

INNOVATION IN RETAIL MARKET USING OMNI-CHANNEL

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Abstract: As evolution of the concept of customer service channels, the omni-channel was driven by the new information and communication technologies that have brought the consumer a new dynamic in the relationship with retailers. This new dynamic imposes on the retailer a series of changes in its internal management processes. The consumer shopping journey can start in the cell phone, go through a physical store for experimentation or withdrawal of the product or service and end up in a social network from an opinion, good or bad, about the service or product. And this view can spread quickly by influencing other consumers. The technology alone is not enough to ensure that during that journey the consumer has satisfactory experience that can boost new sales. It is up to the retailer to prepare its numerous business processes and also its organization, composed of people with their due roles and responsibilities, for this new dynamic. For its part, this consumer when perceiving this value offer is willing to reward the retailer through engagement with his brand and new purchases. In this context, among the most important processes to be adapted to the omni-channel are those involved with the supply chain. A perfect synchrony of this chain is what guarantees products, services or both at a fair price, in the right place and at the right time. This study seeks to investigate, through a single case study, how the introduction of the omni-channel is being managed by a Brazilian retailer that markets durable goods of several segments. It is demonstrated that there is an alignment between the theory and the practice about supply chain impacts from the implementation of the omni-channel in retail companies and that this strategy can collaborate to meet the demands of new consumers and at the same time provide financial and operational results satisfactory for the retailer.

Keywords: Retail, Supply Chain, Omni-Channel

1. INTRODUCTION

Brazilian retailers go through an economic period characterized by major challenges, among which KPMG (2016) cites the emergence of a new consumer profile and the

need to adapt to new technologies. EBIT (2017) cites the increased competition, including new entrants from other countries. In this scenario, it is fundamental to seek efficiency in management by analyzing the actions that retailers can implement in response to the challenging environment and its impacts on the supply chain in order to ensure an increasingly pleasurable shopping experience for the consumer.

Brynjolfsson, Hu and Rahman (2013) state that in order to remain competitive, the retailer started to invest in proximity to the consumer through strategies that seek to offer a differentiated and customized buying experience by integrating the online sales channel known as e-commerce, with its physical stores. This integration between sales channels is known as multichannel strategy. Another more comprehensive strategy involves not just the sales channels but any point of contact between retailer and customer. Known as omni-channel, this strategy puts the customer at the center of the business by interacting not only with the retailer but also with the brand, supported by new technologies such as smartphones and Big Data & Analytics.

For Rigbi (2011) the omni-channel strategy is an evolution of digital retail and is characterized as a consumer-retailer relationship executed through numerous physical or virtual channels. This relationship is strongly supported by technology and the channels can overlap as when the consumer makes the purchase online and withdraws the product in the store. In this strategy, a direct impact can be identified on how physical stores are supplied either by the supplier or by a retailer's own distribution center. If the store used to receive the products in batches for sale, it now becomes necessary to also receive units for direct delivery to the customer, which forces the retailer to reorganize its internal procedures and / or the supplier.

One of the crucial aspects to be studied is the management of the stock, either from the perspective of the consumer's behavior towards the problem or from the perspective of the logistic processes that lead to shortages. The imbalance between supply and demand is a very common problem in any supply chain and retail as the final link is no different. The solution to the problem of product availability is to improve inventory management not only in retail but throughout the supply chain. Solutions that involve increasing inventories to mitigate inefficiencies go far beyond the solution once they create another problem represented by the increase in working capital of the business. In this sense, a holistic approach is necessary in order to consider the whole supply chain, its processes and the integration between them. With this approach it will be possible to identify the root causes of problems involving poor management of items such as people, inventory, cash flow, business partners and information systems, among others.

Based on these considerations, it is proposed as an objective of this research: To identify the impacts caused by the implementation of the omni-channel strategy in the planning and management processes of the supply chain of a Brazilian retail network

2. LITERATURE REVIEW

2.1. The Omni-Channel Retail

The Omni-Channel concept, a strategy that seeks greater proximity to a segment of consumers increasingly connected to the virtual world and in large growth strongly affects retail as the last link in the supply chain. Verhoef, Kannan and Inman (2015) highlight two important characteristics of the omni-channel strategy, the synergistic

relationship of the contact points and the need to offer the consumer the same experience independent of the point of contact.

The omni-channel is the result of a process of evolution of customer service channels. According to Zhang et al. (2010) this explosion of online retail was motivated by the fact that the internet made it easier for the retailer to expand the offer of products to the consumer in a much faster way. Zhang et al. (2010) also explore the fact that a multi-channel operation offers the opportunity to collect much more consumer information. Knowing consumers' consumption habits allows the retailer to develop more and more customized and profitable offers, either in online stores or physical stores.

The impact of the introduction of the omni-channel is not limited to deliveries, but also occurs at the retailer's distribution center that has to adapt to the new model of separation, transportation and delivery. Hübner, Wollenburg and Holzapfel (2016) cite the requirements and benefits of integrating product separation areas for supplying stores with product separation areas to meet consumer requests.

According to Tetteh (2014) the retail-consumer relationship that was once limited to the world of physical stores today is fully integrated into the digital world as well. The great challenge is to make this relationship consistent throughout all client-retailer-supplier interactions, the omni-channel proposal. Gallindo and Moreno (2014) demonstrate, for example, the importance of integrating online stores with physical stores as an important element in improving the consumer buying experience.

Bell, Gallino and Moreno (2013) point out that physical stores play a relevant role in the omni-channel environment, since certain categories of consumers are more sensitive to the product experience. This experience has the power to reduce the possibility of returns by the consumer, thus reducing the cost of the logistics operation.

Emrich, Paul, and Rudolph (2015) explore the effects of assortment allocation by online channels and physical stores on consumer behavior on their shopping journey. Retailer communication to the consumer on these aspects of assortment integration is critical to ensuring the effectiveness of any assortment allocation strategy per channel. This allows the retailer to offer a much wider range of consumer products which in turn benefits in the variety of supply and convenience aspects. In the omni-channel concept, the retailer can choose to eliminate any barrier to accessing the entire assortment of products offered.

EY (2015) warns that the implementation of the omni-channel strategy is not seen as an initiative that increases profit or retail contribution margins immediately. The increase in billing may occur, but initially it may affect the profit margin that is impacted by the demands of implementing this strategy such as channel integration. The study cites that the retail supply chain was developed to supply physical stores and needs to adapt to meet the online consumer

2.2. Delivering Value to Consumer

Kotler and Keller (2012) argue that in competitive markets it is not enough to manufacture and sell the product or service, it is necessary to "deliver value" to the customer and this delivery is done through the execution of a sequence of coordinated interdepartmental activities. The authors cite that one of the main reasons for the loss of value is the unavailability or lack of product (rupture). Kotler and Keller (2012) cite one of the most efficient companies in the process of making the product available to the customer is WalMart, the largest retail chain in the world. This is only possible because WalMart has been able to implement an extensive collaborative network of

information sharing with its main suppliers. Thus, at the same time that a product leaves the store, its replacement process is started in the supplier itself.

Parente and Barki (2014) also affirm that the variety of products and low level of ruptures are some of the factors that increase the perception of value for the consumer. The prompt delivery and / or availability of the product for experimentation are the big differentials that a physical store presents in relation to the online channel. Kumar and Reinartz (2016) argue that organizations exist to generate value for customers. Then the client, realizing the value offered, generates value for the organization in the profit format. In order for this value to be perceived by the final consumer, the retailer must act to guarantee a buying journey permeated by uniform experiences at all the contact points of the relationship. And part of this action has to translate into the delivery of the product or service to the consumer.

The impact of omni-channel on the aspect of delivering consumer value and return to the retailer is demonstrated in Deloitte (2014). According to the survey, consumers are looking forward to a shopping journey through multiple sales / service channels and are willing to reward retailers for either buying higher value items or brand recognition and loyalty. Omni-channel generates value for the consumer by providing flexibility in their shopping journey through the various points of contact (website, mobile device, physical store). On the other hand, the consumer repays this value offer provided by the omni-channel retailer through a larger volume of purchases. Purchases that would not be made if there was no such flexibility.

Also regarding the delivery of value to the consumer provided by the implementation of the omni-channel, we can add the role played by the sales team. Yurova et al. (2017) argues that the sales team of the omni-channel retailer must be prepared to serve the omni-channel consumer. This consumer values the shopping experience, especially when dealing with hedonic products such as high-tech electronics. Thus, a well-prepared sales team can deliver value to the consumer by delivering relevant information about the product

2.3. Supply Chain Management

Chopra and Meindl (2016) caution that the coordination of relationships in the supply chain only occurs if each chain link considers the impact of its actions on the previous and subsequent links. Although the relationship is simple to understand there are difficulties in its implementation. Each element has its own business objectives and goals. While there may be a common goal of serving the end customer, this is most perceived only in the last links in the chain that are closest to the end customer. In addition organizations are run by people who do not necessarily agree with each other. Coordination and therefore collaboration between the chain links only exists through an intense exchange of information based on mutual trust.

Gibson, Defee, and Ishfaq (2016) highlight the impacts of the growth of the online retail channel and highlight the strategic priorities of the retail supply chain for the coming years and the respective actions that are being put into practice:

Table 1
Priorities in retail supply chain management and respective strategies

Priority	Strategies
Increase the efficiency for the omni-channel consumer	Encourage the use of physical stores as a point of collection; Increase the use of "Big Data & Analytics" tools for trade-off decisions (price, delivery speed, etc.)
Use Supply Chain Competencies for Revenue Generation	Reduce lead time, increase availability, offer more convenience options, improve customer experience.
Stock Allocation	Reduction of stock area in stores with intensive use of IT tools to improve the replenishment process.
Change Management	Recognition of the importance of human capital through investment in training and development, empowering teams to assist the new omni-channel consumer.

Source: Adapted from Gibson, Defee, Ishfaq (2016)

2.4. Inventory Management

Arnold (2008) cites that any company that wants to maximize its profits will be forced to a minimum investment in stock. This point is even more relevant in retail chains that do not normally control the means of production despite having significant bargaining power and product positioning. The availability of the product in the industry is related to the concept of service level that will be provided to the retailer. After all the product availability in the industry influences the availability of product that the retailer will offer the consumer. Reinforcing the relevance of the issue, Parente and Barki (2014) argue that inventories absorb a large volume of financial resources and therefore deserve special management by the retailer.

The implementation of inventory management may require a broad transformation in the organization demanding the elimination of departmental silos. Corrêa, Giansesi and Caon (2013) affirm that the implementation of robust management systems such as ERP (Enterprise Resources Management) aims to eliminate the lack of informational coordination between these areas, facilitating integration.

2.4.1. Inventory Management and the Omni-Channel

It is important to note that with the emergence of the omni-channel concept, the boundaries between the sales channels do not exist from the point of view of the consumer. The same reasoning can be attributed to inventories that although they may be physically allocated in a sales channel (a physical store for example) will not necessarily be dedicated to exclusively serving the demand of the store. Gallino and Moreno (2014) point out that retailers that have a high degree of integration between online and offline channels (physical stores) can offer the consumer the possibility to make the purchase online and withdraw the product in the physical store, known as BOPS (Buy online and Pickup at Store). This characteristic of the omni-channel concept creates a new challenge for the retailer and consequently for the supply chain. After all, under this concept, the stock becomes shared between the channels in a more dynamic way and from the point of view of the consumer. Gallino and Moreno (2014) also warn of the impacts of channel integration and their inventories. This sharing increases the flow of consumers in physical stores which can lead to increased sales and consequently the need to revise the criteria that define store inventories.

Gallino, Moreno and Stamatopoulos (2016) address the issue of dispersion of sales from the integration of sales channels and warn that this characteristic of the omni-channel retailer needs to be considered in inventory management processes.

The phenomenon of channel integration can contribute to improving the consumer buying experience, making it more enjoyable as new service possibilities are introduced, eliminating points of friction in the consumer-retailer-brand relationship, though Guy (2015) and EY (2015) draw attention to the challenges that channel integration demands for the management of inventories in the omni-channel environment. If on the one hand the consumer wants to buy and receive the product from the retailer, regardless of the channel used for the purchase, on the other hand there is a history of demand that supports the allocation of retail stocks. This retailer has its inventory management processes developed to service stores from a central warehouse or even from the supplier's warehouse. But the new consumer does not see in this way demanding changes by the retailer to serve him. Table 2 shows the evolution in inventory management from the channel integration provided by the omni-channel.

Table 2

Inventory Utilization: Traditional Model and Omni-Channel Model

Physical Inventory Allocation	Traditional Model	Omni-Channel Model
Physical Store	Stock is designed to meet store demand	The stock is intended to meet the demand of a consumer who purchased the product from the retailer. Independent of the sales channel. It is also used to meet the demand for replacement and / or sales in physical stores.
Distribution Center	The stock is destined to meet the demand of replacement and / or sale of the physical stores. It is also used to meet the demand of the online store.	
Supplier	The stock is intended to meet the retailer's demand and can be delivered to the Retailer's Distribution Center or a physical store.	

Source: Author based on Gallino e Moreno (2014); EY (2015); Gallino, Moreno e Stamatopoulos (2016)

When considering the omni-channel model in the allocation and use of inventories, the retailer seeks to provide the customer with a better level of service (reduced lead time, increased availability). According to Verhoef, Kannan and Inman (2015), the retailer must be able to analyze the variables involved and make the best decision about the origin of the product that will be delivered to the consumer.

From the point of view of the consumer it can be said that it will benefit because it can receive the product faster, regardless of its location, especially if it used an online store. From the point of view of the retailer the benefits will also exist. Freight and handling costs are also likely to be reduced. Ishfaq and Raja (2017) cite that a stock that was low moving in a physical store would be better used, also serving consumers of the online channel, reducing operating expenses. In this scenario EY (2015) alerts to the increasing complexity of supply chain management and consequently inventory management.

2.4.2. Inventory Management and Sales Forecast

Another element that adds complexity to inventory management in industry and retail is the sales forecast. Khun and Sternbeck (2012) report that the more accurate the

sales forecast, the lower the need to maintain security stocks along a retail distribution network (Distribution Centers, Physical Stores). Parente and Barki (2014) argue that retail sales forecasts are a key component in the definition of volumes that will be purchased from suppliers and resold to consumers.

Maab, Spruit and Wall (2014) conclude that the use of statistical methods combined with analysis based on the experience of professionals involved in the demand management process can generate significant improvements in the accuracy of sales forecasting. This accuracy will provide significant gains in the definition of adequate inventory levels and maintenance of the level of customer service, since the quantity to be kept in stock is influenced by the level of demand accuracy (Arnold, 2008).

2.4.3. Inventory Management and Stockout

Turk (2011) points out that retailers should work together with their suppliers to seek continuous improvement of their value chain processes as the breach or stockout jeopardizes customer loyalty not only to the store but also to the supplier, in addition to the costs inherent in the loss of the sale.

Stockout is a persistent problem for retailers. Even with the advancement of new technologies and implementation of collaborative processes the problem insists on remaining a point of attention for any retailer (Ehrental, Stozle, 2012). On the other hand, consumer reactions to the lack of a desired product are numerous, but have in common the damage to all links in the chain. This in turn reinforces the need for an integrated chain-wide approach, mainly manufacturer and retailer, to mitigate or reduce the effects of product shortages (Turk, 2011)

2.5. Omni-Channel: Impacts

Hübner, Wollenburg and Holzapfel (2016) address the operational impacts on the following processes in the value chain of a retail company operating under a multi-channel approach to adopt the omni-channel strategy: Inventory Management; Handling of Products on the DC (Picking); Assortment Management; Delivery Management to the Consumer (Delivery Time and Model); Reverse Logistics (Returns); Management of the Organizational Structure (Organization Chart) and Management of Information Systems.

Regarding the unification of inventories, the authors acknowledge that, although the complexity of the operation, especially in the distribution centers, increases, the gains in terms of agility in meeting consumer orders overlap. Inventory integration, also supported by integrated information systems, is considered a prerequisite for the implementation of the omni-channel strategy. In fact, the authors cited emphasize that this inventory integration, regardless of channels or location, provides a synergistic integration of the channels that are benefited, for example, in the stockout issue.

It is worth emphasizing that the impacts of implementation can spread through other areas. Carvalho and Campomar (2014) note that the processes of consumer relationship management, usually associated with Marketing, need to be adapted to the new approach. It is up to Marketing to deepen their understanding of consumer buying behavior in order to create, for example, more individualized and customized experiences that can bring more results to the business.

Another area cited by Carvalho and Campomar (2014) is the Human Resources Management. During the shopping journey the consumer also interacts with employees

and they need to be prepared to deal with the omni-channel consumer. Not only the salespersons at the stores but the whole organization.

Kraemer (2015) lists actions to implement the omni-channel:

- Obtain integrated visibility of all inventories, ie Warehouses / DCs, Physical Stores, transit and supplier;
- Develop a flexible distribution network with the logistics partners (suppliers, transporters, logistics operators) in line with omni-channel demand dynamics (allocation of spaces and services in a flexible way to meet demand for shipments to stores and consumers);
- Consider innovative models for consumer delivery (Last Mile). Consider that the experience and the purchase journey also comprise the delivery stage.
- Maintain attention on the need to integrate the new Information and Communication Technology tools with legacy systems. There is a risk that they will become blockers to the omni-channel implementation since they have been developed from the perspective of a traditional retail supply chain.

Finally, to measure the performance of a hybrid supply chain, that is, a chain that integrates the operations of online stores and physical stores, Kumar, Tiffany and Vaidya (2016) suggest as a best practice the adoption of the set of defined performance indicators in the SCOR (Supply Chain Operations Reference) model.

From this survey the author sought to relate the initiatives that characterize the implementation of the omni-channel environment and the respective impacts generated in the operation and related areas. It is worth pointing out that in order to elaborate this relationship, we have sought to maintain the focus on the aspect of order fulfillment and product delivery to the final consumer (order fulfillment).

Table 3 shows the impacts of the implementation of the omni-channel strategy from the theoretical framework researched. It is possible to observe that these impacts involve not only operational characteristics such as increased complexity in inventory management, the need to implement new functionalities in legacy information systems or acquisition of new systems and the increase of complexity in the storage and distribution processes due to greater fractionation of loads, there are also impacts related to cultural / behavioral factors related to the need for a new organization that demands more integration and collaboration between areas that previously acted in a segregated way by sales channel.

In terms of collaboration, it is important to highlight the need to implement partnerships with other supply chain links as service providers such as hauliers and even fuel stations that can act as a pick-up point to consumers. On the other hand, positive impacts are also related, for example, from the financial point of view, the reduction of the freight cost of deliveries to the consumer, reduction of stockout rates due to inventory integration / optimization and increase of the flow of consumers in physical stores that in turn need to transform to meet the new demands of the omni-channel.

Table 3
Omni-Channel Initiatives and Impacts (1/2)

OMNI-CHANNEL INITIATIVE	WHAT IS?	IMPACTS
Same price for all sales channels	Adopt the same or similar prices in physical stores and online store	Need to implement systems that consider all business variables (taxes, competitors, margins) to determine the correct price; Review processes and organization for definition of price policy independent of the sales channel
CC: Click & Collect /BOPS	The consumer buy online and pickup at the store	Increase in the uncertainty of the demand in the store and consequent difficulty in determining the store's ideal stock / ideal assortment; Increase of the picking operation in the Distribution Center (DC); Adequacy of the physical and organizational structure of the physical store; Reduction of Delivery Freight Cost; Increased customer flow in the store and possible conversion increase; Best consumer buying journey due to lead time reduction.
CR: Click & Reserve online/pickup at the store	Consumer has access to the stock available in the Physical Store or even in the distribution center and can make a reservation of the product for later billing and withdrawal in the physical store	The need to implement procedures and systems that make it possible to make visibility of stocks of physical stores and DCs through the website; Increases the complexity of inventory management available in the physical store and on the DC; Reduction of Delivery Freight Cost; Increased customer flow in the store and possible conversion increase; Best consumer buying journey due to lead time reduction.
Physical Store acting as a small Distribution Center	Physical store billing and shipping to the consumer independent of the sales channel used to purchase the product. In addition, the physical store also operates supplying other stores, replacing the Distribution Center	Increase in the uncertainty of the demand in the store and consequent difficulty in determining the store's ideal stock / ideal assortment; Adequacy of the physical and organizational structure of the physical store; Streamlines and optimizes inventory turnover through transfers to other stores and / or consumer sales Possible reduction of Delivery Freight cost due to the proximity of the stock of demand points (delivery place);
Logistics operations integration at the DC (mainly stock)	The Distribution Center ceases to be segregated by sales channel and starts to serve all operations independent of the sales channel	Increase in the complexity of the operation that starts to meet shipments of different characteristics: fractional load (Orders of Online Shop) and Consolidated (Orders to Supply the Physical Store). Optimization of inventories that are no longer segregated by sales channel and begin to meet the consolidated demand (Physical Store and Online Store); Stockout reduction due to inventories optimization
Provide Innovative Delivery Options for the Consumer (last mile)	Provide the consumer with options other than the usual delivery, such as: lockers, points of flow of people such as post offices, gas stations and shopping centers	Requires the need to hire a specialized third party service as lockers suppliers and establish partnerships with companies (gas stations, post offices, malls); Institutional gains (the retailer's image and the customer's best shopping journey through convenience

Source: DHL (2015); Carvalho e Camponar (2014); Hubner, Wollenburg e Holzapfel (2016); Witcher et al. (2015); IBM (2016); EY (2015), Vogel e Paul (2015)

Table 3 - Omni-Channel Initiatives and Impacts (2/2)

OMNI-CHANNEL INITIATIVE	WHAT IS?	IMPACTS
Returns and changes in Physical Stores (reverse logistics)	Allow the consumer to use the structure of physical stores to make an exchange or return of the product purchased independent of the sales channel used	Adequacy of the physical and organizational structure of the physical store to receive consumer products; Speed inventory replenishment if returned product can be resold; Best consumer shopping journey due to the convenience offered
Implement Full Inventory Visibility to Customer (Cross Channel Inventory Optimization)	Allow the sales team and also consumers to have full visibility of the inventories in the company (Stores, DCs and possibly suppliers)	Need to implement systems and management processes (Order Management System) in parallel to the maintenance of legacy systems; Need to implement technology and support processes to improve inventory controls in physical stores such as using radio frequency tags; Optimizes the use of inventory according to predefined business rules: better customer service and sustainable sales margins
Implement the Omni-Channel organization	Delete organizational structures segregated by sales channel	Need to revise / adapt organizational structure. From: Organizational Structure by Channel, To: Consumer-Oriented Organizational Structure; Elimination of organizational silos through the implementation of a consumer-oriented structure, generating more communication and collaboration and also eliminating overlapping functions
Withdrawal of the Product by the consumer in the DC (PickUp in DC)	Retailer offers the consumer the possibility of withdrawing the product in the Distribution Center speeding the delivery	The need to review / adapt the organizational and physical structure of the DC to allow withdrawal of the product by the consumer; Best consumer buying journey due to reduced lead time and increased convenience
Ship products directly to the consumer from the Supplier, without having to go through the retailer's installation (Ship Direct to Customer)	Implement shipments direct from supplier to consumer	The need to implement partnerships and their organizational / operational structure to allow shipments from the supplier to the consumer; Necessary high degree of partnership with the supplier involving information of availability and visibility of the inventory; Reduction of storage and handling costs in the operation of the retailer; Best consumer buying journey due to lead time reduction

Source: DHL (2015); Carvalho e Camponar (2014); Hubner, Wollenburg e Holzapfel (2016); Witcher et al. (2015); IBM (2016); EY (2015), Vogel e Paul (2015)

3. METHODOLOGY

This work is based on information collected in periodical scientific publications, books and theses published mainly from 2010 and searched in the databases Academic, Web of Sciences and SciELO. The research also included reports regarding retail operations published by management consulting firms such as KPMG, EY, Deloitte and large logistics operators such as DHL.

The analysis of the literature on the subject sought to identify the impacts in the retail supply chain generated from the implementation of multi-channel strategies that improve the customer's buying experience, focusing mainly on the omni-channel

strategy. In addition, it was tried to highlight the actions of the retailers to maximize the effects of this strategy on consumer loyalty.

From the analysis of the literature, some theoretical propositions were established that were validated by empirical evidence collected through interviews, documentary analysis (public documents) and observations of the researcher in the field (stores, distribution center). The strategy of validating theoretical propositions is one of Yin's (2010) suggestions for a case study, and the authors of these paper corroborate with this strategy because that the data collection stage of the case study seeks to reinforce or even question the explored theory.

Next, the actions that a national retailer implemented to adapt its supply chain to a scenario of integration of logistics operations demanded by the omni-channel strategy were analyzed. Eisenhardt (1989) emphasizes that the case study seeks to understand the dynamics of a specific environment. The exploratory nature of the research takes into account that the omni-channel theme is relatively recent, mainly in Brazil, but it has been rapidly evolving due to the phenomenon of digital transformation that almost naturally reinforced the launch of new channels of relationship with the consumer.

The target company of the study, hereinafter referred to as VAREJISTA, began its operation in 1950 and expanded nationally either through acquisitions of smaller retail chains or organically through the opening of new stores. It is important to affirm that in this acquisition process, VAREJISTA has added to its assets a set of brands (store flags) that can be considered a competitive advantage. As a result of this expansion, an extensive logistics network was created, consisting of more than 1000 points, between stores and distribution centers. Its gross revenue is approximately R\$ 30 Billion reais per year. In 2016 the company announced to the market the decision to integrate its operations of physical stores and online stores and their inventories into a single company.

Among the expected synergies with integration is worth highlighting: improving the consumer buying experience; search for competitive advantages in line with the new retail scenario; reduction of logistics costs and use of existing assets (physical stores), to leverage the operation of the online store

4. CASE STUDY - Data and Evidences Collected

The implementation of the omni-channel strategy has impacted the company's planning and management processes. To understand these impacts interviews were conducted with the directors of the areas of Logistics and Commercial Planning and Pricing. These areas played a key role in the omni-channel implementation. In addition, public documents on the financial and operational performance of VAREJISTA were consulted. As a publicly-held company, classified at a certain level of Corporate Governance at B³ (São Paulo Stock Exchange & BMF) under the supervision of CVM- Comissão de Valores Mobiliários, the organization provides operational and financial performance reports in a standard internationally accepted. The researcher also follow the teleconferences presented by the executive board for the investors. Finally, the researcher also made guided visits to the main Distribution Center in addition to some stores. In this way it was possible to obtain a perception of the impacts and respective actions taken to guarantee the success of the implementation.

The analysis of the collected evidence sought to validate the following propositions:

1. Customers are pushing retailers to adopt the omni-channel strategy.

2. The adoption of the omni-channel strategy requires adaptations in the supply chain.
3. Advances in Information and Communication Technology (ICT) will work together to increase the efficiency of the supply chain.
4. Omni-channel enhances retail competitiveness in an environment with more competition and changes in the consumer profile.
5. The omni-channel strategy requires an integrated management of inventories and prices (online / offline).

5. THEORETICAL PROPOSITIONS AND EVIDENCES

The analysis and discussion of the theoretical and empirical evidence obtained were carried out considering each one of the propositions established from the theoretical foundation:

5.1. P1: Clients are Pressuring Retailers to Adopt the Omni-Channel Strategy

Piotrowicz and Cuthbertson (2014) argue that the new generations demand technological resources that allow digital interaction with retailers. In this context, the proliferation of new technologies is cited as the driving force behind the omni-channel strategy. KPMG (2016) reinforces the role of "digital natives" or millennials by citing that retailers' investments in omni-channel platforms are one of the main initiatives taken to reach this segment of consumers. Cook (2014) points out that the buying experience of this consumer can be frustrating when on a shopping trip the same is faced with different prices for the same product in different sales channels. Piotrowicz and Cuthbertson (2014) still warn of generalizations about consumer behavior by pointing out that other criteria such as brand experience or product type (low-cost products, high-end products) are also associated with how consumers wish to interact with the retailer .

Referring to the company object of the study it was possible to observe that the area responsible for the definition and execution of the organization's pricing policy assumed a fundamental role. This area is the result of the unification of two areas that previously defined the prices of products for each channel independently. Called "Commercial Planning and Pricing", this area defined a pricing model to meet a pricing policy that provided for the same or similar price situation for products independent of the channels. One factor that is taken into account is the price practiced only by strategic competitors. The price charged is not associated with the cost of operating the sales channel but rather with a view of the entire operation. There may be price differences between channels, but these are not significant to the extent that they impact the consumer's buying experience. In addition, it was possible to verify that the sales teams of physical stores, when confronted by a possible price difference between online store and physical store, are ready to negotiate the lowest price in order to meet consumer expectations.

When browsing the channels (online and offline) the consumer is waiting for a unique experience. In the VAREJISTA company, the BOPS (buy online pickup at the store) indices showed constant growth throughout the year 2017, reaching the rate of 27% of all orders in the categories of Telephony, TV, Long Tail Technology and Portable Long Tail from the online store. The analysis of the evolution of the withdrawal rate of product in store demonstrates that VAREJISTA responded to a consumer demand. The number of products made available for this modality increased by 271% in 2017. And

considering these products, the percentage that was withdrawn using store stock reached 57%. These advances represent advantages in terms of reducing the value of freight for both retailer and consumer. In addition, it represents more convenience for the consumer because of the rapid availability of the product.

It can be said that this type of operation meets a consumer demand that does not see the channels as separate entities, even if the channels (online and offline) operate under the same brand. In this scenario, the Logistics area was responsible for making it possible to send products to the physical store destined for direct delivery to the consumer who made the purchase through the online store.

In addition, it was possible to observe, through the follow-up of the conference calls for investors, the concern of the Executive Board with the service provided to the consumer. This statement is based on data about investments in information technology and logistics in the last quarter of 2017. The results were a good performance to the logistics area which reflected in more quality in the service provided to consumer such as the speed up of deliveries and availability of products.

It was possible to conclude that actions implemented by the VAREJISTA meet the demands of the new consumer, which in turn demands a fluid, simple and uncomplicated experience during the buying journey.

5.2. P2: The Adoption of the Omni-channel Strategy Requires Adaptations in the Supply Chain

Gibson, Defee and Ishfaq (2016) highlight actions for the supply chain to meet the demands of the omni-channel strategy. Among them, one can draw attention to the issue of inventory allocation that is no longer associated with the sales channel. In addition, with the increased consumer product delivery options that omni-channel provides, the supply chain needs to undergo a redesign. With the omni-channel the consumer seeks convenience and wants to withdraw the product at physical stores or even receive the product at a pick-up point such as a gas station. Meeting these demands, the supply chain can become a competitive edge by offering consumers convenience and a superior shopping experience.

Ishfaq and Raja (2017) warn of the necessary adaptations in the organization of physical stores when the retailer decides to use these stores as a point of withdrawal of products purchased in the online store (BOPS). Gibson, Defee and Ishfaq (2016) also cite the necessary adaptations to offer the consumer the possibility of using the sales / delivery channels as points of return for products. This requires an agile reverse logistics process so that, when possible, return the returned product for sale to the consumer. Finally, retailers need to review their methods of forecasting sales and inventory allocation. After all, in an omni-channel environment are considered several options to meet the demand of integrated channels (online and offline).

In the company that was the object of the case study, there was an important organizational adaptation that impacted the management of prices. The company had a differentiated price strategy for each channel, which, from a view of independent entities, considered that the sales generated in the physical store had to "pay" the costs of the store itself as inventory maintenance costs, rent, sales staff, security, among others. This approach justified higher consumer prices than the online store that does not carry these costs. By unifying its operations, both online and offline, the pricing strategy became the company's strategy rather than the channel. In this sense the area

of Commercial Planning and Pricing was unified to serve the customer-focused business that does not differentiate service channels.

It is important to emphasize that the area of Commercial Planning and Pricing also needed to adapt to meet the demands of the Logistics area. Logistics leads the process of S & OP - Sales and Operations Planning responsible, among other things, for defining the allocation of stocks in order to maintain supply aligned with the commercial strategy. In order to meet this alignment the Commercial Planning and Pricing area had to analyze the commercial strategies of the channels considering that actions in the physical store impact consumer behavior in the online store and vice versa.

The Commercial Planning and Pricing area is also responsible for managing the relationship with suppliers of products for resale. This relationship did not undergo major changes due to the omni-channel implementation. This is mainly due to the fact that purchases were already made on a consolidated basis. But both were defined separately. There was a need to purchase for the physical stores and another need purchase for the online store. Since the definition of volumes was separate, it was common for an additional stock to be purchased. A possible excess inventory of a product in the physical stores was not considered in the definition of the volume of purchases for the online store. With the unification of inventories, purchases were optimized and supplier relationship management processes became more robust, including the need to maintain alignment of vendor's business strategies with VAREJISTA's business strategies. Previously this alignment was done separately for each sales channel regardless of the impact of the vendor's commercial actions that permeated the sales channels.

Finally, as a reflection of the omni-channel strategy, it is important to mention the positioning of the Commercial Planning and Pricing area in the adoption of the e-marketplace concept. In this sense there is no conflict when a business partner, known as a seller, offers a product on the online platform with a more advantageous price than that of the VAREJISTA. The benefit to the consumer prevails as a norm and it is up to VAREJISTA to develop actions to compete with the business partner, not just the price factor.

For the Logistics area, responsible not only for the allocation and handling of inventories, but mainly for the policies that govern the management of these inventories, the implementation of the omni-channel strategy brought the need for several adaptations. As responsible for the leadership of the S & OP process, Logistics has the function of acting as integrator of the several areas that contribute to the success of the process. Aspects such as leadership capacity and mobilization of other areas for a common goal were determinant to reach the goals of reduction of stockout rates.

It is essential to highlight the effort required to implement the BOPS modality. The withdrawal of the product using the stock of the store itself or using stock transferred from the Distribution Center (DC) requires an alignment of several processes with different areas. Take as an example the definition or revision of the product mix or portfolio that is offered by the physical store, which now depends on alignment of the areas of Logistics with the areas of Marketing and Commercial Planning and Pricing. The challenge also involves a significant shift towards the inter-unit transfer of products. In traditional logistics the physical store was supplied with large volumes in consolidated packages. In the new model the operation had to adapt to send products in unitary / fractionated packages to be delivered to the consumer without going through a process

of unpacking in the physical store. The profile of the cargo which were more consolidated began to have a greater variety of products in different types of packages. Another change in progress is the implementation of the project of turning a physical store into a mini distribution center. In this context, the number of nodes in the distribution network and consequently the storage locations increases, increasing the complexity of inventory allocation management. In the view of the consumer, the advantages of this operation are evident. With the stocks closer to the demand points the consumer gains in agility in delivery and in reducing the cost of freight.

In this way it can be affirmed that the actions in progress or those already implemented by VAREJISTA are in agreement with the propositions that the implementation of the omni-channel strategy requires that elements of the supply chain adapt to meet the demands of the omni-channel strategy. That is, they review their processes, their organization and their technological support to adapt the supply chain to the omni-channel model

5.3. P3: Advances in Information and Communication Technology (ICT) Enhance Supply Chain Efficiency

Bradlow et al. (2017) and Zhang et al. (2010) evaluate Information and Communication Technology (ICT) as an enabler of the multi-channel operations strategy and stresses that this strategy allows the collection of more data regarding the consumer when there is interaction with the retailer. From the analysis of these data it is possible to adopt specific actions to, for example, execute promotional actions aligned to the profile of the consumer purchase.

Witcher, Wider and Sheldon (2015) and Kraemer (2015) point out that order fulfillment methods in the omni-channel environment demand robust management systems (OMS-order management system) and storage management (WMS-warehouse management system). These information technology systems are considered as enabling an omni-channel operation because they provide, among other functionalities, an integrated inventory visibility and control of the operations in the distribution center. In the context of the case study carried out, in addition to the OMS and WMS systems, the Commercial Planning and Pricing area invested in IT tools, in order to meet the demand for a unified pricing strategy known as "Price Match". The company searched the market for a specific software to manage the pricing strategy. This software had to comply with all business rules considering the numerous variables defined by VAREJISTA in order to guarantee a unified and profitable pricing strategy for the business.

With regard to the opportunities made possible by IT, it is also worth noting the opportunities for increased sales conversion in the physical store when using data collected from the consumer during their shopping journey in the online store. As an example we can mention the opportunities of cross-selling or up-selling generated from the analysis of the data collected during the purchase journey and also historical data. In other words, a consumer who purchased a cell phone from the online store while taking the product from the physical store may be encouraged by the store's sales team to purchase, for example, a theft insurance. This way the retailer can get better contribution margins for the business from the sale of the two items, cell phone plus theft insurance.

Turning to the case study, the Commercial Planning and Pricing area recognizes that its performance in the execution of the processes is strongly based on the technology

tools. They highlights the integration aspect of the databases of the consumer relationship systems (CRM-Customer Relationship Management), and business management (ERP-Enterprise Resource Management) through BI-Business Intelligence systems. By providing better inventory visibility across the Distribution Centers and Physical Stores network, information systems such as ERP enable store replenishment process and inventory allocation to be much more assertive. Such move decisions combined with anticipated and managed demands in the S & OP-Sales and Operations Planning process, under the leadership of the Logistics area, increase the efficiency of a high value asset of VAREJISTA: the stock. This asset started to be seen from the Logistics point of view, as a single inventory as opposed to the channel-separated inventory model. And this was reflected in systems, notably ERP. The S & OP process itself was also automated with the acquisition of a specific tool since the VAREJISTA understood that the volume of data to be worked required a great effort of the logistics team. These actions have allowed the management of movements and inventory allocations along the logistics network to always be in line with expected demand, reducing the risk of shortages or excesses.

It is also important to consider that a supply chain needs to be managed end-to-end and it was also possible to highlight in the case study the effective use of technologies such as geolocation in the monitoring of product delivery routes, whether in the supply of a physical store or in a delivery to the consumer

5.4. P4: The Omni-Channel Strategy Enhances Retailer Competitiveness

Zhang et al. (2010) and Verhoef et al. (2015) state that the adoption of the omni-channel strategy meets the needs of the current consumer characterized by the desire to relate to the retailer uniquely independent of the sales channel. Piotrowicz and Cuthbertson (2014) cite that this ability to offer such a unique consumer experience is critical to the retailer's competitiveness.

Brynjolfsson, Hu, and Rahman (2013) argue that as barriers between the physical world and the virtual world are disappearing, retailers need to revise their strategies to stay competitive. The same authors argue that strengthening partnerships between retailers and suppliers can create more competitive advantages of the retail supply chain itself. Finally, Albright and Nuce (2014) cite a retailer's ability to synergetically combine their physical store network with their online channel as a factor that creates a competitive advantage against retailers who do not use the omni-channel strategy.

In the study organization, the financial performance data released to the market in February / 2018 demonstrate the importance of adopting the omni-channel strategy. The company integrated its physical stores operation with its online operating arm in the last quarter of 2016 and the fruits of this integration appear clearly in the income statements of 2017. In presenting the results to the market, the management of VAREJISTA emphasized the achievements of the integration of channels highlighting improvement in the level of consumer service, more assertive pricing policy and closer relationship with suppliers, among others.

It should be added that according to data from FECOMÉRCIO-SP the retail segment as a whole took advantage of a resumption of consumption during the year 2017. In March 2018, FECOMERCIO-SP published a survey showing that the Household Consumption Intention Index increased by the 19th consecutive month. In this scenario, VAREJISTA was able to revert a loss of R \$ 1 Billion, adjusted to meet accounting standards, the corporate reorganization, in 2016 to a net profit of R \$ 195 Million in

2017. Other indicators such as EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) and net revenue presented the same positive performance. Net revenue increased by 11% and EBITDA margin increased by approximately 2.6 pp.

The sum of a good business environment, according to economic recovery statements published in the specialized press and by research institutes such as FECOMÉRCIO-SP and IBGE, together with the implementation of actions aligned to an omni-channel strategy such as the integration of sales channels generated very significant financial results

When observes the fundamentals of the theoretical proposition with omni-channel initiatives, such as the integration of physical stores with the online store, implemented by VAREJISTA and its financial results, it can be affirmed that the proposition was corroborated.

5.5. P5: The Omni-Channel Strategy Calls for Integrated Inventory Management

Hübner, Wollenburg and Holzapfel (2016) show that integrated stock management is a key part of improving the consumer buying experience by providing faster and more efficient customer service compared to per-channel management. On the other hand, Raja and Ishfaq (2017) point out that the adoption of integrated inventories offers the consumer more possibilities of attending to their requests even though in this scenario EY (2015) warns of the complexity of the supply chain management and consequently of the management of stocks.

Emrich, Paul and Rudolph (2015) point to the question of assortment of products that will be offered in the online store and in the physical store. The authors caution that the adoption of long-tail is not always reflected as an increase in consumer perceptions of convenience and variety.

In the organization object of the study were implemented initiatives aimed at improving the consumer buying journey and consequently in the experiences that this consumer experiences. Evidence of this improvement is that the stockout rates in both, the consolidated view and the per-channel view, have been reduced. In physical stores, the stockout rate fell from 10% in 2016 to 5% in 2017. In the online store, the reduction was significant, from 55% in 2016 to 6.3% in 2017. In the consolidated view, the reduction was 21% in 2016 to 5.3% in 2017. It can be said that the consumer started to find the desired product more often. In addition, the delivery times of the product purchased by the consumer have been reduced. This occurs, for example, when the consumer buys a product from the online store and is serviced by the stock that is in a physical store closer to home.

In order for these initiatives to take effect, it was necessary to unlink the inventory from the sales channel. The stock belongs to the company, not the sales channel, and its allocation is based on omni-channel strategy.

It is important to highlight some actions that VAREJISTA has taken to implement integrated inventory management. Collaborative decision-making processes permeated the organization and interviews confirmed this change in the organization's mindset, previously managed from the perspective of the sales channel and now in the omni-channel consumer view. One can mention the initiative of the Logistics area that created advanced teams of consultants who had as one of the attributes to spread knowledge of inventory management in an integrated way in stores, distribution centers and other impacted areas such as Marketing. A consequence of this collaborative stance was that the process of monitoring the assortment of stores that started to

consider data on the demand for a product in the BOPS modality. In this scenario a product that was not part of the assortment of the physical store may become part due to a demand of customers who wish to withdraw the product purchased in the online store. The benefit to the consumer is evidenced by the reduction in delivery time due to withdrawal at the store.

Therefore, it can be affirmed that the proposition is true since the implementation of these initiatives was only possible from the unification of the stocks of the channels and the adoption of an integrated management of these stocks.

5.6. Impacts caused by Omni-Channel strategy

Table 4 summarizes the impact of the implementation of the omni-channel strategy on the basis of the theoretical evidence (found in the bibliography consulted) and the empirical evidence (obtained through the case study).

It is possible to observe that there are impacts in both, operational and organizational aspects. There is a clear need for reorganization of various supply chain management processes such as the management of product deliveries in the physical store. These stores and the entire supply chain were prepared for supply operations, that is, receiving consolidated products and now had to prepare to receive fractionated products for delivery to a consumer who bought it in the online store. Consequently, the store had to organize itself to meet a larger influx of consumers that could eventually be taken to new purchases, this time in the physical store. Besides the operational aspect, it was necessary to prepare the sales team of the store for the omni-channel concept and thus to avoid a possible conflict of channels as the bibliographic researched alert. In other words, the human aspect can not be neglected in transformation processes such as the implementation of this strategy. It is still important to highlight the internal reorganization that is necessary. Functional areas that operate segregated by channel need to adopt a new posture, more integrated and collaborative, as strategy demands. In this sense processes that define and monitor inventories are essential. One can cite the S & OP process that originated in the industry and also applies to retail. A feature of this process is the ability to integrate all areas under a common goal that can be in essence the improvement of the service provided to the consumer with the generation and maintenance of revenues in a sustainable way.

It is worth highlighting the actions that the company that is the subject of the case study has been taking to adapt to the new strategy. Reviewing business processes and implementing new systems to support these processes are part of the effort to fully integrate channels, a consumer demand. The role of technology can also be highlighted in the alignment of the sales price, a condition highlighted in the literature to ensure a buying journey permeated by satisfactory experiences for the consumer. The same happens in the management of the processes of product delivery to the consumer with technology support that monitors the entire delivery process. And the support of technology in planning support systems is extremely relevant.

Still worth mentioning organizational initiatives such as the formation of a dedicated team to act on the impacts on inventory management processes, a prominent topic in reports from specialized consultancies and scientific research. The performance of this team is not limited to the area of Logistics itself, but goes further, interacting strongly with other areas such as Marketing and Sales in a collaborative way in order to maintain the balance between stock, demand and level of service provided to the consumer.

The impacts resulting from the initiative of transforming the physical store into a small center of distribution deserve attention since this project, although still in the pilot phase in the company, is very much in line with the omni-channel strategy and it is common to find research on the new role of the physical store in retail. While it is possible to observe challenges in the management of inventories there are also opportunities in terms of optimization of these stocks and a significant increase of convenience for the consumer. Also on the aspect of consumer convenience, we can highlight the impacts under the reverse logistics process that allows the consumer to return the product purchased in the online store in physical stores. Reorganizing the internal processes to fit the physical store to handle these returns is something that has been occurring in the company and is in line with the expansion of the process of BOPS model, a model that has been widely accepted by the consumer.

Therefore, it is possible to notice impacts that require adjustments in the supply chain processes, but it should be noted that the initiatives demanded by omni-channel offer a counterpart in terms of consumer satisfaction and financial results.

Table 4
Omni-Channel Impacts in Case Study 1/2

OMNI-CHANNEL INITIATIVE	WHAT IS?	IMPACTS	CASE STUDY
Same price for all sales channels	Adopt the same or similar prices in physical stores and online store.	Need to implement systems that consider all business variables (taxes, competitors, margins) to determine the correct price; Review processes and organization for definition of price policy independent of the sales channel	YES. The company has acquired a tool that considers several variants to establish prices that guarantee adequate margins for the operation. YES. The company has unified its business planning areas.
CC: Click & Collect /BOPS	The consumer buy online and pickup at the store.	Increase in the uncertainty of the demand in the store and consequent difficulty in determining the store's ideal stock / ideal assortment; Increase of the picking operation in the Distribution Center (DC); Adequacy of the physical and organizational structure of the physical store; Reduction of Delivery Freight Cost; Increased customer flow in the store and possible conversion increase; Best consumer buying journey due to lead time reduction.	YES. To respond to this uncertainty, the company established a process of periodic review of the store's portfolio and implemented a process of S & OP - Sales and Operations Planning involving several areas including physical store managers. YES. The company reorganized the operation on the DC to meet this demand. YES. The company created an exclusive area in the physical store for handling and delivering consumer products which were bought at online store. YES. As the consumer himself has withdrawn the product in the store has reduced the freight delivery expense. IT WAS NOT POSSIBLE TO CONFIRM. YES. The acceptance of this modality of purchase by the consumer proves its effectiveness.
CR: Click & Reserve online/pickup at the store	Consumer has access to the stock available in the Physical Store or even in the distribution center and can make a reservation of the product for later billing and withdrawal in the physical store.	The need to implement procedures and systems that make it possible to make visibility of stocks of physical stores and DCs through the website; Increases the complexity of inventory management available in the physical store and on the DC; Reduction of Delivery Freight Cost; Increased customer flow in the store and possible conversion increase; Best consumer buying journey due to lead time reduction.	YES. To respond to this uncertainty, the company established a process of periodic review of the store's portfolio and implemented a process of S & OP - Sales and Operations Planning involving several areas including physical store managers. YES. The company reorganized the operation on the DC to meet this demand. YES. The company created an exclusive area in the physical store for handling and delivering consumer products which were bought at online store. YES. As the consumer himself has withdrawn the product in the store has reduced the freight delivery expense. IT WAS NOT POSSIBLE TO CONFIRM. YES. The acceptance of this modality of purchase by the consumer proves its effectiveness.
Physical Store acting as a small Distribution Center	Physical store billing and shipping to the consumer independent of the sales channel used to purchase the product. In addition, the physical store also operates supplying other stores, replacing the Distribution Center.	Increase in the uncertainty of the demand in the store and consequent difficulty in determining the store's ideal stock / ideal assortment; Adequacy of the physical and organizational structure of the physical store; Streamlines and optimizes inventory turnover through transfers to other stores and / or consumer sales Possible reduction of Delivery Freight cost due to the proximity of the stock of demand points (delivery place); Increased transport and inventory management complexity due to increased inventory dispersion.	The project of physical stores acting as mini-hub of distribution (mini-hub) is pilot phase with 5 stores. Adjustments are being made to expand the operation in the second half. The company also created a dedicated team of internal logistics consultants to monitor the implementation of the project in the physical stores.
Logistics operations integration at the DC (mainly stock)	The Distribution Center ceases to be segregated by sales channel and starts to serve all operations independent of the sales channel	Increase in the complexity of the operation that starts to meet shipments of different characteristics: fractional load (Orders of Online Shop) and Consolidated (Orders to Supply the Physical Store). Optimization of inventories that are no longer segregated by sales channel and begin to meet the consolidated demand (Physical Store and Online Store); Stockout reduction due to inventories optimization.	YES. Increase in the complexity of the operation that starts to meet shipments of different characteristics. Fractional (Online Shop Purchase) and Consolidated (Physical Store). At the end of 2017 the company made investments in equipment for the DC and in systems for transportation management. YES. Stock optimization by eliminating duplicity in the consolidated view compared to channel view. YES. The stockout indices showed a significant reduction in all dimensions analyzed: per channel and consolidated company.

Table 4
Omni-Channel Impacts in Case Study 2/2

OMNI-CHANNEL INITIATIVE	WHAT IS?	IMPACTS	CASE STUDY
Provide Innovative Delivery Options for the Consumer (last mile)	Provide the consumer with options other than the usual delivery, such as: lockers, points of flow of people such as post offices, gas stations and shopping centers	Requires the need to hire a specialized third party service as lockers suppliers and establish partnerships with companies (gas stations, post offices, malls); Institutional gains (the retailer's image and the customer's best shopping journey through convenience)	YES. The company has developed partnerships with specialized service providers for the use of lockers and a network of gas stations. Institutional gains (the retailer's image and the customer's best shopping journey through convenience).
Returns and changes in Physical Stores (reverse logistics)	Allow the consumer to use the structure of physical stores to make an exchange or return of the product purchased independent of the sales channel used	Adequacy of the physical and organizational structure of the physical store to receive consumer products; Speed inventory replenishment if returned product can be resold; Best consumer shopping journey due to the convenience offered.	DO NOT. The return of products purchased through the online store can only be performed through collection service. Except products which were bought in the BOPS model.
Implement Full Inventory Visibility to Customer (Cross Channel Inventory Optimization)	Allow the sales team and also consumers to have full visibility of the inventories in the company (Stores, DCs and possibly suppliers)	Need to implement systems and management processes (Order Management System) in parallel to the maintenance of legacy systems; Need to implement technology and support processes to improve inventory controls in physical stores such as using radio frequency tags; Optimizes the use of inventory according to predefined business rules; better customer service and sustainable sales margins.	YES. The company has strengthened its systems and processes to ensure inventory accuracy both in stores and DCs with dedicated staff. YES. Partially. The definition of the best output location of the product is part of the scope of the small DC project that is in the pilot phase. Some rules have already been set for the system to decide to use product from the small DC (physical store) or to use the product from the nearest DC. YES. Partially. Punctual cases of consumer satisfaction were reported in interviews.
Implement the Omni-Channel organization	Delete organizational structures segregated by sales channel	Need to revise / adapt organizational structure. From: Organizational Structure by Channel, To: Consumer-Oriented Organizational Structure; Elimination of organizational silos through the implementation of a consumer-oriented structure, generating more communication and collaboration and also eliminating overlapping functions.	YES. Areas that operated separately, such as Commercial Planning & Pricing and Marketing, which focused on the channel were unified with a focus on serving the company, not the sales channel
Withdrawal of the Product by the consumer in the DC (PickUp in DC)	Retailer offers the consumer the possibility of withdrawing the product in the Distribution Center speeding the delivery.	The need to review / adapt the organizational and physical structure of the DC to allow withdrawal of the product by the consumer. Best consumer buying journey due to reduced lead time and increased convenience.	Not Implemented
Ship products directly to the consumer from the Supplier, without having to go through the retailer's installation (Ship Direct to Customer)	Implement shipments direct from supplier to consumer.	The need to implement partnerships and their organizational / operational structure to allow shipments from the supplier to the consumer; Necessary high degree of partnership with the supplier involving information of availability and visibility of the inventory; Reduction of storage and handling costs in the operation of the retailer; Best consumer buying journey due to lead time reduction.	Not Implemented

6. FINAL CONSIDERATIONS

The identification of the impacts resulting from the implementation of the Omni-Channel was accomplished through the validation of a group of theoretical propositions obtained from a survey of the theory on the omni-channel strategy and the results of a case study in a retail company that operated in a multichannel structure and at one point made the strategic decision to integrate its online sales channel with its physical stores.

Regarding this integration, the VAREJISTA highlighted several synergies, such as the on-time impact of reducing the cost of inventories / working capital in the amount of R\$ 325.000.000 due to the optimization of duplicate stocks. In addition to financial gains, initiatives aligned with the omni-channel strategy were highlighted, such as the acceleration of the BOPS modality, the reduction of stockout rates, and the benefits of multichannel marketing. From the point of view of the Supply Chain, the same statement highlighted the efficiency of the transportation cost, the optimization of the purchasing process, and the sharing of distribution centers.

This integration movement occurred precisely at the moment when retailers had a very challenging time at the end of 2015. In other words, in response to an adverse environment, the VAREJISTA reorganized itself by adopting a strategy that meets consumer demands and exactly a year later presents significant results in both, financial terms and in the satisfaction of this consumer. From this assertion, it can be considered that the case study was able to demonstrate that the adoption of the omni-channel strategy allied with and the respective actions that were taken in the processes of planning and management of the supply chain contributed to the successful implementation of the strategy .

The study also allowed to conclude that there is an alignment between the bibliographic research and the researched environment. Among the solutions presented, it is worth mentioning the need for intensive use of technology tools. This technology is already available and this is highlighted in all surveys and reports from consulting firms. However, it is important to treat the omni-channel not as a technology project, but as a business transformation project. In other words, in addition to technology, it is fundamental to address behavioral aspects, since these initiatives will only be sustainable in the long run without the mentality of departmental silos that do not communicate or understand the business as channels when the consumer does not see these channels. One way to overcome these barriers is to implement integrative processes such as S & OP where the biggest barrier is often behavioral and not just technology or processes. For the success of these initiatives it is also necessary to consider them as an action aligned with the company's strategy. It is still important to highlight the relevant results in the financial aspect since the bibliographic research also drew attention to the question of investment and the return of the omni-channel implementation. In a very competitive environment creating business differentials that generate sustainable results for the business is a basic premise. The initiative has to generate results and for this, as some specialized consultancies call attention, transformations in the supply chain are fundamental.

As a relevant contribution of the study, it is possible to cite the proof of the positive effect of the implementation of the omni-channel strategy as a leverage tool for the financial results of a retailer. In the case of the organization that is the object of the study, since this organization has competitive advantages over other retail organizations, the combination of its network of physical stores with national coverage,

its brands and an omni-channel strategy have created a competitive advantage that few competitors would be able to achieve in the short or medium term.

Regarding the delimitation of the research, replication of the findings of the single case study could be done by conducting other studies involving other organizations (YIN, 2015). In this way the conclusions could be considered more robust. To minimize this limitation, the researcher sought other sources of information obtained through visits to the physical stores of the company where it was possible to follow the current situation of the omni-channel initiatives, follow-up of the conference calls for presentation of results to the market and mainly reading and analysis of the relevant facts disclosed by VAREJISTA following the practices of corporate governance. Finally, on results disclosed to the capital market, it is important to mention that these are consolidated business data:

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