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Generation Z consumers' expectations of interactions in smart retailing: A future agenda

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ABSTRACT

Retailing is witnessing a transformation due to rapid technological developments. Retailers are using smart technologies to improve consumer shopping experiences and to stay competitive. The biggest future challenge for marketing and consequently for retailing seems to be generation Z, since members of this generation seem to behave differently as consumers and are more focused on innovation. The aim of this paper is to explore Generation Z consumers' current perceptions, expectations and recommendations in terms of their future interactions in smart retailing contexts. To do so, we used a qualitative approach by conducting a series of semi-structured in depth interviews with 38 university students-consumers in the UK market. The findings showed that smart technologies have a significant influence on generation Z consumers' experiences. Moreover, this particular group of consumers expects various new devices and electronic processes to be widely available, thus offering consumers more autonomy and faster transactions. In addition, they expect the technology to enable them to make more informed shopping decisions. Interviewees also stressed the importance of training consumers how to use new smart retailing applications. In addition, some of the participants were sceptical about the effects of further advancing smart retailing on part of the job market. Relevant theoretical and practical implications are also provided.

1. Introduction

In this age of Internet and communication technology retailing has become a dynamic industry. This is partly because consumers have become increasingly technology-dependent (Zhitomirsky-Geffet & Blau, 2016). As organizations continue to increase their investment in IT, they are becoming aware of the importance of IT acceptance and how its usage is a precondition for achieving higher productivity with IT (Halilovic & Cicic, 2013). As Browne, Durrett, and Wetherbe (2004) have projected, the shopping experience has vastly changed over the years and the number of consumers shopping on line has increased dramatically. Society exchanges information through smart phones, laptops and multi-touch

tablets, (Liu, Pasman, Taal-Fokker, & Stappers, 2013), while retailing employs various innovative (smart) technologies to improve the consumer shopping experience (Fotiadis & Stylos, 2016; Pantano & Priporas, 2016; Pantano & Viassone, 2015; Pantano, 2013, 2014). For example, retail chains have invested heavily in introducing self-service technologies, such as self-cash desks, informative touch points, interactive displays equipped with touch screens, digital signage and applications for mobile phones, which are supported by Radio Frequency IDentification (RFID) tags. Other retailers have developed entirely virtual stores where consumers can use their phones to locate products and purchase them within the store (Pantano & Timmermans, 2014). Furthermore, age is an important factor in the new digital culture (Lee, 2009) which is why there are differences in different categories of consumers, (i.e., Generation Y, Generation Z) and in their expectations as consumers.

Against this background, we need more insights into consumers' expectations of future interactions in the smart retailing setting. The aim of this study is to explore generation Z consumers' expectations of interactions with retailers or/and products/

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consumers in store in terms of future innovation in retail settings. The focus is on the new innovations in consumer-computer interactions that have shown already their potential to meet the present and future needs of generation Z. In addition to exploring consumers' perceptions of current smart technology applications, this empirical study centred on the following key research questions:

RQ1. What is the future of smart technology in retailing?

RQ2. What are the expectations of generation Z consumers of smart retailing?

This study contributes to the existing literature by addressing the following important gaps. First, although empirical research on smart retailing is growing (Dacko, 2016; Kim, Lee, Mun, & Johnson, 2016; Roy, Balaji, Sadeque, Nguyen, & Melewar, 2016; Vrontis, Thrassou, & Amirkhanpour, 2016), it is still limited and more studies are needed as it is a dynamic field, since the technological advancements are continuous and have an impact on the retail market and consumer experiences. Second, the epicenter of the study is generation Z, where there is a dearth of empirical studies in the field of marketing. This generation seems to be the biggest future marketing challenge, since it is the driver of innovation and change (Morgan, 2016; Wood, 2013, pp. 1–3). This generation has huge spending power and makes up a quarter of the UK population (www.campaignlive.co.uk), while it will constitute 40% of all U.S. consumers by 2020 (Empson, 2016). Thus, it is expected to heavily influence retail marketing practices both from a technological and product-specific point of view. Third, consumer's expectations and the aspiration to fulfil them form the foundations of all classical and modern marketing concepts (Baruk & Iwanicka, 2016). As expectations are consistent with the market's evolution (Steiner, Wiegand, Eggert, & Backhaus, 2016), it is important to explore Zers' expectations of the future of smart retailing, since Gen Z has more power than any previous generation to re-define production and consumption. Finally, our findings are important for researchers and practitioners alike, because little is known about generation Z as consumers and their expectations in smart retailing settings.

The remainder of this paper is organized as follows: First, it briefly overviews the relevant literature on generation Z and consumer expectations in relation to the new technologies. Thereafter, it describes the research methodology and discusses the key empirical findings. Lastly, it presents the conclusions as well as the relevant implications, limitations and future research avenues.

2. Theoretical background

2.1. Smart retailing background

Since 1974 when the first retail product (a pack of chewing gum) was sold via a scanner at a Marsh supermarket in Troy, Ohio, USA, many major technological innovations have revolutionized retailing (Inman & Nikolova, 2016). This is especially true of how information communication technology and smart technologies (i.e., socially interactive dressing room, virtual fitting room, interactive mirrors, in store mobile apps, etc) have transformed consumer-retailer interactions (Grewal, Roggeveen, & Runyan, 2013; Kim et al., 2016; Pantano & Priporas, 2016; Pantano & Timmermans, 2014; Pantano & Viassone, 2015; Voropanova, 2015; Yadav & Pavlou, 2014). The application of new technologies in retailing is beneficial to both consumers and retailers since these technologies can enhance consumer in-store behaviour and decision-making, improve the collection and exchange of information, provide opportunities for the development of new

products and services as well as new contacts through interactive tools between retailers and customers (Pantano & Migliarese, 2014; Pantano & Timmermans, 2014; Pantano, 2010).

Furthermore, Vrontis et al. (2016) point out that smart retailing is expectedly changing consumer behavior throughout the decision process stages (search, purchase, consumption and after-sales process) as well as becoming a vital innovative strategic approach for retailers' success. Moreover, the concept of smart retailing goes beyond the application of a modern technology to the retailing process by including a further level of "smartness" related to the employment of the technology (Pantano & Timmermans, 2014).

In the literature, there is a dearth of definitions on smart retailing, probably due to its complex nature, continuous technological advancements as well as the different shopping patterns among consumers and across generational cohorts. Recently, Roy et al. (2016, p.3) defined smart retailing as "an interactive and connected retail system which supports the seamless management of different customer touchpoints to personalize the customer experience across different touchpoints and optimize performance over these touchpoints". Starting from the notion of smart cities, Pantano and Timmermans (2014, p. 102) in their seminal work on smart retailing, emphasise that "the emerging idea of smart retailing would reflect a particular idea of retailing, where firms and consumers use technology to reinvent and reinforce their role in the new service economy, by improving the quality of their shopping experiences".

These definitions emphasize, as a key theme, the importance of enhancing customer experience. This concept is a major concern in retailing settings (Grewal et al., 2011; Verhoef, Kannan, & Inman, 2015). Although in comparison with traditional retailing, smart retailing provides a sense of flexibility (Roy et al., 2016), it is challenging as the technology advances fast and subsequently the consumer behaviour is changed by these technological developments. In the future, the retailer-consumer interface could, in several settings, be dramatically different from today's interactions.

2.2. Consumer expectations and new technologies

Consumer expectations are defined as the desires or wants of customers. Parasuraman, Zeithaml, and Berry (1988) assert that this term emphasizes that expectations have more to do with what the organizations (retailers) "should" offer and less with what they "would" offer. Consumer expectations are a very important indicator of customer perception and satisfaction and thus why retailers seek to manage customers' expectations (Mitra & Fay, 2010). For retailers, it can be said that expectations are what customers believe before they make a purchase related to their products or services. However, consumer expectations in a smart retailing setting differ as different generations tend to have different beliefs about new technologies and tools (smart technologies). As Pan and Zinkhan (2006) point out, this is the main reason why traditional retailing tools are unobservable in online markets. For that reason, over the last few years retailing has changed intensely due to the introduction of online channels and ongoing digitalization (Verhoef et al., 2015). A smart retail setting was developed that can be a beneficial way for a firm to generate greater customer and business value (Pantano & Priporas, 2016; Pantano & Timmermans, 2014). As age is known to be strongly associated with reduced access to many information technology resources and technologies as well as with limited willingness to engage with new technologies and services (Lee, 2009) it is possible that different generations will react differently to smart retailing.

Roy et al. (2016) explore the main factors that formulate customers' experience of smart retail technologies. Their results designate that smart customer experience is positively affecting

satisfaction and reduces smart retail technologies perceived risk. As was mentioned before, different generations seem to have different expectations of smart retailing.

Zhitomirsky-Geffet and Blau (2016) examined Generation X, Generation Y, and Generation Z's consumer expectations of smartphones and they found that Generation Y had a higher level of addictive behavior. As they mention, it seems that emotional gain from smartphone use was significantly higher in the case of generation Z compared with the other two generations. Van Wezemael et al. (2012) also notice that tangible benefits are a very important factor in shaping consumer acceptance technologies. On a study about mobile internet services consumer expectations in Korea it was found that consumer expectations were satisfied differently in dissimilar service categories (Lee, 2009).

2.3. Generation Z and consumer behavior

Generation Z are young adults who were born in 1995 or later (Bassiouni & Hackley, 2014; Fister-Gale, 2015) and are highly educated, technologically savvy, innovative and creative (www.ey.com). It is the first generation born into a digital world that lives online and virtually integrates and engages with its favourite brands (Bernstein, 2015). Generation Z are heavy users of technology and they see it as an instrument for them (Van den Bergh & Behrer, 2016). Generation Z is a challenge, since it appears that they behave differently to earlier generations and this behavior can lead to changes in consumer behavior (Schlossberg, 2016).

Wood (2013) asserts that four trends are likely to characterize Generation Z as consumers: 1) An interest in new technologies, 2) An insistence on ease of use, 3) A desire to feel safe, and 4) A desire to temporarily escape the realities they face. They have experienced a lot in their brief lifetimes and have encountered political, social, technological and economic changes (Ernst and Young, 2015). Consumers are less loyal to retailers and they expect retailers to get the product to them, as a consequence retailers feel pressure to find new ways to grab and hold consumers' attention (www.ey.com). They have higher expectations, no brand loyalty and care more about the experience (Schlossberg, 2016).

3. Method

3.1. Research design

A qualitative research design was applied due to the exploratory nature of this research (Creswell, 2009; Pantano & Priporas, 2016), and the lack of pre-existing research studies on consumer expectations of smart retailing. This research approach was used since it provides richer and deeper information for exploring viewpoints, allowing the researchers to reach a better initial understanding of the problem and identify phenomena attitude influences (e.g. Healy & Perry, 2000; Maxwell, 1996).

3.2. Data collection and analysis

For this study, the second author conducted a series of in depth interviews with people in the generation Z category. The fundamental logic in adopting this generational cohort was its familiarity and connectivity with technology from birth (Bassiouni & Hackley, 2014; Fister-Gale, 2015), and its character as a driver of innovation (Morgan, 2016; Wood, 2013, pp. 1—3). In-depth interviews reduce the "distance" between interviewer and interviewee (Johns & Ross-Lee, 1998) and promote mutual understanding between them (Bryman & Bell, 2015). Furthermore, scholars (i.e., Palmerino, 1999; Stokes & Bergin, 2006), point out that researchers should use in-depth interviews because they are an efficient approach and

provide more depth of information, representation.

A non-probability purposive sample was utilized, since the participants were chosen based on their age (18—21 years old). Initially, 58 first year students from a UK University were approached and 38 (20 females and 18 males) of them participated. The interviews took place in September—October 2016. The sample size is considered sufficient for the purpose of the current study and for a qualitative research study in general, since it is large enough to draw useful evidence regarding any underlying behavioral patterns and small enough to enable effective analysis (Saunders, Lewis, & Thornhill, 2009). Furthermore, it meets the criteria set by Onwuegbuzie and Leech (2007) who recommend sample sizes of fifteen to twenty, while De Ruyter and Scholl (1998) point out that the most common samples range from 15 to 40 respondents.

Data were collected through a semi-structured interview guide, however the discussion remained flexible and open-ended (McCracken, 1988). The interview guide was designed based on existing literature (Burke, 2002; Granot, Greene, & Brashear, 2010; Pantano & Priporas, 2016) and it had been pre-tested for readability and content relevancy in relation to the research questions. The interview guide consisted of 10 questions, which were designed to draw information from the participants' personal experiences on smart retailing and their expectations of the future of smart retailing. The participants also had to respond to four demographic questions. The interviews began with introductory questions asking whether they use the smart phone for shopping purposes, whether they use smart technologies in store while they shop, followed by subsequent questions related to their expectations of the future of the smart retailing such as "how do you expect smart technologies may affect various aspects of retailing in the future compared to the present", "how do you see the future of smart retailing", "what do you believe retailing needs to be to be even "smart"-*er*? (regarding your interactions with retailers, products or other consumers in store)". In the current paper, only a part of the questionnaire on the future of smart retailing is presented. On average, the qualitative interviews lasted approximately 45 min.

The interviews followed ethical guidelines such as 'no harm', 'informed consent', 'anonymity' and 'honesty' (Allmark et al., 2009; Bryman & Bell, 2015). The participants were informed that their honest and frank opinions were what the research was interested in and that there was not a wrong or right answer. Also, with their consent the interviews were audio recorded to increase the accuracy of data collection, since it permits the interviewer to be more attentive to the interviewee (Patton, 1990) and permits verbatim transcription. The participants-students' names were substituted with coded numbers to ensure anonymity.

The data was analyzed using thematic analysis. Following the approach described by Ryan and Bernard (2003), the information gathered was processed into categories or themes (Mitic & Kapoulas, 2012), and the data were divided into categories to be analyzed (Kapoulas Murphy, & Ellis, 2002). Each question was treated as a different category, and the answers of all the respondents were analyzed at the same time for each question; therefore, differences and similarities could be analyzed more accurately (Priporas, Kamenidou, Kapoulas, & Papadopoulou, 2015). This method also helped us to compare and contrast information and data from both primary and secondary sources (Saunders et al., 2009).

4. Findings

All 38 respondents informed the interviewer that they have been using smartphone devices for the last 3—7 years, thus they are quite familiar with the relevant technology. The vast majority of interviewees stated that they make use of their smartphones for shopping purposes (e.g. apparel, shoes, perfumes, food delivery,

groceries, and digital apps). Only four of them use their phones for just browsing online content, and prefer shopping using their desktop/laptop computers for safety reasons.

4.1. Smart technologies usage during shopping

Concerning the smart technologies respondents use while shopping in physical stores (offline), most of them mentioned the self-checkouts, the informative touch points, digital signage, as well as new payment methods (e.g. yoyo wallet) via smartphones without direct use of bank cards or contactless payments. With regard to online shopping, they mostly referred to social media apps and customized smartphone applications released by e-retailers (e.g. Amazon, Zara, mobile ebay, Missguided). Also many of them indicated that their preferred payment method is either Apple pay or PayPal, while the rest use debit/credit cards.

As the respondents further explained, the main reasons for currently using smart technologies while shopping are the ease and speed of transactions, flexibility in terms of not needing to carry cash or cards, and convenience in terms of finding information to locate goods and avoid queues (Kang, Mun, & Johnson, 2015; Pantano & Priporas, 2016). One of the respondents summarized the advantages of smart technology penetration in retailing in three words: "Convenience, portability, efficiency" *(Interviewee No 7).*

Then, respondents were asked to talk about their lived experience of a smart interaction while purchasing a good or a service. Some of them described in store smart interactions regarding payments, while others talked about online purchases (smart step 1) accompanied by a delivery (smart step 2). For example:

> *"One of the latest things I purchased was the new iPhone 7. I ordered the product online using my laptop and I was able to track the delivery using features on the Apple website. This then informed me what location my phone was at. I was also able to check on my phone as I would receive email notifications. Once the product was delivered, I had to sign for it digitally so that the company could record that it had been successfully delivered." (Interviewee No 37)*

4.2. Interactions between humans and smart devices

Proceeding with the second half of the questions posed and topics discussed, the respondents provided their opinions with respect to smart technologies per se, as well as the emerging effects of the interactions between people and smart devices. Two main trends were noted among the respondents: first, most of them agree that human interactions with smart devices will increase, making people feel more confident as the technology becomes an inseparable part of human life; second, many interviewees are particularly concerned about the consequences of this evolution for interpersonal relationships and the job market. The following excerpt is quite representative:

> *"I think smart technologies make people lazier and less sociable. On the other hand, they will make the process of reaching targets and goals much quicker. This may lead to there being fewer jobs for humans and in turn increase unemployment in certain areas. And that in turn will make it cheaper for retail businesses to run as they won't have to pay as many wages." (Interviewee No 23)*

4.3. The future of smart technologies in the retail setting

The future of smart technology in retailing (online and offline) is the main topic of this study. This has been investigated using a set of four questions to best capture respondents' views and visions. Hence, moving on from current smart experiences to the influences on retailing in the future, the participants of this study were asked to attempt a temporal comparison in terms of a range of parameters (see Appendix A), i.e. convenience, enjoyment of shopping, value provided, product selection, service, product information, speed of shopping, privacy, product quality and security. Most of the interviewees believe that convenience, speed of shopping, product selection and product information may be more affected in the future. On the other hand, most of them agree that product quality, value provided, privacy and the service itself will be possibly less affected by the deeper penetration of smart technologies in retailing. Yet, respondents seem to have different views for two of those parameters, i.e. enjoyment of shopping and security. Those who conceptualize the influence of smart technologies with respect to in-store retailing project a significant but negative effect on the enjoyment of shopping, because they think that shopping is also a sociable event (Borges Chebat, & Babin, 2010; Pantano & Migliarese, 2014), that cannot be imitated in the virtual environment; similarly, they are particularly concerned about the level of security in a smart transactions environment (Taylor, 2016; Wang, Hahn, & Sutrave, 2016). However, those respondents expect that smart technologies have a higher potential to improve the shopping experience and the level of transaction security in a computer-generated environment. A quote from a respondent thinking of online shopping is:

> *"Technology will continue to advance and customers & businesses will need to adapt. Smart technologies will enhance shopping for humans and make it more convenient." (Interviewee No 29)*

However here is a different point of view from an interviewee who had offline shopping in mind:

> *"Although smart technologies will improve convenience and provide faster and quicker access to products, it will also take away the fun of shopping and reduce the excitement and joy of physically going out to the stores." (Interviewee No 31)*

Furthermore, interviewees were asked to provide suggestions about what would be part of their ideal shopping experience. Some really interesting ideas came up that incorporate state of the art technological advancements. New devices, robots and digital assistants (Grewal, Roggeveen, & Nordfält, 2017), were suggested that would assist the consumers with product selections, locate products in store or make distribution quicker and easier. For example, three of the respondents stated:

> *"A hand-held device — if in a new shop — that gives directions for searched items/isles of goods also a barcode scanner as this will save POS, price labels and extra work for retailers." (Interviewee No 2)*

> *"Virtually trying on shoes would be nice as it takes away the actual hassle of putting and taking shoes off." (Interviewee No 32)*

> *"Delivery made by drones, remote control robots. Being able to buy items on your watch." (Interviewee No 1)*

A second batch of new elements relates to product information, thus assisting Generation Z consumers in their decision making processes. Some innovative ideas are described in the following quotes:

"I would like an application with which I can take a picture (of a product) and then the app would tell me where I can buy it from." (Interviewee No 25)

"I would like a comparison guide; to know if another company offers a better product with higher value for money; interactive assistance that would tell you about a product." (Interviewee No 16)

Finally, regarding technology coverage on behalf of the retailers, the following ideas were communicated:

"Automatic access to Wi-Fi in store that would connect my smartphone to all smart technologies provided to customers in store and giving me a list of available smart-services." (Interviewee No 38)

"Enough technicians, so the technology doesn't fail. Regular tests so they are fault-free. (Products which are) compatible with most equipment." (Interviewee No 15)

Then, interview participants were asked to envisage the future of smart retailing. Most of the perceptions articulated largely focused on two things: a) the penetration of smart technologies in the retail market and b) the relevant consequences in people's lives − both positive and negative. In line with the first group of responses, some representative excerpts are:

"I see a future where smart retailing slowly over-runs the market, i.e. making the market mainly smart retail oriented." (Interviewee No 5)

"I see robots everywhere in the future." (Interviewee No 1)

"A much more technologically advanced (future) and investment in such technologies becoming the 'norm'." (Interviewee No 20)

On the other hand, about half of the respondents felt the need to express their concerns about extensive diffusion of smart technologies in retailing and the possible repercussions to society at large. They expressed themselves in a positive way, such as:

"Smart retailing will become more common. Slightly easier for particular age groups. It will grow and integrate with society" (Interviewee No 13), as well as *"It would be great for those with disabilities, enabling tastings / promotions / options for 'ease of convenience."* (Interviewee No 2)

Interviewees see positive influences on companies' operations, for example:

"The future of smart retailing is very bright because more people will be looking to buy stuff using smart apps to save time", as well as *"Positive change. Higher sales, more efficient and quicker."* (Interviewee No 27)

However, some of the respondents focused on the potential difficulties of spreading this technology across various retail markets, e.g. *"It can work, but there is a lot of work to be done for it to be a broad success"* (Interviewee No 31), as well as on the negative effects on certain job categories, such as cashiers and retail assistants, e.g. *"Smart retailing is more than likely going to increase unemployment. This is based on the reasoning that staff members may no longer be needed as technology can now start doing their jobs and saving money for companies."* (Interviewee No 29).

Other respondents mentioned a possible shift of turnover from

physical stores to online ones, e.g. *"A lot more online shopping and fewer stores"* (Interviewee No 23), and *"I think in the future there will be less and less need for shops because everything will be able to be accessed from home."* (Interviewee No 36).

4.4. Smarter retailing in the future

The last topic discussed during the semi-structured interviews with the Generation Z consumers was what actions would make retailing even smart-*er* in the future. It is true that some of the participants were skeptical about further advancements in the smart retailing area, e.g. *"The level of smart tech now in retailing is already quite good and useful and would probably increase pleasure in shopping. So, an increase could make it difficult for consumers to absorb."* (Interviewee No 3).

However, others see room for further improvement of those technologies, as well as in their corresponding applications in the retail market. For example, they advise *"Multiple trained technicians, so systems don't go offline easy"* (Interviewee No 14), and *"Training globally/worldwide not just by companies, but also by schools promoting customer serviceability via smart tech."* (Interviewee No 2).

Additionally, one of the interviewees proposed a way to devise further improvements in smart retailing, i.e. by *"Effective investment in resources through lab research, as well as research into the demand in different retail sectors."* (Interviewee No 22).

5. Conclusions

This research has sought to provide a better understanding of generation Z's expectations of retailers-consumer's interactions regarding future innovations in retail settings. The findings delineate generation Z consumers' perceptions and expectations, as well as the potential impact of those expectations on the retailing industry in the years to come. Thus, an enhanced smart retailing experience may be important in terms of meeting or even exceeding consumer expectations. In all, the interviewees believe that smart retailing will extend its impact and they hope that retailers will manage to adapt fast to this dynamic environment. New apps and new tools should be used that will take account of the effects of these technologies on human relationships and potential their negative impact on employment and transaction security. The findings of this research add to the existing literature on consumers' expectations of smart retailing and offer novel and important theoretical and practical implications.

5.1. Theoretical implications

Many researchers have examined consumer expectations in retailing settings (e.g., Fowler & Bridges, 2010; Jin Ma & Niehm, 2006; Mitra & Fay, 2010). The current study extends this literature by examining generation Z consumers' viewpoints regarding smart retailing.

As our study indicates, generation Z is a young, technology-oriented group in retailing, since they use their smartphones and other technologies very extensively for shopping (IPSOS, 2014; Bernstein, 2015). Previous studies on various generations highlighted that generation Y is also a technology-savvy group which makes heavy use of online shopping (Bilgihan, 2016) and in general spends less on purchases than other generations, such as generation X (Lissitsa & Kol, 2016). As Bilgihan (2016) comments, positive online experience is highly important for generation Y too. Similarly, the current findings indicate that generation Z customers are heavy online shoppers of apps and customized applications. As generation Z purchasing power grows, it is very important for marketers to understand how their consumer behavior is related to

smart retailing.

Respondents have also requested enhanced smart information technologies that could assist them with locating product offerings they need (online or offline), as well as with matching their needs with the most appropriate offering. This is also indicated in the empirical findings of Kallweit, Spreer, and Toporowski (2014), who proposed that "information with high relevance for the needs of the customer" (p. 274) is needed.

Taking into consideration the future of smart retailing, many respondents seem to feel uneasy about security issues during their interactions. This has been discussed and validated by previous research into online interactions (Groß, 2016; Kimery & McCord, 2002; San-Martín, López-Catalán, & Ramón-Jerónimo, 2013; Tontini, 2016). These findings are in line with findings on other generations ("Baby Boomers", Generation "X" and Generation "Y") who perceive the most significant challenge to be the risk of credit card fraud (Dhanapal, Vashu, & Subramaniam, 2015).

Another very interesting finding from this research is that several interviewees are concerned about the potential negative consequences of extensive usage of smart technologies in retailing. First, they worry about the impact of these technologies on how human interpersonal relationships are affected by human-computer interactions, as has been illustrated in the published literature (Rafaeli et al., 2016). Second, they explicitly state their concerns about the possible consequences of the smart retailing evolution for the job market, since some of the technologies being proposed (i.e. robots) may replace actual employees. This is implied in the work of Prater, Frazier, and Reyes (2005) who relate the implementation of smart retail technologies to employees' willingness to learn how to manage new technologies and adapt to new retail environments. Researchers should investigate those possible impacts in depth and further propose appropriate management tools or/and contingency plans to help retailers and society at large successfully respond to the challenges.

5.2. Practical implications

The findings of the current study have significant implications for retailers and managers, suggesting that it is essential to deal with generation Z consumers' demands regarding the ease and speed of transactions, information provision and convenience. It is also evident that the level of digital features installed in the retail environment plays a significant role in shaping generation Z consumers' purchasing experiences. This could have possible influence on their decision making processes. Therefore, this situation demands that retailers budget extensive investments in smart technologies in the near future so as to compete successfully in the new retail environment. In this way they would be able to develop a competitive advantage in their distribution channels. Specifically, retailers need to gradually enhance shoppers' experience of both online and offline retail settings. That could be operationalized by employing digital assistants or robots to provide updated information and instructions on how to track products, as well as opportunities to compare products with alternative offerings offered in-house or by competitors. This is in line with Browne et al. (2004) who point out that customers should be served appropriately, based on their needs, wants and expectations.

6. Limitations and suggestions for future research

While this exploratory study can be seen to have contributed to the existing literature on smart retailing and has extended our understanding of gen Z consumers' expectations, it has some limitations. The qualitative nature of the study and the size of the sample, minimize the generalizability of the findings to the entire UK generation Z. Future studies could employ larger samples and quantitative methods and measures to support these findings. This study was conducted in the UK, where Gen Z customers usually have many opportunities to observe and engage in smart retailing. Future research could be undertaken in different backgrounds and in other countries to verify whether the same patterns can be found among gen Z consumers. In addition, a more in depth analysis of even smarter retailing could be conducted to explore other possible behavioral patterns and further advancements in smart retailing. Further research could compare how different generations implement smart retailing, as has been done for other areas of retailing.

Appendix A

1) How many years have you been using smart phone for you mobile communications and which model in particular?
2) Do you use it for shopping purposes (Please give some examples)?
3) Do you use smart technologies in store while you shop and which ones particularly? *(for example, self-cash desks, informative touch points, interactive displays equipped with touch screens, digital signage, and applications for mobile phones).*
4) Why? (please provide the reasons for using smart technologies)
5) Please select a tangible product or service you purchased lately and *write about your lived experience* as it naturally occurred in your smart interactions with the product or service
6) How you expect the smart technologies will affect the interactions between human and computers/smart phones?
7a) How do you expect smart technologies may affect various aspects of retailing *in the future compared to the present:*
   - Convenience
   - Fun of shopping
   - Value provided
   - Product selection
   - Service
   - Product information
   - Speed of shopping
   - Privacy
   - Product quality
   - Security
7b) Please provide any comments of yours related to the previous attributes with regards to smart technologies expectations in future retailing.
8) What other elements would you include in your ideal "smart" shopping experience? Any particular ideas that would make it easier for you to interact with smart applications in store?
9) How do you see the future of "smart retailing"?
10) What do you believe retailing needs to be even "smart"-er? (regarding your interactions with retailers, products or other consumers in store)

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