

# Marketing mix dynamism and performance: Evidence from commercial firms

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**SUMMARY** We focused on the analysis of marketing mix dynamic capabilities, taking into account their influence on customer, market and financial performance. In order to achieve this research goal, 201 SMEs in the Portuguese commercial sector were contacted and personally administered a questionnaire pertaining to the presence of diverse marketing mix dynamic capabilities. Data were analyzed by means of factorial analyses of the main components, as well as linear parametric regressions. Our findings show that there is a clear relationship between marketing mix dynamic capabilities and diverse performance metrics. Especially, the marketing dynamic capabilities related to aspects external to the product exert the greatest impact. This study highlights how Portuguese company managers are conscious of the importance of developing marketing mix dynamic capabilities and to adapt them to the changes in the environment.

**KEYWORDS** commercial sector, dynamic capabilities, marketing mix, performance.

## HISTORIA DEL ARTÍCULO

### ¿CÓMO CITAR?:

Martínez-Ruiz, M. P., Lopes-Dias A. y Blazquez-Resino, J. J. (2014). Marketing mix dynamism and performance: Evidence from commercial firms, *Perspectiva Empresarial* 1(1), 69-80.

RECIBIDO: 5 de septiembre de 2013

APROBADO: 7 de marzo de 2014

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## Dinamismo en el *marketing mix* y *performance*: evidencias obtenidas en empresas comerciales

**RESUMEN** Se llevó a cabo un estudio de las capacidades dinámicas de marketing teniendo en cuenta su influencia en los resultados de los clientes, los mercados y algunos indicadores financieros. Con el fin de lograr este propósito, se contactó con 201 empresas comerciales portuguesas a las que posteriormente se les administró de forma personal un cuestionario relativo a diversas capacidades dinámicas de marketing. Los datos obtenidos se estudiaron por medio de un análisis factorial de componentes principales y diversas regresiones lineales. Los hallazgos resultantes ponen de manifiesto la existencia de una relación clara entre las capacidades dinámicas de marketing y diversos indicadores de resultados. Especialmente, aquellas capacidades dinámicas relacionadas con aspectos externos al producto son las que ejercen un mayor impacto. Este estudio enfatiza cómo los gerentes de las empresas portuguesas del sector analizado son conscientes de la importancia de desarrollar capacidades dinámicas de marketing y adaptarlas a los cambios del entorno.

**PALABRAS CLAVE** sector comercial, *marketing mix*, capacidades dinámicas, performance.

## Dinamismo no *marketing mix* e *performance*: evidências obtidas em empresas comerciais

**RESUMO** Levou-se a cabo um estudo das capacidades dinâmicas de marketing tendo em conta a sua influência nos resultados dos clientes, os mercados e alguns indicadores financeiros. Com o fim de lograr este propósito, se contactou com 201 empresas comerciais portuguesas às que posteriormente se lhes administrou de forma pessoal um questionário relativo a diversas capacidades dinâmicas de marketing. Os dados obtidos se estudaram por meio de uma análise fatorial de componentes principais e diversas regressões lineares. Os achados resultantes põem de manifesto a existência de uma relação clara entre as capacidades dinâmicas de marketing e diversos indicadores de resultados. Especialmente, aquelas capacidades dinâmicas relacionadas com aspectos externos ao produto são as que exercem um maior impacto. Este estudo enfatiza como os gerentes das empresas portuguesas do setor analisado são conscientes da importância de desenvolver capacidades dinâmicas de marketing e adaptá-las aos câmbios do entorno.

**PALAVRAS CHAVE** setor comercial, capacidades dinâmicas, *marketing mix*, performance.

### ¿CÓMO CITO EL ARTÍCULO? HOW TO CITE THIS PAPER?

#### CHICAGO:

Martínez-Ruiz, María Pilar, Lopes-Dias Álvaro y Blazquez-Resino, Juan José. 2014. "Marketing mix dynamism and performance: Evidence from commercial firms". *Perspectiva Empresarial* 1: 69-80.

#### MLA:

Martínez-Ruiz, María Pilar, Lopes-Dias Álvaro y Blazquez-Resino, Juan José. "Marketing mix dynamism and performance: Evidence from commercial firms". *Perspectiva Empresarial* 1.1 (2014): 69-80. Digital.

## Introduction

Managers face growing concerns about their business environment framework. The current economic crisis brings the challenge to a new degree, and performance and its sustainability becomes a major imperative (Srinivasan *et al.*, 2005; Bromiley *et al.*, 2008). Environmental uncertainty and complexity represent the landscape for decision making towards competitiveness and long term sustainability. Against this background, the design and implementation of flexible marketing strategies are at the forefront of managers' and scholars' agendas. The Marketing Science Institute (MSI), among its other priorities, establishes the need for more research to better understand how organizational structure and marketing capabilities influence business performance: "What are effective strategies for firms that need to transition from more traditional brands, product lines or technology structures to more competitive and nimbler ways of doing business?" (MSI, 2013).

There is no denying that the development of marketing dynamic capabilities represents a basis to support competitive advantage (Katsikeas, Samiee and Theodosiou, 2006; Vorhies and Morgan, 2005). The core problem is how to sustain competitive advantage in a context of increasing uncertainty and growing competition. The way the firm changes its bundle of resources and capabilities is addressed by the dynamic capabilities approach (Teece, Pisano and Shuen, 1997; Eisenhardt and Martin, 2000; Danneels, 2008). Dynamic capabilities play an important role in marketing renewal processes in order to build more adaptable and reconfigurable organizational routines (Teece *et al.*, 1997).

Considering these ideas as a starting point, this article aims to analyze the role of marketing mix variables dynamism in the performance of key business metrics such as customer satisfaction, customer retention, market share and profitability. More specifically, in order to gain a greater degree of knowledge about the influence of marketing dynamic capabilities, the marketing mix capabilities will be considered in relation to the company marketing mix variables, in particular, product, price, communication and distribution. This will allow us to observe which of the marketing mix dynamic capabilities exert the greatest importance on performance variables identified in the relevant literature as being traditionally influenced by marketing dynamic capabilities (in particular, customer satisfaction, customer retention,

market share and profitability). To address this research gap, we will analyze a sample of 201 Portuguese companies in the commercial sector, which will enable us to observe the vision of the manager regarding the influence of those marketing dynamic capabilities. The data obtained by means of questionnaires personally administered to the managers of the companies will be analyzed by means of factorial analyses of the main components as well as linear parametric regressions. The results will enable us to observe how Portuguese managers in the commercial sector consider that those marketing dynamic capabilities related to marketing mix variables external to the product itself, exert the greatest influences on the performance variables considered.

## Conceptual framework

Research into dynamic capabilities has evolved since the publication of the first articles on the subject. Organizational routines were always associated with this concept (Teece *et al.*, 1997; Eisenhardt and Martin, 2000), but their complexity has changed following new academic contributions (Teece, 2007; Hodgkinson and Healy, 2011). In this vein, the firm's competitive advantage sustainability is related to: (1) its routines, resources and capabilities idiosyncrasy, and (2) the maintenance of this difference. In addition, the dynamic perspective of long term sustainability considers not only the acquisition of new resources and capabilities but also the development of existing ones (Slotegraaf, Moorman and Inman, 2003). Therefore, organizational resources and capabilities are related to the firm's circumstances and competitiveness depends more on how they use what they know than on how much they know (Haas and Hansen, 2005).

As a matter of fact, Teece, Pisano and Shuen (1997) highlighted the importance of combining the specific position of the assets in order to configure the technological, organizational and management processes. These authors clearly showed how strategic value was obtained when all the relevant knowledge of the organization was codified and completely understood, given that in this way productive knowledge could be materialized. These knowledge transference processes are also considered dynamic capabilities and were detailed in several of the components proposed by Macher and Mowery (2009). In fact, in their study

regarding the measurement of dynamic capabilities, the authors analyzed the effects on the results of the organization.

Likewise, Danneels (2008, p. 519) defines dynamic capabilities as a “competence for constructing competences”, exemplifying that an exploratory competence leads firms to construct new competencies. Furthermore, it is based on the concept that “the accumulation of new resources for forming new organizational competencies is a type of organizational learning” (Danneels, 2008, p. 520). With a more specific look at the dynamic marketing capabilities, it is interesting to take into account the work of Severi Bruni and Verona (2009), which highlights how dynamic marketing capabilities are specifically aimed at developing, releasing, and integrating market knowledge. Furthermore, dynamic marketing capabilities are related to the broader context of dynamic managerial capabilities managers use to build, integrate, and reconfigure the capability base over time (Adner and Helfat, 2003).

With these ideas in mind, the research aim of the current paper resides in evaluating the role of dynamic capabilities in a set of specific marketing variables, that is, the marketing mix variables, and their importance on the results of the organization. For this reason, it is close to the proposals of other authors such as Moorman and Rust (1999) who empirically established the connection between knowledge and skills with regard to the relationships of: (i) customer-product; (ii) customer-service and (iii) customer-financial accounting and the value of the marketing function of the firm. It also presents a certain similarity to the research of Li and Calantone (1998, p. 14), who showed the importance of the market knowledge competence regarding the advantage in new products as being “particularly significant because it concerns a resource of a greater order”. It concerns jobs which, up to a point, reflect the key relevance which dynamic capabilities are able to exert on key aspects of the organization related to customer management.

Likewise, it is also interesting to posit the common aspects of this research in relation to the vision based on the resources (VBR) of the firm. Indeed, in accordance with Helfat and Peteraf (2003), capabilities are complex networks of skills and knowledge framed within the organizational processes, where the marketing dynamic capabilities can be included (Vorhies and Morgan 2005; Krasnikov and Jayachandran, 2008). As the VBR

claims, it is clearly shown how these resources are valued as rare, inimitable and non-replaceable (VRIN) (Wernerfelt, 1984; Barney, 1986; Barney, 1991). Thus, once these characteristics are assured, the firms can “strategically develop their resources and capabilities, enabling them to exploit their different competencies in the best possible way in order to create sustainable competitive advantages” (DeSarbo, Di Benedetto, Jedidi and Song, 2006, p. 909). In accordance with Slotegraaf *et al.* (2003, p. 297), “the immobile resources are highly dependent on each specific organization which is considered, legally protected and probably created as a more complex function of technical and social routines”, becoming idiosyncratic resources of the organization. In an increasingly competitive and dynamic context, the question which emerges is how to obtain the competitiveness of these idiosyncratic resources when the cycles of innovation and imitation are the principal driving force for the obtention of capabilities (Lampel and Shamsie, 2003).

The effects of dynamic capabilities on the results of the organization have been pointed out by many researchers (e.g. Day, 1994; Moorman and Rust, 1999; Slotegraaf *et al.*, 2003; Vorhies and Morgan, 2005). The value of the marketing function for market orientation and the results of the organization have been clearly demonstrated (Moorman and Rust, 1999; Krasnikov and Jayachandran, 2008) via the facilitation of the link between the customer and different key processes of the organization (Day, 1994), including the financial result and the result of the relationship with the customer (Moorman and Rust, 1999) and even by means of the acquisition of competitive advantages via the interrelation of various resources of the organization and specific marketing actions (Slotegraaf *et al.*, 2003). Therefore, the review of the literature in this line of research demonstrates the influence which marketing dynamic capabilities are able to exert over the key variables of business results (Day, 1994), both with regard to the management and relationship with the customers –including, among others, satisfaction (e.g., Martelo Landroque, Barroso Castro and Cepeda-Carrión, 2011; Thongsodsang and Ussahawanitchakit, 2011), customer retention (e.g., Maklan and Knox, 2009) and market share (e.g., Protogerou, Caloghirou and Lioukas, 2011) –as well as with respect to financial results and profitability (e.g., Fang and Zou, 2009; Nath,

Nachiappan and Ramanathan, 2010; Protogerou, Caloghirou and Lioukas, 2011).

Starting from these ideas, we will consider the focus of Vorhies and Morgan's (2005) regarding marketing dynamic capabilities, applying it specifically to the 4Ps Mix<sup>1</sup>: that is, product, price, place and promotion, which enable us to obtain a deeper and more detailed knowledge regarding the influence of marketing dynamic capabilities related to the 4Ps over the results of the organization. From here it is possible to posit the following hypotheses regarding the positive and significant influence of the marketing mix dynamic capabilities which company managers recognize on different results variables which the relevant literature identifies as key in this line of research (specifically, customer satisfaction, customer retention, market share and profitability):

**H1:** *Dynamic capabilities in the marketing mix variables positively and significantly influence customer satisfaction.*

**H2:** *Dynamic capabilities in the marketing mix variables positively and significantly influence customer retention.*

**H3:** *Dynamic capabilities in the marketing mix variables positively and significantly influence market share.*

**H4:** *Dynamic capabilities in the marketing mix variables positively and significantly influence the profitability of the business.*

## Description of the sample and methodology

In this section, we will proceed to describe the process of data collection as well as the information obtained, something which has enabled us to analyze the underlying assessment of those responsible for undertaking the management of the Portuguese firms with respect to their

competitive position in relation to different dynamic capabilities in marketing mix variables and their relationship to key results of the business (customer satisfaction, customer retention, market share and profitability).

### Obtention of the sample

During the period between October, 2009, and September, 2010, we proceeded to administer a questionnaire to firms which operate in non-industrial sectors in Portugal by means of personal interviews of those responsible for managing the companies. The sample of firms which was chosen was from the services sector, specifically commerce, excluding financial services. The number of valid questionnaires collected amounted to 201. Table 1 describes the technical specifications of the questionnaire.

**TABLE 1.** Technical specifications of the questionnaire

Universe	163,245 firms located in Portugal in the commercial sector
Sampling unit	Portuguese firm located in Portugal in the commercial sector
Geographical region	Portugal
Method of collecting the information	Personal survey
Sample site	Office of the company manager
Sample size	201 questionnaires
Sampling error	6.9%
Level of reliability	95% $Z=1.96$ , $p=q=0.5$
Sampling procedure	Probabilistic
Field work data	October 2009 - September 2010

### Measurement of the variables

The questionnaire included questions aimed at obtaining general information about the opinion of the director or manager of the firm with regard to their competitive position in relation to different key variables of the business. Specifically, in the first block, different questions were included oriented at assessing the competitive position in dynamic capabilities in key variables of the marketing mix. In the second block, questions oriented at gathering the perception of the manager were incorporated with respect to

<sup>1</sup> The convenience of considering the 4 Ps Mix is given by works of people such as Constantinides (2006) who, based on the review of the literature, evidences how: (i) a large number of marketing practitioners consider the 4 Ps Mix as the mechanism of transaction marketing and paradigm for operational marketing planning; and that (ii) many studies confirm how it is the trusted conceptual principle of practitioners dealing with tactical/operational marketing issues.

the competitive position of the firm in relation to different key variables of results, such as customer satisfaction, customer retention, market share and profitability. The scales of all the variables employed in these blocks correspond to a 5-point scale in which the manager was asked to assign a score relative to the competitive position of the firm with respect to the competitors, considering furthermore the current situation with regard to different variables, where 1 meant "much worse" and 5 "much better". To draw up the formulation of these questions those variables were taken into account which had been identified in the previous

literature as key variables in relation to marketing dynamic capabilities and business results.

Specifically, for the marketing mix dynamic capabilities variables (product, price, distribution and communication) the scales of Vorhies and Morgan (2005) have been used regarding the marketing dynamic capabilities. Likewise, for the results variables, the customer satisfaction and financial results scales of Katsikeas *et al.* (2006) have been adapted. Table 2 describes the variables introduced in the study (specifying whether they are introduced as explanatory or endogenous), their scale and their denomination.

**TABLE 2.** Variables used in the study

<b>VARIABLE</b> (first group of the questionnaire / second group of the questionnaire)	<b>MEASUREMENT SCALE</b>	<b>TYPE OF VARIABLE IN THE MODEL: EXPLANATORY / ENDOGENOUS</b>	<b>DEFINITION</b>
Use of pricing techniques to respond quickly to market changes ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) - Much better (5).
Knowledge of the pricing policy of their competitors ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Definition of the pricing policy in relation to products/services offered ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Monitoring and control of the competitors' prices ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Capacity to develop new products/services ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Development of new products/services to contribute to R & D investment projects ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Studies about the creation of new products and services ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).

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<b>VARIABLE</b> (first group of the questionnaire / second group of the questionnaire)	<b>MEASUREMENT SCALE</b>	<b>TYPE OF VARIABLE IN THE MODEL: EXPLANATORY / ENDOGENOUS</b>	<b>DEFINITION</b>
Successful launch of new products and services ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Efficacy in the development of products/services for responding to customer needs ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Development and execution of advertising programs and plans ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Management of advertising and creative competencies ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Competencies in public relations ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Competencies in brand image management ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Management of the company image and its reputation ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Quality of relations with distributors ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Ability to attract and maintain the best distributors ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Ability to work closely with distributors and suppliers ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Ability to add value to distributors' businesses ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Provision of back-up services for high quality distributors ( <i>first group of the questionnaire</i> )	Metric	Explanatory	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).

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<b>VARIABLE</b> (first group of the questionnaire / second group of the questionnaire)	<b>MEASUREMENT SCALE</b>	<b>TYPE OF VARIABLE IN THE MODEL: EXPLANATORY / ENDOGENOUS</b>	<b>DEFINITION</b>
Customer satisfaction ( <i>second group of the questionnaire</i> )	Metric	Endogenous	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Customer retention ( <i>second group of the questionnaire</i> )	Metric	Endogenous	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Market share ( <i>second group of the questionnaire</i> )	Metric	Endogenous	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).
Profitability ( <i>second group of the questionnaire</i> )	Metric	Endogenous	In relation to the competition, what are the current capabilities of the firm and the variations suffered in the last three years in this variable: Much worse (1) – Much better (5).

With regard to the relationship which the literature establishes between the different explanatory variables considered in the first block of questions, as well as the high degree of correlation existing between them, we proceeded to carry out a factorial analysis of the principal components which enabled us to identify a more reduced set of factors which, without being mutually correlated, explained to the highest possible extent the variability found in the aforementioned variables.

However, prior to the performance of said analysis, the reliability of the scale used was verified by means of Cronbach's alpha coefficient. Cronbach's alpha coefficient applied to the previous variables gives a value of 0.971. This value, higher than 0.7, indicates a considerable internal consistency and confirms the reliability of the measurement scale (e.g. Nunnally, 1978). Likewise, and also as a prior step to the application of the principal component method with varimax rotation to the different constructs, the statistical suitability was studied, using Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin measure. In this case, Bartlett's Test of Sphericity obtains a high value which, with a significance level of 0.000, allows us to reject the null hypothesis of no significant correlation, the application of principal components analysis being adjusted to the variables analyzed. For its part, the Kaiser-Meyer-Olkin measure of adequacy (or KMO

index) acquires a value of 0.945, a value greater than the limit established for this index in values higher than 0.5 (George and Mallery, 1995).

The two resulting factors enable us to explain 74.937% of the variation of the variables considered (See, Table 3). The first factor defined as "variables external to the product" (VEP) includes the variables related to all the elements of the marketing mix which have no relation to the product: specifically, price, communication and distribution variables. The second of the factors identified, denominated "variables centered on the product" (VCP) contains all the variables which are related to the product and the products policy of the organization.

These findings coincide with those obtained by other previous works in the relevant literature. Thus, for example, they confirm the results of Cavusgil and Zou (1994) insofar as they clearly show the strategic importance of marketing. Likewise, they are also coherent with the results of Barney, Wright and Ketchen (2001) insofar as the importance of marketing and the VBR is highlighted regarding the relationship between changes in the market and the evolution of key resources. Finally, the effects of the dynamic capabilities over the results of the organization compared in this model are also consistent with those obtained by many other authors (e.g. Moorman and Rust, 1999; Vorhies and Morgan, 2005; Krasnikov and Jayachandran, 2008).



TABLE 3. Description of the factors

FACTOR	VARIABLE	CRONBACH'S ALPHA OF ALL THE VARIABLES	CRONBACH'S ALPHA PER FACTOR	SCORE
Variables external to the product (VEP)	Use of pricing techniques to respond quickly to market changes	0.971	0.967	0.799
	Knowledge of the pricing policy of their competitors			0.782
	Definition of the pricing policy in relation to products/services offered			0.767
	Monitoring and control of competitors' prices			0.778
	Development and execution of advertising programs and plans			0.683
	Management of advertising and creative competencies			0.697
	Competencies in Public Relations			0.731
	Competencies in brand image management			0.727
	Management of the company image and its reputation			0.719
	Quality of relations with distributors			0.835
	Ability to attract and maintain the best distributors			0.842
	Ability to work closely with distributors and suppliers			0.838
	Ability to add value to distributors' businesses			0.822
	Provision of back-up services for high quality distributors			0.795
Variables centered on the product (VCP)	Ability to develop new products/services -	0.934	0.934	0.826
	Development of new products/services to contribute to the R & D investment projects			0.656
	Studies regarding the creation of new products and services			0.877
	Successful launch of new products			0.881
	Efficacy in the development of products/services to respond to customer needs			0.854

## Analysis of the results

Table 4, below, shows the  $R^2$ , the typical estimation error and the Durbin Watson statistic for the linear parametric regression models developed.

TABLE 4. Summary of the models

ENDOGENOUS VARIABLE	$R^2$	TYPICAL ESTIMATION ERROR	DURBIN WATSON
Satisfaction	0.208	0.742	1.741
Customer retention	0.334	0.827	1.903
Market share	0.589	0.725	2.140
Profitability	0.564	0.697	1.835

As emerges from the analysis of this Table, the greatest explanatory capacity corresponds to the model in which the results variable introduced is market share, while the least is the model where the endogenous variable is customer satisfaction. This finding clearly shows how the managers of the companies considered think that, in relation to competitors, the dynamic capabilities in the marketing mix variables considered allow us to explain to a greater extent the changes observed in market share. Likewise, the marketing dynamic capability variables introduced allow us to explain to a lesser degree, and in this order, the variability in the profitability results, ability to retain customers and customer satisfaction.

**TABLE 5.** Relationship of the explanatory variables and the results variables

ESTIMATED PARAMETERS FOR THE FACTORS	SATISFACTION	CUSTOMER RETENTION	MARKET SHARE	PROFITABILITY
Constant	3.857***	3.911***	3.391***	3.243***
VEP	0.349***	0.531***	0.741***	0.646***
VCP	0.136**	0.226***	0.428***	0.440***

\*  $p < 0,10$ ; \*\*  $p < 0,05$ ; \*\*\*  $p < 0,01$ 

However, a detailed analysis of the estimations of the parameters obtained in Table 5 reveals how the two factors identified exert a positive and significant influence (as well as with a 99% significance level in practically all the estimations) on all the results variables considered. For all the models, we can detect how the VEP factor exerts the greatest influence, followed by the VCP factor. Likewise, the greatest influence of the VEP factor is observed in the model in which the results variable introduced is the market share. However, the greatest influence of the VCP factor is not detected in this model but rather in the model in which the results variable introduced is profitability. Thus, these results make it possible to accept all the research hypotheses previously proposed with regard to the positive and significant influence which the company managers recognize of the dynamic capabilities on the marketing mix variables in all the indicators of the results considered.

Therefore, these findings clearly show how the managers of Portuguese firms in the commercial sector considered recognize the great influence of all the marketing mix dynamic capabilities and their competitive position on the changes observed in the key business results in the last three years. However, for the managers, and in relation to the competitors, the dynamic capabilities which have been developed in the variables of the marketing mix which have nothing to do with the product (specifically, price, communication and distribution) as well as their changes over the last three years, exert a greater influence on the results attained in the business. However, those marketing mix dynamic capabilities which have been developed in the last three years in relation to the competitors, even though they exert a positive, significant influence on business results, are capable of exerting less impact.

Among the possible explanations which enable us to understand these findings, it is necessary to bear in mind the intangible nature of the product offered in the business sector, given that we are dealing with a service sector. As some

authors highlight, the intangibility of the service is characterized because it is a question of products which are inaccessible to the five senses before the act of purchasing takes place: the services cannot be seen, smelt, heard, touched or tasted before being acquired (Kurtz and Clow, 1998; Zeithaml and Bitner, 2000). For this reason, in order to compensate for the intangible nature of the services offered, those responsible for the management of the companies in this sector have been able to give a greater importance to the marketing mix dynamic capabilities developed in other variables of the marketing mix, such as for example, attractive prices, more aggressive communication campaigns or new distribution channels.

This study clearly highlights how Portuguese company managers are conscious of the importance of developing marketing mix dynamic capabilities and to adapt them to the changes in the environment, above all for their great influence on key results variables of the organization, especially as regards those variables that are more directly related to economic-financial results: specifically, market share and profitability. In this sense, it seems that these managers fail to see the relationships which marketing mix dynamic capabilities share with other business results variables which are traditionally characterized by showing a great influence on the competitive capacity of the organization and long term survival, such as customer satisfaction and customer retention.

## Conclusions, limitations and research lines

Given the growing interest which the study of marketing dynamic capabilities has received over recent years, especially given the conditions of continuous change and economic instability, the present work has focused on the analysis of marketing mix dynamic capabilities of Portuguese firms in the commercial sector and that is due to

the influence that these dynamic capabilities are able to exert on the competitive strategy and the results of the organizations. In order to accomplish this research objective, a questionnaire was personally administered to a sample of firms from the commercial sector regarding the presence of different dynamic capabilities in the variables of the marketing mix. The information obtained has been analyzed by means of a factorial analysis of principal components which has initially evidenced the existence of two factors of dynamic capabilities in the marketing mix variables: variables external to the product, VEP (price, distribution and communication) and variables centered on the product, VCP. Subsequently, the influence of said factors has been analyzed on different variables of the results of the organization, such as customer satisfaction, customer retention, market share and profitability. The findings obtained have clearly shown how: (i) there exists a greater influence of the VEP over all the variables of the results obtained and (ii) this greater influence is detected principally in those results variables which are more directly related to results of an economic-financial nature: market share and profitability.

Among the explanations which enable us to understand these results, we should consider the intangible nature of the product offered, from which is derived the fact that perhaps those responsible for undertaking the commercial management of these types of firms confer greater importance on the marketing dynamic capabilities which are developed in other variables of the marketing mix different to the service offered.

In view of these results, it is possible to outline two important contributions. On the one hand, we have detected the presence of two dynamic capabilities factors in the marketing mix variables, as well as their influence on different results variables. On the other hand, the sample of firms analyzed consisted of a set of Portuguese firms in the commercial sector, which allows us to gain a better understanding of how these firms face marketing dynamic capabilities challenges.

Thus, this work has highlighted the great importance which those responsible for undertaking the management of the firms in the commercial sector confer on the development of dynamic capabilities in all the aspects of the marketing mix, especially in relation to other competitors in the sector. It has also been clearly demonstrated that the particular relevance that is attributed to the development of these dynamic capabilities is

observed especially in variables of the marketing mix which have nothing to do with the product variable. Therefore, the conclusions of this work allow us to highlight the advisability of developing marketing dynamic capabilities in all the variables of the marketing mix, especially in the variables of the marketing mix related to price, communication and distribution, given their notable impact on the results of the organization, especially on the economic-financial results. Therefore, it has been clearly evidenced how competing in aspects of the product loses importance in commercial firms, and other aspects centered in the rest of the 4 Ps variables –e.g., price variations (price), sales promotions (communication), additional services (distribution)- acquire more importance.

As limitations of the work, we should mention that some of the  $R^2$  which have been obtained in some of the models have not turned out to be very high, especially in relation to certain models which have considered the variables of satisfaction and customer retention as endogenous variables. Although this is usual when working in social and behavioral sciences, these reduced values of the  $R^2$  obtained might have been induced by the characteristics of the sector and the market in which firms operate.

Another limitation lies in the fact that the competitive positioning has been measured in relation to the rest of the world. As future research, it is suggested to measure this positioning in relation to the closest competitor. We also propose to consider different types of dynamic capabilities related to other aspects of marketing (such as, for example, Customer Relationship Management -CRM-, etc.) as well as to other results variables (loyalty, trust, etc).

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