University of Economics, Prague

Faculty of Business Administration

Field of Study: CEMS International management

Title of the Master´s Thesis:

How Online Grocery Shopping Alters Food-Related Consumer Behavior

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Declaration of Authenticity

I hereby declare that the Master´s Thesis presented herein is my own work, or fully and specifically acknowledged wherever adapted from other sources. This work has not been published or submitted elsewhere for the requirement of a degree program.

Prague, May 16th 2018   Signature

Acknowledgments

Hereby I would like to acknowledge Mrg. Zuzana Chytková, Ph. D. for her guidance, insightful comments and helpful advice when writing this thesis. I would also like to thank all the respondents who took the time out of their busy schedules to sit down with me for interviews and their proactivity when answering my questions. Most of all, however, I would like to thank my family and friends for their unwavering support, words of courage and never-ending motivation.

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Abstract:

This study attempts to assess how the online grocery supermarket environment impacts and alters the shopping behavior and buying habits of the online grocery shoppers. Based on the results of a qualitative research, this thesis identifies two different shopping strategies on the online grocery platform. The first strategy exhibits the same shopping behavior as in a traditional supermarket and is representative of those consumers who do not shop online for groceries regularly. The second shopping strategy, on the other hand, includes major alterations into the shopping habits and behaviors of online grocery shoppers. This strategy is common for shoppers who are regular visitors to the online supermarket and are therefore fully accustomed to the online grocery environment and its functions. Therefore, this research concludes that the online grocery shopping frequency and familiarity with the service are the main determinants of which strategy a consumer will adopt.

Key words:

Outline

1. Introduction

E-commerce has been booming in the past years and the grocery shopping industry did not come out unaffected. More and more grocery chains offer the option to shop for groceries online; moreover, we have seen the birth of many grocery businesses that operate entirely as an e-commerce platform with no physical stores. It is hence not surprising that this field has attracted many researchers in the past years that have been investigating different attributes of online grocery shopping and the impact it has brought into the grocery industry. Extensive research has been undertaken to study the motivations behind online grocery shopping trying to explain what propels people to change their shopping behavior from brick-and-mortar stores to the online environment. Apart from the online grocery shopping adoption drivers, research has also focused on the adoption of e-commerce in general, the situational factors that come with online grocery shopping, consumer perception of online grocery shopping and to a certain extent, the impact on consumer behavior, choice and channel use when they buy their groceries on the internet.

Nevertheless, the online grocery shopping is a relatively new trend that has been gaining popularity and practical use on a wider scale only in the last few years and it is therefore not surprising that the depth and quality of already existing research is still lacking in some areas. Hence, the aim of this master's thesis is to add onto the already existing research and to deepen our knowledge about how the online supermarket alters the shopping behavior and habits which is an area that has not been, to my best knowledge, investigated in a proper depth before. In particular, I will study how the online grocery shopping supermarket environment impacts and alters the shopping behavior of its consumers.

The research is derived from a qualitative study of interviewing ten online grocery supermarket customers who are at the same time the responsible person for grocery shopping in their respective household. These respondents were interviewed in depth about their shopping habits before and after they have started buying groceries on the online platform. The semi-structured interview method was used to conduct the interviews. Eight female online grocery customers and two males took part in the study. They constituted of a wide range of ages and geographic locations. Additionally, the respondents represented the two main target groups of online supermarkets and were split evenly between busy professionals and families with children. Hence, the data sample can be assumed to have a maximum variation.

The paper is organized into four main sections - research context, theoretical part, methodological part and the research findings. All these sections together create a closely

comprised research paper that connects the knowledge gained by reviewing the current market situation of the online grocery business and the existing scholar literature on this topic together with the new findings that were obtained from the qualitative analysis.

The paper commences by introducing the online grocery shopping industry in the first section to demonstrate to the reader the growing importance of this field in the food industry as well as in the area of e-commerce both worldwide and in the Czech Republic. This section is set to review the current and future trends in the online grocery shopping and to highlight how essential it is to explore this field further to understand its growing impact on the online grocery customer.

In the theoretical part, I will take a comprehensive look at the existing literature on this topic and outline research and different theories that are the most relevant to my research question. I will start broadly by reviewing the factors leading to the adoption and acceptance of technology and online services to first understand the motivations that prompt consumers to switch from a traditional service to its online version. I will then delve deeper into the factors that drive online grocery shopping adoption in order to understand different internal and external triggers that might help us later understand potential behavioral changes online. Lastly, I will review the existing research that has been focused on behavioral alterations specific to the online grocery supermarket environment to confirm which gaps allow for further research that could be included in this study.

The methodological section introduces the research methodology and the reasoning why this methodology is the most suitable for this study to help me reach meaningful conclusions and answer the research question. This section will further outline the goals that have been set for this research and describe the research methodology in detail, data collection, data sample, data analysis and research ethics.

I will then present the research findings in the empirical part of this study to identify the alterations of consumer shopping behavior and buying habits once he or she switches from the traditional brick-and-mortar store to the online supermarket. I will illustrate the different findings that have been revealed by analysing the collected data with the help of the coding technique and will attempt to interpret them and to find the root causes of the behavior alterations that would help us explain why the online supermarket impacts the customer in a certain way.

Finally, I will discuss the contributions of this paper and the limitations of the overall findings for theory and practice before I conclude and summarize the entire study.

2. Research Context: Trends in Online Grocery Shopping

Online shopping, also referred to as e-commerce, has been transforming the shopping industry since the birth of the internet. Its biggest impact on the consumer behavior lies in its inherent ability to allow consumers ordering from home electronically and having the goods delivered at their own preferred location as Burke (1997) defines it. In other words, e-commerce allowed consumers to complete the entire buying process from the comfort of their homes starting with choosing the product, placing the order and having the good delivered to their door.

This is in agreement with Robertson (1967) who studied and defined the differences between innovation and behavior patterns. Robertson (1967) defined three different innovation classes as follows: 1) continuous innovation, 2) dynamically continuous innovation and 3) discontinuous innovation. According to his classification, online shopping falls into the category of discontinuous innovations as it not only introduced a completely new product to the market but the use of the product or service significantly altered consumer behavior patterns. When consumers shift from brick-and-mortar stores to online shopping, they choose products by clicking on them on a website instead of selecting them from a shelf in a supermarket which significantly changes their shopping behavior on many different levels. It is therefore significant to study these changes in the consumer behavior to understand better how the online environment influences the consumer shopping journey.

Chintagunta et al (2009) further distinguishes online shopping from traditional store shopping and identifies three important elements:

1) Online shopping saves time and adds convenience as there is no travel time involved, products are not investigated at the time of buying and consumers do not have to carry product load while shopping;

2) price uncertainty is decreased by the availability to see the final basket price at any given moment; and

3) delivery charges are often involved when shopping online.

Altogether, these elements have a major impact on the way a consumer approaches online grocery shopping. They propel the consumer towards different shopping habits compared to the traditional brick-and-mortar shopping as we will learn further in detail in this master's

thesis. All these definitions point out the significant difference between brick-and-mortar stores and online shopping environment which implies that consumer shopping behavior determinants and patterns will differ based on the channel choice. It is hence important to study online shopping behavior to shed more light on this discontinuous innovation of the past years.

Studying the change in consumer behavior when he or she decides to shop for groceries online becomes even more significant when we put the topic into perspective. E-commerce has become a booming business in many new as well as traditional areas and it is therefore not surprising that the grocery sector followed a similar trend. Even though online grocery shopping is not as established as some others areas of retail, there is no doubt this field is on the rise and will continue to grow at an unprecedented rate in the coming years.

According to a research done by Morgan Stanley (2016) which surveyed 10,000 consumers in 10 countries, groceries might be the next big driver of e-commerce globally. The grocery industry represents a multi-billion dollar business ($675 billion in the United States alone in 2016) and yet, the market share of online groceries is still very low compared to the grocery business overall (around 2% in the US and about 6% in some European markets such as the UK and France where the online grocery has become a little bit more established according to the Morgan Stanley research).

However, online grocery shopping is expected to more than double in the next 10 years which would result in nearly 75% of consumers doing 25% of their groceries online in 2025 (Nielsen Company, 2015). According to the market data retrieved from the Statistics Portal Statista (2015), similar staggering growth results are put forward:

Figure 1: Market value of the online grocery industry worldwide in 2015 and 2020
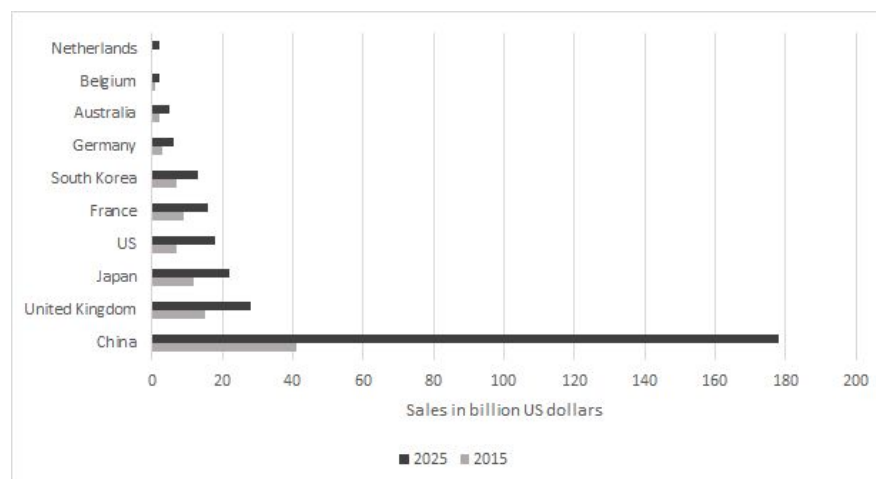
Source of data: Statista, 2015

Considering the overall low market share compared to the entire grocery industry combined together with the staggering growth predictions, it is not surprising that the research is forecasting that online grocery shopping might become a major growth driver of e-commerce in the coming years. Both studies agree that the shift towards online grocery shopping follows a similar suite as with other e-commerce areas. We globally see the maturation of people who have grown up with digital technology, particularly the Millenials and the Generation Z, who have grown accustomed to using technology in virtually every aspect of their lives. According to the Nielsen Company (2015), both of these generations have an *"unprecedented enthusiasm for and comfort with technology and online shopping is deeply ingrained in their behavior"*.

Figure 2: Percent Using/Willing to Use E-commerce Options across Generations
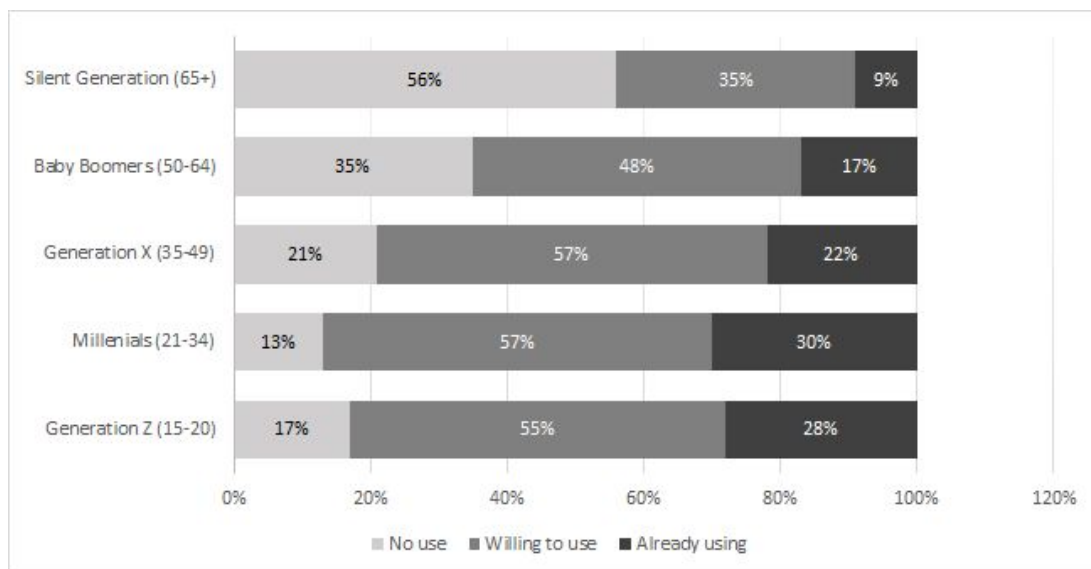
Source: Nielsen, 2015

Moreover, according to Howe and Strauss (2000), the Millennials tend to be on average more affluent than the generation of their parents and can therefore afford the luxury and comfort of paying extra for saving time on grocery shopping. Lastly, there is an increasing trend of mobile use when shopping for groceries online which allows the consumer to buy groceries from virtually everywhere and further fuels the trend of online grocery shopping adoption (Nielsen Company, 2015).

To summarize, the focus that is being placed on the grocery industry at the moment is rooted in the industry's inherent characteristic that grocery shopping affects virtually every consumer. When combined with the prediction that more and more grocery 'trips' will be happening online rather than in the offline environment, online grocery shopping naturally

becomes a field of high expectation, great attention and vast potential. Therefore, researching how the consumer behaves differently online when he or she shops for groceries and shedding more light on the behavioral change helps us understand the consumer better. Furthermore, it may assist online grocery providers with the prediction of consumer behavior on their website and hence with a better targeting and retention strategy.

2.1. The Grocery E-Commerce Landscape in the Czech Republic

The online grocery shopping was introduced to the Czech Republic around the beginning of the decade and has since witnessed a booming growth with more sellers entering the market, more regions in which online grocery services are available and more people that has tried to shop or shop regularly for groceries on the internet according to studies made by the GfK company (2017) on a large consumer panel that is representative of the entire Czech population. The Czech Republic is among the top European nations when it comes to the amount of sales of groceries online. The figure is currently 2,5% of all sold groceries in the country which ranks the Czech Republic on the 7th position worldwide in the most sold groceries online as a percentage of all sold groceries in the country based on the data acquired from Statista (2016).

Figure 3: Countries with the Largest Percentage of Online Grocery Shopping
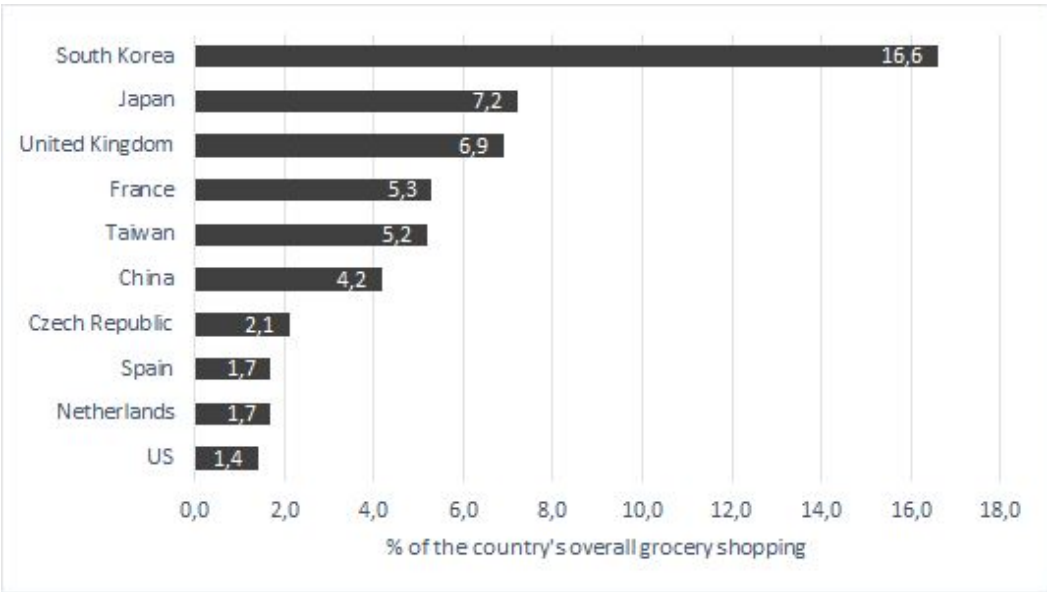
Source: Statista, 2016

Most European countries sell between one and two percent of their grocery turnover online with examples of Germany at 1,2% or Spain at 1,7%. Only the United Kingdom (6,9%) and France (5,3%) surpass the Czech Republic which makes the country a very competitive market in the grocery e-commerce landscape (GfK, 2017). The main players in the online grocery sector include Rohlik.cz, iTesco, Košík.cz, Freshbedynky.cz, Coop-box.cz, Plnataska.cz, Potravinydomu.cz and others (Ekonomika, 2017). Only the first three named online grocery providers, however, count among the top players in the sector and the rest is seen as bystanders and more niche-oriented platforms (InsightLab, 2017).

Around 24% of people in the Czech Republic have tried to place an online order for groceries in the past and one out of 10 customers purchases groceries on the internet regularly (InsightLab, 2017). Women are more experienced online grocery shoppers with 27% shopping for groceries at least once in the past and 11% shopping regularly (InsightLab, 2017). Not surprisingly, online purchases are leading among the younger generation and the experience with online grocery platforms decreases with increasing age. While 35% of people between 18-24 years of age have some online grocery experience, it is a mere 7% for the age category above 65 (InsightLab, 2017). We can find the highest number of customers in the Central Bohemia Region and the capital city Prague while the online grocery platforms are the least used in the Vysočina Region and the Olomouc Region. The typical shopper generally comes from either a large city that has over 100,000 inhabitants or from a remote small village with population below 2,000 people (InsightLab, 2017).

Households with higher educational level and higher income tend to place more orders for groceries online than household with lower educational background. When the household net income exceeds 30,000 CZK, no major discrepancies were found in the shopping habits among different income level household. Similarly, household structure was found not to have an impact on the frequency of online orders. The frequency does not change for families with children compared to singles and working couples (InsightLab, 2017).

Among people that have the experience with online grocery shopping, iTesco is the most known platform that was named by 83% of participants (InsightLab, 2017). Rohlik.cz was named by 63% of participants while Kosik.cz by 60%. The rest of online grocery platforms fell behind significantly with the next player having the name recall of only 32%.

2.2. Chapter Conclusion and Its Implications on the Research Question

Even though the online grocery industry can still be considered as a relatively new e-commerce service, we are witnessing an unprecedented growth of this field around the world as more and more people are trying out this service or even adopting it completely. Many market research companies have turned their focus towards studying the current trends of the online grocery industry as well as predicting its potential future developments. As both the trends and predictions are more than promising for the online grocery providers, it can be assumed we will see more and more online grocery websites being set up and more and more people becoming regular customers of online supermarkets. As this study focuses on the alterations into the consumer shopping behaviors and habits when comparing the online environment to the offline one, the growth prediction of the customer base only fuels the interest into the research question. With more people buying groceries online, there will be a pressing need for online grocery providers to improve their services in order to stay competitive. Exploring the different consumer behavior in the online supermarket can add significant insights into how to make the service more efficient for the consumer, how to target and market effectively and how to retain the already existing customer base.

3. Literature Review

3.1. Factors Affecting the Adoption of a New Information Technology Service

The research context has shown that the online grocery shopping is a burning topic at the moment because of its immense growth potential and the significant impact on the traditional shopper. The research on current trends in online grocery shopping, both on the global and local scale, has become the focal point of many statistical institutes and consultancy companies; however, shopping for groceries online has also been studied and scrutinized in the academic field. In order to understand how consumer behavior changes in the online environment, it is first essential to understand why consumers stir away from the physical brick-and-mortar store towards the online supermarket. In other words, we need to understand what leads people to adopt and use a new service which may later provide us with a connection and a deeper understanding of the behavioral changes in shopper's behavior online.

The research on new service adoption has been developing quite significantly over the years and a lot of attention has been paid especially to the online environment and information technology (IT). As online grocery shopping is an e-commerce service which was brought about by the IT revolution, researchers tried to establish whether adoption of online grocery shopping follows the same path as the adoption of other IT services. First research on why and how consumers adopt technology and digitalization came from Davis et al (1989) who proposed one of the most widely accepted models on IT and technology acceptance - the technology acceptance model (TAM). It postulates that the individual adoption and the intention to use new ITs is determined by two beliefs: *perceived usefulness* and *perceived ease of use*.

Perceived usefulness is defined by Davis et al (1989, p. 320) as the "*extent to which a person believes that using a particular technology will enhance his or her job performance.*" Mandilas et al (2013) further explains perceived usefulness in the context of online shopping as the additional benefits of Internet purchasing minus the benefits of traditional retailing. In other words, perceived usefulness can be described as the extent to which a consumer believes that adoption of a new IT service will create value for him or her. Simply put, consumer must believe that the service will be useful.

Perceived ease of use, on the other hand, is defined as the level of effort one believes that using a new IT will require. According to Mandilas et al (2013), the higher the effort required, the more likely the consumer will abandon the system. Additionally, Venkatesh and Bala (2008) suggested that the perceived ease of use will correlate with individual's general beliefs in regard to IT and his or her computer use. The influencing factors include computer self-efficacy, computer anxiety, computer playfulness and perceptions of external control.

The model has been continuously scrutinized and expanded over the years. One of the most notable updates was brought by Venkatesh and Davis (2000) who expanded the model by adding determinants and moderators of perceived usefulness which created an extension known as TAM2. A second extension - TAM3 - was proposed by Venkatesh and Bala (2008) with regard to the topic of e-commerce and included the effects of *trust* and *perceived risk*. This model directly relates to the topic of online grocery shopping where trust and risk play an important part in the consumer's decision on purchase online.

Gefen et al (2003) studied the effects of trust in context of technology adoption and examined the factors that build online trust in an environment that lacks the typical human interaction which often leads to trust. Their study found that online trust is built through four factors: 1) a consumer's belief that the e-commerce vendor has nothing to gain by cheating, 2) a belief that safety mechanism are built into the design of the Web in order to protect the consumers, 3) e-commerce platform has a typical interface like many others and 4) the platform is easy to use. Additionally, Gefen et al (2003) further stated that only by studying the factors established through TAM - perceived usefulness and perceived ease of use - together with the trust in the online vendor, an adequate prediction can be made whether a consumer will have the intention to adopt, accept and continue to use a new technology. Nevertheless, trust in a new online service correlates with the level of perceived risk.

Mandilas et al (2013, p. 437) predicted that consumer's risk perception is one of the most important barriers to adopting online grocery shopping and defined the perceived risk as the *"extent for a consumer's belief about the potential uncertain negative outcomes from the online transaction"*. Bhatnagar et al (2000) identified three types of risk that can significantly influence online shopping: 1) financial risk, 2) information risk and 3) product risk. Together the perceived risk from online shopping is higher than found in traditional physical stores and it can therefore impact consumer's online purchase decision. The perceived risk can be mitigated by a repeated purchase and by building and emphasizing the four trust factors above defined by Gefen et al (2003). In the context of online grocery shopping, the consumer will only adopt this new service once he or she perceives its usefulness is higher compared to traditional supermarkets, the service is easy to use and the design is user-friendly, a trust factor is established towards the online grocery provider and lastly, the consumer overcomes the

potential risk connected with online shopping such as the unavailability of inspecting the product before purchase.

Based on the literature on the new online service adoption, we have learnt that consumers adopt an online service only if they perceive it as useful and easy to use. Moreover, they still have to overcome the risk connected to shopping online and to establish trust in the online service. When taking these findings into account, we can deduct that switching channels from an offline to an online environment must provide online grocery shoppers with a useful and convenient form of grocery shopping that is based on trust in the online vendor which limits the overall risk of the shopping experience. Hence, the online supermarket environment must make the shopping experience easier which potentially directly alters the process of shopping for grocery online.

3.2. The Adoption of Online Grocery Shopping

Shopping for groceries electronically requires a significant change in consumer behavior and it is hence a discontinuous industry innovation according to Robertson (1967). This is in agreement with Hansen (2005) who described that the main change of shopping behavior comes from the forfeiture of traditional store social interaction and the loss of the ability to evaluate the products prior to purchase. As with any other significant and disruptive change to the consumer behavior patterns, it is essential to understand the reactive behavior and the adoption of new behaviors. Therefore, research has focused on exploring what propels brick-and-mortar stores' customers to change channels. Both external drivers and internal motivations were identified as triggers leading the customer to the online supermarket.

While the triggers coming from an external environment can lead consumers online, they similarly can vanish the desire or necessity to shop online for groceries once they are not present anymore. On the other hand, internal motivations, which were identified as seeking convenience and an easier information search, have a more permanent effect on the consumer's determination to stay with the online environment. Moreover, a careful examination of these drivers might provide us with connections to some of the behavioral changes that occur once a consumer starts buying groceries online and might therefore be useful later on for our analysis.

3.2.1. External Drivers in Online Grocery Shopping Adoption

Hand et al (2009) studied the situational factors that trigger the adoption of online grocery shopping and concluded that the adoption is rather an erratic process that is derived from current consumer's situation rather than an elaborative and planned decision to change the

current shopping behavior. Until the research of Hand et al (2009), situational factors were widely ignored when studying the adoption of online grocery shopping and the notion of rational and cognitively elaborate decision prevailed. However, the acknowledgement of situational factors can help us understand the adoption process better and with more accuracy. In fact, situational factors are key triggers to both adopting and discontinuing online grocery shopping according to Hand et al (2009).

Their research revealed that lifestyle changes such as moving houses, worsened health conditions, pregnancy and having a baby, starting a new job, leaving work, working late hours or working from home among others were the main lifestyle changes that led respondents to switch to buying groceries online rather than in traditional supermarkets. Significantly, however, when the initial situation reverted back to the normal pre-adoption stage, some consumers discontinued to shop online and returned to traditional shopping behavior. Hence, the study results revealed that the situational factors are significant triggers of online grocery shopping adoption but at the same time this newly developed consumer behavioral pattern can be reversed when the initial trigger disappears.

These findings have proven that online grocery shopping is an innovative service that does not follow the traditional smooth path of innovation adoption as it was traditionally described by Engell and Blackwell (1982, p. 382) as a *"process by which an individual becomes committed to continue use of an innovation. Adoption includes not just the act of buying a new product but also includes the mental and behavioral sequence through which consumers progress, potentially leading to acceptance and continued use."* In contrast, Hand et al (2009) pointed out that online grocery shopping adoption is a constantly re-evaluating process that could be easily picked up once the *"right"* triggers are in place as well as ceased when the triggers disappear.

This is in agreement with the research of Gillett (1976) which states that online grocery shoppers are not a captive market as there are little to no barriers preventing the consumes from reverting back to the original supermarket. In other words, in-home grocery shopping can be in many cases complementary to traditional brick-and-mortar store shopping. If some research suggests that situational factors can both drive the adoption and withdrawal from the online grocery shopping process, it is essential for online supermarkets to find out if the alteration of consumer grocery shopping habits online can be so significant as to prevent the potential termination of using the online service once the situation reverts back to normal.

Hand et al (2009) studied situational factors from the perspective of the consumer and described how life changes can affect consumer's grocery shopping behavior. In contrast, some researchers focused on the situational factors that affect shopping on a daily basis and can have

an effect on the long-term switching behavior of the consumer. Chintagunta et al (2009) among others explored these situational factors in a large consumer panel study and identified six situational factors that can influence the switching consumer behavior or the frequency of shopping in either conventional or online store.

First, there are *contextual factors* that need to be considered and those include weather and day of the week among others. Chintagunta et al (2009) found out that bad weather discourages trips to conventional supermarkets and hence favors ordering groceries online. Moreover, as online grocery shopping is often driven by convenience which is a major factor for time-constrained individuals, online shopping takes place in larger quantities on weekdays as time-pressured individuals more often have more spare time on the weekend to make a trip to a physical supermarket. This is consistent with Pozzi (2008) who similarly certifies in his research that consumer's intention to shop online decreases on weekends when shoppers are not pressured by time constraints.

Secondly, *delivery fees* play an important role in deciding which channel to choose. Pozzi's (2008) research showed that shopping for groceries online becomes less appealing with a rising price of delivery. However, as the delivery fees stay more or less the same for a certain duration of time, Chintagunta et al (2009) pointed out that the major short-term channel choice distinction in regard to the delivery fees involves bad weather conditions. This is the time when the occurrence of online grocery shopping increases as consumers tend to disregard the influence of delivery fees in the online channel in exchange for the comfort of shopping from one's own house. Hence, the convenience factor becomes even more important when outside conditions are not ideal.

The third situational factor described by Chintagunta et al (2009) involves *category needs* or *inventory levels*. They conclude that the depletion of high-expenditure household inventory is more likely to be associated with an online channel choice while running out of low-expenditure inventories drives the household to the offline store. Chintagunta et al (2009) further explained that one reason behind this consumer behavior includes the unexpected or random depletion of lower-expenditure categories when the household has no reason to plan a major online grocery shopping trip. The refill happens in smaller physical stores that are usually conveniently situated close to the house or on the way to work. This is in agreement with Kahn and Schmittlein (1989) who concluded in their research that large-basket *"stock-up"* trips are more often associated with the online medium while small-basket *"fill-up"* trips happen usually in a physical brick-and-mortar store.

The fourth situational factor that was identified by Chintagunta et al (2009) describes the grocery shopping channel choice based on the *category characteristics* and refers specifically to

the weight and bulkiness of some grocery items. The online channel eliminates the need for the consumer to physically lift and carry heavy items in the store and subsequently home. Therefore, stocking up on heavier grocery items is more likely to be carried out in the online environment.

Store promotions were the fifth factor studied by Chintagunta et al (2009) who found that promotions drive households to offline chains more often and more efficiently than to the online supermarket. However, in regard to the third situational factor that deals with high- and low-expenditure categories, Chintagunta et al (2009) hypothesized and subsequently backed up with data that promotions on perishable, small or low-expenditure items drive households to offline channels while promotions on heavy, bulky and high-expenditure categories increased the online store traffic.

Sixth situational factor is based on *household demographic* which includes family size, number of children in the household, income level, geographic area of the household residence or distance to the closest supermarket and which studied the opportunity costs that families face when buying groceries based on their household demographics. The larger the family, the more children they have, the higher income level and the greater distance from the nearest physical store, the more likely a household is to buy groceries online as the opportunity costs are greater. This is consistent with the literature as both Pozzi (2008) and Chiou (2008) certified that customers tend to choose the online channel when there are no brick-and-mortar supermarkets nearby.

Lastly, Chintagunta et al (2009) postulated that the *attractiveness of shopping* itself can decide the choice for the shopping channel. The characteristics of the most frequented offline stores play an important role in affecting this attractiveness. If the store does not provide the consumer with large assortment size, quality goods or parking lots among other services, its consumers are more likely to switch channels and decide to shop for groceries online. On the other hand, Hand et al (2009) highlighted that online grocery shopping adoption can be discontinued or not adopted at all if the consumer experience does not match the positive experience of shopping in a physical store. In other words, if consumers do not find shopping for groceries on the internet enjoyable, they are likely to be driven back to the offline channel.

3.2.2. Internal Motivation to Online Grocery Shopping

The reviewed literature has so far only dealt with the external situational factors that can affect the switching behavior between an online supermarket and a physical brick-and-mortar

store. As these factors are external, their final impact on the consumer behavior is not always possible to be predicted or prevented in most cases. Situational factors originate from an external situation that is - to most extent - outside of the consumer's control. On the other hand, many consumers that decide to switch from the offline to the online environment are driven by an inner motivation. As inner motivation cannot be easily observed directly, studying the consumer inner motivation to shop for groceries online has become one of the biggest research questions in the field of online grocery shopping. Kumar et al (2016) and many other researchers identified two most significant underlying motivating factors that propel consumers towards the online supermarket: *convenience* and *information search*. For the purpose of this thesis, it is important to review the different motivators that push or pull customers towards online supermarkets as these are likely to be connected to the behavioral alterations online and might even explain some of the root causes.

3.2.2.1.   Convenience

Childers et al (2001) distinguished between two basic motivations to shop for any product. They identified these as hedonic motivation, which sees shopping as enjoyment, and as utilitarian motivation, which defines shopping as work. In the hedonic view, shopping is perceived as enjoyment, adventure or pure passion. On the other hand, utilitarian approach to shopping emphasizes *"efficient and timely manner to achieve goals with a minimum of irritation"* according to Ryu et al (2010, p. 419). Many researchers agree that grocery shopping falls into the second category, being strongly goal-oriented rather than an enjoyable activity.

Kumar and Kashyap (2018) attempted to understand online shoppers' motivation to choose items in online environments. They postulated that utilitarian shopper shops on the internet because his motivation is driven by rational decisions and efficient and deliberate actions that are related to a specific goal. They further identified convenience as the main driver for online grocery shopping because utilitarian consumers try to minimize their search costs as much as possible to save time and energy for activities that later give them more pleasure than grocery shopping.

This is in agreement with Childers et al (2001) whose research revealed that the ability of shopping for groceries at any time of the day is a major convenience factor that drives the underlying motivation for people to shop online. Furthermore, Beatty and Smith (1987) emphasized that the consumer's perceived convenience becomes even more important when the consumer is under time pressure and uses the in-home grocery shopping as a reduction of overall time spent doing groceries. Jiang et al (2011, p. 406) dwelt deeper into the topic of convenience as a major motivation factor and summarized previous research by stating that

"convenience has been one of the principal motivations underlying customer inclinations to adopt online shopping".

Based on in-depth focus groups and personal interviews with a number of online shoppers, Jiang et al (2011) identified six dimensions of convenience when shopping online as follows: *access, search, evaluation, transaction, possession* and *post purchase convenience*.

First and foremost, online shopping is *accessible*. It provides time and place flexibility and gives consumers the convenience of reaching the online store and shopping from the comfort of one's home. Secondly, Jiang et al (2011) classified the *search convenience* which consists of the ease of site loading speed, online grocery shop Web design and user-friendly classification system of the online store's environment. *Evaluation convenience* was described as the third factor of online shopping convenience and refers to the ability to investigate and obtain more product information than in traditional physical supermarkets. Moreover, the third factor also includes a convenient price comparison between different products online. Jiang et al (2011) subsequently described *transaction convenience* as flexible payment methods, easy-to-follow path to checkout and easy payment at the point of sale. *Possession convenience* is the fifth dimension of service convenience. It concerns the delivery time, on-time delivery and accurate order fulfillment. Lastly, Jiang et al (2011) identified *post purchase convenience* as the sixth convenience dimension. Post purchase convenience refers to the enjoyment of the shopping outcome and can be easily destroyed by any post purchase hassle such as spam email, product returns or unhelpful customer service. Overall, the aspect of convenience is one of the major underlying factors that leads to the adoption of online grocery shopping and to the continuation of using this service as long as the customer is satisfied on all or at least most of all the convenience dimensions described by Jiang et al (2011).

However, even though Childers et al (2001) among other researchers identified grocery shopping as utilitarian driven, they corrected the argument by proving that enjoyment still plays an important role in the motivation to shop online for groceries. Similarly, Close and Kukar-Kinney (2010) suggested that online window shopping and placing items of interest in the shopping basket is entertaining for some customers and can serve as an experiential activity to store all the desired items and later pick out those items intended for purchase. Combining the research of Childers et al (2001) and Close and Kukar-Kinney (2010) suggests that online consumers expect a different level of enjoyment from interactive online shopping than they would have expected from a traditional supermarket setting. In other words, consumers' attitudes, expectations and preferences for interactive shopping may differ from those that hold true in the physical store environment.

Past research has established that shopping for groceries is driven by utilitarian motivations from which convenience plays the most important role and its significance increases with shopping for groceries online. However, Kumar et al (2016) believes that information search is another equally important motivation factor for online grocery shopping. In other words, main motivation for consumers to choose to shop for groceries on the internet is their gained ability to search easily. This is in agreement with Luo (2002) who wrote that information is the key consideration for consumers in their decision to use the Internet. Customers can easily and quickly obtain various kinds of product information such as nutritional value, price, availability, warranty and guarantee and in some cases even extra information like possible recipes or suggestions of products that go well together.

Moreover, Kumar et al (2016) studied consumers' use of the shopping cart and found its value as an information gathering, a shopping research tool and a place of information comparison. Similarly, the study of Close and Kukar-Kinney (2010) revealed that the online shopping cart use goes beyond the traditional retailers' view that the shopping cart only serves as a space for gathering products before an intended purchase. The research investigated other possible reasons how consumers use the online shopping cart and established that consumers place items in the online basket to secure promotions, to obtain more product information, to organize their shopping and even as a form of entertainment and shopping comparison. According to Luo (2002), shopping carts are used for a purposeful ongoing search and are one of the underlying factors why information search and information availability play an important role as a major motivation factor to shop for groceries online.

3.2.3.   Possible Prevention to Adopting Online Grocery Shopping

Online grocery shopping comes with quite a few advantages such as no travel time involved, no need to carry heavy items, no restriction on shopping time of the day, greater accessibility, shopping from the comfort of one's home, time saving, price comparison, product comparison, greater product information and easy and fast information search and access. In contrast, however, Chu et al (2010) studied the implications that might possibly prevent the adoption of online grocery shopping. One of the first disadvantages of online grocery shopping is its inherent impossibility to examine the product. One cannot smell, feel, touch or sample the product that is one buying online. This finding is in agreement with a previous finding of Peck and Childers (2000) that described that goods with salient haptic attributes which include

texture, hardness, temperature and weight need to be examined personally in many cases and their purchase on the internet may therefore be prevented because consumers may choose to buy these products in a physical supermarket.

Additionally, Hornik (1992) further proposed in his study that direct experience may play an important role when shopping for products requiring more tactile information. He presented evidence that shoppers that were touched on the arm while shopping in a supermarket and offered to taste a sample were more likely to buy. This evidence can be further combined with the research of Chu et al (2010) who focused on the foregone interpersonal communication and interaction when a consumer switches to online shopping. Chu et al (2010) found that some consumers would not switch from a brick-and-mortar store to an online shop because they do not want to give up the personal and social interaction that the physical store offers. On the other hand, these cases mostly involved consumers that shopped in only one or a few stores and therefore developed high consumer loyalty to that particular place.

Lastly, Grewal et al (2004) saw that online grocery shopping does not permit instant gratification that is usually present in the case of brick-and-mortar store shopping. Instant gratification often occurs hours or days after the shopping has taken place and is therefore another reason to take into account when studying the possible reasons that may prevent the adoption of shopping for groceries online.

3.3. The Changing Consumer Behavior in the Online Supermarket

3.3.1. Shopping Trip Length Reduction

As I have previewed above, a lot of research has been undertaken to study the motivations and drivers to adopt shopping for groceries online. However, with the growth of online grocery shopping revenue, some researchers realized the importance to understand the online shopping behavior and turned their focus to studying the consumer behavior in the online environment. Anesbury et al (2015) saw the significance for retailers and manufacturers to understand how consumer behavior differs between a brick-and-mortar store and an online environment. They conducted an experiment in which 40 shoppers that were previously inexperienced with online grocery shopping had to buy a basket comprising of 12 common grocery categories. In agreement with the literature, Anesbury et al (2015) hypothesized that grocery shopping is utilitarian driven and that consumers will shop in a goal-oriented manner regardless of the channel choice.

The results showed that online grocery shopping primarily reflects the consumer's desire for efficiency and time saving. The shopping trips were fairly fast for most of the experiment participants regardless of the lacking experience that the participants had with online grocery shopping. The mean average time to select the 12 items took just over 11 minutes with the median below 10 minutes. In other words, participants took less then one minute to select a product from a product category and the selection time declined as the participants continued to shop. The overall duration of the shopping trip is hence much shorter than in a traditional supermarket which is consistent with previous literature.

Anic and Radas (2006) reported that a shopping trip to a traditional supermarket takes on average 42 minutes when a consumer shops for 10 to 20 items. From the overall duration, 35 minutes are spent on shopping and store navigation while about 6 minutes are used for queuing. Other studies reported the average supermarket trip to range between 13 to 42 minutes according to Anesbury et al (2015) who postulates that the huge discrepancy in the reported averages most probably lies in the differences between examination techniques (observation, Bluetooth and radio frequency identification, consumer surveys), locations of the studies (North America, Europe, Australia) or especially the size of the store. Nevertheless, Anesbury et al (2015) points out that regardless of the wide range of the shopping trip durations, they all suggest that the selection time taken up per product category is on average two minutes in a physical store. Therefore, online grocery shopping seems to represent an efficient way to save time spent on buying groceries.

Anesbury et al (2015) explains the time saving by pointing out that most purchases in their experiment took place on the first page of the product category. In other words, participants consistently used the default option of the page display in the retailer's online store and most of the time only viewed the products displayed on the first page (the default page). This is supported by previous literature as the research of Breugelmans et al (2006) showed that products located on the first page in the retailer's online store yielded more purchases. The results further exhibit that consumers are less likely to 'scroll' through the pages to see the entire product category offering and the number of page views other than the first page is small. Anesbury et al (2015) conducted their own research on page views and found out that the average number of page views is only one and that 85% of selections were made from the default page. Moreover, the number declined rapidly and only 2% of products were chosen from pages 5 and more.

To find a product in a brick-and-mortar supermarket, a consumer must find the correct aisle and walk down in order to locate the product he or she is searching for. On the other hand, a consumer has many different options to find the right product in the online store. He can use the search function and directly look the product up. He can also use the 'virtual departments'

that resemble the aisle organization as if in a traditional supermarket (e.g. dairy, meat, vegetables, fruit). Lastly, a consumer can directly view the special offer page. Even though searching directly is the most popular way of looking up information on the internet, Levene (2011) hypothesized that using 'virtual department' navigation will be preferred by grocery shoppers as they tend to associate the online grocery website with the traditional brick-and-mortar store.

The way a consumer searches for a product was the focal point of the study by Benn et al (2015) who carried out an experiment in which 40 participants made an online shopping trip for their weekly groceries while their eye movement was recorded and later analysed. The study revealed that 95% participants used the 'virtual departments' search function, 80% navigated by searching directly and 68% browsed the special offers. When the consumer found the relevant product category, the results were then similar to the results of Anesbury et al (2015) and Breugelmans et al (2006). The results suggested that once the customer landed the right category, he or she was likely to shop on the first page.

Moreover, participants in Benn et al's (2015) experiment tended to make their selection based on the product picture rather than product information examination even though online environment offers some information that might not be available in the traditional store setting (e.g. possible recipes, products that go together etc). Nevertheless, 65% of participants looked at the pages providing additional product information at least at some point of the shopping session. The conclusion of Benn et al's (2015) laboratory experiment suggests that the way a consumer searches for a product in the online environment resembles the way the consumer would search for the same product in a physical supermarket.

Anesbury et al (2015) attribute this to the fact that most online grocery retailers simulate a familiar supermarket environment which may explain why consumers prefer to browse categories rather than searching for the product directly. Additionally, Benn et al (2015) believes that navigation may be the preferred choice of product lookup rather than a direct search because it does not require any effort to use consumer's linguistic working memory which may be required to remember which goods to purchase. This is in agreement with previous literature and especially with the technology acceptance model (TAM) that includes the perceived ease of use as one of the predictors to information technology adoption according to Davis et al (1989). In the context of online grocery page navigation, 'virtual departments' are perceived to be easier to use and hence require less effort than searching for products directly. It was not previously tested, however, if shoppers with a prepared shopping list would use the direct search or if they would also browse 'virtual departments' in order to find the products on the shopping list.

Lastly, Sorensen (2017) adds to the findings that today's overload of choice in both traditional and online supermarkets leads to consumers developing a so-called 'clutter filter' that screens quickly through the vast selection of brands and products that we find on the shelves or on webpages nowadays. Therefore, selecting products quickly, often without browsing, might represent an unconscious protective behavior that consumers use to stay efficient and oblivious to the amount of choice that is presented to them.

3.3.2.   Alterations in the Brand Exploration Online

Research has revealed that online consumers shop efficiently and do not waste much time by browsing between pages within one product category. Does it therefore mean that there is a lack of brand exploration while shopping for groceries electronically? Pozzi (2008) tried to answer this question by scanning a large dataset of 11,000 consumers who shopped both online and in a brick-and-mortar store. The focal point of his study was the brand exploration within the breakfast cereal category. The result of the research showed that brand exploration is more prevalent in an offline environment than online which would be consistent with previous literature which suggested that consumers rarely browse further than the category landing page. In fact, the study estimated that 10% of households are more likely to try a new breakfast cereal brand when shopping in a physical supermarket than online.

Pozzi (2008) proposed and empirically tested three explanations to his findings: 1) time saving and goal-orientation hinders brand exploration online, 2) online grocery retailer's website features can impede potential brand exploration and 3) the difficulty for a consumer to judge the quality of an unknown product or a brand online. Online shopping offers consumers a time-saving alternative to hours spent in the supermarket as was already put forward by Anic and Radas (2006). Therefore, a consumer is more likely to choose the online channel for grocery shopping when he or she is under time pressure as Pozzi (2008) assumes. This behavior therefore leads to a decreased intention to explore unknown brands and products.

Secondly, many online grocery providers offer the option to shop based on past shopping history which allows consumers to buy their favorite products at one click. Naturally, this feature lessens any intention to browse through virtual aisles and explore new brands as it lowers the time spent in the online store. On the other hand, Pozzi (2008) found that disabling this feature boosts brand exploration online by 23%.

The third reason put forward by Pozzi (2008) for the lack of brand exploration online is the fact that quality verification online is harder if not impossible. If a consumer cannot examine

an unknown product, he or she is less likely to buy it. Therefore, the search for unknown brands decreases as exploring new products and brands carries a cost in terms of uncertainty about the quality of the product.

Overall, Pozzi's (2008) research suggests that there is more brand stickiness online than in a traditional offline supermarket. In detail, he finds that 10% of consumers are more likely to try a new brand in the offline store and that online shoppers are 3.5% less likely to choose a new variety or box sizes of an unknown brand. One of the most important findings of Pozzi's (2008) research, however, is the fact that despite the conventional wisdom that the internet and the rise of e-commerce lowered the barriers to entry, it may not be the case in the context of online grocery shopping where the barriers to entry might be even higher for new unknown brands. This is consistent with previous readings on the topic when both Degeratu et al (2000) and Shankar et al (2003) outlined that brand names and brand equity have higher impact online than offline.

3.3.3. Effect of the Online Environment on Price

The main difference between the offline and online grocery shopping environment is the consumers' ability to obtain sensory and non-sensory information about the attributes of a certain product according to Alba et al (1997). In response, Degeratu et al (2000) posed a research question to find out what are the effects of brand name, price and other search attributes such as sensory and non-sensory information. They derived their research from a previous study by Dick et al (1990) who proposed that consumers make their choice based on both external information as well as their prior experience. If the external information is missing or the cost to acquire it is high, consumers start to rely on their previous experience and prior information.

Dick et al (1990) found that in cases when information was not available, consumers always made deductions based on prior information. Moreover, in some situations the brand name can become a surrogate for all information or attributes that are either unavailable or expensive to acquire. Reversely, the brand name can diminish once product attributes become available. Degeratu et al (2000) suggests that the online environment offers more information on prices and hence increases price sensitivity for undifferentiated products. On the other hand, more information on non-price attributes reduces price sensitivity for differentiated or branded products.

3.4. Literature Review Conclusion and Its Implication on the Research Question

Reviewing the relevant literature on the topic of e-commerce and online grocery shopping has helped to bring forward the research question of this study and that is the study of the alterations into the consumer shopping behavior in the online supermarket. Extensive research has been carried out on the topic of why and how consumers adopt an e-commerce service. Additionally, fueled by the growth trends and predictions of the online grocery industry, research has further focused specifically on the process of online grocery adoption and motivation for continuous use. On the other hand, even though some studies delved into the behavioral changes online, the research on the consequential behavior and habits alteration remains lacking in my opinion. Hence, a gap in the research has been identified that this thesis will attempt to fill. Nevertheless, reviewing the existing literature helps us understand the topic more thoroughly and can potentially help us explain some of our research findings later in the thesis when I will be looking for root causes and implications of the observed behaviors derived from the study.

4. Methodology

The prime goal of this thesis is to reveal how the consumer shopping behavior and habits alter when he or she starts shopping for groceries on the internet. The findings of this research will further complement the previous studies of online grocery shopping that have been outlined in the previous chapter and will help online supermarkets better understand the impact that the virtual supermarket has on the shopping habits of their customers.

I will recapitulate the purpose of this research and the main research question in the first part of this section. I will then describe the research method that was used to conduct this research together with the data collection technique, data sample, interview analysis and research ethics.

4.1. The Research Goal

The aim of this research is to observe and study the changes in consumer shopping behavior and to answer the following research question:

How does the online grocery supermarket environment alter the shopping behavior and habits of its customers?

4.2. Research Method

For the purpose of this research, I have decided to use the qualitative methodology as the primary research method to obtain the above mentioned results. The qualitative methodology is a type of research that produces descriptive data such as people's words (both spoken or written) and their observable behavior according to Taylor et al (2016). Moreover, Taylor et al (2016) states that qualitative research is primarily interested in the meaning that people attribute and attach to things and people in their lives. To put these words into a perspective, the qualitative research deals with the understanding of a certain phenomenon using a person's frame of reference and with attempting to experience what the informant is experiencing as Corbin and Strauss (2015) put it.

In Hendl's (2005) opinion, one of the major advantages of the qualitative research methodology is the possibility for the researcher to delve deeper into a certain issue. Therefore, the qualitative research was chosen for the purpose of this thesis as its main goal is to shed light on both the conscious and unconscious behavioral changes that appear when a customer changes from the brick-and-mortar store to the online supermarket. The qualitative methodology helps us understand the consumer behavior more in depth and detail, revealing hidden motivations, unconscious behavior and automatized habits, and is therefore the chosen method for the purpose of this thesis

4.3. Data Collection

The data was collected by performing semi-structured interviews. The method of semi-structured interviews involves the elements of both structured and unstructured interviewing which makes this method an ideal research instrument according to Miovsky (2006). The heart of the semi-structured interview is a set of questions that are connected to each research topic that needs to be discussed during the interview. However, these questions are not set and do not have to follow a certain order. It is hence up to the interviewer to ask these questions based on the situation and the direction in which the interview is going. The aim of the proposed questions is to create guidelines for the interviewer and yet his or her main responsibility is to ask follow up questions that will lead the respondent to broaden and deepen his or her answers. To maximize the mutual understanding, the interviewer paraphrases some of the respondent's answers and asks exploratory questions as suggested by Hendl (2005).

The set of potential interest topics relevant for our research was created based on the literature review. These topics were later filled with exemplary questions that served as guidelines on how to approach the exploration of each of the set topics during the interviews; however, they were by no means an inexhaustible set as would be the case in a structured interview. Both the research topics and interview questions were finalized during the process of data collection. The final set of the research topics together with their relevant exemplary questions can be found as Attachment 1.

The research for this thesis was conducted during the months of March and April and the beginning of May 2018 and is based on 10 interviews with online grocery customers. All interviews were held in the Czech language as all the respondents were from the Czech Republic. Most of the interviews were conducted via a video call as the geographic location of some respondents and/or time issues did not allow a personal meeting between the interviewer and the respondents. Hence, a video conference call was chosen as the most appropriate way of interaction as it still allowed me to see the respondent's facial expression and body language.

Respondents had the option to choose the date and time of conducting the interview; however, most of the interviews took place in the evening hours. As the interviews were scheduled in advance, the respondents seemed to have taken a time of their schedule just to conduct the interview and were concentrated and present during the interview session. Only one respondent was multitasking during the interview as she used the time of the interview to cook dinner; however, no major distractions or concentration issues were observed and hence the interview was included in the analysis.

Respondents were notified about the approximate length of the interview at the time of scheduling as well as the approximate content that will be discussed. More specifically, they were informed about the general theme of this master's thesis - how online grocery shopping impacts consumer behavior. This information was later repeated to each respondent at the beginning of the interview. Questions to the respondents were asked in a clear manner; moreover, paraphrasing, control questions and questions, that were supposed to motivate the respondent to expand on the topic, were also used. After the interview was finished, respondents had the chance to ask following questions about the study.

Interviews were recorded using a dictation machine and the respondents were notified about the recording at the time of scheduling and/or before the interview began. The interview recordings were transcribed word to word for analysis.

Average length of the interviews reached 32 minutes while the longest interview lasted 47 minutes and the shortest only 15 minutes. As the interviews lasted approximately about half an hour on average, the attempt was to interview more than ten respondents. However, the information richness of the ten interviews became sufficient for data saturation and hence, no other respondents were further sought.

Only two interviews fell under the minimum 20 minute mark that I have set as the bare minimum for my research. One of these lasted about 10 minutes and was later not used for the analysis because it brought no added value to the research. The respondent answered most questions by a one-word answer such as *"yes", "no"* or *"I don't know",* and seemed not to be interested in the interview at all. I have asked the respondent if it would be better to reschedule; however, she declined and stated that she probably would not have much more to add as she does not enjoy shopping and does not have time to talk about it.

On the other hand, the second interview that was less than 20 minutes lasted 15 minutes and was included in the research for its enriching content and relevant information. This respondent was sent the question topics beforehand as she was on a business trip in China and her busy schedule did not allow her to take more time to conduct the interview. The conference

call was very quick and to the point because it was clear that the respondent took time to think about the questions in advance and was ready to answer any questions without too much thinking or hesitation. As the answers were very thought-through in advance, I found this interview as one of the most value-adding in the research and hence included it in the analysis. This interview proved that the length of an interview does not always correspond with its quality and relevance.

Some respondents directly asked me in the beginning of the interview if we can keep the interview closer to the half hour mark rather than longer as they are busy individuals and only found this slot for me to interview them. However, these respondents then answered all my questions directly and kept to the point as they were aiming to make the interview efficient and yet thorough in a shorter period of time. On the other hand, some respondents that have scheduled a longer time period for the interview had the tendency to wander away from the questions and from the topic in general or to answer some questions in so much detail that their answer soon also became irrelevant. Therefore, there is a strong reason to believe that the duration of each interview does not always reflect the quality of the information that was retrieved from the interview as already stated above in the case of the shortest and yet one of the most enriching interviews of this research.

4.4. Data Sample

The data sample is comprised of 10 online grocery customers from the age of 23 to 48 (mean = 31, median = 30) from which 8 customers were female and 2 were male. The data sample selection was deliberate as it approaches the distribution of online grocery shoppers in the general population of the Czech Republic. Hence, the data sample represents a maximum variation as I have selected the most meaningful characteristics of online grocery customers (sex, age, occupation/income level, geographic location and family structure) and choose the respondents accordingly to have representatives of all the different backgrounds. Therefore, we can talk about a judgemental sample which is type of nonprobability sampling in which the units to be observed are selected on the basis of the researcher's judgment about which units will be the most useful or the most representative for the selected research according to Babbie (2007).

I have first specified the selection criteria based on various demographic statistics that describe the typical online grocery shopper in the Czech Republic. These criteria included age, gender, income level, geographical location and family structure. According to a report from KPMG (2016), 20% of the population from the age 18 to 44 has shopped online for groceries at least once and another 25% is planning on trying out online grocery shopping. Based on the

same report, that surveyed 1,000 respondents that have the main responsibility for groceries in their households, it is clear that the gender split of grocery shoppers is still large as 70% of all grocery shoppers are female and only 30% male. Women are also more experienced online grocery shoppers with 27% shopping for groceries at least once in the past and 11% shopping regularly (InsightLab, 2017).

Additionally, the highest number of online grocery shoppers can be found in the Central Bohemia Region and the capital city Prague; however, locations outside the capital city were selected as well for interviews to make sure the data sample was comprehensive. Moreover, the typical shopper generally comes from a large city over 100,000 inhabitants or a remote smaller village with population below 2,000 people (InsightLab, 2017). Hence, a respondent from a small village of 450 was chosen to represent this specific demographic.

Moreover, the sample includes 5 respondents who are either working mothers or mothers on the maternity leave and 5 respondents who are busy professionals. This represents an even split between the two major target groups of online grocery supermarkets. The first target group includes families with children as is apparent from the mission and vision statement of Rohlík.cz (2016) that states that their vision is for people to not waste time in supermarkets and queues, but spend time much more meaningfully, for example outside with their family. Moreover, the Unata report (2016) has shown that consumers that have one and more children are twice as likely to shop for groceries online than consumers with no children. At the same time, Rohlík.cz attempts to attract the demographic group of young busy professional who have become the second most important target group. The online grocery provider communicates that they save the one thing that is the most important to the customer and that is his or her time (Rohlik.cz, 2018).

The complete description of the data sample is as follows:

Figure 4: Data Sample

Respon-dent	Sex	Age	Occupation	Geographic Location	Family Structure
Adéla	Female	38	Value Chain Manager	Jablonec nad Nisou	2 adults + 2 children
Barbora	Female	23	Administrative Assistant	Prague	1 adult
Cecílie	Female	26	Business Analyst	Prague	2 adults

Dana	Female	32	Maternity Leave/Hairdresser	Březina u Mnichova Hradiště	2 adults + 1 child
Eliška	Female	25	Maternity Leave/Translator	Prague	1 adult + 1 child
Františka	Female	30	Maternity Leave	Jablonec nad Nisou	2 adults + 1 child
Gabriela	Female	30	Advisor	Liberec	2 adults
Honza	Male	27	Government official	Prague	1 adult
Ilona	Female	48	Doctor	Prague	4 adults
Jakub	Male	32	Consultant	Prague	1 adult

4.5. Interview Analysis

Each individual interview was analysed based on its literal transcription to text. In these transcripts, different semantic units were identified by using the coding method. Semantic units are definable sections of the text or interview that carry a certain information according to Miovsky (2006). The identified semantic points were later encoded by content and grouped by the same code into categories. The list of categories can be found in Attachment 2 in the appendix.

Within each category, similar as well as divergent semantic units were searched for and each interview was analysed thoroughly to see what the connection is between the category and the respondent's opinion, experience or thoughts on this topic. When needed, a sub-category was created to give room for additional findings. Each category was analysed until data became saturated. In other words, the category was being filled with all the relevant codes until the data started repeating each other.

A connection between categories was later searched and established so the analysis gave rise to recurring themes in the data sample. These were then described by using representative sections or statements directly from the interviews to exemplify the findings.

4.6. Research Ethics

As any other research or a research methodology, the qualitative research needs to follow certain ethics as Disman (2002) writes in his book on sociological research. For this reason, each respondent was informed at the time of the interview scheduling and then again at the beginning of each interview about the purpose of this study and the purpose of the interview as well as about the expected length of the interview. Respondents were further informed that the video call will be or is being recorded for the purpose of transcription and analysis; however, it was clearly communicated that only a voice recording is being made and no video recording will be undertaken during the interview as the Skype for Business conference call allows this option as well. Respondents had a chance to decline to participate or to refuse being recorded.

Respondents were guaranteed a complete anonymity in the research and no possibility that the published thesis could be in any way connected to their person. I have explained in detail to each participant how the interview will be transcribed, analysed and exemplified using their words as citations but only with the use of pseudonyms that would not make it possible to connect the statement with their person. At the end of the interview, respondents had the chance to ask questions or express their thoughts about this research. The interview was concluded by thanking them for their willingness to take part in the study and for their time that they had spent answering my questions. Some participants offered to be contacted for further information if needed; however, I did not find it necessary to take them up on their offer.

To be in line with the ethics of the socio-academic research, each respondent became anonymized in this thesis by using an alternative first name when being cited in the research findings or the Figure 4. - Data Sample. Hence, no citation can be connected to a real person. Voice recordings and transcripts are not attached to this thesis due to the reason of data protection and a complete anonymity for the respondents. These can be, however, provided separately without full names if needed for further research in the future.

5. Research Findings

The following chapter describes and interprets the research findings that have been retrieved from a coding analysis of the undertaken interviews. The interviews have brought to light many interesting pieces of knowledge about how the online supermarket environment impacts some shopping habits while others might stay the same. The text comprises of direct citations from all the respondents on the topic to exemplify different research findings on this data sample.

The respondent answers are filling the established categories that have been derived from both the analysis and from the literature review that led us to our research question. Within each category, consistencies as well as inconsistencies in the different answers are sought. These are then attempted to be explained and interpreted using the established literature review.

One of the main findings of this research includes the existence and identification of **two different behavioral patterns** in our data sample. I have identified that the shopping patterns change quite dramatically when a consumer adopts online shopping as their main means of grocery shopping and buys groceries on the internet on a **frequent basis**. On the other hand, a second group of online grocery customers was identified and those were the **shoppers with no or low frequency** of online grocery purchases. This group have demonstrated minor changes in their food selection behavior; however, this group was not significantly impacted by the online grocery supermarket environment and from a large part stayed devoted to their old shopping habits that were developed in a brick-and-mortar supermarket. Hence, this chapter comprises mainly of two main sub-chapters, with each sub-chapter describing one customer group, their behavioral pattern in the online supermarket and the root causes of this behavior and its consequences on shopping in the lives of these consumers. Nevertheless, two behaviors were identified that could not be associated exclusively to one or the other shopping strategy. Hence, the third sub-chapter deals with these two behavioral patterns.

The two shopping strategies and their relevant findings are as follows:

Figure 5: Research Categories Derived from the Coding Analysis

Shopping with no or low frequency	Frequent shoppers
1. No time saved	1. More planning and efficiency
2. Same expenditure on online shopping	● 'Favorites' Category

3. No alteration in product choice	2. Time saved
4. Alteration in information search	● Monotonous shopping
	3. Money saved
	● Maximum amount spent
	4. Expanded product assortment
Special Offer Category	
Product Search	

5.1. Shoppers with No or Low Shopping Frequency Online

Within the data sample of online grocery customers used in this research, it became soon apparent that the respondents differ not only in their shopping habits but also in their shopping frequency. Based on this finding, I have identified two different shopping strategies within the sample. The first strategy, that will be described and studied in this subsection, was exhibited by customers that have a low or no shopping frequency online. That said, these customers have not yet fully switched to the online supermarket and only use it as a means of an occasional shopping trip. On most occasions, these customers chose the online supermarket when they were forced by some external driver and either reverted back to offline grocery shopping or shop online once a while out of necessity. Hence, their **online shopping lacks** a frequent repetition that would allow them to potentially develop **new shopping habits**. Moreover, these customers seem not to stir away from their routine grocery shopping behaviors that they demonstrate both in the online and offline environment. I have identified the following areas that **were not altered** by the online shopping channel as opposed to the representatives of the other shopping strategy that buy groceries online frequently:

1. Consumers with low or no frequency of online grocery shopping did not perceive any time saving;
2. Their expenditure on online grocery was more or less the same as in the traditional supermarket;
3. Their product selection in the online channel did not alter.

On the other hand, even though these shoppers tended not to change their behavior when changing from the offline environment to the online one, I have identified one change that have occurred:

4.   The irregular online grocery shoppers searched less for information or perceived the information search online harder than in the brick-and-mortar store.

The analysis has revealed that consumers that exhibit the first shopping strategy patterns that resembles shopping in a traditional supermarket seem to share a common view that online grocery shopping is not that useful in their lives and the online grocery websites are not easy to use. I will exemplify these findings further by using direct respondents' expressions on these topics and will try to demonstrate other possible explanations, root causes and implications on the shopping habits of these consumers.

5.1.1.   No Apparent Time Saving

One of the biggest benefits that is usually associated with online grocery shopping and online shopping in general is the time saved on the journey to the store, walking around and picking items and queueing to pay for the purchase. Some online supermarkets such as Rohlík.cz for example has built their entire unique value proposition around the time saving aspect of their business. Rohlik.cz promises its customers that they save the one thing that is the most valuable to them and that is their time (2018). However, it has been surprising to find out that not all customers that visit these online supermarkets view online grocery shopping as a means of saving time.

Adéla, Dana and Gabriela all expressed that they do not see a major time saving in the online grocery shopping trip. Dana even expressed:

"It definitely lasted me even more time. Even though I had a shopping list ready and wasn't browsing for anything but stuck to the shopping list, it took me ages to click through the whole thing… I just don't see the advantage, definitely not a time advantage. For me it's faster to shop when I'm in the city." (Dana)

Gabriela would agree by stating similarly that *"one saves the journey time but otherwise I feel it still takes plenty of time [to buy groceries online]."*

These statements are contradictory to previous findings by Anesbury et al (2015) and Anic and Radas (2006) which both agreed that online grocery shopping seems to save time to its customers as the shopping trips in the online environment tended to be shorter on average than shopping in the physical supermarket. However, there are factors that might be affecting the observed behavior in this research. For example, Adéla, who described that she has to *"open the*

laptop and sit down to click through all the different categories and search for all the different products that you need which overall is also a lot of time spent shopping", was a very inexperienced grocery online customer which could explain why the shopping trip took her longer than it would normally take in a supermarket she is accustomed to.

Anesbury et al (2015) explained their findings by proving that most of the customers that took part in their research chose products on the landing or default page and hence, the product choice process was speeded up by a limited choice of the landing page. However, the respondents of this study who were not buying groceries online frequently most often scrolled through different categories to see what is new online and what is available. Adéla said that even though she was looking for something specific, she *"still first opened the category and went through and looked at things"*.

The implication of more time spent on online grocery shopping seemed to be discouraging these customers from adopting online supermarkets as a frequent means of their grocery shopping destination. Jana admitted that *"even though you're sitting at home at your computer, you still spend about an hour before you manage to select the entire shopping... I don't know.. I don't see the convenience. I prefer smaller shops. Buy stuff and be out of there."* The tendency of these customers was to use online grocery shopping only when necessary (in time of sickness for example) and thus they were making large bulk-up trips as Gabriela stated that she only *"made very large shoppings online once a while"*.

On an ordinary day, these customers perceived shopping as a quick stop on the way to work or any other place they were traveling to. Adéla mentioned that she is the type of a person that still *"enjoy[s] those small shops such as the vegetable store, the butcher's and so on... When there is a market on Saturday morning, I'd like to drive in for some fresh vegetables from people who grow it locally."* which might suggest the importance of social interaction for these consumers. Additionally, she stated that she *"drive[s] to work and drive[s] children to sports ... so the shopping is done just quickly on the way"*. As the ordinary shopping trips to a traditional supermarket tended to be quite quick for these customers, there was no perceived time saving when making a larger shopping on the online platform which could be one of the reasons to explain their online grocery shopping perception.

5.1.2. No Change in Product Choice

One of the main areas of interest in this research was to study if consumers choose products differently when they shop in different channels. As the literature review touched upon brand exploration, Pozzi's (2008) would agree that customers of the online grocery

supermarkets do not experiment that much with new brands and new products but they rather stick to the brands they are familiar with. This seems to hold true for some as Dana describes that she *"only buy[s] what [she] knows rather than experimenting with new products… [I choose products] based on what I know and what I am used to"*.

On the other hand, Adéla answered: *"I look for my products but at the same time I'm looking at … the whole assortment, and if something catches my eye, I could easily buy something else [that is not on the list]. Or I would buy the thing I know, plus something new to taste… I don't resist trying new things."*

Furthermore, Gabriela also decides for new brands but it is because *"they have a different assortment and not all the brand I normally buy are there"*.

To conclude, even though Pozzi (2008) found that the brand exploration online is lower than in the traditional supermarket, those customers that do not buy groceries online on a regular basis seemed to be expressing the same behavior online and offline. If a consumer likes to experiment with new products, she would not give up this experimentation only because the channel choice would be an online supermarket. On the other hand, if a person tends to stick to a shopping list and only buy the products that they came for, they would express similar behavior online. Based on the analysis of this data sample, it can be deducted that once an online shopper is only an occasional one, he or she does not change the shopping habits that are connected to the product choice and brand exploration.

5.1.3.   Same Expenditure on Online Shopping

A recurring topic that kept coming up during the interview analysis was the discrepancy of views on the topic of shopping expenditure. One of the field of the semi-structured interview dealt with the expenditure that a customer spends online and offline as I tried to look for differences in behavior in the online supermarket versus its traditional brick-and-mortar counterpart. As mentioned earlier in the beginning of this chapter, a different behavioral pattern was identified for those who adopted online grocery shopping completely or at least shop with a high frequency, and for those who do not shop online regularly but only occasionally.

The literature on online grocery expenditure is not very comprehensive; however, some researchers tried to deduct the overall expenditure from the buying habits for unbranded and branded products. Previous studies by Dick et al (1990) and Degeratu et al (2000) suggested that when information is missing online, consumer is likely to depend on prior experience. In the context of online grocery shopping, the missing information represents the inability of the

consumer to inspect the product and thus the consumer might be propelled to stick to the brands and products he or she already knows and has an experience with. Moreover, as there is more non-price information online, this reduces price sensitivity for branded products according to Degeratu's et al (2000). Hence, it can be derived that consumers might be likely to spend more online than offline as they prioritize familiar products which decreases their price sensitivity.

Dana does not like to experiment with new products and sticks to the brands that are familiar to her. However, she does not feel she would be spending more on the internet for groceries than she does in a normal supermarket as she describes:

"... as I always follow a shopping list, I would say I spend the same as if I would in a normal store. Because I can take something that just drew my attention so if something jumped up at me in the online store and I thought I would have a use for it, then I put it in the basket as well. But to spend significantly more, not really…". (Dana)

Similarly, Adéla goes after the brands she knows and tends to experiment with new products time to time but spends more or less the same as if she would in a traditional supermarket.

As this customer group does not show many alterations to their shopping habits online and offline, the expenditure on grocery shopping also does not seem to differ between the two channels. It was apparent from the interviews that they shop online as if they were in a physical store and are therefore buying the same products. Even though the literature suggests that online environment decreases price sensitivity for branded products, these customers did not feel a major change in prices or they would view the margin on the differentiated products as negligible as Adéla describes:

"... I think [prices] were comparable. I'm not the type of person that would be inspecting tiny price differences but I think it was more of less the same. If there was a little percentage extra, I wouldn't care anyway." (Adéla)

5.1.4. Alterations in Information Search Online

There are no major alterations in the behavioral pattern of the irregular online grocery shoppers when they shop online in comparison to their shopping trips into the physical supermarket. However, one change in the behavior was identified and that is the alteration in the level of information search that happens online and offline. Interestingly, this data sample has shown that consumers that have not adopted online grocery shopping predominantly seem

to look less at the additional information for a product online even though they might still be interested in this information in a traditional supermarket.

This is quite an interesting finding as most of the literature review suggests that the availability of more information online is one of the main aspects for a lot of consumers to switch from a brick-and-mortar store to the online environment. Kumar et al (2016) believes that easy information search is one of the major motivations for consumers to switch to the online store while Luo (2002) states that informativeness might be one of the key considerations for a consumer to use the internet for grocery shopping. Despite the academic literature review, our data sample showed that the irregular online supermarket visitors do not pay more attention to the additional information about products. In fact, they seem to care less about them or they have a higher difficulty to obtain this information.

Adéla usually cares about the country of origin when buying products and always checks for it in a supermarket as she prefers to buy Czech products. However, when asked about the country of origin when she shops online, Adéla answers: *"... I tried [to look for the country of origin] on the internet as well but to be honest I don't remember that they would have it anywhere,"* which implies that she has never found the information. As she shops on Košík.cz which has this information published for any product after clicking on the additional information button, we can deduct that Adéla did not click on the product to retrieve more information.

Similarly, Gabriela perceived the additional information about products difficult to find on the internet portal. She replied to a question about the availability of information online as follows:

"I don't feel it's easier [to find information about a product online]. I even feel I didn't find the ingredients for some products or maybe I was just clicking on it wrong... overall I found it harder to find and maybe there was also less information than on the actual products.. For example, sugar content was very hard to find...". (Gabriela)

Moreover, Dana stated: *"I must admit I have never thought of it. I [check the ingredients/country of origin] in a normal store but it didn't even occur to me on the internet."*

The respondents that were not regular online grocery shoppers looked for additional information less often or with less success than as if they were in a regular supermarket. This is in direct contradiction to the reviewed academic literature on the topic of information search and e-commerce. However, this can be again explained by the consumers' unfamiliarity with the online supermarket. As they were using it only occasionally, they never had the chance to

build up familiarity with the online supermarket that would possibly make their shopping experience easier and more efficient.

5.1.5. Difficulty to Adopt Online Grocery Shopping as the Root Cause

The irregular online grocery shoppers exhibited an online shopping strategy that was not significantly different from their shopping habits in a traditional supermarket. They expressed that online grocery shopping is not faster for them than going to a normal supermarket and they did not feel the price difference between the online and offline channel. Further, their product choice behavior was not impacted by the channel choice and they expressed similar habits online and offline. On the other hand, they seemed to have a difficulty finding and retrieving additional information about products online. Hence, they became uninterested in finding certain additional product information even though they would normally look at this information in the brick-and-mortar store.

One of the explanation behind the unchanged behavioral pattern was mentioned earlier and included the possibility that the inexperience with the online supermarket does not lead these consumer to develop new shopping habits. Nevertheless, we can also deduct some of the root causes from the reviewed literature. As this group of consumers exhibits similar traits in their shopping behavior and none of them adopted online grocery shopping fully, we can deduct that the irregularity of their online shopping might play a part in the explanation why their behavior does not change so dramatically compared to the other group of shoppers who shop with a high frequency.

From the research conducted by Davis et al (1989), we understand that in order to adopt a new information technology and to intend to use it frequently, two beliefs need to be established in the consumer's mindset: perceived usefulness and perceived ease of use. Mandilas et al (2013) describes perceived usefulness in the context of grocery shopping as the additional benefit brought about by the online environment minus the usual benefits of the traditional supermarket shopping. Perceived ease of use, on the other hand, is defined by Davis et al (1989) as the level of effort one believes that using a new information technology service will require. This thesis explores the changes in behavior in the online supermarket once the online shopping has been adopted. However, the lack of these behavioral changes for the irregular online grocery shoppers might be very well explained by the fact that they have never adopted the online shopping in its fullness because they never perceived it useful and easy to use.

First of all, our irregular shoppers did not perceive online grocery shopping as useful. More specifically, they did not feel that the additional benefits from online shopping would outweigh the benefits they were gaining already from the normal supermarket shopping experience. This can be exemplified on the case of the perceived no time saving by the online grocery customers.

Dana has already been expressed above saying: *"I just don't see the advantage, definitely not a time advantage. For me it's faster to shop when I'm in the city."* If we delve further down into the analysis, we can spot some of the possible explanations why the online shopping trip lasted longer for these consumers. Dana mentioned that she *"just does not like to sit at the computer and look through the online shelves"* as it is more *"comfortable for her to make a quick drive [to the normal supermarket]"*. Additionally, some respondents made me feel the struggle with online shopping and online selection even from the tone of their voice. Adéla's voice made it clear that she does not enjoy that she has to *"open the laptop and sit down to click through all the different categories and search for all the different products ... which overall is also a lot of time spent shopping"*. Hence, it is possible to deduct that these consumers did not perceive online grocery shopping as an useful means of grocery shopping and hence never learned how to shop and adopt this service.

Furthermore, according to Mandilas et al (2013), the higher the effort required for an adoption of a new internet service, the more likely the consumer will abandon the system. This seems to be true for Dana who shopped online infrequently but for the duration of a year and half because she was on a maternity leave with a small child. However, she has abandoned online shopping when her son was old enough to accompany her to the supermarket.

The perceived ease of use is another determinant of a smooth internet service adoption. Venkatesh and Bala (2008) suggested in their research on IT adoption that the perceived ease of use will correlate with the individual's general beliefs in regard to IT and his or her computer use. The influencing factors would then include computer self-efficacy, computer anxiety, computer playfulness and perceptions of external control.

This can be directly exemplified on the case of Dana who claimed herself that she is not very *"computer and internet proficient so I do not like to spend time at [the computer] … I'm rather a preventative user... like I mean I only order when I really need it or can't find it anywhere else."* She further unconsciously backed up this statement when she complained about newly set up self-service cashiers in her hometown supermarket which she described as making the checking out process *"very lengthy"* and as *"no advantage for the customer"* because *"it takes time to get the products out, find them in the system, scan them and so on..."* Even though self-check cashiers have no relation to online grocery shopping, we can see the

connection between the individual's general belief in regard to IT and computer use and their perceived ease of use as Venkatesh and Bala (2008) described.

5.2. Frequent Online Grocery Shoppers

The second shopping strategy identified in this data sample - and probably the more significant strategy for the purpose of this research - is exhibited by those consumers who adopted online grocery shopping as their main means of buying groceries or at least shop (or shopped for a longer period of time) online for groceries on a frequent basis. Unlike the previous group that consisted of irregular shoppers that did not expressed significant behavior changes, this consumer group shares behavioral patterns that represent a substantial behavioral change in the online supermarket environment when compared to the previous habits in a physical store.

These consumers switched to online shopping either because of an external force driving them out of the traditional store, such as an injury or giving birth, or because of an internal motivation to save time or energy by shopping from the comfort of one's home. Nevertheless, no matter which factor drove these customers towards the online supermarket, they have become frequent customers and regular visitors of the online grocery platforms which resulted in **significant change** in their **consumer behavior** and their **shopping habits**.

Opposed to the first group of consumers who did not experience a significant alteration into their consumer behavior on the online grocery platform, this consumer group exhibits a shopping strategy that has been altered and impacted by the online grocery supermarket environment. The following behavioral alterations have been identified based on the coding analysis of the interviews:

1.   Frequent online grocery shoppers plan their shopping more and experience a higher efficiency in their shopping trips;
    1.1.   The higher efficiency is further fueled by the adoption of the 'My Favorites' function;
2.   Regular shoppers claim to save significant time thanks to online shopping;
    2.1.   The time saving is rooted in the higher shopping and eating monotony for the regular online grocery shoppers;
3.   Regular shoppers claim to save money by shopping for groceries online;
    3.1.   They are able to stick to their maximum price ceiling setting because they can see the final price at any given moment;

4.   Regular shoppers expanded the product assortment that are used to buy once they switched to online grocery shopping.

These findings that were comprised into topical categories will be exemplified based on the same principle as in the previous chapter by using direct respondents' answers and thoughts on the presented topics. The analysis will not only include the respondents' reactions and their subsequent interpretations but it will also further dive deeper into the interviews so that explanations, root causes and implications of these shopping strategies can be found and established.

5.2.1.   More Planning and Efficiency in Shopping Trips

One of the most common motivators for respondents in this study to adopt and/or stay with online grocery shopping was the aspect of its convenience. As Kumar and Kashyap (2018) postulated and I have previewed earlier in the theoretical part of this thesis, grocery shoppers exhibit utilitarian behavior. Hence, as utilitarian shoppers, they shop on the internet because their motivation is driven by rational decisions and efficient and deliberate actions that are related to a specific goal. Even though utilitarian shoppers display similar goal-driven behavior in the traditional brick-and-mortar store as well, the convenience of the online grocery shopping makes the shopping efficiency even more possible as the utilitarian consumers try to minimize their search costs to save time and energy according to Kumar and Kashyap (2018).

The interview analysis has revealed that respondents felt that their grocery shopping became more efficient when they switched to the online store. One of the reasons behind this changing consumer pattern includes a more deliberate planning of shopping trips and things that these consumers buy and eat. This can be summarized by Eliška's statement:

"I see the biggest change in the fact that I plan more what we are going to eat. When I used to go to a store, I didn't care too much about it and just bought something on spot but now I think more about what we are going to have for meals… Another thing that I feel changed quite a lot for me is that I never used to make shopping lists and then I went to a store and bought for example something that I already had at home and forgot I had it but that does not happen to me anymore because I just look in the fridge and see if I have it or not… I think [that] my shopping became so much more efficient." (Eliška)

Františka and Ilona share this view as Františka adds onto the previous statement that *"one really has to think it through, what one wants to order and how much one needs."*

Secondly, a significant reduction in food waste in the family of the respondents is another aspect that has become apparent from the analysis. Reducing food waste and buying less or no unnecessary products has been brought about by the change when the the consumer switched from the physical supermarket into the online environment as Jakub puts it that *"it rarely happens to me nowadays that something would go bad in my fridge. Before Rohlík, that was happening quite a lot,"* while Eliška feels that *"we throw away much less [food] because I really only buy what we are going to eat and nothing more."*

These respondents' statements reveal to us that the frequent online grocery shoppers felt that online grocery shopping made them plan their shopping more. They started to plan more what the family is going to eat during the week and hence made plans more specifically for products and ingredients that they need to buy and in which quantity they need to buy them. Moreover, some customers even started using grocery shopping lists when they switched to the online supermarket. The overall better planning of meals and shopping lists allowed these customers to reduce the quantity of food that would go bad and would have to thrown away. They only buy things that they really need and will consume when they are doing their grocery shopping trip on the internet.

As we could have observed previously, this is in direct comparison to the infrequent online shoppers. The irregular online shoppers did not perceive online grocery shopping as efficient as they had to *"click through all the different categories and search for all the different products that you need at the moment which overall is also a lot of time spent shopping,"* according to Adéla. Moreover, the first identified group did not reduce the bought items online compared to the physical supermarket or in some cases even *"bought more stuff that [weren't] even needed,"* based on Adéla's testimony.

5.2.1.1. Adoption of the "My Favorites" Function

Apart from planning online shopping more thoroughly than in the case of traditional supermarket shopping, another reason that plays a very important role in making online grocery shopping more efficient lies in the inherent function of many online supermarkets. This function allows the user to either select products that are his or her favorite products or to use the user's shopping history to select the products that were bought on previous occasions. This function will be referred to as 'My Favorites' for the purpose of this thesis and will be used interchangeably for both favorite products on the website as well as shopping history as both these function serve the same purpose and that is to make a product selection easier for the regular online customer.

'My Favorites' became one of the most frequently recurring topics in this research that a sub-category was made in order to further explore and explain why the grocery selection shopping habits of the regular shoppers became more efficient and planned than their expressed behavior in a normal brick-and-mortar store. Cecílie describes this function as follows:

"... and what is really cool [about online supermarkets] is that once you select the items you want for the first time, they will stay there for the future and you can just quickly click on them if you want them again in your next shopping trip... basically you always buy the same things." (Cecílie)

Eliška has a similar experience with the 'My Favorites' function as she states:

"What is great about Rohlík - but other platforms probably have this as well - is that you can use the function that Rohlík remembers what you are buying and saves the products you have bought last time [as] your favorite products, so I always first go into 'My Favorites' where I click on the usual maybe 15 items I buy all the time such as fruit, bread, cheeses and so on..." (Eliška)

Honza also derives a lot of benefit from the 'My Favorite' function as he finds that it is "*great that you can just have a prepared shopping list that you buy every Friday again and again and again...*". In other words, Honza took the 'My Favorite' section to another level and uses it as his major shopping list which makes grocery shopping repetitive for him and therefore very efficient as we have already seen in the previous section.

Based on the above-mentioned statements by Cecílie, Eliška and Honza and similar statements by Františka and Ilona, the 'My Favorites' function makes it easier for our respondents to shop for products that they are used to be buying almost every time they shop for groceries. This makes their shopping faster and more efficient as a result. This is also consistent with Pozzi (2008) who explored briefly the option to shop based on past shopping history in his research on brand exploration. In his opinion, this feature naturally lessens any intention to browse through virtual aisles and explore new brands as it lowers the time spent in the online store. This has been now confirmed by our research as well; however, it is interesting to delve deeper into the analysis and search for more connections that would help us to explain the root causes behind efficiency of online grocery shopping.

5.2.2.   Time Saved on Online Shopping

The regular online grocery shoppers mentioned on many occasions that time saving is one of their biggest perceived benefits of using this online service. It can be simply deducted that an online grocery shopper will save the time that would normally be spent on going to the supermarket, walking around, selecting items and putting them physically in the basket, queueing and then journeying back home. However, what was striking in our research is that the selection of items took the respondents of the second group much less time than it would have taken them in a regular supermarket.

The aspect of a major time saving is really appreciated by Eliška:

"... when I'm doing an ordinary weekly shopping, when I'm really buying more or less my favorite products from the shopping history and then maybe few other products, it can easily take me 10 minutes. But if I had to go to a normal shop, I have to go by car, I would have to take my little one with me so I would have to dress him and then when we would finally get there, we would spend at least an hour there ... so we are comparing maybe an hour and half to a ten minute shopping, max 30 minutes when shopping for something special. I really think that once you get used to the app and shopping becomes a routine, it saves you unbelievable amount of time." (Eliška)

Eliška's expression on this topic is not only comprehensive but also summarizes the answers of other respondents such as Cecílie and Ilona. Moreover, Honza also connects time saving with the fast item selection: *"[Online shopping] was definitely a big time saving because as I have mentioned I always only copied the order I have made previously so I didn't have to run around Prague, especially at the weekends."*

Even though the online shopping trip duration was already studied previously and it was proven that online item selection appears to be faster, Anesbury et al (2015) explained the time saving by pointing out that most purchases in their experiment took place on the first page of the product category. In other words, participants consistently used the default option of the page display in the retailer's online store and most of the time only viewed the products displayed on the first page. Furthermore, this explanation was consistent with a previous research conducted by Breugelmans et al (2006) which showed that products located on the first page in the retailer's online store yielded more purchases.

However, our research is bringing a new finding on fast item selection which can be explained by the use of the 'My Favorites' function that allows customers to simply *"copy the order … made previously"* as Honza puts it. This way consumers do not lose any time on selecting the items that they are buying regularly. They simply copy them or select them by one click in one section to place them in their shopping basket again.

5.2.2.1. Monotonous Shopping

Building further on the topic of efficiency and time saved when shopping for groceries online, the analysis revealed another interesting finding. Our research proved that the frequent online grocery shoppers believe that their grocery shopping became more monotonous than when they shopped in a physical supermarket.

This topic was already touched upon in the previous sections in which Cecílie mentioned that *"... basically you always buy the same things…"* or when Eliška stated: *"... I click on the usual maybe 15 items I buy all the time such as fruit, bread, cheeses and so on…"*. However, a direct ackwnoledgement and the use of word 'monotonous' has been used in the relation to both the shopping habits and the eating habits of that particular family. Eliška admitted that: *"... maybe on one side our meal plan is a little bit monotonous but once you have kids … they aren't really interested in your [culinary] inventions anyway."* Similarly, Cecílie feels she is much more 'creative' when she goes to a traditional supermarket as she recognizes:

"[we] always just click on our existing list of maybe like 30 things and we always buy the same … We are pretty tight on schedule so we always buy the same … I think that when I go to a normal supermarket, I am much more creative than when I shop online." (Cecílie)

Having the option to buy the same items based on one's shopping history or favorite products creates a shopping routine for the regular shoppers in our data sample. Using the 'My Favorites' function of the online platform is a way to save time and mental energy by not planning the core of their shopping trip because as have been previously mentioned, online grocery shopping already requires more shopping list planning than a regular shop visit. Moreover, we have seen that the routine became so strong for some respondents that their product buying habits have altered as they started to shop more monotonously. This further even led to a more monotonous meal plan and eating habits in that particular family of the respondent.

5.2.3.   Money Saved on Online Grocery Shopping

Online grocery shopping is still ingrained in the mind of lot of people as a premium service that requires a margin on the products that appear online which can be exemplified on Honza's assertion: *"in all honesty, when I was shopping online, I perceived it as a premium service that normal people still not often made use of. It was a bit like a luxury to order groceries all the way to your house."* Františka would even admit that the prices online were higher compared to a normal supermarket as she stated: *"they have a margin so that it's worth it for them to deliver [the groceries] … Prices there are higher … If one would go to Kaufland, one can buy the things cheaper…"*. Moreover, some respondents felt that the delivery fee makes the service a bit more pricey than a normal trip to a supermarket. In Cecílie's words: *"we tried Košík and Rohlík [few times] but we never finished the shopping … the delivery was way too expensive or they didn't have many delivery slots opened … so we shopped on iTesco."*

However, a major finding of this research is that even though many respondents would perceive online grocery shopping as a premium service or would even feel that the prices online are higher, the same respondents still claimed that online grocery shopping is saving them money. This is due to the reason that they do not buy unnecessary items which they would normally buy in a normal brick-and-mortar store. Hence, the online supermarket environment makes the entire grocery shopping trip cheaper for them on average.

Eliška expressed her thoughts on how much time she manages to save by using the online supermarket in the previous section; however, she expands:

"It's not only about saving time … I think I save a lot financially as well. When I shop [for groceries] online, I only buy things that I need … but when you go to the supermarket physically, then you can see the products and all the food and you buy things that you don't need … especially when I'm hungry then I would buy half of the store. That doesn't happen on the internet because you're just not that tempted." (Eliška)

Františka similarly sees the advantage that *"one doesn't buy that much because you don't see the things physically"* and Honza sees his financial savings in the fact that he doesn't buy *"all the little stupid things that one normally buys in a supermarket."* Finally, Barbora summarized this finding: *"… overall I save money because I don't buy things that I don't need."*

In other words, the respondents perceived that online shopping represents a financial saving for them because they only buy exactly when they need and are not tempted by all the

small temptations of a normal supermarket. This can again be explained by the fact the 'My Favorites' function makes the shopping experience more automated. Regular shoppers, who are familiar with the online grocery webpage and with this function, seem to benefit not only from a significant time saving but from a financial saving as well. Interestingly, this still holds true even though these respondents believe that the prices might be somehow higher on the internet because of a premium service margin or because of the delivery fees.

5.2.3.1.   Maximum Price Ceiling Setting

The regular shoppers have expressed how online supermarkets decreased their grocery expenditure as they stopped buying unnecessary items. However, another finding was elicited from this study that helps explain why these consumers might be saving money while shopping for groceries online. An online grocery provider operates on the same principle as any other e-commerce retail store where you select an item by clicking on the 'basket' button which automatically saves this good into your shopping basket. More importantly, however, this virtual shopping basket is generally visible in the upper right corner of the screen and is present regardless of where you browse on the particular website. It also updates automatically when you place more and more goods into this virtual shopping basket. Hence, a consumer always sees the final amount of the basket at any given moment.

In our study, our regular shoppers admitted that the possibility of seeing the final basket price helps them from going over their personal *"price ceiling"* as Jakub puts it. Barbora has expressed that the online supermarket and its ever-visible basket price saves her a lot of surprise at the cashier:

"When I shop physically, I don't add up all the costs and then I'm surprised at the cashier … but online I can see [the final price] there because it's adding up automatically so I know straight away if I can add more stuff or not. That's not possible offline." (Barbora)

When Jakub was asked if the fact that he always sees the final basket price makes him not to cross it, he answered: *"exactly or by a very small amount … I usually set the price ceiling and don't go over it."* Jakub then went on further explaining:

"It's not really only about the money [but] I'm used to buying similar or even the same things every week and then I know exactly that's what I need and that's what I'm going to eat … when I'm above the price ceiling, I know I'm buying useless stuff."

Setting a personal price ceiling together with the fact that final basket price is visible on the screen at any given moment during the shopping trip helped the respondents to keep their expenses on groceries under their control. In a traditional supermarket, this option is not available unless a person keeps adding up all the expenses manually while picking up each item is not very plausible. Hence, the respondents complained that when they finally find out the final price to pay at the cashier, the price can surprise them by being much higher than expected.

Barbora mentioned that she sometimes asks herself *"I'm paying like 500 CZK but for what?"* when she sees a small fill-up trip that she expected to cost only about 300 CZK. Therefore, seeing the final basket price also helps to lower the final expenditure spent in the online supermarket compared to the traditional store shopping. Moreover, it represents an additional explanation why the overall shopping trip might be or seem to be cheaper for the frequent online grocery shoppers on top of the previously discussed finding that regular online grocery shoppers do not waste money on things they do not need.

5.2.4.   Expanded Product Assortment

This research has established that regular online supermarket customers exhibit a very efficient way of shopping for groceries online when they use the 'My Favorites' function which makes their shopping habits automated and their shopping list quite monotonous. On the other hand, the respondents admitted that their product assortment expanded once they started to shop online. In other words, although they do not tend to experiment with new products and brands after they have switched to the online supermarket and grocery shopping becomes a routine, the different assortment of the online grocery providers introduced new ingredients and products into their diets. Moreover, for some respondents online grocery assortment was one of the drivers that led them online and hence the different product offering affected them even more substantially.

Ilona started shopping online for groceries more than two years ago because of a knee injury; however, another reason - although less significant at that time - included the offering of healthy products that can be found on Rohlik.cz. Even though her knee healed, she never went back to the traditional supermarket shopping and buys 90% of her groceries online. There were many factors that propelled her to stay with the online grocery provider including time saving and convenience; however, the different product assortment was the main factor that has prevented her the most from going back to the traditional way of grocery shopping. Ilona describes her view on the product offering as follows:

"I got used to buying meat from the farmer's selection on Rohlík which is so hard for me to get anywhere else … like there is the bio option in supermarkets but that's the next level above 'from the farmer's' which makes that meat outrageously expensive … I also like their selection of alternative flours like buckwheat, almond or millet. You almost can't get these anywhere else … Our family almost stopped eating gluten since Rohlík … there are so many healthier alternatives on Rohlík that I wasn't buying before … I wouldn't even know where [to buy them]…". (Ilona)

However, once Ilona adopted to Rohlík, she has also started using the 'My Favorites' function and the core of her shopping list became more or less the same as she explains: *"most of the essentials don't change much so I just tick [these items] almost on every shopping trip."* At the same time, she admits: *"... the other day I have noticed that [Rohlík] has sweet peas pods in the offering which wasn't there before … I guess I should check the product offering once a while to see what's new there."*

Therefore, we can see her entire online journey from the exploration and adoption of new products and thus new eating habits for herself and her family to the settlement into the routine when she automized most of the grocery shopping and started treating it as a routine. Similarly, Honza also added *"vegan or regional products that [he] wouldn't find anywhere else or would have trouble finding somewhere else"* but once he got accustomed to the online grocery provider's website, he began *"copying orders that [he] made in the past so [he] wouldn't have to click on them again."* Similarly, Barbora and Františka also introduced new products into their shopping lists that they have been buying online ever since.

This finding suggests that shoppers tend to adopt new products and thus expand their usual product assortment choice together with their shopping and eating habits. On the other hand, once they become familiar with the online supermarket environment and start using all of its functions to their fullest potential including the 'My Favorites' function, their grocery shopping behavior seems to switch into the autopilot mode. They reach efficiency in their online grocery trips by selecting mainly the products that they have ordered previously. Hence, we can assume that the online grocery supermarket environment leads to an initial expansion of the typical shopping basket but when this adoption becomes fixed and shopping becomes a routine, consumers tend to stick to a similar assortment of the basket which they buy over and over again.

5.3. Behavior Common to Both Consumer Groups

The two identified and above described consumer groups lead to two different consumer shopping strategies in the online supermarket. The main prerequisite for adopting one or the other strategy lies in the frequency of the online grocery shopping. The differences were described and analysed in the previous sections to demonstrate how one shopping strategy changes while the other remains more or less constant compared to the shopping strategies in a traditional supermarket. On the other hand, some behavioral patterns were identified that cannot be assigned directly to just one group as members of both consumer groups expressed similar behavior. Hence, I will describe the commonalities that both groups share and will try to identify the root causes that might be behind these behaviors.

Two areas of behaviors were recognized that did not bear evidence that one consumer group would alter its behavior differently that the other consumer group. These are as follows:

1. Both regular and irregular shoppers shop in the special offer category;
2. Searching for product directly or browsing virtual aisles to find a product is not connected to the frequency of online grocery shopping.

There were discrepancies on the way the respondents of this study approached special offers in the online supermarkets; however, these discrepancies cannot be easily explained based on the regularity and frequency of the consumer's grocery shopping. More interestingly, it seems that the choice of the online grocery provider might be the root cause of consumers approaching sales differently.

Secondly, respondents also exhibited different behavior regarding their search for a product. A slight difference between regular and irregular shoppers was registered; however, the evidence was not strong enough to conclude that the regularity or frequency of online grocery shopping is the root cause of this behavior as both could use either the direct search as well as the virtual departments. However, it has been observed that those consumers who make complete and comprehensive shopping lists tend to look up each item directly rather than to browse different categories.

5.3.1. Special Offer Category

Similar to a traditional supermarket, online grocery providers also attempt to attract customers to their website and retain them. One of the main strategies of customer attraction

includes promotions and special offers with which we are all very familiar from the environment of any supermarket. Online supermarket is not an exception; moreover, its vast possibility to present the assortment to the consumer in many different ways allows the online grocery providers to target customers efficiently. All major online grocery providers that have been used by the respondents in this study (iTesco, Rohlík and Košík) use special promotions on their websites.

Moreover, they all provide a separate category named the 'Special Offers' that only contains discounted products. Hence, the consumer has the possibility to view and shop for all the existing discounts in one place which would not be possible in a traditional supermarket where discounted items are usually spread around the entire store. It is therefore safe to assume that the online customer has a greater and a more comfortable access to any current discount in the online grocery store. This is true for the consumers of this study who also paid a special attention to the special offer category.

The respondents in our study tended to take a look at the special offers at least at one point during their online grocery shopping trip. Cecílie expressed her excitement about the special offer category:

"What is really cool is that you can search just by special offers. You simply select promotions only… Moreover, it's great that if you click on one category - meat for example - then you get different subcategories of meat and one of them is special offers on that particular category." (Cecílie)

Moreover, Eliška first selects her typical items by using the 'My Favorites' function but afterwards also checks the promotions: *"... and then I have a look in this one section … it's basically a direct category where you can find only discounts and special offers … but I don't buy things there just for the sake of sales."*

Even though Dana does not buy groceries online regularly, promotions were the one major driver that led her online: *"... [I shop online] mostly because of promotions on baby stuff like baby formulas and nappies … Not that I'm the type of a person that goes drastically just for discounts but baby nappies … that's something you only buy when it's on sale."*

Gabriela is another infrequent grocery shopper in the online store environment; however, she felt it was *"very convenient that there is one entire category just with discounts … that's really a big difference compared to a regular supermarket."*

Some respondents tend to start their online grocery shopping by checking the special offer section first. Barbora describes her approach to the online grocery website: *"I first have a look in the promotion section because they sometimes have real bargains there that catch my eye and if I feel I would use it and the price is much better than in a normal supermarket, then I would buy it."*

Other respondents, on the other hand, first made their regular shopping similar to Eliška's description above on first choosing items from the 'My Favorites' section and then having a look in the promotions. Jakub similarly also has *"a quick look into the part with all the offers after [he's] done with his normal shopping"*.

As both consumer groups visit the special offer category at some point during their shopping trip, there is no consistent trend that would show that the frequency of online grocery shopping has a large impact on the way a consumer approaches sales and special offers. Moreover, even though this function makes it much more convenient for consumers to see sales in the same place, there is again not enough evidence that the behavior of either consumer group differs or alternates from their normal behavior in a supermarket. Adéla summarizes:

"If it's a product that I like and it's on sale and I don't need it at that point but I know I would use it in the future or later on, then I would add it [to the basket] both online or in the store." (Adéla)

On the other hand, a recurring trend was revealed based on which online grocery platform is used for shopping. The respondents shopping on iTesco seemed to care more about discounts as we have seen from Dana's statement who shops on iTesco for baby food and baby nappies. Cecílie also praises iTesco for its prices:

"I shop on iTesco because it's really great. It's much cheaper that the other [online grocery providers] because they have hypermarket-style of prices and promotions and the sortiment is also really comprehensive." (Cecílie)

She further continues that *"Rohlík and Košík don't have the kind of offers [like iTesco] if you look at the comparison ... if you go by metro, you see that they have discount commercials there which are the same for the whole month..."*

Honza has expressed a similar view on this topic even though he shops on Košík.cz: *"I try to look at special offers but I feel that they never really have anything too interesting there."* Furthermore, Ilona shops on Rohlík.cz and even though she looks at the special offer category

when she is done with her shopping, she feels that *"they don't have that many promotions there after all."*

This finding therefore suggests that it might not be significant whether the respondent is a regular visitor of the online supermarket or an occasional shopper but rather which online grocery platform he or she uses to buy groceries. iTesco is backed by the Tesco supermarket chain which allows for hypermarket prices and promotions while Rohlík and Košík operate exclusively as online grocery providers which may lead to a smaller offer of discounted goods.

The respondents of this study all looked at the special promotion category because it is conveniently set as a category on its own; however, the iTesco customers tended to utilize the online store promotions more than the customers of the online grocery providers Rohlík or Košík. Therefore, we can assume that the shopping behavior changes more profoundly for those respondents who use iTesco as their online grocery provider.

5.3.2. Product Search

Unlike a regular supermarket in which a consumer navigates the store by following the different aisles which are usually categorized to put similar products together, an online supermarket can be navigated in many different ways. A consumer can choose to imitate the traditional store behavior and search for items by the 'virtual departments' that would resemble normal store aisles such as meat, dairy, vegetables etc. according to Levene (2011). Secondly, a consumer may use the search function on the top of the screen and directly search for the product he or she needs. Lastly, consumer can view the special offer page as we have discussed previously or use the 'My Favorites' section to select the regularly bought items quickly and conveniently. Levene's (2011) research hypothesized that consumers will tend to use virtual departments more often as they tend to associate the online grocery website with the traditional supermarket.

As two behavioral patterns were identified in our data sample based on the frequency of online grocery shopping which further carries the implication that the regular shoppers are more familiar and accustomed to the online grocery website, it would make sense to assume that our irregular shoppers might tend to use the virtual departments as Levene (2011) hypothesized. The explanations would be that the irregular shoppers tend to associate the webpage with a supermarket while our regular shoppers might use the direct search function as they are adapted to the online grocery website environment. However, there is no evidence in our data sample that one consumer group prefers one solution to the other.

Using the virtual departments or simply product categories was used by both frequent and irregular online grocery shoppers. On the other hand, some members of both consumer groups preferred searching for the product directly. Honza who is a frequent online grocery website visitor and buys groceries online sometimes even twice a week said: *"I search usually by categories because I didn't feel the direct lookup was that good … it was never really the exact thing that popped up that I was looking for."* That is consistent with Adéla's behavior who is, however, an irregular visitor of the online supermarket but also searches for products *"by following categories"*.

Direct search is then again used by the representatives of both consumer groups. A regular customer Františka describes:

"I don't have time to go through all the products they are offering in the section 'dairy' for example. Košík is great - but others probably have the same - that you can write 'cottage cheese' in a search bar on the top of the page and you get to see all the cottage cheeses at once so you just select what you want." (Františka)

While Gabriela shops for groceries online only occasionally and could then be assumed to follow product categories that she is familiar with from the traditional brick-and-mortar stores, she also uses a direct lookup to search for products from her shopping list as she says that her habit is to *"directly look up each product one by one."*

However, it is worth mentioning that respondents who use the direct search function to find the products expressed some kind of time pressure such as Františka above who says that she doesn't *"have time to go through all the products … in the section 'dairy'"* or Ilona who feels that direct search is *"definitely faster than categories"*.

Moreover, respondents who directly expressed that they use very comprehensive shopping lists seemed to search the items on the shopping list directly through the lookup function. This does not include the 'My Favorites' category that some respondents selected and then went on to choosing the rest of products by categories which would be the example of Honza from above or Cecílie.

On the other hand, it has been already mentioned that Eliška chooses her 15 or so items through 'My Favorites', then she checks the special promotions and afterwards she admits that: *"if I still need something additional, I quickly look it up … in all honesty, I'm shopping so efficiently already that I'm not even using categories but search for that particular product independently."*

At the same time, Eliška started making grocery shopping lists since she picked up online grocery shopping: "*... another thing that I feel changed quite a lot for me is that I never used to make shopping lists [before]*". Eliška's online shopping behavior exemplifies the behavior of others who search for items directly while having a shopping list prepared. To compare to the respondents that follow categories to search, they either do not use a shopping list or their list is not that comprehensive as Adéla describes: "*it's a mix for me. I have some things that I know I need [on the list] but I always look for and buy other stuff as well*".

This finding argues that the way a consumer searches for a product does not depend on the frequency of their online shopping trips and hence their familiarity with the online grocery website. Our sample shows evidence that both frequent and irregular customers may utilize the virtual departments to search and select items while both consumer groups have respondents that search for items directly using the search function. However, respondents with comprehensive shopping lists were more likely to search for items directly while those respondents that did not use a shopping list or their list was not complete tended to follow the product categories in their item selection. Further research on this topic might be an interesting field of study.

5.4. Discussion

This chapter will present the main research findings that have been revealed from the analysis and their interpretation together with the discussion on the possible root causes and implications of these findings.

The analysis has identified two major shopping strategies on the online grocery platform and hence split the respondents of this study into two groups of online shoppers. One group comprises of the shoppers that do not shop online for groceries regularly and are therefore not accustomed to the the environment of the online supermarket. It has been observed that this group does not significantly alter their behavior online when compared with traditional grocery shopping. On the other hand, the second group consists of regular online grocery shoppers who exhibited great familiarity with the online supermarket environment which led to the adoption to a completely different shopping strategies than they would have in the traditional brick-and-mortar store.

One of the behavioral patterns in our data sample was identified to be associated with consumers that have never adopted online grocery shopping in its fullest and only shopped occasionally or when necessary. These consumers seemed not to change their shopping habits in the online environment substantially. In fact, they have retained many shopping behaviors and

habits that they also demonstrate while shopping for groceries in the traditional brick-and-mortar store.

First and foremost, these consumers do not perceive any significant changes in the duration of the shopping trip between the online and offline environment. Although many online supermarkets try to attract consumer on the time saved value proposition, it seems that is does not hold true with all online shoppers.

Secondly, these irregular online supermarket visitors followed the same shopping and product choice habits online as offline. No matter if they only shopped for the brands they were familiar with or had an experience with or if they did not mind buying a new product time to time to experiment, their product choosing behavior remained the same in the online supermarket environment as it was in the traditional brick-and-mortar store.

Thirdly, these customers felt they were spending the same amount of money online as if they were shopping offline. No money saving or substantially more money spent was mentioned even though these customers seemed not to care if there was a small margin on the online products which could be explained by their occasional shopping trip usually out of necessity.

Lastly, the only change in the shopping behavior of the irregular shoppers was their lack of information search online. This is quite an interesting fact as all previous literature suggests that the ease of information search online and especially the availability of more information that in the offline form is one of the main drivers for consumers to adopt an online service, including online grocery shopping.

However, there is a reason to believe that the lack of any alternations in the shopping behavior is due to the improper adoption of the service. As two main factors determine the adoption of an internet service, they both need to be present in the mindset of the adopters. These include the perceived usefulness of the service and the perceived ease of use. As has been demonstrated based on the interview analysis, it seems that the respondents who buy groceries online irregularly have not identified with one or both of these factors and were therefore not able to adopt the online grocery shopping service to its fullest. This could therefore not propel them towards the creation and adoption of new shopping habits and consumer behaviors that would be specific to the online shopping channel.

The second consumer group that has been identified in our data sample represents online grocery shoppers who are regular and frequent visitors of the online supermarket. Unlike the first group of irregular online supermarket customers which did not signal major changes into their consumer shopping behavior and habits, this group displays significant alterations into

their shopping behavior in the online supermarket environment when compared to those they exhibited in the traditional brick-and-mortar stores.

First and foremost, the frequent online grocery customers buy groceries in a more efficient manner than they did previously in a normal supermarket. The analysis has revealed that these customers plan their online shopping trips more thoroughly than they would have planned if they were going to a physical store. In other words, they plan exactly what they are going to eat and how much of each ingredient they need. In some consumer cases, this change in the behavioral pattern led to the adoption and use of grocery shopping lists. Furthermore, better planning reduced the overall quantity of products that the consumers were buying per shopping trip which subsequently led to the reduction of food waste.

Another reason for making the online shopping trip more efficient is the availability of the 'My Favorites' function that allows consumers to select the same items as in their past orders or that they have saved previously. Once consumers became familiar with the online grocery supermarket environment and started using its functions to the fullest, their buying habits became automated because the 'My Favorites' function allowed them to select the core of their usual shopping basket in a matter of seconds just by clicking at each item. Hence, the respondents tend to make repeated purchases comprising of more or less the same products which makes the shopping faster and more efficient as a result.

The time saving that the 'My Favorites' function creates for the customers is significant compared to the time that a consumer would have to spend to select the same products in a traditional supermarket. Moreover, this function makes shopping monotonous for some customers as they always buy more or less the same shopping basket which leads to a potential greater monotony in their eating habits as well.

Furthermore, the monotonous shopping habits and the efficiency and planning with which the regular online supermarket visitors shop prevent them from buying unnecessary products. Hence, the overall shopping basket price decreases when compared to shopping for groceries in a traditional supermarket. This is due to the fact that consumers are not tempted by the usual temptations of a brick-and-mortar store because they do not see them physically. Moreover, the overall decrease in expenditure spent on groceries is also impacted by the fact that the final basket price is visible on the screen at any given moment of the shopping trip and therefore the consumer can limit himself or herself to a personal price ceiling that they do not want to overstep.

Even though the regular online grocery customers exhibit an efficient behavior that borders with a shopping monotony, they have claimed that they shopping assortment expanded

once they started shopping online for groceries. Mostly, healthy product choices were added on their shopping lists and hence made it into their diet and the meal plan of the entire family. However, once these consumers became adapted to the online supermarket environment and started shopping with a more routine behavior by choosing the same products that they were familiar with over and over, their product exploration decreased and their shopping basket assortment became more or less fixed. Nevertheless, the online supermarket environment initially introduced these consumers to a new product choice which impacted their shopping and eating habits as a result.

To understand the difference between these two consumer shopping strategies and therefore two different behavioral patterns, we could search for the trigger that drove both of these customer groups on the internet. All respondents expressed convenience of shopping from the comfort of their home as one of the prime drivers; however, in addition to convenience, the irregular online grocery shoppers seemed to be motivated by factors such as short-term sickness, bargains on certain items or simply curiosity. On the other hand, the regular shopper stated that in addition to convenience, they were shopping on the internet because they *"had no time or energy to go to a supermarket"* as Jakub puts it. These consumers were driven by the motivation of saving time and energy by not doing the grocery shopping physically. Therefore, there is a reason to believe that the time pressure of their everyday lives led to the creation of very efficient grocery shopping habits online that allowed these consumers to save time and both physical and mental energy in the end.

The frequency of online grocery shopping seemed to dictate whether the online supermarket environment had an impact on the consumer's shopping habits and behaviors. However, two behavioral alterations were identified that could not be directly associated with or explained by the frequency of the online grocery shopping trips. Hence, the level of familiarity of the online grocery provider website did not seem to play an important role in these behavioral changes.

It was observed that all consumers visit the special offer category at least once during their online shopping trip as the option to see all the promotions at once is viewed as very convenient compared to a regular supermarket. However, the analysis revealed that the reason why some shoppers pay more attention to discounted items versus those who only quickly check this section could be possibly explained by the difference between the online grocery providers. The respondents in this study used iTesco, Rohlík and Košík as their primary online supermarkets. The analysis suggests that iTesco customers tend to seek special offers more than the customers of Rohlík or Košík. The explanation that has been mentioned during the interviews points at the fact that iTesco offers hypermarket prices as well as promotions while Rohlík and Košík do not offer as many special offer compared to the hypermarket chain. Hence,

iTesco customers seemed to be more impacted by the special offer category than the other respondents.

Additionally, an item search on the grocery website is another shopping area not affected by the frequency of consumer's online grocery shopping. Both regular online grocery customers as well as the irregular ones either followed the virtual departments product categories or they directly searched for an item using the search function when the item was not in the 'My Favorites' section or the special offers category. On the other hand, consumers that searched for items directly expressed some kind of a time pressure; moreover, these customers tended to prepare complete shopping lists before their started the online grocery trip. It can be therefore assumed that the use of shopping lists and/or time pressure leads these consumers towards direct item search as they perceive it as quicker than browsing categories

5.5. Research Reflection and Its Limitations

Research limitations are common to an almost any research so it is always important to acknowledge these limitations and take them into account when presenting the final findings of the study. The research limitations are usually rooted in the limitations of human cognitive processes and the limitations of methodological techniques. The chosen qualitative research methodology is not an exception. Its biggest research limitation lies in the low probability that the research data sample can be generalized and applied to the entire population. In other words, the research method has a low external validity. This is in agreement with Disman (2002) who wrote that the findings of the qualitative study can be only applied on the chosen data sample and cannot be generalized. Further, the reliability of the qualitative study has its limitations due to the difficulty to standardize the data extraction and the data analysis according to Disman (2002).

The respondents can also impact the study results by conscious or unconscious data falsification that makes them look better. Disman (2002) calls this behavior a way of presenting oneself in a better light so he or she is more socially acceptable. Even though the topic of online grocery shopping might not involve many sensitive topics that respondents would not feel comfortable sharing, I have noticed that in many cases they did not directly want to admit that they search for discounts or shop on sale. One respondent mentioned that she is not "*a person that would go after discounts but time to time [she has] a sneak peak into the sale section*" in almost an apologetic tone of voice as if I would judge her for her shopping behavior.

The researcher can also bring limitations into the study on her own by projecting personal preferences into the interview and the data analysis and data interpretation which is a

threat of any research according to Disman (2002). This can be mitigated by a conscious effort not to project any personal biases into the study in Disman's (2002) view. Lastly, Reichel (2009) expands on the limitations from the researcher's side by noting that the time requirement of the data collection and the data analysis become a limitation in many studies and especially those that have a deadline attached to it. This usually prevents the researcher from obtaining a larger data sample.

6. Conclusion

The online grocery industry is a field that impacts more and more consumers in the Czech Republic and worldwide. As it is set for an even faster growth, the prediction would be that we will be hearing about online grocery shopping more often in the coming future. Moreover, many of us will be directly affected by this new e-commerce service in our everyday lives. As it is still a quite new service that has been in the Czech Republic only since the beginning of the decade, the existing research on this topic still lacks in many areas. On the other hand, this field has been gaining popularity in the recent years and hence researchers now attempt to fill these gaps of understanding quite quickly.

The thesis is divided into the theoretical part, methodological part and empirical part. Existing literature has been reviewed in the first part to identify research gaps that would be of interest to explore in this study. In particular, consumer's online journey has been outlined based on existing research from the factors that fuel the adoption of online grocery shopping and IT services in general to the already observed and researched impacts on consumer behavior in the online supermarket.

The methodological section outlined the selected qualitative methodology and the reasoning behind the selection. Moreover, it presented the data sample more in detail as well as the technique used to analyse the data collected. A short outline of research ethics was mentioned as well in this section.

The main purpose of the practical part and this thesis in general was to add onto the existing studies by exploring how the online grocery supermarket environment alters the shopping behaviors and buying habits of online grocery shoppers. The analysis has revealed that two different shopping patterns are observable when a person switches from the traditional supermarket to the online environment.

The first shopping strategy does not exhibit major alterations into the shopping habits of online grocery consumers and is commonly associated with shoppers who buy groceries online infrequently. The shopping habits of these consumers do not change significantly online and seem to follow the same behavioral pattern as in a normal supermarket. The possible root cause of this behavior has been identified as the lack of familiarity with the online supermarket website due to the incomplete adaptation to the online grocery buying process.

The second shopping strategy, on the other hand, involves behaviors that are significantly different to the traditional buying habits in a brick-and-mortar store. This shopping strategy tends to be adopted by online supermarket customers that buy groceries frequently online and seem to be using the grocery provider's webpage to its full potential. First, these consumers emit greater efficiency and planning that goes into their grocery shopping. Secondly, they perceive this service as a tool to save time and use the 'My Favorites' function to select their typical groceries at one click. On the other hand, the achieved efficiency and time saving makes their shopping list and potentially even their eating habits more monotonous than before. In comparison, however, the usual product assortment seems to expand once these shoppers switch to the online channel even though this expanded assortment then usually stays the same once the shoppers achieve shopping efficiency. Nevertheless, the usual regular shopper claims that online grocery shopping saves him or her money because they only buy what they need and nothing more.

Additionally, two behaviors were identified that were exhibit by both the regular and irregular shoppers. Both consumer groups tend to shop in the special offer section; however, the customers of iTesco seemed to enjoy the discounts more than the customers of Rohlík and Košík. The possible explanation behind this behavior is the fact that iTesco offers hypermarket prices and promotions while Rohlík and Košík are not backed up by an offline supermarket. Moreover, both consumer groups shopped either by direct search or category browsing regardless of their shopping frequency. One of the possible identification of the root causes suggests that those customers that use complete shopping lists use the direct search function more than customers without a shopping list.

This thesis and its research findings can serve as a valuable source of information about the impact that the online supermarket has on the shopping habits of its customers. The findings therefore shed more light on the habits of online grocery shoppers and can help online grocery providers to improve their services, target customers better and retain those shoppers who do not shop regularly yet.

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List of Figures

Attachments

Attachment 1 - Operationalized Research Questions

Summary of Operationalized Research Questions	
Field	Questions
Sample Description	● How long are you?
	● What is your educational background?/What is your highest level of achieved education?
	● What do you do for living?
	● Where are you from?/Where do you live?/Where do you do most of your shopping online?
	● For how many people do you shop?
	● Long long have you been shopping for groceries online?
	● How often do you shop?
	● What online grocery portal do you use?
Shopping Habits Description & Product Choice	● What led you to start buying groceries online?
	● How do you shop for groceries online? (direct search, categories browsing, shopping history)
	● Describe your usual shopping 'trip' in the online environment.
	● What products do you buy online?
	● Does your product choice differ between the online supermarket and a normal one?
Shopping Duration	● How long does it take you to finish an online shopping?
	● Do you see online grocery shopping as a means of saving time?
	● How does the time compare to your usual trip to a

	brick-and-mortar supermarket?
Shopping Expenditure	● Would you say that online groceries are more expensive?
	● Do you see online grocery shopping as a means of saving money?
	● Do you look for discounts more than in an offline supermarket?
Product Information	● Based on what information do you choose products online?
	● Has your online choice been influenced by additional information online?
	● Do you search for other information online versus offline?

Attachment 2 - Categories Derived from the Coding Analysis

Shopping with no or low frequency	Frequent shoppers
5. No time saved	5. More planning and efficiency
6. Same expenditure on online shopping	● 'Favorites' Category
7. No alteration in product choice	6. Time saved
8. Alteration in information search	● Monotonous shopping
	7. Money saved
	● Maximum amount spent
	8. Expanded product assortment
Special Offer Category	
Product Search	