The omnichannel strategy in portuguese companies: an overview

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Abstract — The consumer's profile and behaviour have undergone drastic changes in recent years, as a result of rapid technological developments associated with the proliferation of the Internet, which have boosted the growth of e-commerce. Retail needed to adopt new strategies to respond to new consumer demands leading to the development of omnichannel. The omnichannel strategy is centred on the consumer and aims to offer him/her a unique, consistent, and quality experience, through any contact point and wherever the consumer wants. However, most Portuguese retailers still opt for a multichannel strategy, where the physical shop and the online shop operate independently from each other. Although there are already some successful cases in Portugal, it can be considered that the use of omnichannel is still at an early stage. More publicity is needed so that retailers are aware of the concept and above all recognise the advantages of this new strategy. Before disclosure it is important to understand why companies work with both online and offline channels and do not opt for an omnichannel strategy. This study aims to analyse Portuguese companies that have not yet adopted an omnichannel strategy, to understand the barriers that make them unwilling to adopt this strategy. To this end, a quantitative research was carried out through the application of surveys to companies in different districts of Portugal to understand their position in relation to omnichannel and the reasons for not moving to this structure. The results obtained made it possible to describe the importance of omnichannel as a commercial and distribution strategy and analyse the reasons why its use by companies in Portugal is still extremely low. The lack of knowledge about the structure and management issues emerged as the biggest barriers.

Keywords - omnichannel; retail; Portuguese companies; barriers.

I. INTRODUCTION

The consumer buying process has undergone numerous changes due to rapid technological developments. One of the most marked trends is the proliferation of channels through which consumers can interact with companies [1]. The growth of the online channel has arisen from the need for retailers to adopt a synergic management that allows the integration of all available channels with the aim of optimising their performance, enhancing the customer's shopping experience [2]. Retailers' approach has been changing over time, adapting to the needs of their target audience. Consumers are becoming increasingly sceptical, with traditional marketing campaigns becoming obsolete, leading customers to prefer companies which offer personalised experiences and promote meaningful interactions across all channels [3] [4]. The use of channels using mobile devices and social media have led to a shift from passive to active consumption of a particular brand, given the increase in points of contact between the two, leading to the satisfaction of consumer expectations [3]. In this context, changes have occurred mainly in the way businesses interact with consumers [5], with a proliferation and reformulation of interaction channels [5] [6], from traditional direct marketing channels (such as catalogues, offline channels, and physical shops) to online channels [2] [6]. This situation has created a challenge for companies in the process of managing commercial strategies [1]. It is possible to identify three stages through which retail channels have evolved. It started with a single channel approach, making only one channel available to consumers for the purpose of serving, selling, distributing and/or relating [7]. Brick-andmortar emerged as the first channel to approach customers and despite its antiquity, the current position of retailers still

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highlights its importance. This has evolved into a multichannel approach of providing the consumer with more than one channel. However, there is no interaction between these, which can create major challenges in stock management. Crosschannel, in turn, centralises information and allows consumers to use more than one sales channel. Channels complement each other creating a synergy for the customer experience, unlike the competition seen in a multichannel approach [8]. Multichannel was the most widely used retail strategy in the last decade, but recently there has been a shift to omnichannel strategy [2]. The strategy refers to the possibility for the consumer to buy and receive products where, how and when they want, through the integration of the physical and digital worlds [9]. It was from 2012 onwards that the omnichannel concept began to spread, becoming yet another challenge for the management of distribution channels. These began to work in a coordinated way by integrating processes such as logistics, warehousing, distribution, customer service, database, and marketing. This new concept arises from the perspective of the new consumer, it does not matter how he buys the product, but the experience he has during the buying process, with the product and the brand [10]. Omnichannel is relevant as technologies develop and destabilise the strategies of retail companies [11]. Being a recent phenomenon, as previously mentioned, it is expected that the amount of literature on the subject is limited, which implies a gap highlighted by Lazaris and Vrechopoulos regarding the lack of research on how companies have changed their management to meet the challenges of omnichannel management [12]. The complex aspect of strategy makes achieving success a challenging and still poorly understood task [13]. Retail strategy is becoming increasingly complex and to improve the understanding of the effects of emerging strategies, more comprehensive research projects that simultaneously investigate the effect of various strategies are needed [14] [15]. Some examples of unanswered questions in retail include the integration between platforms and channels, the impact and implications of the mobile channel and the outlook for the future of physical shops considering the evolutionary trajectory of omnichannel [16]. The fact that this strategy is still little known and presents some barriers means that companies do not have sufficient knowledge to implement this strategy, and as such, research is needed as a way of contributing towards better implementation of the omnichannel in retail companies.

A. Omnichannel

Traditional retail has been changing a lot in recent years and this is due to new technologies such as the smartphone and tablet, software such as apps, digital coupons, and mobile payments. Technologies enable an optimised interaction between the customer and the company. With this new scenario, it has been seen that cross-channel and multichannel models have been moving towards an omnichannel model, in which the full integration of the various channels shapes the service interface and creates a perfect experience for consumers [2] [17]. In addition, omnichannel provides companies with a broader perspective on channels and how consumers may be influenced or guided to move through channels throughout the search and purchase process [2]. Companies realised that having an online presence would be beneficial as they would reach digital customers and innovate the consumer shopping

experience. The omnichannel strategy appeared as an extension of the cross-channel strategy, which took place due to the growth of the online channel [2]. Omnichannel is a cohesive integration where communication opportunities are intended to create a unique brand experience regardless of the channel, platform or the stage of the purchasing process the consumer is at [18]. In Beck and Rygl's approach, omnichannel appears as being the result of the interaction of consumers and the integration created by the company. The experience is only achievable if there is interaction between the customer and the company where the channels are fully integrated [19]. As it is a relatively new concept, there is no exact definition of omnichannel. To better understand this concept, it is important to start by explaining the etymology of the word. "Omni" derives from the Latin "omne", which means "whole, entire", so omnichannel refers to a set of channels that represent a unified whole [19] [20]. Briefly, the omnichannel strategy's main objective is to provide a similar shopping experience regardless of the channel, putting the customer at the centre of the strategy [21]. This purchase experience is achieved if there is a combination and integration of the benefits of the different channels, digital and non-digital [21]. In the omnichannel context, channels are not treated as divergent and noncomplementary methods. An online channel can and should, in different ways, complement the offline channel, and vice versa, and this integration will allow the creation of synergies [2]. Omnichannel results from two variables: the interaction of consumers and the integration created by the company. The omnichannel strategy combines the advantages of both channels and elevates the importance of understanding the consumer. This strategy brings to the company price transparency, the availability of reviews made by other consumers, an endless selection of products through the online channel [21], face-to-face interaction, instant gratification of purchase and the experience of touching the product through the availability of physical shops [21]. All the interaction and integration provide consumers with a unique experience which leads to loyalty and higher spending on purchases. The aim of the omnichannel strategy is to aggregate all retail operations in an integrated approach and to offer a continuous response to the consumer's shopping experience through the available channels [22]. Consumers can, for example, buy online and pick up their order in a physical shop, or have their order delivered to their home and return it in shop, or buy in shop and have it delivered to their home [23]. The ultimate customer experience is the real omnichannel retail: the continuous flow of customer, information, and inventory between multiple channels throughout the shopping experience. For example, the consumer searching for a given item online and then visiting a shop to try on and touch the fabric, buying the products and having them delivered to their home. Then, exchange some products in a different shop from the one you bought and finally, return an item via a kiosk.

B. The Omnichannel Customer

Several aspects determine the behaviour of the omnichannel consumer and as such it is necessary to adapt the shopping experience to the consumer's expectations. Companies must be

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constantly concerned with providing this experience in a unique, integrated, and continuous way, whatever the channel used [24]. In recent decades, consumers have undergone several changes that have culminated in new complex behaviours and some that are difficult to analyse. Today's consumers are more informed, demanding and empowered by companies. This consumer is characterised by volatile behaviour, which requires companies to guide their strategy to meet what the customer is looking for in his or her purchasing experience [24]. Consumers want to undertake the purchasing process at a time and place that suits their demands contemplating a balance between monetary effort and time spent.

II. METHODOLOGY

A. Instrument

The questionnaire used in this study was created by the authors, based on the literature review carried out and considering the research objectives. This is a self-completion questionnaire, to be disseminated via email, so it was built on Google Forms® platform. After its elaboration, a face validation was carried out by a multidisciplinary group of researchers and a pre-test was also carried out with a group of fifteen people, to identify possible mistakes or problems in the interpretation of the questions. The average time to complete the questionnaire is 8 minutes. The questionnaire consists of five groups of questions. The first group is made up of four questions that seek to characterise the profile of the respondent companies, through factors such as business area, type of company, its seniority, and its geographical location. The second group of the questionnaire consists of three questions and aims to collect data on the perception of new markets and the consumer. In this group there are two questions whose answers are on an agreement scale, namely on a five-point Likert scale (1: totally disagree, 2: partially disagree, 3: neither agree nor disagree, 4: partially agree and 5: totally agree) and another closed, multiple-choice question with multi-answer, but with a maximum limit of three options for selection. The third group is made up of four questions, also multiple choice, which will be essential for knowledge about the different channels used by companies, two of which are multi-answer questions, but with a maximum limit of two options to be selected. The fourth group aims to collect data on the companies' commercial strategies and consists of four questions: two on a 5-point Likert scale (1: totally disagree, 2: partially disagree, 3: neither agree nor disagree, 4: partially agree and 5: totally agree) and two multiple-choice questions, one of which is a multi-answer (with a maximum limit of two options to be selected). The fifth and last group consists of the essential questions for this research. It contains questions concerning the omnichannel strategy, its implementation and the main barriers encountered to its implementation, such as inventory management, personalised customer service, price setting, among others. It consists of ten questions, two of which are multiple choice; six on a 5-point Likert scale of agreement (1: totally disagree, 2: partially disagree, 3: neither agree nor disagree, 4: partially agree and 5: totally agree) and two multiple choice with multi-answer (one with a maximum limit of two options to be selected and the other with no limitation).

B. Procedure

The first step was to conduct a survey, by district, of Portuguese companies with physical and online shops that had not yet implemented an omnichannel strategy. This survey was carried out using Google search engine. Following this, an email was sent to these companies explaining the study and inviting them to participate. On 23 November 2020, the link to the questionnaire was sent, via email, to all companies that had agreed to participate by that day. The questionnaire was closed on 15 December 2020 and 61 responses were obtained.

C. Research Hypotheses

This study aims to assess whether the adoption of an omnichannel strategy is considered an advantage for companies in Portugal. To this end, and based on the literature review, four operational research hypotheses are defined, which will be tested based on the sample of this study:

 H_1 : The implementation of an omnichannel strategy is associated with knowledge about this strategy.

H₂: The implementation of an omnichannel strategy is associated with the difficulty in inventory management.

H₃: The implementation of an omnichannel strategy is associated with the difficulty of personalized customer service being one of its greatest barriers.

H₄: The implementation of an omnichannel strategy is associated with the price definition being one of its major barriers.

D. Statistical Methods

Data were exported directly from Google Forms® platform to a Microsoft Excel 2016® file and then analysed in SPSS v.25®. Nominal variables are described through absolute frequencies and their respective relative frequencies, n(%). Ordinal variables are described by the median, Med, and the respective interquartile range, $[Q_1,Q_3]$, where Q_1 is the 1st quartile and Q_3 is the 3rd quartile. Additionally, absolute frequencies and relative frequencies are presented for a better description of the responses. To study the association between nominal variables the Chi-square test is used. To compare ordinal variables of two independent samples, the Mann-Whitney test is used. Values of $p \leq 0.05$ are considered significant.

III. RESULTS

A. Sample characterization

The sample consists of 61 companies, 23 (37.7%) from the fashion sector, 12 (19.7%) from the cosmetics sector, 12 (19.7%) from the sports sector, 9 (14.8%) from the technology sector and 5 (8.2%) from other sectors. Regarding the type of company, 36 (59%) are small and medium enterprises, 12 (19.7%) are sole proprietorships, 9 (14.8%) are microenterprises, 2 (3.3%) are collective enterprises and 2 (3.3%) are large enterprises. As for the time of existence of the company, 20 (32.8%) have existed for more than 10 years, 19 (31.1%) have existed for more than 2 years, but not for more than 5 years, 15 (24.6%) have existed for more than 5 years, but not for more than 10 years and only 7 (11.5%) have an existence of no more than 2 years. Regarding the location of the physical

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shop, it should be noted that there are companies that have more than one physical shop. Thus, the distribution of physical shops by district was as follows:

Porto – 21 (34.4%); Braga – 13 (21.3%); Lisboa – 13 (21.3%); Viana do Castelo – 10 (16.4%); Vila Real – 10 (16.4); Aveiro – 8 (13.1%); Faro – 8 (13.1%); Coimbra – 7 (11.5%); Beja – 6 (9.8%); Bragança – 6 (9.8%); Leiria – 6 (9.8%); Portalegre – 6 (9.8%); Setúbal – 6 (9.8%); Santarém – 5 (8.2%); Évora – 4 (6.6%); Viseu – 4 (6.6%); Castelo Branco – 3 (4.9%) e Guarda – 2 (3.3%).

B. Market and consumer perception

The second group of the questionnaire aims to assess the companies' perception of the market and the consumer. In this sense, the first question is "In your opinion, has the evolution of technology influenced and changed the markets?". Of the 61 companies involved in the study, 48 (78.7%) totally agree; 11 (18%) partially agree and 2 (3.3%) neither agree nor disagree. This question presents a median of 5 [5; 5] points. The second question of this group is "In your opinion, has technological evolution changed consumer behaviour?". Of the 61 companies involved in the study, 43 (70.5%) totally agree; 17 (27.9%) partially agree and 1 (1.6%) neither agree nor disagree. This question presents a median of 5 [4; 5] points. The third question in this group asks respondents to select a maximum of three characteristics that they consider the new consumer has and that influences him/her when making a purchasing decision. The answers are distributed as follows: more demanding - 29 (47.5%); more informed - 27 (44.3%); more connected (connected anytime, anywhere) - 24 (39.3%); more mobile (uses smartphones to research the solutions they want and whether they should buy or not) - 21 (34.4%); less impulsive (they are more sensitive to price and their practices are more conscious and thoughtful) - 20 (32. 8%); more participative (he likes to give his opinion about his experience, positive or negative, on any platform) - 19 (31.1%); he/she values convenience when buying - 15 (24.6%); he/she values the convenience of delivery - 12 (19.7%); he/she values convenience when looking for information - 9 (14.8%) and he/she values the convenience of payment - 6 (9.8%).

C. Channels used

The third group of the questionnaire addresses the different channels used by the company: the offline channel or physical shop and the online channel. Of the 61 companies, 24 (39.3%) stated that the sales channel in which the company has made the greatest investments is the physical shop; 22 (36.1%) answered that it is the online shop and 15 (24.6%) answered both. In relation to which channel the company has a greater volume of sales, 44 (72.1%) replied that it is in the physical shop, while 17 (27.9%) stated that it is in the online shop. Respondents were asked what the greatest advantages of the physical shop for the consumer would be and could select a maximum of two options from those presented. The distribution of responses was as follows: the ability to try and experience products - 40 (65.6%); immediate access to products - 33 (54.1%); personal assistance - 25 (41%); shopping is seen as an event/experience - 16 (26.2%) and instant gratification - 8 (13.1%). About the advantages of the online shop, the respondents could also select up to two options and the distribution of answers was: convenience (anything, anytime, anywhere) - 44 (72.1%); price comparison of the various offers - 30 (49.2%); extensive information on the products - 17 (27.9%); wider selection - 17 (27.9%); more convenient and quicker check-out and payment - 9 (14.8%) and availability of evaluations and suggestions - 5 (8.2%).

D. Business strategies

In the sample, 47 (77%) companies adopt the multichannel strategy, while 14 (23%) adopt the cross-channel strategy. Concerning the question "Do you consider it important for companies to periodically analyse and rethink their commercial strategy?", 49 (80.3%) totally agree; 11 (18%) partially agree and 1 (1.6%) neither agree nor disagree. This question presents a median of 5 [5; 5] points. When asked if they consider that in their company the commercial strategies are analysed, 19 (31.1%) partially agree; 16 (26.2%) totally agree; 12 (19.7%) partially disagree; 11 (18%) neither agree nor disagree and 3 (4.9%) totally disagree. This question presents a median of 4 [2.5; 5] points. In the last question of this group of the questionnaire, respondents were asked what the biggest motivations for rethinking business strategy would be and could select a maximum of two options from those presented. The distribution of answers was as follows: the constant change of markets - 28 (45.9%); the evolution of technology - 24 (39.3%); the change in consumer behaviour - 22 (36.1%); not having reached the initially proposed goals - 14 (23%); the new strategies that may be implemented - 13 (21.3%); the changes in consumer characteristics - 9 (14.8%); the saturation of markets - 7 (11.5%) and having reached the proposed goals but always wanting more and better - 5 (8.2%).

E. Omnichannel strategy

This section presents the data from the fifth and final part of the questionnaire, as well as the analysis of the research hypotheses defined in Section II.C. In the sample, 37 (60.7%) respondents state that they are familiar with the omnichannel strategy, while 24 (39.3%) answer that they are not. As to whether they have ever thought of adopting an omnichannel strategy, 33 (54.1%) answered yes and 28 (45.9%) answered no. To answer the first research hypothesis, "H₁: The implementation of an omnichannel strategy is associated with knowledge about this strategy", a Chi-square test was performed, concluding there is statistical evidence that variables "knows about omnichannel strategy" and "has ever thought of adopting an omnichannel strategy" are not independent (Table I; p-value < 0.001).

TABLE I. COMPARISON OF VARIABLES

	Thought about adopting an omnichannel strategy?	
Familiar with omnichannel strategy?	No	Yes
	19 (79.2%)	5 (20.8%)
Yes	9 (24.3%)	28 (75.7%)

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Of the respondents who are not aware of the strategy, the majority (79.2%) have never considered adopting an omnichannel strategy, while of those who are aware, the majority (75.7%) have already considered adopting an omnichannel strategy. The third question of this group is "Do you consider that the implementation of omnichannel still presents several difficulties?". Of the 61 companies involved in the study, 27 (44.3%) partially agree; 24 (39.3%) neither agree nor disagree; 7 (11.5%) totally agree and 3 (4.9%) partially disagree. This question presents a median of 4 [3; 4] points. As for the barriers to implementing an omnichannel strategy, 28 (45.9%) of the respondents neither agree nor disagree that inventory management is one of them; 16 (26.2%) partially agree; 14 (23%) totally agree; 2 (3.3%) partially disagree and 1 (1.6%) totally disagree. This question presents a median of 3 [3; 4] points. To answer the second research hypothesis, "H₂: The implementation of an omnichannel strategy is associated with the difficulty in inventory management", a Mann-Whitney test was performed (p-value < 0.001), concluding that there is statistical evidence to consider that the level of agreement with inventory management being one of the greatest difficulties in implementing an omnichannel strategy is not the same between those who have ever thought of adopting an omnichannel strategy (4 [5; 5] points) and those who have never thought about it (3 [3; 3] points). In other words, those who have already thought about adopting an omnichannel strategy, agree more with the fact that inventory management is one of the greatest difficulties in achieving it. With respect to the other barrier for the implementation of an omnichannel strategy, 22 (36.1%) of the respondents neither agree nor disagree that personalised customer service is one of them; 20 (32.8%) partially agree; 7 (11.5%) totally agree; 7 (11.5%) totally disagree and 5 (8.2%) partially disagree. This question presents a median of 3 [3; 4] points. To answer the third research hypothesis, "H₃: The implementation of an omnichannel strategy is associated with the difficulty of personalized customer service being one of its greatest barriers", a Mann-Whitney test was performed (p-value = 0.683). It was concluded that there is no statistical evidence to consider that the level of agreement with the difficulty of personalised customer service being one of the biggest barriers to implementing an omnichannel strategy is significantly different between those who have ever thought about adopting an omnichannel strategy (4 [2; 4] points) and those who have never thought about it (3 [3; 4]). Still on the barriers to the implementation of an omnichannel strategy, 27 (44.3%) of the respondents neither agree nor disagree that pricing is one of them; 16 (26.2%) partially agree; 8 (13.1%) partially disagree; 6 (9.8%) totally disagree and 4 (6.6%) totally agree. This question presents a median of 3 [3; 4] points. To answer the fourth and last research hypothesis, "H4: The implementation of an omnichannel strategy is associated with the price definition being one of its major barriers", a Mann-Whitney test was carried out (p-value = 0.806), concluding that there is no statistical evidence to consider that the level of agreement with price definition being one of the greatest barriers to implementing an omnichannel strategy is significantly different between those who have ever thought about adopting an

omnichannel strategy (3 [2; 4] points) and those who have never thought about it (3 [3; 3] points). The seventh question in this last group of the questionnaire asks respondents to select at most two reasons why their companies do not adopt an omnichannel strategy. The answers present the following distribution: little knowledge about the strategy - 30 (49.2%); high implementation costs - 23 (37.7%); lack of capacity to adopt the strategy - 17 (27.9%); company with little technological evolution for the strategy - 15 (24. 6%); not enough human resources - 13 (21.3%); not considering important to rethink the strategy adopted - 8 (13.1%); type of client does not require this strategy - 7 (11.5%); type of product does not require this strategy - 4 (6.6%) and other - 6 (9.8%). The eighth question in this group is "Do you consider that the adoption of an omnichannel strategy could improve your company's results?". Of the 61 companies involved in the study, 26 (42.6%) neither agree nor disagree; 21 (34.4%) partially agree and 11 (18%) totally agree. This question presents a median of 4 [3; 4] points. The penultimate question of this questionnaire is "Is your company where, when and how the customer wants it?" Of the 61 companies involved in the study, 40 (65.6%) partially agree; 11 (18%) neither agree nor disagree; 6 (9.8%) partially disagree and 4 (6.6%) totally agree. This question presents a median of 4 [3; 4] points. Although the overall strategy of companies is not an omnichannel strategy, companies can have omnichannel components, integrating the online channel with the offline channel. The last question in the questionnaire had several options of examples of omnichannel components and respondents were asked to select which ones they do not integrate in their companies. The distribution of answers was as follows: in-store technology - 39 (63.9%); on online platforms, there is stock information available in the physical shop - 28 (45.9%); when there is no stock in the physical shop, the possibility of knowing whether it is available online or in another physical shop - 24 (39.3%); possibility of receiving the order at home or in the physical shop and returning/exchanging it through the online channel - 21 (34.4%); access to online information, from the physical shop -18 (29.5%); on the online platforms, there is information on the online stock available - 16 (26.2%); when there is more than one physical shop, it is possible to know the quantity of stock in each shop - 16 (26.2%); possibility of ordering in the physical shop and choosing to receive the order at an address or in a physical shop of one's choice - 10 (16.4%); possibility to order online and choose to receive the order at an address or physical shop of their choice - 7 (11.5%); interaction with customers through various channels (website, physical shop, social networks, smartphones) - 5 (8.2%) and, finally, the consumer's choice of payment method (Mbway, Debit/Credit cards, Bank transfers) - 4 (6.6%).

F. Limitations of the study

It is a pioneering and exploratory study, so it has some methodological weaknesses. In particular, a priori sample size calculation was not performed. In 2019, there were 1335006 companies in Portugal [25], so the sample size of this study (n = 61) corresponds to a sample error of approximately 13% (considering a sample proportion of 50% and a significance

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level of 5%). Another limitation of the study is related to the selection of companies. There was no random sampling, but a sample for convenience, from Google searches. These study limitations do not allow us to generalize the results to the Portuguese reality, but the results found are quite interesting and motivating for the development of future work.

IV. CONCLUSIONS

This study's main objective was to understand the positioning of Portuguese companies towards the omnichannel strategy, as well as to analyse the main reasons why they do not adopt it. To this end, an analysis of bibliography was carried out, which allowed an understanding of the inclusion of omnichannel in Portugal and the strategies adopted by some companies that have already implemented omnichannel. Subsequently, a quantitative research was developed based on the data collected from companies that have not yet adopted omnichannel, to respond to the problem pointed out at the beginning of the research: "Why are Portuguese companies not adopting an omnichannel strategy?". For a better understanding of the problematic and the general objective, research hypotheses were based on the main barriers to omnichannel identified in the literature review. It was concluded that the biggest barrier to omnichannel non-implementation is the companies' lack of knowledge regarding the strategy. 50.8% recognise that this strategy could improve their company's results and 54% have already thought of adopting omnichannel. However, there is statistically significant evidence that the difficulty in inventory management influences the nonimplementation of the omnichannel strategy. In future research it is suggested to develop studies to understand the use of omnicanal strategy as well as its lack of use and deeply analyse the main reasons. It is also suggested to propose to SMEs that have not yet implemented omnichannel, the chance to implement it and then analyse what changes they had in terms of competitive advantage and results obtained.

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