

Faculty of Business Economics

Master of Management

Master's thesis

The last meter. Will multi-channel strategies make the difference in the Retail sector?

Fakhar Abba

Thesis presented in fulfillment of the requirements for the degree of Master of Management, specialization International Marketing Strategy

SUPERVISOR:

Prof. dr. Allard VAN RIEL



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Disclaimer

This master thesis was written during the COVID-19 crisis in 2020. This global health crisis might have had an impact on the (writing) process, the research activities and the research results that are at the basis of this thesis.

Acknowledgement

I am a student at the University of Hasselt, studying Master of Management majoring in International Marketing Strategy. This master's thesis was written to finalize my master's studies. This master's thesis is entitled "The last meter. Do multi-channel strategies make a difference in the retail sector?". This thesis bridges the theoretical knowledge that has been built up in recent years and practice. This thesis was writing between October 2019 and May 2020. This duration involves many hours of reading, writing, rewriting, and analysis.

Before starting, I would like to thank the personnel who were involved and helped me to complete this thesis successfully. I would like to express my deep gratitude to my Educational Supervisor Prof. Dr. Allard van Riel, for guiding me in the right direction and for giving me extensive and meaningful feedback that was useful especially in the hard times of COVID 19 pandemic. Secondly, I would like to thank all my colleagues for being a support in the research and for advising me in certain difficult situations. I would also like to thank everyone who took the time and effort to complete my questionnaire. This is the only way to complete this master's thesis. Also, special thanks to the University of Hasselt.

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Executive Summary

In the past, customers used bricks-and-mortar for searching information and buying through the same sales channel, but the introduction and development of the Internet and mobile devices have dramatically transformed consumption patterns. Therefore, a large group of retailers has now decided to add an online store to their already existing offline concept because selling via the Internet has many advantages over the traditional shopping environment for both customers and retailers. Due to these advantages almost, all retailers are selling through different sales channels (a combination of a physical store and a webshop). These retailers are known as multichannel retailers.

In the past few years, however, we have seen that pure online retailers are also opening physical stores (offline sales channels) and becoming multichannel retailers. These movements of retailers by opening additional online or offline sales channels shows that retailers are convinced that multichannel retailing offers advantages over selling through only one single channel. But is that true? Do multichannel strategies make a difference? Or do these strategies cost a lot of extra money without gaining any additional benefit?

Customer loyalty is amongst one of the main sustainable competitive advantages that retailers can achieve. That's is because loyal customers bring more profitability for the retailer than one-off customers, retaining loyal customers is easy and these customers are less price-conscious. Thus, when we want to investigate whether multichannel retailing offers more advantages, customer loyalty in different sales channels is a very interesting approach. This master thesis examines exactly how customer loyalty works in multichannel retailing. This master thesis also investigates, whether there is a spill-over of customer loyalty among different sales channels and how new technology such as mobile devices affect customer loyalty in these sales channels. To answer these questions, a literature study was first conducted. It explores the main sources of loyalty in offline and online channels. The existing literature regarding the spill-over effect was also examined, which states that there is indeed an interplay between online and offline loyalty. Lastly, literature about the difference between pc-based internet and mobile-based internet was also examined.

Based on this literature study a questionnaire was formulated. This questionnaire was answered by 203 customers who had experience with buying through multiple sales channels. The results of this research show us that customer satisfaction and customer trust have a positive impact on customer loyalty in both offline and online sales channels. In addition, the results also show that there is indeed spill-over of loyalty among online and offline sales channels. This means that customers see both channels of the retailer as a whole, as a result, the views that a customer has about one channel are transferred when the customer comes into contact with the other channel. Customer loyalty is carried along from one channel to another. Therefore, multichannel retailers do not have to start from scratch when building customer loyalty. Hence, if a customer is already loyalty to one sales channel, he/she will transfer it to the other sales channel. In this way, multichannel retailers have an advantage over traditional single-channel retailers.

Furthermore, it was also investigated how the use of mobile devices affects customer loyalty in multichannel retailing. The results show that the use of mobile devices indeed affects multichannel retailing. More specifically, the use of mobile devices have a positive effect on loyalty in online sales channels, whereas mobile use negatively affects loyalty in offline sales channels. It may be because customers are more focused on their mobiles, so they pay less attention to the products on shelves in the store. It could also be that by comparing prices by using mobile devices customer might find a better offer in online sales channels. Another reason could be that bad reviews of a product can cause customers not to buy the product. To minimize the negative effect of the use of the mobile phone on offline sales channels, retailers can encourage the use of mobile devices in the offline sales channel (stores) by offering coupons that are only valid in the physical stores, another option could be to provide charging devices on the shopping carts so that customers spend more time in the store while they wait for their mobile devices to be charged or to offer free Wi-Fi to prompt the customer to stay longer in the store which could lead to more purchases.

This study contributes to the literature by confirming what previous studies have already shown: customer loyalty depends on satisfaction and trust, both in the physical store (offline sales channels) and in the webshop (online sales channels). Also, there is an effect of offline loyalty on online loyalty and vice versa. Furthermore, this research shows that the size of the spill-over effect is almost equal to the effect of customer satisfaction and trust on loyalty in different sales channels. This means in multichannel retailing customer loyalty is also mainly influenced by already built up loyalty in another sales channel. For that reason, multichannel retailers do have an advantage when it comes to loyalty building. So, to utilize the full benefits of customer loyalty, single-channel retailers should start an additional sales channels to benefit from the spill-over of customer loyalty from the existing sales channel (online to offline or offline to online). This additional channel will provide the retailer with a sustainable competitive advantage.

This research also has some limitations, the biggest limitation is regarding the dataset. Due to an uneven distribution of age categories, especially for the age categories of under 18. There are no observations to provide a good picture of these age groups. In a possible future study, it is best to pay more attention to a more evenly distributed sample to get a more uniform picture because younger consumers might deviate from this research model. Another possible limitation could be the low values of standard deviation, this could mean that the sample (respondents) of this study may not be representative of the entire population of multichannel consumers. Furthermore, this research did not focus on different sectors. Therefore, it might be possible to say that the results of this study may vary when applied to a specific sector. Therefore, further research in the field of loyalty in multichannel retailing can focus on extending these findings to specific sectors. Finally, further research is needed to determine why the use of mobile devices affect offline sales channels negatively.

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1 Introduction:

The introduction and development of the Internet and mobile devices have dramatically transformed consumption patterns. In the past, customers used bricks-and-mortar for searching information and buying through the same sales channel. Nevertheless, with the quick expansion of multichannel sales channel environments offering many different search platforms such as directories, websites and mobile applications, customers are now able to search for information through any of these sales channels and utilize this information to make a final decision about where to purchase.

It is extensively recognized by researchers and experts that conducting transactions through a virtual medium is different from conventional shopping environments (Alba et al. 1997). Some main differences include the modes of collecting product information, higher perceived risk, and the ability for customers to repurchase the same product by using the saved personal shopping list. Therefore, it is crucial for managers to determine how these differences influence customer sales channel choice.

Mobile devices have changed the ways of retailing due to mobile devices' portability, location sensitivity and personal nature when compared to traditional fixed Internet (PCs) (Shankar, Venkatesh, Hofacker, & Naik 2010). This is because in bricks-and-mortar, stores can only interact with potential customers when they enter the store, but the mobile sales channel allows the retailer to interact with potential customers everywhere by continuously entering the customer's environment (Shankar et al. 2010). Hence, we believe that the development of mobile technologies greatly influences how online information affects customer purchasing decisions and their loyalty.

1.1 Problem Definition:

In recent years, the retail sector has changed significantly. Customers used to buy their products in stores, whereas nowadays many customers are buying their products online. Due to this change, many Internet retailers are growing, such as bol.com, AliExpress and Amazon. Nevertheless, traditional stores are far from extinct, because customers still prefer to buy some products at a physical store compared to a webshop. Therefore, many retailers offer a combination of sales channels; for example, the same retailer has both a webshop and physical stores where customers can go, depending on their needs and requirements. This selling of goods via different sales channels is known as multichannel retailing.

In the early days of multichannel retailing, retailers used to send catalogs by mail to their potential customers along with having a physical store. That enabled the customers to place orders via a reply form in the catalog or by telephone call. However, the evolution of multichannel retailing started with the rise of the Internet, because it provided the possibility of adding a new sales channel.

In recent years, the Internet became a very popular sales channel worldwide with reach to many customers, especially in the fashion, tourism and electronics markets (Rejón-Guardia & Luna-Nevarez, 2017). Selling via the Internet has many advantages over the traditional shopping

environment for both customers and retailers. Nonetheless, multichannel retailing is not only about selling through the Internet (webshop) along with a physical store. Not so long ago we observed that there is a reverse movement such that online retailers are moving towards a network of physical stores (Avery, Steenburgh, Deighton, & Caravella, 2012). This reverse movement shows that multichannel retailing has benefits that a single sales channel cannot offer. Some of these benefits include: expanding the sales market, increasing ease of use for customers, spreading risk across multiple sales channels and increasing contact between customers and retailers through various communication and sales channels. These benefits lead many retailers who owned a physical store to rush towards starting an online sales channel.

While multichannel retailing has become widespread, it also has some disadvantages because this strategy increases the number of competitors. Multichannel customers, therefore, have more options to choose from than customers who only buy through one sales channel. On average, customers who purchase through multiple sales channels are less loyal than customers who only buy through one sales channel (Stojkovic, Dragan, Lovreta, & Bogetic, 2016). Moreover, due to the rapid surge in the use of mobile devices, consumers can engage at any time and from anywhere with different brands during and after the transaction. This makes it possible for them to change their purchasing decision at any time. This greatly affects customer purchasing decisions and their loyalty.

The way loyalty can be attained changes as the retail landscape changes. The rise of multichannel retailing is no exception. In the past, researchers have been researching the concept of multichannel retailing and the challenges that come with it but customer loyalty in terms of multichannel is a fairly recent topic. Moreover, another neglected factor of multichannel literature is the increased use of mobile devices. Although the use of mobile devices is increasing, little academic research has concentrated on preference for mobile devices compared with PCs in the different stages of the purchasing process and how customers use these mobile devices in the context of multichannel retailing.

1.2 Research Questions

This research contributes to loyalty literature by understanding the different factors that affect customer loyalty in multichannel retailing (offline and online sales channels) and the effect of using mobile devices on customer loyalty with a focus on these sales channels. Due to the reverse movement (online retailers are moving towards a network of physical stores) happening recently, it is interesting to investigate whether online sales channel loyalty also influences the offline sales channel of the same retailer.

This master thesis aims to determine which factors have an impact on loyalty in multichannel retailing. To investigate this, the central research question is formulated as follows:

"What factors affect customer loyalty in multichannel retailing and how does the use of mobile devices affect their loyalty in multichannel retailing?"

It is crucial to examine what influences the loyalty in each specific sales channel. Some factors remain the same across the different sales channels and some may be unique for a certain sales channel. The experience gained in one sales channel can also have an impact on loyalty in another sales channel because customers are not only loyal to a sales channel, but to the retailer in general. To support the key research question additional sub-questions were defined as follows:

Sub-question 1: "Which factors influence customer loyalty in online and offline sales channels?"

This sub-question examines the determining factors for customer loyalty in traditional offline (store) and online (webshop) sales channels. This question will determine whether there is a difference between online and offline loyalty. Moreover, this sub-question considers factors that are relevant for every retailer with an offline or online store. These factors are therefore not unique for multichannel retailing, but they do play a role in investigating loyalty in multichannel retailing. Many variables that have an important influence on customer loyalty in the literature will also be listed.

Sub-question 2: "Do online and offline sales channels affect each other in terms of loyalty?"

The second sub-question determines whether loyalty in the offline sales channel influences loyalty in the online sales channel and vice versa. This spill-over effect is therefore viewed in both directions. This research question also tries to analyze the reverse movement of retailers.

Sub Question 3: "What are the key differences between mobile devices and traditional fixed (PC) internet?"

This sub-question examines the key differences between the use of mobile devices and traditional fixed (PC) internet for information searching for purchasing reasons. Moreover, this sub-question focuses on preference for mobile devices compared with PCs in the search stage of the shopping journey.

Sub Question 4: "How do mobile devices impact customer loyalty in multi-sales channel retailing?"

This sub-question will investigate, that which factors have an effect on the use of mobile devices and checks whether the use of mobile devices influences those factors negatively or positively.

2 Literature Study

The goal of this literature study is to obtain a research model that can be tested and can act as an input for the second part of this master's thesis. The first part of this literature study includes definitions of the relevant terms used in the study. In the second part, we examine the existing loyalty literature, in which we first look separately at the literature on loyalty in offline and online sales channels, which is followed by an analysis of the factors of customer loyalty in offline and online sales channels. In the third part, we explore the literature on the spill-over of loyalty across different sales channels. In the fourth part, we examine the literature about the key differences between mobile devices and PCs based internet. Lastly, we explore the literature about how mobile devices affect customer loyalty in multichannel retailing. The main source of collecting literature for this study are Google Scholar and the website of the library of the University of Hasselt.

Keywords: multichannel retailing, sales channels, loyalty, customer loyalty, omnisales channel retailing, online retailing.

2.1 Definitions

Before investigating the causes of loyalty in a multichannel retail environment, it is critical to define some terms for a better understanding of the literature study. Therefore, in this chapter main terms that will be used throughout this thesis are explained in detail.

2.1.1 Multichannel retailing

The main focus of this research is on customer loyalty in multichannel retailing. Therefore, understanding what exactly multichannel retailing means is important. There are several definitions of multichannel retailing in literature such as multichannel retailing is a situation where the retailer allows the customers to buy through numerous different types of sales channels such as traditional stores, catalogs and e-commerce (Berman and Thelen 2004). Levy and Weitz, 2009) have defined multichannel retailing as a set of activities involved in selling products or services to consumers through more than one sales channel. Both definitions make it clear that multichannel retailing is about selling products or services to customers through more than one sales channel. Sometimes, confusion arises between multichannel marketing and retailing but there is a clear distinction between both.

Multichannel marketing is mainly about using one or more marketing sales channels to reach one or more market segments or in simple words communicating with customers and promoting products through two or more sales channels, but only selling through one sales channel. Therefore, the main difference is that multichannel retailing sales are also made through different sales channels (Zhang et al., 2010). Moreover, multichannel retailing exclusively refers to retailers who sell directly to the end consumer.

Making this distinction is very important because customer loyalty is based on the opinion of the end consumer instead of a trader who continues to sell the product to other customers. So, based

on the previous explanation we define multichannel retailing in the following way: multichannel retailing is about offering retailers' products or services directly to the end consumer through multiple sales channels.

In the literature, many different terms are used to describe this concept of selling through multiple sales channels. For example, multi-sales channel retailing, cross-sales channel retailing and omnisales channel retailing. However, these terms do not completely have the same meaning because there are a few differences, particularly in terms of the degree of integration between sales channels. This section of the literature study will attempt to clearly describe this distinction among different terms of this concept.

In multichannel retailing, a company offers multiple sales channels but with the lowest integration, for example, a retailer who sells through a website and a physical store may allow the customer to order a product online while the product ordered online is not returnable to the store. This method shows that there is no interconnection between these sales channels. Each sales channel is treated individually and normally managed by different teams. In addition, pricing and inventory are also done separately for each sales channel.

According to Beck and Rygl (2015), cross-sales channel retailing has partial integration between several sales channels. In cross-sales channel retailing customers can switch between some, but not all available sales channels. For example, the customer can return a product that was purchased online in the physical store., or the customer can redeem a voucher in a store that he/she received online. The main characteristic of the cross-sales channel retailing is that there is a certain degree of interaction and integration between different sales channels or touchpoints (De Faultrier, Boulay, Feenstra, & Muzellec 2014). The cross-sales channel retailing is not only limited to sales channels, it also considers touchpoints (Beck & Rygl 2015). Touchpoints refer to direct or indirect contact between a customer and a brand or firm' (Verhoef, Kannan, & Inman 2015, p. 175). Touchpoints include TV, billboards, or radio (Verhoef et al. 2015).

Lastly, omnisales channel retailing has the highest form of integration in which all sales channels are fully integrated. For example, a customer is attracted by a promoted product on a TV/billboard that refers to a website. Later, this customer gathers more information and places the selected product in the shopping cart but does not place the order. While traveling to work by train, this customer uses the company's mobile shopping app (in which the product is also in the shopping basket) to complete the order and chooses store pick-up. As this example shows, that the customers can switch from one sales channel to another without interrupting their transaction stage.

Making this distinction was important because the degree of integration, can have extensive consequences on customer shopping experiences. According to Verhoef et al. (2009), customer experience is one of the factors that influence customer loyalty in single, and across different, sales channels. Therefore, a smooth transition between different sales channels can lead to positive customer experience, which in turn can promote customer loyalty.

Though it is critical to understand these different terms, in this master thesis the term multichannel retailing will be used to describe the general phenomenon of sales through multiple sales channels regardless of the degree of integration.

2.1.2 Sales channels

Sales channels are the way of getting products or services to customers. We classify three different types of sales channels in this master's thesis.

1. Offline sales channels

By offline sales channels we mean the physical stores, where customers can buy the product via physically feeling, touching and/or trying out the products. There are also other terms used for this kind of sales channel such as brick and mortar, brick stores and traditional retailers.

2. Online sales channels

The online sales channels mean sales through the internet. In an online sales channel the customer orders a product through a webshop or mobile app of a retailer and then receives his/her at the chosen address. These webshops or mobile apps are available 24/7, allowing a customer to make a purchase at his/her own ease. In an online sales channel customer is however not able to feel, touch or try out the products in pre-purchasing phase. There are also other terms for these kinds of sales channels such as: e-commerce, e-retailers and clicks store.

3. Catalog sales

Catalog sales are the sales channel where retailers send a catalog to the customers, customers are able to place their orders via telephone, and the order is then delivered to their home. In the past, this sales channel was very popular with retailers, but with the introduction of the Internet, this kind of sales channel is almost extinct. Therefore, in this master's thesis catalog sales channels will not be elaborated further.

2.2 Loyalty

Loyalty or customer loyalty has been one of the most important topics for both retailers and academics for years. This is because loyalty offers numerous benefits for both the retailer and the customer and thus is a critical aim of many marketing strategies. Customer loyalty is mainly defined as the willingness of customers to repeatedly buy a product/service from a similar retailer (via different or same sales channel) and hold a favorable attitude and psychological bond toward that retailer (Deng, Lu, Wei, & Zhang 2010; Gede, Mahatma, Yuda, Bakti, & Sumaedi 2013; Yeo, Thai & Roh 2015). As a result, loyal customers are willing to pay higher prices, and generate positive word of mouth, hence signifying a strong link between loyalty and profitability (Reichheld 1996; Wright &

Sparks 1999; Zeithaml, Berry, & Parasuraman 1996). Due to all these benefits, loyal customers create a sustainable competitive advantage.

Customer loyalty also benefits customers themselves because the customer does not have to compare different alternatives. Which in return save time and reduces the risk of purchase. Additionally, it is important to recognize that customers can be loyal to brands, services, product categories and even activities (Uncles, Dowling, & Hammond, 2003). Therefore, customer loyalty not only occurs with retailers. In this master thesis, however, we will focus mainly on loyalty towards a retailer's sales channels and on the factors that affect customer loyalty specifically in those sales channels. In the next part of this literature study, we explain how customer loyalty can be measured.

2.2.1 Measuring Customer Loyalty

For years different measuring instruments for customer loyalty have been recommended. For example, the number of purchases, the frequency of purchases and the probability of purchases at a particular store were used to measure loyalty (Dick & Basu, 1994). However, these methods faced huge criticism due to the lack of insufficient standards to describe the complex and multidimensional process of customer loyalty. This is due to the fact that customer loyalty is more than just behavior, therefore it is vital to understand the underlying processes and causes of customer loyalty. Recent academic literature shows three methods of conceptualizing loyalty (Uncles et al., 2003).

- 1. loyalty expressed in terms of observable behavior (pattern of past purchases),
- 2. loyalty as an attitude that occasionally leads to a relationship with a store.
- 3. Buying decisions that are influenced by buyers' characteristics, circumstances and / or the purchase conditions.

(1) loyalty expressed in terms of observable behavior:

The first method measures loyalty by examining the pattern of past purchases of customers with secondary regard to the motivations behind these purchases (Ehrenberg, 1988; Fader and Hardie, 1996; Kahn, Kalwani, & Morrison 1988; Massy, Montgomery, & Morrison 1970). This method therefore mainly looks at observable behavior. Based on this method loyalty comes through a trial and error process. A customer purchases repetitively from the same retailer because this retailer provides satisfaction or meets expectations. This does not occur due to an attitude or deep commitment with the retailer, but because it is not worthwhile looking for a better alternative. For example, if a usual product is out of stock or not available for some reason, then another similar product will be purchased because there is little reason to spend more time/ energy considering the alternatives when all are likely to be satisfactory. When a customer frequently buys from the same retailer and there is a no/weak commitment to this retailer, then that customer is loyal according to this method. Due to weak/no commitment, this method faces much criticism because according to the critics repeated purchases can also be the result of laziness and not necessarily arise from a conviction (Uncles et al., 2003).

(2) Loyalty as an attitude

The second method looks beyond basic observable behavior. Many researchers and professionals contend that there must be strong "attitudinal commitment" to a retailer for real loyalty to exist (Day, 1969; Jacoby and Chestnut, 1978; Foxall and Goldsmith, 1994; Reichheld, 1996). A strong attitudinal commitment means that a customer has a consistent set of positive beliefs towards a chosen retailer. These attitudes may be measured by inquiring customers about how much they like the retailer, how much committed they feel towards the retailer, to what degree they would recommend the retailer to others and has positive beliefs and feelings about it when compared to competing brands (Dick and Basu, 1994). The strength of these attitudes provides the predictions of potential buying behavior.

This model receives much conceptual support from many researchers, like Aaker, 1996; De Chernatony and McDonald, 1998; Keller, 1998. This method is also appealing to many consultants/ managers because it helps in searching for strategies that can strengthen customer's attitudes towards a retailer. According to Ahluwalia, Unnava, & Brunkrant (1999), the attitudinally-loyal customers are much less prone to negative information about the retailer than non-loyal customers. This is because customers form an affective (emotional) relationship with some of the brands. However, this method also faces criticism. This critic consists of the fact that this method is not applicable for understanding the buying of low-risk, regularly purchased products, or impulse purchasing than for important or risky decisions (Dabholkar, 2000). From this limitation, a third method emerged that addresses this criticism.

(3) Loyalty through individual characteristics and circumstances

The third model claim that the best conceptualization of loyalty is to allow the relationship between attitude and behavior to be moderated by contingency variables. These contingency variables include customers present circumstances (budget, time pressure), individual characteristics of the customer (risk tolerance, desire for variety, habit, the need to conform), and/or the purchasing condition (the availability of a retailer, promotions/discounts and occasion for purchase).

The main difference between this model of contingency perspective and the attitude perspective is that the contingency variables are raised from the status of loyalty inhibitors in model one to loyalty co-determinants in model three. Which means attitudes are indeed an important factor in customer loyalty, but several other factors can also influence purchasing decisions. This can be seen also in Oliver's loyalty definition (1997, p. 392):

"Loyalty is a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, causing repetitive same-brand or same-brand purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior."

This definition strongly suggests that purchasing conditions or other marketing efforts do not change loyalty. Which means a customer is less likely to be influenced by purchasing situation as he is more

loyal to a retailer and therefore shows less exchange behavior. Therefore, the stronger the customer loyalty, the less likely a customer will be influenced by purchase situations and the less change behavior he/she will exhibit. Based on this information understanding the different phases of loyalty with different strengths is crucial. Consequently, Oliver (1997) by extending his earlier work in conceptualizing loyalty, he provided a detailed framework of loyalty that presents loyalty as including four different phases: cognitive loyalty, affective loyalty, conative loyalty, and action loyalty (Harris & Goode, 2004). Table 1 examines the four distinct phases of loyalty to create a clear understanding of loyalty and its different phases.

Loyalty Phase	Description	
Cognitive loyalty	Cognitive loyalty is the first loyalty phase. Loyalty in this stage is driven from	
	previous knowledge or information based on experiences (Oliver, 1997,	
	1999). Individuals in this stage develop loyalty by comparing their preferred	
	product and alternatives based on former knowledge related to the product,	
	its features, and its performance (Back and Parks, 2003; Evanschitzky and	
	Wunderlich, 2006; Oliver, 1997, 1999). This is therefore a very low form of	
	loyalty where the customer can be influenced quickly to switch to another	
	retailer (Oliver, 1999).	
Affective loyalty	Affective loyalty is the second loyalty phase. In this phase deeper sense of	
	loyalty exist when compared to first cognitive stage (Oliver, 1997, 1999). At	
	this stage, loyalty is attained through repeated positive user experiences and	
	favorable attitude toward a retailer (Oliver, 1997, 1999). In this regard, many	
	researchers accept that this affective loyalty involves emotions and	
	satisfaction, which are important for customer attitudinal loyalty formation	
	(Bandyopadhyay and Martell, 2007; Han, 2009; Oliver, 1997, 1999). This	
	level of loyalty is deeper than cognitive loyalty. Yet, this level of loyalty is still	
	sensitive to switching between retailers.	
Conative loyalty	Conative loyalty is the third loyalty phase, which involves a strong	
	commitment and intention to repurchase as specified in the loyalty definition	
	(Oliver, 1997, 1999). In this stage, customers have a deeper level of loyalty	
	than in the affective stage since a simple affection grows into a real urge. At	
	this level of loyalty, customers will consciously choose to keep buying with	
	the same. Despite this strong urge, certain circumstances can stop customers	
	from converting their attitudes into behavior (Oliver, 1999).	
Action loyalty	Action loyalty phase can be referred to as true loyalty because action loyalty	
	does make the transition from intention to behavior. At this stage a customer	
	is at the highest level of loyalty, he/she is willing to overcome obstacles that	
	would prevent them from achieving action. These obstacles may include, for	
	example, need for variation, travelling cost etc. This last phase is by far the	
	highest loyalty and therefore the most difficult to break (Oliver, 1999).	

Table 1: Phases of Loyalty

These four stages of loyalty show the extent to which customers' loyalty can differ. The stronger level of customer loyalty leads to sustainable competitive advantage. A measuring instrument for loyalty should be able to measure the strongest form of loyalty as well as the lower levels of loyalty because a lower level of loyalty is also sometimes a necessary condition for stronger loyalty. These four stages of Oliver (1999) have got considerable acceptance and application in the marketing literature. It has been applied and verified in a different research context (Back and Parks, 2003; Blut, Evanschitzky, & Vogel 2007; Evanschitzky and Wunderlich, 2006; Han, Kim, & Kim 2011). Which measure gives a good picture of loyalty is discussed in the next chapter.

2.3 How is loyalty measured?

As mentioned earlier, a measuring instrument for loyalty should be able to measure the strongest form of loyalty as well as the lower levels of loyalty. However, the strongest form of loyalty like action loyalty is very difficult to observe and measure in practice. Therefore, most researchers concentrate on conative loyalty because it is a more measurable phase (measuring behavioral intentions). To measure loyalty based on the conative phase many researchers rely on the measuring instrument known as 'Behavior Intentions Battery' developed by Zeithaml, Berry, and Parasuraman (1996). This measuring instrument measure loyalty based on certain questions such as:

- The likelihood that a customer will buy again from same company in the future?
- Whether the customer considers this company as his/her first choice?
- The probability that a customer will give positive reviews or say good things about the company?
- Whether the customer would endorse the company to friends or family?
- Whether the customer would recommend the company to others for advice. come to ask?

To investigate the factors that influence loyalty in multichannel retailing, these questions of Zeithaml et al. (1996) are a good way to operationalize loyalty. However, in a multichannel context, it is important to question the loyalty in the individual sales channels. These loyalty questions will therefore be focused on the webshop, mobile technology and the physical store respectively.

2.4 Loyalty in offline sales channels

Now that we understand the meaning of loyalty and how it can be measured, it is now appropriate to understand the factors that influence loyalty in different sales channels. In this part of the thesis we will describe the factors of loyalty in traditional offline sales channels (stores). The customer loyalty differs in certain areas from brand loyalty or product loyalty. Therefore, explicit attention is paid to the way in which store loyalty (offline sales channel loyalty) is established and which factors influence this loyalty.

2.4.1 Store image

Store image is the views and general image that a customer has of the store in question and takes place entirely in the mind of the consumer. Various definitions of store image can be found in the literature. Based on those definitions it is clear that store image greatly depends on previous experiences and knowledge of the store. In addition, a retailer image (store image) may be more realistic to consumers than product brand images because the retail store enables the consumers to factually experience the brand at the point of purchase (van Tongeren, 2004). Customer emotional reactions can be elicited by store environmental cues, while cognitive inferences about a retailer can be generated by the diagnostic cues of the retailer's performance (Baker, Grewal, and Parasuraman, 1994). So, the store image mainly depends on two important categories. The first category includes rational, cognitive side, based on tangible characteristics or physical functions of the store (range, prices, shop design). The second category includes emotional elements based on intangible characteristics of the store (experience, excitement, friendliness). Having a positive store image plays an important role in the current retail market because of the high competition in marketing. Retailers, therefore, have every interest in working on their image in order to convince customers to buy in their store.

Based on the loyalty definition, we know that positive attitudes play an important role in creating customer loyalty and a positive store image is mainly about an accumulation of positive attitudes. Therefore, the question is, does the store image have an influence on customer loyalty? The research of De Ruyter and Bloemer (1998) answers this question. In their research, they examined whether there is a relationship between store image, satisfaction, and loyalty, but also whether there is an indirect effect, by keeping satisfaction as a mediator. The results of their research show that there is no significant direct effect of store image on loyalty, nonetheless, there is an indirect effect of store image on loyalty by keeping satisfaction as a mediator. This shows that store image does affect loyalty, but as a determinant of satisfaction. Therefore, if we want to investigate the causes of customer loyalty, we will also need to consider customer satisfaction. Customer satisfaction is further explained in the next part of the literature study.

2.4.2 Customer satisfaction

As mentioned above, customer satisfaction has a major impact on customer loyalty. Several studies (e.g., Aktepe, Ersöz, & Toklu, 2015; Chang, 2015; Kumar, Dalla Pozza, & Ganesh, 2013; Muhammad, Shamsudin, & Hadi, 2016) have confirmed that there is a positive relationship between customer satisfaction and customer loyalty. Customer satisfaction is generally defined as a difference between customers' expectations and experience after using a product/service at a certain period (Azman, Ilyani, & Nur 2016, Mosahab, Mahamad & Ramayah 2010). Therefore, customer satisfaction is largely determined by the experience in the store environment, webshop, or mobile application. This part focuses mainly on offline sales channels so experience in traditional store environment will be considered. When a customer purchases in a traditional store many different factors play a role in creating (positive or negative) customer experience. Such as instore atmosphere, the value of customers, contact with the staff, range of products, after-sales service, etc. Some of the main factors will be briefly explained in the next part.

Instore Customer Interaction:

Instore customer interaction means the interaction that occurs between a customer and a store employee. This interaction can occur due to questions or comments. Every customer value these interactions in different ways depending on personal differences, a situation the customer is in. In simple words when a customer wants to buy a certain product for the first time, he/she will normally give more value to interaction with store staff. While customers who make repeated purchases mostly have less value or need for this kind of interaction with store staff.

Customer Value:

Providing superior value to the customer has become the norm of many businesses. Nonetheless, there has been a lot of confusion in the literature about the precise definition of the customer value but the one proposed by Zeithaml (1988), "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given," is the most universally accepted definition of customer value (e.g., Chen & Dubinsky 2003; Ruiz, Gremler, Washburn, & Carrión 2008). Moreover, based on the recent literature customer value is generated and created in a reciprocal process between two parties in a business relationship (Grönroos, 2011), and is evaluated from the perspective of the consumption experience of consumers (e.g., Agustin and Singh, 2005; Bolton, Gustafsson, MacColl, Sirianni, & Tse 2014; Floh, Zauner, Koller, & Rusch 2014). Which in simple words means that customer value is the difference between benefits that a consumer receives from buying a certain product or service in comparison to the resources that the customer spends to buy the product. These resources include money and time and the benefits the customer expects may be either monetary or nonmonetary. A good perception of value by customers can lead them to be more satisfied with the retailer. Which will eventually lead to a higher level of customer loyalty.

Product Range:

The product variety is significant for retailers to aid the customer's buying behavior because different customers have different preferences for products and product quality. When a certain retailer has higher product variety, it may increase the frequency of customer shopping visits to that retailer, in which case it may increase the purchase volume of products as well as increase the customer's satisfaction and loyalty to a great extent.

Physical store environment

The physical store environment comprises all the elements that contribute to a pleasant shopping atmosphere. Such as the layout of the store, the size of the lanes, product display/arrangement, decoration of the store, lighting in the store, the smell in the store, colors in the store, and temperature of the store. The physical store environment also greatly affects the customer's experience. Customers can react in two ways towards the store environment namely a sense of approach or a sense of avoidance of the environment. These elements have different effects on the shopping experience and analyzing these effects will exceed the limits of the research questions in this master's thesis. Therefore, a general idea concerning the physical store environment will be determined, because it leads to a better shopping experience and higher customer satisfaction.

Complaint Handling:

Complaint handling refers to the after-sales services, especially in situations where a customer has a complaint, or he/she is not happy with the purchase and return to the retailer with complaints, this experience also has an influence on the customer experience. Handling these complaints in the best possible way is also very important in endorsing customer loyalty because when a complaint is handed in the best possible way ensures a higher level of customer satisfaction.

Service quality:

Service quality has extensively been discussed in the past and today it is still important in helping companies in creating differentiation and achieving competitive advantage in an era of globalization (Ali et al. 2016, Fotaki 2015, Karatepe 2016). In general, service quality is an assessment of how well a purchased product/service matches the customers' expectations.

Companies try to meet the expectations of their customers and even the companies which do not provide services but provide trading goods also recognize the importance of service quality. That is due to the fact that Service quality has a direct link with customer satisfaction and customer loyalty (B. L. Cheng & Rashid, 2015; Mokhtar, Maiyaki, & Mohd Noor, 2011). Service quality enables companies to gain a competitive advantage through customer loyalty even in the highly competitive markets (Al-Zoubi, 2013). Moreover, several studies (e.g., Agyei & Kilika, 2013; Al-Zoubi, 2013; Lee, 2015; Nimako, 2012) concluded that service quality and customer loyalty have a positive relationship.

2.4.3 Trust

The relationship between trust and loyalty has been widely discussed in the marketing literature. There are several definitions that can be found within the literature for trust. The simplest definition of trust is "Trust is the willingness to rely on another party in the phase of risk" (Worchel, 1979). This willingness is based on the understanding of a past experience or based on the expertise of the other party. This willingness also increases the expectation that the other party will create a positive outcome, without being affected by the possibility that the other party may cause a negative outcome.

According to Grah & Tominc (2015), trust is mainly achieved through frequent positive exchanges among a customer and a retailer and this mutual trust give confidence to both a retailer and customer to share important information which helps in creating better and smoother collaborations. Trust is one of the essential conditions for loyalty because when a customer has confidence in a retailer then he/she will show loyal behavior towards that store. Relationships that are categorized by a trust are very precious to customers, therefore for maintaining these relationships customers are dedicated and willing to put effort (Morgan & Hunt, 1994) and the same goes for the retailer. This chapter provided an overview of the main factors that influence customer loyalty in traditional offline stores. However, this overview is not very detailed because a detailed overview of all these factors would take us too far. This chapter does, however, provide an overview of the most important

factors. These factors include namely customer satisfaction and trust. When retailers want to build a loyal customer base, it is necessary to work on the trust and satisfaction of their customers.

2.5 Loyalty in online sales channels

After discussing the factors that influence customer loyalty in offline sales channels, it is time to discuss the factors that influence loyalty in online sales channels. It may seem impossible to have loyalty in online sales channels due to the fact that customers have access to hundreds of the best deals and prices with a single click, but loyalty in e-commerce is still far from extinct. Customer loyalty is also very important for online retailers. Keeping customers loyal in an online environment come at high costs because in an online environment competition is intense, so more resources are spent on advertising and promotions compared to the offline sales channels where there are fewer competitors. This section provides an overview of earlier research about the factors that influence online loyalty.

2.5.1 Online customer satisfaction

Just like in the traditional store environment, customer satisfaction also plays an important role in the online environment in achieving loyalty. According to the academic literature, online customer satisfaction also has several factors. Some of these factors are similar to those of traditional offline satisfaction. Others are unique for online customer satisfaction. In the next part mainly, unique factors for online customer satisfaction are described.

Service Quality

Service quality is also important in online satisfaction; however, the way in which this is expressed is different (Goutam & Gopalakrishna, 2018). As mentioned earlier, service quality is an assessment of how well a delivered service matches the customers' expectations. In online sales channels, this quality of service is expressed in terms of the design and functionalities of the website. Many customers prefer webshops over the traditional store because of two main reasons, First, ease of use refers to the degree to which a website can be adapted to the personal needs of customers, reliability, and stability of the website. Second, the availability of information which refers to the efficiency with which information can be searched and how readily information is available. Therefore, when retailers focus on optimal use of these benefits this leads to good service quality (Vijay, Prashar, & Parsad, 2017). Moreover, the physical appearance of the website (colors, styling, graphics) and interaction with the website also contribute to online customer satisfaction.

2.5.2 Reputation and Trust

Reputation has a vital role in promoting online loyalty when compared to physical stores. That is because customers are not able to hold, test the products in advance, and cannot use intrinsic cues to assess the quality of the retailer, something that is possible in a physical store. Consequently, they may be led by the extrinsic signals that arise from their own experiences, such as the country of origin or the reputation of the retailer (Kim, Jin, & Yong Park, 2008). Reputation refers to the sum of a number of monetary and non-monetary attributes that are associated with a retailer based on

the past actions of that retailer or from past experiences of customers. When a retailer has a good reputation, it gives the retailer a sustainable competitive advantage because reputations are fairly stable and cannot be changed or influenced quickly (Kim et al., 2008).

Just like reputation, trust also plays an important role in online loyalty. Perhaps, it is one of the most important factors of understanding the relationship between a customer and an online retailer (Gummerus, Liljander, Pura, & van Riel 2004). Online retailers can increase customer's trust by keeping customers updated and by responding quickly to their queries. Moreover, in an online environment customers' trust can be greatly influenced by competitors. When customers' trust is broken by an online competitor, a customer might lose trust in online shopping completely and this may cause another retailer to lose a customer. However, this is not the case in the offline shopping environment because the actions of a competitor are more independent of trust in their own store.

Data security and privacy

One of the concerns of customers who buy through online sales channels is their data privacy and security because when customers buy products online, they provide a lot of personal data to the retailer (name, address, credit card, emails, etc). Therefore, if the retailer does not appropriately protect this data, it can create a big problem for the customer. So, the retailer must provide the customer with the confidence of the safety and security of their data and assurance that their personal data will not be resold to third parties and that their privacy will be respected. This confidence in online safety and privacy has a significant effect on online customer purchase decisions and customer satisfaction (Jin, Park, & Kim 2010). Data security and privacy have the possibility of overcoming the other factors like service quality. Consequently, the security and privacy of data in online shopping is an essential condition for satisfaction as well as the purchasing decision of the customer.

Perceived purchase risk

All purchases, online or offline, contain a certain risk. This risk is known as purchase risk. The intensity of this risk is higher in online purchases compared to the purchases in a traditional store. Perceived purchase risk has many different definitions in the academic literature such as:

Thakur and Srivastava (2015) describe perceived risk as to the construct that measures beliefs of the uncertainty concerning possible negative consequences (dangers). Parumasur and Roberts-Lambard (2012) explain perceived risk as the amount of risk that the consumer perceives in the buying decision and or the potential consequences of a poor decision. Zhang, Wan, Huang, & Yao, (2015) defines perceived risk as "consumers' purchase decision contains the uncertainty of the outcome, which was the initial concept of perceived risk". To sum it up, when a customer buys a product/service, there is always a risk that the product/service does not meet expectations. This risk is higher in online purchases compared to the purchases in a traditional store because with online purchases it is not possible to hold the product and to examine whether it meets expectations before purchasing the product. Customer perceived risk affects the purchasing decision because higher perceived risk reduces customer satisfaction (An, Lee, & Noh 2010; Martin, Mortimer, & Andrews 2015; Yoon & Lee, 2014). Lower the risk perceived by the customer, the higher their

acceptance of the online shopping mode (Forsythe and Shi, 2003), and the greater their purchase intention from the online retailer (Park and Stoel 2005).

In this chapter, we discussed different factors that influence online loyalty. Nevertheless, the main factors that influence online and offline customer loyalty are similar, specifically customer satisfaction and trust. Yet, the difference lies in the way in which these factors are established.

2.6 Interaction between offline and online loyalty

In the previous chapters, we discussed the main factors that influence offline and online customer loyalty. But loyalty in multichannel retailing is more than just adding an offline sales channel and the online sales channel. After all, there is a spill-over of loyalty across sales channels because customers are able to buy from the same retailer via any sales channel (offline or online). This increases the loyalty to the retailer when compared to the situation where a customer has to seek another retailer for another sales channel (Wallace, Giese, & Johnson, 2004). Moreover, a customer does not have to start from scratch when building up his/her attitudes but instead transfers those attitudes from one sales channel to the other because the customer knows the retailer based on his/her past experience. As mentioned earlier, according to Verhoef et al. (2009) customer experience is one of the factors that influence customer loyalty in a single and across different sales channels. Moreover, they not only recognize the role of current experiences, but also the role of past experiences. These experiences can be gained within a similar sales channel or on a different sales channel. To explain the process of transferring attitude across sales channels better we will use cognitive dissonance theory.

2.6.1 Cognitive dissonance theory

This theory refers to the conflict that occurs when persons (also customer) opinions or behavior do not align with each other and as a result tension or stress arises. At that moment, a customer will try his best to eliminate this dissonance. There are several methods that can be used to eliminate the occurrence of cognitive dissonance. One of the methods is to transfer the existing cognitions to the new stimuli. In the context of multichannel retailing, this theory suggests that a customer want to keep their beliefs and attitudes aligned and to achieve that he/she will transfer his/her existing attitudes and beliefs of the original sales channel to the new sales channel (new stimuli) since both sales channels belong to the same retailer. Therefore, good beliefs and attitudes towards one sales channel have a positive influence on the assessment of another sales channel from the same retailer (Frasquet, Mollá Descals, & Ruiz-Molina 2017). So multichannel retailers do not have to start from scratch in building loyalty towards one sales channel when that customer already has experience with the same retailer in another sales channel. Furthermore, alongside the transfer of beliefs and attitudes, trust is also transferred across sales channels (Badrinarayanan, Becerra, Kim, and Madhavaram, 2012). Lastly, according to Fernández-Sabiote and Román (2012), the perceived value of the service quality in the traditional store is also transferred to the online store.

While discussing the spill-over effect between different sales channels it is also important to discuss the reverse movement (online to offline movement). This topic has not been discussed much in the academic literature. That is because usually multichannel retailers originated from traditional offline stores and they add webshops to their existing offline sales channel. However, in the past few years, we have seen a reverse movement happening, with retailers who originally only owned a webshop are also starting to operate physical stores. This reverse movement raises the question of whether customer loyalty is also transferred in this direction. Thus, there is hardly any research to support the transfer from online loyalty to offline loyalty. Nevertheless, we can apply the theory of cognitive dissonance to this relationship. As the transfer from online to offline follows the same alignment (of beliefs and attitudes), there is no theoretical evidence that suggests that this transfer is different from the transfer of offline to online. To be able to substantiate this assumption empirically, this thesis will also investigate the transfer from online loyalty to offline loyalty.

2.7 Differences between mobile devices and PC based Internet access:

In this part of the literature review, we discuss the key difference between mobile and PCs based internet in the context of multichannel retailing. Based on the existing literature, there are several key differences that differentiate mobile devices from traditional fixed PCs. As mentioned above, mobile devices have changed the paradigm of retailing because, in traditional retailing, stores can only interact with potential customers when they enter the store, but mobile devices allow a retailer to interact with potential customers everywhere by continuously entering the customer's environment (Shankar et al. 2010). Despite the increasing usage of mobile devices, little academic research has focused on preference for mobile devices compared with PCs.

To understand the key difference between Mobile devices and traditional PCs based internet we employ the theory of use and gratification (U&G). This theory has been used to understand why and how people follow specific media to satisfy specific needs (Weng and Ding 2012). A media user in U&G theory is an active audience who uses a medium with a specific desire and picks the most suitable media to satisfy his/her gratification. In general U&G theory is used to understand the psychological motives that lead users to select specific media sales channels as well as the related behavioral and attitudinal outcomes (Ruggiero 2000). However, in the context of multichannel retailing, U&G theory is used to understand the psychological shopping motives that lead a customer to choose between mobile devices or PCs.

Due to the different characteristics of mobile and PC-based internet, we believe that these two devices provide different levels of gratification. According to Chae and Kim (2003), mobile Internet refers to the "wireless access to the digitized contents of the internet via mobile devices". Mobile internet can be used anywhere at any time compared to traditional PC-based internet due to its unique characteristics such as portability, mobility, and permanent availability. Whereas, PC-based Internet is normally used in fixed environments (office or home) (Hiltunen, Laukka, & Luomala 2002). Moreover, mobile devices are more personal/individualistic devices because users always carry them and hardly share them with others (Chae and Kim 2003). However, traditional PCs are less personal/individualistic because they can be used by several other people like family members or office workers (Watson, Pitt, Berthon, & Zinkhan 2002). In comparison to PCs, mobile devices

have some weaknesses such as small screens, need app installation for shopping, require data plans (if Wi-Fi is not available). Furthermore, unlike PCs based internet that does not show consumer's physical location, mobile-based internet can be used to determine users' physical locations (Kannan, Chang, & Whinston 2001).

However, benefits of mobile devices offset the weaknesses because the trend in mobile devices is to build smartphones with larger screens (Tsai, Tseng, & Chang 2017), it is not costly and time-consuming to install an app and the use of data plans may not be a problem if a customer uses mobile devices inside stores or malls which usually have WiFi connections. New smartphones have the option of disabling the location features. Table 2 lists these differences of features between mobile-based internet and PC-based internet (Eunhye, Christian & Myeong 2018).

Feature	Mobile Based Internet	PCs Based Internet
Ubiquity	Absence of space and time	Predetermined environments
	constraints	(e.g., home or office)
Number of users	Personal devices	Multiple users (e.g., family
		and/or colleagues)
Screen	Small	Big
Location exposure	Location-awareness for	Does not expose user location
	personalized services	

Table 2: Difference between Mobile and PC Based Internet

Based on the past studies it can be concluded that the differences mentioned in Table 3 may lead to different user behaviors. For instance, according to Okazaki (2009) electronic word-of-mouth (E-WOM) by mobile devices has a stronger effect on customer decisions compared to the WOM via PCs due to mobile-based Internet Ubiquity. Additionally, these differences among PCs and mobile devices may deliver users different levels of gratification like a customer may choose mobile devices over PC if they consider mobile devices to be greater sources of gratification.

2.8 How do mobile devices impact customer loyalty in multi-sales channel retailing?

Mobile phone addiction has become a global phenomenon. People spend almost three hours of their daily lives on mobile phones (ThinkwithGoogle, 2016). Loads of customers check their mobile phones continually during the day and night, no matter if they are with family or friends, in a business meeting, or while driving (Global Mobile Consumer Survey, 2015; Bellini and Aiolfi, 2017). The increase in the use of mobile devices has significantly changed consumers' behavior and the way they live and work (Bellini and Aiolfi, 2017). In addition, this increase has also changed the way in which customers interact, communicate, and make a decision regarding purchasing the product (buying behaviors). Customers in a retail setting use mobile with different purposes such as searching information online, making a shopping list, comparing different pricing, buying products and services, and lastly engaging post-purchase activities (Shankar et al., 2010; Bellini and Aiolfi, 2017). According to existing literature mobile technology is a useful resource for helping customers

make better decisions, especially in regard to reducing search costs and improving the quality of customer choice (Haubl and Trifts 2000; Murray and Haubl, 2008; Sciandra, 2014; Bellini and Aiolfi, 2017).

The use of mobile devices almost affects customer loyalty in the same way as the online sales channel, but it extends further due to its unique characteristics. That is because mobile devices allow the customers to merge online and offline buying in an innovative way, such as: doing fast price comparisons, checking reviews of the other customer, and checking the products physically in an offline store (Piotrowicz and Cuthbertson, 2014). Customers regularly obtain information in the store and at the same time look for more information about the offers on their mobile devices (Verhoef, Neslin, & Vroomen 2007). Ko, Kim, & Lee (2009) define mobile shopping as "the use of the wireless internet service for shopping activities via mobile devices". The next section provides an overview of variables that influence customer loyalty with the use of mobile devices.

Degree of availability of information:

Delivering up-to-date and relevant information is the key to develop customer loyalty and create a conversation between the consumer and the retailer. Delivering this up-to-date information is only possible through a mobile device, because of the advantage of real-time communications. This allows retailers to provide extra information that enhances the store experience such as store maps, product advice, and personalized suggestions based on the customer's shopping history. By using mobile device cameras customers can research products through scanning product barcodes to compare prices, read reviews, share items with friends via social networks and interact with promotional signage which helps in creating a more interactive store experience. Using mobile devices in the store (offline sales channel) allows customers to access extended product information, which enables them to make more informed purchasing decisions.

Usability of Mobile Applications:

Mobile applications (apps) also support customer loyalty by enabling location-based services like beacons and geofencing, which are two substitutes to target push notifications to increase customer engagement which in turn leads to customer loyalty. In addition, mobile apps allow retailers to create very personalized offers in real-time. By using these apps, customers can "check-in" to receive store coupons and/or online promotions. These coupons can be used for getting a financial discount or rebate when purchasing a product/service. Retailers use these coupons/promotions to attract new customers or reward loyal customers. Also, these coupons/promotions can be one of the numerous ways that a retailer can use to attract customers to visit a store and/or online shops. However, customers are very picky about the mobile applications they will download and use. A survey by RetailMeNot shows that 60% of customers who use a mobile device to buy online have less than two retailer-specific applications on their phones, and 21% don't have any at all. And if a mobile application is not up to customers' expectations, it is quickly forgotten or removed.

Degree of Customer control:

Mobile devices have changed the dynamics of how and when the customer shops, and to who customer interacts with. Therefore, if a retailer provides higher value, customers are willing to share more information and that leads to a higher level of engagement and customization. As a result, the retailer gains valuable knowledge about its customer, while the loyal customer gets immediate reward or information whenever and wherever they need it most. This exchange of value provides the customer the control over their purchasing decisions and relationships with their transactions.

Ease of Mobile Payments:

Retailers who allow customers to make payments via mobile devices make the check-out experience quick, convenient, and easy. This greatly influences shopping experience in both online and offline sales channels. Therefore, many retailers are implementing mobile app scanners or NFC devices at registers to allow customers to pay quickly and easily with their mobile phones. However, trust plays a very important role in online mobile payments. One possible cause of this is the mobile payments that may develop customers' fear for their privacy and security as well as the risk of fraud. However, many retailers are investing in customer security and authentication via implementing rigorous technology standards, like two-factor authentication, and secure payments (Capgemini, 2017).

3 Research model and Hypotheses

Figure 1 depicts the research model, which was developed based on the literature study in Chapter 2. The individual hypotheses are formulated and briefly explained below the figure. How the various variables in this research model will be measured is described later in the thesis.

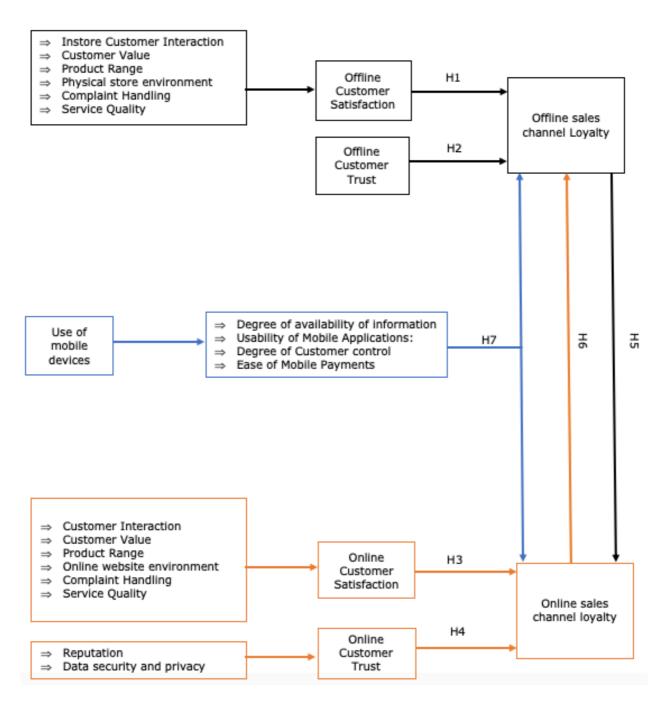


Figure 1: Research Model

3.1 Hypotheses

- H1: Offline customer satisfaction positively affect customer loyalty in the offline sales channel
- H2: Offline customer trust positively affect customer loyalty in the offline sales channel
- H3: Online customer satisfaction positively affect customer loyalty in the online sales channel
- H4: Online customer trust positively affect customer loyalty in the online sales channel

The first four hypotheses test two main factors that affect customer loyalty namely customer satisfaction and trust. These factors are included in the research model of this master's thesis. We agree with previous research, that an increase in each of these factors will lead to an increase in customer loyalty in both online and offline sales channels. There are several factors that are vital to achieving customer satisfaction and trust. These factors are almost similar for both offline and online sales channels with an additional factor that is measured with online trust is "Data security and privacy". These factors have been briefly explained in Chapters 2.4 and 2.5. Going deeper into these factors falls outside the focus of this study. Therefore, no formal hypotheses are formulated for these factors. However, several factors are measured that will help us to explain a vague concept such as "customer satisfaction" into particular action that retailers can use.

H5: Loyalty in offline sales channel positively affects customer loyalty in the online sales channel H6: Loyalty in the online sales channel positively affects customer loyalty in the offline sales channel

The fifth and sixth hypotheses test the spill-over effect between offline and online sales channels and test whether multichannel retailing is really ahead of single-sales channel retailing in terms of loyalty. As discussed earlier in Chapter 2.6, there is sufficient empirical research to support Hypothesis 5. Hypothesis 5 is about customers loyal to a retailer's offline sales channel, they will transfer this loyalty to this retailer's online sales channel if they choose to make purchases there. But, research into Hypothesis 6 has hardly been done before. Hypothesis 6 is about customer's loyalty to a retailer's online sales channel, they will transfer their loyalty to the physical stores. These hypotheses are based on the fact that loyalty transfer depends on cognitive dissonance theory. People follow internal consistency by transferring their loyalty from a physical store to a webshop (as discussed in Hypothesis 5). Similarly, this theory can also be applied to assume that loyalty is also transferred from the webshop to the physical store because when a customer has a positive experience with a webshop and is loyal towards the online sales channel, it is expected that this experience and loyalty will be involved when that same customer visits a traditional store from the same retailer. In this way, cognitive dissonance theory ensures that online loyalty also leads to offline loyalty, at least according to Hypothesis 6.

H7: Use of mobile devices positively affect affects customer loyalty in both offline and online sales channels

The seventh hypothesis tests whether the use of mobile devices actually leads to an increase in customer loyalty in both online and offline sales channels. Testing this hypothesis may also reveal

one of the reasons for the reverse moment of retailers (online sales channels to offline sales channel). There are also several variables related to the use of mobile devices that affect customer loyalty. These variables have been briefly explained in Chapter 2.8. However, no formal hypotheses are formulated for these variables. Nevertheless, these variables will be measured because it will help us ask the right questions to test this hypothesis.

4 Research Design

This chapter mainly focuses on the research approach and the methods that are used in this thesis for collecting and analyzing the data. This analysis will help us test the hypotheses and answer the main research question. In this thesis, we will use the Positivist paradigm, also known as the quantitative research approach and collect primary data through survey method. This research approach is based on collecting and analyzing data from a sufficient number of people. This data is collected in the form of numbers or named codes and is an effective method to gain knowledge about customers' preferences and opinions (Matthew and Ross, 2010). It is important to use this method because this method is all about collecting and working with structured data, that can be easily scrutinized. This approach will lead to good results and thus provide better conclusions (Burns and Burns, 2008; Matthew and Ross, 2010).

The primary data necessary for this research is collected with the help of the questionnaires with subjective content measuring multiple constructs (Satisfaction, Trust, Loyalty, Experience, etc). This questionnaire was created based on several existing measuring instruments for loyalty (Zeithaml et al., 1996), trust (Frasquet et al., 2017), and satisfaction (Jin et al., 2010; Wallace et al., 2004). Since the research mainly addresses these variables in both the offline and online sales channels, these questions were also asked specifically per channel. In addition, more questions were added to measure the effect of the use of mobile devices. These questions are not completely based on the previous literature because this topic has not been investigated a lot in the past. Therefore, later in the analysis Chronbach's alpha will be calculated to check the validation of these measuring instruments, which will provide an overview of the internal validity of these measuring instruments.

Moreover, respondents were asked to select one specific retailer with whom they have already made purchases in all sales channels (store, webshop, and via mobile) in the past so that the responses are based on their own experience in all sales channels. By enabling the respondents to choose from a specific retailer, help us in avoiding very diverse shopping experiences that provide unclear data. Besides these questions, the questionnaire has two more parts. One, placed at the beginning of the survey, aims to evoke the experience with multi-channel retailing. This could help to position respondents in the right direction. Another part was added at the end of the questionnaire, which shows the demographic data of the respondents like age, origin, education, and so on. This data could be useful for the general information and maybe could be additionally utilized in the future.

The questionnaire was constructed using Qualtrics. Before distributing the questionnaire, the questions were pretested on several respondents, the sample size was defined, and the sample was chosen (see the following section).

4.1 Measurement Instruments

Table 3 provides an overview of the composition of the measuring instruments (constructs) used in the analysis. These measuring instruments were questioned based on different questions in the questionnaire, which are also listed below in Table 3. For the majority of the questions/statements

non-comparative scale was chosen, namely Likert scale with five grading answering possibilities. This scale was implemented because of the ease of constructing, administering, and understanding (Malhotra, Nunan, and Birks, 2017). Each scale item has five response categories ranging from "strongly disagree" to "strongly agree" or "very likely" to "least likely" etc.

Construct	Questions	Type of	Scale
		Scale	Category
Multi-Channel Awareness/Ex	• It is very important for me to be able to buy from a retailer from different channels (store, by mobile, online).		
perience	I buy from several channels simultaneously? (physical store, online, mobile).	Interval	
	I buy often through these channels.		
	I shop from the same retailer through different channels.		
	I find shopping online is reliable	Interval	
	I trust that my data is stored securely on the online	Titleivai	
	I trust that I can pay safely when making online purchases		
	• The availability of multi-channels affects my purchasing habit		
	positively (increase in shopping)	Interval	
	I would buy from a retailer with pure online store at an offline facility		
	(online store opening an outlet/physical store).		
	• I would buy from a retailer with only physical store at an online		
	website (outlet/physical store starting a website)		
Satisfaction	How satisfied are you with the product range in the stores?		Likert
	How well are you helped if you have questions in the stores?		
	How do you feel when interacting with in-store staff?		
	How are your complaints handled in the stores?	Interval	
	How do you feel about the way the store is decorated?	Tricer var	
	How easily can you find the products you need in the stores?		
	How do you feel in general with your shopping experience in the		
	stores?		
	The products of the chosen retailer are worthwhile		
	How satisfied are you with the stores of the retailer?		
Trust	I trust the stores of the chosen retailer.		
	The stores of the chosen retailer are reliable		
	The stores of the chosen retailer are safe	Interval	
Loyalty	How likely will you give positive reviews about the chosen stores?		
	How likely will you recommend visiting the chosen stores to others		
	(family, friends etc)?		
	How likely will you make purchases in the chosen store in the	Interval	
	future?	Tittervar	
	How likely will you consider the chosen stores as your first choice		
	when buying in the future?		
Online	How satisfied are you with the product range on the retailer		
Satisfaction	website?		
	How well are your queries handled on the retailer website?	Interval	
	How are your complaints handled on the retailer website?		
	are year complaints hundred on the retailer website:		

	 How do you feel about the design and appearance of the retailer website? The products of the chosen retailer are worthwhile How easily can you navigate through the retailer website? How do you generally feel about your purchasing experience on the website of the retailer? How satisfied are you with the website of the retailer. 		
Online Trust	 The website of the reliable is reliable. I trust the website of the retailer. My data is safe on the website of the retailer.	Interval	
Online Loyalty	 How likely will you give positive reviews about the retailer website? How likely will you recommend the website of the retailers to others (family, friends etc.)? How likely will you make purchases on the website in the future? How likely will you consider the chosen retailer website as your first choice when buying in the future? 	Interval	Likert
Mobile Satisfaction	 Use of my mobile phone in the chosen improves my shopping experience. How satisfied you with the mobile application/ mobile version website of the retailer are? 	Interval	
Information Availability	 By using my mobile phone, I can access a lot of extra information about the products in store. I can easily compare prices and look at product reviews by using my mobile phone while shopping. 	Interval	
Ease of Use	I can easily use the mobile application/mobile version website of the retailer.	Interval	
Safety	I trust that I can pay safely when making purchases using my mobile phone.	Interval	
Mobile Loyalty	 How likely will you give positive reviews about the retailer store and/or website? How likely will you recommend the store and/or website of the retailers to others (family, friends etc.)? How likely will you make purchases in the retailer store and/or website in the future? How likely will you consider the chosen retailer store and/or website as your first choice when buying in the future? 	Interval	

Tale 3 Measurement Instruments

4.2 Sampling Design

Population

The first important thing when carrying out a survey is to identify the population, define the sample frame, choose the sampling method, and the sample size. Since this research aims to determine which factors have an impact on loyalty in multichannel retailing, the target population for this research is all multi-channel consumers (people who buy instore, online or via mobile device).

Sample frame

It is evident that the population in this research is all multi-channel consumers worldwide, therefore it is very hard to define the exact population. That is why the study will be conducted without being limited to specific countries. People will be contacted via e-mails containing the link to the Qualtrics survey (questionnaire).

Sampling procedure

The ideal method for sampling would be probability sampling because with this method everyone in the population has a probability of being selected as a sample subject and the results obtained through this method can be extended to the whole population. Since there is no complete list of the population of multichannel consumers, non-probability sampling was the only option. So, the sample was obtained through a combination of convenience and snowball sampling.

Sample size

To define a consistent sample size the population size has to be taken into account. Based on the population size which is all multi-channel consumers, the sample size was too big. Nevertheless, it was necessary to select the right sample size that will help to confirm whether the hypotheses will be accepted or rejected. There are several methods that can help to choose the sample size like applying tables or simply using 30 respondents per category, although this survey will target to get about 200 successful responses. For this study, 95% level of confidence will be used.

5 Data analysis

5.1 Description of the Respondents

We received around 230 responses in total but after filtering out the incomplete responses, 203 responses remained. How are these respondents distributed based on their gender, age, education, and employment status is listed in Table 4.

		Frequency N	Percentage/Total
Gender	Male	105	51.7
Gender	Females	98	48.3
	Total	203	100.0
Education	Less than high school	2	1.0
Ludeation	High school graduate	20	9.9
	Some college	22	10.8
	2-year degree	11	5.4
	4-year degree	91	44.8
	Professional degree	50	24.6
	Doctorate	7	3.4
	Total	203	100.0
Age	under 18	0	0
Age	18 - 24	18	8.9
	25 - 34	102	50.2
	35 - 44	42	20.7
	45 - 54	24	11.8
	55 – 64	17	8.4
	Total	203	100.0
Employment	Employed full time	122	60.1
Linployment	Employed part time	29	14.3
	Unemployed looking for work	14	6.9
	Unemployed not looking for work	10	4.9
	Retired	5	2.5
	Student	21	10.3
	Disabled	2	1.0
	Total	203	100.0

Table 4 Description of the Respondents

In general, the respondents are fairly equally distributed over the different categories and almost all groups of respondents are well represented. In terms of gender, there are slightly more male respondents than female respondents, but both groups are well represented. Regarding the age of the respondents, we see that about 50 percent of the respondents belong to the category between 25 and 34 years old. The age category of 35 and 44 years is also reasonably represented. The remaining categories of age are somewhat moderately represented. However, the age category of under 18 is not represented, therefore, with the results of this study, it is difficult to make statements about the multichannel consumers who are younger than 18 years old. When looking at the education level and working status of the respondents it is sufficient to say that mostly all categories are represented.

6 Convergent validity of the variables

Table 3 in Chapter 4.1 provides a general overview of all the questions related to each variable, but Table 5 below enlists all the specific questions that were used to analyze each specific variable. Moreover, to check the internal validity of these variables Chronbach's alpha is calculated as shown in Table 5.

Construct	Questions	Cronbach's Alpha
Satisfaction	How do you feel in general with your shopping experience in the stores?	0.863
	How satisfied are you with the stores of the retailer?	
Trust	I trust the stores of the chosen retailer.	
	The stores of the chosen retailer are reliable	
	The stores of the chosen retailer are safe	0.841
Loyalty	How likely will you give positive reviews about the chosen stores?	
	How likely will you recommend visiting the chosen stores to others (family, friends)	
	etc)?	
	How likely will you make purchases in the chosen store in the future?	0.846
	How likely will you consider the chosen stores as your first choice when buying in	
	the future?	
Online	How do you generally feel about your purchasing experience on the website of the	
Satisfaction	retailer?	
	How satisfied are you with the website of the retailer.	0.854
Online Trust	The website of the retailer is reliable.	
	I trust the website of the retailer.	0.860
	My data is safe on the website of the retailer.	
Online Loyalty	How likely will you give positive reviews about the retailer website?	
	How likely will you recommend the website of the retailers to others (family,	
	friends etc.)?	
	How likely will you make purchases on the website in the future?	0.840
	How likely will you consider the chosen retailer website as your first choice when	
	buying in the future?	
Mobile Use	Use of mobile phone improves my shopping experience on the retailer website.	
	Use of mobile phone improves my shopping experience in the retailer physical	0.864
	stores.	
	I am satisfied with the mobile application/mobile website of the retailer.	

Table 5 Variable with Cronbach's Alpha

All the variables have high Chronbach's alpha. Therefore, the internal validity of these variables is perfectly fine.

7 Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Offline Loyalty	203	1.00	5.00	3.96	0.87
Offline Satisfaction	203	1.00	5.00	3.99	0.77
Offline Trust	203	1.00	5.00	4.10	0.80
Online loyalty	203	2.00	5.00	4.09	0.77
Online Satisfaction	203	1.50	5.00	4.08	0.73
Online Trust	203	1.00	5.00	4.19	0.89
Mobile Use	203	1.50	5.00	3.81	0.89

Table 6 Descriptive statistics

Table 6 provides an overview of the descriptive statistics of the data. Number of respondents of this study are 203 which is large enough (>30) and we have metric data (Likert scale), so based on central limit theorem we can assume normal distribution. Moreover, each variable was given 5 out of 5. We see the minimum score of 1 out of 5 came back for offline loyalty, offline satisfaction, offline trust, and online trust. So, the questionnaire was answered positively and negatively by many respondents. With regard to the mean, we see that respondents are on average more satisfied with the online store than with the physical store of the retailer, but this difference is negligible because the difference with the mean scores is very less. In addition, on average, trust is slightly higher in the online stores than in the physical store. Furthermore, respondents specify that they show more loyalty towards online stores than towards physical store. Lastly, there is not a big difference between the standard deviations of the different variables. For some variables, this standard deviation is slightly higher than the other variables.

	Offline	Offline	Offline	Online	Online	Onlin	Mobile
	Loyalty	Satisfaction	Trust	loyalty	Satisfaction	е	Use
						Trust	
Offline Loyalty	1	.731**	.759**	.584**	.334**	.395**	.355**
Offline Satisfaction		1	.632**	.364**	.255**	.298**	.318**
Offline Trust			1	.523**	.486**	.495**	.406**
Online loyalty				1	.706**	.577**	.607**
Online Satisfaction					1	.596**	.561**
Online Trust						1	.430**
Mobile Use							1
**. Correlation is signi	ficant at the 0	0.01 level (2-taile	ed).				

Table 7 Correlations

Table 7 shows the correlations between the different variables. It is remarkable that all variables have significant correlations. Based on the research model, it makes sense that certain variables show a positive correlation. For example, the research model shows a positive correlation between

online loyalty and offline loyalty, which means an increase in offline loyalty will cause an increase in online loyalty and vice versa. In addition, we see that other variables also have a moderate to strong correlation with both offline and online loyalty. For example, offline loyalty also increases in the offline sales channel when satisfaction increases for the online channel. Hence, there is a moderately strong positive correlation between the main variables from this study and that at a significance level of 1%.

8 Statistical methods

Two different equations are used to test the hypotheses in this study. These equations are tested using an OLS (ordinary least squares) regression. OLS regression is a statistical method, that is used to estimates the relationship between one or several independent variables and a dependent variable. In this chapter, both equations are briefly discussed. For explanation, and example of an equation can be seen below.

$$Y = \beta 0 + \beta_1 x_1 + \beta_2 x_2 + d$$

In this equation, Y represents the dependent variable, meanwhile, β_1 and β_2 show the extent of the influence that the independent variable has on the dependent variable. β_1 is the intercept, which is the value of the dependent variable when all independent variables are equal to zero. D is an error term.

Equation 1:

Offline Loyalty = β_0 + β_1 offline satisfaction + β_2 Offline Trust + β_3 Online loyalty + β_4 Mobile Use + β_5 H + ϵ

In equation 1, loyalty in the offline sales channels (offline loyalty) is the dependent variable. By testing this equation, we can test hypotheses 1, 2, 6, and 7. We test whether the level of offline loyalty is influenced by offline satisfaction, offline trust, mobile use, and online loyalty. The variable H is a collective term for all control variables in the model. These control variables include Gender, Age, Education, and Employment.

Equation 2:

Online Loyalty = β_0 + β_1 Online satisfaction + β_2 Online Trust + β_3 Offline loyalty + β_4 Mobile Use + β_5 H + ϵ

In Equation 2, loyalty in the online sales channels (online loyalty) is the dependent variable. By testing this equation, we can test hypotheses 3, 4, 5, and 7. We test whether the level of online loyalty is influenced by online satisfaction, online trust, mobile use, and offline loyalty. The variable H is a collective term for all control variables in the model. These control variables include Gender, Age, Education, and Employment.

9 Results and Discussion

9.1 Results Equation 1

Equation 1	Standardized	Standardized Coefficients Beta	P Value
	Error		
(Constant)	.481		.278
Offline Satisfaction	.053	.409	.000 ***
Offline Trust	.056	.392	.000 ***
Online loyalty	.056	.304	.000 ***
Use of Mobile	.043	129	.005 ***
Control Variables			I.
Age	.031	050	.185
gender	.066	.008	.826
Education	.024	071	.056
Employment	.019	048	.201
R ²	0.744		I
Adjusted R ²	0.733		
Dependent Variable	Offline loyalty		
Significant at 5% ***			

Table 8 Regression analysis Equation 1

9.1.1 Interpretation of Equation 1

Based on equation 1, we can draw the following conclusions: the relationship between offline satisfaction and offline loyalty is significantly different from 0 at 5% significance level. This confirms hypothesis 1. Offline trust is also significantly different from 0 at 5% significance level and has a positive impact on offline loyalty, confirming hypothesis 2. Online loyalty has a significant positive effect on offline loyalty at 5% significance level, confirming hypothesis 6. The use of mobile is also significantly different from 0 at 5% significance level but with a negative impact on offline loyalty.

9.1.2 Discussion Equation 1

When we dive deeper into the regression results of equation 1, we first see that equation 1 has a good predictive power because the value of adjusted R² is 0.733. This value of adjusted R² is high, which means that approximately 73% of the variation in offline loyalty is explained by the included variables. It is also striking that none of the control variables are significant. Which means that there are no significant differences in offline loyalty among different age groups, among males or females, between different customer education levels and different employment status.

Offline loyalty is affected by the level of offline satisfaction, which confirms hypothesis 1 at a 5% significance level. This means that whenever offline satisfaction increases by 1 unit, offline loyalty towards offline sales channel increases on average by 0.409 units. That is a comparatively large effect. Therefore, customer satisfaction in offline sales channels is very important for retailers. So,

they should take appropriate steps to increase customer satisfaction. Customer satisfaction is mainly increased by enhancing the product range, increasing customer value, enhancing the store environment, and by helping customers with their questions and complaints. By focusing on these factors, retailers can increase the satisfaction of their customers.

Hypothesis 2 is also confirmed, at a significance level of 5%. This means that offline trust has a positive effect on loyalty. As trust in the store increases by 1 unit, customer loyalty towards offline sales channel increases by 0.392 units. This effect is slightly lower than the effect of offline satisfaction, but it is an equally important factor. Retailers can increase customer trust by selling fairly. When a customer experiences this fairness, he/she will also trust the store.

Hypothesis 6 is also confirmed, at a significance level of 5%. Which means online sales channel loyalty (online loyalty) has a positive impact on offline sales channel loyalty (offline loyalty). If online loyalty increases by 1 unit, it will lead to an average increase in offline loyalty by 0.304 units. This effect is also moderately large. This hypothesis confirms the effect of cognitive dissonance theory on the transfer of loyalty. As a result, when multichannel retailers want to increase loyalty in their offline sales channels, they can benefit from loyal customers in the online sales channel. In terms of building customer loyalty, multichannel retailers indeed have an advantage over single-channel retailers.

Finally, hypothesis 7 is also confirmed, at a significance level of 5%. However, the shocking result is that the use of mobile for offline loyalty has a negative impact which means, if mobile use increase by 1 unit, it will lead to an average decrease in offline loyalty by 0.129 units. This impact is very small, but it could not be ignored. One reason for this could be that when customers are more focused on their mobiles, so they pay less attention to the products shelves in the store which may cause distraction from products, in addition, by comparing prices by using mobile customer might find a better offer in online sales channels. Another reason could be that bad reviews of a product can cause customers not to buy the product.

9.2 Results Equation

Equation 2	Standardized Standardized Coefficients Beta		P value
	Error		
(Constant)	.473		.657
Online Satisfaction	.059	.411	.000***
Online Trust	.045	.115	.030***
Offline Loyalty	.041	.332	.000***
Mobile Use	.043	.212	.000***
Control Variables			
Age	.030	.037	.383
gender	.065	.026	.535
Education	.023	.017	.684
Employment	.018	086	.037***
R ²	0.684	•	•
Adjusted R ²	0.671		
Dependent Variable	Online Loyalty		
Significant at 5% ***			

Table 9 Regression analysis Equation 2

9.2.1 Interpretation of Equation 2

Based on equation 2, we can draw the following conclusions: the relationship between online satisfaction and online loyalty is significantly different from 0 at 5% significance level. This confirms hypothesis 3. Online trust is also significantly different from 0 at 5% significance level and has a positive impact on online loyalty, confirming hypothesis 4. Offline loyalty has a significant positive effect on online loyalty at 5% significance level, confirming hypothesis 5. The use of mobile is also significantly different from 0 at 5% significance level, with a positive impact on online loyalty.

9.2.2 Discussion Equation 2

When we discuss the regression results of equation 2 in detail, we first see that equation also has a good predictive power because the value of adjusted R² is 0.671. This value of adjusted R² is high, which means that approximately 67% of the variation in online loyalty is explained by the included variables. In equation 2 again there are no differences in age groups, gender, and education level. However, there is a difference between different employment statuses. The customer with employed/student status has online loyalty which is on average 0.086 units lower than the customer with unemployed/retired status at a significance level of 5%. This may have to do with the fact that employed/students tend to spend more than unemployed/retired people because their income is higher, and they are willing to take more risks and try new retailers.

Online loyalty is affected by the level of online satisfaction, which confirms hypothesis 3 at a 5% significance level. This means that whenever online satisfaction increases by 1 unit, online loyalty towards online sales channel increases on average by 0.411 units. That is a comparatively large effect. Therefore, customer satisfaction in online sales channels is also important for retailers. So, retailers should also take the right steps to increase online customer satisfaction. Online customer satisfaction is mainly increased by enhancing the product range, increasing customer value, enhancing the website looks, and by helping customers with their questions and complaints. By focusing on these factors, a retailer can increase the satisfaction of his customers.

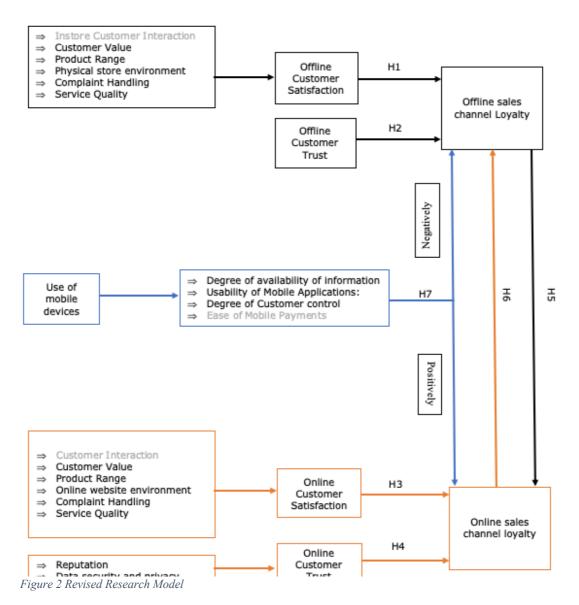
Hypothesis 4 is also confirmed, at a significance level of 5%. Which means that online trust has a positive effect on online loyalty. As trust in the website increases by 1 unit, customer loyalty towards online sales channel increases by 0.115 units. This effect is much lower than the effect of online satisfaction, but it is an equally important factor. Retailers can increase customer trust by quickly and properly responding to customer questions and by ensuring the customer that their data is safe with the retailer.

Hypothesis 5 is also confirmed, at a significance level of 5%. Which means offline sales channel loyalty (offline loyalty) has a positive impact on online sales channel loyalty (online loyalty). As offline loyalty increase by 1 unit leads to an average increase in online loyalty by 0.332 units. This effect is quite large. This hypothesis also confirms the effect of cognitive dissonance theory on the transfer of loyalty. As a result, when multichannel retailers want to increase loyalty in their online sales channels, they can benefit from loyal customers in their offline sales channels. In terms of building customer loyalty, multichannel retailers indeed have an advantage over single-channel retailers.

Finally, hypothesis 7 is also confirmed, at a significance level of 5%, with a positive on online loyalty. If mobile use increase by 1 unit, it will lead to an average increase in online loyalty by 0.212 units. This impact is small, but it could not be ignored. Therefore, the retailers should also consider that how can they improved the use of mobiles. The mobile phone use can be enhanced by improving the usability of the mobile app, giving more control to the customer regarding information sharing and making more information available for mobile users.

9.3 Revised Research Model

The research model is revised after doing the regression analysis. Figure 2 shows the revised research model. Rejected variables are highlighted. This model provides a better overview of the findings of this master's thesis. The regression analysis for each factor can be seen in the appendices.



Based on these research results, we can answer the research questions of this master's thesis. The answer to sub-questions 1, which factors influence customer loyalty in offline and online sales channels, is found in hypotheses 1, 2, 3, and 4. Customer loyalty in offline and online sales channels is influenced by customer satisfaction and trust, and also by loyalty across different sales channels. Sub-question 2, which examines whether there is a spill-over between online and offline loyalty. Hypotheses 5 and 6 verify that there is indeed a spill-over between online and offline loyalty, both ways. This spill-over gives multichannel retailers a competitive advantage over single-channel retailers. Answer to the sub-question 3 is giving in Chapter 2.7. sub-question 4 which refers to the effect of using a mobile phone on online and offline loyalty was answered by hypothesis 7.

Hypothesis 7 shows that there is a positive effect of using mobile on online loyalty and negative effect on offline loyalty. A formal answer to the main research question is as follows: Customer satisfaction, customer trust, and the spill-over of loyalty from the offline sales channel to the online sales channel and vice versa affect customer loyalty in multichannel retailing. While the use of mobile devices has a positive effect on loyalty in online sales channels and negative effect on loyalty in the offline sales channel.

10 Conclusion and future research

The purpose of writing this master thesis was to answer the question of whether multichannel strategies make a difference in the retail sector. This question was derived because introduction and development of the Internet and mobile devices have dramatically transformed consumption patterns and therefore, many retailers with traditional stores (offline sales channels) are having difficulties competing with some retailer having online sales channels, that is because in recent years some retailers with online sales channels have become extremely popular. Therefore, many offline retailers have opted for a multichannel strategy by running an additional online sales channel. Nevertheless, in recent years, we have also seen the reverse movement, in which retailers with only online sales channels suddenly start operating offline sales channels (physical stores). These steps of retailers gave all the more reason to investigate whether a multichannel strategy is better than the classic single channel.

This question was examined from the customer loyalty point of view in different sales channels. The main research question was therefore formulated as follows: "What factors affect customer loyalty in multichannel retailing and how does the use of mobile devices affect their loyalty in multichannel retailing?". To answer this main question four sub-questions were created: Which factors influence customer loyalty in online and offline sales channels? Do online and offline sales channels affect each other in terms of loyalty? What are the key differences between mobile devices and traditional fixed (PC) internet? How do mobile devices impact customer loyalty in multichannel retailing?

The results of this study confirmed earlier research that customer loyalty is greatly affected by customer satisfaction and their trust, both in offline and online sales channels. Moreover, this research finds a strong spill-over from offline loyalty to online loyalty, which again confirms the existing literature. This research also contributes to the literature by investigating the spill-over from online loyalty to offline loyalty. The results show that there is indeed a very strong spill-over of loyalty from online loyalty to offline loyalty just like in spill-over from offline to online loyalty. This is a very important finding because due to this spill-over effect of loyalty among different sales channels, multichannel retailers can benefit from it by taking advantage of the already built up loyalty in their online or offline sales channels. Since loyalty provides an important competitive advantage, multichannel retailers therefore already have an advantage. This research also contributes to the literature by investigating the effects of the use of mobile devices in multichannel retailing. The results show that the use of mobile devices indeed have an effect on multichannel retailing. More specifically use of mobile devices have a positive effect on loyalty in online sales channels. Whereas mobile phones negatively affect loyalty in offline sales channels. It may be because customers are more focused on their mobiles, so they pay less attention to the products on shelves in the store. It could also be that by comparing prices by using mobile devices customer might find a better offer in online sales channels. Another reason could be that bad reviews of a product can cause customers not to buy the product. To minimize the negative effect of the use of the mobile phone on offline sales channels, retailers can encourage the use of mobile devices in the offline sales channel (stores) by offering coupons that are only valid in the physical stores, another option could be to provide charging devices on the shopping carts so that customers spend more

time in the store while they wait for their mobile devices to be charged or to offer free Wi-Fi to prompt the customer to stay longer in the store which could lead to more purchases.

The result of this research shows that in terms of customer loyalty, multi-channel strategies do make a difference in the retail sector. That is because multichannel retailers have an advantage over single channels retailers due to the transfer (spill-over) of already build up customer loyalty across different sales channels or new sale channels. Even though creating and maintaining multiple sales channels have extra costs, it also comes with additional benefits that will also lead to additional revenue. In this way, multichannel strategies do indeed make a difference in the retail sector. So, to utilize the full benefits of customer loyalty, single-channel retailers should start an additional sales channels to benefit from the spill-over of customer loyalty from the existing sales channel (online to offline or offline to online). This additional channel will provide the retailer with a sustainable competitive advantage.

The biggest limitation of this research is regarding the dataset. Due to an uneven distribution of age categories, especially for the age categories of under 18. There are no observations to provide a good picture of these age groups. In a possible future study, it is best to pay more attention to a more evenly distributed sample to get a more uniform picture because younger consumers might deviate from this research model. Another possible limitation could be the low values of standard deviation, this could mean that the sample (respondents) of this study may not be representative of the entire population of multichannel consumers. Furthermore, this research did not focus on different sectors. Therefore, it might be possible to say that the results of this study may vary when applied to a specific sector. Therefore, further research in the field of loyalty in multichannel retailing can focus on extending these findings to specific sectors. Finally, further research is needed to determine why the use of mobile devices affect offline sales channels negatively.

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12 Appendices

12.1 Regression Analysis: Offline Satisfaction

Dependent Variable Offline Satisfaction	Standardized Error	Standardized Coefficients Beta	P- value
(Constant)	.187		.041***
Complaint Handling	.048	.161	.002***
Instore Interaction	.057	.049	.444
Customer Value	.044	.179	.001***
Product Range	.042	.252	.000***
Store Environment	.058	.399	.000***
R ²	.673		
Adjusted R ²	.664		
Significant at 5% ***			

12.2 Regression Analysis: Online Satisfaction

Dependent Variable: Online Satisfaction	Standardized Error	Standardized Coefficients Beta	P- value
(Constant)	.196		.075
Complaint Handling	.048	.151	.009***
website Interaction	.040	.002	.970
Customer Value	.038	.099	.032***
Product Range	.043	.239	.000***
Website Environment	.052	.523	.000***
R ²	.673		
Adjusted R ²	.664		
Significant at 5% ***			

12.3 Regression Analysis: Online Trust

Dependent Variable: Online Trust	Standardized Error	Standardized Coefficients Beta	P-value
(Constant)	.237		.001
Reputation	.074	.408	.000***
Data Privacy	.071	.365	.000***
R ²	.512		
Adjusted R ²	.507		
Significant at 5% ***			

12.4 Regression Analysis: Mobile Use

Depend Variable: Use of Mobile	Standardized Error	Standardized Coefficients Beta	P-value
(Constant)	.172		.271
Information Availability	.059	.406	.000***
Ease of Mobile Payment	.051	.097	.064
Degree of Customer Control	.047	.309	.000***
Usability of Mobile App/Website	.054	.170	.004***
R ²	.714		
Adjusted R ²	.709		
Significant at 5% ***	•		