

SCHOOL OF ECONOMICS AND MANAGEMENT

Understanding Generation Z Consumers Expectations of In-Store Digital Devices in Retailing

A Segmentation Framework

by

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Supervisor: Ulf Elg Examiner: Ulf Johansson "Personalization is pointless without knowing the individual. Understand the dreams, hopes, and fears that motivate your customers then hit them where it counts." (Gillin, P., 2020)

Abstract

Title Understanding Generation Z Consumers' Expectations of In-store Digital Devices in Retailing: A Segmentation Framework Seminar date June 4th, 2020 Course BUSN39 - Degree Project in Global Marketing Researchers Mariia Hondar, Helena Søsted Westmark Supervisor Ulf Elg Keywords: in-store digital technology, generation Z, consumer expectations, consumer values, retailing

Thesis purpose: The purpose of this thesis is to explore Generation Z consumers' expectations of in-store digital technologies and to enhance the understanding of different segments' consumer values derived from in-store technologies.

Methodology: A qualitative research strategy with an abductive approach was chosen, as our thesis aims to build an improved understanding of the phenomenon, thus is of exploratory nature. A qualitative method enabled us to take the point of departure from the customers' perspective and obtain many different views in our findings.

Theoretical perspective: This research is based on the following theories: Theory of Customer Journey and Touchpoints (Lemon & Verhoef, 2016); Consumer Values derived from In-store Technology based on TAM (Davis, 1989; Dabholkar & Bagozzi, 2002; Weijters et al, 2007); Consumer resistance to innovations (Ram & Sheth, 1989); Generation Y values and lifestyle segments (Valentine & Powers, 2013); Customer Journey segments (Herhausen, Kleinlercher, Verhoef, Emrich & Rudolph, 2019).

Empirical data: A case study of the global retailer IKEA was conducted to observe how Generation Z consumers interact with in-store digital technologies in a real-life retail setting. A combination of observations, field interviews, and in-depth interviews was conducted in order to gain an in-depth understanding of the individuals' experience and motivations in terms of using in-store digital technologies.

Findings: The analysis of the empirical material allowed to identify a new segment of Generation Z consumers, *Conventionals*, and reveal new consumer values derived from instore technology which are unique for Generation Z consumers - *privacy*, *supportiveness*, *visibility*, and *alignment*. This culminated in a new conceptualised segmentation framework, which made it possible to distinguish Generation Z consumers based on their self-confidence, shopping mode, values and expectations of in-store technologies The research further revealed that not all Generation Z consumers are open towards engaging with in-store technologies or expect them to be available.

Practical implications: This research provides a practical segmentation framework that enables to assess the expectations and values derived from in-store digital technologies of different Generation Z segments. The findings further suggest managerial perspectives on how to handle the concerns of Generation Z consumers and ensure a seamless experience complemented with innovative digital touchpoints.

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Table of Contents

1. Introduction	7
1.1. Background	7
1.2 Problematization	
1.3 Purpose	
1.4 Intended Contributions	
1.5 Outline of the thesis	
2. Literature Review	
2.1 The Retail Revolution	
2.1.1 Omnichannel approaches	
2.2 The Role of Digital Technologies in Retail	
2.2.1 Theory of Consumer Value	
2.2.2 The Value of In-store Technologies	
2.2.3 Barriers to the Adoption of Technology	
2.3 The Importance of the Customer Journey and Experience	
2.3.1 Outlining the Customer Journey	
2.3.2 The Creation of a Successful Customer Experience	
2.4 The Complex Consumer Behavior	
2.4.1 Understanding Generation Z - "The Digital Native"	
2.5 Initial Conceptual Framework	
3. Methodology	
3.1 Research Philosophy	
3.2 Justification for the selected case	
3.3 Research Design	
3.4 Data Collection Method	
3.4.1 Observation	
3.4.2 Field interviews	
3.4.3 In-depth interviews	
3.5 How respondents were chosen	
3.6 Analysis of empirical data	
3.7 Quality of study	

3.8 Ethical and Political Implication	
4. Analysis and Findings	
4.1 Findings from empirical data	
4.1.1 IKEA in-store digital devices	
4.1.2 Usage of digital technologies at IKEA	
4.1.3 Expectations of digital technologies	
5. Defining segments of Generation Z	64
5.1 Segments of Generation Z	
5.1.1 Actualizers	
5.1.2 Fulfilleds	
5.1.3 Strivers	
5.1.4 Experiencers	
5.1.5 Conventionals	
5.2 Framing Generation Z segments	
5.2.1 Innovation Acceptance vs Self Confidence	
5.2.2 Shopping mode	
5.2.3 Psychological & Functional barriers	
5.3 Proposed Conceptual Segmentation Framework	74
6. Discussion	
6.1 Expectations of Generation Z	
6.1.1. Perceived ease of use	
6.1.2 Perceived usefulness	
6.1.3 Fun and Enjoyment	
6.1.4 Newness	
6.1.5 Reliability	
6.1.6 Privacy	
6.1.7 Supportiveness	
6.1.8 Visibility	
6.1.9 Alignment	
6.2 Implications of Conceptual Segmentation Framework	
6.2.1 Implications of variables	
6.2.2 Interconnectedness of consumer values	
6.2.3 Application of values outside Generation Z	
6.3 Recommendations for Retailers	
6.3.1 Clear Purpose for In-Store Technologies	
6.3.2 Creating an aligned experience	

7. Conclusion	
7.1 Contributions	
7.1.1 Theoretical Contributions	
7.1.2 Managerial Implications	
7.2 Limitations and Future Research	
References	
Appendix A:	
Appendix B:	109
Appendix C:	111
Appendix D:	

List of Tables

Table 1. Types of retailers based on the attitude towards innovation adoption	19
Table 2. Types of shoppers based on their preferred shopping mode and journey	26
Table 3. VALS Typology of consumers	28
Table 4. Conceptual Framework	31
Table 5. Summary of Data Collection Methods	42
Table 6. Overview of respondents of in-depth interviews	43
Table 7. Segmentation framework of Generation Z consumers	76

List of Figures

Figure 1. Outline of the research	11
Figure 2. Consumer Values derived from In-store Technology based on TAM	21
Figure 3. Reasons for choosing IKEA as real-case study	33
Figure 4. Attitude towards innovation vs Level of Self-Confidence	77
Figure 5. Attitude towards innovation vs the purpose of in-store devices	72
Figure 6. Identified Generation Z's values and expectations of in-store technology	86

1. Introduction

This section will introduce the reader to the background of the chosen topic, followed by a problematization depicting current issues of retailing and the main purpose of the thesis. This will then lead to the research question that seeks to be investigated, the aimed contributions, and lastly, an outline of the thesis will be presented.

1.1. Background

"The biggest future challenge for marketing and consequently for retailing seems to be Generation Z" (Priporas, Stylos & Fotiadis, 2017)

The retail industry is witnessing a radical transformation due to the rise of the Internet, changing consumer behavior and digital technologies. Grewal, Roggeveen, and Nordfält (2017) argue that especially the presence of technology has reshaped our daily habits to a great extent. Consequently, our consumption patterns have been adapted accordingly to the immense exposure of new technologies (Grewal, Roggeveen & Nordfält, 2017). The shopping experience has further changed immensely over the last decade, which is reflected in retailing becoming more dynamic, with more consumers shopping online and the society exchanging information through smartphones and other digital devices (Priporas, Stylos & Fotiadis, 2017). Thus, the role of the physical retail store is increasingly challenged, which has to lead to the phenomenon *"retail apocalypse"* (Bain, 2017; Grewal, Stephanie, Roggeveen & Nordfält, 2020). In general, retailing is facing disruptive times, and therefore more innovative thinking is needed to create value for one's customers and offer unique experiences that attract the customer to the physical store (Rigby, 2011).

Particularly, the rising level of competitiveness is challenging retailers, and their ability to identify what consumers truly need and expect is becoming increasingly more complex (Rigby, 2011). Digitalization has empowered customers to be more informed, and hence shifted the power from retailers to the experienced customers (Priporas, Stylos & Fotiadis, 2017) Thus, the retail industry has to re-think and re-define its focus. Retailers are trying to adapt to the changing environment by employing various innovative technologies as self-cash desks, interactive displays, applications for mobile and virtual stores, to improve the shopping experience (Priporas, Stylos & Fotiadis, 2017). However, the rise of technology and changing consumer behavior has led to many traditional brick-and-mortar stores closing, due to the lack of adaptation (Bain, 2017). The physical store is still considered a vital element in retailing that can facilitate something which online retailing is lacking - *an experience*. Therefore, retailers need to actively engage their customers in the physical store to create a memorable and distinctive experience that can ultimately lead to a higher level of customer loyalty. Different

customer segments will value different parts of the shopping experience, nevertheless, all are likely to want a perfect integration of digital and physical (Rigby, 2011).

It is evident that one of the major inquiries to cater to is that of Generation Z, as they represent the future customers of retailing (Priporas, Stylos & Fotiadis, 2017). Generation Z is defined as young and technology-oriented consumers born in 1995 or later and are powerful shoppers with an annual spending of an estimated \$600 billion (Accenture, 2013). This generation is reshaping the industry, using smartphones and other technologies extensively when shopping, being the driver of innovation and change. Thus, they are expected to heavily influence retailing from a technological perspective (Priporas, Stylos & Fotiadis, 2017). An interactive and connected in-store experience supporting a personalized shopping experience and a unique store atmosphere is, therefore, essential to meet the young target groups' expectations (Calienes, Carmel-Gilfilen, Arch & Portillo, 2016). According to Calienes, Carmel-Gilfilen, Arch and Portillo (2016), retailers should view the store as a tool for brand building and for creating meaningful customer experiences. Despite the increasing digitalization, the physical store is an unique opportunity to design an exciting and engaging environment for the customer. Rigby (2011) argues that in order to be successful, retailers must mash-up digital and physical experiences with omnichannel retailing, and transform their stores from a liability into an asset (Rigby, 2011). Evidently, the employment of digital features in the retail store will play an imperative role in shaping the Generation Z consumer experiences (Priporas, Stylos & Fotiadis, 2017).

1.2 Problematization

Physical retail is not dying; however, boring, irrelevant, and undifferentiated retail is (Dennis, 2018). Traditional retailers are suffering at the hands of online companies as Amazon¹ and Alibaba²and need to devote resources to the search for innovations to enhance the customer experience. In the era of rapid digitalization and ongoing *"retail apocalypse"*, constantly changing and evolving customer demands and preferences are dedicating new standards for retailers. *"Consumers are becoming more powerful, with expectations of having it all"* (Deloitte, 2019). The digital consumer is disrupting many norms of retailing, being connected at all times, and expecting businesses to react to their personal needs instantly (Deloitte, 2019). Retailers have to identify each segments' unique pathway and critical points and thereby create customized solutions instead of a one-size-fits-all approach (Rigby, 2011). Some of the most significant components of the physical store, that are still being requested by the customer, are the emotional and physical aspects as the ability to touch, feel and try products in a real live setting (Bäckström & Johansson, 2006). Nevertheless, the challenge is how to highlight these benefits by offering engaging and inventive in-store solutions. It is evident that many retailers have already recognized the need to change, however, how to actually develop an original and

¹ Amazon is the world's largest online retailer with an extensive product assortment within different categories.

² Alibaba is a Chinese multinational technology company specializing in e-commerce, retail, Internet, and

technology. The company hosts one of the largest marketplaces in the world, besides Amazon.

unique shopping experience that is valuable for the customer is an inquiry of further research (Bäckström & Johansson, 2006).

The modern retailer is struggling with finding new and innovative ways to appeal to their customers and embracing digital technologies (Calienes et al., 2016), and it has become evident, that one of the biggest future challenges for retailers to undertake is the new generation (Priporas, Stylos & Fotiadis, 2017). Retailers are challenged in defining exactly what this segment wants and expects of the physical environment, and how to cater to their needs. They are trying to improve the customer shopping experience by investing and employing various technologies, introducing self-service opportunities, interactive displays, and apps (Priporas, Stylos & Fotiadis, 2017). The young segment is not willing to adapt to the conventional standards of shopping in brick and mortar stores. They have high expectations for an exciting and engaging customer experience, meanwhile having no brand loyalty, hence putting high demand on retailers and their ability to renew and innovate (Hagberg, Sundstrom & Egels-Zandén 2015). The influence of technology on Generation Z cannot be overstated, they are the digital native generation, who cannot tell the time without relying on their smartphone. Research shows that 75% of Generation Z prefer to shop online instead of physical stores, indicating the need to integrate digital features to brick-and-mortar stores (Criteo, 2018). Further, much research indicates that this group of consumers expects digital processes to be commonly available, e.g., more autonomous and fast transactions and that technology will enable them to make more informed shopping decisions (Priporas, Stylos & Fotiadis, 2017). Other research has however indicated that consumers, in general, are not overly eager to adopt these digital devices in-store immediately. Customers have shown to be skeptical about these new technologies, reflecting in a low level of adoption (Elliott, Hall & Meng, 2013). As most research points out that young customers embrace new technological devices, the phenomenon of reluctance, if Generation Z actually values digital technologies, is an interesting inquiry to investigate further.

Many global retailers are currently facing the challenge of technology, and hereby how to effectively innovate their store concept with digital technologies and solve the customers' instore needs. Generation Z will impact the future of retailing profoundly with their vast spending power and tech-savviness (Accenture, 2013). Hence, this customer group represents the future customers of retailing. The main challenge retailers are facing at the moment is the drastic changes and the high level of fragmentation in the behavior of the younger audience, and how to meet the needs and expectations of these tech-savvy and knowledgeable customers successfully. The physical store environment has, for decades, been the main pillar of physical retailers' success, but it is now threatened by digitalization and the shifting consumer behavior. The question of how new technologies can be effectively integrated into the shopping experience in-store has arisen. As more and more retailers are working towards embracing digital technologies in the physical store, there is a profound need to understand different segments of Generation Z's consumption patterns and their expectations of in-store technology embedded in the customer journey.

1.3 Purpose

Given the growth of the managerial relevance in a retail context in the area of Generation Z over the past years, the purpose of this thesis is to differentiate Generation Z consumers and gain a more in-depth understanding of the intentions of Generation Z segments when using digital technologies. The empirical research on digital technologies is growing, however, as it is a dynamic field and technological advancements are continuous, it is still limited, and more studies are required. Furthermore, as the center of this thesis is Generation Z, where there is a lack of empirical research, this is an important area to investigate (Priporas, Stylos & Fotiadis, 2017). Current research on Generation Z's behavior and expectations of digital technologies in retail are employing quantitative studies, thus it is important to conduct qualitative research in order to gain a more in-depth understanding of the underlying behavior when using digital technologies and thereby a broader perspective (Wright, Haug & Huckabee, 2019; Priporas, Stylos & Fotiadis, 2017; Valentine & Powers, 2013). Furthermore, there is a knowledge gap, as current literature has not addressed the differences in segments of Generation Z concerning innovation acceptance and values of digital technologies.

This research intends to uncover different segments of Generation Z according to their in-store shopping behavior and attitude towards in-store technology, which in turn, can provide retailers with valuable insights that can evidently enhance the gap between the online and offline customers journey. Our research seeks to derive implications that can be of relevance for retailers in general. Thus, this study contributes to the existing literature as it provides insights on certain groups and profiles within Generation Z, and the behaviors and expectations of those, and further presents solutions to how the managerial issues can be handled. Our research question arises in the desire to investigate the following.

RQ: What are the expectations of Generation Z consumers of digital technologies in physical retail stores?

In order to provide a profound and well-grounded answer for this research question, the researchers refer to the findings from the extensive literature review and rely on the chosen theory of the topic. The researchers will conduct a case study of IKEA in order to observe and analyze how digital technologies are currently being used by Generation Z in the real retail setting. While collecting data, a consumer perspective will be taken in order to gain in-depth insights and individual opinions about current attitudes towards in-store technology and expectations.

1.4 Intended Contributions

This research will extend the existing literature on Generation Z consumers and their attitude towards in-store digital technologies by bringing new theoretical perspectives to the discussion, thus contributing to the present understanding of how Generation Z segments behave. The

existing theoretical perspectives on consumer values, personality types, and preferred shopping mode enables us to study Generation Z consumers with the aim of revealing new insights on potential segments and values that will act as determinants when adopting new in-store digital technologies. This will lead to an unique understanding of different Generation Z segments and thus provide insights in the form of a new conceptual segmentation framework. This study furthermore brings attention to the managerial issues and contributes by suggesting recommendations for retailers on how to handle this. The findings derived from this research will have significant implications for retailers and managers by creating an opportunity to develop the in-store technological touchpoints according to the values and expectations of different Generation Z segments. Thus, the contributing findings are both theoretical and practical, as the conceptual segmentation framework provides an inquiry of further research and is also applicable for retailers to improve their offer and distinguish themselves and reduce the risk of being outperformed in the long-term. Finally, we draw attention to the fact that our findings could potentially be relevant to other age spans due to influence on the customer journey as a whole.

1.5 Outline of the thesis

The structure of this thesis is illustrated in the figure below.



Figure 1. Outline of the research

Firstly, existing academic literature on the ongoing retail revolution, omnichannel strategies, the role of digital technologies in retail, customer journey and experience will be elaborated and discussed. Furthermore, customer behavior, factors that are forming consumer behavioral patterns, and the description of the Generation Z profile will be thoroughly discussed in the theoretical section. Then, the research methodology will be presented with consideration of ethical and political implications and the quality of our research. Subsequently, the research

findings will be presented analyzed. Thereafter, the thesis will discuss the research findings by considering findings from the existing literature and analysis of the collected primary data to present the final theoretical framework to support the *expectations of Generation Z consumers of digital devices in physical retail stores*. To conclude, this thesis will consider theoretical contributions and practical implications for retailers as well as the scope for future research.

2. Literature Review

The following section will provide a review of the existing literature relevant to the chosen research topic, and thus, provide the required theoretical background to answer the proposed research question. Firstly, the revolution within retailing will be elaborated to gain a background understanding, followed by a description of the role of digital technologies in retailing, the value of them, and barriers of adopting new technologies, then leading us to the customer journey and experience. Finally, a customer-centric section in which the complex behavior of Generation Z and the different segments within will be reflected upon. The insights from the theoretical framework will be a solid starting point and enable us to approach the research topic from different perspectives, and hence guide our empirical research.

2.1 The Retail Revolution

Retailing is developing at an accelerated rate due to evolving customer behavior, digitalization, and the explosion of new technologies. The offline and online worlds are converging, disrupting the retail environment, and thus challenging the primary purpose of the physical store (Grewal, Roggeveen & Nordfält, 2017). In the last decades, the core of retailing has, in general, remained the same (pricing, visual merchandise, atmosphere, etc.), however, the way in which retailers have delivered these principles have changed enormously, mainly due to the rise in technology. Retailers' main component of success have, in many years, been the physical store, but the spread of the Internet has eventually led to the term omnichannel retailing, outlined as an integrated, seamless, and consistent shopping experience across all touchpoints and channels (Rigby, 2011). According to Grewal, Motyka, and Levy (2018,) this has reflected the need to consider how to integrate technology in the customer journey, which has brought upon quick-response delivery systems, data interchange, and e-commerce. With the Internet spreading, retailers have begun to understand the value of online retailing, leading them to prioritize this channel equally with the physical store (Grewal, Motyka & Levy, 2018). Nevertheless, retailers tend to think that their customers will always be there, but with the increase in e-commerce and the consumer behavior becomes increasingly more complex, more is expected of the customer experience (Rigby, 2011). According to Rigby (2011) an integrated customer experience that merges the advantages of the physical store with the information-rich experience of online shopping is imperative to survive.

The expansion of the Internet and smartphones has empowered consumers to shop not only *anytime* but *anywhere*. This extension represents a huge opportunity for retailers, but also new challenges to undertake (Grewal, Motyka & Levy, 2018). Grewal, Roggeveen and Nordfält (2017) discuss that the rise of online retailing influences the consumers purchasing behavior enormously, because they are no longer restricted to the physical store as the only purchasing channel. Consumers expect consistency in all touchpoints, why retailers cannot manage their

online and brick-and-mortar channels independently (Grewal, Motyka & Levy, 2018). The most significant assets of e-commerce retailers are the competitive advantages within *convenience, time saving* and *variety of choice*. According to Helm, Kim and Riper (2018) the outperformance in these imperative areas has led to the *"retail apocalypse"*, referring to the large numbers of brick-and-mortar stores forced to close. The integration of new channels and the use of big data are therefore no longer distinctive factors but rather prerequisites for competing in the industry (Grewal, Roggeveen & Nordfält 2017). The Internet of Things³, Virtual or Augmented Reality⁴ and Artificial Intelligence⁵ are emerging forces that will evidently shape the future of retailing. These innovations will enable consumers to make more informed purchase decisions, reduce their time spend and make the shopping experience more convenient. Hence, retailers need to embrace these new innovations to make customers are more engaged, while also making their lives easier. However, finding the right ways to do so, remains an area of inquiry, worthy of further exploration (Grewal, Roggeveen & Nordfält, 2017).

It is evident that online retailing is gaining a greater share, and that consumers are increasingly shifting from offline to online shopping. Wright, Haug and Huckabee (2019) discuss that the main reasons for this are *ease of use, product variety, convenience, money-saving* and *availability of information*. Particularly the vast amount of information that enables to navigate, personalized offers and product reviews, are important to consumers. They further argue, that trust and satisfaction with the brand are key to establish a relationship online. According to Shankar, Inman, Mantrala, Kelley and Rizley (2011) customization and personalization of offers have emerged as a major shopper innovation. In order to increase the level of personalization, retailers need detailed information about their consumers. Hence, big data is key, as it enables retailers to access data regarding consumers behavior online, and use it strategically to optimize sales (Grewal, Roggeveen & Nordfält, 2017). Grewal, Roggeveen and Nordfält (2017) suggest that retailers leverage on this knowledge and use it to positively impact the customer's satisfaction level.

With over 85% of retailing still taking place in the physical store, e-commerce retailers moving offline, and new store openings succeeding, there are evidences that the physical store remains a relevant attribute for customers (Alexander & Cano, 2019). However, the recent trends within retailing is threatening the traditional physical retail store and its purpose. According to Shankar et al. (2011) retailers can generate positive returns if they create an exciting shopping environment, as shoppers respond positively to well-designed innovations in store atmospherics. New store concepts have been introduced in retailing, as showrooms, click-and-collect and strategic pop-ups, as the big store format is challenged. According to Alexander

³ The Internet of Things (IoT) refers to the billions of physical devices in the world that are connected to the internet, and therefore all collecting and sharing data (Grewal, Roggeveen & Nordfält, 2017).

⁴ Virtual Reality (VR) is a simulated experience that can be similar to or completely different from the real world, whereas Augmented Reality (AR) is a technology that blends what the user sees in their real life surroundings with digital content (Grewal, Roggeveen & Nordfält, 2017).

⁵ Artificial Intelligence (AI), referred to as machine intelligence, and is simply intelligence that is demonstrated by machines (Grewal, Roggeveen & Nordfält, 2017).

and Cano (2019, p. 5), it is not about the size of the store, but about the story that it tells *everything you design within a space brings it to life*. Shankar et al. (2011) point out, that in order to create a memorable experience, a customer-centric store layout and design is essential. They further suggest, that retailers should experiment with customized sensory experiences, as background music, odor, lighting, to influence the shopping behavior and utilize the benefits of the physical space vs. online. Shoppers often choose brand and purchase channel based on the quality of the experience they've had online. Thus, innovation within online navigation and channels are crucial in influencing the behavior and attitudes of consumers (Shankar et al, 2011).

It is evident, that there are different perspectives and speculations on the future of retailing (Rigby, 2011; Grewal, Roggeveen & Nordfält, 2017; Grewal, Motyka & Levy, 2018; Helm, Kim & Riper, 2018; Alexander & Cano, 2019). Rigby (2011) argue that the adoption of an omnichannel approach becomes even more imperative for brick-and-mortar stores going forward, as retailers need to be where the customers are. Digitalization of the physical store plays a fundamental role, however, traditional retailers are lagging in the embrace of new technologies (Rigby, 2011). According to Priporas, Stylos and Fotiadis (2017), new technologies will transform the consumer-retailer interactions with innovations as interactive dressing rooms, virtual fitting rooms, interactive mirrors, in store mobile apps, etc. Companies such as Amazon has already established a substantial competitive advantage in the retail landscape, primarily due to their dominant position within internet-based retailing, meanwhile gaining a share in the physical retail landscape. This is increasing the pressure on existing retailers, forcing them to differentiate and explore their own unique customer experience. Amazon is an example of a successful e-commerce retailer who revolutionized the physical shopping experience with the use of the physical space that enables customers to enter a store, pick up items and leave with no queuing, and automatically pay through the Amazon app (Grewal, Motyka & Levy, 2018). Hence, an understanding and knowledge of how these new technologies can create value for customers, are game-changing and key drivers for the future of retailing (Grewal, Roggeveen & Nordfält, 2017). This thesis is of high relevance, as it will investigate the value creation of digital technologies in the retail store more in-depth, with emphasis on Generation Z.

2.1.1 Omnichannel approaches

Omnichannel strategies in retailing have been explored extensively within literature (Alexander & Cano, 2019; Verhoef, Kannan & Inman, 2015; Rigby, 2011; Hagberg, Sundstrom & Egels-Zandén, 2015). To encounter the developments within retailing, many retailers have evolved from single-channel to multi-channel, and now to embracing omnichannel approaches (Verhoef, Kannan & Inman, 2015). In recent years, there has been observed a further digitalization in retailing, as consumers access the Internet through many different digital devices nowadays. Thus, consumers expect consistency in both offline and online channels and touchpoints when shopping (Verhoef, Kannan & Inman, 2015). Alexander

and Cano (2019) argue that the omnichannel concept is based on consumer behavior and represents a shift in the retail paradigm. According to Alexander and Cano (2019), the main idea of omnichannel is to create a seamless experience throughout all touchpoints and thus the interplay between the retailers' channels. In order words, it is a complete integration of all channels in which the customer interacts with.

The digital disruption has empowered consumers and heightened the expectations in regard to flexibility, convenience, and consistency, thus inducing the complexity of the channel mix. Further, the abundance of technology incorporated at the different stages of the customer experience has to lead to the phenomena in retailing called "cross-channel free-riding behavior", defined as when consumers use one retailer's channel to prepare a purchase and then switch to another retailer's channel to purchase (Heitz-Spahn, 2013). Alexander and Cano (2019) claim that the physical store is still the most important and prominent channel, as consumers want to touch and feel the products. However, the growth in online retail has resulted in a decrease in brick-and-mortar stores. Consequently, the role of the physical store is being re-defined and has to become a part of a more connected experience (Alexander & Cano, 2019). Rigby (2011) disputes that the challenge for retailers is to identify each segment's unique path and pain points, and thus create a tailored solution rather than one-size-fits-all. Consumers want the advantages of digital (large selection, transparency, convenience), but also the advantages of the physical store (face-to-face interaction, products available to touch and feel social experience) (Rigby, 2011). According to Grewal, Motyka and Levy (2018), traditional brick-and-mortar retailers need to coordinate their activities across all channels, and reflect multi- or omnichannel integration, in order to leverage the advantages of their physical store, exploit the benefits of technology and provide a seamless experience in all touchpoints. Rigby (2011) argues that an omnichannel approach can provide retailers with a competitive advantage and that,

a successful omnichannel strategy should not only guarantee a retailer's survival—no small matter in today's environment. It should deliver the kind of revolution in customer expectations (p. 76).

It is evident, that the implementation of an omnichannel strategy can be a facilitator for competitive advantages in retailing (Rigby, 2011; Grewal, Motyka & Levy, 2018; Alexander & Cano, 2019; Verhoef, Kannan & Inman, 2015; Chopra, 2018). Verhoef, Kannan and Inman (2015) suggest that companies should provide engaging in-store technology, such as tablets and digital signage, that allows customers to search for information and order product, to offer a complete omnichannel in-store experience. The key to success with an omnichannel strategy is the company's ability to be agile enough to match the strengths of each channel used to fulfill each customer request (Chopra, 2018). By investigating the customer preferences of new digital technologies, it will be possible to derive findings that have implications for retailers omnichannel approaches.

2.2 The Role of Digital Technologies in Retail

Technology is defined as an enabler of educating and empowering consumers (Wikström, 1996). Digital technologies represent an imperative role in terms of retail transformation, and it is evident, that this will impact the number of touchpoints currently faced by customers for retailers (Rigby, 2011). Retailers are starting to employ different types of technologies as e.g. self-service technologies, QR codes, interactive kiosks in-store to adapt to the changes in consumer behavior and enhance the shopping experience (Grewal, Roggeveen & Nordfält, 2017). Grewal, Roggeveen and Nordfält (2017) claim that these new digital technologies can facilitate more convenient shopping, reduce waiting time, and increase access to information, thus improving the customer experience in the end. The growing role of information and innovative technologies makes it even more urgent to develop and implement common principles to cater to the changing environment (Krymov, 2019). Particularly, omnichannel, mobile commerce, and mobile payment for products and services are some of the critical issues in the list of information technologies in retail. Along with these tendencies, 'big data' technologies and predictive analytics gain importance (Krymov, 2019). However, the most important is to integrate technologies that add true value to the customer experience (Hagberg, Sundstrom & Egels-Zandén, 2015). In this thesis, we distinguish between the digital technologies provided by the retailer and the technologies that are out of the retailers' control, as a customer's mobile. Following the purpose of the thesis, the usage of digital technologies provided by retailers in the shopping experience in-store will be the main focus.

The technological innovation and the influence of the retail landscape have thought to be a threat to the traditional brick-and-mortar stores, however, it has also led to the emergence of a variety of channels, that makes it possible to reach customers in more touchpoints of the customer experience (Rigby, 2011). Since most retailers are currently prioritizing omnichannel approaches, which allow customers not only to shop across channels but also to experience the brand outside of the store at any time, retailers are rapidly integrating digital devices and technologies into the customer journey (Mosquera, Olarte-Pascual & Juaneda-Ayensa, 2017). A central facilitator of digitalization is the increasing usage of mobile devices, that connects consumers to the Internet, and thereby changes the consumer practice and shopping behavior in retail stores (Hagberg, Sundstrom & Egels-Zandén, 2015). Hagberg, Sundstrom and Egels-Zandén (2015) argue, that digitalization of traditional retail settings has led to the increased intermix of digital and physical in various settings. Particularly, the Internet is expected to lead to a proliferation of new types of places for shopping and consumption online with 'virtual shopping rooms', 'webrooming' and 'game worlds' that combine both material and imaginary elements. According to Hagberg, Sundstrom and Egels-Zandén (2015) digital technologies stimulate the impulsive purchasing behavior of consumers and bring new experiences to life it's more than just ecommerce, it's everywhere commerce.

Priporas, Stylos and Fotiadis (2017) highlight, that the application of new technologies in retailing is beneficial for both consumers and retailers, as technologies can improve the consumer behavior in-store, facilitate the decision-making process, and enhance the exchange

of information. Hence, information communication technology and smart technology have transformed the consumer-retailer interactions (Priporas, Stylos & Fotiadis, 2017; Krymov, 2019). Digital technologies are argued to provide retailing with a sense of flexibility and creating a more interactive and connected system that supports the management of the individual customer touchpoints, and thereby enabling personalization of the customer experience, which is a major concern in retailing (Priporas, Stylos & Fotiadis, 2017). However, although in-store digital technologies can be beneficial for companies in terms of generating greater customer value, age is known to be strongly associated with the willingness to engage with new technologies, thus different generations will react differently to digital technologies in retailing. In research conducted by Priporas, Stylos and Fotiadis (2017) on Generation Z, results indicated that digital technology in the in-store shopping experience positively affected the satisfaction and reduced the perceived risk of technologies. In the research, the results were generalized to be applicable for the whole generation span. In this thesis we aim to define different segments within Generation Z and investigate their perceptions and expectations of in-store digital technologies, making the research of high relevance to contribute to existing literature.

Alexander and Alvarado (2017) claim that physical stores can compete with online marketplaces by constantly adapting to consumers' demands and incorporating new omnichannel technologies and practices. The researchers further support the mixed model, where one combines the immediacy and multi-sensorial experience of a brick-and mortar store with the access, interactivity and convenience of an online one (Alexander & Alvarado, 2017). Before-mentioned leads to the conclusion that the introduction of innovative in-store technologies is an inevitable stage of the retail evolution.

To gain profound understanding of how retailers are transforming their stores by equipping it with digital technologies, it is essential to understand the categorization of retailers based on their acceptance of innovative in-store technology.

Type of innovation adaptor	Definition	
Technology Enthusiast	 argue that technology will result in significant benefits for the retailer adopt the last innovation available on the market 	
Early Adopters	 purchase new products very early believe that the first to adopt the new technology will maximize their benefits 	

Early Majority	- adopt a certain new technology because it is already largely adopted, thus believing that having the new technology has become a status (or a standard)
Late Majority	- uncomfortable towards an innovation and show a risk- averse attitude (they adopt the technology mainly because they are influenced by social norms and reference groups)
Laggards	- show negative attitude towards new technology in general, being very skeptical towards the benefits emerging from the adoption of a new technology.

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Table 1. Types of retailers based on the attitude towards innovation adoption(Adapted from Rogers, 2017)

The research proposed by Rogers (2017), indicate that retailers prioritize innovation to a different extent by delivering additional values to their consumers (Rogers, 2017). A wide variety of digital innovations have already been incorporated in retailing, such as virtual and augmented reality, quick response (QR) codes, beacons, interactive tablets and free Wi-Fi and self-check-out (Piotrowicz & Cuthbertson, 2014). Thus, most retailers belonging to the categories of "technology enthusiasts" and "early adopters" understand that the success of their business is depending on their ability to adapt to the market requirements and the application of these new technologies (Krymov, Kolgan, Suvorova & Martynenko, 2018). Nevertheless, many retailers are still in the category of late majority and laggards, being skeptical, and believing that their customers will always be there (Rigby, 2011).

2.2.1 Theory of Consumer Value

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The phenomenon of consumer value is a topic that has given rise to a significant number of research studies and discussions in the field of customer experience, touchpoints and other key areas of retailing. The retail shopping studies describe consumer value within the customer experience with two perspectives, the hedonic and utilitarian value concept (Babin, Darden & Griffin, 1994; Bagdare & Jain, 2013; Carpenter, Moore & Fairhurst, 2005; Sachdeva & Goel, 2015). The utilitarian and hedonic perspectives are considered to be the main motivations and objectives of the shopping experience. As defined by Babin, Darden and Griffin (1994), the utilitarian value presupposed efficiency and economic benefit of an experience with the objective to complete a task. While the hedonic value is defined as a pleasurable customer experience. The hedonic value concept is usually associated with a leisure experience that is not always leading to purchase but can be referred to as "window shopping" entertainment, and joy that results from consumer arousal, involvement, perceived freedom, fantasy fulfilment

and escapism (Babin, Darden & Griffin, 1994). This is supported by Bäckström and Johansson (2006) who argue, that the hedonic shopping value has been described to reflect a shopping experience emotional worth and are more subjective, whereas the utilitarian value concerns accomplishing its intended goal.

Nevertheless, consumer values can be both utilitarian and hedonic at the same time (Babin, Darden & Griffin, 1994). Since many researchers are currently substituting shopping with the term "leisure activity", and with the transition towards "experience-oriented" and "experience-seeking" retailers, the hedonic perspective for studying shopping experience becomes more relevant (Bäckström & Johansson, 2006). While *experience* is a crucial component of the modern customer experience, modern retailers are reinventing their strategy by creating experience services for customers beyond purchasing goods, called "*Experience Retail*" (Kim, Fiore & Lee, 2007). This new approach to the customer experience is related to the brand or a particular product and aims to build and enhance brand awareness that is based on four pillars: *Environment, Education, Escapism, Entertainment*. Some researchers have added an extra pillar to this strategy, *Emotions*, that shape the value of the in-store customer experience and foster customers' loyalty (Sachdeva & Goel, 2015).

2.2.2 The Value of In-store Technologies

In order to understand values derived from in-store technologies it is essential to determine the consumer values proposed by existing literature. In this thesis, the value of in-store technologies will be researched, with the aim of contributing to a new segmentation framework that categorizes different segments of Generation Z.

Davis, Bagozzi and Warshaw (1989) propose a technology acceptance model referred to as TAM. This model is considered to be an universal approach to analyze the acceptance of innovation in the context of new technology. Davis (1989) identifies two factors that are forming the extent of technology acceptance by consumers. The first component is perceived ease of use defined as "the degree to which a person believes that using a particular system would be free of effort". The second one is a perceived usefulness - "the extent to which a person believes that using a particular system would enhance the job performance" (Davis, 1989, p.320). With regard to the time of origin of the TAM, there are many additional factors that have been introduced in the academic literature. Dabholkar and Bagozzi (2002) argue that the extent to which the process of using a technology is enjoyable is equally of crucial importance when evaluating the technology acceptance by customers. This argument resulted in a new component of TAM referred to as enjoyment or fun. Weijters, Rangarajan, Falk and Schillewaert (2007) elaborates the model by proposing new elements: reliability and newness. *Reliability* is defined as the extent to which the technology "consistently and accurately performs the expected task", whereas newness determines to which level consumers perceive technology as new and innovative (Weijters et al., 2007).



Figure 2. Consumer Values derived from In-store Technology based on TAM (Davis, 1989; Dabholkar & Bagozzi, 2002; Weijters et al, 2007).

It could be assessed, that some of the commonly introduced in-store innovations as Virtual and Augmented Reality could be associated with a new entertainment and pleasure activity creating hedonistic values for consumers (van Herpen, van den Broek, van Trijp & Yu, 2016). If applying the above-mentioned TAM framework, VR and AR devices create such values for shoppers as *enjoyment*, *fun*, and *newness*. Moreover, Heller, Chylinski, de Ruyter, Mahr & Keeling (2019) conclude that AR frontline is a net booster of retail experience and could become an effective tool for establishing personalized frontline experience (Grewal, Roggeveen & Nordfält 2017; Rafaeli, Altman, Gremler, Huang, Grewal, Iyer, Parasuraman & de Ruyter, 2017). Furthermore, retailers are actively using self-service devices that are defined as public-access computers, often with touch screens that allow customers to get information or service independently without staff assistance (Meuter, Ostrom, Roundtree & Bitner, 2003). Shostack (1985) associates in-store devices with critical moments of interaction between a customer and a retailer. Due to their *high-touch* and *low-tech*, customers with low innovation acceptance can benefit from the *ease of use* and get fast and convenient self-service by avoiding potential obstacles (Wang, Harris & Patterson, 2012).

As argued by Caro and Sadr (2019) the retail success in an omnichannel world requires innovations that provide the consumer with information on products that best match his or her needs and tastes, but without trying to sell a product that the retailer does not have in stock. According to Grewal, Roggeveen and Nordfält (2017) personalized technologies clearly has benefits for both consumers and retailers, however, this arises a paradox of privacy. If consumers recognize how much data and information retailers have about them, it can result in reluctance towards digital devices, and thereby diminish customer engagement (Grewal, Roggeveen & Nordfält, 2017). Much research points out, that digitalization will impact retailing profoundly in various ways (Rigby, 2011; Hagberg, Sundstrom & Egels-Zandén,

2015; Krymov, 2019). Digital technologies will influence the communication, transaction and distribution of the exchange, and how actors as store associates will be transformed.

2.2.3 Barriers to the Adoption of Technology

At the early stage of technology adaptation, the retail industry may experience opposition from consumers. Most recent literature indicates that consumers embrace new technologies, nevertheless, some research has also detected a reluctance in consumer adoption of digital technologies in-store (Elliot, Hall & Meng, 2013). The reasoning for consumer reluctance has mainly been due to the lack of trust in technology and the higher possibility of encountering mistakes when using digital technologies in-store (Elliot, Hall & Meng, 2013). The rapid proliferation of technology in the retail industry is highly associated with innovation diffusion that allows to measure the level of consumers' innovativeness (Goldsmith & Hofacker, 1991). To assess the barriers of adopting new technologies it is vital to consider the theory of innovation diffusion. Roehrich (2004) develops the following characteristics of innovation diffusion among consumers: newness attraction (the extent to which an innovation is perceived as attractive), creativity/originality (the extent to which an innovation is perceived as creative/original), risk attraction (the extent to which adopting an innovation involves a certain level of risk), and attention to others' opinion (the extent to which others' opinion influences the choice of adopting innovation). These characteristics determine whether consumers are willing to engage with new innovations, thus important to consider in order to investigate the expectations of new digital technologies.

In order to understand roots of such resistance, two types of barriers are distinguished in literature: *functional* and *psychological* (Antioco & Kleijnen, 2009). *Functional barriers* represent practical implementation of technology, what value it is creating, and potential risks associated with it. Since innovative in-store technology requires changes in the customers routine, a significant amount of time has to be dedicated to the transition and adaptation process before it is completely accepted by consumers, since sometimes such know-how requires a complete change of customer shopping habits (Herbig & Day, 1992; Ram & Sheth, 1989). Holak and Lehman (1990) argue that prior to aggressively introducing digital in-store devices, the target group has to be educated about its benefits and functional gains to overweight the reluctance towards new technology. According to Molesworth and Suortti (2002) value barriers are associated with the performance-to-price ratio compared to other products substitutes.

Psychological barriers are usually a result of customers' personal beliefs and attitudes towards new technology. In current literature, psychological barriers consist of *tradition* and *image* barriers (Ram & Sheth, 1989). The tradition barrier is a result of cultural changes that are enforced upon the consumer by adopting the innovation. Moreover, any change from established routines and norms is stressful to consumers (Kleijnen, de Ruyter & Andreassen, 2005). When investigating the adoption of in-store technology, it is of crucial importance to consider image barriers that customers may face. As argued by Kleijnen, de Ruyter and Andreassen (2005) customers tend to purchase innovations because they are associated with

the premium status of the buyer. Consequently, an unfavorable image of a retailer can severely affect consumers' adoption intentions either towards purchasing innovations or using in-store technology (Kleijnen, de Ruyter & Andreassen, 2005). However, one has to keep in mind that not only brand image of the retailer affects customer choices but also stereotyped thinking and a lack of information (Ram & Sheth, 1989). Prior to adopting new technologies and introducing new possible touchpoint in the customer journey, consumers have to be well informed about the benefits, and provided with usage guidelines. As a result, with profound information and advertising, customers will not doubt the necessity of adopting this innovation (Ram & Sheth, 1989). This thesis will contribute with more in-depth insights of how Generation Z engages with digital technologies, and which barriers influence the different segments behavior.

2.3 The Importance of the Customer Journey and Experience

Since digital technologies are transforming the retail environment, the touchpoints within the customer journey and the expectations of the in-store experience are also evolving (Stein & Ramaseshan, 2016). The researchers seek to investigate the shopping behavior in-store, and thus, it is imperative to outline the customer journey and experience to gain a broader understanding of how digital technologies can influence this, and how to create a successful experience.

2.3.1 Outlining the Customer Journey

It is evident, that a strong customer experience is key and that companies must develop more personalized customer journeys to compete (Lemon & Verhoef, 2016; Varnali, 2019). Lemon and Verhoef (2016) describes the customer journey as iterative and dynamic and as encompassing past experiences as well as external factors that have been of influence. Hence, retailers need to have a detailed understanding of the whole customer journey and the expectations that the customers have (Varnali, 2019). Edelman and Singer (2015) points out, that the explosion of digital technologies has empowered especially young consumers to be experts in their use of information, and thus enabled them to easily find what they want online and getting it delivered to their door. It is increasing the customer journey complexity, thus, retailers need to make the customer journey compelling and customized so that they can gain the loyalty of the customer and thereby gain a competitive advantage (Lemon & Verhoef, 2016; Edelman & Singer, 2015). Retailers should employ new technologies and processes to proactively lead the customer, rather than following the customer on their journey.

Varnali (2019) argues, that although each customer journey is unique, it usually consists of the same phases of pre, present and post purchases. This statement is also supported by Lemon and Verhoef (2016) who claim, that this process demonstrates each touchpoint in the customer journey, only some of which will be under the company's control (Lemon & Verhoef, 2016). The pre-purchase stage involves the customer's first interaction with the brand, company and

environment before. In this stage, the consumer becomes aware of the brand, searches for information and considers purchase. The next stage in the customer journey is purchase - this stage covers all customer interactions with the company and its environment during the purchase. This stage is characterized by behaviors, involving choice of product, ordering and payment. Lastly, the post-purchase stage involves the interactions with the brand following the purchase. Lemon and Verhoef (2016) argue, that retailers should use this framework to understand the customer perspective and identify key aspects in each stage. Furthermore, retailers should identify trigger points that lead to either customer continue or discontinue their shopping journey (Lemon & Verhoef, 2016).

Today, the customer journey consists of numerous touch points scattered across different channels and media (Lemon & Verhoef, 2016). Stein and Ramaseshan (2016) imply that the touchpoints may not be linked to the specific shopping experience but can be indirect interactions during unplanned encounters. Additionally, that the touchpoints from the customer experience is moments of truth, that can evidently affect the customers' purchase behavior (Stein & Ramaseshan, 2016). Lemon and Verhoef (2016) suggest four different categories of customer experience touchpoints; brand-owned, partner-owned, customer-owned and social/external/independent. The brand-owned touchpoints are managed by the company and thus under the company's control (website, advertising, loyalty programs), and the partnerowned are jointly designed and managed by the company or one of its partners. The customerowned touchpoints involve the customer's own thinking and desires, and are therefore out of the company's control, and social/external/independent touchpoints could be other customers, peer influences, information sources or the environment. According to Lemon and Verhoef (2016) this typology provides retailers with a framework that can potentially leverage critical touchpoints (moments of truth) during the customer journey, that have the most significant impact on the customer experience. In this thesis the researchers will primarily focus on gaining more insights of the purchase stage, implicating how consumers interact with technologies during their shopping journey in-store, as well as the brand-owned touchpoints that is within the companies' control.

2.3.2 The Creation of a Successful Customer Experience

Retailers have in general acknowledged the customer experience as an important component in order to sustain a competitive advantage (Stein & Ramaseshan, 2016; Varnali, 2019; Bäckström & Johansson, 2016; Rigby, 2011). A customer experience is outlined as the internal and subjective response a customer has to any interaction with a company. Customers have experiences every time they interact with any part of the product, service or brand, across different channels (Stein & Ramaseshan, 2016). Bäckström and Johansson (2006) suggest that it has become increasingly important to create emotionally and engaging experiences for customers. According to the authors, a shopping experience can induce value either by successfully achieving its intended purpose or by providing enjoyment and funness. This is supported by Stein and Ramaseshan (2016), who argue, that customers seek more than just a product, delivery and consumption. They desire a unique and memorable experience connected to the product or service. It is widely recognized that the customer experience is not only shaped by the aspects which the company can control (e.g. store interface, advertising, store associates), but also aspects that are outside the company's control (customer interaction, purpose of shopping etc.) (Stein & Ramaseshan, 2016). Retailers can therefore not control all elements of the customer journey, however, they can design and orchestrate prerequisites that enables their customers to have a unique experience. Alexander and Nobbs (2016) claim, that

when a customer enters a store, they do not experience the music in isolation; they do not smell the scent without seeing the colors as well; they do not walk on the floor-covering without feeling the ambient temperature. The typical customer experiences degrees of stimuli as an ongoing, integrated experience. (p. 421)

Stein and Ramaseshan (2016) propose seven distinct touchpoints, that encloses the customer experience: atmospheric, technological, communicative, process, employee-customer interaction, customer interaction and product interaction elements (Stein & Ramaseshan, 2016). The research indicated that technological devices are particularly important for consumers, as it enables consumers to engage with the company. This is supported by Rigby (2011) who claims, that digital technologies offer endless opportunities for retailers to integrate in the physical space and to provide an entertaining customer experience. An equally distinct touchpoint highlighted by Stein and Ramaseshan (2016) is communication, as customers tend to make better decisions leading to positive responses, if the quality of information is relevant for the customer. Lastly, the social interactions both with store associates and with other consumers play a significant role in determining the customer experience. Stein and Ramaseshan (2016) argue, that with these elements retailers can capture the dynamic nature of the customer experience, which is subjective to the individual customer, thus draw from these insights and enhance the customer experience.

2.4 The Complex Consumer Behavior

The creation of new touchpoints due to the influence of digitalization has resulted in a more complex customer journey. The rise of the digital era and the abundant availability of information has led to the evolution of the 'empowered customer', thus it has never been more important to understand customer behavior (Hagberg, Sundstrom & Egels-Zandén, 2015). In order to understand customer behavior in-store, it is essential to understand what factors influence the choice of touchpoints, and how existing theories are classifying customers based on their shopping behavior and customer journey. Herhausen, Kleinlercher, Verhoef, Emrich and Rudolph (2019) categorize factors that are forming customer shopping behavior in three segments: psychographic, sociodemographic, and other factors. Besides these, the duration of consumers shopping trip is also crucial, since customers with a longer shopping trip are exposed to more touch points (Lemon and Verhoef, 2016). Customers with a longer shopping history usually use fewer touchpoints because a longer customer history and membership in loyalty programs predicts usage of more in-store touchpoints (Konus, Verhoef & Neslin, 2008).

The buying frequency and spending per shopping also determines the number of touchpoints that customers have. Buyers with a higher frequency of shopping trips do not require extensive in-store search and comparison between different touch points. However, higher spenders usually need more extensive search and longer decision process if compared to customers with limited budget (Kushwaha & Shankar, 2013). Further, consumers that are more tech-savvy and experienced with online shopping may be categorized as customers that primarily use online channels with the same touchpoints (Gensler, Verhoef & Böhm, 2012).

Herhausen et al (2019) distinguish five customer segments: store-focused shoppers, pragmatic online shoppers, extensive online shoppers, multiple touchpoint shoppers, and online-to-offline shoppers - that differ considerably in their touchpoints and mobile device usage, their segment-specific characteristics, search and purchase patterns.

Type of the consumer based on consumer journey	Characteristics	
Store focused	 Store based touchpoints Reluctant to online shopping Do not use in-store technology 	
Pragmatic online	 Mostly online shopping Use mobile devices for shopping Short shopping journey 	
Extensive online	 Use online channels for search Shop both online and offline Short shopping journey 	
Online -to-offline	 Search online, buy mostly offline Long shopping journey Use mobile devices while shopping 	
Multiple touchpoint	 Both online & offline Use the most touchpoints for shopping More involved in company-/brand-owned touchpoints Long shopping trips Use mobile devices extensively for shopping 	

Table 2. Types of shoppers based on their preferred shopping mode and journey(Adapted from Herhausen et al, 2019)

According to Herhausen et al's (2019) formation of different customer journey segments, it could be assessed, that *Multiple touchpoint* and *Online-to-Offline* shoppers are most inclined to be exposed to using in-store technology. Thus, by understanding to which segment a particular customer group belongs, retailers can better design a tailored customer in-store journey complemented by technology for each customer group based on their expectations (Herhausen et al, 2019).

However, in order to segment customers based on their in-store behavior and usage of technology during the shopping journey, it is vital to understand what factors influence their behavior. Dabholkar and Bagozzi (2002) highlight two groups of variables that impact the level of technology acceptance of customers: consumer traits and situational factors. Consumer traits include self-esteem, novelty seeking, need for interaction and self-consciousness (Dabholkar & Bagozzi, 2002). Shoppers with greater self-esteem and self-efficacy are more confident with using technology-based services, hence, ease of use is less important for these customers than to customers who are less comfortable with using new digital devices. In terms of novelty seeking, customers who are open to innovations are considered to be early adopters of innovations. *Ease of use* is less important for these types of consumers because they have a strong intrinsic motivation to try out new technology. Contrary to customers with inherent novelty seeking, customers with a need for personal interaction are lees open to using selfservice technology and tend to seek assistance from in-store personnel (Dabholkar & Bagozzi, 2002). Situational factors consist of perceived waiting time and social anxiety. Personality traits particularly self-esteem and reliance on others opinion, that are forming customers' attitude towards in-store devices proposed by Dabholkar and Bagozzi (2002) will be applied to the above-discussed types of shoppers in our conceptual framework in order to define what values of in-store technology are prioritized by Generation Z segments.

2.4.1 Understanding Generation Z - "The Digital Native"

Due to the rapid digitalization of all industries, incorporating technologies and eliminating boundaries between online and physical shopping has become imperative for retailers (Ernst & Young, 2019). It is more important than ever to understand the complex behavior of consumers in order to cater to their needs. The expectations of Generation Z, or also called "digital natives", presuppose that companies must keep up with the pace of change to maintain their position. Generation Z are young adults born in 1995 or later (Bassiouni & Hackley, 2014; Fister-Gale, 2015). Seppanen and Gualtieri (2012) argue that Generation Z possess unique behavioral patterns as a result requiring an unique approach from retailers. However, the literature review on the Generation Z behavioral patterns, attitudes to the current retail experience and future expectations has not been profoundly studied. The research mainly focused on Generation Z application of digital devices in daily life, not particularly for shopping (Priporas, Stylos & Fotiadis, 2017). Nevertheless, many researchers in the field of customer behavior argue that Millenials, Generation Y and Generation Z share the majority of personality traits (Barton, Fromm & Egan, 2012; Valentine & Powers, 2013). According to

Valentine and Powers (2013), they tend to be tech savvy, self-centered, innovative, social, optimistic and engaged. In order to understand the expectations of Generation Z and the attitude towards in-store technologies, the researchers will consider the typology of Valentine and Powers (2013).

Types	Characteristics
Actualizers	Self-confidentReceptive to new products and technologies
Fulfilleds	Value knowledgeLittle interest in image and prestige
Achievers	Image consciousRelatively affluentsAttracted to premium products
Experiencers	Follow fashion and fadsSpend disposable income on socializing
Believers	Slow to change habitsImage conscious
Strivers	Spend on clothing and care products
Makers	 Self - sufficient Shop for comfort and durability Unimpressed by Luxuries
Strugglers	Concerned with security and safetyBrand Loyal

Table 3. VALS Typology of consumers (Adapted from Valentine & Powers, 2013)

Having in consideration the high number of similarities between Generation Y and Z, the typology proposed by VALS and further developed by Valentine and Powers (2013) could be applicable to Generation Z due to the lack of the theory on classification of Generation Z consumers. According Valentine and Powers (2013), besides amicable attitude towards technology and novelty, these Generations are highly concerned with their personal brand, time usage and spending their resources wisely. Without a doubt, Generation Z will affect the future of retailing profoundly (Priporas, Stylos & Fotiadis, 2017). Having lived on the edge of centuries, Generation Z have experienced several dramatic political, social, technological and economic changes (Ernst & Young, 2015). The representatives of this generation are highly

educated, technologically savvy, innovative and creative (Ernst & Young, 2015). It is the first generation born into a digital world that is completely engaged in the online world to interact with their favourite brands (Bernstein, 2015). There are four main traits of the Generation Z that form their consumer profile: interest in innovations and technologies; useness to the straightforward user journey and ease to adopt and change; the need to feel secure; and escapism - a desire for constant changes (Wood, 2013). Consumers aged between 18-25 are less loyal to retailers and they expect retailers to get the products to them, as a consequence, retailers feel pressured to find new ways to grab and hold consumers' attention (Ernst & Young, 2015). Moreover, this tech-savvy generation is "experience-seeking", possess higher expectations, and has no brand loyalty.

As well as Millennials, Generation Z shares preferences for modern ways to shop: "webrooming" and then going to a store to shop (Cameron, 2014); and "showrooming" browsing at a store and then going online to find a "better deal" (Fromm & Garton, 2013). Combining the in-store experience with innovative solutions is vital to engage this segment of shoppers. According to the research findings of Calienes et al. (2016), in terms of the shopping experience, young shoppers are looking for a shopping experience that offer neatness, order, variety as well as entertainment and a joyful experience. Beauchamp and Ponder (2010) characterize the consumer of the future as a group of people whose constraints are no longer money, but time. Dabholkar and Bagozzi (2002) emphasize "the perceived waiting time" to be one of the components that is forming the attitude of customers towards in-store technology. Therefore, retailers should carefully consider the importance of convenience in their offerings. Results from Beauchamp and Ponder (2010) research indicate that retail convenience consists of four dimensions - access, search, transaction and possession. Having in mind, the behavior of Generation Z mentioned above, it can be concluded that the dimensions of access and search process are particularly prioritized by this customer category. Since generation Z tend to be more impatient than other generations and look for shorter waiting time, the "ease of use" of technology is important for them since it can compensate for their waiting time.

Nevertheless, this generation tend to be more concerned about what others are thinking about them and their overall reputation in the community (Ernst & Young, 2015). Based on the framework of Dabholkar and Bagozzi (2002), this personality trait can result in reluctance towards technology if young consumers feel self-conscious about using in-store technology when other customers are there. It can be concluded that in order to attract and meet the demands of Generation Z, the modern retailers have to develop a multidimensional, holistic store journey made up of functional and entertainment experience complemented by digital innovations (Rigby, 2011). Valentine and Powers (2013) suggest that there is a lack of additional research that considers the underlying causes of behavior and attitude within segments of Generation Z. In this thesis, a segmentation of Generation Z's needs and expectations in regard to in-store digital technologies will be conducted and provide additional insights that would be beneficial to managers seeking to reach this important market segment.

2.5 Initial Conceptual Framework

This thesis seeks to investigate the expectations of different segments within Generation Z of digital technologies in retail stores and enhance the understanding from a customer perspective. In the previous section, the existing literature on retailing, digital technologies, and their role in retail, customer journey and experience, and complex consumer behavior have been reviewed. It can be argued that there is scarce literature on different segments within Generation Z and their intents and motivations of using in-store digital technologies, thus, there is a lack of knowledge on this area (Laukkanen & Pasanen, 2008; Thangavel, Pathak & Chandra, 2019).

As an attempt to conceptualize the expectations of in-store digital technologies in the context of Generation Z consumers, the researchers have developed an initial conceptual framework based on the combination of different theories and models presented in the theoretical review. In the initial framework below, Valentine and Powers' (2013) classification of different types of consumers and their belonging characteristics are adopted and matched with the corresponding patterns of the customer journey proposed by Herhausen et al. (2019), which will form the basis of defining different segments of Generation Z. These theories will be used as overarching categories to classify our findings. The researchers further argue that it is possible to apply the theory of consumer values (Davis, 1989; Dabholkar & Bagozzi, 2002; Weijters et al., 2007) to the context of the aforementioned types of consumers proposed. The TAM values proposed by Dabholkar & Bagozzi (2002) and Davis (1989), as the most widely used and acknowledged theory in current literature, will serve as one of the criteria to segment young consumers. The researchers have chosen to use the two original determinants, perceived ease of use and usefulness, but also the suggested values of enjoyment and newness, as including hedonic values are considered relevant to determine the reasoning for using digital technologies. Weijters et al. (2007) latest additions to the model will equally be applied, as reliability and newness are expected to be relevant determinants for consumers.

The researchers argue, that personality traits and prefered shopping mode are expected to influence the level of adoption of in-store technologies, and thus the consumer values derived. Therefore, by establishing an interconnection between the types of shoppers based on their preferred shopping mode and journey (Herhausen et al., 2019) and VALS typology of Generation Y segments (Valentine & Powers, 2013), we are able to determine the prioritized consumer values and expectations of Generation Z consumers (Davis, 1989; Dabholkar & Bagozzi, 2002; Weijters et al., 2007). It is worth to highlight that the typology proposed by VALS and further developed by Valentine and Powers (2013) on Generation Z consumers. It is suggested, that this linkage of existing theories will allow to reveal an interconnection between shopping patterns, distinguishing characteristics of personality types and consumer values that are unique for Generation Z consumers.

By revealing a connection among proposed variables, the researchers will be able to challenge existing theory and present new findings. The proposed framework will be a starting point to determine values and expectations of in-store technology that are distinctive for Generation Z and identify personality traits that contribute to innovation acceptance or reluctance towards digital touchpoints. Hence, the initial conceptual segmentation framework is of adaptive nature, and will serve as a guideline for our research.

Segments based on Customer Journey	Segments based on Personality Types	Characteristics	Consumer Values
Extensive online shoppers	Actualizers	 Self-confident Receptive to new products and technologies 	NewnessEnjoyment
Store - focused shoppers	Fulfilleds	 Value Knowledge Little interest in image and prestige 	UsefulnessEfficiency
Online-to- offline	Achievers	 Image conscious Relatively affluent Attracted to premium products 	Newness
Multiple touchpoint shoppers	Experiencers	 Follow fashion and fads Spend disposable income on socializing 	 Newness Enjoyment Playfulness
Store - focused shoppers	Believers	 Slow to change habits Image conscious 	Ease of useReliable
Pragmatic online shoppers	Strivers	 Spend on clothing and care products 	Usefulness
Store - focused shoppers	Makers	 Self-sufficient Shop for comfort and durability Unimpressed by Luxuries 	EnjoymentUsefulnessEfficiency
Multiple touchpoint shoppers	Strugglers	 Concerned with security and safety Brand Loyal 	ReliabilityEfficiency

Table 4. Initial Conceptual Framework

3. Methodology

In this section, the methodological approach will be presented, and thus, how the research question expects to be answered. Then the philosophical background will be reflected upon, followed by a detailed description of the research design, including the empirical material that will be collected and analyzed. Finally, the quality of the empirical research and results will be reflected upon critically in terms of trustworthiness and authenticity and the ethical implications.

3.1 Research Philosophy

With the point of departure in social science, the researcher needs to reflect upon the chosen research philosophy, as an understanding of one's philosophical position is of great importance (Saunders, Lewis & Thornhill, 2009; Easterby-Smith, Thorpe & Jackson, 2018). Easterby-Smith, Thorpe & Jackson (2018) argue, that it enables the researcher to have a clear sense of their reflexive role in the research, and thus the ability to enhance the quality of the research. The philosophical position will influence the research question, the data being collected and the way it is interpreted. According to Easterby-Smith, Thorpe and Jackson (2018), researchers generally draw from ontological and epistemological assumptions when evolving their methodologies for compiling research. Ontology is defined as "assumptions about the nature of reality and existence", and epistemology is concerned with assumptions about "the best ways of enquiring into the nature of the world." (Easterby-Smith, Thorpe & Jackson, 2018, p. 251). In order to investigate the purpose of this thesis, the researchers have chosen to take upon a *relativist* ontology, as it is accepted that there is no single truth but on the contrary many perspectives on the issue. This research is of exploratory nature with the aim of understanding how different segments within Generation Z use digital technologies in retail stores, and what their expectations of these are. Thus, the researchers assume that there are many truths and that the outcome can vary (Easterby-Smith, Thorpe & Jackson, 2018). The exploratory approach had enabled a broad starting point in terms of studying literature related, and then narrowing down the focus when themes emerged during the empirical research. Taking upon a relativist perspective, the researchers have followed a social constructionist epistemology (Easterby-Smith, Thorpe & Jackson, 2018). This approach emphasizes that the driving force of societal reality is people, rather than objectives and external factors. Thus, this research aims to appreciate the different constructions and meanings that the observed and interviewed respondents place upon their individual experience of digital technologies in-store, rather than searching for external causes to explain their behavior. Further, we focused on identifying individual feelings and emotional positions of customers, on highlighting different perspectives within different segments of Generation Z, hence a more comprehensive understanding of the complexity of the customers has been obtained (Easterby-Smith, Thorpe & Jackson, 2018).

In order to investigate the purpose of the thesis, the researchers have applied a case study approach to the Swedish retailer IKEA, with the aim of analyzing a group of people in a particular situation, in detail (Starman, 2013). Starman (2013) suggest that case studies should focus on the environment and the context, to explore multiple perspectives of the complexity and uniqueness of a particular phenomenon in 'real-life'. The researchers seek to uncover the behaviors and attitudes of different segments within Generation Z in a real-life case, in order to gain a broader understanding of the value Generation Z impose on digital technologies. Thus, an extensive and diverse group of individuals are observed and interviewed in this study to underpin different perceptions. A case study approach applied to a retailer enabled the researchers to analyze the qualitatively complex events of Generation Z and take into account several variables precisely, hence fostering new hypotheses of their expectations towards digital technologies (Starman, 2013).

3.2 Justification for the selected case

Real-life case: IKEA

To gain a deeper understanding of the research question and investigate it in a retail surrounding to find practical implications, it was decided to apply the empirical research to IKEA as a real-life case study. The case study method is argued to be a particularly effective approach to prove the importance of the research problem, to inspire new ideas and for illustrating and implementing abstract theories (Siggelkow, 2007) One of the biggest global furniture retailers founded in Sweden, IKEA, was chosen to be a base for the case study analysis because of the following reasons.



Figure 3. Reasons for choosing IKEA as real-case study
Firstly, IKEA is one of few global retailers that have incorporated diverse in-store technology such as interactive tablets, screens, self-serve checkout counters and interactive information screens (Appendix A). Moreover, IKEA started the journey of digitization of the customer experience by blending boundaries between the online and physical in-store journeys and creating a so-called "phygital" experience. With regards to the facts mentioned above, IKEA is considered to be a rational choice to facilitate a study of how digital devices are influencing the customer journey and collect customer feedback. Secondly, one of the most significant customer segments of IKEA is aged between 20-30 years old as a result of providing access to study in-store shopping patterns and expectations of Generation Z consumers. As a global furniture retailer that is present in 50 markets, IKEA serves as a universal case study environment. Due to the fact that IKEA maintains the same store concept, layout, design and in-store technology, findings of the case study at IKEA Sweden can be applied not only to other IKEA branches but potentially also other retailers. Finally, a case study based on IKEA provides a convincing basis for expanding the existing theory on Generation Z and their expectations and barriers of adopting in-store technology.

The IKEA store offers the following attributes and digital technologies:

- Cafe and restaurant area
- Play area for kids
- Marketplace
- Free Wifi
- Showroom
- Warehouse
- *Interactive in-store screens* (See Appendix A): there are several different tablets with different functions; register for IKEA Family membership, information on upcoming events, store and product information, navigation help and the opportunity to create own personalized design for e.g. wardrobes.
- Self-service checkouts
- *IKEA applications:* IKEA app enables to organize your shopping list, find store location, scan products in-store with QR codes and access IKEA Family Card; IKEA Home Smart app enables to design your own atmosphere at home and control lighting and music via their system; IKEA Place app enables to virtually decorate your home with Augmented Reality (AR).

3.3 Research Design

The following section will include the research design of this study. The research design justifies what data is to be collected, how and where from. Furthermore, how the data is proposed to be analyzed and how it will provide answers to the research question (Easterby-Smith, Thorpe & Jackson, 2018). We have carefully considered which research approach was most suitable for the purpose of this thesis and the knowledge gaps in the existing literature.

Thus, we agreed to proceed with a qualitative research approach, using observations, field interviews, and in-depth interviews to investigate the purpose further.

Qualitative research is appropriate in this case, as present knowledge and theory within the area of interest are inadequate, and this type of research allows to reveal findings that are often missed when using positivistic inquiries. The main area of interest has been to determine the expectations of Generation Z' towards digital technologies in physical stores, as well as investigating different segments within Generation Z. Hence, we chose to apply a non-numeric approach with the interest of revealing underlying behavior and motivations of the target audience concerning the topic. This approach allows the researchers to be intimately involved, however, flexible in the research process (Easterby-Smith, Thorpe & Jackson, 2018). In short, we sought to focus on depth rather than breadth, as there is a lack of nuanced insight into this topic. By combining observations, field-interview and in-depth interviews, we were able to triangulate the data collected by firstly observing how Gen Z interacts with digital technologies in a real live setting, asking follow-up questions in the same setting, followed by in-depth interviews that allow to prove or disprove the findings. Overall, this research approach has provided a profound understanding of Generation Z and uncovered unique customer insights.

The research approach is dependent on the research question and also on the extent to which this topic is researched in the academic literature (Saunders, Lewis & Thornhill, 2009). With regards to the three types of research approaches - deductive, inductive and abductive, the researchers chose to follow the abductive approach. The deductive approach is based on utilizing existing literature and testing this theory (Saunders, Lewis & Thornhill, 2009). Since the focus of this research is Generation Z consumers and their in-store shopping behavior, it is difficult to test an existing theory, or a framework based on the existing finding due to the unresearched state of this topic and foremost focus on Millennials in the existing literature. On the one hand, the decision to apply only the deductive approach would be irrational.

On the other hand, Saunders, Lewis and Thornhill (2009) define the inductive approach as developing a theory based on the collected empirical data, its analysis and as a result contributing to the existing literature. Due to the limited number of academic research available on Generation Z customers and their shopping patterns, there is an opportunity to contribute to the existing academic literature. Following the inductive approach in the research, it would facilitate collecting data and generating a framework based on the analysis of this data. However, the lack of reliance on existing theory or frameworks while collecting data may result in false-positive findings. After careful consideration of the advantageous and disadvantageous of both approaches, the abductive research method was chosen because of the following reasons. The *abductive* approach is defined as a combination of inductive and deductive aspects: deductive logic arises from theory, and inductive aspects are derived from empirical material (Patton, 2002). It allows us to contribute to the existing literature by proposing a new theory based on the collected data but also with the consideration of the existing theories. The research conducted has, therefore taken upon an abductive approach, which is defined as going back and forth between data and theory. The prior conducted literature review on the research topic has helped to establish a profound basis for designing the data collection process. The

theory development is then based on empirical observations and vice-versa, thereby influencing each other.

3.4 Data Collection Method

The researchers have, as mentioned previously, chosen to imply a research approach of qualitative nature in order to explore the purpose of the thesis. The exploratory approach was applied because of the few existing pieces of research on the in-store shopping behavior of Generation Z. Taking into consideration the exploratory nature of the research, various qualitative data collection techniques were applied in order to ensure that data is broad and represents diverse angels of the researched phenomenon. Consequently, in order to increase the accuracy and make the results of the observation more reliable, more than one method was used - observations complemented by field interviews and in-depth interviews. According to Easterby-Smith, Thorpe and Jackson (2018), the benefits of observational research include a better understanding of customers behavior in the specific environment and the context within which people interact. Moreover, it offers a firsthand experience with the environment that surrounds participants, rather than guessing what the context is like, it allows to observe people unobtrusively and gather data that respondents might be unwilling to bring up in an interview or focus group. Moreover, since the main focus of this research is not only in-store customer behavior of the Generation Z but also their attitude towards in-store technology, it is vital to observe these consumers in a "real" retail environment to collect data, firsthand. In order to gain a profound understanding and deepen the knowledge of what the consumers' expectations are of in-store technologies, a qualitative research method is an effective way to collect "soft facts" such as customers' beliefs and attitudes toward in-store experience and their values of the in-store technology.

For the chosen research question, observations complemented by short field interviews and indepth interviews have been chosen by researchers to be the most appropriate approach because of the following reasons. Observations will serve as a starting point of the data collection process to observe a retail setting from the consumer perspective, customers' interaction with available in-store technology as well as personal digital devices. While observing, customers of the target age will be asked to participate in the short interviews. Having the opportunity to prove the responses by observing their in-store behavior is especially valuable in terms of revealing true motivations to either use in-store digital technologies or reasons for reluctance. Such combination of personal interaction and real-time observation enables to delve deeper into the Generation Z motives for coming to the brick-and-mortar store, their attitudes towards digitalization of the store, as well as allow the researchers to collect various ideas and experiences (Krueger & Casey, 2009).

Before proceeding into the chosen research techniques, the *preparation phase* will shortly be elaborated. Firstly, the existing research and literature on Generation Z, their shopping behavior and expectations of digital technologies were screened and analyzed in order to get a basic understanding of the particular area. This attributed to the localization of knowledge gaps

in the field, that could be investigated further in the thesis. The knowledge obtained from this helped to develop questions for the in-depth interviews, field interviews and the focus of the observations at IKEA. The empirical data collection was initiated with observations and field interviews. Thus, this also provided insights and gave rise to new areas of interest, that could be investigated further in the in-depth interviews. After finalizing the first draft of the interview questions, we sent it to our thesis supervisor, with the interest of getting some useful feedback to enhance the quality further.

Additionally, the interview questions were tested to ensure that it led to an exciting dialogue and enabled a fruitful conversation. Finally, it is essential to mention that the current world situation with the pandemic of COVID-19, has influenced how the data collection has proceeded. As it has been challenging to execute physical interviews with participants, due to the government restrictions and recommendations, the majority of the in-depth interviews have been conducted online using Zoom or Skype. Nevertheless, all interviews have been conducted with webcam to be able to observe body language and reactions, to ensure high quality and proper interpretation of responses. The observations were also affected by the situation, thus fewer people were out shopping and more skeptical about having close contact, which we have, of course, taken into consideration in the quality of the research. The chosen research techniques will be described in detail in the following section.

3.4.1 Observation

Observations at IKEA in Malmö Hyllie and IKEA in Helsingborg, Sweden, were conducted as the first research step of the data collection, in order to observe and study the shopping behavior of Generation Z right on-site. The purpose of observing customers was to determine at what stages of the shopping journey they were interacting with digital devices, how long the interaction process was, what their primary objective of interacting with in-store technology was and whether their goals and needs were achieved. In terms of conducting observations, the researchers have chosen the role of "Observer-as-participant" that presupposes asking questions, while not influencing the experience of customers under the study (Easterby-Smith, Thorpe & Jackson, 2018). The researchers sought to act as regular customers, interacting with products and not intervene or stalk customers and make them feel uncomfortable. It, in turn, enabled the researchers to gain insights and further knowledge into the targets shopping behavior and helped determine areas that could be investigated further in the in-depth interviews. Carrington, Neville and Whitwell (2010) argue that people do not usually "walk their talk" since customer behavior is a quite complex and unpredictable phenomenon. If comparing focus groups and observations as research methods, during focus groups, customers tend to fake their answers and give more common and anticipated replies, as a result behaving entirely differently in the real retail environment. Easterby-Smith, Thorpe and Jackson, (2018) state that such behavior of observed customers may be a result of physical presence or stimulating effects of other respondents in the focus group, and therefore, people agree on specific statements in order to 'fit in'. Hence, the researchers decided to conduct observations

to get a realistic view of the current state of the retail environment and gain unbiased responses, and thus elaborate on the findings with field interviews and in-depth interviews.

The observations were conducted in two stages. Conducting two observations is considered valuable since it allows to test the observation plan, observed place and type of observation. The first observation was therefore conducted at IKEA Hyllie, Thursday 20th of February between 10 am - 2 pm on the first and second floor of the store. During the observation, 44 customers in the target audience were observed while they were shopping. The purpose of conducting the study was to observe if and how the target audience interacted with digital technologies in the store (Appendix A), and if they relied on other digital devices as smartphone etc. while shopping. Therefore, we made our observations close to the different digital interactive screens and tablets around the store and circled these specific areas to observe the behavior. During the observation, the researchers aimed to collect data in four main areas of the store: entrance, showroom, market and ground floor and besides shopping area, also checkout zone. While observing, the researchers were talking notes of how often customers approached digital devices and for what reasons. Moreover, the researchers paid attention to the emotions and gestures of the observed customers.

The second observation was conducted at IKEA Helsingborg, Sunday 22nd of March between 10 am - 2 pm. Approximately 40 people of the target age were observed. At this point, it was clear for the observers that the current pandemic situation (COVID-19) had gained its impact, resulting in fewer people out shopping. However, it mainly impacted the presence of the elderly, who are at high-risk, so it was still possible to observe the target audience. This time, the main objective of the observation was to observe how customers behave and interact with in-store technology in more complex product category sections as sofas, kitchens and wardrobes. Such parts of the store as the entrance to the showrooms, entrance to the cafeteria and check out were of tremendous importance because these areas are packed with interactive tablets and screens and self-checkout machines. It was decided to observe whether customers stop to interact with these devices and what their purpose is.

In order to document the observation, the diary method has been applied (See Appendix B). Diary methods enable a simple journal or record of events, a rich qualitative picture of motives and attitudes from the perspective of the observed. The advantages of using this method when conducting an observation are that it allows the researchers to collect other relevant data while the study is in progress and enables to gain insights into the perspective of different individuals (Easterby-Smith, Thorpe & Jackson, 2018). Further, during the observational research, field notes were taken. Notes consisting of time, place and respondents details were taken on the observers cellphones in order not to irritate and annoy customers both when observing them and asking questions. The researchers were trying to take as detailed notes as possible not to miss any detail that might be perceived unimportant from the first sight but be crucial for the final result. The emotions of observed and interviewed customers were also written down. Mainly qualitative research in social and cultural settings is experienced subjectively. Thus, the quality of the data gathered is intimately related to the relationships the observer can

establish with observants in the field (Easterby-Smith, Thorpe & Jackson, 2018). Hence, the researchers sought to openly acknowledge both the subjective and objective aspects of the research and capture the interplay of different elements.

3.4.2 Field interviews

To collect maximum insights from the observation, the researchers decided to proceed with field interviews, in addition to conducting the observations. Moreover, since the observations were conducted in the "Observer-as-participant" mode, it presupposes asking questions, while not influencing the experience of customers under the study (Easterby-Smith, Thorpe & Jackson, 2018). The main aim of conducting field interviews was to complement and support the observation findings and gain more insights into the customers' behavior and factors forming their customer journey and influencing their choices in a real-life setting. Additionally, it enabled to uncover some of the ambiguities of how the customer truly feels about digital technologies when being in the store. Having regard to the different types of interview styles and with careful consideration of advantageous and disadvantageous of these, the researchers have chosen to conduct structured interviews during the observations. According to Yin (2015), structured interviews presuppose a careful script of the interaction between interviewer and the participant. Since the field interviews involved interaction with customers in the middle of their shopping experience, the interaction process should be short and precise in order to not distract interviewed too much from their shopping and speak only straight to the point. For these purposes, structured interviews that consisted of five closed-ended questions and two open questions with short responses were decided to be a rational choice. The questions were designed in four areas: persona, preferred approach to shopping (online/offline), usage of digital devices in IKEA, main reasons/motivations, attitude towards in-store technology, and feedback on in-store experience (See Appendix C). While asking about customers' intentions to use in-store technology and what they are aiming to achieve, the researchers were categorizing the responses based on the values of in-store technology described in the previous section: perceived ease of use, usefulness, fun, enjoyment, newness, reliability, and usefulness.

The respondents were limited to a set of responses for the closed-ended questions that involved two short response based on their shopping habits. The field interviews were lightly structured, since it was dependent on the customers' behavior and thus allowed the observers to alter the questions based on the context and customers actions. While observing customers, researchers were asking customers for interviews, who were either using in-store technology or approached it to get assistance but have not succeeded.

The field interviews were conducted in two stages simultaneously with the two observations. Hence, one observation was conducted in February at IKEA Hyllie and one observation in March at IKEA Helsingborg. Six respondents were interviewed during their shopping experience per observation, according to predetermined criteria. The interviews took place on the second floor, to be in the shopping atmosphere, and lasted about 3-5 minutes per person, depending on the amount of information the respondent was willing to share. The first question

concerned the profile of the respondent, the following the usage and interaction with digital devices in-store, and lastly the general perception of the shopping experience at IKEA. It requires various skills to conduct an interview, and especially understanding the point of view of the interviewees is essential (Easterby-Smith, Thorpe & Jackson, 2018). Thus it was important for the researchers to be perceptive and sensitive to events, and refrain from projecting one's own opinion, in order to obtain trust. The interviews allowed respondents to express in their ways and pace, share current experience and thoughts with minimal guidance from interviewers (Jamshed, 2014). When interviewing respondents, it was essential to explain the project to gain their trust and make them feel comfortable so that they felt they could answer honestly. Further, the ethical aspects have, of course, been considered, and all respondents have been informed of the project scope before answering and have given the researchers their consent to participate.

3.4.3 In-depth interviews

To gain a profound understanding of the expectations of Generation Z consumers and find explanations for findings gained from observations, the researchers decided to employ in-depth interviews with the representatives of the chosen target group. Holstein and Gubrium (2003) argue that qualitative interviews are likely to be the overwhelmingly dominant mode of interviewing in qualitative research. Some of the benefits of conducting interviews are that they add a human dimension to impersonal data and allow to clarify ambiguities, that cannot be explained with statistical data (Easterby-Smith, Thorpe & Jackson, 2018). The empirical data was collected using a semi-structured interview guide with open-ended questions. It aimed to allow flexibility and to enable the researcher to challenge the participants, which is difficult with a completely predefined order of questions (Easterby-Smith, Thorpe & Jackson, 2018). This was particularly relevant for this research, as the researchers strive to gain deeper insights into the different perspectives of Generation Z. Moreover, the interview guide was designed based on findings from the observations and field interviews as well as existing literature and was pre-tested for relevancy in relation to the research question. A pilot interview was conducted before the actual interviews, in order to obtain feedback and enhance the formulations and thus ensuring clarity in the flow of questions asked.

The interviews were conducted to be easily accessible for the respondents via Zoom or Skype and with a comfortable and relaxed setting of their choosing. A total of 14 respondents were interviewed and lasted between 17 to 35 minutes. The researchers applied an interview guide, including predetermined themes, that ensured that all-important areas would be covered during the interview (See Appendix D). The questions were categorized in the following blocks: *personality, shopping behavior, attitude towards digital technologies, usage of IKEA in-store technology*. These themes aimed at drawing information from the participant's personal experiences on digital technology in stores and their expectations of these. The first block aimed to define a persona type from the aforementioned VALS segments (Valentine & Powers, 2013) (actualizers, fullfilleds, achievers, experiencers, believers, strivers,

makers, and *strugglers*) by asking questions about the interviewee's personality, traits and behavioral patterns. The answers had the aim of facilitating categorization of respondents based on their personality type. Question blocks regarding the attitude towards and usage of in-store technology aimed to gain an understanding of the values that act as determinants of the usage of digital technologies. The initial conceptual framework thus serves as a guide for segmenting the consumers with our interview questions.

To ensure the informative outcome of the in-depth interviews and a valuable contribution to the research, the interviewers followed the following techniques proposed by Yin (2015). Firstly, it was important to speak less than interviewees and instead of asking yes/no questions, encourage a monologue on their part. To maintain the flow of the conversation, the interviewers were asking follow-up probes and questions that were prepared in advance by authors. Secondly, while interviewing, it was essential to be non-directive and provide an opportunity for interviewees to express their thoughts freely without guidance. This approach helped to reveal crucial insights of the interviewee's shopping behavior and expectations. Thirdly, to avoid conformational biases, the interviewees were not expressing their own opinion not to affect subsequent participant response (Yin, 2015). Moreover, in order to ensure the maximum value of the conducted interviews, the researchers were simultaneously analyzing responses and deciding when to ask follow-up questions for more detail, when to shift question blocks, and when to alter from agenda to gain deeper or new insights. Finally, the researchers decided to start rather general with broad questions about their personality, shopping behavior and usage of digital technologies and then funneled it down to be more specific concerning IKEA.

Having regards to the fact that most respondents were of diverse nationalities, the rational decision was to conduct interviews in English instead of the native language. Moreover, it allowed ensuring transparency and accessibility of the collected data. The interviews followed ethical guidelines in terms of 'informed consent', 'anonymity' and 'honesty' (Easterby-Smith, Thorpe & Jackson, 2018). No notes were taken during the interviews, in order to not distract the respondents from talking freely and for the researcher to concentrate all attention on what is said. With the participants' consent, the interviews were audio-recorded to increase the accuracy of the empirical data since it permits the interviewer to be more attentive to the participants.

Data Collection Method	Obser- vation 1	Field Inter- views 1	Obser- vation 2	Field interviews 2	Test in- depth inter- view	In-depth Inter- views
Date	25.02.20	25.02.20	22.03.20	22.03.20	05.04.20	06.04- 14.04.20
Location	IKEA Hyllie	IKEA Hyllie	IKEA Helsing- borg	IKEA Helsing- borg	Face - to - face	Zoom/ Skype
Time spent	5 hours	5 hours	6 hours	6 hours	30 minutes	17-35 minutes each
Participants	~ 50 IKEA custome rs between 18-25 y.o.	6 IKEA custome rs between 18-25 y.o.	~ 40 IKEA custome rs between 18-25 y.o.	6 IKEA customers between 18- 25 y.o	1 inter- viewee	14 inter- viewees

Table 5. Summary of Data Collection Methods

3.5 How respondents were chosen

The research aimed to contribute to the level of knowledge of different segments within Generation Z, their expectations of digital technologies in retail stores, and the main drivers that entice or oppose customers to using these devices. Thus, the respondents were selected according to predetermined criteria for inclusion in order to ensure obtaining relevant and insightful findings. The chosen sampling technique applied in the research was a combination of *convenience* sampling and *purposive* sampling, where potential sample members needed to meet eligibility criteria but were easily accessible (Easterby-Smith, Thorpe & Jackson, 2018).

Thus, these non-probability techniques allowed the researchers to interview individuals depending on their age and their familiarity with the IKEA store. For the observation and field interviews, the respondents were chosen based on the aforementioned. In terms of the in-depth interviews, the *convenience* technique facilitated screening and recruiting of the respondents by using personal contacts in Lund University and social networks as Facebook. Furthermore, the respondents for the in-depth interviews were then selected depending on pre-selected criteria and rejected if they did not meet these. The respondents could be of any gender, but

should be 1) aged between 18-25, 2) living in Sweden, and 3) have visited an IKEA store before. The age played a crucial role, in terms of researching the purpose of the thesis, which is to investigate the expectations of Generation Z that are the future customers of retailers. Additionally, the researchers chose to narrow the geographic area to people based in Sweden for practical reasons. Finally, the study aimed to select respondents who were familiar with shopping in physical retail stores in general and were familiar with IKEA's store concept, since the in-depth interviews included specific questions related to IKEA.

Number	Name	Gender	Age	Nationality	Interview duration
1	Jacob	Male	25	Danish	24 minutes
2	Tristan	Male	25	Danish	32 minutes
3	Catalina	Female	25	Romanian	35 minutes
4	Maria	Female	24	Ukrainian	20 minutes
5	Cecilie	Female	25	Danish	29 minutes
6	Nanna	Female	24	Danish	26 minutes
7	Fenja	Female	25	Finnish	24 minutes
8	Nanna	Female	25	Danish	28 minutes
9	Anja	Female	24	Swedish	29 minutes
10	Volodymyr	Male	22	Ukrainian	29 minutes
11	Fabian	Male	25	German	33 minutes
12	Sarah	Female	24	Swiss	28 minutes
13	Sandra	Female	24	Danish	17 minutes
14	Michael	Male	25	Argentine	18 minutes

Table 6. Overview of respondents of in-depth interviews

To ensure a wide diversity of perspectives, different nationalities and a variety of individuals were included in both observations, field interviews and in-depth interviews. The number of individuals observed and interviewees was determined based on data saturation, as suggested by Glaser and Strauss (1967). They claim that this level is reached when no new information is discovered, and thus the researchers have achieved enough data to achieve their research purpose. In our research, the saturation was reached with 100 observed and six interviewees per observation, and 14 in-depth interviews. Hence, the researchers believe that the sampling sizes have been sufficient for the purpose of this research and has enabled to draw some useful findings regarding underlying behavioral patterns of the target audience.

3.6 Analysis of empirical data

After presenting the data collection methods, the way in which the analysis has proceeded will be elaborated. Since three different research methods were applied in the study at different stages, the researchers extended their knowledge continuously over several weeks. Thus, the data collection and analysis were not separated fully from each other but conveyed in sequences (Easterby-Smith, Thorpe & Jackson, 2018). As the research is of exploratory nature, it has been important to consider the different perspectives of the individual participants. Thus, the analysis of the data was initiated by organizing and transcribing the recorded audio of respondents from field interviews, and by converting the field notes from observations, since these findings were needed in order to design the in-depth interview guide. This procedure has been beneficial in terms of proving or disproving findings that have been captured in observations or field interviews, and in order to analyze the knowledge gap. Thus, the researchers have conducted a pre-analysis during the whole data collection process before initiating the main analysis of the research outcome. The data has then been analyzed using thematic analysis, by identifying relevant themes, patterns and relationships within the transcripts, and dividing them into categories to be analyzed (Easterby-Smith, Thorpe & Jackson, 2018). This method has been helpful in linking the research findings to the research problem and derive conclusions from this and allowed the researchers to summarize and synthesize the data, and to identify the similarities and highlight the contradictions more accurately.

In line with an abductive approach, the final analysis aimed to both develops new theory and knowledge based on the collected empirical material whilst considering prior literature on the subject (Easterby-Smith, Thorpe & Jackson, 2018). Furthermore, when analyzing the data, the researchers applied a cross-perspective, which enabled to interlink and emphasize underlying relationships between the different empirical data. The researchers strived to include different perspectives and attempted to be critical to the outputs, and reflect upon how the choice of respondents and setting could have affected the results, as well as how to contribute with new knowledge to the field.

3.7 Quality of study

In order to produce high-quality research, it is of crucial importance to ensure that both the research process, data collection and findings of the study are "relevant, credible and attractive to others" (Easterby-Smith, Thorpe & Jackson, 2018). Easterby-Smith, Thorpe and Jackson (2018) argue that the quality of research mostly depends on the researchers' approach, whereas reflexivity and transparency are key factors of proposing qualitative research. In particular, the word trustworthiness is of high relevance in relation to the quality of qualitative study results (Easterby-Smith, Thorpe & Jackson, 2015). It can be difficult to assure and demonstrate the quality of qualitative research in general, as it relies on other criteria than reliability and validity. The most cited system of quality criteria for qualitative research has been developed by Lincoln and Guba (1985). They advocate five key concepts that can be used to assess the quality of qualitative research: credibility, transferability, dependability, confirmability and authenticity (Lincoln & Guba, 1985; Treharne & Riggs, 2015). Additionally, Treharne and Riggs (2015) suggest that personal reflexivity and end-user involvement; the transferability of findings; and triangulation of data sources are three facets that also need to be considered to ensure quality in qualitative research. The concepts of Lincoln and Guba (1985) will firstly be reflected upon in the following.

The *credibility* concept concerns if the findings of the research fully represent the experience of the respondents (Treharne & Riggs, 2015). In line with a constructionist approach, the credibility of the research is ensured by triangulating the data collected. As the researchers employed different methods and data sources to generate findings, it enabled to include various perspectives, and hence minimize credibility issues. Further, the credibility is enhanced as the research is conducted by two researchers who together have prepared, collected and analyzed the empirical data (Easterby-Smith, Thorpe & Jackson, 2018).

Transferability concerns if the findings are applicable in other contexts that have not been investigated in this thesis (Treharne & Riggs, 2015). The researchers have described the applied sampling method and data collection process in detail; thus, the study facilitates comparisons with other studies. Additionally, other researchers can transfer the outcomes to other studies within the same area of interest. In terms of generalizability, the sample size of the data collection methods is simply insufficient in order to draw any general assumptions, however, useful for enabling effective analysis of behavioral patterns and for supporting further investigation (Treharne & Riggs, 2015). With triangulation of the data (observations, fieldinterviews, in-depth interviews) the research facilitates a thick description of the Generation Z expectations of digital technologies in retail stores. However, by focusing mainly on one particular retailer in this research, the findings will not necessarily be applicable for retailers in general. The researchers considered a detailed exploration of the phenomenon to be of greater importance rather than statistical generalizability. Nonetheless, generalizability is not an objective for qualitative research but rather aims at internal generalizability, which concerns explaining what has been researched within a given setting (Easterby-Smith, Thorpe & Jackson, 2018).

Dependability relates to the aspects of the reliability of the research and the possibility to replicate (Treharne & Riggs, 2015). The researchers aimed to generate reliable and well-audited findings, thus, every phase of the research process was documented to ensure substantial documentation and honesty in the research. The documentation included oral records, written notes and pictures taken during the observations, field-interviews and in-depth interviews. Lincoln and Guba (1985) argue that the notion of auditing is a criterion for obtaining dependability. Therefore, it can be argued that dependability has been sustained in the research process. Nonetheless, the researchers ought to influence the research due to the close involvement, and thus it would be impossible to replicate completely. As suggested by Easterby-Smith, Thorpe and Jackson (2019), the value of qualitative research is found in its uniqueness, hence qualitative research is rarely replicable.

Confirmability refers to the objectivity of the findings, hence, if the outcomes are influenced by the researchers' bias, motivations or interests (Treharne & Riggs, 2015). Lincoln and Guba (1985) argue that it can be difficult to avoid any kind of bias of the researcher due to the background and experience of the researcher. It must be acknowledged that the researchers have certain backgrounds, norms and values that would evidently affect the objectivity. Nonetheless, the researchers attempted to be neutral both when conducting research and while interpreting results. We strived to not intervene too much in the interviews and not express our individual perspectives or views that could influence the outcome. Further, the interview questions were open and flexible so that the respondents could express themselves freely and thus avoid being biased. Nevertheless, qualitative research is subjective by nature, as interpretation is personal and cultural, hence the research conducted has been somewhat affected by researcher bias (Easterby-Smith, Thorpe & Jackson, 2018).

This leads to the last concept, *authenticity*. This concept involves convincing the reader that the researcher has an in-depth understanding of what has taken place in the research (Easterby-Smith, Thorpe & Jackson, 2018). Easterby-Smith, Thorpe and Jackson (2018) claim that a high level of authenticity of the research could be achieved with a profound understanding of the researched topic and theoretical background of the study area. To ensure the authenticity of the research, the researchers conducted a thorough analysis of existing literature to familiarize with existing theories and approach the research question from different perspectives. Hence, in order to eliminate the risk of presenting one-sided findings, several data collection methods were chosen, such as observations, field interviews and in-depth interviews. The implementation of various methods allowed to explore the researched phenomenon from three angles and deepen authors' and readers' understanding of the presented ideas and findings.

Besides the aforementioned, it is also important to highlight other factors that might have influenced the quality of the research. Firstly, applying a case study approach to IKEA has facilitated a relevant investigation of the purpose in a real live retail setting, nonetheless, it also causes certain limitations. It is evident that by focusing on one particular retailer, the transferability of the findings and insights to other retailers can be impeded, as it might be a different outcome if studying other retailers. Thus, it can be difficult to derive findings that can

be applicable to retailers in general. Moreover, the outcomes and results of the conducted research may have been influenced by the current world situation of a pandemic (COVID-19), which has caused difficult circumstances for conducting qualitative physical research. Fortunately, the observations and field-interviews were conducted prior to the lockdown of many countries and was therefore not largely affected by this. However, it was evident that the observed were more skeptical about closing contact and practiced distancing, but it did not seem to influence their behavior towards digital technologies. The in-depth interviews were due to the situation compelled to be online, which could have affected the quality due to internet issues, poor video quality, response time limitation. However, by using platforms like Zoom or Skype, the interviews were of sufficient quality and made it possible to have an in-depth conversation and capture the body language of the participants. Treharne and Riggs (2015) emphasize the importance of transparency in demonstrating a match of the research questions, methods, findings and how the researchers have addressed reflexivity. The researchers have strived to keep regular journals of reflections and notes, to address personal reflexivity, and further practiced ongoing revision of the thesis in order to ensure relevancy. The research conducted in this thesis is argued to be authentic and believable, as the researchers have carefully explained the process of collecting the data, how it has been analyzed and how conclusions have been drawn.

3.8 Ethical and Political Implication

If considering the fundamental principles of research, one should pay exceptional attention to "ethics" since the process of crafting qualitative data may give rise to ethical issues. While conducting this research, the researchers were following ten principles of ethical practice proposed by Bryman and Bell (2011). The majority of principles presuppose the protection of research interests and interests of respondents as well as ensuring transparency and accuracy of the research findings to eliminate the effect of bias. The first group of principles are associated with the protection of research participants. During observations and process of recruiting interview participants, the researchers ensured that observed customers and interviewees were treated with respect to their dignity, personal space and their thoughts.

During the recruitment process for the in-depth and short field interviews, respondents were informed about the purpose of the study, the time required, and professional background of researchers for the reasons of transparency and integrity. The researchers also addressed such ethical aspects as confidentiality and privacy of participants. respondents were informed that all collected responses would be kept confidential. After giving verbal consent to participate in the in-depth interviews, respondents stated their agreement to participate in the study and to be audio recorded and maintaining anonymity while analyzing and presenting data.

While conducting the fieldwork, the researchers have not asked permission from IKEA store managers to perform observations. Since the researchers did not interfere with the store operation, and only observed customers and available in-store technology from a distance, there were no need to seek assistance or approval from the IKEA administration. When

recruiting IKEA shoppers for a short interview, the researchers ensured that customers expressed freely their consent to participate in the study. It was of crucial importance to avoid any form of harm to the environment and respondents during observation process (Easterby-Smith, Thorpe & Jackson, 2018) During the field interviews, the researchers maintained friendly attitude with the respondents in order to ensure comfortable and engaging atmosphere to share personal opinions and insights.

4. Analysis and Findings

In this section, the results derived from the empirical data collected through observations, field interviews and in-depth interviews will be presented and analyzed to investigate the expectations of Generation Z consumers' towards in-store digital technologies. In order to provide a clear understanding, the analysis of the findings will be initiated with a short description of the complexity of the in-store digital technologies provided at IKEA. Subsequently, the findings from the empirical data collected will be presented according to the theory in our initial conceptual framework (Table 4).

4.1 Findings from empirical data

The first section will consist of a short evaluation of the complexity of the digital technologies IKEA offers. Then the researchers will reflect upon the consumer values concerning the usage of digital technologies at IKEA from previously found literature - *ease of use, usefulness, fun and enjoyment, newness, reliability*. Finally, this will lead to a section concerning the expectations of Generation Z in terms of digital technologies at IKEA, where we have unveiled new insights by identifying new values.

4.1.1 IKEA in-store digital devices

The empirical material was gathered at IKEA Malmö Hyllie and IKEA Helsingborg, in order to provide a convincing basis for expanding knowledge within the subject of Generation Z in a relevant environment. In order to initiate the analysis of the findings, the digital devices available and their level of complexity will be shortly elaborated. The IKEA store features several different types of digital technologies to enable a smooth and simple shopping trip. The showroom area is spacious and arranged according to different categories, with different digital technologies integrated during the shopping trip (Appendix A). In line with the different steps in the customer journey, IKEA has integrated different in-store digital technologies to enable an enhanced shopping experience.

The first type of digital technology customers are exposed to are digital interactive screens, facilitating store and product information, navigation, enabling registering for IKEA family card or personalization of products. During the observation, we noticed six stands with digital screens throughout the store, which is further explained in detail in Appendix A. It could be argued that the primary purpose of this technology is to provide detailed information on the products available and enhance the in-store experience for customers. These interactive screens are suggested to be rather complicated and require more involvement from consumers if the consumers are new to the devices and not aware of their specific functions. Moreover, there are self-service checkouts with the function of enabling convenient, fast and automated payment. It can be claimed that this type of technology is relatively basic and hence, does not involve that much complexity, as many consumers are used to using these types of devices

when shopping at other retailers. Besides the in-store technologies, IKEA provides different applications that customers can download in order to feel more informed and blur the lines between online and offline experience. The IKEA app provides product and store information and enables to make a shopping list before visiting the store, the IKEA Home Smart app enables a system to control lighting and music at home, and the IKEA Place app facilitates augmented reality (AR) options where the consumer can see products true-to-scale and can virtually place products in their own space using only their mobile phone. These applications require a higher level of involvement, as consumers need to create an account and give away personal information, in order to access the function of the applications. Furthermore, consumers may find it challenging to learn how to use and manage several different mobile applications for different retailers, thus, it can be suggested that the applications encompass a higher level of complexity.

It can be suggested that the consumers' perceptions of ease of use, usefulness, relative advantage and enjoyment will influence the adoption and usage of the digital technologies at IKEA. Furthermore, the consumers' perceptions concerning the complexity and risk associated with the digital technologies will influence the level of adoption. Generation Z' consumers' usage of and interaction with the technologies mentioned above have been the primary inquiry of the empirical data collected and will be elaborated in the following section.

4.1.2 Usage of digital technologies at IKEA

4.1.2.1 Perceived ease of use

There were different views on the perceived *ease of use* of the in-store technologies at IKEA. Some interviewees indicated that they were not particularly content with the ease of use of the in-store technologies at IKEA, which could mainly be referred to the fact, that the interviewees were not aware of the available in-store digital devices such as tablets, interactive screens and other available assistance. Thus, the ability to access the functions of the digital technologies were not effortless and *easy to use*.

"Never noticed in-store devices in IKEA" (Fenja)

"I didn't know that these devices exist. I have never noticed it" (Sarah)

"I only saw it in the IKEA museum. I never recognized these devices when I was at the store" (Fabian)

This was further supported by the same respondents expressing their concerns about the lack of information about the in-store technology existence, including their functions, in-store location, and possible benefits for users. These concerns were especially emphasized in regards to the interactive screens and IKEA applications, whereas the self-service checkouts were perceived as easy to use. From the empirical observations and field interviews, we also deducted a low level of adoption of the digital interactive screens and IKEA applications instore amongst the target audience. It was observed that the target did not use or interact with the digital interactive screens, and did not seem to be very enthusiastic or willing to try the digital signage. Additionally, the observed consumers did not seem to notice the digital interactive screens and did not seem to be searching for them either, indicating that the devices were not perceived as easy to access. The field interviews further implied that the respondents were slightly skeptical and hesitant when discussing the usage of the digital devices in-store, due to the lack of personal knowledge and familiarity. It can be suggested that the interviewed consumers, who are considered to be a tech-savvy generation, are not adequately informed about the availability and benefits of the in-store technologies at IKEA to the extent that encourages them to try it out. It further indicates that Gen Z' consumers who are new to a specific technology require help or additional information in order to understand how a digital device works.

"Though it was rather easy to use, you just needed to try it out" (Nanna R.)

"Yes, pretty user friendly. You can swipe through all categories and see if there is anything interesting" (Sandra)

As opposed to the aforementioned, some of the respondents who had accessed the digital interactive screens in-store and the IKEA applications, perceived the devices as being somewhat easy to use, as illustrated with the above quotes. This can be explained by the fact that the interviewees had tried the devices several times, thus, feeling more comfortable and familiar with how to use it. The interviewees mentioned that the devices were not complicated to access, and were user friendly as you could quickly look through different categories and find product and stock information. Nevertheless, another respondent who had tried the digital interactive screens claimed that they were slow and not easy to use, which lead him to seek assistance from sales personnel. This is also supported by another respondent who mentioned that the devices were confusing to use, as they were providing misleading information. Thus, the digital interactive screens were disregarded as they were associated with being time-consuming, confusing and not enabling a smooth experience.

"I have tried using tablets to search for products, but it was too slow, and I asked a sales guy anyway" (Volodymyr)

This implies that there are different views of the technologies *ease of use*. The findings further indicated that the interviewees preferred to seek assistance from sales personnel instead of referring to available digital devices as interactive screens or the IKEA applications, in order to get interaction. Some comments suggested that especially the interactive screens did not feel easy to use, and not enabling for an enhanced shopping experience, thus, it was more comfortable to ask in-store personnel. Furthermore, the respondents implied that they valued the interaction of talking to real human beings. This is also evident, with the below statements concerning whom the interviewees would refer to if in need of assistance in-store.

"Prefer personal services instead of in-store technology - it creates a better experience" (Catalina)

"I would ask a person instead of using technology to get interaction" (Maria)

"Last time I went there I just went to a physical guy and asked him for help. I didn't really know how else to do it" (Sandra)

These statements could be an indication that consumers who are not aware of how to access a specific new digital technology, are somewhat reluctant to adopt it due to its complexity and the involvement required to understand how to operate the device. Thus, leading them to seek personal assistance instead. There were different perspectives on the ease of use of the digital technologies in-store at IKEA, nonetheless, it can be suggested, that the perceived ease of use is to some extent a result of how familiar and comfortable the consumer is with the specific type of device. This was especially evident, as the self-service checkouts were perceived as being easy to use, as they did not involve newness, complexity and uncertainty, compared to the digital interactive screens which were perceived as the opposite due to the limited knowledge of how to use it and what service it offers. Hence, the digital devices provided do not all serve as complementary devices that enhance the customer experience but could result in some sort of confusion and frustration for the customer.

4.1.2.2 Perceived usefulness

Correspondingly to the ease of use, there were also different perspectives on the *perceived* usefulness of the digital technologies at IKEA. The digital interactive screens and IKEA applications were perceived as being somewhat useful by the interviewees who had tried it, however, with several limitations. The interviewees indicated that there was a lack of information concerning the usage and purpose of the different devices and that they did not perceive them as being a necessity for their shopping trip. Cecilie, for instance, claimed that she considered the digital devices to be somewhat useful, but not vital for her shopping trip. However, it is important to mention that she was not looking for anything particular, hence, it could perhaps influence her attitude and might have been different if she knew what she was looking for. Additionally, Nanna mentioned, that when interacting with the digital devices, there was no communication of how to use and access it, and what the benefits were of using it. Although the digital devices in-store allow for further product information, personalization of products and navigation, these features seemed to be unnoticed by several interviewees and observed consumers. One explanation for this could be that the consumers were not aware of the devices and their attributes. This is further supported by the interviewees emphasizing that they did not feel fully informed about the digital in-store devices available.

"You could definitely shop without it. You go there, and you don't know exactly what you're looking for, so you could do it without the app or other devices" (Cecilie) "It was lacking some sort of information and was kind of misleading. I'm not sure that I have the knowledge of what I'm supposed to do with the devices. I'm sure there is a lot of benefits, but maybe it's something about not having clear directions of how this is going to help me. I could just google if i really needed some information" (Nanna N.)

The above statements are signaling that the digital interactive screens and IKEA applications are not exactly enabling for an enhanced shopping experience, which can be referred to the dearth of knowledge about the usage. It is especially interesting that one of the respondents would rather use google than IKEA's digital interactive screens and applications. It can lead to the assumption that available IKEA alternatives are perceived as less helpful than personal digital devices. Nonetheless, two of the interviewees who had tried the devices, stated that they perceived the digital devices to be user friendly and useful, however, did also comment that they were not fully informed about their purpose. The interviewees pointed out that the devices were useful, as they enabled them to access information about products, stock and delivery - *It was useful. I got the information I needed.* Further, the interviewees stated that they liked that they could browse through categories and get inspired to buy new products.

"Not useful that much did not show the correct information. IKEA should communicate more about the available technology" (Anja)

Another interviewee who had tried the in-store devices further reinforced the assumption that the usefulness of the digital technologies implicates some limitations, with the above statement. From this statement, one can understand that it is not clear to the consumer when and how to use digital devices, and for what purpose. It was implied that in-store technology does not complement the online experience, as some information is not aligned. It could be argued that IKEA needs to consider carefully how digital technologies fit with the consumer experience, so it creates a seamless experience for the consumer. Furthermore, what consumer needs the devices are supposed to resolve, hence, what the purpose is of each device. In terms of the interviewees who had not tried the digital devices before, one individual claimed that he perceived the interactive screens and IKEA applications as undesirable and needless.

"I do not use much technology in my daily life, but I don't believe that it would be useful or valuable in general. The main reason for me shopping at IKEA is to see the products in real life, so I really don't know why I should use these devices" (Jacob)

Another interviewee who had tried the interactive screens had the following comment.

"I don't use all these screens and tablets, I find it useless and too complicated. If I need assistance, I'd look for a salesperson or look up on my phone. Maybe it should be more straightforward for customers" (Volodymyr)

Hence, some interviewees found it complicated and pointless, which supports the findings from observations and field interviews, that indicated that the consumers might not have a need for digital devices as a constant companion while shopping. Other than that, the reluctance of

adopting the devices available at IKEA could be explained by the fact, that there is a general lack of awareness of the digital devices due to insufficient information and promotion from the retailers' side. Considering the below statement, it is evident, that it is not only the less tech-savvy of the interviewees who do not resort to digital devices, it is also the ones who feel confident with using digital devices.

"I am confident with the new technology, but I would not mind referring to in-store devices" (Fabian)

Nonetheless, a few interviewees were also curious and open towards trying new digital technologies at IKEA. Four out of fifteen individuals expressed that they liked the fact that the in-store technologies as interactive screens could allow them to access information without having to communicate with employees in the store. Thus, in-store technology was useful as it gave direct information, without having to stand in line waiting for employees. This implies that they potentially perceived the in-store digital devices to be useful and somewhat more efficient than talking to employees. However, with our observations, we noticed that consumers would approach personnel if in need of assistance. They were indicating that this is the main solution if they need help. At the same time, convenience was mentioned as the main driver for approaching the digital devices.

"If a digital device were close, I would maybe try that. You know, if it was convenient" (Nanna N.)

When asking the interviewees if they felt informed about the digital devices, it was clear that the level of awareness was low and mainly depending on coincidence. Although all respondents had been to IKEA several times, and correspondingly had visited the online website, they were not familiar with all the devices. This was also supported by the field interviews where the respondents claimed that they were not aware of the interactive screens or the IKEA applications, only the self-service checkouts. The self-service checkouts were considered useful because of the perceived advantage of time-saving and catering to the utilitarian shopping value. This strengthens the assumption that there is a substantial shortage of information and communication concerning the usability and accessibility of digital devices, which is also evident with the below statement from the in-depth interviews.

"I was very surprised to see there's like, oh, one here. You actually don't know what there are of digital devices when you enter IKEA, but then when you go around you see some places that there are" (Nanna R.)

Overall, there were conflicting viewpoints on the usefulness of the digital devices at IKEA. Nonetheless, it could be argued that the perceived advantage, involving the dimensions of convenience, effectiveness, quality and functionality associated with using the interactive screens and IKEA applications were in general low. It could be suggested that IKEA need to be more systematic in aligning and merging the physical experience with the online experience and consider what the objective of the different digital technologies is.

4.1.2.3 Fun & Enjoyment

The findings indicated that the interviewees enjoyed the overall experience at IKEA, referring to it as *pleasant* and *nice*. We were able to identify enjoyment as the interviewees stated that they perceived the store as pleasurable, especially with the showroom and café area. This was also supported by our observations during which we observed a positive atmosphere and attitude in the environment. Nonetheless, the interaction with digital devices in-store was not exactly associated with enjoyment and fun. Several of the interviewees expressed openness towards trying out digital innovations that could create an extraordinary experience, nevertheless, they also indicated that the IKEA in-store digital devices in general, but it needs to be useful and convenient as well. This is further implied with the below statements concerning innovative digital devices.

"Retailers should offer a whole experience of entertainment but with a priority of convenience" (Anja)

"I think innovative devices as for example, VR and AR are more about entertainment. I need more functionality and time-saving technology" (Fenja)

The interviewed respondents further articulated that they would value innovative and entertaining devices as for example, VR or AR if they were bored or to relieve their stress. Several interviewees claimed that they appreciate and enjoy the *entertainment* part of the shopping experience, illustrated with the below statements. This indicates that it is of importance to integrate more *fun* and *excitement* into the innovative digital devices, to make them create more positive associations and appeal to the hedonic shopping values. It could be assumed that the consumers would be more likely to be receptive to the digital technologies if they perceived it to contain superior features or functions.

"I am totally open to trying out devices for fun. I think it's a good way to combine promotion and entertainment" (Fabian)

"I value the entertainment part of the experience" (Sarah)

"I would appreciate fun devices to relieve my stress in store" (Catalina)

Overall, it can be argued that the observed and interviewed consumers were satisfied with the concept of the IKEA store and were content with their shopping experience. However, the instore digital technologies were not perceived as being amusing and enjoyable, which could once again be referred to as the lack of knowledge and awareness of the functions of the devices. It was evident that the interviewees with higher self-confidence had a stronger intrinsic motivation to use the digital devices and enjoy the stimulation of them, whereas the interviewees who were more self-conscious were more reluctant. Thus, it can be suggested that the unfamiliarity was also a factor that leads to some of the interviewees not being able to

appreciate the enjoyment of using the devices. In compliance with this, one could argue, that as the interviewees did not perceive the digital interactive screens or IKEA applications as offering superior benefits or functions, they could be more resistant to accept the technologies.

4.1.2.4 Newness

In line with the interviewees not feeling adequately informed about the digital devices in the store and not aware of the specific functions, the perception of these were not particularly associated with innovativeness and *newness*. The same applies to the observations and field interviews, where respondents indicated that the devices available were not perceived as being *groundbreaking*. Nevertheless, when explaining the different opportunities that the IKEA store offers in terms of digital interactive screens and IKEA applications, several of the interviewees seemed interested and intrigued. It was interesting to find out that many of the interviewees had positive reactions to the in-store technologies and seemed pleasantly surprised about the information. This is illustrated with the following statements, suggesting, that newness is perceived as a facilitator of a positive experience with digital technologies.

"I would be very excited to try out new in-store technologies "(Sarah)

"I didn't know that. It seems like they have a great option. I'm intrigued" (Sandra)

Several of the interviewees articulated that they would be open towards trying new digital technologies at IKEA and seemed receptive to adapt to new innovative ideas in general. Yet, a few of the interviewees were not eager to interact with new digital devices at IKEA. One of the respondents indicated a general reluctance to technology changes and were not open towards engaging with new digital devices at IKEA, which is exemplified with the below quote. It could be argued that adopting innovations is closely linked to the personality traits of an individual, as it reflects the tendency to seek out new information, stimuli and experiences. Thus, it could be suggested that the negative response to innovations stems from uncertainty and fear associated with the devices.

"I wouldn't like to try any new digital devices. I feel that digital technologies are like an invasion into my live" (Jacob)

However, it was evident that one main factor that was especially important for several of the interviewees was a value provided. One of the respondents stated that she would try new digital technologies, but it *depended on how much i get out of it. It should be some sort of natural extension*. The *natural extension* was referred to as a technology that should be logically related to the phase in the customer journey, and thus a natural extension that enabled for a smoother experience. Hence, in order for the interviewees to interact and engage with the digital devices in-store, it should comprise attributes that provide clear incentives for the customer. It should not just be there to be there, but rather serve a purpose. This is also in line with the observations, in which consumers mentioned that they *didn't really know why to use*

the digital interactive screens. From the following statements, one can further detect a clear interest in new technologies, but a general request for usefulness and added value.

"I am open to trying out new in-store technology if brings more value to me. It needs to have a function and make my visit easier" (Fenja)

The statement suggests that *newness* in itself is not necessarily enough. It has to add some additional value for the consumer and differentiate from other already known technologies. Although several of the interviewees claimed that they were not first movers on new technologies, they also stated that they appreciated new and innovative technologies in-store for both entertainment but primarily for functionality. It could be argued that new in-store digital devices at IKEA do not make the visit more attractive at the moment, thus, it is not the main driver for consumers to visit the store. In this regards, one of the respondents had an interesting comment *- IKEA can attract more young people by developing in-store technology*. This implies that new innovative digital technologies at IKEA could potentially become the main driver for young consumers to visit the store, however, it needs comprehensive development and an understanding of the needs of the segment.

4.1.2.5 Reliability

Overall, the *reliability* of the digital devices available at IKEA was not perceived as being consistent and accurate in terms of fulfilling the given task. The interviewees expressed that they preferred to use their own mobile phone if they needed to search for information or ask in-store personnel. Furthermore, some interviewees claimed that some of the technologies were simply not developed enough and thus, could actually aggravate the consumer experience.

"At the moment it's not valuable and developed enough, and could maybe 'hurt' more than helping the consumer if an app, e.g. doesn't work" (Tristan)

"Technology does not answer my questions fully. If those types of the technology say that a product is in aisle four, and you don't know where it is. So, if I'm going to approach a person, they will just show me the way. People fulfil my experience, not technology" (Catalina)

The above statements suggest that the interviewees do not have much faith in digital in-store technologies to solve their needs. It is evident, that the segment has quite high expectations to the reliability, and do not necessarily believe that in-store technologies are particularly valuable. They are in general more reliant on either themselves or employees for dependable information. This is also in line with the observations during which the consumers mainly approached personal assistance or used their own mobile phone if in need of assistance. Nonetheless, two of the respondents mentioned that they would refer to digital interactive screens or IKEA applications before asking service employees for assistance if they were convenient and close by. This implies that timesaving and convenience are important factors for engaging consumers.

"I would hate Amazon Go, once the technology will not work. I don't trust it" (Sarah)

The above claims, however, acknowledge that the perceived reliability of interactive screens and IKEA applications amongst the interviewees were somewhat low. It can be argued that there is a general lack of trust in the reliability of the digital technologies at IKEA and the perceived risk of using the devices is negatively influencing the intentions of the consumers.

4.1.3 Expectations of digital technologies

In this section, the expectations of Generation Z consumers will be elaborated based on the analysis of the empirical data and values presented in the conceptual framework (Table 5). Following the predetermined abductive approach of this study, the profound analysis of the collected data allowed to reveal some additional values and expectations of the in-store technology such as *privacy*, *supportiveness*, *visibility* and overall *alignment*. The newly distinguished values will be further elaborated in this section in relation to the conceptual framework (Table 5). Based on the values discussed in the conceptual framework and newly established insights, the expectations of Generation Z consumers will be defined. The order of the following values does not affect their importance nor priority among respondents.

4.1.3.1 Privacy

The empirical findings revealed that the in-store technologies at IKEA are associated with a "privacy threat" particularly in terms of personal data of Generation Z consumers. All interviewees consumers stated that they were concerned with their privacy and personal information that is collected by retailers via in-store technologies. One of the respondents articulated that his concern for his privacy has led him to use encrypted messenger as well as covering his laptop camera. This implies that consumers have increased concerns that retailers might misuse their private information, which is exemplified with the below statements.

"I should take my privacy more into consideration. I don't like that retailers collect and use my personal data" (Sarah)

"I'm highly concerned about my privacy. I would not just share my personal info" (Jacob)

"I am concerned about where my data goes" (Fabian)

These statements indicate that some of the interviewed consumers were particularly concerned with their privacy and did not trust retailers to handle their information. It could be argued that the low adoption of in-store digital devices by the interviewees and observed consumers could also be a result of the uncertainty of how retailers are using collected personal data. Further, some technologies are perceived as being too invasive, thus leading to consumers to undermine its benefits. It is evident that several interviewees were not pleased to share information, which

further confirms that there perhaps is a lack of communication in how these data will be used. However, there were also some respondents who did not seem to care much about their privacy and usage of their data by third parties, illustrated by the below quote.

"Not as concerned with my privacy as I should be" (Sandra)

Additionally, it was interesting to find out that some of the respondents would agree to share their personal data during their in-store shopping trip at IKEA in the exchange of personalized or customized offers and services. This indicates that consumers are more willing to disclose information when they anticipate a *benefit*. The value of personalization is evidently more important for some consumers than privacy concerns, which is expressed with the following statement.

"If I can get personalized offers, I don't mind sharing my personal data" (Volodymyr)

In compliance with the above, several interviewees would agree to download and share their personal data or location via an app in order to receive push-notifications and thus get a coupon/bonus. However, in these regards, the respondents also emphasized the importance of convenience and timesaving, as they would not engage if these elements were not fulfilled. The previously mentioned imply that the interviewees have different perspectives on how concerned one should be with one's safety and personal data. Nonetheless, it could be argued, that consumers privacy concerns represent important implications for retailers, hence, IKEA should ensure a transparent privacy policy, in order to make the sharing of personal data valuable for consumers. In order for the interviewees to mitigate their privacy concerns, IKEA should communicate clearly what data is being collected, how it is used and how consumers can benefit from this - such as personalized, just-in-time promotions.

4.1.3.2 Supportiveness

The interviewees articulated the importance of support for the purpose when talking about the usage of the digital devices in-store. We identified that the respondents had a need to feel that the devices fulfilled a task or provided support for the value of the service, in order to appreciate the in-store technology fully. The in-store interactive screens and IKEA applications provide information on the product availability, detailed product descriptions, delivery opportunities and complimentary services. While analyzing the responses of the interviewees, it was found that most of them justify their low adoption of the in-store technologies or ignorance, with the uncertainty and no motivation for using it. Thus, the benefits received were not perceived as being significant enough compared to what the consumer had to "sacrifice". The empirics implied that young consumers are willing to use in-store technology for the simple purpose such as price scanners, product information, automated checkout and others, and expect retailers to offer these solutions. However, *supported value* and convenience are identified to be rather important attributes for engaging with the devices, illustrated with the below quotes.

"It should be convenient and valuable - it should have a purpose and enhance the experience for customers" (Nanna N.)

"It should be available in all sections and in working condition" (Anja)

Some interviewees mentioned that they liked the self-service checkouts because they were quick, convenient and reduces time spent and thus resulting in higher value perceptions. Hence, it could be argued that implementing some tangible benefits would be important in terms of shaping the consumers' acceptance of interactive screens and IKEA applications. Furthermore, several respondents claimed that they believe that digital devices enable more informed decision-making because it provides further information. Therefore, it is reasonable to assume that the value perceptions of the digital devices at IKEA could be increased if it resolved more tangible and just-in-time needs. Besides this, several interviewees expressed that they expect retailers to invest more in order to merge the physical and online experience and *move accordingly to the world*, which is exemplified with the below quote.

"I wouldn't expect an app, but it would be valuable since I believe that digital devices enable more informed decision-making. I think that retailers should invest more - find a way to merge it, so it gives you more value to go to the physical store - it needs to have a purpose "(Cecilie)

The in-store digital devices encompass a substantial asset for IKEA to utilize, making it a considerable area of inquiry to accommodate. Since there is a clear lack of information and communication about the usage and incentives for consumers, it can be suggested that IKEA should assess how the various technological devices impact the customer satisfaction and what the purpose is of each device. In line with this, it is advised to implement more marketing initiatives to support awareness and perhaps incorporate personalized offers to enhance motivations. Moreover, customers should be informed about the potential benefits of the instore technologies that could not be substituted by personal devices, for instance by "googling" products instead of referring to the interactive screens or IKEA App. This fact also relates to the lack of alignment between the in-store devices and physical touchpoints that will be elaborated in the following section.

4.1.3.3 Visibility

One particular important value implied by the interviewees were *prominence* and *visibility*. When respondents were asked whether they had used in-store technology at IKEA, several replied that they had not actually seen these types of in-store devices during their shopping journey, or were at least not aware of their existence, which is exemplified with the below statements.

"They have not caught my eye. I did not know that it exists" (Fenja)

"I have never noticed the in-store devices" (Maria)

This allows to assume that one main reason of why the interviewees are reluctant to IKEA's interactive screens and applications is because of the low level of promotion of newly installed devices and because the in-store personnel do not promote them to consumers. The respondents expressed that they were very surprised by the fact that IKEA offered many different opportunities for digital devices. Even the ones who had accessed some of the devices before were astonished to find out that they had several interactive screens and applications for the instore shopping experience. This indicates that they are simply not fully informed about what services there are available, what the devices offer and how they can benefit from it. Since it was detected that the majority of the interviewed customers tend to choose personal service over digital assistance, it is evident, that the personnel exert a significant influence on the consumers' in-store behavior.

"Staff should also refer customers to the in-store technology" (Sarah)

Interestingly, one respondent mentioned that in terms of increasing the level of adoption of the digital devices at IKEA, the staff should refer to them as a trusted device for resolving their needs. Thus, in order to encourage more customers to enjoy the benefits from the in-store technologies, while helping customers with their inquiries, employees should emphasize all available sources of information in-store. Furthermore, one respondent suggested that the employees should help with any technical issues and uncertainties concerning the usage that might arise while trying the devices. This reinforces the assumption that the employees at IKEA imply an imperative role in terms of making digital devices more *visible* for consumers.

Consequently, a profound training for in-store personnel regarding how to use the in-store devices and how to ensure their maintenance and good working condition could potentially reduce the workload of the in-store personnel and enhance customer support with the help of innovative devices. Furthermore, it should be distinguished by IKEA what the purpose is of each technology, so it is clear to the consumers if it's a functional purpose or entertainment purpose. In the end, providing consumers with sufficient information regarding the existence of the device through in-store personnel and marketing initiatives could evidently increase the awareness and also the confidence of approaching the devices amongst consumers.

4.1.3.4 Alignment

The findings delineate that the interviewed consumers expect to receive an *aligned* shopping experience. The analysis of the collected data allows to conclude that the respondents appreciated the general experience when shopping at IKEA, nonetheless, as the digital devices were not perceived as adequate, the experience was not entirely complete. The concept of *alignment* was defined by consumers as the opportunity to receive additional and complementary services such as showrooming, children area, cafeteria and other services that add value, whilst experiencing consistency between channels. It was evident that several of the interviewed consumers value the hedonic aspect of shopping, as they liked to look around and experience the products in a real-life setting. In compliance with this, some interviewees stated

that they consider physical shopping as a source of inspiration, since they are visiting for the variety of products available in-store and to be stimulated by the physical atmosphere, which is illustrated with the below quotes.

"I appreciate the total overall experience that I can get from IKEA" (Fabian)

"I come to the store for the physical interaction and touch of the product" (Maria)

Nevertheless, several respondents also claimed that they valued the utilitarian aspects of shopping, as functionality and efficiency were in particular prioritized. In order to create an *aligned* experience focusing on both hedonic and utilitarian values, the in-store technology has to be fully integrated into the store experience and complement the customer journey, whilst accentuating experiential and functional aspects. Thus, IKEA should ensure synergy between digital devices and existing touchpoints in order to maintain a consistent experience that encourages engagement.

"I think that retailers should invest more in digital devices - this is the way to go" (Sandra)

"You need to move accordingly to the world - I would expect them to have digital devices" (Michael)

"Retailers should offer a whole experience" (Anja)

Some interviewees further articulated that they believe that retailers, in general, should invest more in digital devices, in order to enhance the shopping experience and make it more aligned. One respondent emphasized that it was necessary in order to stand out compared to competitors, and another respondent stated that *this is the way to go*. Additionally, one interviewee claimed that the *youth would expect it to be available*. This indicates that the interviewed consumers believe that digitalization of the physical space is central, in order to follow the development. Hence, the *alignment* of the shopping experience is especially of crucial importance when considering IKEA, as their main asset is their physical environment.

"IKEA is about a nostalgic feeling for me" (Fenja)

Based on the respondents' replies, shopping at IKEA is much more than just purchasing items from the shopping list. For instance, for one of the interviewees, the IKEA experience brings a feeling of nostalgia, since it is associated not only with purchasing goods but with a complex leisure activity consisting of such store activities as showrooming, children area and restaurant facilities. Our empirical research suggests that an effective alignment of in-store devices into the in-store experience is an inevitable transformation in order to meet the expectations of the new generation of consumers. Besides facilitating and ensuring best-in-class experience, blurring the lines between digital and personnel service could potentially encourage young consumers to understand the value of in-store technology and use it more frequently instead of human assistance. By implementing different communicative initiatives at IKEA, the

encountered issues concerning lack of information and awareness could be resolved, and in the end, increase the adoption of digital devices amongst the younger consumers.

5. Defining segments of Generation Z

In this section, segments of Generation Z will be determined based on the collected empirical data and the previous analysis. The main objective of initiating the in-depth interviews with asking personal questions was not only to serve as an *icebreaker* but also to identify the individual personality traits of each interviewee. Further, to understand the personality patterns of Generation Z shoppers and gain deeper insights into the character of each interviewee. The questions were structured in such way that allowed to categorize the interviewed consumers by personality profiles based on our initial conceptual framework (Table 5) while studying the shopping behavior and attitude towards in-store technology of each segment. The personality types that were identified and will be further analyzed are the following - "*Actualizers*", "*Fulfilleds*", "*Strivers*" and "*Experiencers*" (Valentine & Powers, 2013). Based on the conducted analysis, it was concluded that the remaining four personality types were not represented in the group of interviewees since none of the respondents could be categorized according to the specific criteria. Nonetheless, we were able to determine a new segment of Generation Z, namely *Conventionals*.

In order to analyze the different segments, we have predetermined a set of variables to allocate the interviewed consumers to different segments. Therefore, the interviewees' responses will be analyzed according to the following criteria determined; self-confidence, reliance on other opinions, preferred shopping mode, attitude towards innovation and finally perceived values and expectations of in-store digital technologies, discussed in the previous section. These variables are based on the findings from existing theory and literature summarized in the conceptual framework (Table 5). The first variables, self-confidence and reliance on others opinion, are identified by Dabholkar and Bagozzi (2002) and are applied in order to deepen the understanding of how consumer traits and situational factors can affect the innovation acceptance of Generation Z consumers and form their expectations. The following variable of *preferred shopping mode* is based on the theory proposed by Herhausen et al. (2019) and is chosen in order to distinguish the consumer segments based on their offline and online shopping behavior. The consideration of preferred shopping mode enabled us to classify Generation Z consumers with regard to their primary touchpoints when shopping and their purchase patterns. Furthermore, we have chosen to analyze the segments based on *perceived* values of in-store technologies, proposed by Davis (1989), Dabholkar and Bagozzi (2002) and Weijters et al. (2007) in order to identify differences between the segments and to serve as guidance to reveal new insights. Segmenting respondents with regards to these variables allows to identify consumer traits and situational factors that are relevant for innovation acceptance or serve as prerequisites for reluctance towards in-store technology.

5.1 Segments of Generation Z

5.1.1 Actualizers

The first personality type that was identified in the conducted interviews is *Actualizers*. Based on the responses and behavior, two of the interviewees (Cecilie and Michael) could be categorized as *Actualizers*, since they are detected to be self-confident, not reliant on others opinion, follow latest trends, and are willing to try out new products, including innovative technologies. This segment entails individuals with high self-esteem who are not depending on others. This is supported by the interviewees, claiming that they were self-confident in being first movers, approaching new technologies and at the same time not afraid of being judged. This segment is in general self-directed, opinionated and future-oriented, which is also demonstrated with the below statements.

"I usually have the latest phone", "I think my friends see me as strong and opinionated" (Cecilie)

"I do follow trends very closely", "I would definitely be the one to buy the newest iPhone first", "I would rather do my own research." (Michael)

The above quotes illustrate that these individuals take charge and are the types of individuals that are leading change. When evaluating the preferred shopping mode, this segment tends to shop both online and offline depending on the product, prices and assortment, which is exemplified with the below statements. This segment expects in-store technology to align their in-store experience, hence, blurring the lines between digital and physical touchpoints in order to get maximum value from their in-store shopping trip. The purchases of this segment often reflect a cultivated taste for upscale emphasizing quality and design.

"I shop both online and offline, it mainly depends on convenience" (Michael)

"For me, it depends on the product - if the price is higher offline, I would prefer offline." (Cecilie)

In terms of the values expected to be derived from in-store technologies, *Actualizers* expect instore devices to be useful and serve a particular function (e.g. self-checkouts). Based on the responses, Cecilie and Michael would prefer to use technology that enables to make more informed decision-making. Furthermore, they are heavy users and open towards trying new digital devices such as AR, VR and other available in-store innovations, indicating that they especially value *newness* when using digital technologies.

5.1.2 Fulfilleds

The next personality type, which was identified is *Fulfilleds* (Tristan, Fabian, Fenja, Sarah, Nanna R.). This is the personality type in which most of the interviewees were classified to be in. The interviewees were detected to value functionality and order and would actively seek information before making decisions. It was evident that if trying out new digital devices, it was important for them to be guided and informed about its usefulness and benefits. Thus, this segment would use digital technologies primarily for a functional purpose. In general, they are practical and rational shoppers prioritizing quality and functionality when shopping, as well as being reliant on gathering information themselves, which is also evident in the following claims.

"I am confident with the new technology if I know what it is about, but I would not mind referring to in-store devices" (Fabian)

"I'm not very confident in a new environment", "I'm very dependent on other feedbacks, I look for stars/reviews", "I need more functionality and time-saving technologies." (Fenja)

> "I would say I value quality, functionality and durability the most when buying a product" (Tristan)

The statements above allow us to conclude that this segment prioritizes such values of in-store devices as *usefulness* and *reliability*. Although this group of Generation Z consumers have an open attitude towards innovations and new products, in-store digital technologies must enable more rational decisions, save time and be convenient and easy to use, in order for them to engage. In regard to the prefered shopping mode, this segment shops mostly online, however, also shop offline depending on the convenience and prices. These individuals buy *proven* products and prefer quality over trends and popularity, which is evident with the following quote.

"Quality should match the price, and I don't want to pay extra if clothes just look nice but quality is poor" (Fenja)

5.1.3 Strivers

Strivers is a segment that is highly concerned about the opinions and approval of others since they care about their image in the community. Following fashion trends is very important for

this group, and they favor stylish products that emulate the purchases of people with greater material wealth.

"I have my own style, but I adapt to the trends that I like. I follow social media to get inspired", "I care about my image, especially among strangers" (Anja)

"When I like to buy something good, it has to be luxury and quality" (Nanna N.)

Nanna N. and Anja are associated with the group *Strivers*, proved by their traction towards hedonic shopping and preference for luxurious products. The respondents indicated, that when in an unfamiliar environment, they feel the need to maintain a certain image and reputation. This was further evident, as one of the respondents stated that despite her self-confidence, she relies very much on others for support and takes into considerations of other opinions and recommendations. In this segment, keeping up with fashion as well as purchasing and trying out innovations are extremely important to them as they strive to resemble people they admire. They prefer to shop mainly online since they value good assortment, as illustrated with the below quote, but they also shop in physical retail stores occasionally.

"I kind of like to get it done online, I feel like there is a higher amount of different products" (Nanna N.)

In terms of in-store technology, *Strivers* are open towards trying new innovations and particularly value convenience and availability of digital devices. Nonetheless, one of the respondents stated that it should be developed more in order to properly fulfil their needs, for instance, make interactive tablets available in each section of the store and more user friendly and easy to use self-checkout counters.

"It should be available in all sections and in working condition" (Anja)

It should also be noted that besides being hedonic shoppers, this persona type emphasizes *fun* and *enjoyment* functions of in-store technology, which is exemplified with the below statement. Besides convenience, it should enhance the overall customer in-store experience in order to encourage offline shopping, since shopping environment and atmosphere are key factors for *Strivers*.

"Retailers should offer a whole experience of entertainment but with the priority of convenience" (Anja)

5.1.4 Experiencers

The next segment identified amongst the interviewees is *Experiencers*. The distinguishing characteristics of these individuals are self-expression and relatively high self-esteem. The interviewees represented in this segment are Sandra and Volodymyr, due to their high social activity, adoption of new trends, seeking recommendation and at the same time valuing traditional shopping with the choice of trying and experiencing new products and services. These consumers are motivated by self-expression and seek variety and excitement with their actions. As consumers, they shop both offline and online since for this persona type shopping is associated with an *experience*, and thus often involves entertainment and socializing, which is evident with the below statement.

"I would bring a friend normally when shopping because it's a cosy activity" (Sandra)

This segment is open towards trying new innovations including in-store devices, which is also exemplified with one of the respondents claiming that he *likes to keep up with the latest technology and be aware of what is new on the market*. The interviewees further stated that they like to experience new technology, especially for the *fun* and *entertainment*, which is indicated with the below quote. In general, they are open towards trying out new digital devices if it complements their in-store journey.

"I like trying out new products (devices) in-store, I would not mind taking part in some AR & VR", "I like to try it out in shopping malls or other installations just for fun, for instance, VR glasses" (Volodymyr)

In terms of values, *Experiencers* aim to get *newness* as well as *fun and entertainment* from instore technology. This traction could be explained by their desire to follow the latest trends and combine shopping process with entertainment rather than devices with complex usage. Based on the analysis of the respondents, it can be concluded that they associate in-store technology mainly with entertainment rather than the actual way to get service.

5.1.5 Conventionals

After careful consideration of persona types proposed by Valentine and Powers (2013), four respondents were left unmatched, since they possess a unique mix of personality values and traits that are not present in existing persona types. Thus, we propose a new personality type, *Conventionals*, within Generation Z. All four respondents (Catalina, Sarah, Jacob and Maria) would choose offline instead of online shopping since they are seeking for traditional components of shopping such as the physical touch of the products, interaction with the staff, and the overall experience associated with it.

"When I am in the shop, I want to feel and touch instead of VR or AR" (Maria)

"I need to feel and see products with my eyes" (Catalina)

Furthermore, it was detected in their comments and behavior that they were reluctant towards change, correspondingly to a more traditional perspective. Taking into consideration these facts, they share some characteristics with the segment *Strugglers*, that are highly conservative towards any change, loyal to brands, hard to change preferences and habits, and are heavy technology users. Nonetheless, since this segment is mainly associated with middle-aged people, who value family, community and religion, it is not present amongst the interviewed consumers. In regard to new technologies, the interviewees expressed that they do not perceive them as a beneficial asset to the customer in-store experience and do not prefer to use them on a regular basis, which is also evident with the below statements. For instance, Jacob is quite skeptical towards digitalization in general, and do not wish to use in-store technologies. Nevertheless, he is not completely reluctant to digital devices, since he uses a few devices on a daily basis.

"I am not a tech -guru, I am fine with old fashioned technology. I could get my Nokia 3200 and go to the mountains" (Catalina)

"I would hate Amazon Go, technology usually cannot work. I don't trust it" (Sarah)

The statements above further illustrate that these customers value a more traditional approach when purchasing goods, and do not necessarily believe that new innovative technologies are *reliable* and trustworthy. This is also evident with one of the respondents stating that she is open towards new technology, however, when it comes to shopping, she follows a traditional mindset. It should be emphasized that these customers are not completely reluctant towards digital technologies but are skeptical and associate digital technologies mainly with "entertainment activities" and consider it to be undesirable and unimportant for the actual shopping process.

"I would appreciate VR/AR as entertainment options but not for actual purchases" (Catalina)

Based on the statement above, It can be concluded that this group of consumers is skeptical towards experiencing new technologies, due to their traditional mindset. However, as the segment *Strugglers* that similar shares characteristics are also associated with older consumers and low resource consumers, this allows concluding that these Generation Z consumers form a new segment that is unique to this age group *- Conventionals*. The distinguishing characteristics of this new persona type involve preferences towards offline shopping without using innovative devices and buying products based on their familiarity and durability. Representatives of this group are self-confident, friendly and opinionated.

The above analysis of personality profiles allows concluding that the interviewees mentioned can be associated mainly with the following profiles - *Actualizers*, *Fulfilleds*, *Strivers*, *Experiencers* and *Conventionals*. The analysis of the peculiarities that are associated
exclusively with these profiles as well as the influence on the attitude towards in-store technology of Generation Z consumers will be further elaborated further in this section.

5.2 Framing Generation Z segments

The following section will outline and discuss the segments proposed by our empirical research according to their innovation acceptance, shopping mode and barriers of adopting new digital technologies. This will lead to our new proposed conceptual framework of Generation Z segments.

5.2.1 Innovation Acceptance vs Self Confidence

The conducted analysis of responses of interviewees demonstrated the correlation between innovation acceptance and self-confidence. It is evident that segments with higher self-confidence and more openness towards trying new innovative technologies such as *Experiencers* and *Actualizers* have higher technology acceptance. It is supported by the theory proposed by Valentine & Powers (2013), who categorize them as a customer with high self-esteem and no regards to the public opinion. In regard to segments with lower self-confidence, as *Strivers*, their openness towards trying out new innovations in retail stores is lower since they tend to care more about their image in the community and are very self-conscious about engaging with such devices in public because it can affect their reputation. Thus, they have a lower intrinsic motivation to adopt digital technologies and would tend to seek human interaction for service encounters, which is in accordance with literature proposed by Dabholkar and Bagozzi (2002).



Low self confidence

Figure 4. Attitude towards innovation vs Level of Self-Confidence (S - "*Strivers*", E- "*Experiencers*", C - "*Conventionals*", A- "*Actualizers*", F - "*Fulfilleds*")

Interestingly, our findings propose that the newly found segment *Conventionals* involve consumers with high self-confidence who knows what they believe in and actively chooses not to rely on new in-store digital innovations, due to their scepticism. Thus, the high self-efficacy does not influence their behavioral intentions positively towards in-store digital technologies, as proposed by existing literature. In contrary, it could be suggested, that the high self-confidence actually attenuate a positive attitude towards technologies, because the segment has low novelty seeking. These findings can be considered an extension of previous literature, as we propose, that there are consumers within Generation Z who are reluctant towards the adoption of new digital devices introduced by retailers, however, they possess a rather high self-esteem.

In order to further elaborate the segments level of acceptance of digital in-store technologies and the purpose derived, we have developed the following figure based on our findings.



Refuctance

Figure 5. Attitude towards innovation vs the purpose of in-store devices (S - "*Strivers*", E- "*Experiencers*", C - "*Conventionals*", A- "*Actualizers*", F - "*Fulfilleds*")

We found that Actualizers, Experiences and Strivers could be determined to be acceptant towards adopting new innovations and trying out new technologies in-store, which is in line with current literature (Valentine & Powers, 2013). Nevertheless, our findings propose that *Experiences* and *Strivers* do not prioritize functionality, as they seek to the experience of using in-store devices rather get *fun* and *entertainment* from than *functionality*. However, the newly revealed insight contradicts the theory proposed by Dabholkar and Bagozzi (2012), stating that novelty-seeking consumers value the high functionality of devices in order to find new ways to solve existing tasks. Since this theory does not discuss Generation Z, particularly, it can be concluded that it does not apply to young consumers. Contrary to other age groups, Generation Z consumer with high acceptance of innovation perceives in-store technology as a new source of entertainment.

In regards to other segments with lower innovation acceptance as *Fulfilleds*, it is evident that they seek to gain functional benefits from using in-store technology such as providing a particular service or enabling a more effective and time-saving in-store journey. It was also revealed during the analysis that their acceptance of in-store devices could be explained by their overall "rationality" - getting the best deal, appreciation of fast and high-quality service rather than openness towards innovation.

It is furthermore interesting to point out that for *Conventionals*, shopping is also associated with leisure activity to some extent, and therefore they expect a combination of *entertaining* and *functional* aspects in their shopping experience. It could be explained with

the fact that they interact with a wide range of touchpoints and have long shopping trips. Since they tend to ignore in-store technologies, they expect to have more user-friendly devices that are easy to use.

5.2.2 Shopping mode

Furthermore, in order to classify the consumers based on their shopping mode, the criteria proposed by Herhausen et al. (2019) were implied. The findings derived from this has further extended the current research on Generation Z consumers shopping behavior. The analysis of the respondents leads to the conclusion that Generation Z consumers differ considerably in their shopping mode, which contradicts much current research indicating that young consumers are mainly multiple touchpoint shoppers (Herhausen et al., 2019). For instance, such segment as Fulfilleds belongs to Extensive online shoppers due to their rational approach to shopping and high price sensitivity. Their switch between modes of shopping is explained by the desire to find the bargain rather than get diverse experience. On the contrary to Fulfilleds, there are Experiencers who are categorized as Multiple touchpoint shoppers. This type is more involved in the shopping experience and values long shopping trips. Nevertheless, they actively use in-store technology and often switch between online and offline providers to get involved in more touchpoints and find a better assortment. The least online oriented shoppers are Conventionals due to their reluctance towards innovation and in-store technology. They are defined as mainly Store focused shoppers who value in-store touchpoints, such as showrooming, personal service and physical touch of the product. The empirical data allows conclude analyzed segments Actualizers, Fulfilleds. to that customer Strivers and Experiencers tend to seek to compare prices, assortment, get reviews and recommendations prior to purchasing, whereas the *Conventionals* are more store-focused.

5.2.3 Psychological & Functional barriers

In terms of psychological barriers, it was found that besides tradition and image barriers proposed by Ram and Sheth (1989), such segments as *Actualizers* and *Fulfilleds* emphasize the importance of ensuring the privacy of personal data. Customers' concerns on how retailers are using collected personal data are also considered as one of the psychological barriers that are preventing them from approaching in-store technology. We found that Generation Z consumers do not necessarily associate innovation with a *premium brand* but perceive it as an additional tool to get faster and better in-store service. It leads to the conclusion that analyzed a group of consumers does not necessarily consider the extent of retailers innovativeness when using in-store technology. It comes in line with the findings of Kleijnen, de Ruyter and Andreassen (2005) that propose that consumers tend to be influenced by the approval of their surroundings (friends, family, colleagues) rather than surrounding environment (retail setting). That was

further proved by the connection between personal self-esteem and innovation acceptance of Generation Z consumers.

Another psychological barrier found in our research that could prevent Generation Z consumers from using in-store technologies is the *stereotyped* perception of IKEA and the shopping experience. Such segments as *Conventionals* associate IKEA with a feeling of nostalgia and leisure activity. It allows us to conclude that customers' intentions towards using new innovations are also reliant on the overall image and perception of the retailer and its in-store atmosphere. To encourage more reluctant shoppers to approach available in-store technologies, retailers should position themselves as early adopters of innovation and clearly communicate this, and as a result, educate consumers. Consequently, the image of a retailer that is not associated with innovations can severely affect consumers' adoption intentions towards using in-store technology, which is in line with the proposed literature by Strebel, Erdem and Swait (2004).

Reluctance towards in-store technology of Conventionals could be explained by the fact that the consumers could be affected by both functional and physical barriers, which is in line with literature proposed by Ram and Sheth (1989). The lack of information provided on the in-store technologies and education of consumers could be associated as one of the functional barriers faced by the identified segments. Furthermore, we found that the functional barriers involve visibility and alignment in the in-store customer lack of journey. The segment Fulfilleds prioritize functional gains in order to overcome the barriers of adopting new technology. Value barriers proposed by Molesworth and Suortti (2002) could be overcome by providing devices for making information-based decisions. By educating this segment about functions of the in-store technology, they could start referring to the in-store innovations to get detailed information on the assortment, prices and other product information. Getting assistance from in-store technology could help them to make information-based decisions, and as a result, increasing their innovation acceptance.

Based on the assessment of the empirical findings it is reasonable to conclude that Generation Z consumers differ in their attitude towards innovation, anticipated values derived from instore technology, purpose of using it and expectations of digitalization of in-store devices. With our research, we contribute to the existing literature on Generation Z segments by extending the knowledge of technology acceptance and attitude towards digital technologies.

5.3 Proposed Conceptual Segmentation Framework

As a result of our empirical material gathered and our analysis of Generation Z, we propose a revised conceptual segmentation framework based on the findings from this research, in order to answer our research question - *what are the expectations of Generation Z consumers of digital technologies in physical retail stores*. In line with an abductive research approach, we have adapted and extended our initial theoretical framework to present our findings derived.

The modified theoretical framework is illustrated below in Table 7. As previously presented, our point of departure was based on Valentine and Powers's (2013) classification of different types of consumers, Herhausen et al.'s (2019) customer journey patterns and the TAM values proposed by Davis (1989), Dabholkar and Bagozzi (2002) and Weijters et al. (2007).

Based on our analysis, we were able to discover four new value variants, namely *privacy*, *supportiveness*, *visibility* and *alignment* unique for Generation Z consumers. Furthermore, we were able to reveal a new segment within Generation Z, namely *Conventionals*. Based on our analysis we have organized the adjusted framework according to each segment - *Actualizers*, *Fulfilleds*, *Strivers*, *Experiencers*, *Conventionals* - identified in our research. Furthermore, we have noted different principles related to personality type. The initial conceptual framework based on our conducted literature review allowed to summarize aspects that influence Generation Z consumers in-store behavior and form their attitude towards in-store technology. Based on this framework, variables for analyzing collected data and segmenting customers were developed, which included *self-confidence*, *the extent of the reliance on others opinions*, *preferred shopping mode*, *attitude towards innovation and expected values from in-store technology*. As a result of aforementioned, we propose the following revised conceptual segmentation framework, that enables to segment Generation Z consumers according to the variables mentioned.

Type of Persona type	Actualizers	Fulfilleds	Strivers	Experiencers	Conventionals
Reliance on others opinion	 Self-confident Do not rely on others opinion 	 Rely on others opinion Rely on reviews, and advice 	 Want to resemble people they admire Image is important 	 High self- esteem Do not rely on others opinion 	 Self-confident Tend to search for information

Shopping Mode	• Multiple touchpoint shoppers	• Extensive online shoppers - look for the best deal	 Multiple touchpoint shoppers Shop mostly online - depends on the product category, availability Value offline shopping for place and atmosphere 	• Online-to- offline	 Store-focused shoppers Perceive shopping as leisure activity
Attitude towards innovation	• First movers in trying out innovation	 Not first movers in technology Try out new devices to make more information- based choices 	 Not first movers Try new technology for fun & entertainment 	 Follow trends but not first movers Like to try out new products, brands and technologies 	• Reluctant to in-store digital devices
Prioritized values of in-store digital technology	• Newness • Usefulness	UsefulnessReliabilityEase of use	• Ease of use • Fun & Enjoyment	• Newness • Fun & Enjoyment	Ease of useReliabilityUsefulness
Expectations from in-store digital technology	 Alignment Supportive ness Privacy 	SupportivenessVisibilityPrivacy	 Alignment Visibility Supportiveness 	 Alignment Supportive ness 	 Supportive ness Privacy

Table 7. Segmentation framework of Generation Z consumers

It was interesting to see that our research enabled us to extend the value variants proposed by existing literature, and include new variants that are important to the Generation Z consumers. Our findings further implied that there are different segments of Generation Z who have different expectations and values developed from in-store technology, that needs to be taken into consideration. It was evident, that *alignment* is a variable that is considered important to segments as *Actualizers, Strivers* and *Experiencers* due to their higher need for experiential shopping and thus a consistent experience. The value *visibility* was particularly important to the segments *Fulfilleds* and *Strivers* as they are self-conscious consumers, image-oriented and rely on others opinions. Therefore, in order for them to adapt to new digital devices, they have

to be prominent and supported by in-store personnel. In terms of *privacy*, our research indicated that there were different views on how concerned one should be. Nevertheless, *Actualizers* and *Conventionals* valued this to a greater extent as they are more self-confident and reflective consumers, hence more aware of how they handle their personal information correctly. Finally, *supportiveness* was perceived as an important value variant in terms of adopting digital technologies for all segments, as some sort of benefits or incentives is required to engage.

Our revised conceptual segmentation framework contributes to existing literature, as we propose that there are *more* segments within Generation Z than what is evident in existing literature and theories adopted from Generation Y, who have distinctive values and expectations of in-store digital technologies. Indeed, it became apparent that these newly identified segments distinguish much in personality and behavior, and therefore must be handled separately. The implications of the specific variables and consumer values presented in the above framework will be further elaborated in the discussion.

6. Discussion

The collected qualitative data created a profound basis for the research full of valuable insights and ideas of the observed retail environment and interviewed consumers that were presented and analyzed in Chapter 4 and 5. The purpose of the following section is to further elaborate on the above presented empirical findings, discuss how they contribute to our research and answer the research question with regards to the existing literature.

6.1 Expectations of Generation Z

As presented in the findings, it was found that each of the values proposed by Davis (1989), Dabholkar and Bagozzi (2002) and Weijters et al. (2007) were valued to a different extent. Additionally, our empirical analysis identified new values important to the consumers in regards to their expectations of in-store digital technologies, which involved *privacy*, *visibility*, *supportiveness* and *alignment*. Therefore we will discuss each value variant proposed by existing literature, as well as the newly found values proposed by our research, in order to deliberate the expectations of Generation Z.

6.1.1. Perceived ease of use

It was found that the perceived ease of use was an important value for the consumers in order to engage with in-store digital technologies. Especially if it enabled for a smoother and easier shopping experience, hence, this reflects what has already been disclosed by existing literature (Davis, 1989; Dabholkar & Bagozzi, 2002; Weijters et al., 2007; Calienes et al., 2016). In line with past literature, our findings position themselves as an extensive explanation of the reasons for which ease of use is found to enhance the adoption of digital technologies. Our findings indicated that in the cases of Generation Z consumers who were familiar with a certain technology, easy access and handling of the technology results in positive reactions. In accordance with existing literature on omnichannel integration (Grewal, Motyka & Levy, 2018), easy access to in-store technology enables for a seamless experience in all touchpoints. Nonetheless, in the cases of Generation Z consumers who were not familiar and comfortable with new in-store technology, the device tends to be disregarded and perceived as confusing and time-consuming, hence not enabling for an effortless and smooth experience. It was found that Generation Z consumers who are new to technology require additional help or information in order to understand how the devices can benefit them. Evidently, the complexity and involvement required to understand the device could result in a reluctance of adopting the devices. This is also in line with Dabholkar and Bagozzi (2002) proposing that consumers with a high need for human interaction, will tend to avoid self-service technologies.

Thus, it could be discussed which attributes are needed in order to ensure that consumers are more adequately informed about how to operate a device and appreciate the *ease of use*. Our research suggests that the in-store personnel has a significant role, as consumers tend to seek

advice and assistance from employees when shopping (Bäckström & Johansson, 2006). This is in accordance with past literature (Alexander & Cano, 2019) proposing that employees should be adequately trained to use in-store technologies, in order to make it relevant for the customer. Alexander and Cano (2019) further suggest that the quality of the interaction with employees and the use of technologies to assist customer service is vital, in terms of increasing adoption. It was evident, that the low perception of *ease of use* depicts the fact, that how to access and use the digital technologies in-store easily was not clear to the consumers. This indicates, that guidance from the in-store personnel combined with prominent explanation is considered valuable and helpful, and could potentially facilitate increased usage of the devices. This is in accordance with Stein and Ramaseshan's (2016) research claiming that interactions with store associates play a significant role in determining customer experience. The findings validate previous research concerning *ease of use* and provide further insights into the elements within the retail environment that are important in order to increase Generation Z consumers level of adoption of digital devices in-store.

6.1.2 Perceived usefulness

In line with the values proposed by Davis (1989), Dabholkar and Bagozzi (2002) and Weijters et al. (2007), our findings determined *usefulness* to be valuable for Generation Z consumers. This value is connected to utilitarian shopping values, and thus a *functional* value as proposed by Sheth, Newman and Gross (1991). Our research implied that there were conflicting views on the usefulness of the digital devices at IKEA. It was evident that the self-service checkouts provided in-store were perceived as being useful in fulfilling the given task, as the consumers were familiar with the functions of it. In contrast, the interactive screens and applications were perceived as confusing and less useful, which could mainly be referred to as the lack of familiarity and information. The respondents expressed that *usefulness*, in terms of providing valuable information, could evidently enhance the shopping experience and enable more informed decision making. Furthermore, findings indicated that in-store technologies are perceived as useful when it allows accessing required information without having to communicate or approach any employees, and thus save time. This indeed indicates that Generation Z consumers value usefulness in terms of convenience, efficiency and timesaving, which is in line with existing literature, proposing that devices that provide time-saving and convenience are especially valuable for the younger generation (Priporas, Stylos & Fotiadis, 2017). The findings further illustrated, that although respondents prefer to seek assistance from in-store personnel, some would consider resorting to digital devices if they were more convenient and useful in resolving their needs. This suggests that consumer preferences might be shifting due to the satisfaction of using new technological devices, which is in accordance tor Grewal, Roggeveen and Nordfälts (2017) research suggesting that digital technologies can improve the customer experience.

Nonetheless, our findings implied that the low usage of interactive digital screens and applications at IKEA could be a consequence of scarce information and communication concerning the usability of the devices. The lack of knowledge about how to access and use

the remaining digital technologies were recognized as being one of the main reasons for the respondents to not adopt the devices in-store. This is also evident in previous research, which has pointed out how the reluctance of technologies can be exerted due to miscommunication from the retailers' side (Elliot, Hall & Meng, 2013). As a result of our findings, we suggest that IKEA should reconsider how the different digital technologies fit with the consumer experience, with the aim of providing a consistent and seamless experience to consumers. This is also in line with Hagberg, Sundstrom and Egels-Zandén (2015), who claim that it is imperative to integrate technologies that have a purpose and ads actual value. Our findings underscore the current literature by proposing that retailers should carefully consider what the objective is of each of the digital devices they provide, to align the experience to a greater extent.

6.1.3 Fun and Enjoyment

Dabholkar and Bagozzi (2002) proposed two new components to the TAM identified as *fun* and *enjoyment* of using technology. This is described as a hedonic value in combination with the utilitarian value of technology. Our findings indicated that the experience at IKEA was perceived as being *enjoyable* in terms of the in-store environment. This could be explained by the in-store facilities and atmospherics, resulted in a pleasant experience. This is in line with existing literature on the customer experience, implying that particularly in-store ambience, stimuli and design influence the customer experience (Alexander & Nobbs, 2016).

Nevertheless, our findings implied that the perception of *enjoyment* and *fun* when interacting and using the in-store technologies at IKEA was not present. The enjoyment perceived seemed to be dependent on the usefulness and convenience, and as these elements were not entirely fulfilled, it was not possible to enjoy the stimulation of the digital devices. It was evident that the interviewees with higher self-confidence and openness towards innovations tended to enjoy the interaction and usage of the digital devices available more, whereas the interviewees who are more self-conscious were more hesitant in using the devices. This is in accordance with the literature on the TAM values proposed by Dabholkar and Bagozzi (2002) suggesting that consumers with high self-efficacy tend to look favorable on technology and have the stronger intrinsic motivation to use such devices whilst enjoying it, as these consumers would not be much concerned whether the devices are easy to use of reliable. We found that the consumers who were more self-confident would seek the stimulation in the experience, and thus valued, e.g. Virtual Reality and Augmented Reality for fun and entertainment purposes, that could create an extraordinary experience. Nevertheless, the findings also implied that some interviewees were reluctant to use the digital technologies at IKEA, despite being selfconfident, which is somewhat contradictory to existing research. This could be explained by the fact that they, in general, are opposed to new technologies and actively choose to not interact with such devices due to own strong opinions.

Much research suggests that *enjoyment* and *fun* is a clear way to build a relationship and build trust, and is essential in building a long-term connection (Calienes et al., 2016). However, our

findings showed contradictory results, indicating that respondents consider it as a *supportive* aspect that enables a more relaxed and stress relieving experience, but not for building trust. Overall, the findings indicated that the extent of *fun* and *enjoyment* derived from using in-store digital technologies is closely related to the usability and accessibility of the devices.

6.1.4 Newness

Newness was identified by Weijters et al. (2007) as a new value variant, that determines the level of innovativeness of technology. Our findings implied that *newness* was not found to be derived from the in-store technologies for consumers at IKEA. This could be explained by the customers not feeling well informed about the digital devices and not aware of their functions, which had a negative valence. Nonetheless, the findings revealed that it raised interest amongst the consumers when explaining about the variety of devices available and their benefits. Thus, *newness* was perceived as creating a positive experience, indicating that the novelty of the new digital technologies could be a key driver for engaging some consumers if it has clear incentives.

It was, however, evident that there were different views on openness towards *new* technologies. This could be explained by the fact that adopting new innovations is closely linked to the individual's personality traits (Dabholkar & Bagozzi, 2002). Hence, it could be suggested that the consumers who had negative responses to new digital technologies could stem from uncertainty and opposing opinion related to interacting with the devices. Furthermore, the negative reactions could also be explained by the fact that the consumers were lacking clear incentives for using the devices. Whereas, the consumers who had more positive responses towards new digital technologies could be explained with the fact that they have more desire to seek new stimuli and is, therefore, more early to adopt an innovation.

6.1.5 Reliability

Reliability is defined as the extent to which a digital technology consistently and accurately performs a given task (Weijters et al., 2007). Our findings suggested that *reliability* were particularly important for some consumers in terms of adopting new digital technologies. The research indicated that the consumers did not have much trust in the digital in-store technologies at IKEA to solve their needs properly, which is quite contradictory to the existing literature on Generation Z consumers. The existing literature argues that Generation Z is completely reliant on digital devices when shopping in retail stores and expect them to widely available (Priporas, Stylos & Fotiadis, 2017; Bassiouni & Hackley, 2014; Fister-gale, 2015; Wood, 2013). However, it was evident in our research that this is not necessarily accurate for all Generation Z shoppers. From our empirical observations, we deducted a low level of adoption of digital devices in IKEA amongst the target audience, which was supported by the field interviews where consumers were quite skeptical towards the usage of the interactive screens and applications. This is further reinforced by the in-depth interviews, where

respondents indicated that they were more reliant on their own mobile phone or in-store personnel in terms of obtaining dependable information rather than the digital devices. One of the reasons for this view was that the interactive screens and IKEA applications were perceived as being complex, confusing and not developed enough, thus, not reliable to solve their needs. The findings suggest, that *reliability* of in-store digital technologies is considered important in terms of reducing the perceived risk of engaging with the devices, which strengthen the recommendation that in-store personnel has a significant role in terms of changing this perspective.

6.1.6 Privacy

The analysis of the Generation Z consumers attitude towards innovations and in-store devices allowed to reveal a new value, *privacy* that is an important element shaping their expectations of in-store digitalization. *Privacy* could be associated with a desire to feel safe, and thus the concerns of Generation Z consumers in terms of what personal data is collected by retailers and how these data are handled. In line with the theory proposed by Ram and Sheth (1989), privacy concerns of Generation Z consumers could be one of the innovation resistant factors. Our findings showed that young shoppers care to a different extent about the privacy of their personal data. Based on the empirics, it was evident that some consumers refuse to approach available devices if they are not aware of how their data is being used by retailers. This is line with existing literature proposed by Grewal, Roggeveen and Nordfält (2017) suggesting that if consumers are aware of how much data retailers have collected due to their interaction with innovative devices, they can be more reluctant to adapt to them.

Despite the fact that generation Z consumers are aware of the fact that retailers are collecting their personal data, some consumers expressed that privacy concerns do not prevent them from using in-store technology. Interestingly, our empirics showed that some consumers do not mind sharing information on their shopping behavior in the exchange of personalized offers and discounts. This indicates that some sort of tangible offers that shows an understanding of the personal needs of the consumer could undermine the privacy threat. Nonetheless, despite different attitudes toward personal data privacy, the analyzed segments agreed that they need to pay more attention to the private data that they are sharing while shopping prior to giving consent to retailers. Furthermore, that privacy is an important element that will gain more importance for them with the rise of new technologies. This is contradictory to current research (Priporas, Stylos & Fotiadis, 2017) claiming that Generation Z consumers believe that *privacy* may be less affected by the penetration of new in-store technologies. Therefore, we expand knowledge on Generation consumers by proposing that ensuring transparency and informing Generation Z consumers on their data policy is an important area that could eliminate existing concerns and barriers of adopting in-store technologies and potentially motivate youngsters to approach in-store technology.

6.1.7 Supportiveness

The findings indicated *supportiveness* as a new value variant derived from in-store technology. Our findings suggested that the respondents felt that the digital technologies at IKEA were lacking some sort of supporting value, in the sense of providing a significant service or fulfilling a task that enabled for an enhanced shopping experience. This is in line with literature proposed by Hagberg, Sundstrom and Egels-Zandén (2015) suggesting that retailers should only integrate technologies that add true value to the customer experience. It was evident that the respondents perceived the self-service checkouts at IKEA as being value-creating, as they were aware that it would resolve a need, whilst reducing time and being convenient. In terms of the interactive screens and IKEA applications, the value derived was low, indicating that it did not enable for an enhanced experience. Thus, a *supporting* value is important for the respondents in order to approach digital technologies at IKEA.

It was observed that the in-store digital devices at IKEA were not the main driver for consumers to visit the store, however, the findings suggested that it could be. Previous literature (Davis, 1989) suggest that consumers need to be convinced that a given technology is useful for them in order to adopt. Our research contributes, as we claim that it is not alone the consumers who are responsible for this, as current literature indicates, but the retailer plays a significant role in this. We suggest that IKEA should assign profound engagement in determining the purpose of the different digital technologies that they offer, in order to increase the value perception. Further, we propose that clear communication from the retailers' side concerning the benefits and incentives achieved from using the technologies is vital in order to increase the adoption.

6.1.8 Visibility

The analysis of the empirics allowed to reveal one more essential value of in-store technology that is referred to as *visibility*. It could be defined as making digital devices that are embedded in the in-store customer journey *noticeable and observable* for customers. Our findings suggested that one of the primary reasons for the low interaction with available in-store devices were due to the low level of information and visibility of in-store devices at the showrooms. This is in line with the literature proposed by Beauchamp and Ponder (2010), who indicate the importance of convenience in order to access such devices. Hence, we found that ensuring *visibility* of the in-store devices could contribute to the ease of access and search process, that are especially prioritized by Generation Z consumers.

It was evident that some of the interviewed consumers were reluctant to IKEA's interactive screens and applications because of the low level of promotion of the newly installed devices. Since technological touchpoints are usually unfamiliar to consumers, they demand extra promotion and education of the consumers during the launching process. The current level of usage of the devices indicates that IKEA does not integrate such technological touchpoints in the overall showroom experience. We found that the low *visibility* of the in-store devices resulted in low involvement of brand-owned technological touchpoints, which is in line with

Herhausen et al. (2019) suggesting that one of the factors that are forming the customer shopping experience is involvement in the existing touchpoints of the retailer.

Another important finding that was revealed with the value visibility was the role of in-store personnel in terms of creating awareness about the available devices and their functionality. We found that in order to ensure the involvement of Generation Z consumers in the technological touchpoints, it is essential that shopping assistants should refer to in-store devices by explaining their benefits for the customer. The respondents stated that they would still ask personnel because they consider it to be a more reliable and faster way to receive help while shopping. To provoke the usage of available devices, in-store staff could become an effective middleman between customers and functional touchpoints and ensure a smooth transition to them by educating consumers. This will also contribute significantly on such values as *reliability* and *perceived ease of use* since prior to approaching these devices, consumers would be informed of where it is located, its primary functions and how to use it effectively. Current research on Generation Z expectations of in-store technologies highlights that these devices positively affected the satisfaction and reduced the perceived risk of technologies (Priporas, Stylos & Fotiadis, 2017). Our research showed contradicting results, and contributes with new knowledge, claiming that new innovative technologies will not simply facilitate an enhanced experience.

6.1.9 Alignment

The last found value variant newly is *alignment*. The findings implied that the interviewees expect an *aligned* experience, where both the hedonic aspects of shopping and the utilitarian aspects of shopping, including functionality and efficiency, is prioritized. We found that the shopping experience at IKEA was not considered to be aligned, as the respondents expressed that there was a lack of consistency between the offline and online experience touchpoints. The respondents indicated, that due to the interactive screens and IKEA applications not being prominent, easy to use and useful the experience was not perceived as *aligned*. This indicates that they expect a seamless experience in all touchpoints, where both experiential and functional aspects are accentuated. This is in line with existing literature on the customer experience proposing that consumers expect consistency in all touch points when shopping (Verhoef, Kannan & Inman, 2015). Furthermore, the consumers desire a unique and memorable experience connected to the in-store technology, in line with Stein and Ramaseshan's (2016) research.

The empirics show that the respondents expect retailers to have digital devices available, and thus the physical space to be digitized. The respondents expressed that especially the self-service checkouts were considered a standard service that should be available, as it enables for a convenient and time-saving experience, whereas the interactive screens and IKEA applications are supplementary devices that could add additional value. This indicates that it is important for IKEA to ensure synergy between their existing touchpoints and new digital technologies in order to maintain a consistent experience and create value. Furthermore, to

identify each segment, unique customer journey and leverage a tailored solution. This is in accordance with existing literature, proposing that traditional brick-and-mortar retailers need to coordinate their activities in order to leverage the advantages of the physical store whilst exploiting the benefits of technology if they wish to create a seamless omnichannel experience (Grewal, Motyka & Levy, 2018). Moreover, many of Generation Z consumers are categorized as multiple touchpoint shoppers, they tend to switch often between online and offline shopping to look for better assortment and prices. However ensuring *alignment* among technological touchpoints will help to eliminate the "cross-channel free-riding behavior" proposed by Heitz-Spahn (2013) by providing detailed product information, assortment and price comparison devices via in-store technology. As a result, it will encourage young consumers to do preshopping and make a purchase at the same retailer without switching. It could be discussed, that blurring the lines between digital and human services could encourage consumers to use the digital in-store devices at IKEA more frequently instead of human assistance, and leverage an *aligned* experience.

6.2 Implications of Conceptual Segmentation Framework

6.2.1 Implications of variables

Our choice of variables allowed to categorize the respondents based on their personality shopping patterns and attitude towards innovation in order to reveal how these factors are interconnected with the usage of in-store digital devices. We build on research conducted by Dabholkar and Bagozzi's (2002), Herhausen et al. (2019), Davis (1989) and Weijters et al. (2007) by applying relevant consumer traits and factors to determine Generation Z's expectations of in-store digital technologies - *self-confidence, the extent of the reliance on others opinions, preferred shopping mode, attitude towards innovation and expected values from in-store technology*.

Our empirics showed that the reliance on others opinion influenced the attitude towards innovation. Hence, consumers with high reliance on others opinion tended to not be first movers on new technologies. Contrary to our expectations and current research (Dabholkar & Bagozzi, 2002), high self-confidence did not always strengthen the attitude towards innovation. We found that high self-confidence could also attenuate the attitude towards innovation for consumers with low novelty seeking. An explanation might be that the consumers prioritize *ease of use, reliability* and *privacy,* thus, the attitude towards innovation is also interlinked with the prioritized values of in-store digital technologies. Hence, they would tend to try in-store digital technologies only if it encompasses these aspects. It could be further suggested that the shopping mode of consumers correspondingly influence the attitude towards innovation. We found that consumers who are store focused shoppers tend to have more negative responses towards new innovations, whereas consumers who are multiple touchpoint shoppers or online shoppers have more positive responses to new innovations. This could be explained by the consumer being more familiar with using online or technological touchpoints during the shopping trip. These findings support previous research on the subject, however, it

contributes by expanding knowledge with new insights of how variables of segmenting Generation Z are interconnected.

6.2.2 Interconnectedness of consumer values

In terms of the expectations of in-store digital technologies, our empirics showed the interconnectedness between the revealed consumer values and segmentation variables discussed above. It could be suggested that the elements are coexistent and interlinked, and thereby influencing Generation Z's attitude and expectations of in-store digital technologies. We propose that the newly found value *alignment* is the center of all values, thus, the element that interlinks all consumer values, as illustrated in figure 6 below.



Figure 6. Identified Generation's Z values and expectations of in-store technology

It was evident that the *perceived usefulness* is strongly connected to consumers innovation acceptance, thus, *ease of use* is more an antecedent to usefulness rather than a determinant of usage which is in line with current literature (Davis, 1989). Furthermore, we found that *reliability* correlates highly with the level of *supportiveness* and *visibility* of in-store digital technologies. Consumers who prioritize *reliability* in terms of new innovations prefer to interact with employees because they do not believe the technology to be reliable. This leads to the assumption that if the elements *visibility* and *supportiveness* are not fulfilled, Generation

Ζ would consider interacting with the devices. consumers not Thus, visibility and supportiveness in terms of an added value exert positive reactions towards the perceived *reliability*. Additionally, these newly identified values are crucial to build trust with conventional shoppers, increase confidence and provoke usage of in-store digital technologies. The aspect of building trust is further connected to the newly found value *privacy*. Our findings suggest that the perception of *privacy* is strongly associated with the level of reliability and supportiveness. Hence, it could be proposed that these would positively influence the perception of *privacy*.

Our research further indicated that the level of self-esteem influence how Generation Z consumers perceive *newness* as well as their innovation acceptance. Our research indicated that having high novelty seeking, following the latest trends and desire to experience new products is connected to the self-esteem of consumers. Thus, consumers with higher self-confidence would perceive newness in terms of innovation as an important value derived from in-store technologies. However, they are also concerned with whether newly launched in-store devices are perceived as useful and reliable. User-friendliness is for sure not as crucial for high selfconfidence consumers as for consumers with lower usage of in-store technology, but it is still important to establish a consistent experience for these pioneers. Opposed to this, consumers with lower self-esteem would not consider newness a determinant for engaging with new devices, but rather visibility and ease of use. However it also worth to mention that newness in combination with group influence, while promoting in-store technology, could be used as motivation for less self-confident shoppers, who tend to follow the crowd (Dabholkar, Bagozzi, 2012). It could further be derived that *fun and enjoyment* to a great extent is dependent on the personality traits of the consumer. Nonetheless, our findings indicated that usefulness and ease of use exerts a positive response towards fun and enjoyment of in-store digital technologies because when a device is easy to access and use there is more intrinsic motivation to enjoy the stimulation of it

Our empirical research allowed us to identify the technological touchpoints in which customers are interacting, thus, it can be suggested that such values as *visibility, perceived usefulness* and *supportiveness* exert a significant influence on the consumer in-store behavior. The analysis of the empirics proves that one of the reasons why Generation Z is reluctant towards in-store devices is the low *visibility* and *perceived usefulness* of the devices. As a result, ensuring high *visibility* could exert a positive influence on *supportiveness* and *perceived usefulness* and additionally ensure the convenience of using in-store technology. Furthermore, it could be derived, that the level of *ease of use* is equally important in terms of enhancing the convenience of the in-store digital technologies.

Consequently, it can be concluded that the newly identified consumer values derived from instore digital technologies are important factors in terms of Generation Z consumers expectations and adoption of new innovations. This research validates current findings on Generation Z segments and consumer values, however, we contribute with new knowledge on Generation Z segments, how consumer values derived from in-store technologies are interlinked, and evidently how they influence the level of adoption. Further, our study advances a theory in yet another important way. Our research proposes that the perception of the newly found values (*privacy, supportive, visibility, alignment*) will act as determinants of Generation Z's attitudes towards using in-store digital technologies. Thus, our new proposed conceptual segmentation framework will serve as guidance for retailers in order to understand how to attract Generation Z shoppers to use in-store innovations.

6.2.3 Application of values outside Generation Z

It could be discussed if the concept of our segmentation framework could be applied to the context of a different age span. It is evident that current literature considers age an important factor in the new digital culture, particularly in terms of expectations of consumers (Priporas, Stylos & Fotiadis, 2017). However, since the categorization of Generation Z consumers was conducted based on the VALS typology of consumers in general, which Valentine and Powers (2013) have further applied to Generation Y, it could be suggested that some of the identified consumer values could potentially be applicable outside Generation Z consumers.

It could be assumed, that perceived ease of use could act as determinants for elderly consumers to adopt new in-store technologies due to their lower level of innovation acceptance and their inclination to a more traditional what of shopping, in which in-store sales assistance plays a significant role. As discussed above, ensuring *perceived ease of use* for consumers, in general, could enable a more aligned and seamless experience and encourage them to use in-store technological touchpoints, thus, this could be applicable for different age groups. As proved in our analysis, store-oriented customers, which also includes elderly consumers (Herhausen et prefer to interact with in-store personnel, and would, al.. 2019). therefore. value visibility and reliability of in-store devices in order to approach them. It could be argued, that visibility, in fact, serves as a crucial element for any age span, since it creates awareness of in-store technology and is associated with first touchpoints encountered by customers in stores. Furthermore, in the era of the digital revolution, more customers without regards to age tend to care about their personal data. Thus, privacy could be perceived as one of the components of reliance on in-store devices and could be relevant outside of Generation Z consumers.

We suggest that our proposed conceptual segmentation framework could potentially be applicable to other age spans, however, with some moderation and adjustment depending on the proposed variables of the studied age group.

6.3 Recommendations for Retailers

As a result of our research proposing the differences within Generation Z segments, it could be suggested that an *one-size-fits-all* approach regarding the digitalization of the customer's journey is not advisable. In order to encourage Generation Z shoppers to use innovative devices

in-store, retailers should adjust the in-store journey based on the identified values and expectations of Generation Z consumers previously presented.

6.3.1 Clear Purpose for In-Store Technologies

Our empirical research indicates that one of the main reasons for Generation Z consumers low adoption of digital in-store technologies is the lack of information, incentives and benefits derived. In order to effectively integrate in-store technology in the customer journey, retailers should differentiate these devices based on their *purpose*. The in-store devices could be distinguished according to different purposes such as *convenience, providing information, entertainment* and similar, so it is clear for the customer what it is supposed to help with. In line with existing literature on the customer journey (Lemon & Verhoef, 2016), retailers should identify key aspects and trigger points of each technology that leads to either satisfaction or frustration. It can further be suggested that proper communication concerning the benefits and value consumers gain from using the in-store digital technologies, could increase the level of adoption. Additionally, by clearly defining the purpose of each device, retailers can increase the *reliability* of the devices and encourage customers to approach these devices when looking for a particular service.

It was further evident that supportiveness was a crucial motivating factor for consumers in terms of adopting digital in-store devices. In correlation to this, we found, that in-store service employees are very important and can evidently influence the consumers' values derived from in-store digital devices, as discussed in the previous section. Our findings implied that in-store personnel represent a significant role in explaining the purposes of the available technologies and supporting the trustworthiness of them. Consequently, communication is an imperative inquiry, as consumers tend to make better decisions leading to positive reactions, if the quality of the information received is relevant for the customer (Stein & Ramaseshan, 2016). We suggest that retailers' employees should communicate to and educate consumers in-store, to help them overcome their uncertainties of adopting new technology, which in turn, could transform human in-store assistance to technological touchpoints in long-term. The promotion of digital devices via in-store assistance would also increase consumers self-confidence and lower the perceived risk of approaching the devices. Furthermore, we propose that visibility is a major concern, thus, retailers should make sure that digital technologies are prominent and in sight of the consumers and that the consumers are informed about their services. Since Generation Z consumers tend to use personal devices while shopping, it is essential for retailers to communicate how their in-store devices could fulfil the same needs, or even exceed them. In order to attract more Generation Z consumers, retailers should emphasize values as ease of use, supportiveness and privacy defined as transparent use of collected personal data, since they are prioritized by the majority of the defined segments.

With regards to the abovementioned, it can be concluded that modern retailers need a clear strategy in how to relate the digital technologies to a certain purpose so that the customer understand what values and benefits are provided. To ensure coherence, retailers should engage

in a communication strategy, where digitalization of the in-store journey should be treated in complex with the promotion and education of the consumers.

6.3.2 Creating an aligned experience

An equally distinct inquiry that was revealed from our findings and should be highlighted is the creation of an *aligned* experience for Generation Z consumers. In line with existing literature on omnichannel strategies, our research proposed that consumers expect consistency in both offline and online channels (Verhoef, Kannan & Inman, 2015). Nonetheless, our findings indicated that aligning the utilitarian and hedonic components of shopping could potentially increase the involvement of young consumers in the in-store customer journey and also blur the lines between digital and physical touchpoints.

It is evident that digital in-store technologies offer the potential for improved consumers satisfaction and increased value perceptions due to the convenience, time-saving and the labor savings for the retailers (Priporas, Stylos & Fotiadis, 2017). Nonetheless, retailers are struggling with leveraging this value. It is essential to ensure synergy between their existing touchpoints and new digital technologies in order to maintain a consistent experience. An aligned in-store customer journey could lead to a convenient and time-saving experience, whereas embedded innovations are supplementary devices that could add additional value for consumers. Thus, retailers ability to match the strength of each in-store digital technology to fulfil specific customer request is the key to success. Overall, developing a unique customer journey based on the identified values of each segment will allow retailers to leverage a tailored solution for Generation Z segments and increase their involvement.

7. Conclusion

This research study has thoroughly explored the expectations of Generation Z consumers in regards to in-store digital technologies and has developed a new conceptualization in regards to the research question:

What are the expectations of Generation Z consumers of digital technologies in physical retail stores?

The aim and purpose of the study were achieved by conducting a thorough literature review of existing research and collecting relevant qualitative material. To ensure trustworthiness and a broad perspective of the study, the research findings were based on several qualitative research methods consisting of observations, field interviews and in-depth interviews. The global retailer IKEA was chosen as a case study in order to observe and analyze how digital technologies are currently being used by Generation Z in a real-life retail setting, which allowed to gain in-depth insights of the consumers in-store shopping behavior. With our research question as our starting point, we determined different themes throughout our empirical research representing an extended contribution to previous literature (Herhausen et al., 2019; Priporas, Stylos & Fotiadis, 2017; Valentine & Powers, 2013; Weijters et al., 2007; Dabholkar & Bagozzi, 2002; Ram & Sheth, 1989; Davis, 1989), which culminated in the development of a new conceptual segmentation framework. Aside from ensuring to answer the research question, we contribute by presenting managerial suggestions for retailers on how to handle this.

The analysis of the empirical material allowed us to determine that Generation Z consumers vary considerably in their expectations and values derived from in-store technologies. By taking on the theoretical perspective of existing literature and merging with our findings, we were able to reveal new consumer values unique for Generation Z - *privacy, supportiveness, visibility, alignment.* The study further revealed a new central segment of Generation Z consumers, *Conventionals.* This extended knowledge led to the development of a conceptualized segmentation framework depicting the interconnectedness of these elements. The researchers believe that this will be of particular interest for academics seeking to investigate this area further and retailers seeking to understand Generation Z behavior.

On a wider scheme, the findings from this study deducted a low level of adoption of in-store digital technologies, leading to the suggestion, that not all Generation Z consumers are open towards engaging with in-store digital technologies and expect them to be available, which is contradictory to much research (Valentine & Powers, 2013; Fister-Gale, 2015; Priporas, Stylos & Fotiadis, 2017; Bassiouni & Hackley, 2014). As discovered in the discussion, the reasons behind the consumer reluctance can be referred to (1) lack of awareness regarding the technologies existence, (2) lack of information and communication concerning the usage and functions of the in-store technologies, and (3) lack of incentives and benefits for adopting the in-store technologies. The study affirms that in order to address the aforementioned concerns

it is essential for retailers to distinguish each in-store technology according to its purpose, and assign a clear role for it so that it is clarified for consumers. It is also acknowledged that the instore personnel represents a significant role in endorsing the technologies and explaining their purpose, which in turn, could increase customers self-confidence in approaching the devices. The researchers hence suggest that retailers should develop their in-store technological touchpoints in accordance with the values and expectations of Generation Z and ensure proper communication initiatives concerning the benefits and incentives consumers gain from using the devices.

7.1 Contributions

This study contributes to the literature of Generation Z consumers by (a) introducing a new conceptualized segmentation framework concerning Generation Z consumers expectations and values derived from in-store technologies, (b) uncovering valuable insights on Generation Z reasons for the reluctance of in-store technologies, and (c) bringing new managerial perspectives on how to handle these concerns. The strengths of this study lie in both its theoretical and managerial contributions, as the application of our new theoretical perspective enables both academics and practitioners to gain valuable insights.

7.1.1 Theoretical Contributions

Building on Herhausen et al. (2019), Valentine and Powers (2013), Weijters et al. (2007), Dabholkar and Bagozzi (2002) and Davis (1989) studies, this research has gone on to investigate the current expectations of Generation Z segments in regards to in-store technologies. By taking on the theoretical perspective of existing literature, this research is one of few to examine the subject in-depth and hence adds to the understanding of how different Generation Z segments behave. The researchers were able to categorize respondents according to determined theory-based variables, which led to the revelation of new unique values, *privacy, supportiveness, visibility* and *alignment* distinctive for Generation Z, that act as determinants for adopting in-store technologies. Our analysis further allowed to define a new segment of Generation Z consumers, *Conventionals*, with distinguishing values, attitudes and peculiarities. This opened up for the conceptualization of our findings with a new segmentation framework. This research, therefore, specifically contributes to the discussion of Generation Z segments by supporting previous findings and extending general literature on the subject with new valuable findings.

This study further contributes to previous literature (Elliott, Hall & Meng, 2013; Priporas, Stylos & Fotiadis, 2017; Valentine & Powers, 2013; Wright, Haug & Huckabee, 2019) by discovering reasons for Generation Z consumers reluctance towards in-store technologies. Drawn from the empirical material and analysis, the research suggests that particularly insufficient information, communication and incentives from the retailers perspective concerning the usage of the in-store technologies were main drivers for the low adoption.

7.1.2 Managerial Implications

The proposed conceptualization of Generation Z consumers allowed to deepen the knowledge of their expectations of in-store technology and as a result, serve as a basis for leveraging tailored solutions for each identified segment. As Generation Z is a large population (Priporas, Stylos & Fotiadis, 2017), retailers could benefit from segmenting the Generation Z market into meaningful subsets, and thus better serve marketing messages. Therefore, the findings derived from this research have significant implications for retailers and managers, as it suggests, that it is essential to understand different segments of Generation Z consumers and their expectations.

Our research is considered an extension of previous literature, as we identify managerial suggestions for retailers in order to overcome the consumer reluctance towards in-store digital technologies. Based on the issues found in the discussion, the study highlights the need for retailers to develop a clear strategy for the implementation of in-store digital technologies in line with the expectations and values of Generation Z segments. The researchers further suggest that in-store personnel should be a central element in educating and informing consumers about the functions and incentives of using in-store technologies. Hence, our findings are of high practical relevance as they uncover how retailers can handle the concerns of Generation Z consumers.

7.2 Limitations and Future Research

Our research can be seen to have contributed to the existing literature on technologies in retailing and has extended our understanding of Generation Z's expectations. Nonetheless, the findings are subject to some limitations. Firstly the chosen research method of qualitative research minimize the transferability and generalizability of the findings. Thus, it could be relevant to seek further validation and support of our findings proposed in the theoretical framework by applying quantitative research approaches with larger samples. However, it is important to address that the main purpose of this research was to uncover underlying motivations and intentions of Generation Z consumers, which could not be assessed with a quantitative research approach.

Secondly, it would also be interesting to expand and deepen the research by conducting observations in other retail settings, to verify whether the same patterns can be found amongst Generation Z consumers without dependence on the retailer type. The findings might alter if the observations and field interviews were conducted in diverse retailing settings, hence, future research could contribute to the existing literature by investigating if Generation Z innovation acceptance and values differ depending on the type of the retailer. Moreover, it is worth to investigate how proposed segmentation, values and expectations could be applied to other age groups.

It could be argued that our point of departure in this thesis has been that of a customer perspective. Thus, another suggestion for future research would be conducting a study of how retailers implement new technologies in-store, reveal their main motivations and integrate them with their strategy from a retailer perspective. It could contribute to the existing literature by providing new perspectives on how retailers influence innovation acceptance of young consumers from their point of view.

Lastly, it could be suggested that as the respondents chosen for our research are mainly students, this could affect the results of our study. It could be of academic interest to select a new sample of respondents from diverse backgrounds (demographics, income, nationality, level of education) to test the findings of this research and potentially reveal new insights. Moreover, since this research was based on the setting of IKEA Sweden, it could be argued to be limited to the Scandinavian mindset of customers. One could conclude, that in the era of rapid digitalization, this research topic still leaves aspects to be further investigated since Generation Z consumers have evolving values and perceptions of new innovations.

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Appendix A: Typology of IKEA In-Store Devices





In-store device 2. Interactive information screen located near the entrance by the elevator. Functions:

- current updates
- store information (opening hours)



In-store device 3. Interactive touch screen tablet located on the second floor by the elevator.

Functions:

- find products in the store
- map of the store


In-store device 4. Interactive touch screen tablet located in the wardrobe/shelf section Functions:

- find products in the store
- access map of the store
- book and order objects online



In-store device 5. Interactive touch screen tablet located in the wardrobe section. Functions:

- discover available options of wardrobes
- create personalized wardrobes
- check available designs



In-store device 6. Interactive touch screen tablet located in the children area. Functions:

- find products in the store
- create personalized wardrobe
- check sizes of the objects

Appendix B: Diary-notes from observation at IKEA, Hyllie

10:00 - 10:30 Entrance	The observation started from the entrance floor, where sensor tablets are located. These tablets function as interactive screens allowing customers to see the plan of the store, current promotions and activities happening at the IKEA store. This area was observed between 10 and 10:30 am during the fist opening hour of the store, when all the customers enter the store. Despite the fact that focus of the observation were customers aged between 18-27, these tablets were not approached by any customers during the observed period of time.
10:30 - 11:30 Showroom floor	The observation in the showroom area was started by monitoring the customer activities next to the interactive map located by the entrance to the inspiration rooms. This device was not approached by customers but it was noticed that when entering the shopping area most observed consumers are using personal devices. Two customers of the target age were interviewees at this area and they said that they were using cell phones either for shopping list or IKEA App to find the location of the needed products. The observation continued to the "Living room" section, where one interactive tablet was located and screens with room descriptions. While observing, it was noticed that 5 out of 30 passed customers have tried to use the tablet, but the time of using it was short less than a minute. It can be assumed that customers were not able to find the information searched for. At the "Wardrobe" and "Bedroom" areas interactive tablets were not used by the observed customer segment. It can be assumed that either they were not interested in these product categories or did not seek for the information that could be provided by these tablets.
11:30 - 12:00 Market floor	This area was more busy during the observed time, and the majority of customer shopping at this area were in the age between 18-27. The observed target segment was mostly using personal devices for taking notes and keeping track of the shopping list.
12:00 - 12:30 Self-served area (ground floor)	Since there are no interactive tablets at the ground floor, the main objective of the observation at the ground floor was to monitor how Generation Z is using IKEA App for navigation and online shopping list. Based on the observation customers were not using IKEA app nor personal assistance. On the contrary, the majority of the observed people were using personal notes prepared during the pre-purchase stage (doing pre shopping on the IKEA website).

12:30 -	During the observed time this area was the most crowded, there were two
13:00	lines to the cashier of approximately ten people in each. However, the area
Check out	of the self checkout was also in used. Customers that were using the self
area	checkout area were of diverse age groups.

Appendix C: Field Interview Topic Guide

Questions:

- Where are you from and how old are you?
- While shopping do you use your smartphone/tablet/other device/IKEA App?
- Do you use digital in-store tool at IKEA? Why/why not? When?
- If not, do you know that digital devices are available at IKEA?
- Is digital devices important for you, when shopping at IKEA?
- Do you usually shop online/physical? Why?
- Do you like in store experience at IKEA?

Appendix D: In-depth Interviews Topic Guide

In-depth Interviews

Location: Online (Skype or Zoom)

Interview Questions

Profile question

• What is your name, gender, age and nationality?

Personality/behavior

- How would you describe your personality?
- Would you say that you are self confident or more reliant on others?
- To what extent do you care about others opinion about you?
- How do you think your friends see you?
- Is it important to have a certain image?
- To what extent do you follow the latest trends within fashion, digital technologies etc.?

Shopping behavior in general

- Do you usually shop online or offline?
 - If online, explain why?
 - If offline, explain why?
- Do you shop alone or with friends/family?
- Do you usually buy the same brands, or are you open to try new brands?
- Do you often go to others for advice or recommendations when buying a new product?

Attitude towards digital technologies in general

- Do you use any digital devices on a daily basis?
- How do you use technology when shopping?
- Are you open towards trying new digital technologies?
- Would you say that you are concerned with your privacy and safety in regards to new technologies?
- What are your expectations of the availability of digital technologies at physical stores?

- Do you feel that digital technologies enables you to make more informed decisions when shopping?
- Would you use in-store digital devices for a coupon/bonus from a retailer?

Usage of digital technologies at IKEA

- Can you tell us about the last time you visited IKEA?
- Did you use any type of technology last time you were in IKEA?
- If you require any assistance in-store at IKEA, what is the first thing that you would do?
- Do you feel you are well-informed about IKEA's in-store digital technology devices?
- Would you like to try IKEA in-store technology?
- Do you think IKEA (retailers) should invest more in digital in-store devices/assistance?