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## **The Role of Strategic Flexibility on the Development of Organizational Capabilities**

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Master in Business Administration

Supervisor:

Prof. Álvaro Dias, ISCTE Business School, Department of Marketing, Operation and Management

October, 2020



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## Resumo

As Capacidades Dinâmicas permitem que as empresas mudem e reconfigurem as suas estratégias para se adaptarem ao ambiente de negócios em constante mudança. À medida que os mercados de negócios se tornam mais turbulentos com o rápido desenvolvimento tecnológico, é crucial que as empresas desenvolvam Capacidades Dinâmicas para manter uma vantagem competitiva sustentável, especialmente pequenas e médias empresas (PMEs), que são mais vulneráveis à concorrência e às mudanças do mercado. Dada a importância das Capacidades Dinâmicas na economia atual, o objetivo desta dissertação é compreender o papel da Flexibilidade Estratégica - Capacidade Dinâmica - no desenvolvimento de capacidades organizacionais. Deste modo, este estudo visa explorar os efeitos indiretos da Flexibilidade Estratégica na Performance de PMEs por meio da Aprendizagem Organizacional, do Empreendedorismo, e da Orientação à Inovação. Para testar o nosso modelo conceptual, reunimos dados de 180 PMEs e realizamos um estudo quantitativo, através de aplicação de questionários. As contribuições deste trabalho para a área de estudo são duplas. Em primeiro lugar, desenvolvemos um modelo único e distinto para avaliar a relação indireta entre Flexibilidade Estratégica e a Performance da empresa. Em segundo lugar, percebemos a importância da Aprendizagem Organizacional como variável mediadora uma vez que fortalece a relação entre Flexibilidade Estratégica e a Performance.

Palavras-chave: Aprendizagem Organizacional; Empreendedorismo; Orientação à Inovação; Performance Empresarial.

JEL Classifications:

L1, M1

## **Abstract**

Dynamic Capabilities enable companies to change and reconfigure their strategies in order to adapt to the ever-changing business environment. As business markets become more turbulent with rapid technological development, it is crucial that firms develop Dynamic Capabilities in order to maintain a sustainable competitive advantage, especially Small Medium-Sized Enterprises (SMEs) which are more vulnerable to competition and market changes. Given the importance of Dynamic Capabilities in today's economy, the purpose of this dissertation is to understand the role of Strategic Flexibility as a Dynamic Capability in the development of organizational capabilities. This study aims to explore the indirect effect between Strategic Flexibility and Firm Performance through three organizational capabilities: Organizational learning, Entrepreneurship and Innovation Orientation in SMEs. In order to test our conceptual model, we collected data from 180 SMEs and conducted a quantitative study through surveys. Our contributions to the field are twofold. First, we developed a unique and distinctive model to assess the indirect relationship between Strategic Flexibility and Firm Performance. And second, we realized the value of Organizational Learning as a mediating variable as it strengthens the relationship between Strategic Flexibility and Firm Performance.

**Keywords:** Organizational learning; Entrepreneurship; Innovation Orientation; Firm Performance.

**JEL Classifications:**

L1, M1

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## 1 Introduction

Companies are facing more and more adversities sustaining their competitive advantage in today's fast-moving environments (Teece, 2007). The Resource-Based View (RBV) emerges as an influential framework that helps businesses understand how to achieve and maintain competitive advantage (Eisenhardt & Martin, 2000). According to the RBV, the key to sustaining competitive advantage lies in the firm's valuable and costly to copy resources and capabilities (Hart, 1995). Therefore, Valuable, Rare, Inimitable, and Non-substitutable (VRIN) resources are crucial in maintaining the firm's advantage. Thus, in order to thrive in the market, companies implement value-creating strategies that are hard to reproduce by competitors (Eisenhardt & Martin, 2000). The Dynamic Capabilities View (DCV) derives from the Resource-based view, but, while the RBV focuses on selecting resource combinations, the DCV emphasizes on renewing and reconfiguring resources in new combinations of operational capabilities (Pavlou & Sawy, 2011).

The concept of Dynamic Capabilities has been one of the most discussed topics in Strategic Management in recent years. The notion was primarily defined as the "firm's ability to integrate, build and reconapp internal and external competencies to address rapidly changing environments" (Teece, Pisano & Shuen, 1997, p. 516). The continuous interest in the field of Dynamic Capabilities stems from the complexity and dynamism in today's business markets. Therefore, firms, in order to gain sustainable competitive advantage, are required to "continuously create, extend, upgrade, protect, and keep relevant the enterprise's unique asset base" (Teece, 2007, p. 1319). One of the main challenges managers face nowadays is how to respond quickly and make wise decisions according to changes in the business environments (Pavlou & Sawy, 2011). Therefore, the study of Dynamic Capabilities is not only crucial but also deeply relevant as firms learn to navigate these environments through their distinctive skills. (Teece, 2007).

Even though there are several studies addressing Dynamic Capabilities and its effect on Firm Performance (e.g. Fainshmidt et al., 2016; Hernández-Linares et al., 2018), it is still a subject with some limitations. According to Dias and Renato (2017), the field of Dynamic Capabilities is still in its infancy with few empirical studies to support its approach. Chien and Tsai (2012) also corroborate this idea, indicating that empirical studies regarding mediating effects are even scarcer. Moreover, there is a lack of studies addressing the performance implications of Dynamic Capabilities in SMEs (Guo & Cao, 2014). When compared with big companies, SMEs are more vulnerable to competition and changes in the external environment.

Taking this into account, there is a shortage of empirical studies addressing Dynamic Capabilities, especially its indirect effects. Therefore, the aim of this study is to help fill the gap of empirical work in

this area by addressing the indirect effect between Strategic Flexibility and Firm Performance in SMEs. According to Zott (2002) and Barreto (2010) the indirect link between Dynamic Capabilities and Firm Performance holds the most promise. As they refer, Dynamic capabilities don't affect performance directly, instead, they change the firm's operational capabilities, which leads to better economic performance. Thus, the main objectives of this study are: (i) assess the indirect effects between Strategic Flexibility and Firm Performance through three organizational capabilities: Organizational Learning, Entrepreneurship, and Innovation Orientation and (ii) understand how these organizational capabilities individually mediate the relationship between Strategic Flexibility and Firm Performance.

The contribution of this research is twofold. First, it develops a distinctive and unique model that explores the indirect effects of Strategic Flexibility and Firm Performance through the above mentioned organizational capabilities. Second, it addresses the importance of Organizational Learning as a mediating variable as it strengthens the relationship between Strategic Flexibility and Firm Performance.

This dissertation is divided into five chapters. In chapter I we explore the relevance of the study in the field of Dynamic Capabilities and objectives of the study. Chapter II is literature review which is divided into two categories: (i) definition of terms, where we define Dynamic Capabilities and our variables, and (ii) hypothesis development where we reveal and justify our hypothesis. In chapter III we explain the methodology applied to develop this study, the approach, the sample, and the measures. Chapter IV consists of data analysis and results of the study, and finally, in Chapter V we discuss and present the conclusions of the research.

## **2 Literature Review**

### **2.1 Key Concepts**

#### **2.1.1 Dynamic Capabilities**

In order to sustain in turbulent and constantly changing business environments firms are compelled to develop skills and competencies which allow them to survive and gain enduring competitive advantage (Zahra, Sapienza & Davidsson, 2006; Teece, 2007). These skills, known as Dynamic Capabilities, were primarily defined as the “firm’s ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments” (Teece et al., 1997, p. 516). In order to better understand the concept of Dynamic Capabilities, it is pertinent to distinguish it from organizational capabilities. While organizational capabilities, or lower-order capabilities, are the resources that enable companies to execute their daily activities (i.e. marketing, sales, logistics, etc.), Dynamic capabilities, or higher-order capabilities, are the ones that create change by renewing the firm’s organizational capabilities to achieve competitive advantage (Protogerou, Caloghirou & Lioukas, 2011).

According to Easterby-Smith, Lyles, and Peteraf (2009), the topic of Dynamic Capabilities focuses on two central debates: first, the nature of Dynamic Capabilities and definition of the term, and second, the effects and consequences of Dynamic Capabilities.

Regarding the first debate, different scholars view Dynamic Capabilities through different lenses depending on their background, thus, there still lacks a universally accepted definition of the term (Easterby-Smith et al., 2009). Eisenhardt and Martin (2000, p.1107), define Dynamic Capabilities in the same line of thought as Teece et al. (1997) as a “firm’s processes that use resources - specifically the processes to integrate, reconfigure, gain and release resources - to match and even create market change”. On the other hand, Zollo and Winter (2002) questioned the accuracy of Teece et al. (1997) definition of the term, as it only approaches what Dynamic Capabilities are and how they work, leaving a gap regarding where they come from. Therefore, the authors proposed the following definition: “A Dynamic Capability is a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness” (Zollo & Winter, 2002, p.340).

When addressing the topic of Dynamic Capabilities, inconsistencies, overlapping definitions, and contradictions by different authors are evident (Zahra et al., 2006). Therefore, in order to address the inconsistencies surrounding the topic and to specify the nature and micro foundations of Dynamic Capabilities, Teece (2007) developed a framework that divides Dynamic Capabilities into three capacities: (i) sensing, (ii) seizing, and (iii) transforming. Sense and shape opportunities and threats; seize opportunities; and maintain competitiveness by enhancing, combining, protecting, and

reconfiguring their business assets. According to the author, this framework focused on competencies that assure and maintain a firm's competitive advantage.

In regard to the second key debate, one of the main controversies of Dynamic Capabilities arises from the linkage it has with competitive advantage and generalized effectiveness (Easterby-Smith et al., 2009). While some scholars see Dynamic Capabilities as a key competence to achieve competitive advantage, others, are uncertain that they are correlated (Winter 2003). Teece (2007), suggests that Dynamic Capabilities are fundamental in achieving competitive advantage, especially in rapidly technological changing environments. In contrast, Eisenhardt and Martin (2000) suggest that Dynamic Capabilities are important, however, not sufficient to grant competitive advantage. Hence the secret to ensure long-term competitive advantage lies in resource configurations rather than Dynamic Capabilities (Eisenhardt & Martin, 2000).

### **2.1.2 Strategic Flexibility**

Strategic Flexibility is closely related to environmental unpredictability. As external business environments become more turbulent and uncertain, companies are required to develop a certain level of flexibility in order to adapt to these emerging conditions (Abbott & Banerji, 2003). There are several definitions of Strategic Flexibility (Brozovic 2016), however, it can ultimately be defined as a firm's willingness to reformulate its strategy in response to opportunities, threats, and changes that may occur in the marketplace (Zahra, Hayton, Neubaum, Dibrell & Craig, 2008).

Strategic Flexibility, a type of Dynamic Capability, has been predominantly conceptualized as a reactive ability to respond to environmental changes. However, more recent approaches of the field emphasize its proactive dimension, the ability to explore new opportunities in the market. Hence, with the proactive dimension, firms not only respond to uncertainties and changes but also have the capacity to shape and transform their given environment or even create a completely new one (Brozovic 2016; Zahra et al., 2008).

Evans (1991), refers to Strategic Flexibility as a ubiquitous concept that lacked clarity. In order to elucidate the polymorphous nature of Strategic Flexibility, he developed a conceptual framework that incorporates the different senses of Strategic Flexibility: adaptability, agility, corrigibility, elasticity, hedging, liquidity, malleability, plasticity, resilience, robustness, and versatility. These senses are responses to changes in the surroundings which can be categorized in temporal and intentional dimensions. On one hand, the temporal dimension includes ex-ante mode - preparing in advance for eventual changes, and ex-post mode - when the adjustments are done after the threat has occurred.

On the other hand, the intentional dimension can be offensive - creating initiative, or defensive - fixing past mistakes.

According to Shimizu and Hitt (2004), Strategic Flexibility lies in the firm's capacity to identify shifts in the external environments, allocate resources in response to changes and act rapidly when it's time to revert the resources that were already committed. Furthermore, they distinguish three stages of the process of Strategic Flexibility: (i) first, paying attention (attention), (ii) second, completing and evaluating (assessment), and (iii) third, applying measures on the problem (action). Nonetheless, there are several barriers that block the development of Strategic Flexibility within the firm such as insensitivity to feedback, organizational inertia, uncertainty, and resistance to change.

Finally, one of the most addressed outcomes of Strategic Flexibility is financial performance. According to Brozovic (2016) the greater the firm's Strategic Flexibility, the greater is the company's financial performance. Strategic Flexibility also leads to competitive advantage and higher resistance to external instability (Brozovic, 2016). The relationship between Strategic Flexibility and performance has been explored by different authors, including Baum and Wally (2003) which focused on understanding the link between strategic decision speed and Firm Performance by developing a model that contributed to theory in the field.

### **2.1.3 Organizational Learning**

The field of Organizational Learning has been growing over the years showing an increased interest both in the academic and business world (Chiva & Alegre, 2005). Slater and Narver (1995) considered Organizational Learning a key factor for firms competing in dynamic environments, therefore, companies should pursue the "processes of learning, behavior change, and performance improvement" in order to sustain in the business markets (Slater & Narver, 1995, p.63). There are several complex perspectives proposed on Organizational Learning, however, it can essentially be defined as a process where organizations change their mental models, rules, processes, and knowledge maintaining or improving their performance (Argyris and Schön, 1978; Brown and Duguid, 1991; Senge, 1990 cit in Chiva, Ghauri & Alegre, 2013). As such, Organizational Learning helps to develop a new way of viewing things within the organization which leads to new organizational knowledge (Chiva & Alegre, 2009).

In order to clarify the concept of Organizational Learning, Crossan, Lane and White (1999) created a framework named 4I, which characterizes the four processes of Organizational Learning: Intuition (preconscious recognition of a pattern), Interpreting (explaining thoughts or ideas to self and others),

Integrating (shared understanding and mutual adjustment), and Institutionalizing (embedding learning by routinization), linking them into different levels: individual, group and organizational. While the process of intuiting and interpreting takes place at the individual level, integrating occurs at a group level and institutionalizing at the organizational level. Furthermore, Crossan et al. (1999) described Organizational Learning as a dynamic process that, not only happens across time and different levels but also creates a slight tension among feedforward and feedback learning. Feedforward refers to the ability to assimilate new knowledge and feedback refers to the ability to exploit knowledge already acquired by the firm. Over the feed-forward process, individuals create new ideas, pass to the group, and then to the organization. Simultaneously, through feedback processes, the knowledge is transmitted from the organization to the group and individuals, influencing the way they think and act. However, Nielsen, Mathiassen, and Hansen (2018), questioned Crossan's et al. (1999) theory, stating that the 4I model presents some flaws. Even though it provides clarity regarding how a learning process unravels with the four processes: intuition, interpreting, integrating and institutionalizing and the three levels of analysis: individual, group, and organizational, the author still questions the processes of feedforward as exploration and feedback as exploitation which he considers to be biased and logically flawed (Nielsen et al., 2018).

Finally, Organizational Learning becomes a source of competitive advantage for firms (Vorhies & Morgan, 2005). According to the RBV and Knowledge-Based View, which propose that firms achieve competitive advantage from their capabilities and skills, "Organizational Learning will improve the company performance, reinforcing its competitive advantage" (Real, Roldán & Leal 2014, p. 187).

#### **2.1.4 Entrepreneurship**

From the moment Richard Cantillon introduced the term "Entrepreneur" in the eighteenth century, the concept captured the attention of different researchers and scholars who tried to explore its origin and roles (Eisenhardt & Companys, 2002). The popular perspective on Entrepreneurship are "hero" stories of charismatic leaders that develop new ideas and overcome difficult situations whilst making the world a better place, focusing Entrepreneurship essentially on the entrepreneur (Eisenhardt & Companys, 2002). However, Shane and Venkataraman (2000) offered a more extensive definition of Entrepreneurship contradicting the tendency to define it strictly based on what the entrepreneur does. These authors view Entrepreneurship as the "scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited (Shane & Venkataraman, 2000, p.218).

Consequently, the study of this field incorporates not only the individuals who discover, evaluate, and exploit opportunities, but also, the process of discovering, evaluating, and exploiting those opportunities (Shane & Venkataraman, 2000). Likewise, Eisenhardt and Compansys (2002) consider that entrepreneurial activities don't depend solely on the actions of the entrepreneur but the collective work of the entrepreneur and institutional actors who cooperatively create and maintain a market space for the innovation of new products and services.

Traditionally, Entrepreneurship was defined as the start of new firms and the creation of a new enterprise. Nevertheless, in recent years, Entrepreneurship extended its purpose and became accepted as a firm-level phenomenon independently of the size or age of the company. Entrepreneurship at a firm-level includes the willingness of companies to take risks, innovate, and act proactively (Brown, Davidsson & Wiklund, 2001). According to Hult, Snow, and Kandemir (2003) Entrepreneurship corresponds to the application of new combinations of resources that facilitate competitive advantage. Entrepreneurship, alongside market orientation, innovativeness, and Organizational Learning, belongs to the four market-based components that affect Firm Performance.

We are embedded in a dynamic business environment that continuously creates challenges for firms whose goal is to create value and wealth (Hitt, Ireland, Sirmon & Trahms, 2011). To sustain in these environments filled with uncertainty it's crucial that firms create and maintain competitive advantage while simultaneously exploring new opportunities. That is where strategic entrepreneurship comes in, as the link between strategic management and Entrepreneurship. Therefore, its main goal is not only exploit current advantages, but also explore new opportunities in the market creating value over time to individuals, firms, and society in general (Hitt et al., 2011).

### **2.1.5 Innovation Orientation**

The ability to respond innovatively is crucial to sustain and thrive in the marketplace especially in today's environments filled with increased competition, turbulence, change, and uncertainty (Keskin, 2006). According to Siguaw, Simpson, and Enz (2006), Innovation Orientation requires an understanding of innovation, that can be considered the "process whereby organizations transform ideas into new/improved products, services or processes, in order to advance, compete and differentiate themselves successfully in their marketplace" (Baregheh, Rowley & Sambrook, 2009, p. 1334).

Regarding Innovation Orientation, there is an absence of agreement on what it constitutes precisely (Siguaw et al., 2006). Some scholars define it as openness to innovation, others as

technological superiority, and others as the capacity to bring new ideas and products into the firm (Hult, Hurley & Knight, 2004). However, Siguaw et al. (2006) state that the term is often incorrectly defined as it focuses essentially on its outputs: the number of new products and processes. Even though the ideal outcome of Innovation Orientation is innovation, the amount of innovations a company achieves doesn't define its level of orientation. With that said, Siguaw et al. (2006, p.560) define Innovation Orientation as "a multidimensional knowledge structure composed of a learning philosophy, strategic direction, and transfunctional beliefs" that guides the firm's strategies, actions, behaviors, competencies, and processes with the purpose of achieving an innovative way of thinking which leads to evolution and development. With this stated, according to Hurley and Hult (1998), firms that are oriented to innovating are not only open to new challenges but also actively pursue new ideas. Innovation Orientation is crucial as it encourages firms to take risks and create new innovative products (Olson, Slater & Hult, 2005).

According to Hult et al. (2004), there are three key antecedents to innovativeness: market orientation, learning orientation, and entrepreneurial orientation. The first is the company's willingness to connect with the business environment, the second is the acquisition of new knowledge, and the third is the proactiveness in developing new ideas and creating new products. Hence, companies with these antecedents have more knowledge, are more aggressive, and are more connected with the external environment facilitating their engagement in innovative activities which strengthens their overall innovativeness. Furthermore, Hult et al. (2004) established a positive correlation between innovativeness and Firm Performance, stating that, independently of the external environment, innovativeness contributes to the company's business performance affecting positively the success of the firm.

Finally, Subramaniam and Youndt (2005) specify that there is a tight relationship between Innovation Orientation and organizational knowledge indicating that innovation does not lie on specific innovative activities but on an organizational knowledge structure within the company. Therefore, the organization's patents, structures, systems, and processes help reinforcing the firm's knowledge and even create new innovative competencies (Subramaniam & Youndt, 2005).

## **2.2 Hypothesis development**

In order to discuss the proposed indirect effect between Dynamic Capabilities and Firm Performance we will (i) explore the direct effect of Strategic Flexibility, a Dynamic Capability, on three organizational capabilities: Organizational Learning, Entrepreneurship and Innovation Orientation, (ii) analyse the direct effect of these organizational capabilities on Firm Performance and (iii) propose the mediating

role of the organizational capabilities in the relationship between Strategic Flexibility and Firm Performance.

## **2.2.1 Direct effect between Dynamic Capabilities and Organizational Capabilities**

### **2.2.1.1 Strategic Flexibility and Organizational Learning**

To achieve Strategic Flexibility firms are compelled to increase their flexible capabilities through processes and routines. These flexible capacities include: anticipating changes in the business environment, absorb new knowledge, learn new ways of doing things within the organization, and expand mindsets by continuously learning. One of the biggest challenges managers face is to understand the level of flexibility that firms need to sustain in the competitive market, therefore they must develop adaptability and a learning mechanism (Abbot & Banerji, 2003).

According to Theoharakis and Hooley's (2003) working paper, Organizational Learning is closely related to the ability to change rapidly from situation to situation. The company's commitment to learning enhances its capacity to adapt to changing environments and changing customer necessities. With this said, these authors suggest a link between the ability to learn within the firm and the ability to adapt and adjust to external environments.

As claimed by Teece (2007), the ability to recognize business opportunities lies in the individual's capabilities and in the learning capabilities of the organization. According to the author, Organizational Learning is crucial to the study of Dynamic Capabilities as it combines know-how within the firm and between the firm and organizations external to it. Hence, the creation of Organizational Learning is a key foundation of Dynamic Capabilities and an important part of the company's performance. Therefore, Teece (2007) suggests a link between Organizational Learning and Dynamic Capabilities. Even though there are studies connecting Organizational Learning to Strategic Flexibility, there are no studies addressing the influence Strategic Flexibility has on Organizational Learning. So in order to understand if Strategic Flexibility enhances the company's Organizational Learning, we hypothesize the following:

H1: Strategic Flexibility is positively related with Organizational Learning.

### **2.2.1.2 Strategic Flexibility and Entrepreneurship**

Strategic Flexibility refers to "the degree to which a firm is willing to change its strategy in response to opportunities, threats, and changes in the external environment" (Zahra et al., 2008, p. 1043).

As a result of today's turbulent business environments firms are facing adversities to maintain their competitive advantage. In order to give new "LIFE" to the organization, companies should develop the following abilities: Learning, Innovation, Flexibility, and Entrepreneurship. These capacities "are the four meta processes which are critical for organizational performance, survival, and growth" (Bishwas & Sushil, 2016, p. 758). Research by Bishwas and Sushil (2016) has provided evidence that flexibility is crucial to any living system, offering organizations more options, change, and freedom of choice. Thus, according to these authors, when firms increase their flexibility they also enhance their engagement in entrepreneurial activities which leads to the firm being more entrepreneur (Bishwas & Sushil, 2016).

Further, a study conducted by Bradley, Shepherd, and Wicklund (2011) suggests that companies who pursue new opportunities in the market by implementing entrepreneurial strategies are more likely to succeed in dynamic environments which enhances their overall Firm Performance. Therefore, generally, companies with strong Strategic Flexibility also develop entrepreneurial qualities that help their competitive advantage (Teece, 2007).

According to the literature, it is expected that Strategic Flexibility enhances the company's involvement in entrepreneurial activities. Thereby we propose the following hypothesis:

H2: Strategic Flexibility is positively related with Entrepreneurship.

### **2.2.1.3 Strategic Flexibility and Innovation Orientation**

According to Guo and Cao (2014), Strategic Flexibility is crucial to navigate through business environments filled with dynamism and uncertainty. There are different studies addressing the impact of Strategic Flexibility on innovation. A study conducted by Martínez-Sánchez, Vela Jiménez, Pérez-Pérez, and Carnicer (2009) suggested that firms that invest in Strategic Flexibility are generally able to anticipate market demands and react to them by promoting innovative products and services. Thus, Martínez-Sánchez et al. (2009) found a link between Strategic Flexibility and innovation, especially in fast-changing environments. Furthermore, Brozovic's (2016) study refers to different outcomes of Strategic Flexibility and one of them is the increase of innovative capacities. Organizations that are more flexible to change their strategies generally show a higher capacity of pursuing innovative ideas. With this said, strategically flexible environments companies are more likely to engage in innovation (Zhou & Wu, 2010; Hult et al., 2004). Even though the majority of literature found a positive link between Strategic Flexibility and innovation, there are a few studies suggesting that Strategic Flexibility

does not always lead to innovation. (e.g. Li, Su & Liu, 2010). Therefore, in order to understand if Strategic Flexibility influences Innovation Orientation we propose the following hypothesis:

H3: Strategic Flexibility is positively related with Innovation Orientation.

## **2.2.2 Direct effect between Organizational Capabilities and Firm Performance**

### **2.2.2.1 Organizational Learning and Firm Performance**

According to Slater and Narver (1995), all businesses facing dynamic environments should ensure they follow the “process of learning, behavior change, and performance improvement” (p. 63). These authors suggest that Organizational Learning generates higher performance as it tries to understand and satisfy customer’s needs through new products and services.

Chiva et al. (2013) address Firm Performance on its definition of Organizational Learning: the process through which companies change or modify their mental models, rules, processes, and knowledge that helps maintain or even improve their performance (Chiva et al., 2013). According to Chiva et al. (2013), Organizational Learning is crucial for accomplishing competitive advantage, especially in highly dynamic environments.

A study conducted by Ellinger, Ellinger, Yang, and Howton (2002) aimed to understand the relationship between the learning organization and the firm’s financial performance. The empirical study focused on 400 mid-level managers at USA manufacturing companies and concluded that their “exploratory research suggests a positive association between learning organization practices and objective measures of firm’s financial performance” (Ellinger et al., 2002, p. 18). It is expected that Organizational Learning leads to positive Firm Performance, therefore in order to understand the link of the two variables we propose the following hypothesis:

H4: Organizational Learning is positively related with Firm Performance.

### **2.2.2.2 Entrepreneurship and Firm Performance**

Different studies converge on the idea that organizations benefit from “highlighting newness, responsiveness, and a degree of boldness” (Rauch, Wiklund, Lumpkin & Frese, 2009, p.764). As external markets change and become more volatile, organizations are required to constantly look for new opportunities, innovate, and take risks in their market strategies. A study conducted by Rauch et al. (2009) corroborates that entrepreneurial orientation - the proactivity and initiative to engage in new ideas, has a positive influence on performance.

The majority of literature addressing corporate Entrepreneurship addresses its effects on multinational enterprises: how they revitalize their business and respond to changes in the business markets. However, more recent studies show that corporate Entrepreneurship is an effective renewal capability for SMEs as well (Bierwerth, Schwens, Isidor & Kabst, 2015). According to Bierwerth et al. (2015), overall corporate Entrepreneurship has a positive influence on Firm Performance. Nonetheless, their study showed that the context is an important factor to consider when talking about corporate strategy and performance: the type of industry and firm size.

Finally, a study conducted by Altinay, Madanoglu, Vita, Arasli, and Ekinci (2015) addressed the effects of entrepreneurial orientation on performance through growth on sales, market share, and employment. By analyzing 350 SMEs they concluded that there is a positive link between the two, entrepreneurial orientation leads to sales growth and market share, however, it does not lead to employment growth. Hence, in order to better understand the linkage between Entrepreneurship and Firm Performance, we propose the following hypothesis:

H5: Entrepreneurship is positively related with Firm Performance.

### **2.2.2.3 Innovation Orientation and Firm Performance**

As firms face new challenges, the capacity to innovate is key to find solutions to business problems and ensure the long-term success of the firm (Hult et al., 2004). Therefore, the success of organizations lies in its level of innovativeness - the capacity to engage in innovative activities (Hult et al., 2004).

A study by Keskin (2006) which aimed to understand the impact of innovativeness on the performance of SMEs, concluded that companies who explore new ideas, seek new ways of doing things, and develop new products and services through creativity, become more profitable and earn a higher market share. Hence companies should invest in innovation in order to achieve better financial performance, especially SMEs as they have limited resources and are more vulnerable to turbulence. According to Keskin (2006), to achieve sustained competitive advantage, SMEs should incorporate innovation as a central part of their business strategy and corporate culture.

The relationship between innovativeness and Firm Performance has been supported by different authors. However, some studies didn't find a direct link between the two variables, perhaps because the results of innovation are not immediately realized, they're only verified over time (Siguaw et al., 2006). With this said, in order to understand if Innovation Orientation affects Firm Performance and generalized effectiveness in the context of this study, we hypothesize the following:

H6: Innovation Orientation is positively related with Firm Performance.

## **2.2.3 Indirect effect of Dynamic Capabilities**

### **2.2.3.1 Strategic Flexibility and Firm Performance**

The effects of Dynamic Capabilities on Firm Performance have been a central discussion among business scholars leading to several debates (Protogerou et al., 2011). According to Barreto (2010), there are three approaches addressing the relationship between Dynamic Capabilities and Performance: first that there's a direct link between Dynamic Capabilities and Performance - suggested by early scholars (e.g. Teece et al. 1997; Zollo & Winter), second, that Dynamic Capabilities don't necessarily lead to positive Firm Performance (e.g. Eisenhardt & Martin, 2000) and third, that there's an indirect link between the two (e.g., Zott, 2002). As stated by several management scholars (e.g. Barreto, 2010; Zott, 2003; Protogerou et al. 2011) the indirect approach of Dynamic Capabilities is the most promising one. According to Zott (2002), Dynamic Capabilities change the company's resources, operational routines, and competencies, which then affect economic performance (Zott, 2002). Therefore, competitive advantage does not arise from Dynamic Capabilities directly, instead, it stems from the effective configuration of organizational capabilities (Protogerou et al., 2011).

In this dissertation, we dive into the indirect approach of Dynamic Capabilities as we assess the mediating role of Organizational Learning, Entrepreneurship, and Innovation Orientation in the relationship between Strategic Flexibility and Firm Performance. Giniuniene and Jurksiene (2015) explored the link between Dynamic Capabilities and Organizational Learning and the impact the latter has on the performance of the company. They concluded that Dynamic Capabilities became a source of competitive advantage by the mediating role of Organizational Learning. Furthermore, when it comes to the mediating effect of Entrepreneurship, a study conducted by Chaudhary (2019) examined the mediating role of entrepreneurial orientation in the link between Strategic Flexibility and performance. The research focused on small firms and found evidence that entrepreneurial orientation mediates the relationship between Strategic Flexibility and Firm Performance. Finally, regarding Innovation Orientation as a mediating variable, a study by Zhou, Zhou, Feng and Jiang (2017) referred that innovation, especially technological plays a mediating role in the relationship between Dynamic Capabilities and Firm Performance.

Even though there are a few studies addressing the indirect effects of Dynamic Capabilities there are no empirical studies that corroborate the indirect effects of Strategic Flexibility and Firm Performance through the variables proposed in this study.

Therefore, in order to understand how Strategic Flexibility affects Firm Performance through Entrepreneurship, Organizational Learning, and Innovation Orientation we propose the following mediating hypothesis:

H7: Organizational Learning, Entrepreneurship, and Innovation Orientation mediate the relation between Strategic Flexibility and Firm Performance.

H8: Organizational Learning mediates the relation between Strategic Flexibility and Firm Performance.

H9: Entrepreneurship mediates the relation between Strategic Flexibility and Firm Performance

H10: Innovation Orientation mediates the relation between Strategic Flexibility and Firm Performance.

### Conceptual Model

Taking into account the topics discussed in the literature review, this study aims to understand how Strategic Flexibility influences Firm Performance through the proposed organizational capabilities. Therefore in order to discuss and draw conclusions we will analyse the direct and indirect effects between the variables. On one hand the direct effects between Strategic Flexibility and organizational capabilities and between organizational capabilities and Firm Performance, on the other hand, the indirect effects between Strategic Flexibility and Firm Performance. This study will allow us to understand if there are indirect effects between the variables and the mediating role of our organizational capabilities. See in Figure 2.1 the conceptual model and hypothesis.

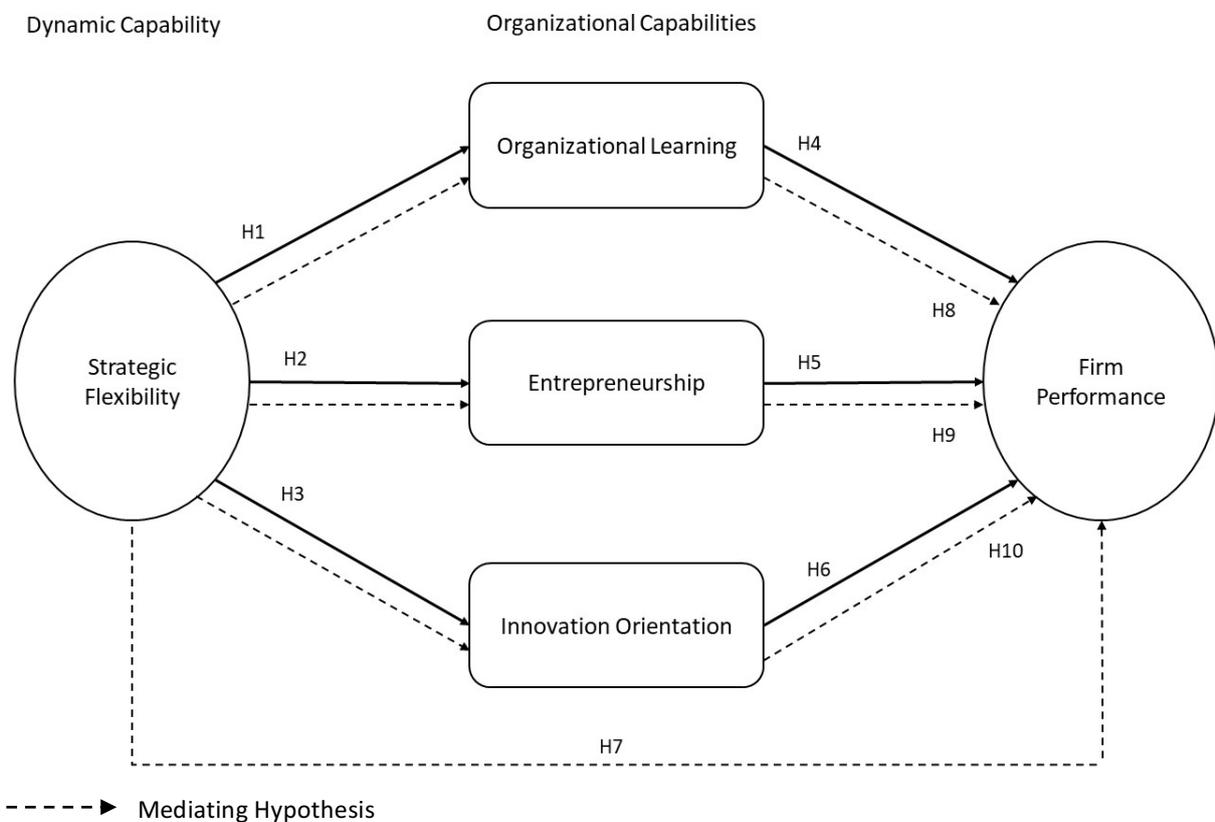


Figure 2.1 Conceptual Model and Hypothesis

### 3 Methodology

#### 3.1 General Sample and Design

In this study, we adopted a quantitative approach through surveys (attached in appendix A).

The sample of our research consists of 180 Portuguese SMEs and the data collection process lasted from the 15<sup>th</sup> of January to the 13<sup>th</sup> of May of 2019. It was an internet-based survey sent via e-mail to different SMEs included in a database, with a 15% response rate.

The survey was divided into two main categories: the first section was a general description of the company: type of industry, dimension, years of activity, and the second included questions regarding the company's Strategic Flexibility, Organizational Learning, Entrepreneurship, Innovation Orientation, and Firm Performance. The questionnaire was confidential and anonymous to assure the accuracy of the results.

As mentioned before, the firms that participated in our study are Portuguese SMEs. Regarding the type of industry, we can observe in Table 3.1 that 50% are in the area of services, 32% belong to the area of commerce, and 18% are in the manufacturing business. Regarding the dimension, 26% have less than 9 employees, 27% have 10 to 49 employees, 32% have 49 to 99 employees and 15% have more than 100 employees. Finally, in regard to the years in activity, 25% of the firms have less than 3 years in activity, 28% have from 3 to 5 years, 27% have from 6 to 10 years, and 20% have been in activity for more than 11 years.

**Table 3.1** Sample characteristics

<b>Sample (N=180)</b>	<b>%</b>		<b>%</b>
<b>Dimension</b>		<b>Industry</b>	
Less than 9 employees	26%	Manufacturing	18%
10 – 49 employees	27%	Commerce	32%
49 – 99 employees	32%	Services	50%
More than 100 employees	15%		
<b>Number of years of activity</b>			
Less than 3 years	25%		
3 – 5 years	28%		
6-10 years	27%		
More than 11 years	20%		

### 3.2 Measures

In this dissertation, we adopted already existing scales to measure our variables. In order to measure the firm's Strategic Flexibility, we adapted Baum and Wally's (2003) scale. Respondents had to choose from a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample questions were: "Our firm must frequently change its products and practices to keep up with competitors"; "Consumer tastes are fairly easy to forecast in our industry".

To measure the firm's Organizational Learning we adapted from Hult et al. (2003) with a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7). Sample questions were: "A team spirit pervades our ranks in the organization"; "All activities that take place in the organization are clearly defined".

Entrepreneurship was also measured from Hult et al. (2003) and they had to select from a seven-point Likert scale (1- strongly disagree; 7-strongly agree). Sample questions were: "We initiate actions to which other organizations respond"; "We are fast to introduce new products and services to the marketplace".

Innovation Orientation was adapted from Hurley and Hult (1998) and Olson et al. (2005) scales. Constructs were measured on seven-item Likert Scales (1- strongly disagree; 7- strongly agree). Sample questions were: "Management actively seeks innovative ideas"; "Innovation in our organization is perceived as too risky and is resisted".

Finally, Firm Performance was measured by a seven-point scale: -3 being: much worse than competitors and +3 being: much better than competitors adapted from Vorhies and Morgan (2005). Sample questions were: "Market share growth" and "Return on investment (ROI)".

## 4 Results

### 4.1 Data Analysis

In order to test the conceptual model of this study, we adopted a partial least squares (PLS) through the SmartPLS 3 software (Ringle, Wende & Becker, 2015). We split the analysis and interpretation of the results into two stages, first, the assessment of reliability and validity of the model and, second, the evaluation of the structural model. We tested the quality of the model through individual indicators of reliability, internal consistency reliability, convergent validity, and discriminant validity (Hair, Hult, Ringle & Sarstedt, 2017). First, the individual indicator reliability is confirmed as the standardized factor loadings of all elements were above 0.6 (with a minimum value of 0.8) and all were significant with a p-value <0.001 (Hair et al., 2017). Second, as observable in Table 4.1, all of the values of Cronbach's alphas ( $\alpha$ ) and Composite Reliability (CR) are higher than the threshold value of 0.7 (Hair et al., 2017), which means that internal consistency reliability is verified.

**Table 4.1** Cronbach alpha, CR, AVE

Latent Variables	A	CR	AVE
(1)Strategic Flexibility	0.928	0.946	0.778
(2) Entrepreneurship	0.942	0.958	0.851
(3) Organizational Learning	0.954	0.964	0.845
(4) Innovation Orientation	0.932	0.952	0.832
(5) Firm Performance	0.980	0.987	0.961

Note:  $\alpha$  Cronbach Alpha; CR -Composite reliability; AVE -Average variance extracted.

Third, convergent validity is validated through three aspects: the fact that all items are positive and significant on their constructs, the fact that all variables had values of Cronbach alpha and CR above 0.7 and, in addition, the average variance extracted (AVE) surpasses the cut-off of 0.50 (Bagozzi & Yi, 1988). Finally, in order to test discriminant validity, we focused on two perspectives. In the first place, a principle by Fornell and Larcker (1981) which demands that the square root of AVE (represented in bold in Table 4.2 is greater than the highest correlation value of the variables (Fornell & Larcker, 1981). As we can see in Table 4.2 this principle is satisfied for all latent variables. And, in the second place, we used the heterotrait monotrait ratio (HTMT) (Hair et al., 2017; Henseler, Ringle, & Sarstedt, 2015). According to these criteria, all HTMT ratios have to be lower than the value of 0.85 and they are, as observable in Table 4.2 (Hair et al., 2017; Henseler et al., 2015). Thus, discriminant validity is verified.

**Table 4.2** Discriminant validity checks

<b>Latent Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
(1)Strategic Flexibility	<b>0.882</b>	0.414	0.426	0.469	0.404
(2) Entrepreneurship	0.396	<b>0.922</b>	0.502	0.371	0.317
(3) Organizational Learning	0.403	0.482	<b>0.919</b>	0.503	0.612
(4) Innovation Orientation	0.444	0.349	0.477	<b>0.912</b>	0.252
(5) Firm Performance	0.388	0.308	0.596	0.239	<b>0.980</b>

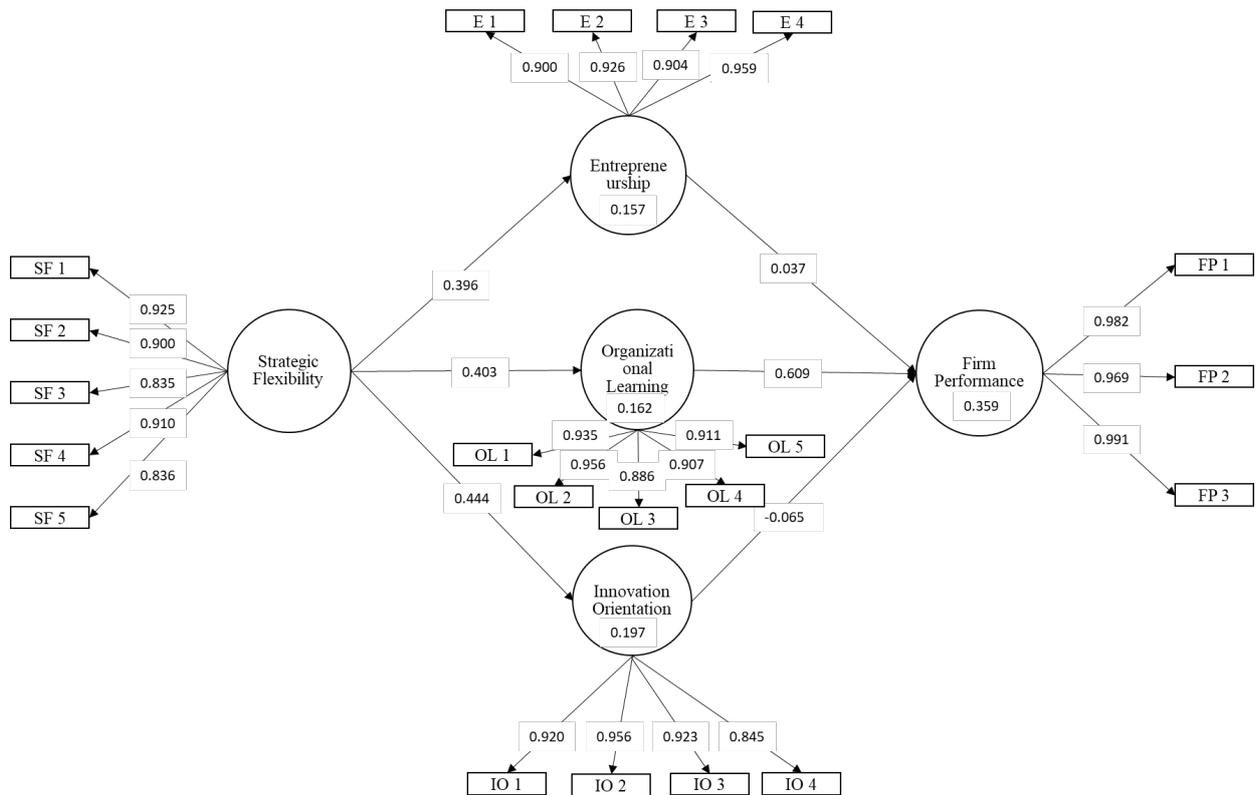
Note: Bolded numbers are the square roots of AVE. Below the diagonal elements are the correlations between the variables. Above the diagonal elements are the HTMT values.

The next step of the study was assessing the structural model, nonetheless, we started by analyzing the collinearity of the model through the variance inflation factor (VIF). Our results show a minimum VIF value of 1.00 and a maximum VIF value of 1.52, both below the critical value of 5.0 (Hair et al., 2017) which indicates no collinearity.

The structural model was evaluated by the sign, magnitude, and relevance of the structural path coefficients, hence, we measured the model's predictive accuracy through  $R^2$ . The  $R^2$  values of our four dependent variables: Organizational Learning, Entrepreneurship, Innovation Orientation, and Firm Performance are 16.2%, 15.7%, 19.7%, and 35.9% respectively. These values are higher than the threshold value of 10% (Falk & Miller, 1992). Therefore it is safe to say that the model's predicted accuracy is satisfied. Furthermore, in order to test the significance of the parameter estimates, this study adopted bootstrapping operating 5000 subsamples (Hair et al., 2017).

### **Direct Effects**

Regarding the correlation between variables, it's demonstrated in Figure 4.1 that the highest correlations are between Organizational Learning and Firm Performance ( $\beta=0.609$ ) and between Strategic Flexibility and Innovation Orientation ( $\beta=0.444$ ). On the other hand, the lowest correlations are between Entrepreneurship and Firm Performance ( $\beta=-0.037$ ) and Innovation Orientation and Firm Performance ( $\beta= -0.065$ ).



**Figure 4.1.** Correlations between constructs

Concerning direct effects, it is observable in Table 4.3 that Strategic Flexibility has a positive influence on Organizational Learning ( $\beta=0.403$ ,  $p<0.001$ ), Entrepreneurship ( $\beta=0.396$ ,  $p<0.001$ ) and Innovation Orientation ( $\beta=0.444$ ,  $p<0.001$ ). These results corroborate H1, H2 and H3 respectively stating that Strategic Flexibility affects the firm's Organizational capabilities: Organizational Learning, Entrepreneurship and Innovation Orientation. Furthermore, Organizational Learning is highly correlated with Firm Performance ( $\beta= 0.609$ ,  $p<0.001$ ) which verifies H4 that Organizational Learning positively influences Firm Performance. However, the direct effect between Entrepreneurship and Firm Performance ( $\beta=0.037$ , n.s.) and between Innovation Orientation and Firm Performance ( $\beta=-0.065$ , n.s.) is not statistically significant. Thus, H5 and H6 are not supported, Entrepreneurship and Innovation Orientation do not directly affect Firm Performance. With this said, we can conclude that H1, H2, H3 and H4 are supported, however, H5 and H6 are not.

**Table 4.3** Structural model assessment

Path	Path coefficient	Standard errors	t statistics	P values
Strategic Flexibility – Entrepreneurship	0.396	0.094	4.203	0.000
Strategic Flexibility - Organizational Learning	0.403	0.101	4.002	0.000
Strategic flexibility - Innovation Orientation	0.444	0.105	4.210	0.000
Organizational Learning- Firm Performance	0.609	0.119	5.109	0.000
Entrepreneurship - Firm Performance	0.037	0.102	0.364	0.716
Innovation Orientation - Firm Performance	-0.065	0.107	0.603	0.547

**Indirect Effects**

Regarding indirect effects, as we can observe in Table 4.4, the indirect effect between Strategic Flexibility and Firm Performance through our three mediators: Organizational Learning, Entrepreneurship and Innovation Orientation is significant ( $\beta= 0.231$ ,  $p<0.005$ ). This result corroborates H7 suggesting that the above mentioned organizational capabilities mediate the relationship between Strategic Flexibility and Firm Performance.

**Table 4.4** Bootstrap results for total indirect effects

Indirect effect	Estimates	Standard errors	t statistics	P values
Strategic Flexibility – Entrepreneurship				
Strategic Flexibility - Organizational Learning				
Strategic Flexibility - Innovation Orientation				
Organizational Learning- Firm Performance				
Entrepreneurship - Firm Performance				
Innovation Orientation - Firm Performance				
Strategic Flexibility – Firm Performance	0.231	0.080	2.890	0.004

When it comes to specific indirect effects, we can observe in Table 4.5 that the indirect effect between Strategic Flexibility and Firm Performance through Organizational Learning is statistically significant ( $\beta=0.245$ ,  $p<0.005$ ) which supports H8: Organizational Learning mediates the relationship between

Strategic Flexibility and Firm Performance. However we did not find statistical evidence that the indirect effect between Strategic Flexibility and Firm performance is strengthened by Entrepreneurship ( $\beta=0.015$ , n.s.) and Innovation Orientation ( $\beta=-0.029$ , n.s.). Therefore, H9 and H10 are not supported, Entrepreneurship and Innovation Orientation do not mediate the link between Strategic Flexibility and Firm Performance.

**Table 4.5** Bootstrap results for specific indirect effects

<b>Indirect effect</b>	<b>Estimates</b>	<b>Standard errors</b>	<b>t statistics</b>	<b>P values</b>
Strategic Flexibility → Organizational Learning → Firm Performance	0.245	0.084	2.908	0.004
Strategic Flexibility → Entrepreneurship → Firm Performance	0.015	0.045	0.327	0.744
Strategic Flexibility → Innovation Orientation → Firm Performance	-0.029	0.050	0.572	0.567

## **5 Discussion**

### **5.1 Direct effects**

#### **Strategic Flexibility and Organizational Capabilities**

As a result of today's turbulent business settings, firms must develop Dynamic Capabilities to navigate through the environment and maintain their competitive advantage. With this dissertation we aimed to understand how Strategic Flexibility as a Dynamic Capability affects Firm Performance in SMEs. However not in a direct way, through Organizational Learning, Entrepreneurship, and Innovation Orientation. Therefore, we developed a unique model that explored the mediating effect between Strategic Flexibility and Firm Performance through the above-mentioned organizational capabilities by assessing both direct and indirect effects between our variables.

Based on our findings, Strategic Flexibility has a positive direct effect on all of the organizational capabilities: Organizational Learning, Entrepreneurship, and Innovation Orientation. Regarding Organizational Learning, even though previous studies (e.g. Theoharakis and Hooley, 2003) identified a link between Dynamic Capabilities and Organizational Learning, our study provides a more specified approach linking Strategic Flexibility to Organizational Learning rather than Dynamic Capabilities in general. However, our study is aligned with Theoharakis and Hooley (2003) perspective in the sense that they associate Organizational Learning to the capacity to adapt to changing business environments which ultimately is considered Strategic Flexibility. In regard to the relationship between Strategic Flexibility and Entrepreneurship, our study goes according to Bishwas and Sushil's (2016) and Bradley et al. (2011) perspective. According to Bishwas and Sushil's (2016) the more flexible a firm is, the more they tend to engage in entrepreneurial activities and become more entrepreneur. Moreover, Bradley et al. (2011) suggested that companies that take part in new opportunities in the market are more likely to prosper in dynamic environments improving their overall performance. Finally, when it comes to the relationship with Innovation Orientation, our results are corroborated with the business literature. As Brozovic (2016) refers, companies that are flexible to change their strategies tend to show a higher capacity to pursue innovative ideas. Even though Li et al. (2010) suggest that not all studies find a direct link between Strategic Flexibility and Innovation Orientation, our study did.

#### **Organizational Capabilities and Firm Performance**

The results of this study show that Organizational Learning positively affects Firm Performance which is corroborated by the literature. As Slater and Narver (1995) indicate, Organizational Learning results

in higher performance as firms develop new products and services to satisfy customer's needs. Furthermore, Ellinger et al (2002), also state that there is a positive association between the learning organization and the firm's financial performance. On the other hand, according to our findings, Entrepreneurship doesn't directly influence Firm Performance, in contrary to what the literature suggested. Altinay et al. (2015), found a strong link between entrepreneurial orientation and performance in SMEs, the higher the entrepreneurial orientation, the higher the company's sales and market share. Further, a study by Rauch (2009) also supports the relationship between entrepreneurial orientation and Firm Performance. Moreover, our study indicates that Innovation Orientation does not affect the company's performance in SMEs. There are two sides to the literature, on one hand, Keskin (2006) indicates that creative and innovative firms become more profitable, especially SMEs since they have limited resources and are more vulnerable market turbulence. On the other hand, a research conducted by Siguaw et al. (2006) indicates that some studies did not find a direct link between Innovation Orientation and Firm Performance due to the fact that the outcomes of innovation are not immediately realized by the company. Our findings are more aligned with Siguaw et al. (2006) perspective, we did not find a statistically significant link between Innovation Orientation and Firm Performance.

## **5.2 Indirect effects**

### **Strategic Flexibility and Firm Performance**

Based on our findings, there is an indirect link between Dynamic Capabilities and Firm Performance as suggested by Zott (2002) and Barreto (2010). As we assessed the indirect effect between Strategic Flexibility and Firm Performance through Organizational Learning, Entrepreneurship, and Innovation Orientation, we found evidence that the indirect effect exists, however, that not all of the organizational capabilities mediate the relationship between the two. This study is constructed on the fact that Dynamic Capabilities impacts performance in an indirect way mediated by organizational capabilities (Protogerou et al., 2011).

According to our results, Organizational Learning plays a mediating role between Strategic Flexibility and Firm Performance as supported by the literature review. A study conducted by Giniuniene and Jurksiene (2015) suggested that Dynamic capabilities lead to competitive advantage and improved Firm Performance by the mediating role of Organizational Learning. Even though the study does not specify Strategic Flexibility as a Dynamic Capability, our study is aligned with this point of view. When it comes to the mediating effect of Entrepreneurship and Innovation Orientation our

findings show that these variables do not mediate the link between Strategic Flexibility and Firm Performance. These results are not supported by the literature. According to Chaudhary (2019) entrepreneurial orientation has a mediating role in the relationship between Flexibility and Firm Performance in small companies. Moreover, Zhou et al. (2017) also suggest that innovation, especially technological innovation mediates the relationship between Dynamic Capabilities and Performance. With this said, our results demonstrate that Organizational Learning, the only variable that has a statistically significant direct effect both with Strategic Flexibility and Firm Performance, plays a mediating role in the relationship between the two variables.

## **6 Conclusion**

In this research, we considered Zott (2002) and Barreto's (2010) indirect approach of Dynamic Capabilities. We aimed to understand the indirect link between Strategic Flexibility and Firm Performance through three mediating variables: Organizational Learning, Entrepreneurship and Innovation Orientation.

After assessing the conceptual model and testing both direct and indirect effects of the variables, we concluded that there is an indirect effect between Strategic Flexibility and Firm Performance. Taking this into consideration, the contribution of this study is twofold. First, we developed a model that, to the best of our knowledge, was not tested before, contributing with empirical work to the under-researched area of Dynamic Capabilities. Second, we also realized that even though there is an indirect effect between Strategic Flexibility and Firm Performance, not all organizational capabilities mediate the relationship between the two. Our results demonstrate that Organizational Learning mediates the relationship, however, Entrepreneurship and Innovation Orientation do not. Therefore, we can conclude that the only variable that has a strong direct effect both with Strategic Flexibility and with Performance plays a mediating role.

### **6.1 Managerial Implications**

From a managerial standpoint, managers should develop Dynamic Capabilities in their companies to address today's dynamic environments. Strategic Flexibility as a Dynamic Capability is a crucial factor to achieve competitive advantage as it helps managers to reformulate their strategy in response to opportunities, threats, and changes (Zahra et al., 2006). Our study concluded that Strategic Flexibility strongly influences the firm's organizational capabilities: Organizational Learning, Entrepreneurship,

and Innovation Orientation. Consequently, in order to develop the company's organizational capabilities managers should invest in developing their Strategic Flexibility by adopting initiatives that ensure flexibility in their firm. This could be done by frequently changing their practices to match competitors and by predicting consumer's tastes and other similar initiatives. Furthermore, this study shows managers the relevant role of Organizational Learning in the firm as it enhances the performance of the company. Besides affecting Firm Performance, Organizational Learning is connected with Strategic Flexibility, strengthening the relationship between these two variables. Initiatives that can be applied by managing directors to improve Organizational Learning can be: boost team spirit inside the organization, clarify the purpose and vision of the company, and other activities that promote a sense of belonging within the firm. By doing so managers will establish a better position in the market.

## **6.2 Limitations of the study and suggestion for future research**

This study needs to be considered in light of some limitations. First, the sample used in this research is limited to SMEs located in Portugal, therefore, it is advisable not to generalize the results to different realities. Taking this into account, future research could test this conceptual model in a different country and with a different type of economy such as developing economies.

Further, another limitation is the size and type of company. The focus was SMEs which are more vulnerable to dynamic environments, however, it could be relevant to understand the performance implications of Strategic Flexibility on a different type of company such as large companies.

Moreover, this study focused on the short term effects of Strategic Flexibility which is Firm Performance. Therefore, it would be pertinent if future research assessed the long term effects of Strategic Flexibility: the sustainability of the firm. Strategic Flexibility is known to be a driver of financial performance, however, it could be interesting to understand if it also contributes to the long term success of the business.

Ultimately, this study can be extended in several directions. Future research could find different organizational capabilities to test the indirect effects between Strategic Flexibility and Firm Performance. This study focused on three organizational capabilities, however, we believe there are more worth the attention.

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## 8 Appendices

### 8.1 Appendix A - Survey displayed to the participants

Dear participants,

First of all I would like to thank you in advance for participating in this study that is part of my Master's dissertation in Business Administration in ISCTE-IUL. The aim of this study is to understand the effects of Strategic Flexibility on Firm Performance through the following organizational capabilities: Organizational Learning, Entrepreneurship and Innovation Orientation in SMEs. Please answer these questions to the best of your knowledge and remember that there are no right or wrong questions. The responses are anonymous and confidential and the data will be treated collectively.

Thank you for participating in this study.

Best regards.

#### STRATEGIC FLEXIBILITY

##### Part 1 – General description of the company

Please select with a "x" the number of employees working in of your firm

Dimension	
Less than 9 employees	
10 – 49 employees	
49 – 99 employees	
More than 100 employees	

Please select with a "x" the number of years in activity of your company

Years in activity	
Less than 3 years	
3 – 5 years	
6-10 years	
More than 11 years	

Please select with a "x" the type of industry of your firm.

<b>Industry</b>	
Manufacturing	
Commerce	
Services	

**Part 2**

Please indicate how strongly you disagree or agree with each statement by circling the appropriate number from 1-5. (1- Strongly disagree; 2-Disagree, 3-Neither disagree nor agree, 4-Agree, 5-Strongly agree).

<b>Strategic Flexibility</b>	1	2	3	4	5
Our firm must frequently change its products and practices to keep up with competitors					
Products/services quickly become obsolete in our industry.					
Actions of competitors are quite easy to predict.					
Consumer tastes are fairly easy to forecast in our industry					
Technology changes more quickly in our industry than in the healthcare industry					

**ENTREPRENEURSHIP**

Please indicate how strongly you disagree or agree with each statement by circling the appropriate number from 1-7. (1- Strongly disagree; 2-Disagree, 3- More or less Disagree, 4- Neither disagree nor agree , 5- More or less agree, 6-Agree, 7-Strongly agree).

<b>Entrepreneurship</b>	1	2	3	4	5	6	7
We believe that wide-ranging acts are necessary to achieve our objectives							
We initiate actions to which other organizations respond							
We are fast to introduce new products and services to the marketplace							
We have a strong proclivity for high-risk projects							
We are bold in our efforts to maximize the probability of exploiting opportunities							

**ORGANIZATIONAL LEARNING**

Please indicate how strongly you disagree or agree with each statement by circling the appropriate number from 1-7. (1- Strongly disagree; 2-Disagree, 3- More or less Disagree, 4- Neither disagree nor agree , 5- More or less agree, 6-Agree, 7-Strongly agree).

<b>Team orientation</b>	1	2	3	4	5	6	7
A team spirit pervades our ranks in the organization							
Cross-functional teamwork is the common way of working in our organization							
There is a commonality of purpose in our organization							
There is total agreement on our organizational vision							
We are committed to sharing our organizational vision with each other							

<b>Systems orientation</b>	1	2	3	4	5	6	7
We have a good sense of inter-connectedness of all parts of the organization							
We understand how our work fits into the value chain of the organization							
All activities that take place in the organization are clearly define							
We understand where all the activities fit-in in the organization							

<b>Learning orientation</b>	1	2	3	4	5	6	7
We agree that our ability to learn is the key to improvement							
The basic values of this organization include learning as a key to improvement							
Once we quit learning we endanger our future							
The sense around here is that employee learning is an investment not an expense							

<b>Memory orientation</b>	1	2	3	4	5	6	7

We have specific mechanisms for sharing lessons learned in our organization							
We audit unsuccessful organizational endeavors and communicate the lessons learned							
Organizational conversation keeps alive the lessons learned from history							
Formal routines exist to uncover faulty assumptions about the organization							

### INNOVATION ORIENTATION

Please indicate how strongly you disagree or agree with each statement by circling the appropriate number from 1-7. (1- Strongly disagree; 2-Disagree, 3- More or less Disagree, 4- Neither disagree nor agree , 5- More or less agree, 6-Agree, 7-Strongly agree).

<b>Innovation Orientation</b>	1	2	3	4	5	6	7
Technical innovation based on research results is readily accepted.							
Management actively seeks innovative ideas.							
Innovation is readily accepted in program/project management.							
Individuals are penalized for new ideas that don't work.							
Innovation in our organization is perceived as too risky and is resisted							

### FIRM PERFORMANCE

Please evaluate the performance of your business over the past year (the next twelve months) relative to your major competitors with a Seven-point scale from -3 ("much worse than competitors") to +3 ("much better than competitors").

<b>Customer satisfaction</b>	-3	-2	-1	0	+1	+2	+3
Customer satisfaction							
Delivering value to your customers							
Delivering what your customers want							
Retaining valued customers							

<b>Market effectiveness</b>	-3	-2	-1	0	+1	+2	+3
Market share growth							
Growth in sales revenue							
Acquiring new customers							
Increasing sales to existing customers							

<b>Current (anticipated) profitability</b>	-3	-2	-1	0	+1	+2	+3
Business unit profitability							
Return on investment (ROI)							
Return on sales (ROS)							
Reaching financial goals							