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Enriching Everyday Experience with a Digital Service: Case Study in Rural Retail Store

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Abstract

A novel omnichannel service concept was developed and piloted in the context of everyday retail service environment. A starting point for the new service was a need to provide the customers of a small rural retail store with wider selection of goods through integrating web shopping interface to the store's service processes. One of the driving design principles was to achieve a seamless service experience by a fusion of web and physical retail channels. The findings from the case study were analysed from the viewpoint of store customers and personnel. Over half of the interviewed customers stated they were likely to use the novel retail service in the future. Previous experience with online shopping appeared to have a direct, positive effect on the customers' willingness to adopt the service into use. The hands-on demonstration was proved to be an advantageous way for introducing the novel service to potential users. Personnel's attitudes towards the service concept were in general enthusiastic and positive; however the service also invoked some initial concerns mostly related to additional work load. The personnel also clearly appreciated the positive effects of the new service on the store and customers.

Keywords: Retail, Case study, Digital service, Omnichannel, Brick-and-mortar store, Web store, Customer experience

1 Introduction

The retail sector is considered as one of the most rapid technology adoptive sectors (e.g. Ahmed, 2012). Over the years, retailers have learned how to design their stores to better meet shoppers' needs and to drive sales. In addition, the technical infrastructure that supports most retail stores has grown enormously (GS1, 2010). The retail industry has evolved from traditional physical stores through the emergence of electronic commerce into a combination of physical and digital channels. Seeing the future of retailing is quite complex and challenging; busy customers expect that the companies must use innovative approaches to facilitate their shopping process efficiently and economically along with providing value added shopping experiences. People no longer only go shopping when they need something: the experience of shopping is becoming more important (Gehring et al., 2011).

There are a number of challenges and opportunities retailers face on their long-term radar such as changes in consumer behavior and consumer digitalization. These drivers

affecting retail sector should be a key consideration for retailers of all shapes and sizes (Reinartz, 2011). The next subsections discuss the consumer-based changes faced by retail sector in more detail.

1.1 Increased Consumer Power

It is likely that the power of the consumers will continue to grow, as they become increasingly willing and able to seek, use and share information, which leads to retailers facing growing pressure due to this increased awareness of consumers (cf. Aubrey and Judge, 2012). The consumer, from the demand-side, will be empowered to direct the way in which the revolution will unfold (Doherty and Ellis-Chadwick, 2010). The focus on buying behavior is changing from products to services (Marjanen, 2010). Thus, the established retailers will need to start consider how they can more effectively integrate their online and off-line channels to provide customers with the very highest levels of service (ibid).

1.2 Digitalization of Consumer Experience

It is now widely recognized that the Internet's power, scope and interactivity provide retailers with the potential to transform their customers' shopping experience, and in so doing, strengthen their own competitive positions (Doherty and Ellis-Chadwick, 2010). Frost & Sullivan (2012, 2013) predicts that by 2025, nearly 20% of retail will happen through online channels, the global online retail sales reaching \$4.3 trillion.

Thus, retailers are facing digitalization of the touch-point and consumer needs (Reinartz, 2011). By 2025, 80 billion devices will connect the world with each person carrying 5 connected devices (Frost & Sullivan, 2012). Mobile and online information technology make consumers more and more flexible in terms of where and how they wish to access retailer information and where and how to purchase products. Consumer behavior is changing as a growing number of smarter, digitally-connected, price-conscious consumers exploit multiple shopping channels, thus making the multichannel retail as an established shopping behavior (Aubrey and Judge, 2012). Described as channel agnostic, they do not care whether they buy online, via mobile or in-store as long as they get the product they want, when they want it at the right price (ibid). A new behavior of test-and-buy-elsewhere is becoming more common (Anderson et al., 2012) and retailers must adapt to the buying behavior of these "channel-hoppers" (Ahlert et al., 2010).

However, simply "adding digital" is not the answer for retailers – yet that is an approach too often taken (Anderson et al., 2012). For traditional retailers to survive, they must pursue a strategy of an integrated sales experience that blends online and in-store experiences seamlessly, leading to the merger of web store and physical store (Maestro, 2012). According to Frost & Sullivan (2012), the retail model will evolve from a single/multiple channel model to an integrated hybrid cross-channel model, and they call it as *bricks and clicks*. Thus, shoppers of the future float seamlessly across mobile, online and real-world platforms (PSFK, 2012).

1.3 From Multichannel to Omnichannel Retailing

Adoption of both online and physical channels to sell simultaneously through multiple marketing channels is referred to as *multichannel* retailing (Turban et al., 2010). Today in an ever digitizing world the line between channels is fading as the different channels are no more separate and alternative means for delivering shopping services, but customers increasingly use them as complementing each other or even simultaneously. Hence, the term multichannel is not enough to describe this phenomenon, and instead

the new concept of *omnichannel* is adopted (Rigby, 2011). Rigby (2011) defines omnichannel as “an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping”. The customers connect and use the offered channels as best fits to their shopping process, creating their unique combinations of using different complementary and alternative channels. In an omnichannel solution the customer has a possibility to seamlessly move between channels which are designed to support this “channel-hopping”.

Payne and Frow (2004) examined how multichannel integration affects customer relationship management and stated that it is essential to integrate channels to create positive customer experiences. They pointed out how a seamless and consistent customer experience creates trust and leads to stronger customer relationships as long as the experience occurs both within channels and between them. Technology-savvy consumers expect pre-sales information, during-sales services and after-sales support through a channel customized to their convenience (Oh et al., 2012). All these needs and requirements must come together as a unified, holistic solution, and retailers should be able to exploit the channel-specific capabilities in a meaningful way (Goersch, 2002).

The aim of this paper is to describe and analyze the findings of a case study of a novel omnichannel service concept implemented in the retail sector paying particular emphasis on aligning the company values and needs with those of consumers.

2 Research Setting

Rigby (2011) states that in pursuit of omnichannel experience, retailers should start to consider their stores not as a liability but as an asset. Omnichannel can provide a way to fight against the phenomenon where retailers spend time serving their customers and providing their expertise only to see the customers to check the cheapest price from the web and in the end buy the product from the online retailer. Thus, there are many good reasons for providing digital shopping solutions. When new technologies and devices emerge, the channel-specific capabilities can be exploited to create new service possibilities and making sure these or other options are available for all customers (Goersch, 2002). The technology should be used as a tool, to deliver a seamless and enhanced experience across channels where customers can trial, research, compare, review, order for home delivery or buy in-store. As such, in-store technology needs to be integrated and meaningful, and relevant to consumer needs (Aubrey and Judge, 2012). It is about nurturing a symbiotic relationship between digital and physical channels, so that they work together side-by-side, supporting each other (ibid).

In this research context the retailer also wanted to integrate the novel services and adapt retail processes to better serve and meet the needs of the rural store’s older customers closer to their homes. Many of the senior population were known not to have an access to larger selections of retailer’s online stores. Thus, in the development of the novel service concept the utilization of Internet possibilities and the importance of sales persons guiding and socializing alongside the older customers at the physical store were emphasised (cf. Nyrhinen et al., 2011).

2.1 Case Study Description

The pilot case study described in this paper was done in the context of developing and piloting a novel omnichannel service concept for a Finnish retail chain. A starting point for the new service was a need to provide wider selection of goods for the customers of a small, distant rural store. The store is owned by a large national co-operative retail chain. The retail company provided access to a pilot environment with all retail value chain actors from customer interface (i.e. employees) to wholesale actors and finally to the end-customer.

The service concept was based on the idea of providing customers with the selection of large stores by integrating an e-commerce solution within the service of a rural store. This was practically done by integrating the service provider's digital web store to service processes of the small brick-and-mortar store. Burke et al. (2002) suggest that retailers who want to web-enable their store should optimize the interface to the in-store environment instead of just providing web access. Thus, one of the driving design principles of our case study was to achieve a seamless retail experience by a fusion of web and physical retail channels. The novelty of the service concept was on how it was integrated to the service processes of a physical store, i.e. how the different channels were used together to create as seamless retail experience as possible.

A co-design process was used in the service design. The build-and-evaluate design cycle involved a small group of researchers and the employees of the retail company. The researchers were active actors in the design process, participating in service concept design and facilitating co-design activities. Technical experts of the retail organization were involved in specification how the developed solution would best integrate with the existing infrastructures of the organization, and how the new solutions related to the strategic development agenda of other related omnichannel solutions. Retail experts were involved in designing the customer journey, tasks of staff, service solution's visual and content design and internal and external communication required by the service.

2.2 Concept Description

The goal was to develop, trial and adopt a omnichannel retail service concept in a real usage environment. The pilot study was conducted in a small rural store part of the service provider's retail chain, located in the city of Kolari in Northern Finland with a population of 3,836. The study was launched in the end of October 2013, with a goal of scaling up the digital retail service concept eventually to also other small rural stores of the service provider.

The customers visiting the physical store could access the selection of goods otherwise not available through a web store interface. The retail service included a *touch-screen customer terminal* located inside the physical store (see Figure 1). The customers could use the terminal for browsing, comparing and ordering goods from the retail provider's web store selections. The two web stores accessible through the customer terminal were already existing and available for any customers through the Internet connection. In addition, the retailer piloted the marketing and selling of their own campaign products through a new web store interface available on the customer terminal. The customers could decide whether they wanted their product order delivered to a store (the delivery was then free of charge) or directly to their home. After placing the order the customer paid the order to a cash register of the store alongside their other purchases. The customer terminal was also accompanied by a large *information screen* (located on the wall above the terminal) that advertised the new retail service concept and directed the customers for its use.



Figure 1: The retail service setup inside the store

3 Research Focus and Methods

The specific research questions of the case study were the following:

- How digital pilot service integrates into retail company's and store's existing processes
- How different service channels can be connected with each other into an omnichannel service
- How the different actors experience the digital pilot service available in the store

The focus of this paper is especially on the last research question, i.e. on more closely investigating and analyzing the store customers' and personnel's service experience and deriving design implications from the gained information for developing and improving the service concept further. The two first research questions have been examined more closely in Rönkä et al. (2013).

3.1 Study Participants

The research study was focused on the two main user groups: store customers and personnel. Altogether 35 *store customers* were interviewed, and of them 10 also experimented with the service hands-on by going through the controlled usability testing. The ages of the study participants among the customers varied from 21 years to 73 years. Altogether 6 members of the *store personnel* participated in the interviews.

3.2 Data Collection

Set of complementary research methods were used to monitor and analyze the retail experience. The interviews were utilized as a primary research method, accompanied by in-situ observation at the store and a questionnaire delivered to customers. These qualitative research methods were complemented with quantitative data achieved through a customer depth sensor tracking system installed inside the store.

Interviews were utilized to research store customers' and personnel's attitudes and expectations towards the novel service concept, motivations for the service adoption and usage, their service experiences, and ideas for service improvement. Two types of structured interviews were done with the customers: a) *General interview* directed for all store customers, and b) interview focusing on the *usability* aspects of the service (done in the context of the usability testing). *Usability testing* accompanied with *observations* was conducted to gain insights into the ways customers used the service.

Paper questionnaires were distributed for the customers who had ordered goods through the service, with the focus on gathering data of their experiences with the service ordering process. Also a *people tracking system* based on depth sensor was used to automatically observe the customers. The special focus of the people tracking was to better understand the in-store customer behavior, and in more detail to collect data of the number of customers using the service through the customer terminal, and of the duration, and timing of the service use.

4 Findings

The findings from the pilot case study are analysed from the viewpoint of two end-user groups, namely the rural store customers and personnel.

4.1 Store Customers

Altogether 35 customers of the store were enquired about their attitudes, expectations, and experiences related to the novel retail service concept.

4.1.1 Interviews

When asked *whether or not the customers were likely to use the novel retail service* on a scale of 1-5 (where 1 = not likely to use, 5 = likely to use), *the average was 2.6*, resulting in 16 interviewees responding not likely to use the service and 19 interviewees responding being likely to use the service. The backgrounds and characteristics of those 16 customers stating not likely to use the novel retail service are overviewed on Table 1.

Table 1: Customers stating NOT likely to use the novel retail service

ID	Gender	Age	Experience with online shopping	Willingness to use the service (on a scale of 1-5)
#2	Male	63	Little experience; orders rarely	2
#4	Female	40	No experience	1
#5	Female	34	Little experience; orders rarely	2
#7	Male	21 and 31	Little experience; orders rarely	1
#8	A couple	37 and 43	Little experience; orders rarely	2
#10	A couple	25 and 30	Little experience; orders rarely	1
#16	Female	51	No experience	2
#22	Male	73	No experience	2
#24	Male	38	No experience	1
#25	Male	22	Experienced; order often	1
#27	Female	50	Little experience; orders rarely	0
#29	Male	70	No experience	1
#30	Male	69	No experience	1
#31	Female	29	Experienced; order often	2
#32	Female	59	Experienced; order often	1
#34	Female	58	No experience	2

The age distribution was large, as this customer group consisted of persons aged between 21 and 73 years, the average age being 44 years. Whereas the gender distribution was very even; 10 men vs. 9 women (some responders comprised of couples who answered to the researchers' questions together as one household). Except for one person, all the interviewees told they visited quite regularly the nearest-located (over 150 kilometers) bigger cities for shopping purposes. 13 out of 16 responders had either no or only little experience with online shopping. This customer group gave the following reasons for not being so eager to adopt the novel retail service in use (direct quotes translated from Finnish):

"I do not need this kind of a service."

"Everyone has an Internet connection at home. It is easier to order [products] from home."

"Might be good for someone else..."

Respectively, 19 responders stated that they were likely to use the retail service in the future (see Table 2 for more detailed characteristics of these customers).

Table 2: Customers stating YES likely to use the novel retail service

ID	Gender	Age	Experience with online shopping	Willingness to use the service (on a scale of 1-5)
#1	Male	72	No experience	"Could be really handy indeed."
#3	Female	30	Experienced; order often	5
#6	Female	60	No experience	3
#9	Female	37	Experienced; order often	4
#11	Female	38	Experienced; order often	3 (<i>"More towards five."</i>)
#12	Male	50	Little experience; orders rarely	2-3 (<i>"I think I could use [the service]."</i>)
#13	Female	59	Little experience; orders rarely	5
#14	A couple	50	No experience	5
#15	Male	35	No experience	3
#17	Female	55	Little experience; orders rarely	3
#18	A couple	65	No experience	3
#19	Male	60	No experience	3
#20	Female	50	Little experience; orders rarely	4
#21	Male	60	Experienced; order often	3
#23	Male	61	No experience	3
#26	A couple	53 and 55	No experience	4
#28	Female	29	Experienced; order often	3
#33	Male	50	Experienced; order often	5
#35	Male	47	Little experience; orders rarely	3

Also in this customer group the gender distribution was very even as the responders consisted of 10 men vs. 11 women. The age distribution was respectively diverse, from 29 to 72 years, the average age being 51 years. In addition, everyone regularly made shopping journeys to closest bigger cities. In this customer group, 11 responders had some experience with online shopping, 6 responders stating they often ordered products

online. These customers justified their interest towards the novel retail service for example in the following way (direct quotes translated from Finnish):

“Everything [new services] that comes need to be utilized so that the services also stay here [in Kolari].”

“We do not have much [product] selections here.”

“Really good... No need to visit [bigger cities] if we do not have other businesses/chores there.”

“Sounds quite nice... If there would be some product offers.”

“If there [in the digital retail service] would be some specific product that I would need, then I could use this.”

To conclude, age or gender did not seem to have an effect on the store customers' willingness to use the retail service. Neither did the shopping journeys to bigger cities influence the willingness for service adoption, as most of the customers made these shopping journeys regularly. However, previous experience with online shopping appeared to have a direct effect on the customers' willingness to use the retail service. If the customer did not have, or had only little previous experience with ordering products from web stores, the person in question often also stated as not likely to adopt the retail service into use. However, if the customer was experienced with online shopping, s/he also had a more positive attitude and greater willingness to use the novel retail service. Thus, the following aspects appeared to positively contribute to customers' interest and willingness to use the service:

- Previous experience with online shopping
- Irritation with the limited product selections at hometown stores
- Pleasure with the recognition of reduced future needs to make shopping journeys to bigger cities
- Desire to support new services in their hometown
- Interest towards product offers and campaigns

4.1.2 Usability Testing

10 store customers participated in the usability testing. The customers were directed to go through a set of pre-determined tasks with the retail service interface, and they were asked to “think aloud” and give any comments, feedback and thoughts that came to their mind during the interaction with the service. Their task performance was observed by the researchers and notes were taken during the customer's experimentation with the service. The tasks included 1) browsing the product selections available through the web stores, 2) looking for more detailed product information, and 3) ordering a product from two different web stores. See Figure 2 for the user interface view of the retail service on the customer terminal.

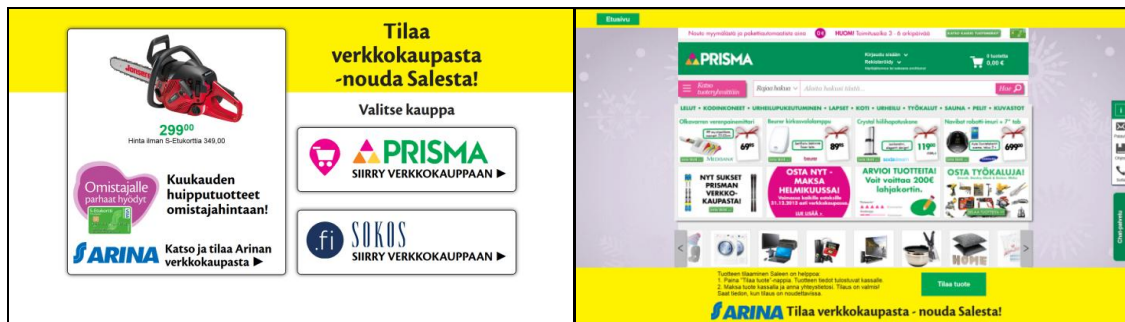


Figure 2: An overview of the retail service user interface (UI) on the customer terminal

The biggest difficulty the customers encountered was related to the touch-based interaction with the service terminal. The terminal's touch-screen appeared not enough sensitive, resulting in 6 out of 10 customers experiencing difficulties in interacting with the touch-screen. In addition, it was not right away clear for the customers that it indeed was a touch-screen, as 6 customers hesitated at first and asked aloud from the researcher whether the terminal had a touch-screen: *“Do I need to touch this? / Should I touch this?”*

However, interestingly 4 customers out of 10 changed their initial answer regarding their willingness to use the service (asked before actually experimenting with the service UI) in a more positive direction after having a hands-on experience with the service. Thus, after usability testing, the average raised a bit from the initial 2.6 to 2.7 (on a scale of 1-5). None of the customers participating in the usability testing changed their response in a negative direction. Other valuable usability findings included observation on the font size on the service UI, insufficient service feedback to the customer, and unclear customer journey path.

4.1.3 Paper Questionnaires

Paper questionnaires were distributed for the customers who had ordered products through the retail service (either at home or through the store's customer terminal), with the goal of researching customers' experiences with the ordering process. These customers identified as the most positive aspects of the service the following:

- Wider product selections
- Unhurried [order process]
- Easy to compare the products and their prices
- Fast delivery
- Free delivery

4.1.4 Automatic Customer Tracking

A depth sensor based system was used for detecting and tracking objects (in this case people) in the scene, i.e. inside the physical store. Depth sensors are unobtrusive, and as they do not provide actual photographic information, any potential privacy issues can be more easily handled. The people tracker software enables detecting people movement in a given space with 32hZ (32 frames per second) within an accuracy of ± 10 cm. The system used one Asus Xtion Pro sensor with an opening view of 70° and a range of about 7 meters. The sensor was positioned so that it could observe the customer traffic

at the store’s entrance hall where the service terminal was positioned. Sensor implementation is described in more detail in Mäkelä et al. (2013).

The purpose of the implementation of the depth sensor tracking was to better understand the in-store customer behavior, and to gather in more detail data of 1) the number of customers using the service terminal, and 2) the duration of the service use. The data was recorded between the beginning of November 2013 and the mid-February 2014 during altogether 64 days. Most of those days contain tracking information from all the opening hours of the store. Some hours are missing due to the people tracking software instability. From the recorded data all those store customers that came to the near-range of the service set-up were analyzed. The real-world position of the customers using the service terminal was mapped to the people tracker coordinates and all the customers that had come into the 30 cm radius of the user position and stayed still more that 3 seconds were accepted. The radius from the user position was kept relatively small in order to minimize the distortion of data resulting from confusing the users of the slot machine as service terminal users (see Figure 1). The service users were categorized to 6 different categories according to time they spent in the region of interest (ROI). The percentage of all users for each category was calculated over the all data. The division of different user categories and the summary of the results can be seen in Table 3. The results show that most of the users used the service relatively short time.

Table 3: Average usage duration of the customer terminal

User category based on usage duration	3-10s	10-30s	30-60s	60-120s	120-180s	>180s
Proportion of all users	30.1%	28.4%	15.6%	12.1%	6.1%	7.7%

On average *0.54 store customers per hour* used the service terminal based on the data gathered from 64 days. It is reasonable to assume that most likely a proper usage of the service system would take more than 120s. The shorter the usage period, the less serious or determined the user session has been. Average usage period was *58.4 seconds*. Thus, the service usage appeared as quite short-term, indicating that in most cases the service usage was not so “goal-directed”, but more like sessions where store customers briefly familiarized themselves with the novel service. During the store opening hours from 7am to 9pm there were on average *7.56 service users/day*. During the week, *Saturday and Sunday* turned out to attract most service users, and during the store opening hours, there were most service users *at 1-2pm and 6-7pm*.

4.2 Store Personnel

The goal of the group interviews was to investigate store personnel’s attitudes and expectations towards the novel service concept, and ideas for service improvement and further development. In addition, the store superior was contacted every other week with a phone call for the purpose of enquiring about the in-store service experiences both from the viewpoint of the store customers and personnel.

4.2.1 Group Interviews

Two group interviews with 6 members of the store personnel were carried out on the same occasion as the personnel was introduced and familiarized with the service concept alongside with their new service-related work tasks. In general, the personnel’s attitudes towards the novel service appeared as enthusiastic and positive:

“I think it is really good that this kind of a thing [the service] comes here!”

“Really nice when we get new things, then you can also learn something new.”

Naturally, the novel service also invoked some doubts, mostly related to its employing effect on the personnel, the clearness and learnability of the order processes, and formation of the new routines related to the service adoption that would also streamline their new work duties and thus ease personnel’s work load:

“Since we also need to do our work at the store and are needed at the cash register... How do we have time for this?”

“We need to have a clear system and routines, otherwise this won’t work.”

“Brings always more challenge when more and more side-services.”

In addition, the following comments illustrate the personnel’s general thoughts and expectations regarding the service:

“This is [indeed a useful service], since we have these long distances [to bigger cities]. Now a customer can buy the washing machine from us.”

“Always the adding of more services should be a positive thing.”

“More services also always mean more customers.”

“When we get our own routines and set-up for this, I’m certain this will succeed!”

“...Should have distribution of [personnel’s] work with this.”

4.2.2 Phone Calls

During the first two months of the case study, inquiry calls were made in every two weeks to the store superior in order to keep records and get information regarding the progress of the service adoption at the store, in addition to possible encountered problems from the viewpoint of both the customers and the personnel. In general, the novel retail service appeared to have soon well integrated into personnel’s work processes:

“This is quite handy, we have good instructions.”

“Very simple system.”

“But now we already can [cope with the new service], as we have now received over twenty orders. This already goes well!”

5 Discussion

Brick-and-mortar stores both as a place and their role in the everyday life of consumers is changing. Increasingly sophisticated customers and intense competition force the retailers to add little more innovation in their store’s format (Ahmed, 2012). Money is tight and shopping around is easier, so physical stores need to work harder to avoid being reduced to the role of expensive showroom for its products or services (Aubrey and Judge, 2012). Consumers’ experience of shopping online leads to higher expectations of what traditional bricks-and-mortar stores should offer; the physical stores must provide a distinctive service and experience that drives consumer preference over price-led, Internet-only competition (ibid). The social aspects and the significance of personal service will be emphasized in brick-and-mortar stores (Deloitte, 2009).

Technology should be utilized in the purpose of developing the shopping experiences (cf. Sandberg, 2010); nothing should be done only for the sake of technology itself. In

the future retail concepts technology should be used as a tool, to deliver a seamless and enhanced experience across channels where customers can trial, research, compare, review, order for home delivery or buy in-store, thus easing everyday life by making simple solutions (cf. Sandberg, 2010). The technology should also be utilized to increase the importance of an expert salesperson as a customer servant and support the salespersons in their new role (Maestro, 2012). In-store technology needs to be integrated and meaningful, and relevant to customer needs (Aubrey and Judge, 2012). It is about nurturing a symbiotic relationship between digital and physical channels, so that they work together side-by-side, supporting each other (ibid).

The next steps in our pilot case study will involve the second iteration cycle for the refinement of the service concept based on the understanding achieved through the customers' and personnel's service experiences and the derived service design requirements. The following key service improvement needs were identified:

- Adding more privacy
 - The customers hoped to have the in-store service terminal better defined from its surroundings, as they longed for more privacy from other customers' sights when interacting with the service
- Refining the UI of the retail service
 - Ensuring higher level and better precision of feedback given to the customer e.g. related to the completion and success of the product order
 - Enlarging and clarifying the instructional and information texts
- Improving the touch-based interaction with the customer terminal
 - Changing the customer terminal to a better-quality touch-screen in order to ensure the smoothness of interaction between the customer and the service terminal UI

6 Conclusions

The pilot case study was done in the context of developing and piloting a novel omnichannel service concept for a Finnish retail chain. A starting point for the new service was a need to provide wider selection of goods for the customers of a small, distant rural store. This was practically done by integrating an e-commerce solution within the service of the brick-and-mortar store. The research focused on investigating and analyzing the store customers' and personnel's service experiences and thereby deriving design implications for developing and improving the service concept further. Several research methods were utilized to monitor and analyze the retail experience.

Over half of the interviewed store customers stated they were likely to use the novel retail service in the future. Previous experience with online shopping appeared to have a direct and positive effect on the customers' willingness to adopt the service into use. The most influential way for introducing the new service to the potential users proved to be the hands-on demonstration as nearly half of the usability test participants changed their initial answer regarding their willingness to use the service in a more positive direction after having a hands-on experience with the service. By using the service themselves the customers noticed (often against their initial doubts) that they mastered the technology well, and could have some personal experience about the possibilities of the service. Usability testing provided also valuable findings related to the touch-based interaction with the service UI, observation on font size, lack of service feedback, and unclear customer journey path.

In general, the store personnel's attitudes towards the service appeared as enthusiastic and positive. But the novel service also invoked some worries, mostly related to its employing effect and addition on the workload due to the new service-related work duties. The personnel also clearly understood and appreciated the positive effects and value this kind of a new retail service brings to their store and its customers.

The retail company's future plans include scaling up the novel retail service concept to other small rural stores part of their national co-operative retail chain. Creating a seamless retail experience by a fusion of web and physical retail channels should be supported by careful design, also one of the driving design principles of our case study. Service experience needs to be consistent, smooth and based on the right information – in every channel and device. After refinement of the service concept, in order to develop a more scalable service and to improve its adoption conditions, the solution will become more standardized and automated, thus enabling better integration into the retail company's services.

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