Omnichannel Retail Management:

How cross-channel integration should be managed at the different stages of a customer's journey in order to deliver a superior customer experience

Master´s Thesis

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Abstract

Providing a superior customer experience it is considered fundamental to stay active on the retail industry. To achieve this goal, retailers need to identify and analyze the whole extent of activities that customers perform when they interact (i.e. customer journey), so companies can provide customers valuable experiences at all of points of interactions with them (i.e. touchpoints). Thanks to the fast evolution of technology, the retail industry is shifting towards omnichannel management, a strategy were all offline and online channels of a company are integrated, allowing customers to seamlessly change from one channel to another in a cross-channel experience. However, despite the increasing importance in the industry, omnichannel management still is considered a new topic in the marketing world. Because of this, more research on omnichannel management is needed, especially in one of its key characteristics: cross-channel integration. By using the survey method to gather information and the multiple regression analysis technique, this master´s thesis focuses on measuring the relationship between the amount of channels that customers are currently using at each stage of their journeys with a company and different drivers for using omnichannel services. By performing a descriptive study, the objective of this master´s thesis is to provide insights for retail managers to determine the right level of cross-channel integration that their organizations should follow in order to improve customers´ shopping experience.

The results from the different regression models provide statistical evidence that drivers of omnichannel services have different effects on the intensity of channel usage by customers during their journeys within a company. In specific, frequency of purchases has a positive relationship with the amount of channels that customers are using at all stages of their journeys, while knowledge of channels only has a positive relationship at purchases stages. Surprisingly, consistency of content across channels, which is considered a key aspect of omnichannel management, did not present positive relationships at any stage, suggesting that this driver losses relevance as customers become active users of omnichannel services. These results provide insights that retailers should manage channel integration according to what customers are expecting from channels at each stage of their journey, and that retailers can achieve successful omnichannel strategies despite its restrictions to implement. Nevertheless, this master´s thesis also concludes that it is very likely that there are other variables that are better predictors for the values of CChU at each stage of a customer´s journey, thus future research should incorporate more variables into the analysis.

Table of Contents

Introduction 4
CHAPTER 1 - Literature Review Part I: Definitions 8
1.1 Customer Journey 8
1.2 Customer experience 9
1.3 The Relevance of Customer Experience in Customers´ Journey 10
1.4 Multichannel Retail Management 11
1.5 Omnichannel Retail Management 11
1.6 Customer Journey in Omnichannel Retail Management 12
CHAPTER 2 - Literature Review Part II: Background & Development 15
2.1 Origins of Multichannel Management 15
2.2 From Multichannel to Omnichannel Retail Management 16
2.3 Main Differences Between Multichannel and Omnichannel Management 19
2.4 Limitations To Implement An Omnichannel Strategy 21
2.5 Current State of Omnichannel Management Research 23
2.6 Choice of Framework 25
2.7 Hypothesis formulation 25
CHAPTER 3 - Methodology & Research Design 30
3.1 Research philosophy 30
3.1.1 Ontology and Epistemology 31
3.2 Research Approach 32
3.3 Research Strategy 32
3.3.1 Measurements Part I: Drivers of Omnichannel Usage 33
3.3.2 Measurements Part II: Customers´ Channel Usage 35
3.3.3 Pre-testing of Self-Administered Questionnaire 37
3.4 Research Choice & Time Horizons 38
3.5 Data Collection & Analysis 38
3.5.1 Sample Demographics 39
CHAPTER 4 - Analysis of Data 40
4.1 Factor Analysis 40

4.1.1 Analysis with Product Categories 43
4.2 Cronbach's Alpha Analysis 44
4.2.1 Analysis per Product Category 45
4.3 Model Construction 46
4.4. Regression Results 47
4.4.1 Coefficient of Determination Analysis 49
4.4.2 Analysis per Product Category 49
CHAPTER 5 - Discussion, Implications & Future Research 50
5.1 General Discussion: Hypotheses & Regression Models 50
5.2 Theoretical Implications 53
5.3 Managerial Implications 54
5.4 Limitations 56
5.5 Future Research 58
Conclusion 59
References 60
Appendices 67

Introduction

Improving customer experience is one of the most popular topics in the marketing world. As customer experience impacts customer´s perceptions of a company, i.e. the brand (Hogan, Almquist & Glynn, 2005), improving customer experience has become a major business priority for most companies (Lemon & Verhoef, 2016). As industries become more competitive, managing customer experience is also considered a key task for customer acquisition, retention and development (Neslin et al., 2006), with the potential of creating a competitive advantage for firms (Vanderwerne, 2000). For retailers, delivering a positive customer experience is considered to be essential in order to stay profitable and competitive inside this industry (Grewal, Levy & Kumar, 2009). For many years, the dominant strategy by retailers to deliver a superior customer experience was *multichannel management*, in which retailers offer their products through multiple channels that are managed as independent businesses within a company (Verhoef, Kannan & Inman, 2015; Shen, Li, Sun & Wang, 2018). Under this strategy, retailers expect to enhance customer experience by offering customers more shopping opportunities (Neslin & Shankar, 2009; Zhang et.al, 2010). In return, retailers benefit by expanding their customer base and product offering (Zhang et al., 2010), something that was very convenient for retailers with several product lines (Emrich, Paul & Rudolph, 2015). However, technological advances and changes in customer´s behavior are making multichannel management obsolete (Walker, 2011) and the retail industry is evolving into something new.

The development of digital technology has transformed mobile devices into a major point of interaction between customers and firms (i.e. touchpoint), but it has also changed how customers engage with companies (Verhoef et al., 2015; Walker, 2011). Mobile devices, such as smartphones and tablets, now allow customers to search and purchase products anywhere and anytime, blurring the limits between traditional retail and Internet commerce (Brynjolfsson, Yu & Rahman, 2013). This has enabled customers to interact with multiple touchpoints simultaneously, creating a customer's experience from the whole company rather than a single channel, a difference that now is indistinguishable for customers (Futtrup Kjær, Kjær Jacobsen, Bjerre Herdel, Houlind & Lasrado, 2016; Piotrowicz & Cuthbertson, 2014; Walker, 2011). Furthermore, the eruption of Social Media channels has made customers more likely to be influenced by their peers (Lemon & Verhoef, 2016) and also to engage with companies through this channels (Heinemann & Gaiser, 2015). Under this dynamic environment of constant interaction between

multiple touchpoints, it has become increasingly difficult for companies to control customer interactions (Verhoef et al., 2015), much less manage their customer experience (Lemon & Verhoef, 2016). Due these circumstances, multichannel management is moving towards omnichannel management, a strategy where all offline and online channels and touchpoints are integrated, providing customers a seamless cross-channel shopping experience (Brynjolfsson et al., 2013; Piotrowicz & Cuthbertson, 2014; Rigby, 2011; Shen et al., 2018; Verhoef et al., 2015).

With omni being the Latin word for "every", omnichannel management enables customers to interact with multiple touchpoints simultaneously (e.g. comparing prices at a store with a smartphone), but also to seamlessly change between channels at any moment according to their preferences, moment of the day, situation, product category, etc. (Piotrowicz & Cuthbertson, 2014; Shen et al., 2018; Verhoef et al., 2015). Under this strategy, retailers are able to deliver consistent customer experience across all their touchpoints, which is crucial for customer retention (Li et al., 2018). Now that customers behave in a cross-channel manner, an effective management of customer experience should provide value for customers during the entirety of activities that they perform while they interact with a company, i.e. customer´s journey (Lemon & Verhoef, 2016). Therefore, effective omnichannel management can improve customers´ shopping experience, as they can change seamlessly between channels according to their specific needs while searching, purchasing, using and post-using a product or service (Lemon & Verhoef, 2016; Verhoef et al., 2015).

While omnichannel strategy has been applied to the retail industry, it has also been introduced in other industries such as banking, tourism, financial services, entertainment, communications, manufacturing, and construction (Futtrup Kjær et al., 2016). Nevertheless, despite the relevance in practice that omnichannel management has earned during the last years in different industries, research on the subject is still limited (Verhoef et al., 2015). Omnichannel management is still considered a new concept in the marketing field, where most of the research available focuses on proposing research agendas and challenges for companies (Shen et al., 2018). Given this scenario more research on omnichannel management is needed, especially more empirical analysis to measure its effectiveness. In that sense, this master´s thesis will focus in one key aspect of omnichannel management: cross-channel integration. At the end of their research, Verhoef, Kannan and Inman (2015) questioned if integration and harmonization

of channels was always beneficial, and what should be the level of integration that retailers should strive for. Although this remark is intended for research on retail mix, it can also be applied to channel integration in general. In this regard, Cao and Li (2018) argued that current research on cross-channel integration provide only few insights on what is the right level of integration between channels that managers should pursue. Considering all the limitations that retailers can face to implement an omnichannel strategy (Larke, Kilgour & O'Connor, 2018), it's worth questioning if cross-channel integration could be managed differently by retailers.

So far, research on customers usage of multiple channels has explored what drives a customer´s channel choices (Barwitz & Maas, 2018; Verhoef et al., 2015), and also if these choices change during customer journey stages (Gensler, Verhoef and Böhm, 2012; Konuş, Verhoef & Neslin, 2008; Verhoef, Neslin & Vroomen, 2007). In addition, recent research on omnichannel usage shows that the effects of cross-channel integration can be mediated by external factors such as uncertainty, switching costs, perceived fluency and knowledge of the company (Li et al., 2018; Shen et al., 2018). These examples show at least a tendency of trying to identify the variables that influence customers to engage with multiple channels during their shopping journey with a company. However, there are not much details on how these variables influence the amount of channels that customers use at each stage of their journeys with a company. This question has relevant managerial implications, because it is different to manage cross-channel integration when several channels are mostly used at one stage of customers´ journey, and then customers just a couple of them for the rest of their transactions, than when several channels are being used at every stage of the journey in every shopping cycle. Thus, this master´s thesis will approach cross-channel integration from a different angle by performing a descriptive study. That is, measuring how many channels are currently being used by customers at each stages of their customer journeys within a retail company. By measuring customer´s usage of channels in a determined retail environment, it can provide an accurate description of the omnichannel environment, delivering useful insights for retailers to how manage cross-channel integration in their organizations in order to increase customers´ shopping experience. Therefore, with all the information presented before, the research question of this master´s thesis is:

How drivers of omnichannel services are affecting customers´ usage of channels at each stage of their journeys within a retail company?

By answering this question, other sub-questions will be addressed in order to provide a more complete approach to the subject:

- What is customer experience?
- What is customer journey? How it is related to customer experience?
- What is omnichannel management? How it is related to customer journey?
- What level of cross-channel integration should retailers strive for?

In order to give an answer to all the question above, a literature review will be conducted as a first step to define concepts, identify relevant variables and build the different hypotheses. In order to test these hypotheses, this master's thesis will perform a quantitative research by collect data through the survey method, which later will be tested through a multiple regression analysis. After analyzing the results obtained from the survey, a discussion with managerial implications and insights will be provided, and later conclude with possible future research.

In terms of contribution, omnichannel management is a topic that is still at early stages of research. Therefore, this master's thesis expects to contribute to its literature by analyzing this topic from a different angle. By performing a descriptive research, it is expected to find insights that can have practical use for retail managers trying to improve the shopping experience of their customers. In addition, this master´s thesis can contribute to the literature of cross-channel integration, which it is also considered to be limited (Cao & Li, 2018). Finally, it is also expected to contribute to the literature of customer experience management, as Lemon and Verhoef (2016) conclude on their work that more research on this area is needed as many aspects of it "are void of strong marketing scholarship" (p.89), and omnichannel research has provided some "bright spots" (p.89).

CHAPTER 1 - Literature Review Part I: Definitions

In this master´s thesis, the literature review is divided in two sections. This first section focuses on delivering an academic definition to the main concepts that will be discussed during this study and how these concepts are related to each other. These correlations will be used as the base for the construction of the hypotheses of this master´s thesis, which will be deeply covered in the second part of the literature review (Chapter 2).

1.1 Customer Journey

This concept has been researched in literature with different names and models, but in general it can be conceptualized as a customer's purchase cycle with a company. It involves a set of different activities that customers enact when they are interacting with a company from searching, obtaining and using a certain product or service throughout multiple touchpoints (Dhebar, 2013; Edelman, 2010; Lemon & Verhoef, 2016; Vanderwerne, 2000; Walker, 2011). This journey is usually divided into three different stages of a purchase cycle. The first stage is pre-purchase, where customers become aware of a need and perform activities such as information research and evaluation of options. The second stage is purchase, and as the name suggest, it is the stage where customers pay for the product or service that they selected in the previous stage. Because of this, purchase is considered the most compressed stage from customers´ journey (Dhebar, 2013). The last stage is post-purchase, which encompasses all activities related to consumption to post-consumption. In this last stage, the most common interactions between customers and companies are exchanges or returns of products, complains, feedback, support, delivery, maintenance and even disposal services (Dhebar, 2013; Lemon & Verhoef, 2016). Although post-purchase is the stage with the most activities available for customers to perform (Dhebar, 2013), in actually customers rarely engage in all of them. Additionally, customer journey is defined as cyclic process where the new journey is influenced by the customer's experience in previous cycles, making it different for every customer (Edelman, 2010; Grewal & Roggeveen, 2020; Lemon & Verhoef, 2016; Walker, 2011). As experience grows, customers should use less touchpoints to repeat a purchase or acquire a similar product, due the fact they are already familiar on how the different touchpoints work. Also, because touchpoints can have multiple attributes, it is likely that customers will use the same touchpoints at different or all stages or their journey. As a consequence, customers with positive experiences with a company are more likely to

express loyalty towards the company, making them to have shorter customer journeys in comparison to a customer that is experiencing the brand for the first time or re-discovering it (Edelman, 2010; Walker, 2011).

1.2 Customer experience

Multiple definitions of customer experience exists in current literature. According to Meyer and Schwager (2007), customer experience is an internal and subjective response from customers to any contact with a company, which can happen directly (i.e. purchase and use) or indirectly (i.e. advertisement, news, recommendations from friends, etc.). It also encompasses every aspect of a company's offering, from the quality of customer service to packaging (Meyer & Schwager, 2007). Verhoef et al. (2009) expressed that customer experience in a retail context is "holistic in nature and involves the customer's cognitive, affective, emotional, social and physical responses to the retailer" (p.32). In addition, Verhoef et al. (2009) describe that customer experience is created by elements that the retailer can control (e.g. price, service, assortment, etc.), but also by elements that it can't control (e.g. recommendations of friends). Overall, customer experience will be a result of the total experience with a firm, from the search, consumption and post-sale of a product or service, possibly involving multiple channels (Verhoef et al., 2009). In a more recent study, Lemon and Verhoef (2016) examine that despite the different definitions for customer experience, there is a general agreement between practitioners and scholars that it is a "multidimensional construct that involves cognitive, emotional, behavioral, sensorial, and social components" (p.70). Furthermore, Lemon and Verhoef (2016) argue that the outcome of this evaluation will depend on how customers respond to a firm´s offering during the totality of its customers´ purchase cycle. Finally, Lemon and Verhoef (2016) conceptualize customer experience as the journey that customers have with a firm over time during a purchase cycle across several touchpoints. The impact of customers experience for a company goes beyond a single purchase cycle, as it can have an effect on its reputation for a longer period. Hogan, Almquist and Glynn (2005) argued that what ultimately defines a brand is customers' experience. According to Hogan et al. (2005), a brand is "the sum of the customer´s experiences with the product or company" (p.12), where all direct or indirect experiences add or subtract to the overall evaluation by customers. These experiences should be analyzed across the full cycle of customers´ relationships with a company: before, during and after of product sales (Hogan et. al., 2005), which makes customer experience a cyclical process. In summary, customer journey refers to the

different set of activities that customers do to acquire a certain product or service, from research to disposal, and customer experience is the subjective and individual evaluation of that total cycle.

1.3 The Relevance of Customer Experience in Customers´ Journey

Customer journey can be used as a method to understand and measure customer experience (Lemon & Verhoef, 2016), and customer experience shape customers evaluation of a company (Hogan et al., 2005). In addition, positive customer experiences while shopping influences the likelihood of choosing the same channel both in the next stage of the journey and in a next purchase cycle (Gensler et al., 2012). Therefore, understanding both terms over time becomes a crucial task for companies (Lemon & Verhoef, 2016).

Identifying key activities during customer's journey to provide a superior customer experience was also argued by Hogan et al. (2005). In their work, Hogan et al. (2005) argue that firms need to identify and concentrate their investments on touchpoints that can generate the biggest impact on customer experience, both positive and negative. As Hogan et al. (2005) explain, some touchpoints can have a minor positive impact on customers´ experience while simultaneously having a huge negative impact on it if these touchpoints do not meet customers´ basic expectations or simply do not work. Examples of these touchpoints are ATMs, baggage drop-offs at airports, confirmation emails, etc. Lastly, Hogan et al. (2005) stated that firms that try to cover all touchpoints can suffer from inefficient use of resources and difficulties to coordinate actions. Finally, Dhebar (2013) takes a different approach on how customers evaluate their experiences with a company. According to Dhebar (2013), customers´ overall experience with a company cannot be measured by the sum of the different individual experiences in each touchpoint. Instead, it should be measured from a holistic perspective because there are interdependencies between touchpoints involved in a customer's journey, independent of its stage. During a customer's journey with a company, there will be interactions with several touchpoints, and some of these touchpoints at multiple activities and stages. Thus, when customers move one from stage to the next one their evaluation on touchpoints is updated, expecting at minimum the same level of service compared to the previous stage (Dhebar, 2013). Therefore, if experiences between stages are related, one bad experience during a customer journey can ruin the overall experience with the company for a customer, forgetting the positive experiences during the journey (Dhebar, 2013).

1.4 Multichannel Retail Management

With the increasing relevance of customer experience to attract and retain customers, companies are in constant need to develop strategies that are able to provide a superior service for their customers. For most retailers, the dominant strategy was multichannel management, where a firm sells its products or services through multiple channels (Zhang et al., 2010). Under this strategy each channel operates as an independent entity inside the company (Verhoef et al., 2015; Shen et al., 2018), meaning that customers would find different assortments, prices, deals, etc. in each channel (Futtrup Kjær, 2016). By doing so, retailers expected to cover different customer segments, where each channel was focused towards a specific target group (Neslin et al., 2006; Walker, 2011). The objective behind this siloed strategy is to improve customer experience by enabling customers to use the channel that fits them better according to their specific needs (Neslin & Shankar, 2009; Zhang et.al, 2010). Therefore, multichannel management seeks to improve customer experience by expanding customer options, where they can purchase products in the channel that is more convenient for them.

1.5 Omnichannel Retail Management

While multichannel management treated each channel as an independent business, omnichannel management does the opposite. Defined by Verhoef et al. (2015) as "the synergetic management of the numerous available channels and customer touchpoints, in such a way that the customer experience across channels and the performance over channels is optimized." (p.176), Omnichannel Management represents a new era for retailers. Under this strategy all touchpoints and channels of a company are integrated, sharing common goals and objectives (Verhoef et al., 2015), where firms look to meet customers at all stages of interaction (Futtrup Kjær et al., 2016). This cross-channel integration creates synergies between the different channels, where the complementary attributes of each channel enhances customers experience (Cao & Li, 2018). In return, customers are enabled to simultaneously use multiple channels, but also to seamlessly change between all the available options that a company has to offer while shopping (Li et al., 2018). The objective behind this strategy is to deliver customers the same shopping experience regardless the channel they use, encouraging customers to perform their total customer journey within the company (Lemon & Verhoef, 2016; Shen et al., 2018). And with customers facing almost unlimited options at all stages of a customer journey, it allow companies to offer

personalized services, creating value for them and customers (Barwitz & Maas, 2018). The most common examples of omnichannel practices and options are presented in table N°1. Therefore, omnichannel management seeks to improve customers experience by making it easier for customers to complete their shopping process according to their specific needs or preferences.

Table N° 1 - Examples of Omnichannel Practices

Shoowrooming: Search and compare products at a physical store to later purchase them online
Webromming: Search and compare products online to later purchase them at a physical store
Click&Collect: Order a product online and collect it from a physical store
Purchase a product in a store and have it directly shipped to a physical address
Purchase a product online, return it at a physical store

1.6 Customer Journey in Omnichannel Retail Management

Even though implementing an omnichannel strategy is a complex process with several challenges to overcome, this is the new strategy that retailers should follow to achieve a competitive advantage (Larke et al., 2018). Given that customers now no longer interact with companies from a channel perspective, customer experience needs to be managed through the touchpoints that customers use at each stage of their customer journey with a company (Walker, 2011). With focus on touchpoints over channels, firms rather than focusing on transactions and deliveries have to focus in helping consumers at any moment of their customer journey (Brynjolfsson et al., 2013). To do so, companies need to move towards customers´ environment in order to understand every space of customer-firm interaction (Futtrup Kjær et al., 2016). This closer relationship with customers´ journey by being at the service of customers at all times is why omnichannel management is viewed as a concierge business model (Brynjolfsson et al., 2013). As omnichannel management promises a seamless customer experience, and customer experience being customers´ evaluation of a journey with a company, an effective omnichannel strategy is determined by an accurate and deep understanding of both concepts by companies (Lemon & Verhoef, 2016; Verhoef et al., 2015). Nevertheless, paying attention to customers´ journey did not start with omnichannel management.

One of the most referenced papers on multichannel management is the work by Neslin et al. (2006). In their framework on multichannel customer management, Neslin et al. (2006) mixes customer´s and

company's decision processes together arguing that these are correlated. According to Neslin et al. (2006), after customers have a need recognition, their shopping process continues with information search, then purchase, and finally towards post-purchase services. On each stage, customers have to choose between a set of different channels from different companies, where their channel selection is determined by their own perceptions and preferences. However, their decisions are also influenced their by the evaluation of previous experiences with the company, which guides the next cycle of purchase (Neslin et al., 2006). Because of this, Neslin et al. (2006) argued that all channel strategies by a firm, including channel coordination (price, promotions, design, service, etc.) and resource allocation (channel selection and investments), should be determined in terms of the value that can be created for customers. With multichannel management making companies to adopt a customer-centric view (Neslin et al., 2006), understanding customers´ channel preferences at each stage of their customer journey became an essential task. The papers from Verhoef et al. (2007) and Konuş et al. (2008) both studied customers´ channel preference at research and purchase stages. Verhoef et al. (2007) concluded that customers use different channels at different stages of their journey because of channel attributes. This means that customers perceive that some channels have better attributes for their search preferences while other channels are better suited for their purchase preferences. As an example, Verhoef et al. (2007) mention that some customers consider the Internet as a good channel for searching information about a product, but stores are better channels for testing it. Regarding Konuş et al. (2008), the results from their study provide evidence that the behavior of multichannel consumers changes according to the product category. For example, customers are more likely to only use physical stores to buy clothes, but they are more likely to use multiple channels for electronic products (Konuş et al., 2008). Finally, Gensler, Verhoef and Böhm (2012) studied customers´ channel choices across all three stages of customer journey in a multichannel context. The results from Gensler et al. (2012) concluded that channel experience and spillover effects influence customers´ channel choice over channel attributes, contrasting Verhoef et al. (2007) who argued that channel choice was mostly attribute-based.

What has changed is how customers interact with companies to complete the stages of their journeys with companies. Verhoef et al. (2007) argued that because customers perceived different attributes for each channel, a customer could use a different channel for each stage of their journey with a company. As an example, Verhoef et al. (2007) stated that a consumer could get information about prices online so

when he/she goes into a store he/she can achieve a better deal through negotiation or be better informed of alternatives. But nowadays with instant access to information from a smartphone, consumers can be at a physical store and compare products and prices at the same time, merging the previous activities into one and accelerate a customer's journey. In addition, as cross-channel integration includes offline and online channels, customers can start or continue their shopping process from anywhere and at any moment of the day (Brynjolfsson et al., 2013; Piotrowicz & Cuthbertson, 2014; Rigby, 2011). Thus, cross-channel integration becomes the cornerstone of omnichannel management, considered a key element for customer retention (Li et al., 2018). In that sense, Li et al. (2018) studied how customers react to cross-channel integration in omnichannel retailing. In specific, Li et al. (2018) looked if there were elements that mediate the effects of cross-channel integration on customers. Li et al. (2018) concluded that customer´s perceived uncertainty and switching costs from a company partially mediate the effect of cross-channel integration in customer retention negatively. On the other hand, identity attractiveness, the degree to which customers identify with the attributes of a brand, also partially mediates this relationship but positively. Li et al. (2018) also concluded that these three elements fully mediate the effect of cross-channel integration on customer's interest in alternative channels.

As a consequence, customers´ journeys have become more complex and individualistic, making the management of customer experience more challenging for companies, especially retailers. In that train of thought, Barwitz and Maas (2018) studied customer´s channel choices under an omnichannel strategy. The results of the research by Barwitz and Maas (2018) show that omnichannel users have an individualistic use of channels, but this behavior is driven by similar patterns that affect other individuals. This means that even though customers´ journeys are heterogeneous, these are driven by common factors such as utilitarian, hedonic, relational and cost saving benefits (Barwitz & Maas, 2018). In conclusion, any retailer that wants to implement an omnichannel strategy needs to have a deep understanding of customer journey. Both concepts are highly related, and a successful omnichannel strategy will be the result of correct interpretation of customers´ journeys within a company.

CHAPTER 2 - Literature Review Part II: Background & Developments

In this second part of the literature review omnichannel management is reviewed in detail, analyzing its transition from multichannel management, its limitations and current state of research. During this analysis, it will be covered how channel integration has evolved over the years, and what are the theoretical implications for customer experience and customer journey. At the end of this chapter, the constructed hypotheses of this master´s thesis are presented as a result of the combined analysis in both literature review chapters.

2.1 Origins of Multichannel Management

Like many things, this strategy was created as a consequence of technological development. The origins of multichannel retail management can be traced down to mid 90's, when the Internet emerged as a sales channel for companies (Brynjolfsson et al., 2013; Zhang et al., 2010). Although many retailers were already selling their products through multiple channels, mostly brick-and-mortar stores and catalogs, the disruption caused by the Internet as a new sales channel change the environment for retailers. Now store-based retailers were able to expand their market by reaching customers beyond their physical locations, as well as expand their total product offering by complementing their online and offline retail mix (Zhang et al., 2010). In addition, online shopping introduced new features such as ratings and reviews of products by other consumers, which provides additional information for customers to compare products (Brynjolfsson et al., 2013). Such features, which are common in today's market, represented a new source of information for customers that that previously was limited to own experiences and/or recommendations from friends and family. With more options and information available to acquire products and services, consumer's behavior changed and online channels gained dominance (Verhoef et al., 2015). As a consequence, this forced many retailers to change their traditional business models and change towards a multichannel management strategy (Verhoef et al., 2015). In addition, some studies concluded that multichannel customers spend considerably more money on average than a regular customer (Neslin et al., 2006), making it a more popular strategy. By 2005, it was estimated that around 40% of retailers in the US were selling their products through three or more channels (Neslin & Shankar, 2009), exemplifying how common this practice became.

In terms of channel integration, as channels are managed as separate businesses inside a company, integration between channels only had very limited development (Verhoef et al., 2015). A study by Bendoly, Blocher, Bretthauer, Krishnan, and Venkataramanan (2005) argued that integration of online and offline channels could provide long term benefits for a company. After analyzing some retailers that implemented integrated strategies, such as return of online orders at stores, online orders and in-store pick up, Bendoly et al. (2005) concluded that channel integration is related to higher customer retention and loyalty. According to Bendoly et al. (2005), when customers perceive high levels of channel integration, they are less likely to seek alternatives option for competitors. Nevertheless, despite this promising benefit most of channel integration in multichannel management has been focused on assortment mix and elimination or addition of channels (Verhoef et al., 2015). On that note, Emrich, Paul, and Rudolph (2015) compared the benefits of full, asymmetrical or zero assortment integration across a company´s channels. The results of the study by Emrich et al. (2015) showed that zero integration is less convenient that full or asymmetrical integration. However, asymmetrical integration is more beneficial for retailers with limited line products and full integration is stronger for retailers with broad lines of products (e.g. store-department stores). On the other hand, Pauwels and Neslin (2015) analyzed the revenue impact of adding brick-and-mortar stores to a firm that already has catalogs and an online channel. With data provided by an unspecified firm, Pauwels and Neslin (2015) concluded that a firm's revenue increased 20% due to the addition of the physical store. Even though returns and exchanges also increased, the increase in purchases overlapped this effect, and the cannibalization on Internet sales is minor (Pauwels & Neslin, 2015). In conclusion, multichannel management represented a business strategy with focus on providing positive customer experiences rather than just selling products. However multichannel strategies are cost-intense and require high investments (Emrich et al., 2015; Zhang et al., 2010). Therefore, implementing channels as separate business within a company would have been easier to execute and control than a coordinated strategy across channels.

2.2 From Multichannel to Omnichannel Retail Management

Over the years, the proliferation of new channels (e.g. kiosks and home shopping networks) created new challenges for retailers, as many customers were now multichannel users (Konuş, Verhoef & Neslin, 2008; Verhoef, Neslin & Vroomen, 2007). In addition, as multichannel practices were growing inside the retail industry (Neslin & Shankar, 2009), managing customer experience became a crucial task for

retailers. With increasing competition, the only way to compete and stay profitable in this industry was through improving customer´s shopping experience, no matter how tiny the detail could be (Grewal, Levy & Kumar, 2009). However, recent advances in technology and changes in social behavior were about to bring new challenges for retailers.

At the beginnings of the 2010 decade, connectivity exploded as a consequence of the increasing popularity of e-commerce and the expansion of mobile devices (Walker, 2011). In a period of only three years, US customers went from only a third that were buying products online to over 60%, and more than half of US adults had two or more devices connected to the internet (Walker, 2011). As customers engaged increasingly more with online activities and digital devices, it was expected that in the short term e-commerce sales would represent 15% to 20% of total global retail sales (Rigsby, 2011). But the increasing adoption of mobile devices, especially smartphones, was about to change how customers engaged with companies (Rigsby, 2011; Verhoef et al., 2015; Walker, 2011). The arrival of mobile devices provided abundance of information and almost perfect price transparency available for customers (Rigby, 2011), which pressured companies to provide accurate product information and benefits (Brynjolfsson et al., 2013). And thanks to their portable size, the use smartphones became massive, were customers carried these devices with them at all times as personal accessories (Shankar, Venkatesh, Hofacker, & Naik, 2010). But most importantly, mobile devices introduced a new feature for customers that was not available before the simultaneous use of channels. Thanks to their ability to browse the web at any moment or time of the day, the use of smartphones expanded from just calling, texting and checking the email (Heinemann & Gaiser, 2015). Now customers were able to use their smartphones for shopping, compare prices, search product information and reviews while they are shopping at physical store, and also to purchase any product they wanted without the barriers of time and place (Brynjolfsson et al., 2013; Piotrowicz & Cuthbertson, 2014). With customers adopting mobile technology to engage across touchpoints, and barriers between offline and online channels being blurred, customers no longer interact with companies from a channel perspective (Walker, 2011). By interacting with multiple touchpoints, customers experience is now influenced by all interactions with a company (Futtrup Kjær, 2016). And given that during their customer journey they interact with multiple touchpoints, customers now expect a consistent customer experience at all interactions (Piotrowicz & Cuthbertson, 2014). In

consequence, smartphones gain relevance as major touchpoint, upgrading its role from a communications medium to an interactional medium (Heinemann & Gaiser, 2015).

Now that customers were changing their shopping behavior, managing channels as separated businesses was becoming obsolete for retailers (Rigsby, 2011; Walker, 2011). Not only customers started using multiple channels during their customer journey, but also multiple channels simultaneously (Verhoef et al., 2015; Shen et al., 2015). In addition, during this period is when the use Social Media channels expanded and changed the way customers interact between each other. For many years, Social Media channels gain popularity in society as a tool for their users to share information about their likes and whereabouts with their contacts. But with the help of mobile devices, now customers could use Social Media channels to share details or situations of their life at any moment, something that translated to their shopping behavior (Heinemann & Gaiser, 2015). This brought two major consequences. Firstly, customers started to engage with companies at any shopping situation through Social Media channels, expecting non time-delayed responses, similar to what they get from their peers (Heinemann & Gaiser, 2015). Secondly, with the ability to rapidly communicate their experiences, customer-to-customer interaction gain relevance during the shopping process. Customer experience became increasingly susceptible to influences through social interactions, especially by a customer´s peers (Lemon & Verhoef, 2016). With a recent survey showing that 43% of Internet users around the globe used social media channels to search products online (GlobalWebIndex, 2019), is not a surprise that Social Media channels went from pure communication space to a direct sales platform (Heinemann & Gaiser, 2015).

This new dynamic scenario was a nightmare for retailers (Rigsby, 2011). For one side the proliferation of multiple touchpoints was making it more difficult for retailers to manage customer experience as customers were interacting with them simultaneously (Lemon & Verhoef, 2016). On the other side, retailers lost control of what touchpoints and interactions customers are using during their customer journey, as now customers have better or more information on the different options, even outside the company (Verhoef et al., 2015). Therefore, these changes in the environment forced retailers to change their business model to one that allowed them to quickly respond to customer´s demands. Companies now need to interact with customers through touchpoints and not channels (Walker, 2011). In order to stay competitive, retailers need to adapt their strategies to one that allows customers to seamlessly change

between channels (Rigsby, 2011; Shen et al., 2011), no matter where customers interact with the company (Futtrup Kjær, 2016). In conclusion, omnichannel management was born due the emergence of a dynamic environment where customers started to reach to companies through multiple platforms. This required a faster and more personalized services by retailers, as now customers have more information and options to acquire products and services with low switching costs, making firms to move to customers environment. To achieve this, firms needed to move from single channel management to cross-channel management.

2.3 Main Differences between Multichannel and Omnichannel Management

The transition from multichannel towards omnichannel management have changed how retailers conceive their businesses and how they should interact with their customers. The most notorious difference is the level of integration across channels. The integration of all channels and the ability to provide seamless cross-channel experiences are the heart of omnichannel management, and these attributes make this strategy distinctive from multichannel management (Shen et al., 2018). While multichannel management focuses on intensity by being present in several channels, omnichannel management strives for creating synergies between channels, facilitating customers' interactions with the company (Li et al., 2018). Even though synergies between channels was already acknowledged in multichannel research, the primary approach was to create lock-in strategies to keep customers in the same channel during their journey with the brand (Verhoef et al., 2007). This is because cross-channel usage was considered a threat, as customers might change to the competition in the process (Verhoef et al., 2007). Now, under an omnichannel management channels and touchpoints have complementary actions between each other to provide an integrated and consistent customer experience (Shen et al., 2018; Verhoef et al., 2015). Therefore, channels collaborate towards a common goal instead of compete between each other. This unveils another important difference, the coordination between the different departments of a company. Delivering an integrated and consistent customer experience is only possible when objectives are aligned, actions are coordinated and data is shared between all departments of a firm (Li et al., 2018; Mirzabeiki & Saghiri, 2020). As it was exposed previously, in multichannel management channels are conceived as separate business within a company, where each channel focuses on their objectives (Shen et al., 2018; Verhoef et al., 2015). In addition, it also reflects how both strategies define and manage touchpoints. Under a multichannel management each channel represents a touchpoint

between a customer and the company when there is a two-way interaction (Neslin et al, 2006), making a division from other touchpoints that do not allow a customer-firm interaction. On the contrary, under an omnichannel management all touchpoints are considered. Touchpoints can be either be one-way or two-way interaction between customers and brands, with superficial or intense exchanges, and each touchpoint has a different role that contributes to the final objective, even if it is only communicational (Brynjolfsson et al., 2013; Shen et al., 2018; Verhoef et al., 2015). This reinforces that touchpoints under an omnichannel strategy need to work collectively in order to deliver a holistic customer experience.

As cross-channel integration becomes a prerequisite for omnichannel management, it is also the cornerstone for companies to achieve customer retention (Li et al., 2018). Distinctive from multichannel management, customers are encouraged to complete their customer journey within a company because of the synergies created by the cross-usage of channels (Cao & Li, 2018). This last point is reinforced by the research of Shen, Li, Sun and Wang (2018), where the authors study the relationship between channel integration quality and customers´ omnichannel usage. The results by Shen et al. (2018) show that channel integration quality, the ability to deliver a seamless and consistent customer experience across channels, is positive correlated with perceived fluency across channels by customers. The more customers perceive that there is a fluent use of channels, there is a positive correlation with omnichannel usage (Shen et al, 2018). However, Shen et al. (2018) also shows that its effect are mediated by internal customer experience (experience with the same company) and external customer experience (experience with other companies). According to Shen et al. (2018), the more a customer interacts with the same company, perceived channel integration quality becomes less relevant, whereas the opposite happens when a customers have experiences with other companies. Therefore, these attributes give omnichannel management a considerable advantage over multichannel management. Omnichannel management allow firms to enter into customers' environment to engage with them, in contrast to multichannel management where firms expect that customers will approach to them. However, achieving the required level of coordination and synergies between channels can be challenging for many retailers.

2.5 Limitations to Implement an Omnichannel Strategy

Omnichannel strategy can bring multiple benefits to retail companies, but this strategy has several challenges. Customers expect a consistent customer experience across channels, independent of the moment of the day or product category (Brynjolfsson et al., 2013; Shen et al., 2018; Verhoef et al., 2015). However, not all companies are capable of implementing or achieving a unified customer experience across different channels (Larke et al., 2018). For example, cross-channel integration can force companies to change several aspects of their business, such as front-end and back-end operations, supply chain management and even its organizational structure (Cao & Li, 2018). With this in consideration, it is imperative to check some of the limitations that can stop or restrict companies to deliver a consistent customer experience.

One of the key characteristics of omnichannel strategy is the seamless integration of online and offline channels. But this integration goes beyond product information and prices. It also involves the integration and coordination of processes such as customer services, transactions, logistics and order fulfillment (Mirzabeiki & Saghiri, 2020). For example, only in terms of supply management a transition towards omnichannel management requires several adjustments in terms of inventory management, deliveries, stock flow, packaging and merchandise assortment between channels (Larke et al., 2018). As the same product can be purchased in different channels, a lack of coordination on how to manage stock across channels affect a company's ability to deliver and exhibit their products to their customers. This implies that objectives must be aligned between all departments of a company, otherwise each one will focus in their own goals and objectives (Gyrd-Jones, Helm & Munk, 2013). Furthermore, a lack of coordinated goals across department can also lead to a scenario where channels compete directly between each other (Piotrowicz & Cuthbertson, 2014). If channels are not optimized to work together, it becomes difficult for customers to use these touchpoints simultaneously, which can turn into an interruption during their customer journey.

With that considered, the processes must be aligned between all the components of a company, data management becomes a key task for firms. Management of data is crucial to keep track of how channels are performing and customers are interacting with a company, enabling coordination between departments such as marketing, sales and logistics (Mirzabeiki & Saghiri, 2020). However, the ability to

manage data is restricted to a firm´s available technology and IT systems (Cao & Li, 2018), which seems the case for many companies. For example, a very common problem that omnichannel companies face is the lack of integration in pricing and promotions across channels (Piotrowicz & Cuthbertson, 2014). The gap in price integration was studied by Cavallo (2017), who after analyzing data from 56 companies across 10 countries discovered that online and offline prices are identical 72% of the times. As the study by Cavallo (2017) gathered information from several companies across 6 continents, it is safe to argue that this is a problem for retailers worldwide. Technological restrictions can also affect a company's ability to collect data from its customers, which is crucial to provide them a personalized service in terms of product offering and price optimization (Piotrowicz & Cuthbertson, 2014). To achieve that personalization data needs to be collected and integrated from several platforms (Futtrup Kjær, 2016), which can be challenging if technological resources are not designed or able to do it.

All these technological tasks represent a major challenge for any company. Hence, a firm implementing an omnichannel strategy needs to have the financial resources to overcome its own limitations. As Larke et al. (2018) argues, adopting an omnichannel strategy is a process that requires numerous complex challenges that not all companies are capable to invest on. For example, the integration of channels should increase the volume of sales, thus firms also need to develop the infrastructure that can support and coordinate this increase in stock traffic across channels (Larke et al., 2018). Retailers will also need to invest in upgrading their physical stores as their role has changed (Brynjolfsson et al., 2013), and also invest time and resources to train their sales associates that provide in-store customized services with tools such as tablets (Verhoef et al., 2015). In addition, data management involves data storage, standardization and also automatization (Mirzabeiki & Saghiri, 2020), which also requires high investments in equipment and labor-training (Cao & Li, 2018). On that note, small companies are more likely to be lag behind in comparison to big companies. Success of omnichannel management is related to economies of scale, and big companies have more orders, customers, data and, ultimately, financial resources (Futtrup Kjær et al., 2016).

Therefore, to achieve coordination across channels and departments, technological and financial resources are needed to implement all the necessary changes to a company's structure. But even with enough resources, the process needs to be supported from top management, which is not always the case.

Walker (2011) indicated that many companies are struggling to manage multiple channels as managers have outdated perceptions about customer engagement across channels. On that note, Rigby (2011) stated that some limitations for traditional retailers to adopt an omnichannel strategy are related to the lag of computer literacy by their senior managers. According to Rigby (2011) senior managers are reluctant to engage in new technologies for their operations, creating a technophobic culture across the industry. As Rigby (2011) continues, this creates and additional problem, as it deters young and tech savvy talent from applying to the company. Rigby (2011) also argues that the absence of computer literacy is not the only problem among senior retailers. Their behavior also makes them to try to solve new problems with old solutions, i.e. reduce expenses and sacrifice customer service (Rigby, 2011), which is the opposite of what they should do. How traditional business thinking is limiting business in general was also argued by Edelman (2010). The author stated that after analyzing several marketing budgets he discovered that 70% to 90% of them goes to advertisement and promotions, trying to pursue customers when they are evaluating their options. But Edelman (2010) argues that actually customers are more influential during enjoyment and bonding stages, i.e. at stages of consumption and post-consumption. This last example shows how outdated business management can lead to inefficient allocation of resources, making a company burn budget unnecessarily. These last examples shows that firms adopting an omnichannel strategy need to be aware that several changes will happen, also managerial ones. To deliver a unified and superior customer experience, all the elements of a firm must be aligned.

2.6 Current State of Omnichannel Management Research

Despite the limitations that can appear over time, omnichannel management has been praised as the new business strategy for retailers to follow to achieve a superior customer experience (Brynjolfsson et al., 2013; Rigsby, 2011). This has also been a reflection on the increase of empirical studies on omnichannel management. Even though Shen et al. (2018) argued that most studies on omnichannel management are focused on proposing research agendas and theoretical framework, studies testing the effectiveness of omnichannel strategies have appeared more constantly over the last couple of years. For example, Fisher, Gallino and Xu (2019) tested the value of faster deliveries of online products in an omnichannel context. Fischer et al. (2019) showed that faster deliveries increases the revenue of a company, as the increase in sales overcomes the cost of delivery, having positive impact on the use of omnichannel services. Their results also showed that when online sales increase, there is a spillover effect on offline stores. Following,

Flavián, Gurrea and Orús (2020) investigate the influence that webrooming and showrooming have on customer experience. In this study, Flavián et al. (2020) conclude that these services provide time-saving benefits that customers appreciate. Akturk, Ketzenberg and Heim (2018) and Yang and Zhang (2020) do something similar with firms performing ship-to-store services. The results from Akturk et al. (2018) showed that ship-to-store can decrease the sales from a firm´s online store, whereas Yang and Zhang (2020) discovered that this service can lead to negative profits when it doesn't expand significantly a firm´s base of customers. Lastly, McLean, Al-Nabhani and Wilson (2018) studied how customer experience is affected by a retailer's own mobile applications, which are also considered relevant touchpoints under omnichannel management (Verhoef et al., 2015). According to McLean et al. (2018), the results from their research highlights that customers are aware of how much time they should spend to complete an activity in an app. Because of this, McLean et al. (2018) argues that any interaction that customers perceive that takes longer than it should, it turns into a negative customer experience with a company.

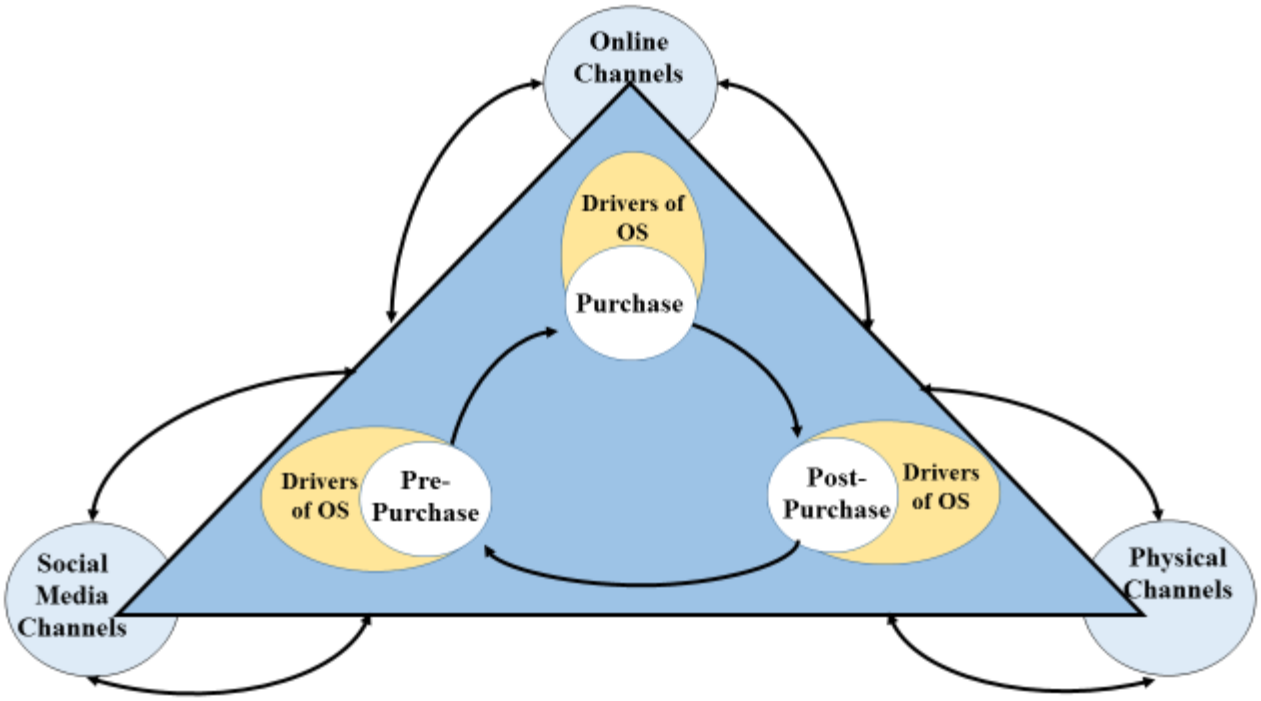
Nevertheless, more research on omnichannel management is still needed. Larke et al. (2018) argues that more studies are needed to determine how much a brand can leverage the process of implementing an omnichannel strategy and build trust for its customers. Shen et al. (2018) argue that generalization of the results from their experiment should be managed with caution, as they use data from a single country (China) and from one type of Retail Company (catering). Therefore, a similar study but with data across cultures and a different type of retail company (e.g. store-department stores) should contribute to this issue. Verhoef et al. (2015) concluded their research by proposing nine research questions on three specific domains of omnichannel management that they consider relevant to be studied. In their analysis over retail mix across channels, Verhoef et al. (2015) questioned if channel integration was always good for companies. This is aligned with Cao and Li (2018) research, were the authors declared that despite the increased interest on cross-channel integration, theoretical and empirical studies on this subject are still limited. Even more, Cao and Li (2018) argue that current studies offer few insights for managers to determine the correct level of cross-channel integration. Therefore, all these examples show how extensive this topic can be, and as it continues to gain practical relevance more research will appear in near the future.

2.6 Choice of Framework

Given the need to understand and manage customers´ experiences with a company throughout their individual journeys, Grewal and Roggeveen (2020) developed a framework called Customer Journey Management (CJM), which is adapted to this master´s thesis to construct the different hypotheses. Similar to Lemon & Verhoef (2016), the CJM framework uses customer journey as a tool to measure and manage customer experience. Aligned with customer journey literature, at each stage of the journey customers face behavioral, cognitive and emotional responses that affect their decisions during the stage and possibly the next ones (Grewal & Roggeveen, 2020). With customer journey dynamics at the center, the CJM framework establishes that there are external factor that also influence customers decisions, including technology, product offering, shopping atmosphere, demographic factors, etc.

With all the input from the CJM framework, an adapted framework that fits the focus of the research is created. As the focus of the study is to measure how drivers of omnichannel services are affecting the amount of channels that are being used by customers at each stage of their journeys within a company, these drivers need to be included in the model. The findings by Gensler et al. (2012) demonstrate that drivers that influence customers´ channel choice change according to the stage of customers´ journey. In addition, thanks to the findings by Barwitz and Maas (2018), it can be assumed that main drivers of omnichannel services can apply for most customers. Therefore, drivers of omnichannel services are the internal factors that influence customers' decisions at each stage of their journey within a company. Given that internal influences is related to customers´ perceptions and beliefs, drivers of omnichannel services are also follow this definition. Regarding external influences, the scope of different channels that a given company possess are incorporated as the external factors that influence customers´ decision during their journey. Specifically, three scope of channels are incorporated: online channels, physical channels, and Social Media channels (Verhoef et al, 2015). A representation of this adapted model is presented in figure N°1, where drivers of omnichannel services are represented as "Drivers OS".

*Figure N°1. Adapted Framework for Hypothesis Construction**



**Adapted from "Understanding Retail Experiences and Customer Journey Management" by Grewal & Roggeveen (2020), p.6.*

2.7 Hypothesis Formulation

The first step to construct the hypotheses is to determine the dependent variable. Given the focus of this master´s thesis, the dependent variable Customers´ Channel Usage (CChU) is created and defined as the intensity of channel usage by customers during their journeys within a company. The reason to define the dependent variable in terms of intensity of usage is due the assumption that a customer that uses 5 channels at each stage of their journeys is not different from a customer that uses 7 channels at each stage of their journeys within a company.

The following step to build the hypotheses is to determine which drivers of omnichannel services are necessary to include in the analysis. In that sense, a clear driver of omnichannel services is frequency of purchases by customers. As it was mentioned before, Pauwels and Neslin (2015) demonstrate in their research that integration of offline and online channels increases the frequency of purchases due the increased availability of products. Furthermore, Pauwels and Neslin (2015) also demonstrate that channel

cannibalization is minimum, suggesting that customers continued interacting with both online and offline channels. These findings are consistent with the research by Herhausen, Binder, Schoegel and Herrmann, (2015), who argued that integration of online and offline channels generate synergies between channels instead of channel cannibalization. Although both Walker (2011) and Edelman (2010) argued that loyal customers will eventually have shorter journeys using fewer touchpoints, current studies suggest that even most loyal customers consider alternatives from competitors before purchasing (Li et al., 2018). In addition, based on the research by Vanderwerne (2000), if several customers frequently purchase products from the same company there is an indication that that company is providing value for customers during the totally of their journey with them. Regarding how frequency of purchase influences CChU at each customer journey stage, Gensler et al. (2012) concluded that positive experiences while using a channel increases the likelihood of keep using the same channel in the next stage of the journey with a company. Additionally, Dhebar (2013) argues that after a customer experiences a channel in one stage, the evaluation of that channel is updated in the next stage, becoming more important. Given that Shen et al. (2018) measured frequency of omnichannel services, the analysis will use the same name that the authors defined for this variable. Therefore, with all the information presented before, the hypothesis number one is:

H_1: Omnichannel Service Usage is positively correlated with Customers´ Channel Usage at all stages of customer´s journey, and its correlation is more significant at each following stage.

Going back to the findings from Shen et al. (2018), their research provide more additional drivers of omnichannel services. According to the results by Shen et al. (2018), perceived fluency is positively correlated with omnichannel service usage, explaining more than half of its variance. Thus, it is necessary to measure the relationship between CChU and perceived fluency, which was defined as "the extent to which customers feel cross-channel experience natural, unhindered, and continuous" (Shen et al., 2018, p.64). As perceived fluency is customers´ perceptions of the overall omnichannel service, this variable is a construct from other variables. From the variables that Shen et al. (2018) studied that affect perceived fluency, three drivers can be extracted and defined: Channel Knowledge, Fluent Transactions and Consistency of Content. The last two drivers can also be deducted from the omnichannel literature that has be reviewed so far, thus Channel Knowledge will be defined first. Shen et al. (2018) argues that

awareness of channel options and their attributes facilitates the transition between channels for customers. Thus, Channel Knowledge will be defined as customers´ awareness of all channel options that a company has and what are their attributes. Regarding the other two variables, based on the literature reviewed so far (Brynjolfsson et al., 2013; Piotrowicz & Cuthbertson, 2014; Verhoef et al., 2015) Fluent Transactions in this thesis is defined as customers´ perception that they can change between channels and stages seamlessly. In the case of Consistency of Content, this variable is defined as customers´ perception that all channels and touchpoints from a company provide the same information. With all three variables defined, the following hypothesis can be formulated.

Going back to Gensler et al. (2012), if positive channel experiences neutralizes the effect of channel attributes in customers´ channel choice, Channel Knowledge should not have a relevant relationship with CChU, independent of its value. Furthermore, if Channel Knowledge facilitates the transition between channels, it is quite similar in functionality with Fluent Transactions. However, the same findings by Gensler et al. (2012) suggest that customers´ channel choices at purchase stages shift towards offline channels because they prefer a more personal, human interaction experience. From this finding it can be assumed that at purchase stages Customers´ Channel Usage is related to the channels that provide them more safety that the purchased product will match its expectations. Thus, the more a customer know its channel options and how to use them, there should be a positive relationship with CChU. Therefore, hypothesis number two is:

H_2: Channel Knowledge is positively correlated with Customers´ Channel Usage only at the purchase stage.

In the case of Fluent Transactions and Consistency of Content, these are two aspects that customers expect every time when they interact with omnichannel services, therefore when these aspects do not meet customers´ expectations it generates a negative experience (Brynjolfsson et al., 2013; Piotrowicz & Cuthbertson, 2014; Verhoef et al., 2015). Given that customers at pre-purchase stages customers are gathering information before purchasing a product (Lemon & Verhoef, 2016), both Fluent Transactions and Consistency of Content should be have a positive relationship with CChU at pre-purchase stages. On the same train of thought, if customers have strong perceptions that their journey is fluent, seamless and

with consistent information across channels, customers should be less likely to engage in post-purchase activities. Although some authors consider that post-purchase can be the longest stage of the cycle (Lemon & Verhoef, 2016), the majority of post-purchase activities can be related to negative experiences, such as returns, exchanges, failures, assistance and even termination (Dhebar, 2013). With that in consideration, hypothesis number three and hypothesis number four are:

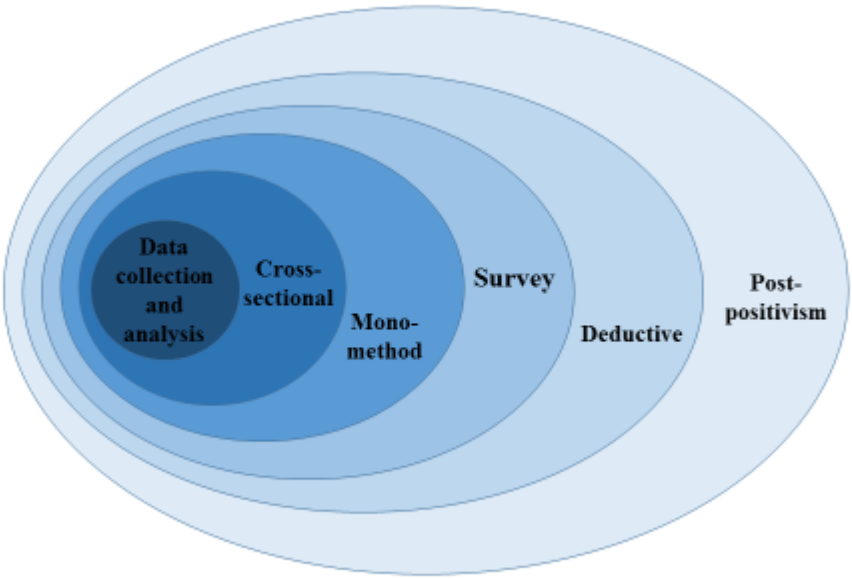
H_3: Fluent Transactions is positively correlated with Customers´ Channel Usage at purchase stage and negatively correlated with Customers´ Channel Usage at post-purchase stage.

H_4: Consistency of Content is positively correlated with Customers´ Channel Usage at purchase stage and negatively correlated with Customers´ Channel Usage at post-purchase stage.

CHAPTER 3 - Methodology & Research Design

In order to provide an accurate answer to the research question of this master´s thesis, a structured research process must be conducted. Following the guidelines by Saunders, Thornhill and Lewis (2009), the research onion model will be applied to this master's thesis. Each stage of its stages is analyzed during the sub-sections of this chapter and a summary of the research model is presented in figure N° 2

Figure N°2. Research Onion Model*



** Adapted from "Research Methods for Business Students" by Saunders, Lewis & Tornhill (2009), p.108*

3.1 Research philosophy

According to Saunders et al. (2009), before conducting a research it is necessary to clarify the research philosophy that has been adopted. Research philosophy relates to the development and nature of knowledge and each research philosophy that is adopted reflects the perception of reality by the researcher (Saunders et al., 2009; Wahyuni, 2012). This becomes relevant because these perceptions have an influence on the research strategy and methods selected (Saunders et al., 2009; Strang, 2015). To explain this view of the world, ontology and epistemology are defined.

3.1.1 Ontology and Epistemology

Ontology is the perception of reality by individuals, while epistemology relates to the perception of what is acceptable knowledge (Saunders et al., 2009; Wahyuni, 2012). Regarding social research, ontology usually is viewed under two perspectives, objectivism and subjectivism. Under objectivism there is a conception that social entities exist in reality external and independent from social actors' interpretation (Saunders et al., 2009). On the other hand, subjectivism states that "reality is dependent on social actors and assumes that individuals contribute to social phenomena" (Wahyuni, 2012, p.69). In the case of this master´s thesis, it follows a post-positivism or realism research philosophy, where reality is objective, but the interpretation of this reality is through social conditioning (Saunders et al., 2009; Wahyuni, 2012). Multichannel and omnichannel literature explains that consumers use different channels according to their specific needs (Verhoef et al., 2007) and social interactions are integrated in the process (Heinemann & Gaiser, 2015). However, the results from Barwitz and Maas (2018) also show that the customer shopping process follows an objective reasoning, as most customers can be categorized under four drivers of consumption. Lastly, cognitive psychology holds a similar point when compared to the results of Barwitz and Maas (2018). In the subject of consumer behavior, cognitive psychology proposes that consumers are in a balance between their own attitudes, beliefs and the environment they live in (Østergaard & Jantzen, 2000). Although interactions with the environment can change their knowledge, consumers are constantly processing information to keep this balance and avoid cognitive dissonance (Østergaard & Jantzen, 2000). This translates into an ontology of consumption where the brain make rational decisions regarding its own wants (Østergaard & Jantzen, 2000). Therefore, even if retail customers can be influenced, it can be argued that their shopping behavior follows a logical process independent of their motivations.

Regarding epistemology, acceptable knowledge comes from observable phenomena. As retail customers follow a rational process to purchase products, it means that reality can be observed and collected as credible data, which later is test through numerical measures and hypothesis testing (Wahyuni, 2012). Nevertheless, because post-positivism considers knowledge as a result of social conditioning, its results only explain reality within a social context (Wahyuni, 2012). Therefore, the use of channel by customers during their journey within a retail company can be measured and provide information that can be generalized, but this process can not necessarily be applied in other industries.

3.2 Research Approach

The focus of this master´s thesis is to provide an accurate description of the environment; thus, it is a descriptive study that it follows a deductive approach. The principal characteristic of a deductive approach is the use of literature to identify different theories and ideas to construct hypothesis that later are tested with data (Saunders et al., 2009), which is how the thesis was conducted. The structure of this master´s thesis was developed around customer journey and omnichannel management, and how these topics are related to customer experience. After an extensive literature review, where different theories and models were gathered and analyzed, a theoretical framework that combined both topics was created. This adapted framework is used as the basis for the construction of the different hypotheses, which are tested in a specific context. One of the advantages of using a deductive approach is that the approach allows for increased control of the testing process, ensuring that the measurement of variables is valid (Saunders et al., 2009). Another advantage of this approach is that allows to work existing scales, which simplifies the research process (Strang, 2015). However, a deductive approach needs to be generalizable, thus it this approach requires to collect sufficient numerical amount of data in order to be reliable (Saunders et al., 2009).

3.3 Research Strategy

In the data collection process, this master´s thesis employs a survey strategy, as it is one of the most popular methods in the business world. Surveys can be used for exploratory and descriptive studies, allowing the researcher to collect large amounts of quantitative data (Saunders et al., 2009). The data collected is later analyzed through quantitative statistics and can be "used to suggest possible reasons for particular relationships between variables and to produce models of these relationships" (Saunders et al., 2009, p. 144). In addition, surveys provide more control over the research process, enabling the researcher to obtain results that can be then generalized to the population (Saunders et al., 2009). For the fact that surveys only need a sample of the population, instead of attempting to collect data from whole population, there is a cost benefit to employ surveys (Saunders et al., 2009). In this master's thesis, the survey was conducted by a self-administered questionnaire were respondents had to answer different questions regarding their experiences using omnichannel services. Respondents face two different set of

questions that measured the different variables that were defined in the previous chapter. The specific measurements of the survey and its scales are presented below.

3.3.1 Measurements Part I: Drivers of Omnichannel Usage

In order to measure the four variables defined in the previous chapter – Omnichannel Service Usage, Channel Knowledge, Fluent Transactions and Consistency of Content – the questionnaire needed to incorporate scales from existing literature that have already measured the same variables. In specific, almost all questions that were incorporated in the questionnaire to measure this four variables were adapted from the research of Shen et al. (2018, p.71), which was also the source two develop the same variables. Using a 5-point Likert scale, were 1 was completely disagree and 5 completely agree, the adapted questions were:

Omnichannel Service Usage	Completely disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Completely agree (5)
I frequently use omnichannel services	○	○	○	○	○
I have used different omnichannel options	○	○	○	○	○
Most of my purchases are through omnichannel options	○	○	○	○	○

Consistency of Content	Completely disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Completely agree (5)
The information is consistent across different channels.	○	○	○	○	○
When I interact with one channel, my interactions with other channels are always taken into account.	○	○	○	○	○

Channel Knowledge	Completely disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Completely agree (5)
I am aware of the existence of all available service channels from a company	○	○	○	○	○
I am aware of the different attributes across different channels.	○	○	○	○	○
I know how to utilize different channels to find what I need	○	○	○	○	○
Regardless of the channel I choose, I can use other channels to get information or help.	○	○	○	○	○
I can choose alternative channels to find what I need	○	○	○	○	○

Fluent Transactions	Completely disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Completely agree (5)
I can do my purchases smoothly from one channel to another	○	○	○	○	○
After channels transition, I can continue with the service correctly	○	○	○	○	○
After channels transition, my shopping experience remains the same	○	○	○	○	○

Although the research by Shen et al. (2018) offered more questions to adapt to the questionnaire, only these questions were included to not make the questionnaire too extensive, as this can have a negative impact on respondents motivation to finish it (Saunders et al., 2009). Finally, two questions were added to measure customers overall experience using omnichannel services in the past, as literature states are relevant at any customer journey. Without a specific source to adapt the questions from, these questions were created based on the analysis on omnichannel management from Verhoef et al. (2015) and the influence of social interactions argued by Lemon and Verhoef (2016) and Heinemann and Gaiser (2015). Using a 5-point Likert scale, were 1 was completely disagree and 5 completely agree, the questions were:

Overall Customer Experience	Completely disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Completely agree (5)
Usually I recommend my friends and family to use omnichannel services	○	○	○	○	○
Overall, my experience using omnichannel services has been positive	○	○	○	○	○

3.3.2 Measurements Part II: Customers´ Channel Usage (CChU)

In the second part of the questionnaire, the objective was to measure customers´ use of channels at each stage of their journey. Just like the previous section, the questionnaire needed to incorporate a scale from existing literature that have measured the same or similar variable in the past. In this case, the scale for section of the questionnaire was adapted from Emrich, Paul and Rudolph (2015, p.340), who investigated the benefits of assortment integration. In their research, Emrich et al. (2015) used a Likert scale to ask respondents if they preferred to only use physical channels or only online channels for product information and purchase. Therefore, this scale was adapted into three questions, one for each customer journey stage. The original idea was to use a 5-point Likert scale to ask respondents the amount of channels that they have used over the last 12 months at each stage. However, the results from the pre-

test of the questionnaire, which is explained in the next section, indicated that this question was confusing, were the suggestion was to add examples of different channels and that it needed to be differentiated by product category. With those comments into consideration, this section of the questionnaire was redesigned, but still using the scales from Emrich et al. (2015).

Finally, this section continued to be divided in three questions, one for each stage of a customer's journey, but now respondents were asked to fill a multiple selection matrix table with all the channels that they have used at that respective stage according to their purchases over the last 12 months. To make the process more complete and detailed, respondents needed to fill this matrix table for four different product categories. This matrix contained eight different channels that selected on the most common ones used under omnichannel management (Piotrowicz & Cuthbertson, 2014; Verhoef et al., 2015), and the option "Other" was added just in case a popular channel was missing. In order to give a value to CChU, it was determined that the value for CChU at each stage it would be equal to the total amount of channels selected, if the value was 4 or less. For respondents with a total amount of channels equal or higher to 5 channels, the value of CChU would be 5. The full version of the questionnaire is reported in Appendix N°1, and the matrix table used for the questions about pre-purchase, purchase and post-purchase is presented below.

	Physical Store	Website (computer)	Website (mobile)	App	Kiosk	Social Media	Sellers with tablet	Call Centers	Other
Clothes	☐	☐	☐	☐	☐	☐	☐	☐	☐
Shoes	☐	☐	☐	☐	☐	☐	☐	☐	☐
Technology	☐	☐	☐	☐	☐	☐	☐	☐	☐
Appliances	☐	☐	☐	☐	☐	☐	☐	☐	☐

3.3.3 Pre-testing of Self-Administered Questionnaire

In order to conduct a valid survey, a pre-test with an initial questionnaire was conducted (Dillman, Smyth & Christian, 2014). The pre-test was distributed to 10 professionals with work experience in major retail companies in Chile. The professionals that participated in the pre-test were four Product Managers, two former Logistics Planners, one Project Manager, one Management Control Analyst, one Sales Manager and one Store Manager. Overall the professionals agreed on the structure and the selected questions to measure omnichannel usage and channel selection. Besides some drafting changes in some questions, the professionals emphasized on providing several examples of omnichannel services and touchpoints during the questionnaire. As it was mentioned in the previous section, some professionals suggested that the section of customers´ channel usage was separated by product categories, because customers have different shopping processes according to the type of product. Finally, the professionals suggested a brief explanation of what omnichannel is defined as at the beginning of the survey, due the fact that it is not a common concept among customers.

3.4 Research Choice & Time Horizons

Following a Post-positivism philosophy, the research methodology could be quantitative or qualitative (Wahyuni, 2012). As this research follows a quantitative methodology, this master´s thesis employs a mono-method research (Saunders et al., 2009). This means that the self-administered questionnaire will be the only data collection method employed, and this should provide enough information to test the constructed hypotheses and draw the following conclusions (Saunders et al., 2009). As it was mentioned before, the objective behind this master´s thesis is to provide an accurate description of the environment of omnichannel management, measuring what is happening rather than why it is happening. Therefore, this research follows a cross-sectional design, where the study of a phenomenon is performed at a determined point of time, similar to a picture (Saunders et al., 2009). Cross-sectional research commonly employs the survey strategy (Saunders et al., 2009) and it allows for examination of relationship patterns between variables (Bryman, 2016).

3.5 Data Collection & Analysis

The design of the questionnaire was created online using the application Qualtrics and it was distributed on three Social Media channels (LinkedIn, Facebook and Instagram) and direct email to personal contacts, who were asked to share the questionnaire with their contacts. For simplicity, the participants of the study were only Chilean nationals and residents in Chile. By collecting data from one country, demographic variables such as level of education and monthly income can be included without being altered by cultural differences. Furthermore, all questions of the questionnaire were presented in Spanish to avoid language barriers. Given that the questionnaire was conducted in Spanish, translated versions of the questions have been presented so far. All translations were made using the Brislin back-translation technique (Brislin, 1970). Overall, the questionnaire was available to collect data during 14 days.

3.5.1 Sample Demographics

As the objective is to generalize the results from a sample of population, the sample size must be large enough in order to be reliable. To achieve that, at least 150 respondents were required (Dillman et al., 2014). After distributing the final version of the survey, a total of 227 complete responses were recorded. The results from the survey shows that overall there is a good distribution in terms of sex (43.6% male, 56.4% female), with a good mixture of people with bachelor degrees (43.2%) and graduate studies (32.6%). Most respondents (52%) came from the age segment 25 to 31 years old, which can produce some biased results. However, this age segment is expected to be a heavy user of omnichannel services given its engagement of new technology and Social Media (GlobalWebIndex, 2019; Heinemann & Gaiser, 2015). The summary of all demographic variables are presented in table N°2.

Table N° 2. Summary of demographic variables

Sample size (N) = 227

Sex		**Age**		**Education**		**Income ($M)**	
Male	43.6%	18-24	21.6%	High School Degree	2.6%	0-500	22.5%
Female	56.4%	25-31	52.4%	Bachelor - Incomplete	21.6%	501-950	12.8%
		32-40	14.5%	Bachelor Degree	43.2%	951-1.600	21.6%
		41-50	7.5%	Graduate studies	32.6%	1.601-2.500	23.8%
		>50	4.0%			>2.500	19.4%

CHAPTER 4 - Analysis of Data

As the construction of the questionnaire was made from adapted scales from existing literature, it is necessary to measure the validity and reliability of its results (Creswell, 2009). Validity refers to the extent that the different set of measures, the questions of the questionnaire in this case, correctly represent what was intended to measure, while reliability refers to the consistency of the measurements, i.e. how it is measured (Hair, Black, Babin & Anderson, 2014). To measure the validity of the scales, a Factor Analysis will be conducted, while the reliability of the scales will be measured through a Cronbach's Alpha analysis. Considering that the results from the questionnaire provided detailed information of customers´ channel usage in different product categories, this additional input is also analyzed to complement the research. The results from these analyses will lead to the construction of the model to test the hypotheses of this research.

4.1 Factor Analysis

Factor analysis is a relationship statistical technique that allows to summarize the information from a large number of variables into smaller sets of variables that present high intercorrelations, called factors (Hair et al., 2014). Factor analysis can either be confirmatory or exploratory. Exploratory factor analysis (EFA) determines the number of factors after the statistical analysis is completed, whereas confirmatory factor analysis (CFA) determines both the number of factors and components of each factor before the statistical analysis is performed (Hair et al., 2014). In the case of this master´s thesis, an EFA is performed. Although the number of constructs (factors) to measure were determined through theoretical analysis before the statistical test, only the composition or number of items (questions) of one construct was determined (Omnichannel Service Usage), while for the other constructs it was not clear as not all questions from the adapted scale were included. In addition, the scale for Customers´ Channel Usage (CChU) was adapted from multichannel literature, plus the addition of two extra questions based on theoretical background. Due these issues, performing an EFA should solve it.

Before conducting this analysis, two tests were performed in order to verify that the dataset provided by the questionnaire was suitable for an EFA. The first one is Bartlett's test of sphericity, which confirms if the variables from a dataset have patterned relationships, i.e. have some degree of correlation between

them (Hair et al., 2014; Yong & Pearce, 2013). The results from Bartlett´s test provided a value of p=000, meaning that were not correlations equal to 0 between the variables in the dataset, thus the first test is successful. The second test is the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO), which measures the capacity of a dataset to create distinct factors (Yong & Pearce, 2013). The measure of the KMO test was 0.796, considerably above the minimum of 0.5 that is required, thus the second test is successful. These results are presented in tables' N° 3a and N°3b.

Tables N° 3a and 3b. Barlett´s test & KMO Results

Bartlett test of sphericity		
Chi-square	=	1377.876
Degrees of freedom	=	153
p-value	=	0.000

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		
KMO	=	0.796

With both test completed, an EFA was performed. The first part of the EFA was to determine the number of factors to extract from the questionnaire, which was performed through the eigenvalue criterion. An eigenvalue is "the amount of variance accounted for by a factor" (Hair et al., 2014, p.90), where the criteria is that only eigenvalues above 1 should be considered (Hair et al., 2014). From 18 possible factors, only 5 meet this criteria, therefore five factors are extracted from the data, which are represented in figure N°3. After this, it was necessary to determine which variables (questions) were part of each factor. To do this, a VARIMAX rotation method was performed to the factor matrix for a better interpretation of each factor (Hair et al., 2014; Yong & Pearce, 2013). The rotated matrix presented the different correlations between each item and the factors, known as factor loadings, and this correlation needs to have a value of at least 0.3 in order to form part of a construct (Hair et al., 2014). All variables analyzed also meet this criteria, therefore each one is assigned to a specific factor. In the case of the measurement of customer´s channel usage, only these three questions are correlated with one of the five factors, confirming its validity. The results from the EFA are presented in table N°4.

Figure N°3. Component Analysis

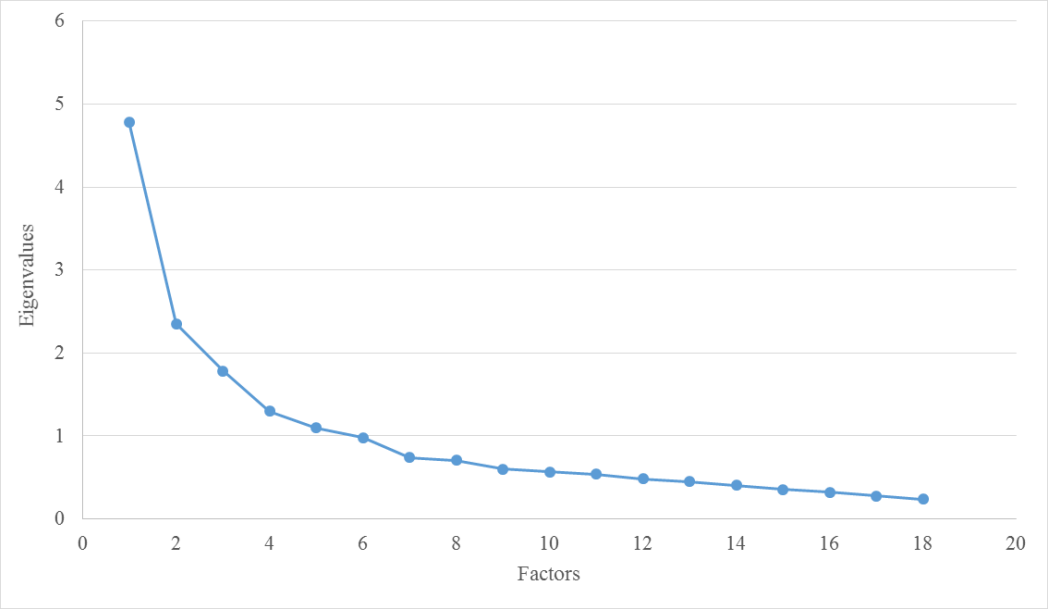


Table N° 4. Exploratory Factor Analysis Results

Constructs	Factor Loading				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Fluent Transactions					
After channels transition, I can continue with the service correctly.	**0.8410**	0.0810	0.1559	0.0817	0.1047
I can do my purchases smoothly from one channel to another.	**0.8123**	0.1470	0.09676	0.0814	0.0565
After channels transition, my shopping experience remains the same.	**0.7387**	0.0863	-0.0566	0.3129	-0.1453
Overall, my experience using omnichannel services has been positive	**0.5956**	0.1642	0.2410	0.2456	0.0537
Omnichannel Service Usage					
I frequently use omnichannel services	0.1263	**0.8416**	0.0648	-0.0571	0.1882
I have used different omnichannel options	0.1028	**0.8105**	0.0513	0.0708	0.0718
Most of my purchases are through omnichannel options	0.0162	**0.7898**	0.0757	0.1707	0.0712
Usually I recommend my friends and family to use omnichannel services	0.3423	**0.6026**	0.1693	-0.0865	0.0778

Channel Knowledge					
I am aware of the different attributes across different channels	0.1223	0.0731	**0.8574**	0.0706	0.0349
I know how to utilize different channels to find what I need	0.0773	0.1010	**0.7902**	0.1017	0.0690
I am aware of the existence of all available service channels from a company	0.0611	0.1494	**0.6914**	0.1336	0.0125
I can choose alternative channels to find what I need	0.2621	-0.0760	**0.4346**	0.2121	0.1920
Consistency of Content					
When I interact with one channel, my interactions with other channels are always taken into account	0.1361	0.0487	0.0327	**0.8858**	-0.0045
The information is consistent across different channels.	0.3125	0.1335	0.2378	**0.6673**	-0.0924
Regardless of the channel I choose, I can use other channels to get information or help.	0.1351	-0.1020	**0.4051**	**0.5859**	0.2009
Customers´ Channel Usage					
Based on your shopping behavior on the last 12 months, please select all the channels from the same company that you have used to search information about a product in the following product categories	0.1626	0.1312	0.0953	-0.0095	**0.7326**
Based on your shopping behavior on the last 12 months, please select all the channels from the same company that you have used to buy/pay for product in the following a product categories	0.00893	0.1462	0.0981	0.1058	**0.7262**
Based on your shopping behavior on the last 12 months, please select all the channels from the same company that you have used to complain, rate or ask for assistance for a product in the following product categories	-0.1666	0.1875	-0.0186	-0.0879	**0.7225**

4.1.1 Analysis with Product Categories

In order to use the information of customers´ channel usage for different product categories, the Factor Analysis was repeated four more times, one time for each product category that was part of the questionnaire ("Clothes", "Shoes", "Technology" and "Appliances"). Regarding Bartlett´s test, all four scenarios presented p values equal to 0.000, therefore there are not correlationships equal to 0. In terms of the KMO test, the values for each product category scenario remained more or less similar to the

general case, just being a bit higher for the "Clothes" product category with 0.802. With all four additional scenarios being suitable for a factor analysis, an EFA was conducted for each one. Overall, in all four scenarios the same five factors were detected with very similar eigenvalues, suggesting that the variance accounted for a factor does not suffer significant changes across product categories. Finally, the loading values of each item for each factor construction are also more or less the same. The summary of these extra validity tests is presented in table N°5 and table N°6.

Table N° 5. Barlett´s test & KMO Results With Product Categories

Product Category used for the analysis	Barlett´s test (pvalue)	KMO
Clothes	0.000	0.802
Shoes	0.000	0.796
Technology	0.000	0.781
Appliances	0.000	0.789

Table N° 6. Eigenvalues by Product Category

	Eigenvalues			
Factors	**Scenario 1: Clothes**	**Scenario 2: Shoes**	**Scenario 3: Technology**	**Scenario 4: Appliances**
Factor 1	4.81152	4.75702	4.67144	4.71734
Factor 2	2.42713	2.38994	2.29640	2.44091
Factor 3	1.70871	1.76656	1.83845	1.73101
Factor 4	1.29809	1.42178	1.42208	1.45893
Factor 5	1.07779	1.09806	1.11289	1.10595

4.2 Cronbach's Alpha Analysis

After the validity of the different scales was confirmed, it is necessary to check the reliability of the scales for each one of the constructs derived from the factor analysis. Although there are more tests that can be performed to determine the reliability of a scale measurement, Cronbach's Alpha is the most used technique (Hair et al., 2014). Thus, a Cronbach's Alpha test is applied to all 5 constructs. With a range from 0 to 1, it is estimated that this measure needs to be at least 0.6 in order to provide an acceptable

reliability (Hair et al., 2014). Fortunately, all 5 constructs presented Cronbach's Alpha values above this number, meaning that all inputs from the questionnaire can be summarized into five variables. Nevertheless, because the focus is to analyze omnichannel usage at all stages of a customer's journey, the construct of Customer´s Channel Usage (CChU) will remain as three separate variables, one for each stage: CChU_Pre, CChU_Purchase and CChU_Post. The summary with all Cronbach's Alpha values is presented in table N°7. Overall, Fluent Transactions and Omnichannel Service Usage obtained the highest results with 0.8041 and 0.7979 respectively, which are considered good values, while CChU obtained the lowest the value with 0.6221. From EFA summary (table N°4), the scale for "Regardless of the channel I choose, I can use other channels to get information or help" it is highlighted that it presents values above 0.4 for two factors, meaning that could be part of two different constructs. Despite having a higher loading value with factor number 4 (Consistency of Content), the Cronbach's Alpha value for Channel Knowledge increased considerably when this item was added to this construct, and the Cronbach's Alpha value for Consistency of Content was mostly unaltered. Therefore, it was decided update Channel Knowledge to a construct of 5 items. The complete detail for both EFA and Cronbach's Alpha analysis coding is presented on Appendix N°2.

Table N° 7. Cronbach's Alpha Analysis Results

Constructs	Number of Items	Scale Reliability Coefficient
Fluient Transactions	4	0.8041
Omnichannel Service Usage	4	0.7979
Channel Knowledge	5	0.7469
Consistency of Content	2	0.7020
Customer´s Channel Usage	3	0.6221

4.2.1 Analysis per Product Category

Similar to the EFA, the Cronbach's alpha analysis was repeated four more times, one for each product category tested in the questionnaire matrix. Despite the changes in the loading values for each factor construction, the Cronbach's alpha values for Fluent Transactions, Omnichannel Service Usage, Channel Knowledge and Consistency of Content remained exactly the same. In the case for CChU, its value increased when it was analyzed by product category, reaching almost 0.7 for both "Shoes" and "Appliances" categories. The summary of this analysis for CChU is presented in table N°8.

Table N° 8. Cronbach's Alpha Analysis
For Customer´s Channel Usage
Per Product Category

Customer´s Channel Usage	Scale Reliability Coefficient
Clothes	0.6576
Shoes	0.6938
Technology	0.6345
Appliances	0.6926

4.3 Model Construction

As the measurements of the questionnaire presented both validity and reliability, a model to test the different hypotheses can now be created. Given the objective to measure how the different variables are related to cross-channel integration usage at each stage of a customer's journey, three models need to be created, one for each stage. Therefore, three multiple regression analysis models are created. Multiple regression analysis is a "statistical technique that can be used to analyze the relationship between a single dependent (criterion) variable and several independent (predictor) variables" (Hair et al., 2014, p.157). Although its main objective is prediction, multiple regression analysis can also be used to analyze the degree and type of relationship between the independent variables and the dependent variable. This is due this technique weightness the contribution of each independent variable to the prediction of the dependent variable, which is represented by the symbol β (Hair et al., 2014). Because of this, multiple regression analysis is considered a "simple and straightforward dependence technique that can provide both prediction and explanation to the researcher" (Hair et al., 2014, p.163).

Going back to this research, each variation of CChU (Pre, Purchase and Post) is defined as the dependent variable for each model. On the other hand, Omnichannel Service Usage, Channel Knowledge, Consistency of Content and Fluent Transactions are considered the independent variables in each model. In addition, the demographic variables that were also measured in the questionnaire are also included as independent variables. This is done to avoid endogeneity problems due the omission of variables (Wooldridge, 2015). The demographic variable of "Sex" had three alternatives to select from on the questionnaire, but only two options were selected by all respondents (male and female), therefore it will

be treated as dummy variable. Considering all the information discussed before, the three multiple regression models are:

$$CChU\_Pre = \beta_0 + \beta_1 FTransactions + \beta_2 OmniSUsage + \beta 3 ChKnowledge + \beta_4 CConsistency + \beta_5 SexDummy + \beta_6 Age + \beta_7 Education + \beta_8 Income + e_1$$

$$CChU\_Purchase = \beta_0 + \beta_1 FTransactions + \beta_2 OmniSUsage + \beta 3 ChKnowledge + \beta_4 CConsistency + \beta_5 SexDummy + \beta_6 Age + \beta_7 Education + \beta_8 Income + e_2$$

$$CChU\_Post = \beta_0 + \beta_1 FTransactions + \beta_2 OmniSUsage + \beta 3 ChKnowledge + \beta_4 CConsistency + \beta_5 SexDummy + \beta_6 Age + \beta_7 Education + \beta_8 Income + e_3$$

4.4. Regression Results

As expected, the three models provided different results for the independent variables incorporated. The results from CChU at pre-purchase stage showed positive and significant correlation with Omnichannel Service Usage (p=0.005), a negative and significant correlation with "Age" (p=0.002) and a positive and significant correlation with "Income" (p=0.05). The results from CChU at purchase stage showed positive and significant correlations with Omnichannel Service Usage (p=value=0.002), Channel Knowledge (p=0.033), and "Income" (p=0.028). Lastly, the results from CChU at post-purchase showed positive and significant correlation with Omnichannel Service Usage (p=0.000) and negative and significant correlation with Fluent Transactions (p=0.044). The summary with of the results of the three models and its values is presented in table N°9.

Table N° 9. Summary of Multiple Regression Models

Independent Variables	Dependent Variables					
	CChU_Pre		CChU_Purchase		CChU_Post	
	Coefficient	P value	Coefficient	P value	Coefficient	P value
Omnichannel Service Usage	**0.2229**	**0.005**	**0.2574**	**0.002**	**0.3728**	**0.000**
Fluent Transactions	0.1093	0.383	0.067	0.591	**-0.2868**	**0.044**
Channel Knowledge	0.1714	0.149	**0.2240**	**0.033**	0.1514	0.274
Consistency of Content	-0.0089	0.932	-0.0045	0.961	-0.1493	0.194
Sex	-0.1070	0.445	-0.0123	0.928	-0.1901	0.249
Age	**-0.2440**	**0.002**	-0.0031	0.967	-0.0.039	0.648
Education	0.0470	0.611	0.1048	0.225	0.1294	0.226
Income	**0.1138**	**0.050**	**0.1128**	**0.028**	0.0044	0.496

As none of the models presented significance in all its variables, it was imperative to check if the model presented collinearity or multicollinearity between some of its independent variables, where the removal of some variables could increase the significance of another variable (Woolbridge, 2015). To do so, in each model the independent variable with the lowest significance (highest p value) was removed and the model was ran again, and the process was repeated until all independent variables in the model were significant (Hastie, Tibshirani & Friedman, 2009). For the second and third model, this analysis did not provide new results, as the same variables that in the first regression were significant, continued to be the only significant variables in the model. On the other hand, in the first model Channel Knowledge became significant after removing Sex, Education, Consistency of Content and Fluent Transactions from the model, with p=0.041. Even more, Channel Knowledge continued to be significant (p=0.036) when Sex and Education variables were added again to the model. Therefore, at a pre-purchase stage, this model suggest that Channel Knowledge has some degree of multicollinearity with Fluent Transactions and Consistency of Content. In conclusion, Omnichannel Service Usage presented positive and significant correlations for all three CChU scenarios, and the value of the coefficient β increased in each model. Thus, hypothesis number one is accepted. Channel Knowledge presented positive and significant correlation with CChU at purchase stage and also with pre-purchase. However, the positive correlation with CChU_Pre happened after some variables were removed from the model. Therefore, hypothesis number two is accepted. Fluent Transactions only presented a negative and significant correlation in the third model (post-purchase), thus hypothesis number three is partially accepted. Lastly, Consistency of

Content did not present any significant correlation in all three models, not even after all three models were tested with fewer variables, thus hypothesis number four is rejected.

4.4.1 Coefficient of Determination Analysis

As the main objective of a multiple regression analysis is to predict results, it is also necessary to address the capacity of the proposed models to predict CChU at each stage of a customer's journey. One of the most common techniques is to check the coefficient of determination (R^2), which is "the proportion of the variance of the dependent variable about its mean that is explained by the independent, or predictor, variables" (Hair et al., 2014, p.152). The value of R^2 is always between 0 and 1, and the closer it gets to 1, the model does a better job to predicting the value of the dependent variable. In this research, the R2 values for each model are 0.1327 (pre-purchase), 0.1386 (purchase) and 0.1024 (post-purchase). With all models explaining less than 15% of the variance of their results, it is very likely that there are other variables that are not incorporated in the models that have a higher impact or relationship with CChU at different stages of customers´ journeys. Nevertheless, for the purpose of this master´s thesis the models accomplish the objective of providing reliable relationships between the intended independent variables and CChU at different stages of a customer's journey, even if these relationships are small. In addition, all three model presented overall p values below 0.05, meaning that all models are statistically significant. The full detail of the multiple regression analysis is presented in Appendix N°3.

4.4.2 Analysis per Product Category

With four product categories being included in the analysis, the three models were replicated for each one, performing 12 additional multiple regression analysis. Overall, Previous Experiences continued to get positive and significant correlations at all stages of a customer's journey in all four product categories, confirming its importance. Regarding the other independent variables, Channel Knowledge was significant only for one product at purchase stage. Fluent Transactions and Consistency of Content did not present significant correlations with at any stage with certain products. Lastly, it's worth showing that the demographic variable of "Sex" gained significance at the pre-purchase stage for "Clothes" and "Shoes" categories. However, half of these extra regressions presented R^2 values below 0.1, meaning that these models explain very little of the variability of the dependent variable (CChU in this case). Therefore, these findings of CChU in different product categories must be taken with caution.

CHAPTER 5 - Discussion, Implications & Future Research

In this last section of this master´s thesis, the results from the analysis section are discussed and related to the objectives of this research in order to provide an answer to the research question. Going from general discussion of the hypothesis to the managerial implication, this chapter finishes with insight for future research on the topic analyzed.

5.1 General Discussion: Hypotheses & Regression Models

In this master's thesis, four hypotheses were tested in relationship with customers´ channel usage (CChU) at each stage of customers´ journey within a retail company. Based on the results from the multiple regression analysis, two hypotheses were accepted, one was partially accepted, and one was rejected. The first accepted hypothesis was that Omnichannel Service Usage (OSU) is positively correlated with CChU at all stages of a customer's journey, and the value of the correlation increases moving from one stage to the next one (hypothesis 1). The results from the regression not only were significant in all three models, but also the value of the coefficient β increased from 0.2229 in the pre-purchase model to 0.3728 in the post-purchase model. Therefore, these results demonstrate that there is positive relationship between frequent usage of omnichannel services and the intensity of usage of channels at each stage of a customer's journeys, and this effect increases as customers move from one stage to the next one.

The second hypothesis that was accepted was that Channel Knowledge (ChK), was positively correlated with CChU only at the purchase stage (hypothesis 2). The data analysis showed a positive and significant correlation for ChK with CChU_Purchase, but it also showed a significant correlation with CChU_Pre after Fluent Transactions (FT) and Consistency of Content (CC) were removed from the model. The results from this new regression model showed similar values in significance (p=0.041 and p=0.044), and coefficients β (0.20 and 0.22) for ChK in both models. The fact that the value of ChK became significant in the pre-purchase model after removing FT and CC as variables, strongly suggest that there is a multicollinearity effect with these variables. Briefly, multicollinearity occurs when one independent variable has strong correlations with two or more independent variables from the same linear regression model, meaning that these variables are explaining the same phenomenon (Hair et al., 2014). As the significance of ChK changes considerably with the absence of FT and CC from the regression model for

pre-purchase, it is most likely that there is a multicollinearity effect between these variables. Therefore, the results for ChK demonstrate that there is positive relationships between customers´ awareness of channel options and their functions and intense usage of channels at purchase stages during a customer´s journeys with a company. The fact that ChK could have multicollinearity with FT and CC is consistent with the assumption that ChK is not distinctive from FT in terms of functionality during a pre-purchase stage, and that customers´ needs from channels change according to the stage of the journey they are in.

The most interesting results came from the other two hypotheses. In the hypothesis regarding Fluent Transactions (FT) it was assumed that it was positively correlated with CChU at pre-purchase stage and negatively correlated with CChU at post-purchase stage (hypothesis 3). Furthermore, the hypothesis for FT is similar to the hypothesis for Consistency of Content (CC), where it was also assumed that this variable it was also positively correlated with CChU at pre-purchase stage and negatively correlated with CChU at post-purchase stage (hypothesis 4). However, the results from the regression analysis showed that FT is not correlated with CChU_Pre ($p=0.383$) and it is correlated with CChU_Post ($p=0.044$) with a negative coefficient β (-0.2868). This results indicates that the more customers perceive that there is fluent, seamless transactions between channels, they will have a lower intense usage of channels at post-purchase stages (or vice versa). But, these results are also suggesting perceptions of fluent, easy transactions between channels are not relevant for customers at pre-purchase stages. Thus, this hypothesis was partially accepted. In the case of the hypothesis for CC, the results from the regression analysis indicated that CC had no significant correlations with any of the three models. In addition, the value of the coefficients β for CC in both pre-purchase and purchase models were below 0.01. This results suggest that this variable has basically no impact in the amount of channels that customers use at any stage of their journey within a company, nor its intensity, therefore this hypothesis was rejected.

With all hypotheses checked, it is necessary to discuss the results for each regression model constructed. In addition to OSU ($\beta=0.2229$, $p=0.005$), the results regression model for CChU_Pre showed significant correlations with the demographic variables “Age” ($\beta=-0.2440$, $p=0.002$) and “Income” ($\beta=0.1138$, $p=0.05$). The results for “Age” indicate that older customers are intensive in their usage of channels at pre-purchase stages, while the results for “Income” indicate that customers with higher financial resources use more intense in using channels at pre-purchase stages. By contrasting the values of the

coefficient β, these results indicated at pre-purchase stages "Age" could potentially balance the effects of OSU when these variables have similar values. The demographic variable "Income" continued to be significant and positive correlated in the regression model for CChU_Purchase (β=0.1128, p=0.028), in addition to OSU (β=0.2574, p=0.002) and ChK (β=0.2240, p=0.033). These results suggest that OSU and ChK have relatively the same importance at purchase stages, and both variables have a higher effect on CChU_Purchase than "Income". Lastly, at the regression model for post-purchase, the results for CChU_Post did not present significant correlations with any demographic variables, thus OSU (β=0.3728, p=0.000) and FT (β=-0.2868, p=0.044) are the only relevant variables in this model. As the coefficient β for OSU is higher, these results suggest that at similar values for OSU and FT, customers should be inclined to be more intensive in their usage of channels at post-purchase stages.

Finally, in terms of the amount of channels that customers use at each stage, the average value for CChU in each model decreases moving from stage to next one. The average value for CChU_Pre is 3.75, while the average value for CChU_Purchase is 2.83, and finally CChU_Post has the lowest average value among all three models with 2.53. The fact that the average value of CChU is higher in the pre-purchase stage is consistent with the postulates from Walker (2011) regarding customers´ activities during a purchase cycle. According to Walker (2011), when customers are gathering information about a product or service is when they will perform the most amount of activities with a company, such as discovery, search and research, compare and later decide. Thus, the more activities are performed by customers, the more likely they are to use or interact with several channels in a single stage of their journey. Lastly, the fact that the lowest value for CChU is at the post-purchase stage can be explained from the results from the regression analysis for Fluent Transactions at this stage. This is due the respondents from the survey presented a high score for the question "Overall, my experience using omnichannel services has been positive", with an average value of 4.00 from a 5-point Likert scale. Therefore, if customers have positive experiences using omnichannel services, it is not likely that they will engage with channels at a post-purchase stages, which is the case for the sample of this study.

5.2 Theoretical Implications

Part of the objectives of this master´s thesis was to contribute to the literature of omnichannel management and cross-channel integration, and the results from this study certainly provide some theoretical implications. First of all, although omnichannel management and customer journey are terms closely related, these concepts are usually not studied together. To the extent of the research of this master´s thesis, the work by Gensler, Verhoef and Böhm (2012) seems to be only study that incorporates all three stages of customer journey literature in their analysis to try to understand customer´s channel choices. Therefore, the results from this master´s thesis provide statistical evidence that customer journey analysis can complement research on omnichannel management, providing detailed information and insights of how customers interact with a company.

The results of this master´s thesis also contribute to cross-channel integration and customer journey literature. By studying the intensity of channel usage by customers at each stage of their journeys within a company, it provides statistical evidence that customers on average are engaging with multiple channel at each stage of their journeys, and the more frequent they engage with omnichannel services, the greater their intensity of usage will be. Another interest theoretical implications relates to the inclusion of the demographic variables to the regression models. Also to the extent of the research of this master´s thesis, although demographic variables are measured in different studies, these kind of variables are rarely included in the analysis. In this study, demographic variables were added in the model construction just to avoid endogeneity problems. However, the results from the regression analysis demonstrate that this kind of variables can have an influence in the amount of channels that customers use during their journeys within a company

Nevertheless, the results from hypotheses 3 and 4 probably provide the most relevant theoretical implications. As it was mentioned in the literature review, one of the findings by Shen et al. (2018) was that internal customer experience (i.e. experiences with the same company) weakens the effect of perceived fluency on omnichannel usage by customers. As perceived fluency is customers´ evaluation of cross-channel experiences (Shen et al., 2018), this means that the more a customer is familiar with a company, expecting a consistent and seamless shopping experience across channels becomes less relevant. By adapting those finding to this research, it is possible that the effects of Omnichannel Service

Usage (OSU) are surpassing the effects of FT and CC at different customer journey stages. Considering that the variables are constructed over customers´ perception of omnichannel services, it is necessary to analyze the average values from the questions of the survey that were part of each construct. By contrasting the average values for OSU (3.79) and CC (3.01) from a 5-point Likert scale, it is feasible that a higher value of OSU reduces the effects of CC during a customer´s journey.

In the case of FT, the average value for the questions of this construct were 3.76, which is quite similar to the value of OSU, thus it is not enough to explain why FT has no correlation in the pre-purchase stage with CChU. However, there is another plausible explanation. According to Hogan et al. (2005), some touchpoints can only slightly improve customers´ experience with a company when they operate correctly, but they can have a substantial negative impact on customers´ experience when these do not meet customers´ expectations. Adapting these postulates to the case, it is possible that a higher perception of FT in a pre-purchase stage has a marginal value on increasing the intense usage of channels, but it has significant relevance when it comes to the post-purchase stage. By contrasting the value of the coefficients β, at the pre-purchase model FT it has an absolute value of 0.1093, while at the post-purchase model the coefficient has an absolute value of 0.2868. Therefore, it is possible that low perceptions of fluency by customers do not represent an obstacle to them to gather information (and vice versa). However, low perceptions of fluency by customers could mean that they will need more assistance (channels) after purchasing a product or service, as they had different experiences in the other stages (and vice versa). In conclusion, even though hypothesis 3 was partially accepted and hypothesis 4 was completely rejected, at least there are plausible explanations of why this happened in both cases. Most of these theoretical implications also have managerial implications, which are discussed in the next section.

5.3 Managerial Implications

Based on the results from the different hypotheses and the theoretical implications previously, these also generate several managerial implications. Firstly, the most notorious one is that fact that on average respondents from the survey had around mediocre perceptions of consistency across channels, but still they are on average heavy users of omnichannel services. This becomes more evident when the average value for the question “The information is consistent across different channels” is 3.20, while the average

value for the question “I frequently use omnichannel services” is 3.94. Thus, this implies that even retailers with relevant limitations to implement cross-channel integration can still be successful in the industry. This scenario increases the advantages of big retailers over small retailers to implement omnichannel strategies. Although achieving a full coordination between departments is increasingly difficult in big corporations, which affects the consistency of content across channels, as long as they have enough financial resources, big retailers can employ more aggressive campaigns to expose their products and value offering, attracting new and old customers. Furthermore, the results of Omnichannel Service Usage have important managerial implications regarding cross-channel integration and management of customers´ experience. If frequent customers of omnichannel services are using more channels than regular customers at each stage of their journeys with a company, retailers can enhance the customer experience of this segment of customers by allowing them to perform any activity at any channel, i.e. a complete integration between all the channels of a firm. As Consistency of Content does not affect the intensity of channel usage, this integration does not has to be perfect. As a practical example, if frequent customers of omnichannel services in a determined retail company want to be able to purchase a product through Facebook, the firm should develop a mechanism that allows it. This experience does not need to be as simple as paying at a store, it just needs to work.

In the case of Channel Knowledge, the results of this master´s thesis suggest that retailers might be losing opportunities to deliver superior customer experiences. Channel Knowledge presented a positive relationship with intense use of channels at purchase stages. If customers select channels based on their knowledge of the available channels, retailers should focus on integrate the channels are preferred by their customers at purchase stages. By checking the total amount of channels selected from the matrix table from the questionnaire, it demonstrates that traditional retail channels, such as physical stores and computer websites, continue to be relevant. In specific, these two channels gathered on average 55.95% of the channel choices at pre-purchase stages and 70.86% of the channel choices at purchase stages. On the contrary, Social Media channels was selected on average only 0.83% between all channels at purchase stages. However, Social Media channels gathered on average 8.76% of the preferences at pre-purchase stages, two point higher than apps. Considering that Social Media channels were also selected on average 9.35% between all channels at post-purchase, there is a clear interest in retail customers on using this channel in specific. Therefore, retailers can enhance channel experience if they integrate channels that

customers are increasingly using at purchase stages. The full detail of the results from the matrix table are presented in Appendix N°4.

One important point that needs attention is that despite the negative results for Consistency of Content in this master´s thesis, this analysis does not imply that Consistency of Content is not relevant for frequent or regular users of omnichannel services. The results from this research only indicate that in the proposed models there was not found a direct relationship between consistent information across channels and intensive usage of channels. Retailers still need to have consistency of information across their channels, otherwise their customers will be confused on what they company has to offer, especially when there are customers that are just discovering the company. Therefore, the most likely scenario is that as soon customers get familiar with a company, they already know from which channels they can obtain all the essential information to obtain a certain product or service. In terms of managerial implications, this forces retailers to discover and determine the minimum level of Consistency of Content that is acceptable for their customers during their customer journey. After that point, improvements in Consistency of Content are likely to have decreasing marginal values to enhance customer experiences. However, being carefree with this variable has the potential of destroying customers´ experience with the company. On the same train of thought, this analysis also applies for Fluent Transactions. The difference between this variable and Consistency of Content is that the results from the regression analysis confirmed a negative relationship between Fluent Transactions with intense usage of channels at post-purchase stages. Therefore, it becomes even more imperative that retailers understand the journey of their customers, and what is the minimum level of seamless cross-channel experience that their customers´ expect from them.

5.4 Limitations

Like any scientific research, the limitations of this master´s thesis must be addressed. Like the research from Shen et al. (2018), the data collected on this research came from one country and one type of Retail Company. In this case, the data was collected only from Chilean nationals, and respondents were asked to answer the questionnaire according to their own shopping experiences at department stores companies. This creates two issues regarding the generalization of the findings of this research. Firstly, shopping habits are different across countries and cultures, thus the results of this study could be biased and only be representative in this context. Secondly, department stores are not the only kind of companies in the

retail industry. The use of department stores for the questionnaire was convenient for a Chilean sample as there are several companies of this kind in the country with multiple branches nationwide, and the concept of "retail" it is usually associated with this kind of company. However, the retail industry also involves wholesale companies, discount stores, supermarkets, catering, drug stores, etc., all with different business strategies but they all employ omnichannel management. Thus, the managerial implications from this study need to be adapted to use in other type of retailers. In that sense, another limitation comes from the results of this research. Although the model accomplished its objective of finding significant relationships between drivers of omnichannel services and customer´s channel usage at each stage of customers´ journey, these are other drivers that could have been included on the research. Like it was mentioned before, the results from R^2 in the regression analysis show that all three models only predict a small percentage of the value of CChU. Therefore, the findings of this research only apply to these specific independent variables, and only explain one part of cross-channel integration usage by customers.

Other limitations from this study comes from its research design. Regarding the design of the survey, respondents were asked questions about their experiences using omnichannel services without linking to any particular company or hypothetical scenario. Thus, the findings could be different for a single or multiple company case, were customer´s perceptions can vary regarding the company. The use of a self-administered questionnaire with a cross-sectional time horizon it is very convenient to collect data in a short period of time, especially with a small financial budget to conduct the research. However, this method might not be the best one to study customer´s channel usage during their journey with a company. As customers evaluate their shopping options simultaneously, more accurate insights could come from observing how customers are using different channel during a shopping cycle. Also, the use of a cross-sectional design does not allow to assume any causal relationships, while a longitudinal design could help draw some causality between the variables. In addition, a longitudinal study could also have been performed to analyze if customer´s are consistent with their choices during their journey within a company. Considering that omnichannel management has been studied with both quantitative (Li et al., 2018; Shen et al., 2018) and qualitative methods (Bartwitz & Maas), a similar research using a mixture of quantitative and qualitative could get more conclusive results.

5.5 Future Research

Despite the limitations that this master´s thesis present, these limitations also provide insights for future research that can improve or even expand the results obtained in this research. Firstly, as this research collected data from a single country, any research that replicates this study with population from another country or multiple countries can contribute to the generalization of the results. In terms of the values of R^2 in the regression models, these results indicated that there are other variables that can have greater impact on the value of CChU. Based on the literature review performed in this master´s thesis, one plausible driver of omnichannel services and that was omitted in the analysis is speed of service. The studies performed by Fisher et al. (2019), Flavián et al. (2020) and McLean et al. (2018) talk about how speed of service, or the lack of it, can have deep impacts on customers´ experience with a company. Therefore, any study that wants to replicate the models from this master´s thesis needs to incorporate the variable of speed of service into the analysis. Lastly, as this research focused on a general analysis of customer usage of channels at each stage of their journeys within a company, future research on this or related topics should pursue a case or multiple case study. Considering that Omnichannel Service Usage, or just frequency of purchases, presented positive correlations at all stages of a customer's journey and it is probably overlapping the effects of Consistency of Content, it would be interesting to study how these relationships change between different companies at the same time. These kind of studies could provide an answer one of the problems that Larke et al. (2018) stated about channel integration, were the authors argue that there is not enough evidence to determine how much a brand can leverage its imagine in the process of implementing omnichannel strategies.

Conclusion

Delivering superior customer experiences has become a common objective by most retailers. Over the last two decades, managers have come with different strategies on how to achieve it, and omnichannel management is the most recent. Throughout this master´s thesis it has been established that omnichannel management allows customers to have fluent shopping experiences, where customers can easily change from one channel to another according to their needs and preferences. Thanks to this characteristic omnichannel management is enabling companies to enhance positive customer experiences in a competitive industry, where retaining customers is essential. Thus, achieving cross-channel integration becomes fundamental for omnichannel management to be successful. However, current state of research is not providing enough information of how much cross-channel integration is needed, or how much cross-channel integration should operate.

By combining omnichannel and customer journey literature, this master´s thesis focused on measuring the current level of channel usage by customers at each stage of their journeys within a company in order to verify if cross-channel integration should be managed differently. By testing the relationship between customers´ channel usage and drivers of omnichannel services, this master´s thesis accomplishes its objective of findings practical insights that retail managers can use to enhance customer experience in their organizations. The practical implications derived from the results of study are several, but probably the main conclusions are that retailers can be successful without perfect cross-channel integration or even with limited resources. Key aspects of omnichannel management such as consistency of content across channels and fluent transactions between channels are the base for the strategy to work. However, after a certain point there are other factors that drive customers to engage with omnichannel services. Is due these factor that cross-channel integration in a retail company should be managed according to the own reality of firms, because customers' needs vary across products, channels and companies. Overall, customers have more complex journeys and they need to able to use all necessary touchpoints that they think are necessary. The ability to quickly respond to customers´ needs is a new feature that retailers need to incorporate to their business strategy, and that it is only possible with the cross-channel integration that omnichannel management provides.

In conclusion, omnichannel retail management is a new way of doing business that will continue to be explored and developed. There are still many challenges to overcome and to be studied, but as technology continues to growth, these challenges should be easier to address. Even though the transformation from multichannel management might seem not radical, it does represent a new way of doing business that can enhance shopping experiences for customers, which is determinant factor to succeed in the retail industry. Therefore, all retailers need to implement this strategy to stay relevant in a competitive industry. Even though it has several challenges and limitations to be implemented, retailers can still be successful without a perfect integration of channels and experiences. Lastly, although Walker (2011) never uses the term omnichannel during his analysis, he provides a quote that summarizes the essential difference between multichannel and omnichannel management, and why it is so important for companies to adapt to their business strategy. In specific, he states that:

"The pieces and the capabilities of an agile commerce operation look familiar to those focused on multichannel commerce — and even to those focused on agile development — but how they come together and how the organization responds to the customer represent a significant change" (Walker, 2011, p.5).

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Appendices

Appendix N° 1: Self-administered Questionnaire

Q1
Bienvenido,

Mi nombre es Hugo Zuloaga Ríos, estudiante de Administración y Comunicación de Marca en la Escuela de Negocios de Copenhague (Copenhagen Business School). Muchas gracias por participar de esta encuesta que es parte de mi tesis de maestría y que trata sobre el uso de servicios omnicanales en la industria del retail, específicamente en compañías de tiendas por departamento (ej: Falabella, Ripley, Paris, Hites, Corona, La Polar, etc.)

En términos generales, la omnicanalidad es la integración de todos los canales que posee una empresa, permitiendo que un cliente pueda cambiar indistintamente entre canales físicos y virtuales para adquirir un producto o servicio de manera fluida, como también para hacer reclamos, devoluciones y sugerencias.

A continuación se presentan distintas preguntas relacionadas a su propia experiencia al usar este tipo de servicio. Todas las respuestas son confidenciales.

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Q2
Algunos ejemplos de omnicanalidad incluyen: compra online y retiro en tienda (click&collect), buscar online y comprar en tienda, buscar en tienda y comprar online, comprar en tienda con despacho a domicilio, comprar en tienda a través de un computador (kiosko), comprar en tienda con asistencia de un iPad, devolver en tienda productos comprados online, etc.

En base a los ejemplos de omnicanalidad entregados anteriormente, por favor indique que tan en desacuerdo o de acuerdo está con las siguientes afirmaciones.

	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
Uso frecuentemente servicios de omnicanalidad	○	○	○	○	○
He usado distintas opciones de omnicanalidad	○	○	○	○	○
La mayoría de mis transacciones son a través de servicios de omnicanalidad	○	○	○	○	○

Q3 En base a su propia experiencia usando servicios de omnicanalidad, por favor indique que tan en desacuerdo o de acuerdo está con las siguientes afirmaciones.

	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
Puedo realizar mis transacciones de manera fluida de un canal a otro	○	○	○	○	○

Después de una transición entre canales, puedo continuar con mi transacción correctamente	○	○	○	○	○
Después de una transición entre canales, mi experiencia de compra se mantiene igual	○	○	○	○	○
Suelo recomendar a mis amigos y familiares usar servicios omnicanales	○	○	○	○	○
En general, mi experiencia usando servicios omnicanales ha sido positiva	○	○	○	○	○

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Q4 La omnicanalidad hace que las compañías dispongan de distintos canales para estar en permanente contacto con sus clientes. En el caso de las tiendas por departamento, algunos ejemplos son: tiendas físicas, páginas web, aplicaciones para teléfonos, kioskos en tienda, redes sociales (Instagram, Facebook, Twitter), correo electrónico, call centers, etc.

Teniendo esto en consideración, por favor indique que tan en desacuerdo o de acuerdo está con las siguientes afirmaciones

	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
Estoy consciente de la existencia de todos los canales disponibles que posee una compañía.	○	○	○	○	○
Estoy consciente de los diferentes atributos que poseen los distintos canales.	○	○	○	○	○
Sé cómo utilizar los distintos canales para encontrar lo que necesito.	○	○	○	○	○
La información entregada es consistente a través de los distintos canales.	○	○	○	○	○
Cuando interactúo con un canal, mis interacciones con los otros canales son siempre tomadas en cuenta.	○	○	○	○	○
Independientemente del canal que escoja, puedo usar otros canales para obtener información o ayuda.	○	○	○	○	○
Puedo elegir canales alternativos a los que ofrece una compañía para encontrar lo que necesito.	○	○	○	○	○

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Q5

Las preguntas presentadas en esta sección corresponden al uso de los distintos canales que ofrece una misma empresa durante un ciclo de compra para distintas categorías de productos. Las categorías de producto a considerar son vestuario (poleras, polerones, vestidos, ropa interior, etc.), zapatos, tecnología (smartphones, tablets, computadores, etc.) y electro hogar (microondas, lavadoras, aspiradoras, etc.)

Teniendo esto en consideración, por favor responda las siguientes preguntas.

Q6 En base a sus compras en los últimos 12 meses, por favor seleccione los todos canales de una misma empresa que ha utilizado para **buscar información** en las siguientes categorías de producto.

	Tienda física	Página web (computador)	Página web (móvil)	App	Kiosko	Redes sociales	Vendedor con tablet	Call Center	Otro
Vestuario	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zapatos	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tecnología	☐	☐	☐	☐	☐	☐	☐	☐	☐
Electro hogar	☐	☐	☐	☐	☐	☐	☐	☐	☐

Q7 En base a sus compras en los últimos 12 meses, por favor seleccione todos los canales de una misma empresa que ha utilizado cuando quiere **comprar/pagar** en las siguientes categorías de producto.

	Tienda física	Página web (computador)	Página web (móvil)	App	Kiosko	Redes sociales	Vendedor con tablet	Call Center	Otro
Vestuario	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zapatos	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tecnología	☐	☐	☐	☐	☐	☐	☐	☐	☐
Electro hogar	☐	☐	☐	☐	☐	☐	☐	☐	☐

Q8 En base a sus compras en los últimos 12 meses, por favor seleccione todos los canales de una misma empresa que ha utilizado para **reclamar**, **evaluar o pedir asistencia** en las siguientes categorías de productos.

	Tienda física	Página web (computador)	Página web (móvil)	App	Kiosko	Redes sociales	Vendedor con tablet	Call Center	Otro
Vestuario	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zapatos	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tecnología	☐	☐	☐	☐	☐	☐	☐	☐	☐
Electro hogar	☐	☐	☐	☐	☐	☐	☐	☐	☐

Page Break

Q9 Sexo

- Masculino (1)
- Femenino (2)
- Otro (3)

Q10 Edad

- 18 - 24 (1)
- 25 - 31 (2)
- 32 - 40 (3)
- 40 - 50 (4)
- >50 (5)

Q11 Nivel de educación

- Secundaria incompleta (1)
- Secundaria completa (2)
- Universitaria incompleta (3)
- Universitaria completa (4)
- Estudios de postgrado (5)

Q12 Ingreso mensual aproximado (pesos chilenos)

- ○ $0 - $500.000 (1)
- ○ $500.001 - $950.000 (2)
- ○ $950.001 - $1.600.000 (3)
- ○ $1.600.001 - $2.500.000 (4)
- ○ >$2.500.001 (5)

Appendix N°2: Exploratory Factor Analysis & Cronbach's Alpha Analysis

Factor analysis/correlation — Number of obs = 227
Method: principal-component factors — Retained factors = 5
Rotation: (unrotated) — Number of params = 80

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	4.78353	2.42961	0.2658	0.2658
Factor2	2.35392	0.56777	0.1308	0.3965
Factor3	1.78615	0.48692	0.0992	0.4958
Factor4	1.29923	0.20199	0.0722	0.5679
Factor5	1.09724	0.11874	0.0610	0.6289
Factor6	0.97850	0.23560	0.0544	0.6833
Factor7	0.74290	0.03717	0.0413	0.7245
Factor8	0.70573	0.10288	0.0392	0.7637
Factor9	0.60285	0.03334	0.0335	0.7972
Factor10	0.56951	0.02880	0.0316	0.8289
Factor11	0.54071	0.05784	0.0300	0.8589
Factor12	0.48287	0.03008	0.0268	0.8857
Factor13	0.45279	0.04673	0.0252	0.9109
Factor14	0.40606	0.04962	0.0226	0.9334
Factor15	0.35645	0.03159	0.0198	0.9532
Factor16	0.32485	0.04485	0.0180	0.9713
Factor17	0.28000	0.04328	0.0156	0.9868
Factor18	0.23672	.	0.0132	1.0000

LR test: independent vs. saturated: chi2(153) = 1384.16 Prob>chi2 = 0.0000

Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Uniqueness
Freq_Omni_~e	0.5031	0.6628	-0.1723	-0.2096	0.0335	0.2329
Use_Diff_O~s	0.4926	0.5433	-0.2069	-0.2856	0.1346	0.3197
Most_Trans~i	0.4832	0.5050	-0.1375	-0.3137	0.2411	0.3360
Recommenda~s	0.5393	0.3761	-0.1969	-0.1524	-0.1676	0.4775
Positive_CE	0.6524	-0.1690	-0.1720	0.0843	-0.0989	0.4994
Fluid_Change	0.6391	-0.1425	-0.3839	0.2162	-0.2790	0.2993
Fluid_Tran~c	0.6665	-0.1870	-0.3218	0.2708	-0.3159	0.2441
Same_CE	0.5374	-0.3244	-0.5145	0.1225	-0.0385	0.3247
Channel_Ex~e	0.5009	-0.0940	0.4111	-0.2785	-0.1260	0.4779
Channel_At~s	0.5655	-0.1605	0.5219	-0.2667	-0.2694	0.2383
Channel_Us~e	0.5380	-0.1131	0.5062	-0.2443	-0.1938	0.3443
Channel_Op~s	0.5102	-0.3433	0.3206	0.1042	0.2909	0.4236
External_C~l	0.4629	-0.2117	0.2594	0.1148	-0.0752	0.6548
Consistent~H	0.6033	-0.3574	-0.0712	-0.1017	0.3445	0.3742
Multi_Inte~n	0.4650	-0.3828	-0.0584	0.0172	0.6635	0.1933
CChU_Pre	0.3634	0.3656	0.2400	0.5159	-0.0059	0.4105
CChU_Purch~e	0.3719	0.3443	0.2755	0.4800	0.1200	0.4225
CChU_Post	0.1044	0.5453	0.3181	0.4127	0.1152	0.4070

. rotate

Factor analysis/correlation — Number of obs = 227
Method: principal-component factors — Retained factors = 5
Rotation: orthogonal varimax (Kaiser off) — Number of params = 80

Factor	Variance	Difference	Proportion	Cumulative
Factor1	2.69911	0.13650	0.1500	0.1500
Factor2	2.56261	0.15900	0.1424	0.2923
Factor3	2.40361	0.51677	0.1335	0.4259
Factor4	1.88684	0.11895	0.1048	0.5307
Factor5	1.76789	.	0.0982	0.6289

LR test: independent vs. saturated: chi2(153) = 1384.16 Prob>chi2 = 0.0000

Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Uniqueness
Freq_Omni_~e	0.1263	0.8416	0.0648	-0.0571	0.1882	0.2329
Use_Diff_O~s	0.1028	0.8105	0.0513	0.0708	0.0718	0.3197
Most_Trans~i	0.0162	0.7898	0.0757	0.1707	0.0712	0.3360
Recommenda~s	0.3423	0.6026	0.1693	-0.0865	0.0778	0.4775
Positive_CE	0.5936	0.1642	0.2410	0.2456	0.0537	0.4994
Fluid_Change	0.8123	0.1470	0.0976	0.0814	0.0565	0.2993
Fluid_Tran~c	0.8410	0.0810	0.1559	0.0817	0.1047	0.2441
Same_CE	0.7387	0.0863	-0.0566	0.3129	-0.1453	0.3247
Channel_Ex~e	0.0611	0.1494	0.6914	0.1336	0.0125	0.4779
Channel_At~s	0.1223	0.0731	0.8574	0.0706	0.0349	0.2383
Channel_Us~e	0.0773	0.1010	0.7902	0.1017	0.0690	0.3443
Channel_Op~s	0.1351	-0.1020	0.4051	0.5859	0.2009	0.4236
External_C~l	0.2621	-0.0760	0.4346	0.2121	0.1920	0.6548
Consistent~H	0.3125	0.1335	0.2378	0.6673	-0.0924	0.3742
Multi_Inte~n	0.1361	0.0487	0.0327	0.8858	-0.0045	0.1933
CChU_Pre	0.1626	0.1312	0.0953	-0.0095	0.7326	0.4105
CChU_Purch~e	0.0893	0.1462	0.0981	0.1058	0.7262	0.4225
CChU_Post	-0.1666	0.1875	-0.0186	-0.0879	0.7225	0.4070

Factor rotation matrix

	Factor1	Factor2	Factor3	Factor4	Factor5
Factor1	0.5914	0.4471	0.4956	0.3923	0.2253
Factor2	-0.2706	0.7136	-0.1932	-0.4204	0.4511
Factor3	-0.5360	-0.2675	0.6909	0.0077	0.4046
Factor4	0.3349	-0.4402	-0.3527	0.0090	0.7547
Factor5	-0.4214	0.1597	-0.3396	0.8180	0.1116

. sortl

Rotated factor loadings (pattern matrix) and unique variances sorted

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Uniqueness
Fluid_Tran~c	0.8410	0.0810	0.1559	0.0817	0.1047	0.2441
Fluid_Change	0.8123	0.1470	0.0976	0.0814	0.0565	0.2993
Same_CE	0.7387	0.0863	-0.0566	0.3129	-0.1453	0.3247
Positive_CE	0.5936	0.1642	0.2410	0.2456	0.0537	0.4994
Freq_Omni_~e	0.1263	0.8416	0.0648	-0.0571	0.1882	0.2329
Use_Diff_O~s	0.1028	0.8105	0.0513	0.0708	0.0718	0.3197
Most_Trans~i	0.0162	0.7898	0.0757	0.1707	0.0712	0.3360
Recommenda~s	0.3423	0.6026	0.1693	-0.0865	0.0778	0.4775
Channel_At~s	0.1223	0.0731	0.8574	0.0706	0.0349	0.2383
Channel_Us~e	0.0773	0.1010	0.7902	0.1017	0.0690	0.3443
Channel_Ex~e	0.0611	0.1494	0.6914	0.1336	0.0125	0.4779
External_C~l	0.2621	-0.0760	0.4346	0.2121	0.1920	0.6548
Multi_Inte~n	0.1361	0.0487	0.0327	0.8858	-0.0045	0.1933
Consistent~H	0.3125	0.1335	0.2378	0.6673	-0.0924	0.3742
Channel_Op~s	0.1351	-0.1020	0.4051	0.5859	0.2009	0.4236
CChU_Pre	0.1626	0.1312	0.0953	-0.0095	0.7326	0.4105
CChU_Purch~e	0.0893	0.1462	0.0981	0.1058	0.7262	0.4225
CChU_Post	-0.1666	0.1875	-0.0186	-0.0879	0.7225	0.4070

```
. alpha Fluid_Transac Fluid_Change Same_CE Positive_CE

Test scale = mean(unstandardized items)

Average interitem covariance:     .3860798
Number of items in the scale:            4
Scale reliability coefficient:      0.8041

. alpha Freq_Omni_Usage Use_Diff_Options Most_Transac_Omni Recommendations

Test scale = mean(unstandardized items)

Average interitem covariance:     .5645426
Number of items in the scale:            4
Scale reliability coefficient:      0.7979

. alpha Channel_Existence Channel_Attributes Channel_Usage Channel_Options External_Channel

Test scale = mean(unstandardized items)

Average interitem covariance:     .3277182
Number of items in the scale:            5
Scale reliability coefficient:      0.7469

. alpha ConsistentInfo_BCH Multi_Interaction

Test scale = mean(unstandardized items)

Average interitem covariance:     .4956922
Number of items in the scale:            2
Scale reliability coefficient:      0.7020

. alpha CChU_Pre CChU_Purchase CChU_Post

Test scale = mean(unstandardized items)

Average interitem covariance:     .4183008
Number of items in the scale:            3
Scale reliability coefficient:      0.6221
```

Appendix N°3: Multiple Regression Analysis

```
. regress CChU_Pre OmniSUsage Ftransactions ChKnowledge CContent SexDummy Age Education Income, robust

Linear regression                               Number of obs     =        227
                                                F(8, 218)         =       4.43
                                                Prob > F          =     0.0001
                                                R-squared         =     0.1327
                                                Root MSE          =      .9704
```

CChU_Pre	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
OmniSUsage	.2228761	.0783353	2.85	0.005	.0684846	.3772675
Ftransactions	.1093006	.1249774	0.87	0.383	-.1370181	.3556193
ChKnowledge	.1714281	.1184059	1.45	0.149	-.0619386	.4047949
CContent	-.0089067	.1039668	-0.09	0.932	-.2138155	.1960021
SexDummy	-.1070604	.1400565	-0.76	0.445	-.3830985	.1689777
Age	-.2440192	.0792661	-3.08	0.002	-.4002453	-.0877931
Education	.0470454	.092408	0.51	0.611	-.1350821	.2291729
Income	.1138003	.0576414	1.97	0.050	.0001945	.227406
_cons	1.94088	.5816126	3.34	0.001	.7945768	3.087184

```
. regress CChU_Purchase OmniSUsage Ftransactions ChKnowledge CContent SexDummy Age Education Income, robust

Linear regression                               Number of obs     =        227
                                                F(8, 218)         =       4.96
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1386
                                                Root MSE          =      .9498
```

CChU_Purchase	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
OmniSUsage	.2573948	.081896	3.14	0.002	.0959855	.418804
Ftransactions	.0672472	.1248691	0.54	0.591	-.178858	.3133524
ChKnowledge	.224046	.1045772	2.14	0.033	.0179343	.4301577
CContent	-.0044947	.091816	-0.05	0.961	-.1854554	.176466
SexDummy	-.0122794	.1364327	-0.09	0.928	-.2811754	.2566165
Age	-.0030852	.0737475	-0.04	0.967	-.1484346	.1422642
Education	.1048251	.0862077	1.22	0.225	-.0650822	.2747324
Income	.112818	.0510972	2.21	0.028	.0121102	.2135258
_cons	.0399363	.5476754	0.07	0.942	-1.03948	1.119353

```
. regress CChU_Post OmniSUsage Ftransactions ChKnowledge CContent SexDummy Age Education Income, robust

Linear regression                               Number of obs     =        227
                                                F(8, 218)         =       3.93
                                                Prob > F          =     0.0002
                                                R-squared         =     0.1024
                                                Root MSE          =     1.1752
```

CChU_Post	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
OmniSUsage	.3728084	.0895787	4.16	0.000	.1962571	.5493596
Ftransactions	-.2868299	.1414536	-2.03	0.044	-.5656215	-.0080382
ChKnowledge	.1513713	.1378934	1.10	0.274	-.1204036	.4231463
CContent	-.1492835	.1146221	-1.30	0.194	-.3751929	.0766259
SexDummy	-.1900703	.1644103	-1.16	0.249	-.5141075	.1339669
Age	-.0398503	.0870844	-0.46	0.648	-.2114854	.1317848
Education	.1294304	.106542	1.21	0.226	-.0805539	.3394146
Income	.0436286	.0639244	0.68	0.496	-.0823604	.1696176
_cons	1.664442	.7395	2.25	0.025	.2069576	3.121927

```
. regress CChU_Pre OmniSUsage ChKnowledge Age Income, robust

Linear regression                               Number of obs     =        227
                                                F(4, 222)         =       8.31
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1252
                                                Root MSE          =     .96578
```

CChU_Pre	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
OmniSUsage	.2550055	.0807967	3.16	0.002	.0957789	.4142321
ChKnowledge	.1993364	.0969276	2.06	0.041	.0083205	.3903522
Age	-.2241962	.0738202	-3.04	0.003	-.3696742	-.0787182
Income	.1025278	.0514584	1.99	0.048	.0011184	.2039373
_cons	2.23641	.4425665	5.05	0.000	1.364241	3.108579

```
. regress CChU_Pre OmniSUsage  ChKnowledge SexDummy Age Education Income, robust

Linear regression                               Number of obs     =        227
                                                F(6, 220)         =       5.67
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1287
                                                Root MSE          =     .96821
```

CChU_Pre	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
OmniSUsage	.2446295	.0805068	3.04	0.003	.0859662	.4032928
ChKnowledge	.2036778	.096498	2.11	0.036	.013499	.3938567
SexDummy	-.108546	.1390297	-0.78	0.436	-.3825465	.1654546
Age	-.2447699	.0781074	-3.13	0.002	-.3987045	-.0908353
Education	.0517398	.0919884	0.56	0.574	-.1295515	.2330311
Income	.1056879	.0571836	1.85	0.066	-.0070099	.2183857
_cons	2.132921	.5508509	3.87	0.000	1.0473	3.218541

Appendix N°4: Results from Matrix Channel Selection

		Channels								
Customer Journey	**Product Category**	**Physical Store**	**Website (computer)**	**Website (mobile)**	**App**	**Kiosk**	**Social Media**	**Call Center**	**Sales Associate with tablet**	**Other**
Pre - Purchase	Clothes	28,22%	24,46%	24,75%	7,38%	0,43%	12,30%	1,16%	1,01%	0,29%
	Shoes	34,30%	24,91%	22,70%	5,97%	0,68%	9,39%	0,34%	1,54%	0,17%
	Technology	22,36%	31,31%	27,80%	7,19%	0,32%	8,15%	0,48%	1,44%	0,96%
	Appliances	26,43%	31,79%	26,25%	5,18%	1,25%	5,18%	1,25%	1,25%	1,43%
Average		**27,83%**	**28,12%**	**25,38%**	**6,43%**	**0,67%**	**8,76%**	**0,81%**	**1,31%**	**0,71%**
During Purchase	Clothes	39,69%	29,29%	19,85%	7,90%	0,39%	0,58%	0,58%	1,54%	0,19%
	Shoes	46,33%	27,75%	16,97%	5,73%	0,46%	0,69%	0,23%	1,38%	0,46%
	Technology	33,26%	36,52%	21,52%	5,87%	0,65%	0,87%	0,43%	0,22%	0,65%
	Appliances	36,34%	34,26%	19,21%	4,86%	1,16%	1,16%	0,46%	0,46%	2,08%
Average		**38,91%**	**31,96%**	**19,39%**	**6,09%**	**0,67%**	**0,83%**	**0,43%**	**0,90%**	**0,85%**
Post - Purchase	Clothes	31,38%	23,65%	11,24%	2,81%	0,23%	10,54%	15,69%	0,00%	4,45%
	Shoes	37,33%	19,73%	10,93%	2,93%	0,53%	9,07%	13,87%	0,27%	5,33%
	Technology	25,62%	25,85%	13,15%	2,72%	0,23%	9,75%	17,46%	0,68%	4,54%
	Appliances	27,66%	23,64%	12,53%	2,60%	0,24%	8,04%	17,97%	0,71%	6,62%
Average		**30,50%**	**23,22%**	**11,96%**	**2,77%**	**0,31%**	**9,35%**	**16,25%**	**0,42%**	**5,24%**