Going Online While Purchasing Offline: an Explorative Analysis of Omnichannel Shopping Behaviour in Retail Settings

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Keywords: Omnichannel Customer Management • Retailing • Pioneering Strategy • Innovation Management • Ubiquitous Computing.

Abstract:
Retail customers are now omnichannel both for attitude and behaviour. Shoppers are also demanding a different and higher level of experience within retailer’s brand, channel, contact point and the way in which the retail is accessed. Such shoppers avoid retailers who are ill-equipped to deliver a seamless brand experience online, in-store and across multichannel media, both consistently and continuously (PwC & Kantar Retail, 2012). Therefore, a new and improved strategy aimed at delivering information and product to customers is becoming mandatory for retailers.

Recently some retailers are showing an increasing interest in the application of advanced systems developed to enhance the shopping experience by providing customers with innovative tools able to engage them with multiple channels simultaneously to obtain deeper insights, save time and feel more independent while shopping. Such technologies can help retailers to better react to those emerging settings by (i) acquiring a positive image and reputation, being at the same time perceived as innovator; (ii) reducing management costs; (iii) maintaining and acquiring loyal consumers; (iv) making imitation strategies as difficult as possible for competitors; (v) reaching a unique and differentiated positioning.

Consequently, many retailers have recently introduced advanced technologies in their stores such as self-service technologies equipped with radio frequency identification systems (RFID), interactive touch screen displays, digital signage and mobile applications, informative touch points and contactless technologies for mobile payments. Furthermore, the development of ubiquitous computing allowed companies to create virtual stores based on QR tags which can be located everywhere and enable consumers to purchase by their mobile devices. These technologies modify both consumer behavior and corporate approach to retail process, by changing the way customers access to information and firms reach their customers. Since individuals interact with multiple channels throughout their shopping journey, even simultaneously (Omnichannel Retailing), retailers must consider all channels holistically as consumers do, in order to provide them with a unified shopping experience.

Preliminary result of our multiple case study involving 15 retailers, operating in different industries of the Italian market, shows that customers are increasingly willing to use the in-store innovations in order to obtain richer shopping experiences, while retailers achieve a stronger brand loyalty as well as a better and updated brand image. A deeper understanding of positive effects and threats resulting from early technology adoption by retailers will be essential for improving the omnichannel customer management, thus increasing business performance.

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1. **Introduction**

Access information and buy “Anything, Anywhere, Anytime” is the mantra of omnichannel retailing (Hardgrave, 2012). Retailers who are clamoring to make it happen need to remove barriers within the channels and provide cross-channel services such as “click and collect”, “order in-store, deliver home”, “order online, pick-up at store/return to store” and other combinations of online, mobile and traditional retail activities (Piotrowicz & Cuthbertson, 2014). Current retail scenario, characterized by a huge consumers’ demand of entertaining and effective shopping experiences, implies an extension of traditional offer through innovative technologies, by maintaining the same quality of service and products across different channels through which consumers can search, compare, choose and purchase products, while interacting with the brand (Neslin et al., 2006; Pantano & Viassone, 2015). In today’s omnichannel retail environment, consumers expect a seamless approach through all shopping channels and all forms of interaction. They seek consistent, positive experiences, where all channels have complete and accurate information about a customer’s history in order to earn their loyalty.

A recent study realized by Deloitte (2014) shows that customers are increasingly using multiple channels during the course of a single purchase. Almost 30% follow brands on social media, 75% browse and research online before they visit a physical store and 56% use a mobile device for shopping-related searches, most of the times while in store. Furthermore, the study reveals that omnichannel shoppers spend more than average, accounting for up to 70% of retail spending. This means that “consumers that connect with retailers via multiple selling channels are more profitable than ones who don’t” (Rosenblum & Kilcourse, 2013).

In fact, purchases made by consumers who shop through different channels are usually of 50% higher value in comparison with those made through a single channel (Deloitte, 2014). However, Kushwaha and Shankar (2013) showed that multichannel customers form the most valuable segment only for hedonic product categories. They also found that traditional channel customers of low-risk product categories provide higher monetary value than other customers (Kushwaha & Shankar, 2013).

From a different study, carried out by Forrester, resulted the increase in customers’ expectations for omnichannel shopping: 71% of customers expect to view in-store inventory online, while 50% expect to buy online and pick up in-store. Nevertheless, only a third of retailers implemented some basic omnichannel initiatives (e.g. store pickup, cross-channel inventory visibility, and store based fulfillment) in order to integrate online and offline channels and engage customers. There is a significant cut off between what consumers want and the omnichannel capabilities that retailers are providing today (Forrester Consulting, 2014; Hansen & Sia, 2015).

The idea is to provide customers with a consistent and seamless experience whether they’re shopping in a physical store, on a mobile device, on a personal computer or via a catalog. In fact, the emerging theme of omnichannel retailing is perceived as an evolution of the multichannel customer management. Whereas the multichannel implies a division between physical and online channel, which are designed and managed separately and where consumers may use one channel for collecting information and a different one for effective buying; in the omnichannel environment customers move freely between all the different touchpoints (online, mobile and physical) within a single transaction process (Rosenblum & Kilcourse, 2013). Mobile and social media channels are added to “traditional” online and physical channels. At the same time, the shopping journey should be smooth and provide a unified and interactive customer experience, regardless of the channels used (Brynjolfsson et al., 2013; Rigby, 2012). Since the channels are managed together, the interaction perceived by the customer is not with the channel, but with the brand (Piotrowicz & Cuthbertson, 2014).
Those disruptive changes are driven by the diffusion of new technologies, such as smart mobile devices (smartphones and tablets) and related software applications, which can be supported by additional tools. For instance, contactless technologies such as Radio-Frequency IDentification (RFID), Quick Response (QR) codes, Near Field Communication (NFC) and Beacons can be integrated in the point of sale in order to enhance the level of functionalities and service provided by the retailer (i.e. contactless and mobile payments, digital flyers, location-based services and personalized promotions, etc.), with the possibility to create an entirely virtual retail environment based on ubiquitous computing and virtual products (e.g. Tesco Korea). Moreover, new in-store technologies are also available: interactive touch-screens, virtual mirrors and fitting rooms based on Augmented Reality, self-scanners, digital signage, intelligent self-service kiosks, vending machines and dynamic menus.

Due to these changes and innovations, the role of physical store in retail settings, which is no longer the only contact point with the customer, has radically changed and is still evolving (Pantano & Verteramo, 2015). Thus, retailers are pushed to redefine the in-store shopping experience, promoting the use of technology as a way to provide an engaging and integrated experience within channels (Blazquez, 2014). This evolution to an omnichannel shopping scenario represents a big challenge for retailers who have to understand their customers’ complex paths-to-purchase, by capturing and analyzing information regarding the ways customers are using digital and physical touchpoints to make their purchase decisions and further modifying their business models in order to align their core-sources and competitive strategies with the new channel and supply chain configuration.

The purpose of this study is to understand the impact of these innovations on the shopping process from a managerial viewpoint. Specifically, we have investigated how and why the adoption of innovative tools enhances customers’ shopping experiences combining digital and physical experience. To achieve this goal, we used a qualitative approach through a multiple-case study design. We carried out 80 in-depth interviews with store managers and employees of 15 retailers operating on the Italian market in different industries (e.g. grocery, cosmetics, fashion, sportswear and food), to better exploit a correlation between technology adoption, customer experience and economic return in a scenario defined as omnichannel retailing.

This work is structured as follows: First, the determinants of the in-store and online experience in retailing are discussed with reference to the retailer perspective and the transition from multi to omni-channel management. Next, the research methodology is set out and explained. The key results are then analyzed and the implications and conclusions derived. Last, limitations and further research avenues are addressed.

2. Theoretical Background

2.1 From Multi-channel retailing to Omni-channel retailing

The advent of new digital channels has resulted in a dramatic change of the retail environment over the last two decades (Rigby, 2011). To meet these developments, many retailers have initiated multi-channel strategies moving towards multiple channel integration, at first mainly concerning the decision whether new channels should be added to the existing channel mix (Sawhney, 2001). This phenomenon is widespread, involving retailing as well as such industry segments as, travel, banking, computer hardware and software, and manufacturing (Kumar & Venkatesan, 2005).

Multi-channel customer management has been defined by Neslin et al. (2006) as the design, deployment, coordination, and evaluation of channels to enhance customer value through effective customer acquisition, retention, and development. In the same study, the authors
consider channels as customer contact points through which retailer and customer interact in a two-way communication. Moreover, the role of multichannel retailing consists in the consideration of issues concerning the management of customers and the integration of the retail mix across channels (Neslin et al. 2006).

More recently, with the mobile channel and social media revolution, and the subsequent integration of these new touchpoints in online and offline retailing, the retail environment is further evolving (Verhoef et al., 2015).

From the retailers’ viewpoint, even if the role of the store is changing, it remains the primary contact point with the consumer. At the same time, from consumers’ perspective shopping in physical stores prevails as the most popular route to buy high-involvement product categories which need to be seen, felt, touched and tried on during the purchase process, since they are difficult to evaluate. In addition, stores provide the instant gratification of purchasing the product and experiencing the service. On the other hand, the dominance of traditional brick-and-mortar stores has declined, and the average time spent by consumers while shopping in store has decreased. Some studies recognize e-commerce as the direct responsible for this change. (Blazquez, 2014; Clifford, 2012). Thus, the future role of the physical store is not clear; it may end up being determined by the product category and customer segment (Piotrowicz & Cuthbertson, 2014).

Brynjolfsson et al. (2013) argued: “In the past, brick and mortar retail stores were unique in allowing consumers to touch and feel merchandise and provide instant gratification; Internet retailers, meanwhile, tried to woo shoppers with wide product selection, low prices and content such as product reviews and ratings. As the retailing industry evolves toward a seamless “omni-channel retailing” experience, the distinctions between physical and online will vanish, turning the world into a showroom without walls” (Brynjolfsson et al., 2013).

Hence, it is clear that multi-channel retailing is moving to omni-channel retailing. This revolution will affect both how retailers operate and how customers behave.

Compared to the multi-channel phase, omni-channel involves a larger number of channels. In fact, interactive channels are becoming integrated with traditional mass advertising channels. An important additional change is that the different channels become blurred as the natural borders between them tend to disappear. While the multi-channel environment mainly considers retail channels, omni-channel is putting more emphasis on the interplay between channels and brands.

Verhoef, et al. (2015) defined omni-channel management as the “synergetic management of the numerous available channels and customer touchpoints, in such a way that the customer experience across channels and the performance over channels is optimized”. Moreover, the different channels interact with each other and are used simultaneously (Verhoef et al, 2015).

2.2 Research Shopping in Omnichannel Retailing

As observed, multichannel and consequently omnichannel strategies has broadened to include not only physical distribution but also the channels consumers employ to gather product and brand information (Rapp et al., 2015). Van Bruggen et al. (2010) were the first to use the term “channel multiplicity” with reference to the “proliferation of channels used to provide information, deliver, and/or facilitate post-purchase satisfaction and retention with respect to the products and services offered”. This channel multiplicity is driven by consumers’ access to multiple sources of information, as well as expectations of seamless transitions starting before the purchase and continuing through post-purchase services.

Whereas in multi-channel and omni-channel strategies the development and management of channel are assumed to be decided and controlled by the company, channel multiplicity is driven by factors outside firm’s control (Van Bruggen et al., 2010). This loss of control can be
largely ascribed to retail consumers’ increased use of technology and information search (Wallace et al., 2004).

In a multi-channel environment, channel multiplicity may induce customers to seek information through one channel (e.g., online, catalogue or mobile) and purchase via another one (e.g., brick-and-mortar store; wholesale outlet). To describe this behavior, Verhoef, Neslin, and Vroomen (2007) coined the term “research shopping” (Verhoef et al., 2007). A specific, and potentially troubling form of this conduct is what has become known in the popular press as “showrooming”, in which consumers use physical stores as showrooms where they can handle products before purchasing online or via mobile devices at a lower price (Rapp et al., 2015).

Since Channels are interchangeably and seamlessly used during the search and purchase process, it is difficult or virtually impossible for firms to control this usage. Showrooming is becoming an important issue also in the omni-channel phase. Shoppers now frequently visit the store to seek information and, at the same time, search on their mobile device to get different offers and possibly find more attractive prices (Rapp et al., 2015; Verhoef et al., 2015). The opposite of showrooming, which is known as “webrooming”, occurs when shoppers search information online and purchase offline. Verhoef, Neslin, and Vroomen (2007) recognized this behaviour as the dominant form of research shopping. However, more recent studies suggest that showrooming has increased substantially (Lipsman & Fulgoni, 2012). To contrast this form of cross-channel free riding, retailers could integrate in-store assistance with online technologies, allowing clients to compare prices and products and convincing them that they provide the best offer and value for money. Firms themselves can also provide these seamless experiences by introducing mobile devices (i.e., tablets and interactive touch screens) within the point of sale, where customers can seek information about their products and order items that can be shipped directly to home or picked up in store (e.g., Apple Stores). Additionally, through in-store Wi-Fi networks, firms can communicate with their customers and send them profiled offers through their mobile devices, while tracking their behavior and shopping routes inside the store using indoor proximity systems such as NFC applications and Beacons (e.g. iBeacons by Apple) (Verhoef et al., 2015).

### 2.3 A Changing Scenario for In-Store Customer Experience: The Role of Technology Innovation

Omnichannel architecture claims for a dramatic change of the physical store in terms of space allocation, assortment and interaction. However, since customers still want to see, feel, touch, and try products, as well as to experience the shop atmosphere, it remains an essential contact point with the consumer (Piotrowicz & Cuthbertson, 2014).

The store experience is crucial in generating value perceptions in retailing, which necessitates creating a superior experience to meet consumer needs (Berry et al., 2010; Kerin et al., 1992). Effective retail management and Cross-channel integration strategies have been linked to the creation of customer experience (CE), which in turn leads to successful performance outcomes and affects firm sales growth (Gentile, Spiller, & Noci 2007; Grewal, Levy, & Kumar 2009; Rose et al., 2012; Tyan & McKechnie 2009; Verhoef et al. 2009).

The acts realized during the experience represent the role consumer has in the experience or in the co-production of it (Pine & Gilmore, 1999; Schmitt, 1999). Thus, consumer behavior reveals more than a functional use of retailer’s channels and services; behaviors represent the expression of the appropriation of the retail environment by the consumer (Trevinal & Stenger, 2014).

Meyer and Schwager (2007) defined CE as “the internal and subjective response that customers have to any direct or indirect contact with a company”. CE results in a psychological construct, which is a holistic, subjective response consequential to customer
contact with the retailer and which covers different levels of customer involvement (Gentile et al., 2007; Lemke et al., 2011).

To deeply understand the store experience it’s important to assess the role of “atmospherics”, defined as the conscious designing of the store environment in order to create certain effects in the shoppers (Kotler, 1973). Indeed, atmospherics have a direct effect on the customer experience, by influencing various emotional and behavioral shopping aspects such as (i) willingness to buy, (ii) customer share (the amount of business each customer does with a specific retailer), and (iii) the value perceived by consumers during their shopping experience (Babin et al., 1994; Babin & Attaway, 2000; Puccinelli et al., 2009).

Atmospherics are composed of both tangible elements (external and internal, such as the building, carpeting, fixtures, store decorations) and intangible elements (e.g. lights, colors, music, perfumes, temperature) which are component part of the shopping experience. A positive store design and atmosphere is crucial in order to offer a satisfying experience rather than just products and services (Hoffman & Turley, 2002). Past studies also show that it can lead to approach behaviors, which implies that consumers stay longer in the point of sale, spend more, or that the propensity for impulse buying increases (Backstrom & Johansson, 2006; Donovan & Rossiter, 1982; Foxall & Greenley, 2000; Sherman et al., 1997; Spies et al., 1997). On the other hand, negative atmosphere may lead to avoidance behavior, such as a desire to leave the store or a sense of dissatisfaction (Backstrom & Johansson, 2006; Donovan & Rossiter, 1982; Turley & Milliman, 2000).

Since technology is part of the store ambient, it must be employed to improve the in-store experience and meet customer expectations (Puccinelli et al. 2009). Moreover, it can create an attractive environment, enhancing the shopping experience in order to be engaging and memorable (Kozinets et al, 2002). Advanced devices such as virtual mirrors/fitting rooms, store-ordering hubs for “click-and-collect” services, interactive touch screens and iPads connected with social networks redefine the store experience by creating a new merchandise layout and making products more accessible and convenient to buy in store. The introduction of all such in-store technologies needs a careful investigation since it often requires store re-design and optimization to ensure that they are fully integrated in the shop layout and interact effectively with the customer experience. In this way, technology becomes the key for creating an integrated experience between channels, pushing the traditional store to change its role to a “hub” which would integrate all sales and informational channels (Blazquez, 2014; Euromonitor International 2009; Piotrowicz & Cuthbertson, 2014).

The in-store experience should provide a suitable, relaxing, and entertaining environment that makes shopping a pleasant experience, and it seems that technology could contribute to that (Chu & Lam, 2007). Pantano and Di Pietro (2012) argued that technology based innovation can in fact make brick-and-mortar stores more attractive and esthetically appealing, thus influencing consumer's shopping behavior (Pantano & Di Pietro, 2012; Poncin & Mimoun, 2014). However, it is important to specify that retailers must focus on the innovations which are relevant for consumers and really provide value for them (Drapers, 2011). The role of the store in attracting customers, indeed, depends both on the product characteristic and the level of customer experience provided, which should match customer needs and exceed their expectations.

Unlike the focus on multichannel retailing in the last decade and the ongoing research in this field (Neslin et al., 2006; Neslin & Shankar, 2009; Verhoef, 2012), the transition to omnichannel retailing and the relevant effect of in-store innovation adoption on the customer shopping experience has surprisingly heretofore not been deeply analyzed nor conceptualized, despite its growing importance in practice. The aim of this study is to investigate some
practical evidence in order to further explore this rising trend and narrow/address the current gap.

3. Research Design

Our research investigates the impact of in-store innovative technologies on the customer’s shopping experience, in the perception of store managers and employees. In order to address the objectives of the research, this work employs a qualitative strategy of inquiry, involving a data collection from a set of retailers identified as the ones who introduced innovative in-store technologies as the first-mover in the market.

The central questions that directed our research are:

RQ1: Does in-store retail technology positively affect the customer experience in an omnichannel environment?

RQ2: To what extent the early adoption of in-store technology by retailers produces a sustainable competitive advantage?

Since the impact of the innovation strategy in omnichannel retail settings still presents scant academic research, the present study is explorative in nature. For this reason, we adopted a qualitative approach resulting in an in-depth analysis across multiple cases following an inductive process, for building rather than testing a specific theory. Based on our results, we seek to outline a theoretical framework that could help retailers to build up or re-think their omnichannel strategy.

3.1 Sample and Methodology

As above mentioned, this study adopts a multiple case study design (Stake, 1995; Yin, 2009, 2012), in order to explore our emergent constructs through in-depth analyses within and across different cases from the field. Specifically, we selected 15 retailers operating on the Italian market in 5 different industries (cosmetics, fashion, grocery, sportswear and food), which introduced in-store advanced technologies during the last five years by adopting a pioneering strategy.

A pioneer retailer can be described as the first-mover in the market introducing an innovative technology within the store to enrich the offered services and thus the shopping experience perceived by customers. In addition, such retailer has the possibility to effectively collecting data on customer behavior and actual market trends, hence enhancing the efficacy of its market strategies in order to reach a unique and differentiated positioning which is difficult to be imitated by follower-competitors (Parra-Requena et al., 2012).

After selecting the retailers, we visited their stores based in the Rome area in order to carry out our interviews and get some important observations and field notes, operating a triangulation of data for ensuring the internal validity. Therefore, after retailer’s permission, we interviewed store managers and salespeople during their working hours. We choose these categories since they are aware of the innovation strategy followed by the retailer and can closely observe consumers’ behaviour in the approach to the innovative tools provided, within their daily shopping journeys.

In particular, between November and December 2014 we performed 80 semi-structured face-to-face interviews on field. Each interview lasted an average of 30/40 minutes. Retailers’ sector and features of the technologies introduced are summarized in Table 1.
<table>
<thead>
<tr>
<th>Sector</th>
<th>Technology</th>
<th>Tech. Category</th>
<th>Retailer</th>
<th>No. of Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosmetics</td>
<td>Color Profile</td>
<td>Informative</td>
<td>Sephora</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Skin-Type Test + Customized Product</td>
<td>Informative/Product customization</td>
<td>Sephora</td>
<td>1</td>
</tr>
<tr>
<td>Fashion</td>
<td>Virtual Mirror</td>
<td>Informative</td>
<td>Optissimo</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Multimedia Totem</td>
<td>Informative</td>
<td>Optariston</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Store Stylist and Hybrid Shop</td>
<td>Informative/ buy online</td>
<td>Patrizia Pepe</td>
<td>3</td>
</tr>
<tr>
<td>Grocery</td>
<td>Self Scanner</td>
<td>Time saving/ buy online</td>
<td>Coop</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Football boots customize machine</td>
<td>Product customization</td>
<td>Nike</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Shoes customize machine</td>
<td>Product customization</td>
<td>Adidas</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Gait Analysis</td>
<td>Informative/Product custom.</td>
<td>Nike</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Run Test</td>
<td>Informative/Product custom.</td>
<td>Universo Sport</td>
<td>2</td>
</tr>
<tr>
<td>Sportswear</td>
<td>Polaroid Instant Printer</td>
<td>Outfit display</td>
<td>Nike</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Magic Mirror</td>
<td>Informative/social</td>
<td>Freddy</td>
<td>3</td>
</tr>
<tr>
<td>Food</td>
<td>Digital Menu</td>
<td>Informative / Time saving</td>
<td>Ham holy burger</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Touch Menu</td>
<td>Time saving</td>
<td>Buddy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Pager Discs</td>
<td>Time saving</td>
<td>T-bone station</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Contactless/Mobile Payment</td>
<td>Time saving</td>
<td>T-burger station</td>
<td>1</td>
</tr>
<tr>
<td>TOT</td>
<td></td>
<td></td>
<td></td>
<td>80</td>
</tr>
</tbody>
</table>

Table 1: Different Sectors and Characteristics of Technologies

### 3.1.1 Interview Protocol

The first part of the interview outline includes closed questions concerning the main characteristics of respondents: gender, age, interest in new technologies, role within the store, degree of expertise during their lifetime, and in that specific point of sale.

Next, we introduced the open-ended questions about the technology innovations installed in store and the interest that customers show while using them during their shopping journeys. The objective of this part of the interview was to understand respondents’ perceptions about the effect of the integration of advanced systems in store on the customer experience and the actual and possible advantage for the retailer resulting from their strategy.

For this purpose, questions were outlined in order to elicit views and opinions from the participants and push them to freely report in depth explanations of their in-store experience, including detailed descriptions of their perceptions about how much the adopted strategies were successful or failed, in terms of: (i) amount of consumers who used the technology and showed interest in it, (ii) direct/indirect effect on sales, (iii) support for their job, (iv) how much the innovation modified the services offered and the shopping experience provided.

More in detail, we designed this part of the interview based on the following concepts:

- Technology Features and Adoption Strategy (i.e. trial period)
- Perceived Customer Behaviour (i.e. interest, adoption rate, frequency of use)
- Perceived Customer Reaction (i.e. buy after usage)
- Expected Market Reaction (i.e. increase in number of visitors and sales)
- Perceived Expected Benefits by the Employees (i.e. competitive market advantage)
- Involvement of the Employees (i.e. benefits for their work)

Furthermore, for having a clearer picture about the size of each retailer (in terms number of points sale, annual turnover, etc.) and categorize them, we asked additional questions and searched information through different channels (i.e. online, etc.). The demographics of the sample are detailed in Table 2.
<table>
<thead>
<tr>
<th>Gender</th>
<th>F</th>
<th>f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>45</td>
<td>56%</td>
</tr>
<tr>
<td>Male</td>
<td>35</td>
<td>44%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>F</th>
<th>f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25</td>
<td>11</td>
<td>14%</td>
</tr>
<tr>
<td>25 – 35</td>
<td>45</td>
<td>56%</td>
</tr>
<tr>
<td>36 – 45</td>
<td>16</td>
<td>20%</td>
</tr>
<tr>
<td>46 - 60</td>
<td>8</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role</th>
<th>F</th>
<th>f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>29</td>
<td>36%</td>
</tr>
<tr>
<td>Salesperson</td>
<td>51</td>
<td>64%</td>
</tr>
</tbody>
</table>

**Experience in Retailing**

<table>
<thead>
<tr>
<th>Experience Level</th>
<th>F</th>
<th>f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very short (less than 1 year)</td>
<td>10</td>
<td>12.5%</td>
</tr>
<tr>
<td>Short (between 1 and 2 years)</td>
<td>10</td>
<td>12.5%</td>
</tr>
<tr>
<td>Average (between 2 and 5 years)</td>
<td>26</td>
<td>32.5%</td>
</tr>
<tr>
<td>Long (more than 5 years)</td>
<td>34</td>
<td>42.5%</td>
</tr>
</tbody>
</table>

**Experience in Point of Sale**

<table>
<thead>
<tr>
<th>Experience Level</th>
<th>F</th>
<th>f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very short (less than 1 year)</td>
<td>26</td>
<td>32%</td>
</tr>
<tr>
<td>Short (between 1 and 2 years)</td>
<td>12</td>
<td>15%</td>
</tr>
<tr>
<td>Average (between 2 and 5 years)</td>
<td>19</td>
<td>24%</td>
</tr>
<tr>
<td>Long (more than 5 years)</td>
<td>23</td>
<td>29%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interest in Technology</th>
<th>F</th>
<th>f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>Medium</td>
<td>13</td>
<td>16%</td>
</tr>
<tr>
<td>Good</td>
<td>49</td>
<td>61%</td>
</tr>
<tr>
<td>High</td>
<td>14</td>
<td>18%</td>
</tr>
</tbody>
</table>

Table 2: Sample Demographics

From the 80 respondents, 56 percent were women, while men accounted for 44 percent. With regard to age, the main segment represented was young adults aged 25–35 (56 percent), followed by people between 36-45 years old (20 percent). Moreover, about the role within the retailer store/chain, the 64 percent of respondents were salespeople while the 36 percent were store managers.

Concerning the experience in retailing, 42.5 percent of the participants had a long experience (i.e. worked in the same sector for more than five years) and 32.5 percent had an average experience (between two and five years), while the experience in the specific point of sale shows more balanced results between the different categories.

Lastly, most of the respondents highlighted a good interest in new technologies (61 percent), whereas just a 5 percent of them declared a low interest in it.

### 3.1.2 Data Analysis

During our data collection, each qualitative interview was audio-recorded and handwritten notes were taken. Recordings of the interviews were then transcribed into text files and data analyzed through a qualitative data analysis software program. In particular we used QSR NVivo for performing our content analysis and associate the text with specific emerging codes (“nodes” in NVivo) consistent with our interview protocol. Therefore, we segmented paragraphs and sentences into categories and associated them with a representative label.

Codes and sub-codes were identified by following a preliminary codebook, developed for coding the findings consistently with the context analyzed and the existing literature. This predetermined coding scheme further evolved and changed on the basis of the information learned during the data analysis.

Specifically, the use of coding process allowed us to generate a description of the setting and cases analyzed by:

- associating a code (and sub-code) to each segment/structure;
b. identifying the most recurrent themes or patterns (i.e. perceptions, opinions, observations, judgements, innovation strategies, etc.) through the analysis of code frequency value; 

c. assessing the correlations between codes (co-occurrence analysis) in order to develop a conceptual model.

4. Results and Discussions

Proceeding on our chain of evidence, the first analysis focused on the code frequency, which represents how many times a specific code was highlighted by the participants. We identified the codes imposing the limitation that each code could appear at most once in each interview. In addition, since our dataset was rich and not all the emerging codes could be used, we needed to “winnow” them in order to focus on the most significant ones (Guest, MacQueen & Namey, 2012). Therefore, by fixing the constraint of a minimum frequency value of 10, from 140 total codes emerged initially we selected the most frequent ones. The 31 most representative resulting codes, ranked by frequency value, are listed in Table 3.

<table>
<thead>
<tr>
<th>NODES</th>
<th>F</th>
<th>f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall benefits \ Improved services</td>
<td>10</td>
<td>13%</td>
</tr>
<tr>
<td>Overall benefits \ More informed customer</td>
<td>10</td>
<td>13%</td>
</tr>
<tr>
<td>Technology Introduction \ Strategy \ Trial period</td>
<td>10</td>
<td>13%</td>
</tr>
<tr>
<td>Technology Description \ Self-scanning</td>
<td>11</td>
<td>14%</td>
</tr>
<tr>
<td>Technology Introduction \ Years \ Totally new (&lt; 1 year)</td>
<td>11</td>
<td>14%</td>
</tr>
<tr>
<td>Overall benefits \ More satisfied customer</td>
<td>11</td>
<td>14%</td>
</tr>
<tr>
<td>Overall benefits \ Brand image</td>
<td>12</td>
<td>15%</td>
</tr>
<tr>
<td>Frequently asked questions \ What is it</td>
<td>14</td>
<td>18%</td>
</tr>
<tr>
<td>Frequency of use \ Rarely</td>
<td>16</td>
<td>20%</td>
</tr>
<tr>
<td>Technology Introduction \ Years \ I don’ t know</td>
<td>16</td>
<td>20%</td>
</tr>
<tr>
<td>Increased sales \ I don’ t know</td>
<td>20</td>
<td>25%</td>
</tr>
<tr>
<td>Technology Introduction \ Strategy \ I don’ t know</td>
<td>20</td>
<td>25%</td>
</tr>
<tr>
<td>Overall benefits \ Differentiated positioning</td>
<td>21</td>
<td>26%</td>
</tr>
<tr>
<td>Increased number of visitors \ I don’ t know</td>
<td>22</td>
<td>28%</td>
</tr>
<tr>
<td>Increased number of visitors \ Yes</td>
<td>22</td>
<td>28%</td>
</tr>
<tr>
<td>Overall benefits \ Attracts the customer</td>
<td>23</td>
<td>29%</td>
</tr>
<tr>
<td>Frequency of use \ Very often</td>
<td>24</td>
<td>30%</td>
</tr>
<tr>
<td>Customer asks question \ No</td>
<td>27</td>
<td>34%</td>
</tr>
<tr>
<td>Increased sales \ Yes</td>
<td>28</td>
<td>35%</td>
</tr>
<tr>
<td>Frequently asked questions \ How it works - serves to</td>
<td>29</td>
<td>36%</td>
</tr>
<tr>
<td>Increased sales \ No</td>
<td>32</td>
<td>40%</td>
</tr>
<tr>
<td>Overall benefits \ Time saving</td>
<td>32</td>
<td>40%</td>
</tr>
<tr>
<td>Frequency of use \ Often</td>
<td>33</td>
<td>41%</td>
</tr>
<tr>
<td>Increased number of visitors \ No</td>
<td>36</td>
<td>45%</td>
</tr>
<tr>
<td>Technology Introduction \ Years \ Stable (&gt; 2 years)</td>
<td>44</td>
<td>55%</td>
</tr>
<tr>
<td>Technology Introduction \ Strategy \ Directly</td>
<td>50</td>
<td>63%</td>
</tr>
<tr>
<td>Customer asks questions \ Yes</td>
<td>53</td>
<td>66%</td>
</tr>
<tr>
<td>Customer interested \ Yes</td>
<td>71</td>
<td>89%</td>
</tr>
<tr>
<td>Technology features \ Permanent technology</td>
<td>72</td>
<td>90%</td>
</tr>
<tr>
<td>Customer buys \ Yes</td>
<td>72</td>
<td>90%</td>
</tr>
<tr>
<td>Competitive advantage \ Yes</td>
<td>73</td>
<td>91%</td>
</tr>
</tbody>
</table>

Table 3: Most Significant Codes Emerging From the Content Analysis
In the previous table we didn’t include the codes relevant to the different sectors analyzed (see Table 4). Based on our constraint of the minimum frequency value of 10, in the following analysis we will not take into account the cosmetics sector since it presented a frequency value of 4 (5%).

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>f</th>
<th>f %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosmetics</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>Fashion</td>
<td>17</td>
<td>21%</td>
</tr>
<tr>
<td>Grocery</td>
<td>15</td>
<td>19%</td>
</tr>
<tr>
<td>Food</td>
<td>30</td>
<td>38%</td>
</tr>
<tr>
<td>Sportswear</td>
<td>14</td>
<td>18%</td>
</tr>
<tr>
<td>TOT.</td>
<td>80</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4: Sector Codes

Our results can be analyzed by dividing the emerging codes into the following macro and sub-categories:

1. **Technology Features and Adoption Strategy:** store managers and salespeople described the strategy used by the retailer to introduce the innovation inside its points of sale on the basis of the information they had, observations and perceptions. They also outlined the most interesting features of the innovative tools, based on their daily use while supporting customers and the observation of consumers interacting with the technology. This category is represented by the following sub-categories, relevant to the codes emerged:

   - **Permanent Technology:** according to 72 respondents over 80 (90%) the innovations have been introduced for standing permanently inside the store.
   
   - **Novelty of the technology:** from 55% of the interviews resulted that the technology has been introduced by the retailer more than two years ago (i.e. code “Technology Introduction\ Years\ Stable (> 2 years)”). This observation is useful to understand the greater benefit perceived by the consumer while using a familiar technology, compared to a totally new technology (see code “Technology Introduction\ Years\ Totally new (< 1 year)”) which was observed by a smaller number of respondents (14%).
   
   - **Adoption Strategy:** two different strategies have been underlined by the participants: for the 63% of them the retailers introduced the technology innovation directly in the point of sale, without an initial trial period (code “Technology Introduction\ Strategy\ Directly”); while in the 13% of the cases they tested its success over the customers firstly in a pilot-store through a trial period (code “Technology Introduction\ Strategy\ Trial period”).

2. **Perceived Customer Benefits:** represent the main effects of the new touchpoints introduced in store by the retailer on the customer experience. In particular, here we consider the benefits expressed or demonstrated by customers in the respondents’ perception, reflecting value-added services provided by retailers which influence customer satisfaction and retention. The present category is represented by the following sub-categories:

   - **Time savings:** the possibility to skip cues at the traditional cash counter, seek detailed information about product variants and availability, and visualize a specific outfit
without waiting a traditional fitting room to be available allow consumers to save time and enjoy better their shopping experience. The 40% of the participants recognized this benefit for customers (i.e. code “Overall benefits\ Time saving”), often related to self-service technologies (e.g. “Technology Description\ Self-scanning”, 14%).

- **Service Improvement (shopping experience):** 13% of interviewees observed an improvement in the quality of in-store services and offer due to the introduction of technology, which impact positively on the customer’s shopping experience (see code “Overall benefits\ Improved services”).

- **More Information:** due to the omnichannel strategies implemented by retailers, which added new and interactive touchpoints, the bi-directional flow of information increased significantly. Therefore, customers result more informed according to the 13% of respondents (code “Overall benefits\ More informed customer”).

3. **Impact of Usage Frequency on Sales:** consumer engagement with the innovative touchpoints can be evaluated on the basis of their frequency of use and the willingness to purchase shown by customers after they interact with them. This category is represented by the following sub-categories:

- **Purchase:** nearly all the interviewees (the 90%, code “Customer buys\ Yes”) reported that customers usually buy a product/service provided by the retailer after they interact with the advanced in-store systems for different purposes (e.g. seek information, get a customized product, scan items, order online, etc.).

- **Frequency of use:** customers interact with in-store technologies when these are user-friendly, engaging, useful and entertaining. According to a large proportion of respondents (41%), customers visiting the retailer stores use often the integrated technology (more than 30% of daily customers; code “Frequency of use\ Often”). Another 30% of interviewees stated that the technology is used very often by customers (approximately 50% of daily customers; code “Frequency of use\ Very often”); whereas the 20% of them observed a less frequent use (less than 20% of daily customers; code “Frequency of use\ Rarely”). Acknowledging that frequency of use depends on the features and type of technology taken into consideration, the sector and the target clients, these results underline an high interest shown by consumers in the new technologies analyzed.

- **Successful Outcomes:** respondents were asked whether the sales increased after the introduction of in-store technologies. According to their answers, the 40% of them didn’t recognized an increase in sales within the retailer stores (code “Increased sales\ No”), while the 35% observed an increase and the 25% weren’t able to affirm if there was an actual connection between the use of technological touchpoints and sales (codes “Increased sales\ Yes” and “Increased sales\ I don’t know”). Since data are so heterogeneous on this issue, it’s difficult to obtain an univocal interpretation. Through a co-occurrence analysis, in the following section we will explore in which sectors successful outcomes were actually registered.

- **Store Visits:** furthermore, interviewees asked about the increase in the number of store visits since the technological innovations were introduced in the store noticed for a 45% of the cases that no increase occurred (see code “Increased number of visitors\ No”), while for the 28% of respondents the innovations led to an increase in customers’ store visits (i.e. code “Increased Number of visitors\ Yes”). In addition, another 28% of the sample wasn’t able to affirm whether an actual increase in store visits followed the integration of the innovative tools in the store (code “Increased number of visitors\ I don’t know”). Similarly to the previous category (successful
outcomes), since almost a third of the sample wasn’t able to express a specific opinion on the issue, the information is not uniquely interpretable and depends on the specific sector.

4. **Strategic Competitive Advantage**: it’s the advantage that from respondent’s viewpoint the retailer draws by providing its customers with a unique shopping experience through the integration of innovative and interactive technologies within the store. This category is represented by the following sub-categories:

   - **Competitive advantage**: 73 respondents over 80 (91%) perceived a competitive advantage for the retailer over traditional retailers which don’t provide customers with a technology enriched retail environment (i.e. code “Competitive advantage\ Yes”).
   - **Stimulate consumer’s interest**: 89% of people interviewed observed that customers demonstrate high interest in the advanced systems integrated in-store, during their shopping experiences (see code “Customer interested\ Yes”). This behaviour is also confirmed by the fact that customers usually ask questions about these technologies (code “Customer asks questions\ Yes”, highlighted by 66% of participants). In particular, the most frequent ones (36%) concern their use and functionalities (see code “Frequently asked questions\ How it works - serves to”).
   - **Customer Attraction**: from the content analysis resulted that the possibility to interact with different channels during the shopping journey and the availability of self-service technologies in store attract customers (see code “Overall benefits\ Attracts the customer”, 29%).
   - **Differentiated positioning**: in addition to the perceived competitive advantage, 26% of respondents highlighted also that retailers differentiate themselves from the competitors in their market by providing customized and interactive services (see code “Overall benefits\ Differentiated positioning”).
   - **Return on image (brand image)**: furthermore, the 15% of interviewees observed that the consumers’ experience, enhanced due to the innovative channels added by the retailer, has a positive impact on their impression of the brand personality (see code “Overall benefits\ Brand image”).
   - **Customer Satisfaction**: another important effect, perceived by the 14% of participants due to their daily contacts with clients, is the greater customer satisfaction connected to the technology-enriched experience through the store in comparison with the traditional one (see code “Overall benefits \ More satisfied customer”).

Data presented so far can be better visualized in the radar chart below (Fig.1).
4.1 Co-occurrence Analysis

In order to analyze more in depth the strength of the relationship between different codes emerging from the frequency analysis and to address the observed structures to the specific sector, we carried out a co-occurrence analysis. Results are provided in Table 5, in which each row represents a specific code while columns interviews grouped by sector. In particular, boxes with “1” denote the respondent identified a correspondence between the two codes; while a blank box implies that no correspondence occurred.

In particular, according to our data and observations we can split the four sectors analyzed in this section into two categories, utilitarian (1) and hedonic (2), based on the:

i. Characteristics of the specific technologies introduced;
ii. Purpose of the technology (and of its use);
iii. Product/service category;
iv. Customer target and shopping orientation.

The first category includes the sectors Food and Grocery, which employed technologies aimed at simplifying the purchase process and saving time. This benefits are perceived by consumers as satisfying for utilitarian needs and shopping values, which involve the acquisition of products and/or information in an efficient manner reflecting a more task-oriented, cognitive, and non-emotional outcome of shopping (Babin et al., 1994; Holbrook & Hirschman, 1982; Jones et al., 2006).

The second category instead includes the Fashion and Sportswear sectors, which employed technologies directed to customize products and provide customers with enriched multimedia experiences, since they look for differentiating themselves from the others through obtaining unique and original offers. These benefits belong to the hedonic sphere of customer needs and shopping values, in which the value is found in the shopping experience itself - characterized by intrinsic satisfaction, perceived freedom, entertainment and escapism - independently from the efficiency of task-related activities (Babin & Attaway, 2000; Jones et al., 2006).
Table 5: Co-occurrence Analysis According to the Reference Market
Further analyzing the correspondence occurred between key codes and sectors (in table 5), we can identify some common conditions and innovation strategy characteristics appearing in all the sectors (and thus common to both the outlined categories), where frequency values are calculated according to the sectors’ sub-totals:

- **Introduction strategy**: technology was introduced permanently in the point of sale (in Grocery and Food this correspondence was identified respectively by the 100% and 83% of respondents, while in Fashion & Sportswear by 94% and 93%);
- **Novelty of technology**: in most of the sectors the technology introduced by the retailer resulted stable (introduced more than 2 years before); in particular: Grocery and Food showed respectively 87% and 30%, while Fashion and Sportswear 82% and 36%);
- **Interest**: innovative tools resulted interesting for the customers (Grocery and Food showed respectively 93% and 77%, while Fashion and Sportswear 94% and 100%);
- **Competitive advantage**: in all the analyzed sectors almost the totality of interviewees (100% in sportswear, 94% in Fashion, 87% in Grocery and Food) associated the adoption of innovative touchpoints to a competitive advantage in the market for the retailer;
- **Willingness to Purchase**: consumers, after engaging with technological touchpoints usually purchased (Food & Grocery showed respectively 100% and 97%, while Fashion & Sportswear 76% and 100%).

Concerning the two categories shown above, on the basis of the emerged drivers we outlined two different behavioural patterns. Their specifications will be shown below:

**A. Conceptual Design 1: The Food and Grocery Approach**

In these two sectors, the most important benefit emerging from our data (from the overall benefits) is represented by time savings (50% for Food and 67% for the Grocery), which is the central benefit of the model since it generates as a result a perceived improvement of provided services that impacts directly on customers’ shopping experience. Moreover, we noticed a positive correlation between the shopping experience and customer satisfaction. In fact, together with an improvement in the shopping experience comes an increase in customer satisfaction (20% for both areas), as remarked in two different interviews from the food sector (“Eataly”) where the respondents stated: “Faster payments, reduction of queues and improved service to the customer... By increasing these elements, the number of customers increases” and “by increasing the ease and speed of payment, customer satisfaction increases and consequently the customer loyalty”.

In this first approach we consider customer loyalty and repatronage intention as the main goals to be achieved by the retailer, represented respectively by the intention to increase the number of customers who deeply held commitment to a specific retailer/brand and their likelihood to shop in its stores again in the future (Oliver, 1999), in line with the utilitarian features presented by the technology. In fact, since the amount of products purchased in a supermarket (which usually depends on a predetermined shopping list or a standardized basket of goods) or the quantity of dishes ordered in a restaurant (which are usually proportioned to client’s hunger) are not affected by the use of technological tools and will not be increased by them, in this model we focus on the retailer’s purpose of increasing the number of consumers and loyal customers.

The choice is supported by the comparison of data relating to negative and positive opinions expressed by respondents according to perceived increase in sales and number of customers. Regarding the first aspect, we noticed a percentage of negative responses significantly higher than of positive feedbacks in both sectors: in Food sector 40% against 27%; in Grocery 47% against 40%.
With reference to the increase in customers who shop in retailer’s stores, instead, mostly Grocery registered an higher percentage of positive responses than negative ones (47% against 33%). Therefore, we hypothesized the present model built mainly on the basis of the Grocery sector analysis: from an higher level of perceived time savings - the main benefit of the model - due to the introduced innovations (67% Grocery vs. 50% Food), associated with an increase in efficiency, can derive positive effects such as the increase in customers, customer loyalty and repatronage intention, which are the primary objectives for retailers operating in these sectors. This conclusion is further emphasized in a passage of another interview: "By increasing the comfort of the shopping experience, the number of customers increases".

Figure 2 provides the representation of Conceptual Design 1.

B. Conceptual Design 2: The Fashion and Sportswear Approach

In these two sectors the level of attraction generated by the innovative tools (respectively 29% in Fashion and 57% in Sportswear sector) are significantly higher than in the first scenario (Conceptual Design 1), since customers emphasize more hedonic values such as the shopping experience itself and the availability of customized products and services. The main benefit of this approach results in the differentiation of positioning (respectively 24% in Fashion and 50% in Sportswear) which comes mainly from luxury branding and product personalization strategies, from which an enhanced perception of the brand image derives (41% in Fashion and 21% in Sportswear). These variables have a positive influence on customer satisfaction (6% in Fashion and 7% in Sportswear) and at the same time generate an increase in the consumer's willingness to pay (WTP), as it is remarked by an interviewee in the following passage regarding the shoes customizing machine (Adidas store): "We provide an exclusive service that our competitors don’t have. We are the only ones offering it in this shopping mall and in the Adidas stores based in Rome. If customers want original customized shoes, they must visit our store. This allows us to increase sales and ask customers for an higher price, since the final product is unique and presents an added value for the consumer". The fact that we didn’t record a substantial perceived increase in sales (positive and negative perception about this aspect are perfectly balanced: in Fashion 35% of respondents noticed an increase in sales, whereas another 35% didn’t; in Sportswear 43% versus 43%), or the observed satisfaction rates are modest in both areas, confirm this technologies are designed for a defined and limited target customer which most likely takes advantage of these specific products and services by spending more in order to differentiate themselves from the majority of customers and to experience something unique (e.g. a customized shoe or an high fashion garment).

Therefore, in this second conceptual design we consider brand image and willingness to pay as the main goals for the retailer, since target customers seek for exclusivity, uniqueness, distinction, and the product becomes a status symbol expressing hedonic values. In line with this perspective and in opposite to the first model, the purpose of the retailer is far from the increase in the number of customers who visit the shop (emphasized by the code “Increased
number of visitors” that mainly in Fashion has negative feedback: 53% no versus 18% yes; while Sportswear presents a balanced result of 43% versus 43%), but focuses on the increase spending of each customer who can afford it. The representation of the second conceptual design is provided in Fig.3

5. Conclusions and Future Research Directions

In the increasingly competitive retail scenario, the advancement of digital and mobile channels raises customer expectations for businesses to engage with them wherever, whenever and however. Retailers need to find innovative ways to connect with their audience and offer them enriched shopping experiences and relevant proposition, making the motivation for a omnichannel strategy design ever more compelling. The present work focuses on the ongoing transition from multichannel to omnichannel management in retail settings. In particular, we explored how the role of the physical store is evolving in the current omnichannel environment, due to the integration of innovative tools in store which impact both on customer experience and retailer performance, and create a connection between offline and online environments. Technology generates multiple touchpoints with the customer, enables the integration of different channels handled by a retailer and gives new relevance to physical stores. Anyhow, it must be clear that it is not an end, but only an instrument to enhance the quality of the customer experience. Moreover, recent studies showed a positive effect of cross-channel integration on firm sales growth, connected to the following aspects (Berry et al., 2010; Cao & Li, 2015):

- the rapid development of interactive technologies has changed how consumers interact with retailers’ multiple channels;
- innovative tools enable traditional channels to provide advanced features and thus reduce service differences across channels;
- retailers’ increasing data integration and big data analysis abilities improve their understanding of consumers’ cross-channel shopping behavior (and contrast the phenomenon of research shopping), supporting them to observe, measure, and leverage how the synergies across their channels influence consumer behavior and value perception.

By deeply analyzing our data resulting from a multiple-case study with fist-mover retailers operating in different sectors, some interesting insights and common drivers emerged which can be conceptualized in a theoretical framework in order to contribute to the existing literature on this topic. Firstly, our results demonstrate that the integration of multiple channels within a single point of sale can be feasible and successful if the retailer introduces the innovative touchpoints as the first in the market, on a permanent basis (i). Moreover, in-store innovations resulted in successful outcomes within the customers when
adopted directly in the point of sale (ii) (i.e. without any initial trial period), and mainly if they are familiar to the customer, thus stable in the store for more than two years (iii). Common positive results were perceived by respondents from all the sectors. First of all, interviewees noticed great interest showed by customers in engaging with innovative tools during their shopping journey. Furthermore, resulting positive shopping experiences drove to an increase in customers’ willingness to purchase. At the same time, retailers who adopted these innovations gained a substantial competitive advantage on the market over traditional ones who didn’t integrate innovative tools within their channel mix. It is furthermore interesting to notice that, depending on the characteristics of the specific sector and the relevant experiences desired and benefits expected by consumers, retailers pursue different goals through their innovation strategy. In fact, our database covers a wide range of sectors and product categories such as grocery, food and restaurants, fashion and sportswear, which enabled us to develop a richer understanding of customers’ preferences and benefits expected by the technology enriched shopping experience.

More in details, as shown in the two behavioural patterns outlined in the previous section, our results suggest that these benefits and relevant technology features can be split in two different categories:

A. **Utilitarian**: task-oriented customers seek for time saving tools in order to get highly-efficient shopping experiences. In this category, the expected goals for retailers are to increase number of store visits and, at the same time, to obtain customer loyalty and repatronage intention.

B. **Hedonic**: selected customers look for enriched shopping experiences and unique and highly-customized products, considering mostly shopping’s emotional worth (Bellenger et al., 1976). In this category, retailers characterized by a differentiated positioning on the market aim to strengthen their brand image and rise customers’ willingness to pay.

Along these lines, the present work also represents a contribution from a more practical and managerial point of view. Retailers should pay attention to the insights presented so far in order to develop the most effective innovation strategy according to their goals and the characteristics of the sector in which they operate, by giving great importance to consumers' interaction with the different touchpoints (i.e. physical, human, digital and mobile) through which the value of the shopping experience is perceived. In fact, our results strongly suggest that consumers’ interactions with in-store technologies and innovative services have a strong influence on the overall service quality perception, satisfaction and purchase intention. Since customers assess the overall quality of the services simultaneously, retailers are pushed to invest in the successful integration of the different channels, rather than concentrating efforts on improving each channel separately. For this reason, based on our results we can state that companies cannot consider their available channels as stand-alone units but simultaneously, starting to redesign the physical store as a new environment containing a variety of possible omnichannel experiences, in order to contrast and avoid the cross-channel/retailer free riding.

Consequently, this emergent scenario requires several managerial implications. Indeed, the resulting increase in the level of complexity for retailers’ operations pushes companies to commit greater efforts and investments to coordinate all the different touchpoints and technologies in order to engage more customers. At the same time, this process allows retailers to be rewarded with more satisfied customers willing to purchase and spend more. Although our research provides some interesting contribution from both theoretical and practical sides, it is an explorative study and shows some limitations. In order to generalize the results achieved, future quantitative studies should empirically test the conceptual models
proposed. In particular, since we limited our research on retailers operating in the Italian market, further studies involving a larger sample of retailers could focus on companies operating in different markets characterized by an higher level of technology adoption and omnichannel integration. In addition, retailers’ performance resulting from the simultaneous integration of different channels and technology adoption, should be evaluated on the basis of reliable data reporting the economic outcomes obtained. Finally, comparative quantitative studies (such as surveys or field experiments) could investigate the consumer viewpoint concerning the shopping experience in the new omnichannel retail scenario, differentiating for hedonic or utilitarian orientation in order to better evaluate and quantify customers’ value perceptions resulting from this emergent management strategy.

References


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Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing:


