance: the mediating effect of business model innovation: Opportunity recognition, business model innovation and SME performance*. R&D Management, 0(0), 1-12. <https://doi.org/10.1111/radm.12219>.
- Heikkilä, M., Bouwman, H., Heikkilä, J. (2017). *From strategic goals to business model innovation paths: an exploratory study*. Journal of Small Business and Enterprise Development.
- Heikkilä, M., Bowman, H. (2018). *Business Model Innovation in European SMEs - Descriptive analysis of quantitative survey and case survey data*. BLED 2018 Proceedings. 4.

- Heinze, A., Rashid, T., Fletcher, G.A., Cruz, A. (2016). *Digital and Social Media Marketing: A Results-driven Approach*. Routledge, Taylor & Francis Group.
- Hidayat, D., Haposan Pangaribuan, C., Prihatma Bayu Putra, O., Suci, A. (2020). *Business Model Innovation on SMEs: A Literature Review*. International Journal of Advanced Science and Technology, 29(05), 4426 - 4434.
- Hidayat, D., Pangaribuan, C., Bayu Putra, O., Suci, A. (2020). *Business Model Innovation on SMEs: A Literature Review*. International Journal of Advanced Science and Technology. 29. 4426-4434.
- Hock-Döpgen, M., Clauß, T., Kraus, S., Cheng, C. (2019). *Knowledge Management Capabilities and Organizational Risk-Taking for Business Model Innovation in SMEs*. Journal of Business Research, (March), 0-1.
<https://doi.org/10.1016/j.jbusres.2019.12.001>
- Huang, H.-C., Lai, M.-C., Lin, L.-H. and Chen, C.-T. (2013). *Overcoming organizational inertia to strengthen business model innovation: An open innovation perspective*. Journal of Organizational Change Management, Vol. 26 No. 6, pp. 977-1002.
- Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). *Reinventing your business model*. Harvard business review, 86(12), 57-68.
- Keiningham, T., Aksoy, L., Bruce, H.L., Cadet, F., Clennell, N., Hodgkinson, I.R., Kearney, T. (2020). *Customer experience driven business model innovation*. Journal of Business Research 116, 431–440.

- Kesting, P., Günzel, F. (2015). *SMEs and new ventures need business model sophistication*. Business Horizons. 58(3). 10.1016/j.bushor.2015.01.002.
- Lambert, S.C., Robyn A. Davidson, R.A. (2013). *Applications of the business model in studies of enterprise success, innovation and classification: An analysis of empirical research from 1996 to 2010*. European Management Journal, Vol. 31, Issue 6, 668-681.
- Landau, C., Karna, A., Sailer, M. (2016). *Business model adaptation for emerging markets: a case study of a German automobile manufacturer in India*. R&D Management, 46, 3.
- Laudien, S. M., Daxbock, B. (2016). *Path dependence as a barrier to business model change in manufacturing firms: insights from a multiple-case study*. Journal of Business Economics, 86:611–645.
- Lee, Y., Shin, J. (2012). *The changing pattern of SME's innovativeness through business model globalization*. Technological Forecasting and Social Change. 79.
- Liao, S., Liu, Z., Ma, C. (2019). *Direct and configurational paths of open innovation and organisational agility to business model innovation in SMEs*. Technology Analysis & Strategic Management, 31(10), 1213-1228. <https://doi.org/10.1080/09537325.2019.1601693>.
- Lindgardt, Z., Reeves, M., Stalk, G., Deimler, M.S. (2009). *Business Model Innovation. When the Game Gets Tough, Change the Game*. The Boston Consulting Group.

- Lindgren, P. (2012). *Business Model Innovation Leadership: How Do SME's Strategically Lead Business Model Innovation?*. International Journal of Business and Management. 7. 10.5539/ijbm.v7n14p53.
- Löfqvist, L. (2011). *Managing resource scarcity in small enterprises' design processes*. ICED 11 - 18th International Conference on Engineering Design – Impacting Society Through Engineering Design. 3. 164-175.
- Loon, M., Chik, R. (2018). *Efficiency-centered, innovation-enabling business models of high tech SMEs: Evidence from Hong Kong*. Asia Pacific Journal of Management. 36.
- Lu, Y., Ramamurthy, K.. (2011). *Understanding the Link Between Information Technology Capability and Organizational Agility: An Empirical Examination*. MIS Quarterly, (35: 4) pp.931-954.
- Lukovszki, L., Rideg, A., Sipos, N. (2020). *Resource-based view of innovation activity in SMEs: an empirical analysis based on the global competitiveness project*. Competitiveness Review: An International Business Journal.
- Madsen, H.L. (2020). *Business model innovation and the global ecosystem for sustainable development*. Journal of Cleaner Production 247, 119102.
- Magretta, J. (2002). *Why business models matter*. Harvard Business Review 80, 86-92.
- management capabilities and organizational risk-taking for business model innovation in SMEs. Journal of Business Research, (March), 0-1.

- Markides, C. (2006). *Disruptive innovation: in need of better theory*. Journal of Product Innovation Management, Vol. 23 No. 1, pp. 19-25.
- Marolt, M., Lenart, G., Kljajić Borštnar, M., Vidmar, D., Pucihar, A. (2018). *SMEs Perspective on Business Model Innovation*. BLED 2018 Proceedings. 2.
- Marolt, M., Lenart, G., Maletič, D., Borstnar, M., Pucihar, A. (2016). *Business Model Innovation: Insights from a Multiple Case Study of Slovenian SMEs*. Organizacija. 49(3), 161-171. <https://doi.org/10.1515/orga-2016-0015>
- Mcadam, R., Keogh, W., Reid, R., Mitchell, N. (2007). *Implementing innovation management in manufacturing SMEs: A longitudinal study*. Journal of Small Business and Enterprise Development, 14, pp. 385-403.
- Miroshnychenko, I., Strobl, A., Matzler, K., De Massis, A. (2020). *Absorptive capacity, strategic flexibility, and business model innovation: Empirical evidence from Italian SMEs*. Journal of Business Research. 10.1016/j.jbusres.2020.02.015.
- Müller, J.M., Buliga, J., Voigt, K-I. (2020). *The role of absorptive capacity and innovation strategy in the design of industry 4.0 business Models- A comparison between SMEs and large enterprises*. European Management Journal.
- Nailer, C., Buttriss, G. (2019). *Processes of business model evolution through the mechanism of anticipation and realisation of value*. Industrial Marketing Management.
- Neely, A., Hii, J. (1998). *Innovation and Business Performance: A Literature Review*. Organizacija, 49(3), 161-171. <https://doi.org/10.1515/orga-2016-0015>

- Osiyevskyy, O., Dewald, J. (2015). *Explorative versus exploitative business model change: The cognitive antecedents of firm-level responses to disruptive innovation*. *Strategic Entrepreneurship Journal*, 9(1), 58–78.
- Osterwalder, A., Pigneur, Y., In Clark, T., & Smith, A. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*.
- Pertuz, V., Perez, A. (2020). *Innovation management practices: review and guidance for future research in SMEs*. *Management Review Quarterly*, 10.
- Pohle, G., Chapman, M. (2006). IBM's global CEO report 2006: business model innovation matters. *Strategy & Leadership*, Vol. 34, No. 5, pp. 34-40.
- Pucci, T., Nosi, C., Zanni, L. (2017). *Firm capabilities, business model design and performance of SMEs*. *Journal of Small Business and Enterprise Development*, Vol. 24 No. 2, pp. 222-241. <https://doi.org/10.1108/JSBED-09-2016-0138>
- Pucihar, A., Lenart, G., Borstnar, M., Vidmar, D., Marolt, M. (2019). *Drivers and Outcomes of Business Model Innovation—Micro, Small and Medium-Sized Enterprises Perspective*. *Sustainability*, 11(2). <https://doi.org/10.3390/su11020344>
- Purcarea, I., del Mar Benavides-Espinosa, M., Apetrei, A. (2013). *Innovation and knowledge creation: Perspectives on the SMEs sector*. *Management Decision*. 51.
- Richardson, J., (2008). *The business model: an integrative framework for strategy execution*. *Strategic Change* 17, 133-144.

- Rissanen, T., Ermolaeva, L., Torkkeli et al. (2020). *The role of home market context in business model change in internationalizing SMEs*. *European Business Review*, Vol. 32 No. 2, pp. 257-275.
- Saebi, T. (2014). *Business model evolution, adaptation or innovation? A contingency framework on business model dynamics, environmental change and dynamic capabilities*. *Business Model Innovation: The Organizational Dimension*, Nicolai J Foss & Tina Saebi, eds., Oxford University Press
- Saebi, T., Lien, L., Foss, N. J. (2017). *What Drives Business Model Adaptation? The Impact of Opportunities, Threats and Strategic Orientation*. *Long Range Planning* 50, 567-581.
- Schneider, S., Spieth, P. (2013). *Business model innovation: towards an integrated future research agenda*. *International Journal of Innovation Management*, 17, 1.
- Schumpeter, JA. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*. Oxford University Press: London, UK.
- Shafera, S.M., Smith, J.H., Linder, J.C. (2005) *The power of business models*. *Business Horizons* 48, 199-207.
- Shahri, M.H., Sarvestani, M.N. (2020). *Business model innovation as a turnaround strategy*. *Journal of Strategy and Management* Vol. 13, No. 2, pp. 241-253
- Śledzik, K. (2013). *Schumpeter's View on Innovation and Entrepreneurship*. SSRN Electronic Journal.

- Smit, S., Hirt, M., Buehler, K., et al. (2020). *Safeguarding our lives and our livelihoods: The imperative of our time*. McKinsey&Company.
- Sosna, M., Treviño-Rodríguez, R. N., Velamuri, S. R. (2010). *Business model innovation through trial-and-error learning: the Naturhouse case*. Long Range Planning, 43(2), 383–407.
- Spieth, P., Schneckenberg, D., Ricart, J. (2014). *Business Model Innovation – State of the Art and Future Challenges for the Field*. R&D Management, 44.
- Still, K., Seppänen, M., Korhonen, H., Suominen, A., Kumpulainen, M., Valkokari, K. (2017). *Business model innovation of startups developing multisided digital platforms*. IEEE 19th Conference on Business Informatics.
- Sydow, J., Schreyögg, G., Koch, J., (2017) *Organizational Path Dependence: Opening the Black Box*. Academy of Management Review Vol. 34, No. 4.
- Teece, D.J. (2010). *Business models, business strategy and innovation*. Business Model 43, 172-194.
- Teece, D.J. (2018). *Business models and dynamic capabilities*. Long Range Planning 51, 40-49.
- Terziovski, M. (2010). *Innovation Practice and Its Performance Implications in Small and Medium Enterprises (SMEs) in the Manufacturing Sector: A Resource-Based View*. Strategic Management Journal. 31. 892 - 902. 10.1002/smj.841.
- Usman, M., Vanhaverbeke, W. (2017). *Business Model Innovation: Role of Entrepreneur for Managing Open Innovation in SMEs*. DRUID Academy Conference 2018.

- Wheelen, T.L., Hunger, J.D. (1999). *Strategic Management and Business Policy*. Addison-Wesley: Reading, MA.
- Yun, J., Jung, W., Yang, J. (2015). *Knowledge strategy and business model conditions for sustainable growth of SMEs*. *Journal of Science and Technology Policy Management*. 6.
- Zahra, S., George, G. (2002). *Absorptive Capacity: A Review, Reconceptualization, and Extension*. *The Academy of Management Review*. 27(2). 10.2307/4134351.
- Zhang, Y., Zhao, S., Xu, X. (2016). *Business model innovation: an integrated approach based on elements and functions*. *Information Technology Management* 17:303–310.
- Zhao, W., Yang, T., Hughes, K.D., Hughes, K.D., Li, Y. (2020). *Entrepreneurial alertness and business model innovation: the role of entrepreneurial learning and risk perception*. *International Entrepreneurship Management Journal*.
- Zott, C., Amit, R. (2007). *Business model design and the performance of entrepreneurial firms*. *Organization science*, 18(2), 181-199.
- Zott, C., Amit, R. (2010). *Business model innovation: creating value in times of change*. Working Paper WP-870.
- Zott, C., Amit, R., Massa, L. (2010) *The business model: theoretical roots, recent developments and future research*. Working Paper WP-862.
- Zott, C., Amit, R., Massa, L. (2011). *The business model: recent developments and future research*. *Journal of management*, 37(4), 1019-1042.

Sitography

- “Civitanova, DIS apre una campagna di raccolta capitali”, September 14th, 2018. Retrieved from Picchio News: <https://picchionews.it/economia/civitanova-dis-apre-una-campagna-di-raccolta-capitali>
- “Design Italian Shoes: l'eccellenza italiana alla conquista del mondo”, September 14th, 2018. Retrieved from Mamacrowd: <https://mamacrowd.com/news/design-italian-shoes-l-eccellenza-italiana-alla-conquista-del-mondo>
- “Dis Design Italian Shoes: dopo Nuvolab al via il crowdfunding”, September 14th, 2018. Retrieved from FashionMagazine.it: <https://www.fashionmagazine.it/business/programmi-di-accelerazione-dis-design-italian-shoes-dopo-nuvolab-al-via-la-raccolta-fondi-su-mamacrowd-100666>
- “Startup innovative: tutti i dati al 30 giugno 2020”, July 24th, 2020. Retrieved from Ministero dello Sviluppo Economico: <https://www.mise.gov.it/index.php/it/impresa/competitivita-e-nuove-imprese/start-up-innovative/relazione-annuale-e-rapporti-periodici/198-notizie-stampa/2041319-startup-innovative-tutti-i-dati-al-30-giugno-2020>
- Emiliano Ragoni. “Dis, la startup marchigiana che punta tutto sulla scarpa personalizzabile in 50 milioni di combinazioni”, March 10th, 2018. Retrieved from Business Insider Italia: https://it.businessinsider.com/dis-la-startup-marchigiana-che-punta-tutto-sulla-scarpa-personalizzabile-in-50-milioni-di-combinazioni/?refresh_ce
- Isabella Naef. “Design Italian shoes: la startup che sposa web e tradizione marchigiana”, April 14th, 2016. Retrieved from Fashion United: <https://fashionunited.it/news/moda/design-italian-shoes-la-startup-che-sposa-web-e-tradizione-marchigiana/2016041414794>