



# THE MEDIATING EFFECT OF STRATEGIC ORIENTATION, INNOVATION CAPABILITIES AND MANAGERIAL CAPABILITIES AMONG EXPLORATION AND EXPLOITATION, COMPETITIVE ADVANTAGE AND FIRM'S PERFORMANCE

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#### **SUMMARY**

This study employs a dynamic capabilities perspective to examine the relationships among strategy orientation, innovation capability, managerial capabilities and exploration and exploitation capabilities on competitive advantage and firm's performance. This paper proposes that the role of exploration and exploitation capabilities in these relationships differs between the three dimensions of strategy orientation (leadership cost-based strategies, and differentiation-based strategies and product-market scope) and performance. Modelling structural analysis was used to test the hypotheses in a sample of 387 Portuguese SME's firms. The empirical findings indicate that innovation capability, managerial capabilities and strategic orientation positively mediate the relationship between exploration and exploitation capabilities and performance, whereas strategic orientation affects competitive advantage and performance. Finally, the study provides a discussion on the theoretical and managerial implications and directions for future research.

**Keywords:** Dynamic Capabilities; Exploitation; Exploration; Competitive Advantage; Performance.

#### 1 INTRODUCTION

The dynamic capability-based view (DCV) of competitive strategy attempts to explain why some firms gain competitive advantage in continually changing environments (Eisenhardt & Martin, 2000; Teece, Pisano, & Shuen, 1997). DCV assigns a prominent role to the firm's strategic leadership in the nurturing and building of dynamic capabilities (DCs) critical to the value generation process.

Although early research on dynamic capabilities suggests a link to competitive advantage (Griffith & Harvey, 2001; Teece, et al., 1997), there has been lack of agreement on the nature of this relationship. Cepeda and Vera (2007) argue that the link between dynamic capabilities and competitive advantage tautological as researchers have tended to claim dynamic capabilities post hoc, inferring their existence from successful organizational outcomes such as profitability and growth.

Eisenhardt and Martin (2000, p. 1107) provide an alternate view and argue that 'dynamic capabilities are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die'. Eisenhardt and Martin (2000), Teece et al. (1997), Zollo and Winter (2002) recognize dynamic capabilities to be a key factor in firm competitiveness through sensing, seizing and reconfiguring (Teece et al., 1997), whereas organizational ambidexterity is responsible for the simultaneous management of exploratory and exploitative activities, thus helping to manage rapid environmental change (O'Reilly and Tushman, 1996; Li et al., 2008; Raisch et al., 2009).

The relationship between the concepts of organizational ambidexterity and dynamic capabilities remains relatively unexplored. A better understanding of this relationship is necessary to comprehend the effect it has on firm performance. This paper makes several contributions to the theories of dynamic capabilities and organizational ambidexterity.

It has been confirmed that dynamic capabilities have no direct impact on firm competitive advantage. A number of researchers (Eisenhardt and Martin, 2000; Helfat, 1997; Liu et al. 2014; Teece et al., 1997; Teece, 2007) analysed dynamic capabilities' impact on firm competitive advantage. Each of these studies, though using different variables, indicates that the relation between dynamic capabilities and firm competitive advantage is indirect.

Accordingly, it is necessary to identify strategic orientation and managerial and innovation capabilities that can have a mediating effect on this relation. Also, previous studies (He and Wong, 2004; Jansen et al., 2006) have confirmed innovations to be a source of competitive advantage.

Previous studies in this area have mainly focused on firms operating in developed markets, and little is known about what dynamic capabilities are, or their relationship with performance in transition economies. To address these research gaps, the study explores the definition and effects of DCs, and specifically the exploitative and the explorative vision of the firm, and the mediating role of Strategic orientation, Managerial capabilities and the Innovation capability and their impact on the firm's performance. This paper proposes that the role of exploration and exploitation capabilities in these relationships differs between the three dimensions of strategy orientation (leadership cost-based strategies, and differentiation-based strategies and product-market scope) and performance.

Thus, the objective of this study is, employing a dynamic capabilities perspective, to examine the relationships among strategy orientation, innovation capability, managerial capabilities and exploration and exploitation capabilities on competitive advantage and firm's performance. The study uses Portugal as a testing ground for the universality of the generated theory for three reasons: Portugal's size in the global economy, Portugal is in a process of internationalization,

and the insertion of Portugal in a European context. As such, this research contributes to existing literature by entailing the new research context, Portugal, and clarifies the debates, to help understand the effect of DCs and the role of environmental dynamism.

#### 2 CONCEPTUAL BACKGROUND

## 2.1 Dynamic capabilities based view

The concept of dynamic capabilities receives significant attention within the field of strategic management. Dynamic capabilities have been analysed from various perspectives and using various approaches. Despite more than a decade of research on the concept, many critical and unresolved issues exist. A number of researchers (Eisenhardt and Martin, 2000; Helfat and Peteraf, 2003, 2009; Peteraf et al., 2013; Schilke, 2014; Teece et al., 1997; Teece, 2007; Winter, 2003) developed a field of dynamic capabilities representing a range of views of the concept.

Dynamic capabilities can be defined as competencies (Barreto, 2010; Adner and Helfat, 2003), abilities (Martin, 2011, Barreto, 2010; Helfat and Winter, 2011), capabilities (Barreto, 2010; Teece et al., 1997; Zollo and Winter, 2002), capacities (Martin, 2011), processes (Eisenhardt and Martin, 2000) and routines (Barreto, 2010).

Initially, dynamic capabilities were considered to be a firm's ability to "integrate, build and reconfigure internal and external competencies to address rapidly changing environments" (Teece et al., 1997). Eisenhardt and Martin (2000) perceived dynamic capabilities as specific strategic processes. In general, a dynamic capabilities concept is usually regarded as an extension of the recourse-based view (Schilke, 2014).

While the recourse-based view involves issues addressed to existing recourses of the firm, the dynamic capabilities view concerns the reconfiguration of existing recourses and the creation of the new recourses (Helfat and Peteraf, 2003; Schilke, 2014). According to Helfat and Peteraf (2003), the recourse-based view explains the differences among competing firms, which appear because of the recourses that firms have. These differences also have a respective impact on firm competitive advantage. In this way, dynamic capabilities become critical, as they promote changes in the existing firm's recourse base (Helfat and Peteraf, 2003; Schilke, 2014) and thus lead to competitive advantage for the firm.

#### 2.2 Antecedents of Exploitation and Exploration

The RBV and the DC approach are considered as models that explain exploitation and exploration (Yalcinkaya et al. 2007; Lin et al., 2013). In this study, we assume that the RBV provides the appropriate framework to identify the antecedents of exploitation, while the DC theory can be a more adequate approach to establish the antecedents of exploration.

In turn, the antecedents of exploitation are regarded as first-order resources and the antecedents of exploration as second-order capabilities (Sidhu et al. 2004; Prange & Verdier, 2011). This is consistent with the arguments that recognize exploitation as a main firm-level internal function and exploration as a domain-level, fundamentally external function (Auh & Menguc, 2005; Dutta, 2012).

In this way, exploitation is the process of taking advantage of what exists, allocating the resources to improve the existing products and processes (March, 1991). This includes actions to strengthen the firm's internal resources in order to develop competitive advantages, proposed by the RBV (Barney, 1991; Grant, 1991). The pressure to achieve efficiency makes managers focus on developing those internal capabilities which aggregate value (Mom, van den Bosch et al. 2007; Bierly et al., 2009).

On the other hand, exploration represents the process of trying new ways of doing things, such as searching, variation, risk-taking, experimentation, flexibility and discovery (March, 1991). This is associated with the possibilities of development beyond organizational limits and, therefore, involves relationships with the environment in which the firm seeks to absorb new knowledge (Bierly et al.2009) and achieve synergies in the inter-organizational networks (Lavie, Kang & Rosenkopf, 2011). All this will let the firm adapt, integrate and reconfigure its resources to build higher-order capabilities (Teece et al.1997).

## 2.3 Strategic Orientation

Some researchers consider strategic orientation as dynamic capability that represents the organization's ability to integrate and built internal and external competencies (Zhou et al. 2005), as other authors consider orientation as elements of the organizational culture (Nobel et al. 2002). So, the strategic orientation reflects the beliefs and values that are deeply rooted in the company and define its focus for achieving a competitive advantage, constituting a determining factor for the configuration of the resources required to achieve this goal (Scott-Kennel & Giroud, 2015).

## 2.4 Innovation capability

According to Adler and Shenbar (1990), innovative capability is defined as: (1) the capacity of developing new products satisfying market needs; (2) the capacity of applying appropriate process technologies to produce these new products; (3) the capacity of developing and adopting new product and processing technologies to satisfy the future needs; and (4) the capacity of responding to accidental technology activities and unexpected opportunities created by the competitors. A firm's capabilities are important in providing and sustaining its competitive advantage, and in the implementation of the entire strategy.

#### 2.5 Managerial Capabilities

According to Ho (2008), a managerial capability refers to an organisation's skills, knowledge and experiences, which are used to handle difficult and complex tasks in management and production (Choi and Shepherd, 2004). In order for managers to perform their managerial tasks adequately, they must possess firm-specific knowledge which is history-dependent or acquired through learning by doing (Barney, 1991).

#### 3 CONCEPTUAL FRAMEWORK AND HYPOTHESES

The tested conceptual model in this study is presented in Figure 1.

Exploration

Strategic
Orientation

Innovation
Capability

Performance

Figure 1 - The Conceptual Model

Source: Elaborated by the authors (2014).

# 3.1 The impact of Exploration and Exploitation on Strategic Orientation

Ambidexterity literature has called for more research on the contextual factors that facilitate ambidexterity, such as culture, values, vision, incentives, and processes (O'Reilly and Tushman, 2011; Markides, 2013). The general agreement established is that achieving organizational ambidexterity by simultaneously pursuing exploration and exploitation is both critical for long-term success and difficult to achieve (Cao et al., 2009). Consequently, the following hypotheses are proposed:

H1: Exploitation has a positive impact on Strategic orientation

**H2**: Exploration has a positive impact on Strategic orientation

## 3.2 The impact of Exploration and Exploitation on Innovation Capability

Compared to exploitation, exploration focuses mainly on trying to create variety, to adapt and hence exploit ever-decreasing windows of opportunity. Organizations engaging in exploratory innovation pursue new knowledge and develop new products and services for emerging markets (Yalcinkaya et al., 2007). Because it provides new insight into the design of new features and benefits of a given product, that product is guaranteed to contain new ideas (Cho & Pucik, 2005).

Each successful organization exploits available resources and explores new knowledge and opportunities. Therefore, ambidexterity increases organization performance and innovation (Cao et al., 2009). Exploitation and exploration have a positive influence on innovation capability (Gibson and Birkinshaw, 2004). Consequently, the following hypotheses are proposed:

**H3:** Exploration has a positive impact on innovation capability

**H4:** Exploitation has a positive impact on innovation capability

## 3.3 The impact of Exploration and Exploitation on Managerial Capability

Adner and Helfat (2003) suggest that the characteristics of a firm's top management team are a major contributor to the development of managerial capabilities that ensure sustained competitive advantage. Ambidextrous managers must manage contradictions and conflicting goals (Smith and Tushman, 2005), engage in paradoxical thinking (Gibson and Birkinshaw 2004) and fulfil multiple roles (Lane and Floyd, 2000). Consequently, the following hypotheses are proposed:

**H5:** Exploitation has a positive impact on managerial capabilities

**H6:** Exploration has a positive impact on managerial capabilities

# 3.4 The impact of Managerial Capabilities on Innovation Capability

Hooley et al. (2005) proposes managerial capability as an antecedent of innovation capability. They argue that superior management capabilities, through integration and teamwork, will enhance innovation. Innovation combines not just new idea creation but also systematic and structured management processes or steps. Cooper (2001) "stage-gate" steps are a special case of the process of managing innovation. Cobbenhagen (2000) gives evidence of the importance of management capabilities in the context of SMEs. In total, the well-documented role of management processes for innovation suggests that management capabilities are likely to influence innovation success. Consequently, the following hypothesis is proposed:

H7: Managerial capabilities positively impacts on innovation capability

## 3.5 The impact of Strategic Orientation on Innovation Capability

The strategic orientation supports risk taking and enhances the possibility of designing and developing completely new and innovative products (Olson e al. 2005). Strategic orientation constitutes a determining factor in ensuring that innovative capabilities produce positive results for a company (Ozkaya et al., 2015). The behaviour required to satisfy the needs and expectations of customers influences the innovative capabilities that can help to enhance business performance, particularly in environments in which changes are rapid and discontinuous (Zhou et al., 2005). Based on the literature, we posit the following hypothesis:

**H8**: Strategic Orientation has a positive impact on Innovation Capability

## 3.6 The impact of Strategic Orientation on Managerial Capabilities

The relationship between strategic types and key management characteristics has been examined in previous studies. Generally, strategic orientation differs with regard to managerial factors and basic competences (Conant et al.1990). The strategic orientation reflects the beliefs and values that are deeply rooted in the company and define its focus for achieving a competitive advantage, constituting a determining factor for the configuration of the resources required to achieve this goal (Scott-Kennel & Giroud, 2015). Based on the literature, we posit the following hypothesis:

**H9**: Strategic Orientation have a positive impact on managerial capabilities

# 3.7 The impact of Strategic Orientation on Competitive Advantage

Business strategy has been characterized as the manner in which a firm decides to compete, which encompasses the pursuit, achievement, and maintenance of competitive advantage in SMEs (Varadarajan & Clark, 1994). Given its position as a focal issue in organizational decision making, it is not surprising that the concept of strategic orientation has been linked to performance outcomes. Indeed, it is a key postulate to which many management researchers devote attention, because without doubt "the notion that superior performance requires a business to gain and hold an advantage over competitors is central to contemporary strategic thinking" (Day and Wensley, 1988, p. 1).

Strategic orientation reflects the firm's philosophy of how to conduct business through a deeply rooted set of values and beliefs that guides the firm's attempt to achieve superior performance (Gatignon & Xuereb 1997). According to Zhou et al. (2005) strategic orientation is the company's strategic direction in creating the proper behaviour so as to achieve superior performance. Consequently, the following hypothesis is proposed:

H10: Strategic Orientation has a positive impact on competitive advantage

## 3.8 The impact of Innovation Capabilities on Competitive Advantage and Performance

Marketing and innovation are necessary for firms to gain competitive and vantages (Song et al., 2005). Innovation capability can help companies to gain an "isolation mechanism" that protects the advantages and benefits they have (Lavie, 2006). Successful innovation can make it more difficult for external imitation and allow the company to maintain their competitive advantages better (Morales et al., 2007). Therefore, innovation can affect competitive advantages and performance (Wingwon, 2012). Consequently, the following hypotheses are proposed:

H11: Innovation capability positively impacts on competitive advantage

H12: Innovation capability positively impacts on performance

## 3.9 The impact of Managerial capabilities on Competitive Advantage

Managerial capability is based on the dynamic capability view—an extension of RBV (Teece, 2007). Organizations require dynamic capabilities to effectively adapt to the changing market conditions and create value. These capabilities help organizations in creating and modifying existing operating routines, sensing and seizing entrepreneurial opportunities that in turn increase organizational effectiveness and competitive advantage.

Similarly, we contend that higher management capability should enable providers to better manage i.e., bundle and leverage various firm-level resources and capabilities through creation of valuable synergy resulting in performance enhancement (Sirmon & Hitt, 2009). Consequently, the following hypothesis is proposed:

H13: Managerial capabilities positively impacts on competitive advantage

# 3.10 The impact of Competitive Advantage and Performance

Studies have found that there is a significant relationship between competitive advantage and the performance of organizations, when sales-based performance was measured by the level of sales revenue, profitability, return on investments, productivity, product added value, market share and product growth (Wang and Lo, 2003; Rose *et al.*, 2010). Consequently, the following hypothesis is proposed:

H14: Competitive advantage has a positive impact on Performance

#### 4 METHODOLOGY

# 4.1 Sample and Data Collection

In order to test the proposed investigation model and the research hypotheses, data was collected via a structured questionnaire. A total of 387 questionnaires were obtained from Portuguese SMEs. Furthermore, a key informant in each company was contacted to complete the questionnaire.

The respondents were scattered throughout Portugal with no sector being specially represented. Twenty-eight percent were from companies with less than 20 employees, 42% from companies with between 21 and 50 employees, 8% from companies with between 51 and 100 employees, and 22% with more than 100 employees until 200 employees. Forty three percent of the companies were share companies, 42% private limited companies, and 15% single shareholder companies. In terms of lifespan, 25% of the firms were less than 10 years old, 65% had between 10 and 20 years, 7% between 21 and 50 years, and 3% more than 51 years.

#### 4.2 Measures

In order to operationalize the variables, the researchers conducted a literature review and adapted scales used in existing studies, changing and adapting the vocabulary so that the scales were more perceptible for respondents.

## 4.2.1 Strategic Orientation

Business unit strategic orientation was measured using a 22-item scale developed by Dess & Davis (1984) and modified by Doty, Glick & Huber (1993). Respondents rated their major business unit on items designed to measure the extent to which they were developing cost-based and differentiation-based strategies (Porter 1980). Items like "Provide unique products or services?" or "Be the lowest cost provider in your industry?"

#### 4.2.2 Innovation Capability

The survey instrument asked respondents to indicate their perceptions with regard to the items pertaining to brand capability, innovation capability, firm characteristics, marketing performance and financial performance. Most of the scales are drawn from or adapted from Hooley, (2005)

and suggested by Merrilees, (2011). Items like "Better at developing new ideas to help customers".

## 4.2.3 Dynamic Capabilities – Exploration and Exploitation

Dynamic Capabilities - exploration and exploitation - were measured using two dimensions, with five items each, competence exploration and competence exploitation, suggested by Atuahene-Gima (2005). Items like "Acquired manufacturing technologies and skills entirely new to the firm" were used as well as "Upgraded current knowledge and skills for familiar products and technologies".

## 4.2.4 Competitive Advantage

Competitive advantage was measured by Vokurka et al., 2002; Thatte et.al. 2009, suggested cost, quality, dependability and speed of delivery as some of the critical competitive priorities. Items like "Offer prices as low as or lower than our competitors" were used

#### 4.2.5 Performance

Performance was measured based on Morgan et al. (2003). Two dimensions of the construct were involved, each having four items that showed on the exploratory and then on the confirmatory factor analysis, to load on one simple factor. The efficiency with which the firm generates cash flows and profits may also be an important accounting indicator of financial performance. This is typically captured in "*Return on ...*" or "*re-investment*" type measures that express profit and cash flow as a ratio of some measure of the capital employed or sales revenue of the firm as well as the growth on sales and on market share.

#### 4.3 The Model

All the items were measured on a seven-point Likert scale (1=strongly disagree to 7= strongly agree). Confirmatory factor analysis was used to assess the psychometric properties of the scales and the measurement model fit, using AMOS 21. The final model shows a good fit (IFI=0,917; TLI=0,909; CFI=0,917; RMSEA=0,061; CMIN/DF=2,420).

Table 1 - Square Correlations, Cronbach's Alpha Composite reliability and Variance extracted

Construct	<b>X1</b>	<b>X2</b>	X3	X4	X5	<b>X6</b>	CR	AVE
Exploitation	0,94						0,89	0,72
Exploration	0,63	0,89					0,92	0,78
Strategic Orientation	0,60	0,50	0,88				0,95	0,83
Innovation Capability	0,42	0,43	0,48	0,88			0,91	0,76
<b>Competitive Advantage</b>	0,55	0,37	0,63	0,49	0,90		0,91	0,76
Performance	0,37	0,21	0,55	0,33	0,94	0,90	0,93	0,76

Source: Elaborated by the authors (2014).

Diagonal in bold - Cronbach's Alpha; CR - Composite Reliability; AVE - Average Variance Extracted

Composite reliability (CR) and the average variance extracted (AVE) were computed. All the scales showed values above 0.8 on CR and above 0.7 on AVE, which are in line with the recommendations (Hair et al. 2006). Discriminant validity is evidenced by the fact that all correlations between the constructs are significantly smaller than 1 and the squared correlations calculated for each pair of constructs is always smaller than the variance extracted for correspondent constructs (Shiu et al., 2011), thereby confirming the discriminant validity.

#### 4.4 Common Method Bias

Based on the suggestions by Podsakoff (1986), a Harman's single factor test and a common latent factor (CLF) analysis were performed to capture the common variance among all observed variables in the model. The Harman's test showed that any factor could explain more than 23% of the variance and there were 11 factors with eigenvalues greater than 1, explaining 73% of the total variance.

A confirmatory factor analysis was conducted restricting all items of the model to load on a common single factor (Podsakoff, 2003). The resulting fit indices show the model did not provide a good fit for the data: CMIN/DF=2. 02; IFI=0.68; TLI=0.673; CFI=0.680, which means that common method bias is not a problem for this data set.

#### **5 RESULTS AND DISCUSSION**

Amos 21.0 was used to perform CFA and SEM to test the proposed hypotheses. The final model shows a good fit with IFI=0,917, TLI=0,909, CFI=0,917, RMSEA=0,061 e CMIN/DF=2,420 (Anderson and Gerbing, 1988).

Table 2 - Estimation of the Structural Model (Global - n = 387)

Hypothesis	Relationship			SRW	C.R.	P	Sup./ Not S
H1	Strategic Orientation	<b>←</b>	Exploitation	,464	6,633	***	Supported
H2	Strategic Orientation	$\leftarrow$	Exploration	,248	3,810	***	Supported
Н3	Innovation Capability	$\leftarrow$	Exploitation	,100	1,481	***	Supported
H4	Innovation Capability	<b>←</b>	Exploration	,079	1,363	***	Supported
Н5	Managerial Capabilities	$\leftarrow$	Exploration	,123	1,876	***	Supported
Н6	Managerial Capabilities	$\leftarrow$	Exploitation	-,055	-,746	,225	Not Supported
H7	Innovation Capability	$\leftarrow$	Managerial Capabilities	,504	5,852	***	Supported
Н8	Innovation Capability	$\leftarrow$	Strategic Orientation	,250	2,491	***	Supported
Н9	Managerial Capabilities	$\leftarrow$	Strategic Orientation	,593	5,911	***	Supported
H10	Competitive Advantage	$\leftarrow$	Strategic Orientation	,704	6,240	***	Supported
H11	Competitive Advantage	$\leftarrow$	Innovation Capability	-,088	-,786	,216	Not Supported
H12	Performance	$\leftarrow$	Innovation Capability	,582	7,315	***	Supported
H13	Competitive Advantage	$\leftarrow$	Managerial Capabilities	-,042	-,432	,333	Not Supported
H14	Performance	$\leftarrow$	Competitive Advantage	,289	5,009	***	Supported

Source: Elaborated by the authors (2014).

The results of the estimation of the structural model in Table 2 confirm **H1**, as exploitation has a positive impact on strategic orientation  $(0,464; P \le 0.01)$  and **H2**,  $(0,248; P \le 0.01)$ , as exploration has a positive impact on strategic orientation. Thereby, the exploitation and exploitation have a significantly influences on strategic orientation. These results are in line with prior literature that exploitation and exploration are fundamentally different logics that create tension because they compete for firms' scarce resources and strategic focus (Nielsen, 2010).

There are a positive relationship between exploitation and exploration and innovation capability, respectively,  $(0, 100; P \le 0.01)$  and  $(0,079; P \le 0.01)$ . Thus, supporting **H3** and **H4**. These results are according the literature that exploration and innovation capabilities help units to encounter rapid obsolescence of products and services (Ahuja/Lampert (2002)).

**H5** is confirmed, as exploration has a positive impact on managerial capability,  $(0.123; P \le 0.01)$ . According to studies of organizational learning the essence of *exploration activities* is creating variety in experience (Holmqvist, 2004; McGrath, 2001) which is associated with broadening a manager's existing knowledge base (Cf. Katila and Ahuja, 2002; Sidhu et al., 2004).

The exploitation doesn't seem to have a significant impact on managerial capabilities. Consequently not supporting **H6** (-0,055;  $P \ge 0.05$ ). This result not in line with prior investigation, confirming that the essence of *exploitation activities* is creating reliability in experience (Levinthal and March, 1993) associated with deepening the manager's existing knowledge base (Cf. Katila and Ahuja, 2002).

However, managerial capabilities have a positive impact on innovation capability  $(0,504; P \le 0.01)$ . Consequently supported **H7**. This result is in line with study of how management capabilities affect innovation capability and performance in SMEs may be conditioned by greater administrative flexibility and a strong participation of the top management in the firm's processes and activities (Escribá-Esteve et al., 2009).

**H8** is confirmed,  $(0, 100; P \le 0.01)$ , as there is a positive relationship between strategic orientation and innovation capability. Consequently, strategic orientation has a significantly influence on innovation capability. In fact, strategic orientation corresponds to the guiding principles that shape managerial decision-making in a company, the configuration of its resources and its interaction with the market in question (Chen et al., 2014).

Strategic orientation has a positive impact on managerial capabilities. Thus, **H9** is supported  $(0,593; P \le 0.01)$ . This relationship is in line with prior investigations. The strategy-formulation perspective is widely used to study the role of strategic orientation (Homburg et al., 2002). Its basic proposition is that there is no universally beneficial strategic choice, and companies need to examine certain sets of organizational and environmental conditions to develop their strategies

There is a positive relationship between strategic orientation and competitive advantage. Consequently, supporting **H10** (0,704;  $P \le 0.01$ ) in terms by literature that market-oriented companies possess inherent characteristics that drive their competitive capabilities to build enhanced performance (Narver and Slater, 1990), and that such strategic orientation provides a superior ability to compete (Zhou et al., 2005).

On the other hand, innovation capability doesn't seem to have a significant impact on competitive advantage, consequently, not supporting **H11** (-0,088;  $P \ge 0.05$ ). This result is not are in line with prior investigations, considering innovation capability a special asset of a firm.

**H12** is confirmed, as innovation capability has a positive impact on Performance,  $(0,582; P \le 0.01)$ . Thus, the innovation capability have a significantly influences on performance. Mone et al. (1998) and Cooper (2000) argue that innovation capability is the most important determinant of firm performance. The diffusion of innovations literature suggests that firms must be innovative to gain a competitive edge in order to survive (Li & Calantone, 1995; 2002).

However, managerial capabilities doesn't seem to have a significant impact on competitive advantage, consequently, not supporting **H13**, (-0,042;  $P \ge 0.05$ ). This result is in contradiction with the result of previous studies that argue that organization's management capabilities are crucial to achieving congruence among its competences and the changing conditions of its environment (Kor and Mesko, 2013).

Obviously, **H14** is confirmed. Thereby, competitive advantage has the positive and stronger impact on performance  $(0, 289; P \le 0.01)$ . In fact, research in the last decade obtains empirical evidence of the relationship between management capabilities, strategy, and performance (Adner and Helfat, 2003; Kearney et al., 2014).

## **6 CONCLUSION**

The main goals of this research were to evaluate the impacts of DC (exploitation and exploitation) on competitive advantage and performance, mediated by strategic orientation, managerial and innovation capabilities. The moderating role of ambidexterity was tested to provide a specific context where these relationships could take place.

The mediating effects of strategic orientation, innovation and managerial capabilities were used to get a better understanding of the links between DC and performance and competitiveness, and the effects from DC on them. The character of DC is rather cultural (Lee and Chen, 2009), and their impacts on performance normally are indirect. The direct effects that were always revealed as being insignificant were removed from the final model.

The results show that DC has an indirect effect on performance and competitiveness, via strategic orientation, innovation and managerial capabilities. These last capabilities act like an instrument from DC to help companies be more competitive and perform better. Strategic orientation exerts a strong and significant influence both on competitiveness and performance, while managerial capabilities may reinforce the effects of DC on innovation capabilities.

This paper makes two contributions to the marketing and innovation management literature. Firstly, this paper provides new empirical evidence of the positive effect of ambidexterity in the context of strategic orientation, marketing and innovation capabilities. While the beneficial effect of balancing exploration and exploitation has been hypothesized in the literature, there have been few studies providing moderating empirical evidence. This paper takes into account two somewhat different conceptual interpretations of ambidexterity and has found empirical support

for both interpretations. Thus, although our study did not explicitly address the issue of what organizational design principles are appropriate for ambidexterity, our findings lend support to the case for pursuing ambidextrous organization designs. As for our findings are limited to the specific context of marketing and innovation, we suggest that the methodological approach of this paper may be adapted to test the ambidexterity hypothesis in other management research domains as well.

Secondly, this paper adds to a wider understanding of innovation management by extending the exploration versus exploitation construct to characterize how firms prioritize their resources for marketing and innovation. As the exploration versus exploitation construct has generated significant insights in other domains of management research, we believe that our operationalization of marketing and innovation strategies grounded on the exploration versus exploitation distinction may have a number of important implications for innovation management as well.

#### 7 LIMITATIONS AND FUTURE RESEARCH

This study has some methodological limitations affecting its potential contributions. As a cross-sectional study that captures one image in time, its ability to identify strict causality between variables is limited. Because capabilities and creativity-innovation co-evolve in a dynamic process, the ideal study might be longitudinal. Furthermore, the results are based on data collected from a key respondent, rather than broader actual data.

As recommendations for future work, the model could be tested introducing variables like entrepreneurial and market orientation, both as mediators or moderators. Innovation and new product success are relevant outcomes which could be tested.

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