The Role of Interactive Technology in Retail Design:
A Case Study Within the Fashion Sector

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This paper explores the role of interactive technology in retail design, and the prerequisites of the designed retail environment in optimizing customer experience and brand experience. Adopting a case study method, primary data was obtained using semi-structured interviews with 20 experts directly involved in the three chosen cases. The research contributes to the lack of extensive literature on interactive technology in physical retail, specifically within the fashion field. By connecting three topics of academic research – physical retail environment, the role of interactive technology and in-store customer experience and brand experience – it suggests the prerequisites for designed retail environments in optimizing customer experience and brand experience.

Keywords: interactive technology, retail environment, customer experience, brand experience

INTRODUCTION

From rising costs to lower footfall, the physical retail environment is more competitive than ever (Blázquez, 2014). With online retail sales accounting for approximately 20% of all UK sales – and expanding rapidly – physical retail stores are being forced to question the value they bring to the customer experience. These increasingly difficult conditions have been exacerbated by the current pandemic and the subsequent lockdown enforcements, driving customers to embrace online retailing in greater numbers. However, physical stores account for the majority of sales and, therefore, remain relevant for most customers.

In the past decade, scholars have demonstrated that technological innovations have deeply impacted business and society and especially played a major role in retail (Lemon and Verhoef 2016; Hagberg, Jonsson et al., 2017). Retailers are turning to technologies to drive sales, build customer relationships, and
improve the shopping experience (Bodhani, 2013). Meanwhile, recent research also claims that multi-channel marketing strategies and technologies (e.g., interactive technologies, augmented reality, virtual reality, and smartphone applications) have blurred the boundaries between physical and online retail stores (Krafft and Mantrala, 2006). Bodhani (2012) explored how digital technology is reshaping the retail landscape, and concluded that the physical store will become a place for brand and consumer experience and new technologies.

Previous research that has tested the effect of technologies in retail contexts (Clodfelter, 2010; Pantano, Naccarato et al., 2010) has focused solely on using technology in the online retail space (Fiore, Kim et al., 2005; Kim and Forsythe, 2008; Berry, Bolton et al., 2010; Varadarajan, Srinivasan et al., 2010). However, transforming the physical retail space is becoming more widespread and, increasingly, attention has focused on interactive technology in physical stores. Yet the academic literature has not addressed the issue of the evolution of the physical retail format and the value of interactive technology within the retail environment (Botschen and Wegerer, 2017; Hagberg, Jonsson et al., 2017). Therefore, this study explores the role of interactive technology in physical retail stores, specifically, the prerequisites of the designed retail environment in developing customer experience and brand experience.

As such, the study aimed to explore how interactive technologies could transform retail design into a more engaging and immersive experience. Two objectives were designed to achieve this aim: (1) to explore current cases of physical retail stores that have effectively integrated interactive technology; and (2) to establish how retail stores can use interactive technology to augment the customer experience and brand experience.

LITERATURE REVIEW

Physical Retail Store Design

The importance of design in a retailing context has been long recognized and argued (Bellizzi, Hite et al., 1992; Foster and McLelland, 2015). Effective store design attracts and entices customers inside, it displays products to their best advantage, helps to support the brand image, and, more broadly, underpins a successful retail strategy. In order to achieve this goal, retail store design includes a combination of retail environment considerations, such as window display, interior design, fixtures and fittings, as well as lighting (Morgan, 2011).

Retail design, therefore, has to successfully balance the considerations of interior design with the functionality of retailing, which can vary across retailers. For example, supermarkets may be more concerned with functionality, while fashion and luxury retailers may focus on creating the right retail environment. It is, therefore, problematic for retail store design to be viewed as merely interior decoration because retail design involves important functional issues such as customer enticement, customer flow, customer experience, stockholding and display, operational efficiency, competitive distinction, and of course, the visual and physical elements that contribute to the mood of the store (Moore, Bruce et al., 2007).

Retail Customer Experience

According to Kim (2001), retail stores can be divided into five different perspectives: (1) experiential consumption, (2) symbolic consumption, (3) entertainment retailing, (4) themed retailing, and (5) cross-shopping. Experiential consumption (1) refers to the emotional reward that customers derive from the purchasing of products; Symbolic consumption (2) applies to customers who are willing to pay extra for the pleasure of signifying special meanings; (3) Entertainment retailing is the way that retailers integrate entertainment factors in the store to encourage customers to stay longer and have fun; (4) Themed retailing typically refers to the activity of a special occasion or festival; (5) Cross shopping explains the demands of customers keen to purchase multiple types of products at multiple retail outlets on a single trip. Of these five perspectives, two represent the consumer viewpoint: experiential consumption and symbolic consumption, while entertainment retailing, themed retailing and cross shopping represent the retailer’s viewpoint, informing the design of the retail store environment.
However, recent studies have suggested a more integrated view in that retail customer experience can be enhanced by encouraging customer interaction and involvement in a multi-sensory retail environment (Russo Spena, Caridà et al., 2012). Moreover, research has shown that immersive technology can energise customers’ shopping experience by stimulating customers’ visual, auditory, olfactory and tactile faculties (Pantano, Laria et al., 2012). These studies showed that by using technology to engage consumers, retailers can combine the duality of perspectives into a more synchronized offering that enhances the retail experience – and, therefore, brand experience – for both consumers and retailers.

**Interactive Technology in Retail Environment**

The rapid proliferation of smart technologies like mobile phones tablets, and widespread use of social media has accelerated the adoption of technology as part of everyday lifestyles. This acceptance encourages retailers to incorporate interactive technology into the retail space as it helps retailers interact with their customers. Drawing on the research of Varadarajan, Srinivasan et al. (2010), we know that interactive technology refers to methods, techniques, or technologies that enable diverse entities (individuals, machines, or organisations) to participate in mediated communication to facilitate the planning and completion of exchanges between entities. From the retailers’ perspective, the purposes of technology used in stores are for customer behaviour analysis and improving customer experience (Hwangbo, Kim et al., 2017). Hence, the benefit of technology in retail stores is that retailers can translate in-store customer behaviour data into actionable insight (Zhang, Li et al., 2014). Using loyalty cards to track access records, recent history and purchase patterns enables retailers to understand customers' behavior deeply.

Retailers also use interactive technology within retail stores to improve customer experience and enhance customer satisfaction, as well as augmenting interactions between customers and store staff (Möller and Herm, 2013). While there is growing interest in new technologies in online stores (Hagberg, Sundstrom et al., 2016), physical stores are starting to apply new technologies, such as virtual reality, augmented reality and artificial intelligence (Dhruv, Roggeveen et al., 2017). Engaging technology in physical stores is important, since most retail sales still occur in physical stores. Online stores were estimated to have accounted for 8.7% of global retail sales in 2016, which was expected to increase to 14.6% in 2020 (Hagberg, Jonsson et al., 2017). As physical stores continue to account for the majority of the sales, they are ideally placed to adjust retail formats and the role of the physical store by incorporating new technology in-store. Moreover, from the experiential aspects, interactive technologies in retail stores may make the traditional retail stores more attractive, encouraging more customers to visit, further increasing sales (Pantano, Servidio et al., 2012) and may improve the customer experience (Pantano and Laria, 2012; Bodhani, 2013). However, while interactive technology has the potential to redefine the physical in-store experience, the presence of interactive technology in physical stores is still marginal (Bell, Gallino et al., 2018). Although it has been suggested that technology must serve as a medium to deliver a greater in-store customer experience and a seamless cross-channel experience (Blázquez, 2014; Alexander and Alvarado, 2017), there is a limited understanding of how this can be effectively introduced to the physical retail store.

**METHOD**

To clearly understand the role of interactive technologies in physical retail, we examined two prominent cases that had successfully incorporated interactive technologies within a retail setting. The first case was Canada Goose and their experience called ‘The Journey’. The second was the flagship store for Burberry called the ‘Space’. Data for both cases were generated via semi-structured interviews with experts directly involved in the two spaces' design, development and delivery. As such, we followed a purposive sampling strategy of focusing solely on interviewing 15 – 20 individuals directly involved in each case (Yin 2015).

To ensure that we had a representative range of roles for each case, we targeted the designers, planners, and technicians responsible for the development and delivery of each of the cases. We also extended this sample to the subsequent store managers, and retail staff who had first-hand experience of the delivery of the retail experiences within the respective stores.
In total we conducted 27 interviews with the selected participants. To comply with local distancing restrictions enforced during the pandemic, the interviews were conducted online using Microsoft Teams software, each lasting approximately 60 minutes. We used open questions to explore the experts’ understanding of the role and impact of interactive technologies in retail environments. All interview data were recorded, with the permission of the participants, to aid the accuracy of the transcription and analytical processes.

RESULTS

The Role of Interactive Technology

From the analysis of the data, four themes emerged: (1) rethinking the purpose of retail spaces, (2) evoking the senses, (3) physical store as part of the omni-channel, (4) enhancing communication and experience.

Rethinking the Purpose of Retail Spaces

A major theme to consistently emerge from the data was the acknowledgement of the importance of the physicality of the retail space in relation to consumer engagement. All experts recognized the recreational nature of shopping as an appealing characteristic of consumer culture, summarized by one participant as: “Human beings are social animals … physical stores are still the lifeblood of retail.” To this end, there was a reoccurring recognition of the need to reconsider the design of the retail spaces, particularly in relation to the functional purpose of retail stores. All respondents believed the retail store's function was no longer considered primarily as a sales-orientated space. “Personally I do not think selling is the most important thing in physical retail stores.” Further, most participants agreed that innovative interactive technologies, combined with the digital revolution, will dramatically shape the retail landscape. The experts expected that the retail environment would see a shift from a sales-orientated space to a brand-experience space: “… it is not about what functions or technologies you use to decorate the store, but the brand story you want to tell.” Another stated: “We use interactive technology to create a new retail space, a place to tell the brand stories, and have memories and fun.”

This shift towards the retail space being more recreational was apparent in one of the case discussions, in which the expert stated: “We do not have any storage space in the physical store. When you visit the store, you can order the clothes, but it will be delivered directly to your home.” The retail space in the selected cases was redesigned to incorporate interactive technology to shift the purpose of the physical retail space, from a place solely for transactions to a place that provided experiences. Nevertheless, from a functional perspective, some of the technology available in the retail spaces facilitated smoother transactions and stock levels, apparent in the following extract: “… the customer can simply use their phone to scan the QR codes that are labelled with every product.” While this particular use of interactive technology can help customers reduce time and effort with transactional functions, the real benefit of interactive technologies is its ability to entertain and immerse consumers in an experience and, as a result, create a positive affective response: “we use lots of interactive technologies to simulate the atmosphere of the Arctic and try to immerse our customers into having a multisensory experience to feel why the outerwear is worth this price”. By creating such memorable experiences, the purpose of retail shifts becomes more acutely fixed on delivering brand experience, which in turn can drive social media impressions and publicity beyond the reach of paid-for media: “Our customers, they were so excited … people willing to queue for hours to get in.”

Interactive technology, therefore, has the potential, when used appropriately, to deliver more meaningful brand experiences that can positively impact brand awareness, brand engagement, and, ultimately, brand loyalty. All expert actors stressed, however, that interactive technology must be used in a relevant and meaningful way that is authentic with the brand, and not merely as part of a novelty act to gain attention. In other words, they believed that the application of such technology should be orientated around the sensory engagement triggers aligned to the brand message.
Evoking the Senses

All experts agreed that physical retail stores have the unique ability to use sight, sound, smell and touch to deliver a multi-sensorial experience, providing a unique opportunity for retail spaces. As such, the expert view was that, given these unique circumstances, it was wasteful for retail spaces to simply replicate the functions that could already be experienced elsewhere across the omnichannel. This insight had important implications for the design of the retail environment and explained how these exemplary cases captured an important point-of-difference from other channels of the brand, and also other competing retail environments: “We want to surprise the customers while they go into the store, they will see a completely different layout and design in ‘The Journey’ store.”

Although it is acknowledged that the visual domain is the most prominent human sense, and a major target of interactive technology applications within these retail cases, the use of audio to trigger emotions and feelings played a crucial role in ensuring that the experiences were vivid and memorable: “... you hear the sound of ice cracking as they walk.” Similarly, as the sense of smell is related to pleasure and is closely connected to memories and emotions (Garlin and Owen, 2006; Goldkuhl and Styvén, 2007) the designers sought to incorporate this sense in the retail space: “You will also inhale the sweet scent of the Canadian outdoors.” Within a physical setting, the sense of touch can be prioritized for full effect, especially as it is used to gain information and is related to feelings through physical and psychological interactions with the products (Citrin, Stem Jr et al., 2003; Peck and Wiggins, 2006). Within a physical setting, touching products can make it easier for consumers to recall the “feeling” more readily than simply looking at them. It is therefore very important for physical retail outlets to engage consumer senses in a way that is not replicable across other channels, and is especially important in luxury fashion retail: “... as they said: ‘Say it, feel it, try it, buy it’, you can physically touch the product and try it on, which is very important in the fashion business.”

As with the previous theme, it was essential for the evoked feelings to align with a particular brand association. In the case for Canada Goose, the evoked emotions were directly linked to the superior performance of the products, where the interactive technology experience enabled the features of the products to be appreciated: “We want our customers to really feel the warmth in a Canada Goose jacket, in a similar temperature as the Arctic in the Cold Rooms.” Interactive technology, therefore, has the potential, when appropriately and intelligently applied, to evoke senses, establish emotional resonance, and make retail shopping a pleasurable, unforgettable and entertaining experience. Indeed, for many consumers, retail shopping is a recreational pastime, particularly when buying clothing (Blázquez 2014).

Physical Store as Part of the Omni-Channel

The digitalization of platforms has challenged the role and relevancy of physical retail stores within the last decade (Picot-Coupey, Huré et al., 2016; Pantano, Priporas et al., 2018). This disruptive effect of online offerings led physical retailers to acknowledge that, rather than compete directly on aspects of convenience and cost, by improving the experiential journey, particularly for the more pleasurable types of retail shopping, it is more difficult for online platforms to replicate. As one expert put it: “Retail recently figured out that the role of the physical store is contiguous with online.” This comment reflects the recognition of considering physical stores as one component of the omni-channel offering, as complementary channels and not necessarily adversarial (Hagberg, Jonsson et al., 2017; Pantano, Priporas et al., 2018). The majority of the experts interviewed stressed the importance for interactive technology in retail design to build deeper connections between the customer and the brand: “The reason why we designed our store like this [incorporating interactive technology] is because we want to build connections with our customers and we do not see online store as a threat, but the opportunity.” Using retail design to engage customers with the brand, by creating positive experiences and memories, was seen as a significant driver, while the introduction of interactive technology was viewed from the perspective of enhancing the choreography of the customer journey (Lemon and Verhoef, 2016; Alexander and Alvarado, 2017; Varadarajan, Srinivasan et al., 2010; Blázquez, 2014). The key understanding here was that the retail store was an opportunity to highlight what was unique to the channel, while ensuring that the physical store worked alongside other channels as part of a collective, not as competing channels.
Enhancing Communication and Experience

Traditionally, retailers communicated with customers at specific points in the customer journey through their various commercial channels. However, as a result of the digital revolution, retailers have a host of new channels and environments to engage with customers, such as web, e-commerce and mobile platforms, and social media (Foroudi, Gupta et al., 2018; Lee, Inman et al., 2018; Hoyer, Kroschke et al., 2020). This concentration of multiple channels has enabled brands to use one channel as a trigger for interaction with another more scalable channel, prompting customers to become active social media advocates. Retail designers incorporated interactive technology into physical retail experiences to enhance the customer experience and drive engagement with the brand across the broader online channels: “We encourage our customers to share their experience on social media so we can have many intangible customers know our brand and build connections with them.” Another expert concurred: “[Interactive technology] has blurred the boundaries between online and offline and changed the way we communicate with our customers ... we can both improve our word of mouth (WOM) offline and e-WOM.”

While the pursuit of advocacy is understandable, retailers are increasingly recognizing that customers interact directly with the brand but often get information, or knowledge, about the merchandise through other channels and not solely by communicating with the brand’s in-store staff. Such open access to product knowledge has raised customer expectations of the level of insight that in-store staff should offer, which allows in-store staff to further foster brand trust.

The bigger picture to emerge from the data was the migration from product-centric experience to a more integrated level of brand experience. Alongside this migration, there is a push for brands to use retail as a stimulus for further engagement, whether that is to trigger sales on another channel, build stronger emotional experiences and connections with customers, or encourage customers to become brand advocates and spread the good word. As such, the cases used in this study used interactive technology, not as the sole focus of the retailing format, but as a mechanism for enhancing the physicality of instore retail environments and its impact on the brand experience. As one expert stated: “Technologies are not the point, it is all about customer experience and brand experience.”

CONCLUSION, IMPLICATIONS AND FUTURE DIRECTION

The study aimed to explore how interactive technologies could transform retail design into a more engaging and immersive experience. With this in mind, the study explored two cases of physical retail stores that had effectively integrated interactive technology to establish how retailers with physical stores can use interactive technology to augment the customer experience and brand experience.

In response to the evolving retail landscape, brands with a strong physical retail presence must emphasize a richer, more sensory experience with which to engage customers and attract greater footfall. Instore interactive technology enables a more seamless integration of channels, offers the opportunity to create more engaging and interactive retail spaces, which in turn better evoke the senses, facilitating new forms of communication between customers and brands, and enhances the customer experience and brand experience. By using interactive technologies to create immersive experiences, customers were attracted to a retail space to participate in a distinctive, memorable event that encouraged a much stronger type of engagement with the brand, beyond the behavioural transactions traditionally associated with physical retail stores. Furthermore, these immersive experiences stimulated participants to serve as brand advocates by sharing their experiences via social media channels.

This study implies that brand-owned retail spaces can benefit more broadly by moving from a transactional retail mindset to a more emotionally engaging type of experience. In following this approach, the retail setting is not considered primarily a sales-orientated space – there are other channels for purchasing – but rather as a unique channel dedicated to delivering an immersive and engaging brand experience that drives visitors across channels and cultivates impactful forms of brand engagement (e.g., social media impressions).

The limitations of this research are that the study is restricted to premium brands. Therefore, given the resource-heavy nature of these specific cases, the implications are likely to be relevant to brands that share
similar status and positionings. We envisage that if retail is to become a more meaningful function of brand experience, such retail experiences would be, in practice, most suitable for the flagship stores of premium brands. The most exciting avenue for further study is to extend the study to less prestigious brands, thereby having wider applicability across the retail sector.

REFERENCES


