

MANAGERS' INFLUENCE ON COMPANY CAPABILITIES

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ABSTRACT

Purpose: This study aims to verify the moderating role of managers' characteristics, age, and tenure (time in the sector, position, company), in the relation between the realized absorptive capacity (RACAP) and the architectural marketing capabilities (CAM).

Originality/value: The present study considers the human element as a factor that affects the relations between the capacities of the company. It contributes theoretically to help understand what can impact the formulation and implementation of marketing strategies and theoretically strengthen the role of the human element. As a practical contribution, it has been shown that it is not enough to seek external knowledge, it is necessary that it is transformed and then used effectively in the design and implementation of marketing strategies.

Design/method/approach: Quantitative research, with transverse temporal data collection. This study empirically tested the hypotheses based on a sample of 343 marketing managers from Brazilian manufacturing industries. Data were collected through a survey. Data were processed by means of modeling of structural equations in AMOS software.

Findings: The characteristics of managers (age and tenure) moderate the relationship between a part of RACAP (knowledge transformation) and CAM (architectural marketing capability). More experienced managers should be valued because it has been proven that in this sector, they make a difference when it comes to transforming knowledge and using it in their strategies.

KEYWORDS

Absorptive capacity. Marketing capability. Managers' characteristics. Tenure. Age.

1. INTRODUCTION

Companies are continually looking for ways to improve their processes, products, and services in order to achieve their goals. For this, they need to differentiate themselves from their competitors by achieving sustainable competitive advantages. One way to achieve such advantages is through organizational capabilities.

Capabilities are a company's abilities to combine, develop, and exploit resources to create competitive advantage (Murray & Chao, 2005; Ruiz-Ortega & García-Villaverde, 2008; Kaufmann & Roesch, 2012). There are several types of capabilities in a company. One of the most relevant is the absorptive capacity (ACAP), which is the ability to take in external knowledge and use it for commercial purposes (Zahra & George, 2002). As Morgan, Zou, Vorhies, and Katsikeas (2003) argue, knowledge creates the most strategically significant resources, so it is essential to understand the logic of its attainment. ACAP is concerned with understanding the processes of acquisition, assimilation, transformation, and exploitation of knowledge (Zahra & George, 2002). However, we can divide ACAP into two phases: potential absorptive capacity (PACAP), formed by the acquisition and assimilation of knowledge; and realized absorptive capacity (RACAP), containing the stages of transformation and exploitation of external knowledge (Zahra & George, 2002).

Another important existing capability in organizations is the architectural marketing capability (AMC), which involves the skills for planning and implementing marketing strategies within a company. This capability is also relevant for leveraging other types of capabilities, such as specialized and cross-functional capabilities (Morgan, 2012). In other words, architectural marketing skills are essential because they help formulate and implement what was planned, transforming it into a perceived value offer for the public (Morgan et al., 2003). Therefore, one can perceive that there is a relationship between ACAP and AMC, because knowledge is needed to formulate and implement the right marketing strategies. Companies can obtain and transform knowledge through ACAP.

However, both capacities – ACAP and AMC – require the human element in order to exist. As Nieves and Haller (2014) point out, human capital is considered a vital resource to ensure the realization of several key capabilities that allow for sustainable competitive advantage. Despite its relevance, many theories do not consider it. However, these theories have reached the limit of their explanatory power, leading researchers to become interested in

how human factors affect corporate outcomes (Finkelstein, Hambrick, & Cannella, 2009).

Bromiley and Rau (2016, p. 174) argue that “strategy academics have an ongoing concern with the strategy process – the mechanisms by which organizations formulate and implement the strategy”. According to the authors, there is a significant and growing flow of research in this area that focuses on the role of the top management (CEOs/COOs, other senior managers, and top management teams) during the development and implementation of a strategy. As Hiller, Beaudesne, and Whitman (2013) note, in order to understand company strategies and actions, it is necessary to understand better the individual characteristics of top executives who make decisions on behalf of organizations.

Furthermore, Bendig, Strese, Flatten, Costa, and Brettel (2018) empirically validated a model that related the micro-fundamentals of dynamic capabilities to the personality of the chief executive officer (CEO). The authors understood how company leaders indirectly influence the dynamic capabilities of the company by shaping individual learning conditions. Bach & Lee (2018) also investigated the relationship between corporate performance and executive characteristics from the perspective of upper echelons theory (Hambrick & Mason, 1984).

To exercise realized absorptive capacity (RACAP), it is necessary to merge new and existing knowledge in order to use them later (Flatten, Engelen, Zahra, & Brettel, 2011). That is, the manager’s experience can make a difference when it comes to transforming the knowledge acquired and using it in the formulation and implementation of a company’s marketing strategies. Finally, there are indications that the characteristics of managers, represented in this study by age and tenure (time the executive has been in the sector, company, and position), play a moderating role in the RACAP-AMC relationship. Therefore, the objective of this article was to verify the moderating role of the managers’ characteristics (age and tenure) in the relation between RACAP and AMC.

The article is intended to cover the literature gap by explaining how the characteristics of managers (human element) intensify the influence of RACAP on AMC and seeks to deepen understanding of the specific elements of RACAP in relation to AMC. Specifically, it remains to be understood how transformation and exploitation influence architectural marketing capabilities when moderated by the human element. As mentioned earlier, ACAP and AMC are essential capabilities for companies and are interrelated, since it is ACAP that provides the knowledge that AMC requires. Despite

the relevance of their relationship, we found no evidence of studies that investigated them together.

We enhanced this study by introducing the managers' characteristics as a moderating factor in this relationship, since they have been shown to influence strategic decisions (Eisenhardt & Schoonhoven 1990; Boeker, 1997; Hambrick, 2007; Chen, Kang, & Butler, 2019). In a 2016 study, Bromiley and Rau claim that while the CEO's experience, tenure, and age influence the company's results, the "how" of this occurrence is a sophisticated element.

Therefore, this research contributes to the theory by demonstrating that the better a company manages its ability to learn from external knowledge, the more significant the differentiation between it and the competition will be, since it will be more costly to copy products and processes that are always being improved. Besides, firms increase this complexity due to causal ambiguity (Lippman & Rumelt, 1982) generated through the integration of different capacities (e.g., RACAP and AMC).

Briefly, causal ambiguity refers to the uncertainty regarding what elements cause differences in efficiency between firms. It prevents competitors who seek to imitate a company from knowing what to imitate or what to do, helping to preserve the condition of heterogeneity (Reed & DeFillippi, 1990) and leading to competitive advantage.

This article is structured as follows: first, we present a brief theoretical overview of the variables involved in the study (absorptive capacity, architectural marketing capabilities, and the managers' characteristics). Next, we discuss our methodological choices and provide our results. Finally, we discuss our findings and the considerations they raise.

2. THEORETICAL FRAMEWORK

2.1 Realized absorptive capacity (RACAP)

Individual learning is the basis for organizational knowledge absorption. However, according to Cohen and Levinthal (1990), such knowledge will only be useful if it is translated into organizational capacities to assist in the development of specific resources. In this paper, we present the results obtained by Zahra and George (2002) as a dynamic capability, which assists in the reconfiguration of resources in dynamic environments (Eisenhardt & Martin, 2000; Teece, Pisano, & Shuen, 1997; Burcharth, Lettl, & Ulhøi, 2015). Dynamic capabilities are heterogeneous among companies, which leads to the distinction of strategies because they are based on path dependence



and use unique assets and idiosyncratic processes. This factor leads to the creation of sustainable competitive advantage as a result of the dynamic capacities in the companies (Teece et al., 1997). Path dependence is the pathway that has already been followed by the company and demonstrates that the company's history is indeed relevant to the decisions to be made (Teece et al., 1997). When a company faces a decision, the path it chooses to pursue will be a function of its current position and future paths. However, the path it has already traveled shapes its current position (Teece et al., 1997). Therefore, all the trajectory already traced by the company, which involves its experiences, errors, achievements, successes, and failures, will influence it at the time of decision making. This temporal logic links with the observable characteristics of the managers were used in this study.

Absorptive capacity (ACAP) is the company's ability to acquire, assimilate, transform, and exploit knowledge from outside the organization (Zahra & George, 2002). The present study used the ACAP division proposed by Zahra and George (2002) and followed by Flatten et al. (2011), Jiménez-Barrionuevo, García-Morales, and Molina (2011), and Chauvet (2014). This framework separates absorptive capacity into stages: acquisition, assimilation, transformation, and exploitation. These four phases are then organized into two: PACAP and RACAP. Potential absorptive capacity covers the acquisition and assimilation stages, while realized absorptive capacity encompasses the transformation and exploitation phases.

The transformation stage of realized absorptive capacity deals with "the company's ability to develop and refine routines that aim to facilitate the combination of existing knowledge and new knowledge acquired and assimilated" (Zahra & George, 2002, p. 190). In turn, there is exploitation, which for Zahra and George (2002), as for Cohen and Levinthal (1990), is the company's ability to incorporate new knowledge into its operations. Through the systems of appropriation of this knowledge that is externally absorbed and finally exploited, the company tends to generate competitive advantage (Zahra & George, 2002).

The company can face different situations related to its new external knowledge. It may, for example, generate several marketing strategies from a small amount of such knowledge. Alternately, it may generate a broad knowledge base, but not have the capacity to exploit it (Lane, Koka, & Pathak, 2006). One way to work on this knowledge base is through the capabilities that the organization already has, such as its architectural capability. The latter has a critical role in the company's ability to formulate and implement marketing strategies, and will, therefore, be addressed below.



2.2 Architectural marketing capability (AMC)

According to Santos-Vijande, Sanzo-Pérez, Trespalacios Gutiérrez, and Rodríguez (2012), interest in studying marketing skills has recently increased. Morgan (2012) conceptualizes marketing capabilities as the acquisition, combination, and transformation of marketing resources into offers that the market values. This author further classifies marketing capabilities into four types: specialized (the marketing mix); interoperability (e.g., customer relationship management – CRM – and new product development); dynamics (e.g., market learning); and planning and implementation of strategies (Morgan, 2012).

Due to their importance in the planning and implementation process of a company's marketing strategies, an analysis of AMCs was undertaken as part of this study. These capabilities can be defined as the processes by which companies plan appropriate combinations of knowledge and other resources available to implement and execute in their markets what has been planned, transforming it into a perceived value offer for their publics (Morgan et al., 2003).

Planning refers to a company's ability to develop marketing strategies to leverage specialized and multifunctional capabilities and resources in the pursuit of competitive advantages (Morgan, 2012). Implementation refers to the ability to acquire, combine, and distribute the resources necessary to reach the strategies previously defined (Morgan, 2012). That is, the company needs to be able to plan and implement its marketing strategies and thus achieve a better result.

However, Hiller et al. (2013) argue that, in order to understand company strategies and actions, it is necessary to deepen the knowledge of the individual characteristics of senior executives who make decisions on behalf of organizations. Thus, the human element and its characteristics, in addition to being relevant to realized absorptive capacity, also have an essential relation to AMCs, and are relevant in the strategic planning and implementation. Therefore, in this research, we investigated managers' characteristics. We will discuss those further in the next section.

2.3 Managers' characteristics

Human capital plays a crucial role in developing and maintaining the capabilities of a company. Nieves and Haller (2014), therefore, consider it a fundamental resource for a series of essential capabilities to be realized, and thus, for competitive advantage to be sustained. Hambrick and Mason



(1984), creators of the “upper echelons theory”, have already seen the necessity of including the human element in organizational studies. Their theory states that managers’ characteristics predict a part of company results. This is because, as managers are different from each other, they will have different knowledge bases, which may lead them to make different decisions (Adner & Helfat, 2003; Marimuthu & Kolandaisamy, 2009).

Penrose (1959) made the argument that top managers are resources that influence the organization’s performance. This can happen through well-formulated and implemented strategies. Therefore, while an organization’s employees are essential for the efficient and effective operation of the business, not all groups have equal weight. Specifically, strategic managers are a group whose importance in generating and maintaining business success has been demonstrated by several authors (Penrose, 1959; Hambrick & Mason, 1984; Castanias & Helfat, 1991; Lado & Wilson, 1994; Guedes & Conceição Gonçalves, 2019).

Some researchers have found evidence that executive demographic profiles, at both the individual and team levels, correlate with company strategies and results (Eisenhardt & Schoonhoven, 1990; Boeker, 1997; Hambrick, 2007). According to Hambrick and Mason (1984), one can divide personal characteristics into two types: psychological properties, which are not the focus of this study; and observable experiences. These observable experiences can be several, but age and tenure (time in position, organization, or industry) are the two most-used demographic variables in managerial studies (Hiller et al., 2013).

One can state that the three types of tenure are linked, since the time a manager has been in their position is linked with the time for which they have been in their sector, as well as in their industry. Although they are related, the theory indicates that they can be considered separately (Finkelstein et al., 2009).

There is considerable evidence of the relevance of the tenure phenomenon. However, there is still a demand for the elaboration of how this process happens and of the concept itself (Finkelstein et al., 2009). The same occurs with the age characteristic, since it can be related to tenure to the extent that the manager accumulates experience and time in the company. The individual’s aging process may play a role in determining how individual changes over time can affect the performance of the work itself (Waldman & Avolio, 1993; Sturman, 2003). These influences, however, are still considered controversial.

For instance, some authors (Miller, 1991; Herrmann & Datta, 2006; Helfat et al., 2009) argue that the more experience in the company, the



higher the tendency to maintain the status quo, the lower the likelihood of taking risks, and the less capacity to absorb and use external knowledge. However, more significant experience may result in greater awareness of complex managerial environments (Herrmann & Datta, 2006).

2.4 Characterization of the sample and respondents

Firms in the southeast region of Brazil, followed by the south region, made up the bulk of our sample, which is in line with the characteristics of the Brazilian gross domestic products (GDP) generation data. The other companies, which made up less than 10% of the sample, were located in the northeast or midwest, or were multinational. According to the Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (Sebrae) classification (2016) by number of employees and industry, the sample is characterized, for the most part (around 86%), by micro, small, and medium-sized companies. These data indicate that the profile of the manufacturing industry in Brazil is in line with our study sample, since data from the Annual Social Information Report (Relação Anual de Informações Sociais – Rais) (2015) point to a similar profile.

At the individual level, the desired respondents were managers who were involved in the organization's marketing strategies. In order to respect this premise, there was a filter question in the questionnaire that eliminated some respondents, leaving only those with the appropriate profile for the research. Regarding the age of the respondents, 44.76% of them were at or below 35 years of age. The remainder (55.24%) were older than 35. The oldest respondent was 67 years old.

Regarding tenure, 53.49% of respondents had up to four years of experience in their roles, while 46.51% had more than four years of experience. Meanwhile, 48.84% of respondents had up to seven years of experience, and 51.16% had over seven years in the sector. Finally, 46.8% of respondents had up to five years of tenure at their companies, while 53.2% had more than five years.

2.5 Relationship between variables

A more extensive tenure is often an essential indicator of managerial experience and accumulated knowledge that could potentially influence the degree of exploitation and exploration (Finkelstein & Hambrick, 1996; Abebe & Angriawan, 2014). Both exploitation and exploration refer to the development of new knowledge, but the former uses pre-existing knowledge in the company, while the second seeks it externally (Vorhies, Orr, & Bush, 2011).



That is, longer tenure will influence the process of obtaining and using knowledge. Therefore, the human element is essential for ACAP, which, as well as exploitation and exploration, is related to organizational learning. The human element is relevant in understanding the dynamics among organizational capacities. In this sense, it is necessary to have synergy with the company's internal resources, such as intellectual capital, to ensure that ACAP offers a sustainable competitive advantage based on the development of strategies (Engelman, Fracasso, Schmidt, & Zen, 2017).

Following the concepts of Cohen and Levinthal (1990), the character and role of ACAP in the assimilation and exploitation of knowledge suggest that at both, the individual and organizational levels, prior knowledge makes it possible to assimilate and explore new knowledge. However, it was not only Cohen and Levinthal (1990) who highlighted human capital. Zahra and George (2002), when they expanded the conception of ACAP, maintained human capital as an essential factor in acquiring and exploiting acquired knowledge. Other authors who have taken the human element into account are Liao, Welsch, and Stoica (2003), Daghfous (2004), Jansen, Van Den Bosch, and Volberda (2005), Todorova and Durisin (2007), Camisón and Fóres (2011), and Hotho, Becker-Ritterspach, and Saka-Helmhout (2012).

Human capital can be considered a fundamental resource to ensure the realization of a series of essential capabilities that allow the sustainability of advantage over rivals (Nieves & Haller, 2014). Thus, the knowledge, skills, and collective characteristics of an organization's employees and managers create capabilities to gain competitive advantage (Lengnick-Hall & Lengnick Hall, 2003).

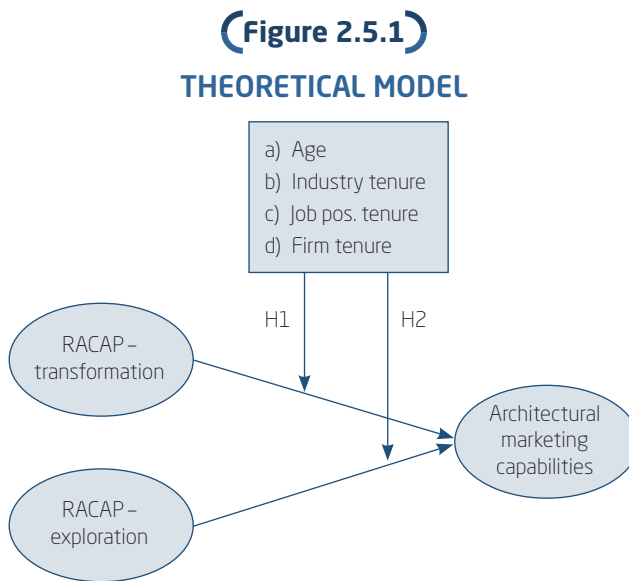
Rodenbach and Brettel (2012) and Von den Driesch, Costa, Flatten, and Brettel (2015) state that managerial experience, as well as age, influences marketing (dynamic) capabilities, depending on environmental conditions. That is, we infer that more experienced managers can help in the development of the marketing capabilities of the companies, which are represented by AMC in this research. Morgan et al. (2003), in another study, indicated that personal knowledge is vital for the development and use of AMC.

Thus, there are indications that tenure (and, we infer, age as well) can influence both, RACAP and AMC, playing a moderating role in this relationship. According to Baron and Kenny (1986), a moderating variable is one that affects the direction and the strength of the relationship between the independent variable (RACAP) and the dependent variable (AMC). That is, the experience and age of the manager can influence how they use the knowledge acquired within a company when planning and implementing



marketing strategies. However, since RACAP is composed of two phases (transformation and exploitation), we decided to analyze it in a disaggregated way. Thus:

- H1: We hypothesize that (a) the age of the manager; (b) their tenure in the sector; (c) their tenure in the office; and (d) their tenure in the company moderate the relation between knowledge transformation (one phase of the realized absorptive capacity) and architectural marketing capabilities.
- H2: We hypothesize that (a) the age of the manager; (b) their tenure in the sector; (c) their tenure in the office; and (d) their tenure in the company moderates the relation between knowledge exploitation (one phase of the realized absorptive capacity) and architectural marketing capabilities.



Source: Elaborated by the authors.

3. METHODOLOGY

The study used a quantitative approach, with transverse data collection and non-probabilistic sampling by adhesion (Creswell, 2010). We performed data collection through a survey, conducted between November 2016



and January 2017, with marketing managers or employees involved with the marketing strategy of their companies. Six researchers conducted the interviews with a sample characterized by companies in the transformation industry throughout the nation, classified according to the National Classification of Economic Activities (Classificação Nacional de Atividades Econômicas – Cnae).

Regarding the measurement instrument, we used scales that were already tested and fully published in international journals, and the absorptive capacity scale was drawn from Flatten et al.'s (2011) study. The architectural marketing capabilities scale used in the study is one developed by Vorhies and Morgan (2005). Even so, considering the use of scales applied outside the Brazilian environment, some procedures were adopted to guarantee the validity and reliability of the scale.

The translation/back-translation method, face validity, and pre-test with six specialists were then used to verify the comprehension of the questionnaire. We also performed an exploratory factorial analysis (EFA) to verify the distinct stages of RACAP, as well as convergent and discriminant validity analysis (Hair, Babin, Money, & Samouel, 2005). Furthermore, by using Harman's test, we verified the common method bias.

After data collection, we performed data cleaning procedures, such as missing data, out of range values, non-engaged responses, asymmetry and kurtosis (with a multivariate analysis of normality), and identification of outliers. After this step, the final sample consisted of 343 respondents.

Then, the data analysis and the hypothesis test were carried out employing structural equation modeling using SPSS and AMOS statistical software.

3.1 Data treatment and results

Regarding the multivariate data normality, the sum of the critical ratio (C.R.) resulted in a value of 19.45. Therefore, we state that the data are not normal. The referenced value represents the normalized Mardia (1970, 1974) estimate of multivariate kurtosis, although it is not explicitly stated as such (Byrne, 2010). Bentler and Wu (2005), based on Mardia's estimate, suggests that in practice, values greater than 5 indicate non-normal data. In the case of the present study, the value of 19.45 represents this number.

According to Pallant (2005), the non-normality of data is recurrent in the applied social sciences. Still, Hair, Black, Babin, Anderson, and Tatham (2009) state that, in samples with more than 200 cases, the harmful effects



of non-normality are reduced, which allowed us to be less concerned with non-normal variables.

The results of the scale reliability test are presented in Figure 3.1.1. It can be observed through Cronbach's alphas that present values are above 0.07 (Hair et al., 2005).

(Figure 3.1.1)

SCALE RELIABILITY TEST

Construct	Alpha
Knowledge transformation	0.90
Knowledge exploitation	0.88
Architectural marketing capabilities	0.95

Source: Elaborated by the authors.

Studies in which two or more constructs are measured using the same method may have skewed effects. Another factor that can bias the effects is having only one respondent per company. When this occurs, one must worry about the covariance observed between the constructs, since it can be due to the use of the same method of measurement (Lowry & Gaskin, 2014; Podsakoff, MacKenzie, & Podsakoff, 2012).

Therefore, to verify the possible interference of common method bias, the Harman (1976) test was performed, employing exploratory factor analysis and setting a factor, without rotation. The only forced factor was 47.6% (< 50%) (Podsakoff, MacKenzie, & Podsakoff, 2003). When the Harman test is employed, the results indicate that common method bias does not interfere with the model, since its value is less than 50%. That is, the explanatory power of a variable is not mostly in a single factor.

Subsequently, we tested for the discriminant and convergent validities of the model. Figure 3.1.2 shows the results. For the construct to have discriminant validity, the square root of the average variance extracted (AVEs) (values highlighted in bold diagonal) should be higher than any corresponding correlation (Fornell & Larcker, 1981). The square root was verified; therefore, that data reached the discriminant validity of all the constructs, according to the criteria stipulated in the literature.

We ensured convergent validity of the model through mean extracted variance (AVE) and composite reliability (CR), following the recommendations of Hair et al. (2009) (AVE > .50; CR > .70). Therefore, the values in Figure 3.1.2 indicate that both AVE and CR were achieved.

(Figure 3.1.2)

**CONSTRUCTS' AVERAGE VARIANCE EXTRACTED (AVE)
AND COMPOSITE RELIABILITY (CR)**

	CR	AVE	Exp	Tra	Arq
Exp	0.885	0.720	0.849		
Tra	0.900	0.692	0.434	0.832	
Arq	0.960	0.923	0.344	0.432	0.961

AMOS bootstrapping (343 cases, 2000 runs); model fit: (CMIN/DF = 2.506; NFI = 0.938; CFI = 0.962; RMSEA = 0.066; SRMR = 0.0378; HOELTER 0.05 = 0.168; HOELTER 0.01 = 0.182).

Source: Elaborated by the authors.

Once the adjustments of the structural model were verified (results shown in the footer of Figure 3.1.2) and were satisfied with the values stipulated in the literature (Byrne, 2010), we tested the hypotheses. As a result, the manager’s age, tenure in the industry, and tenure in the office moderated the relationship between transformation (the first phase of the RACAP) and AMCs. However, the data did not support the hypotheses regarding the moderation between exploitation (the second phase of the RACAP) and AMCs. We present the results in Figure 3.1.3. Specifically, it was found that the higher the manager’s age, the stronger the relationship between knowledge transformation (independent variable – IV) and architectural capacities (dependent variable – DV) (H1a), with $\beta = 0.47$ (more experienced managers) *versus* $\beta = 0.17$ (younger managers). There was no statistically significant moderation related to the age of managers in the relationship between knowledge exploitation and AMCs (H2a).

Tenure in the industry also moderates the relation between transformation (of knowledge) and AMCs (H1b), as represented by $\beta = 0.52$ for managers with longer sector tenure and $\beta = 0.11$ for managers with shorter tenures. As for H2a, time in the sector did not have a moderating effect on the relationship between IV and DV in H2b.

In H1c, there was a moderation of the manager’s post-tenure in the relationship between transformation (of knowledge) and AMCs. The more time in the same position, the higher the intensity of this relation, with $\beta = 0.58$ (higher post-tenure) *versus* $\beta = 0.06$ (lower post-tenure). Data did not support H2c, so there was no moderation of the post-tenure in the relationship between exploitation and AMCs.

The variable tenure in the company moderates the relation proposed in H1d between transformation of knowledge and AMC. The longer the tenure

in the company, the stronger this relation. $\beta = 0.57$ represents this finding (longer tenure in the company) *versus* $\beta = 0.04$ (shorter tenure in the company). Following the logic of the other findings, data did not support H2d, so there is also no moderation in the relationship between the IV and the DV proposed in this study.

(Figure 3.1.3)

HYPOTHESES TESTING RESULTS

Hypotheses	Proposed relation	Moderation	Status	β (standardized coefficient)	
				More years	Fewer years
H1	TRA - > AMC	a) Age	Supported	0.47	0.17
		b) Industry <i>tenure</i>	Supported	0.52	0.11
		c) Job pos. <i>tenure</i>	Supported	0.58	0.06
		d) Firm <i>tenure</i>	Supported	0.57	0.04
H2	EXP - > AMC	a) Age	Rejected	-	-
		b) Industry <i>tenure</i>	Rejected	-	-
		c) Job pos. <i>tenure</i>	Rejected	-	-
		d) Firm <i>tenure</i>	Rejected	-	-

Source: Elaborated by the authors.

In the section, we presented the study's final considerations, its theoretical and managerial contributions, its limitations, and suggestions for future research.

4. DISCUSSION OF RESULTS AND FINAL CONSIDERATIONS

This study aimed to verify the moderating role of managers' characteristics (age and tenure) in the relationship between RACAP and AMCs. The findings contribute to the literature on management strategy by demonstrating that a manager's age and tenure have a moderating effect on the relation between knowledge transformation and AMCs. This result means that the higher the manager's age and the more time they have spent in



their industry, position, and company, the stronger the relationship between knowledge transformation and the ability to formulate and implement marketing strategies.

In the context of RACAP, transforming knowledge means developing and refining routines to facilitate the combination of existing knowledge with new knowledge (Zahra & George, 2002). In turn, a part of architectural marketing capabilities focuses on processes through which firms plan appropriate combinations, among other things, of knowledge (Morgan et al., 2003). Finally, there is a need for RACAP in order for AMC to be used. That is, it is necessary to merge the new and existing knowledge when planning marketing strategies.

However, according to some authors (Cohen & Levinthal, 1990; Ziek & George, 2002; Nieves & Haller, 2014), the human element influences the realization of a series of capabilities – in the case of this research, of RACAP and AMC. Since managers are distinct from each other (in this case, in terms of age and tenure), they may have different knowledge bases, which will lead them to make different decisions (Adner & Helfat, 2003; Marimuthu & Kolandaisamy, 2009). That is, as demonstrated in this research, when combining existing knowledge with the new (transforming it) and applying it to the strategic planning of a company, more experienced managers have the advantage.

Therefore, a major theoretical contribution of this study is its proof of the moderating effect of the characteristics of the managers on the relationship between realized absorptive capacity and architectural marketing capabilities (RACAP-AMC). Identifying this effect helps to increase the understanding of which factors may impact the formulation and implementation of marketing strategies.

Another theoretical contribution made by the study was to fill the literature gap by explaining how the managers' characteristics (the human element) intensify the influence of RACAP on AMC. The study results deepened the understanding of the specific elements of RACAP in its relationship with AMC. Precisely, it was revealed to what degree transformation and exploitation influence architectural marketing capabilities when moderated by the human element.

Since the foundational text of Cohen and Levinthal (1990), absorptive capacities studies have addressed the human element. Other authors also consider individuals as transforming agents when it comes to the absorption of external knowledge (Zahra & George, 2002; Jansen et al., 2005; Todorova & Durisin, 2007; Camisón & Fóres, 2011; Hotho et al., 2012; Chen et al.,





2019). The present findings are in agreement with these authors, strengthening the role of the human element in the researched context.

The characteristics of the individuals studied (age and tenure) moderate the relation between the proposed capabilities. This, in turn, sheds light on the human element, which has been little explored in the marketing capacities literature. As it is understood that managers' attributes impact the company (Boeker, 1997; Hambrick, 2007; Guedes & Conceição Gonçalves, 2019; Dhir & Shukla, 2018) and, as found in this research, specifically influence the relationship between external knowledge and AMC, a study window is opened to explore the role of new individual characteristics in the strategic relationships of organizations.

Another finding was the moderation of the managers' characteristics only in the external knowledge transformation phase in AMCs (H1a, H1b, H1c, H1d). Managers' characteristics did not moderate the exploitation element. Through the two-step scale questions, the transformation of knowledge was revealed to be more strategic, whereas the exploitation of this knowledge reflected more operational factors (Flatten et al., 2011). According to Flatten et al. (2011), the exploitation phase refers to encouraging the development of new products, revising technologies and adapting them with new knowledge, and working more efficiently when adopting new technologies. In turn, the transformation phase refers to structuring, combining, applying, and otherwise using the acquired knowledge. Although strategic managers are essential in both phases of transformation, data have shown that those with more experience are more effective in strengthening the relationship between RACAP and AMC than younger and less experienced ones. Therefore, longer tenure and a manager's age intensifies the relationship between knowledge transformation and the formulation and implementation of marketing strategies, but not the relationship between knowledge exploitation and AMC.

Organization employees are essential for effective and efficient business conduct. However, according to Penrose (1959), managers have a more significant influence on processes. Therefore, not all groups have the same weight of influence in organizational activities. Specifically, strategic managers are a group whose importance in the generation and maintenance of business success has been demonstrated by several authors (Penrose, 1959; Hambrick & Mason, 1984; Castanias & Helfat 1991; Lado & Wilson, 1994). Still, Hambrick and Mason (1984) were the developers of the "upper echelons theory", which suggests companies' results are predicted in part by the characteristics of top managers. The results of the present research agree with those of the authors mentioned above.



Regarding the practical implications of this study, since the conclusions point to the moderating influence of managers' characteristics on the relationship between the capabilities studied, it is suggested that companies consider such factors at the time of project team formation, in order to plan and implement strategies for a new product. In this case, as there are elements of knowledge absorbed externally, managers with more experience and time in their position, company, and sector tend to influence the relation between the transformation of knowledge and AMC positively.

Another contribution would be to clarify for companies that it is not enough to worry only about seeking external knowledge. Such knowledge needs to be transformed and then used effectively in the formulation and implementation of marketing strategies.

In addition, it was pointed out that, unlike some theoreticians and researchers who see longer tenure/age to be related to a lack of flexibility and daring (Miller, 1991; Herrmann & Datta, 2006; Helfat et al., 2009), experienced managers need be valued, because they, as established in the present study, play a fundamental role in effectively transforming acquired knowledge into strategies.

We also admit that with the human element considered in the relationship between the transformation of external knowledge and the capability to formulate and implement marketing strategies, the causal ambiguity (Lippman & Rumelt, 1982) of the company tends to be more complicated. In this way, uncertainties regarding the causes of differences in efficiency among firms are increased, preserving conditions of heterogeneity (Reed & DeFillippi, 1990) concerning competition and leading to the attainment of competitive advantage. Accordingly, companies focusing on more experienced managers can make their processes more complex, making it difficult for competitors to understand.

As a limitation of this study, one can cite the fact that it is a "portrait" of a specific period in time. Therefore, we suggest longitudinal research, since ACAP is a dynamic capability (Zahra & George, 2002) and architectural marketing capabilities involve the implementation of strategies. Thus, time can influence both factors. In this way, we could have reinforced knowledge about the topics discussed here.

Besides that, the study sample was non-probabilistic, and we collected data in a single sector (manufacturing), which may limit its generalization. Thus, we suggest replicating the study in other sectors in order to ascertain if the variables analyzed behave in the same way. Another suggestion for a future study would be to test the moderating effect of specific training of the

managers on the company's capabilities or to investigate other characteristics, especially the psychological ones (following the same logic of the study by Bendig et al., 2018), interpretations and information filters (Finkelstein et al., 2009).

A INFLUÊNCIA DOS GESTORES NAS CAPACIDADES DA EMPRESA

RESUMO

Objetivo: Verificar o papel moderador das características dos gestores, como idade e *tenure* (tempo no setor, cargo, empresa), na relação entre a capacidade absorptiva realizada (RACAP) e a capacidade arquitetural de *marketing* (CAM).

Originalidade/valor: O presente estudo considera o elemento humano como fator que afeta as relações entre as capacidades da empresa. Contribui teoricamente ao auxiliar o entendimento do que pode impactar a formulação e implementação de estratégias de *marketing*, além de fortalecer teoricamente o papel do elemento humano. Como contribuição prática, demonstrou-se que não basta apenas buscar o conhecimento externo, mas também é necessário que ele seja transformado para então ser utilizado de maneira eficaz na elaboração e aplicação das estratégias de *marketing*.

Design/metodologia/abordagem: Trata-se de pesquisa de caráter quantitativo, com corte temporal transversal. Este estudo testou empiricamente as hipóteses com base em uma amostra de 343 gestores de *marketing* de indústrias brasileiras de manufatura. Os dados foram coletados por meio de *survey* e tratados por meio de modelagem de equações estruturais no *software* AMOS.

Resultados: As características dos gestores (idade e *tenure*) moderam a relação entre uma parte da RACAP (transformação do conhecimento) e a CAM (capacidade arquitetural de *marketing*). Gestores mais experientes devem ser valorizados, pois comprovou-se que, nesse setor, eles fazem a diferença na hora de transformar o conhecimento e utilizá-lo em suas estratégias.

PALAVRAS-CHAVE

Capacidade absorptiva. Capacidade de *marketing*. Características dos gestores. *Tenure*. Idade.

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APPENDIX

Scale

Realized absorptive capacity (RACAP – transformation and exploration)
(Hooley et al., 2005)

Transformation

Please rate your business unit in terms of external knowledge transformation.
Seven-point scale running 1 = strongly disagree to 7 = strongly agree.

- TRA_1) Our employees have the ability to structure and to use collected knowledge.
- TRA_2) Our employees are used to absorbing new knowledge as well as to preparing it for further purposes and making it available.
- TRA_3) Our employees successfully link existing knowledge with new insights.
- TRA_4) Our employees are able to apply new knowledge in their practical work.

Exploration

Please rate your business unit in terms of new external knowledge exploration (please, consider all your business units, such as R&D, production, marketing, and accounting)
Seven-point scale running 1 = strongly disagree to 7 = strongly agree).

- EXP_1) Our management supports the development of prototypes.
- EXP_2) Our company regularly reconsiders technologies and adapts them in accordance with new knowledge.
- EXP_3) Our company has the ability to work more effectively by adopting new technologies.

Architectural marketing capabilities (Vorhies & Morgan, 2005)

Please rate your business unit relative to your major competitors in terms of its marketing capabilities in the following areas.



Seven-point scale running 1 = much worse than competitors to 7 = much better than competitors.

Marketing planning

PC 1.1) Marketing planning skills.

PC 1.2) Ability to effectively segment and target market.

PC 1.3) Marketing management skills and processes.

PC 1.4) Developing creative marketing strategies.

PC 1.5) Thoroughness of marketing planning processes.

Marketing implementation

MI 1.1) Allocating marketing resources effectively.

MI 1.2) Organizing to deliver marketing programs effectively.

MI 1.3) Translating marketing strategies into action.

MI 1.4) Executing marketing strategies quickly.

MI 1.5) Monitoring marketing performance.

Manager's profile

MC_1) How old are you? _____ years old.

MC_2) How long have you been working in this firm?

R: _____ years.

MC_3) How long have you been working in this sector (economic sector)?

R: _____ years.

MC_4) How long have you been working in this job position?

R: _____ years.



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