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REVIVAL OF HIGH STREET RETAILING – THE ADDED VALUE OF SHOPPING APPS

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Abstract

Rapid and constant development of technology and social media drive every-day changes in the retail sector, modifying behaviour and power of consumers, whereby traditional brick and mortar stores are facing the risk to become obsolete. E-commerce and m-commerce offer to customer a more convenient, faster and easier way of shopping and the possibility to customize products and services to the individual needs of customers. There are different business models and tools for enhancing the on-line retail industry, which causes changes in the business of the whole retail sector, as well as in the micro and macro social and economic environment. One of consequences of increasing value of the on-line retail industry is a dropping number of customers shopping for products in brick and mortar stores in high streets and city centers. Brick and mortar retailers are exploring new ways to reach these lost shoppers. In this study an innovative application is researched that tries to bridge online and in-store shopping with an online platform (website) and a smart-phone app. The aim of this platform and app is to enhance the local shopping experience by making the physical city centre available for smart-phones and tablets.

Keywords: innovations, online, retail, smartphone and tablet apps

JEL Classification: O31, O32, O33

Introduction

The European retailing industry generated $\notin 2.6$ th in sales in 2011 from 3.7mn businesses (15% of all European businesses) and $\notin 451$ bh in value added. It employs 18.6mn people and represents the largest employment sector in the region (European Commission Final Report, 2012, p.4). The retailers' environment, however, is facing an increase in volume and turn-over in online shopping and more cautious customers in terms of comparison shopping.

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Progressive development of new technologies has tremendous impact on retailers, forcing them to implement new IT solutions as tools for more convenient shopping, making easier shopping decisions and attracting new customers, but investments in new technology does not always guarantee an expected rate of return. Implementing new digital and mobile technology also implies costs of sales staff training and education, aimed to introduce innovations to consumers in the brick and mortar stores. Retailing companies with a substantial number of brick and mortar stores and sales staff are facing decreasing sales revenues and a declining number of customers. The customers shift to online shopping especially affects retail stores in city centers and high streets.

The European m-commerce is estimated at €17bn in 2012 (Ecommerce Europe, 2013). Having in mind that there is increasing number of people who use mobile devices and smart-phones, potential of m-commerce exceeds the potential of e-commerce. People usually use their smart-phones for entertainment (video games, music, etc.) which indicate that there is a potential for enhancing development of m-commerce through increasing participation of online shopping via smart-phones (Wei et al., 2009 cited in Chong, Chan and Ooi, 2012, p.34). Online transactions are also exposed to different risks. Customers' intention to shop is affected by trust in online transactions, in terms of used technology and organizations as participants in the process. Online trust is regarded as a crucial factor for the success of an online enterprise or initiative (Beldad, Jong, Steehouder, 2010, p.857). Customers' trust in an online retail company depends on their previous satisfaction and experience in transactions with that company.

M-commerce enables many consumers to use the benefits of "showroom" apps on their smart-phones to compare prices online; and instantly see where those products can be bought in the cheapest nearby brick and mortar store. According to the research of Smith (2013) 58% of cell owners used their phones for recommendations, reviews, or price comparisons in a physical store during holiday shopping season of 2012. This so called 'showrooming' heavily debated in the industry (Datko, 2012). Young adults and smartphone owners lead the way. Encouraging current and potential customers to search for products and services via their smart-phones and read contents of marketing messages and offers set the base for introducing pull-based marketing strategies. Recently most marketing strategies have been based on mass-market advertising and the promotions, but today popular strategies include loyalty card programs, vouchers, promotions on certain locations and other marketing tools directly offered to customers through smart-phones. The mobile shopping channel has the potential to become a personal shopping assistant for consumers to enhance their shopping experiences and assist in making purchases across channels. While mobile shopping services may promise better consumer shopping experiences, there are concerns about whether consumers will actually adopt these services when available. The mobile shopping channel is different from traditional (e.g. in-store, catalogue) and webpage based online shopping channels (Ter Halle and Weber, 2014).

1. The Prevailed Innovation Trends in Retail Sector

Implementation of new technologies in retail sector affects not only retailers, but other participants in the supply chain. Actually, retailing innovations can be located in the three main fields: supply chain management, customer management and customer satisfaction. It improves interaction and communication between retailers and customers and retailers and

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suppliers. Retailers are enabled to enhance their services to customers, their management operations and to reduce and control their costs and on the other hand consumers receive faster and higher quality service and have the possibility to use benefits of loyalty card programs, etc. (Renko, Druzijanic, 2014, p.1).

Although a lot of new technologies have been introduced by retailers, consumers are not always ready for adopting them or do not see the benefits of using them in the short run. Beside the investments of capital in new technological solutions, retailers should motivate their consumers for accepting novelties and change their ordinary ways of shopping, having in mind that retailers and customers are usually the closest participants in the supply and value chain. Retailers can use social media or loyalty card programs to foster relationship not only with customers, but also between customers who will share their customer experience via blogs, forums, etc. A lot of marketing strategies have been usually focused on interactions with customers, however more it is more important to focus on interactions between customers, which is now possible through social media. Similar to interaction between customers in brick and mortar stores, customers can "interact" with each other in an online setting by posting customer reviews on company web-sites or on different blogs or chat rooms, making a kind of virtual communities (Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros and Schlesinger, 2009, p.34). Results of Smith's research during the holiday season of 2012 showed that six out of ten cell owners used their cell phones for assistance by making shopping decision. Almost half of the respondents (46 %) used their phone while inside a store to call a friend or family member for advice about a purchase, 28% of cell owners used their phone while inside a store to look up reviews and comments about a product and 27% of cell owners used their phone while inside a store to search the price of a product, to find a better price elsewhere (2013, p.2).

According to the Report of KPMG Retail Industry Outlook Survey (2013, p.1), examining and analysing traffic patterns in stores, mining loyalty data, and monitoring consumers' online and social media behaviours help retailers to improve communication and interaction with consumers. Data analytics has become a tool of increased importance for retailers in the process of identifying new markets, business strategies, and new operating models which generate and enhance growth and profitability. Loyalty card programs are developed on a base of data analytics and also enable retailers to establish better and more personalized interaction with customers by processing data on customer's purchase information. Level of adopting data analytics in defining and implementation of business models and strategies depends on retailer's capacity and technology. The researchers argue that online organizations with customization or personalization capabilities can be considered as capable of serving their clients better, but personalization can also have a detrimental effect on trust formation since it requires the collection of personal information, directly or indirectly, from internet users (Beldad, Jong, Steehouder, 2010, p.865).

Cost-effective access to information has expanded the role of the customer from being a simple consumer to being both a creator of demand and a driver of innovation. Mobile devices provide them with anywhere-anytime real-time connectivity to the rest of the world, which has enhanced consumers' empowerment and given them more opportunity and motivation to co-create value (Khansa, Zobel and Goicoche, 2012, p.21). Applying an open innovation approach means to include the customers, as well as suppliers and partners from different sectors in proposing ideas of new or innovative products and services that enables their active participation in the process of value co-creation in the supply chain.

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Customer-centric business strategy and consumer pull marketing approaches enable retailers to intensify the relationship with consumers in the value chain and to co-create with customers in order to provide them improved or new products, services and overall shopping experiences.

Innovations in the retail industry are most of the time focused on increasing efficiency, boosting productivity and the speeding up of administrative processes. The most effective kind of retail innovation however, occurs when there is a re-engineering of the shopping process in a more holistic and radical way (Final Report from the Expert Group on Retail Sector Innovation, 2013, p.12). Direct effect of retail innovations should be reflected in improved experience of the customer after the act of purchase. According to European Commission Final Report, innovation of the retail sector can be divided into product, process, technological and business model innovation. Product and technological innovations are related to the application of the open innovation approach, process innovations are more incremental, while business model innovations have a radical character (Final Report from the Expert Group on Retail Sector Innovation, 2013, p.13). It has to be noticed that innovations of retail sector are most of the time more incremental than radical, because some tiny innovations can result in increased output, revenue, profit or some other performance indicator. Some non-technological innovations such as applying a new marketing approach or a new business model can have more significant impact on the improving consumers' shopping experience and setting closer more personalized relationship to the consumers than innovations in new mobile and digital technologies. Involving not only customers, but also suppliers and other supply chain participants in the process of collecting new ideas and knowledge in the design and development of new products and services indicates that the retailer applies an open innovation approach.

Since the emergence of Android-based smart-phones in 2008 consumers have the possibility to quickly check prices and read reviews about products, even while shopping in stores, in order to ensure that they get the best value for their money. Retailers are especially encouraging consumers to use their mobile devices to shop by offering them better deals and secure, fast, and reliable checkouts (Khansa, Zobel and Goicoche, 2012, p.36). Smart-phones are often used as a marketing channel, because it is a simple and low cost way to reach customers. Marketing strategies focusing on reaching customers through their mobile devices have to be carefully planned, non-intrusive and having in mind that consumers usually do not want to receive marketing messages on their phones (Persaud and Azhar, 2012, p.419). Development of technologies and different apps for smart-phones give to consumers the opportunity to participate in various marketing innovations, to personalize shopping experiences and to share that experience with other consumers worldwide through social networks, which emphasize importance of digital word-of-mouth (WOM) instrument. New technology such as RFID (Radio Frequency Identification Tags) enables consumers to get information about product, to compare prices and other consumers' experiences and to get other relevant information only by scanning and entering bar codes or taking product photos by smart-phone. It empowers consumers because they have possibility to search online and get costless information about the desired product. But consumers can also decide to purchase the product online or a brick and mortar store. According to literature research done by Renko and Druzijanic, the most presented retail innovative technologies (besides RFID) are: barcode scanners at the retail POS (point-of-sale) checkouts, electronic shelf labels, self-check-outs, fingerprint authentication, interactive information terminals, web portals and e-tailing. Khansa, Zobel and Goicoche have outlined chronological order of

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innovations in the field of m-commerce, that are well-known as mobile marketing, secure mobile banking, privacy protection policies, mobile ticketing, identity and access management, customer engagement and empowerment, intelligent personalization, recommender systems, mobile WOM, consumer co-creation and social networking-based m-commerce and entertainment (Khansa, Zobel and Goicoche, 2012, pp.34-38).

The prevalent trends in the retail innovations are self-service technologies, which encourages customers to self-perform services. In order to motivate consumers to apply those technologies and to continue to make online purchases, the activity of purchasing should be fun and easy for consumer and should generate intention to repeat the online purchase. Although it can be expensive, creating superior customer experience seems to be one of the central objectives in today's retailing environments and retailers around the globe have embraced the concept of customer experience management (Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros and Schlesinger, 2009, p.31). The core concept of customer experience management is to focus on the customer experience in the current period rather than in the historic period. It is the key difference with regard to customer relationship management that is pre-dominantly focused on measuring customer satisfaction and service quality as key performance indicators. On the base of researches of numerous authors (Rust, Moorman and Dickson, 2002; Mittal et al., 2005 cited in Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros and Schlesinger, 2009, p.38) it can be concluded that in retail sector it is not enough to focus only on customer satisfaction and loyalty, but to implement customer experience based strategy supported by efficient processes. On the other side authors of The new retailer's survival guide in a digital age of personalization believe that a successful retail strategy should be combination of personalized marketing delivered directly to the customer via mobile devices and proactive marketing based on purchase history and data analytics. A personalized customer experience as the core part of the retailer strategy, can be characterized as a customer-centric business strategy (Bluefin Solutions (BFS) Ltd, 2012, pp.10-12). This process of enhancing customers' loyalty and providing them a customized purchase experience delivered through numerous physical and digital channels places the customer in the center of retailer's strategy and provide a precondition for gaining competitive advantage and successful business. Beldad, Jong, and Steehouder (2010) agreed with the results of previous studies which found that customers rely on their offline experiences with the online retailer's physical store as an information channel to build trust (p.867).

A holistic approach to customer experience means that it derives from different channels (stores, internet, etc.) where customers can complete their experience. Retailers who use this so-called omni-channel strategy work within a framework in which providing a special, personalized experience to customers plays a vital role. This can be realized if physical stores and online shops are considered as complements rather than competitors. Omni-channel retailing means that retailers interact and communicate with customers via different channels, such as stores, website, e-mail, catalogues, call centers, social media, smartphones, video-games, home services and so one. Omni-channel retailing enables customers to form a complete shopping experience, combined of visiting store, reading reviews, blogs and forums about products, prices and suppliers. Koehn emphasized those online organizations that allow their clients to post reviews on purchased products, for instance, can be regarded as promoting trust (2003 cited in Beldad, Jong, and Steehouder, 2010, p.866). Successful retailers are those ones who have managed to harmonize virtual and physical channels, because customers want to be able to use all available channels.

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Customers want to use advantages of brick and mortar stores. They want the possibility to try, taste or touch products that are currently accessible, to be served by sales staff and to experience shopping as an event, but at the same time they want all possible information, reviews and tips of other customers about products and their prices, that are almost costless online available (Rigby, 2011).

Similar findings in terms of benefits of applying an omni-channel marketing strategy are presented in *The new retailer's survival guide in a digital age of personalization* (2012). Authors of this guide claim that customers increasingly expect a blended, seamless shopping experience at every interaction or touch point, including: in-store experience, on-line retail, mobile ordering, home delivery or delivery at variable collection points, integrated supply chain and targeted marketing direct to customers' smart-phone (p.9). This can be compared to the blended learning paradigm, very similar concept in completely different environment. Retailers are also aware that it is not easy to shift the majority of retail transactions to the web, although they are facing constant pressure to decrease costs and staff of their stores. One European retailer disclosed that it realizes nearly 5% of online sales in areas near its physical stores, but only 3% outside those areas. This indicates the necessity of a complementary relationship between online and brick and mortar stores. Retailers should provide a unique experience to customers by using modern technologies in their stores, in order to entertain customers, to retain them and to motivate them to cocreate by providing rewards for innovative ideas of customers (Rigby, 2011).

Implementing an omni-channel strategy is not easy and requires precious planning and harmonization of various activities, participants and new technologies and tools applicable to the retail industry. In implementing an omni-channel strategy retailers have to work together with a lot of participants. This means that an adequate collaboration system should be developed and supported by innovative technologies. Retailers employees and current and potential customers co-create and collaborate through social media and networks in order to share knowledge and ideas and to offer customer improved product, service or shopping experience, as well as to increase retailers revenue and other performance indicators. Introducing new technologies in support of an omni-channel strategy requires significant investments that will not always be returned in the short run, or rate of return on investments (ROI) could be below the expected rate. By considering financial aspects of gaining and retaining competitive advantage through implementing digital and mobile technologies in the process of realization an omni-channel strategy the retailer should also prepare a cost benefit analysis and evaluate the investment in new technology. Small retailers do not have the capacity and finance for investing in technology that supports omni-channel retailing. They can however use the advantages of cloud computing which enables a simpler version of data analytics at lower costs. Over two-thirds (68 percent) of the retail executives surveyed indicate they have adopted, or plan to adopt, cloud technologies into their business strategies and operations (KPMG Retail Industry Outlook Survey, 2013, p.12).

2. Social and Economic Impact of Retail Innovations

The retail environment has changed a lot regarding locations of shops, the ways products are offered and shop design. Customers are more educated and can easily find information about product, price, vendor, supply channel and after-sales services needed for making purchase decision. This indicates that retailers have to satisfy customers' needs better than competitors in order to create loyal customer. Customers gladly accept novelties that offer

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online shopping which enables them to realize purchases that are not limited in time or place. A lot of choices in terms of ways of ordering and places of delivering the ordered products make additional difficulties in forecasting demand. Using social media and other channels of communication with consumers before the act of purchase helps the retailer in predicting and managing their business.

E-commerce has a lot of advantages especially in the period of global financial crisis as well as in the post crisis period, when customers are particularly price sensitive. Online retailers operate with lower costs, considerably less staff, no brick and mortar stores and related expenditures and can offer lower prices and discounts to customers. In terms of diminished purchase power of consumers, internet can have impact on modification of consumers' behaviour, habits and needs that become more oriented toward cheaper or substitute products and services, online available.

A lot of small retail shops in the urban environment have been replaced with stores of large multinational retail chains which limits consumer's choice and drives a "clone town" phenomenon. Significant number of retailers shift their business to the web or decreases the number of stores which results in the rise of shop vacancy rates (in Great Britain the vacancy rate was 5% in 2008 and 14.5% in 2012). Further it has social consequences reflected in alienation of urban population, especially older people. According to the research presented in the report High street Britain 2015, about 30% of people over 65 do not see any friends at least once a week and for many of them small shops presents their only form of regular social contact, which indicates a huge social impact of local shops (House of Commons, High Street Britain (HSB) 2015; 2006, p.60). The older population is also more dependent on local shops and services providers, because a lot of older people are not able to visit big shopping centers. Closing small shops in urban and particularly rural areas drives demographic changes in terms of moving people to the city quarters with higher density and various shops. An even more serious negative impact of this trend of closing small corner shops can be the decrease of population and the selling of houses in those areas.

Having in mind the still present consequences of the global financial crisis of 2008, closing small shops increases unemployment that directly affects reducing purchase power and has spiral effect on reducing sale and profit of retailers. Rising unemployment as an economic and social problem puts additional pressure on the government that has to provide for additional unemployment benefits in their budgets. Disappearing high street shops and small corner shops impact negatively entrepreneurship and self-employment, although entrepreneurs prefer entering the retail branch. In the EU-28 there are 5.3 million self-employees that operate in the retail sector, as the largest private EU sector in terms of entrepreneurship and employment (Final Report from the Expert Group on Retail Sector Innovation, 2013, p.4). Closing small local shops has additional negative impact on the local economy and budgets because of decreasing tax inflow. Some studies show that 50% of turnover from local retailers is returned to the local economy, through taxes, the employment of local staff and the spending of shop owners' profits locally. However large retailers may return as little as 5% to the local economy (House of Commons, HSB 2015; 2006, p.56).

In order to stay competitive in the short run small retailers cut their costs for education and training of sales staff, which in the long run decreases their ability to compete with big retailers and international retail chains (House of Commons, HSB 2015; 2006, p.30).

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Another point of view of cutting retailer's costs is that they fire sales staff in order to redirect saved capital in new technology innovations in order to compete to online retailers, but empirical data show that investment in education and capacities of sales staff and applying new technologies in brick and mortar stores affect positively customer's loyalty and satisfaction and increase innovation potential and growth of the retail industry.

Drivers of future retail innovations can be divided into external and internal drivers. The most presented external drivers are consumers, economic, technological, social and regulatory drivers, while organizational drivers are characterized as internal. Demographic changes in terms of population ageing, smaller households, migration toward urban areas, as well as the online 24/7 availability of information about products, prices, discounts, vendors and services give consumers tail wind to request even more from the retailers. (Final Report from the Expert Group on Retail Sector Innovation, 2013, p.15). Omnichannel retailing and innovations in terms of new packaging, new products and services, new business models and eco-innovation are kinds of retailers' answers on the increasing pressure and requests of consumers. Competition is one of the main economic drivers of retail innovations. Constant pressure of competitors drives to the adoption of innovations which can provide lower costs and prices, higher value added and better shopping experiences. Regarding non-price factors, quality, shop interior design and kind and helpful sales staff contribute a lot to the customers' satisfaction and loyalty. The European commission (2006) recognized digital technologies as transformational drivers of economic growth, when they are effectively implemented. New digital and mobile technologies are the most apparent drivers of retail innovations and they promote partnership between retailers, as well as retailers and suppliers, which is the base for implementation of an open innovation approach, together with customers.

There are also a lot of constraints regarding innovations of retail sector and some of them are: low level of awareness of importance of accepting innovations, costs of introducing innovations and lack of financial sources for investment in innovative projects, scarcity of available qualified and skilled labour and their costs, exposure to risks, regulatory barriers (Final Report from the Expert Group on Retail Sector Innovation, 2013, p.5).

3. Developing an App for Revival of City Centre and High Street Retailers

One of the innovations that have been developed recently to help the small retailer addressing the above mentioned issues is a website and smart-phone app that makes the brick and mortar shop digitally accessible. In this study an innovative application is researched that tries to bridge online and in-store shopping with an online platform (website) and a smart-phone app. The aim of this platform and app is to enhance the shopping experience by making the physical city centre available for smart-phones and tablets. This has been done by developing a mobile mall in which consumers can find the combined shops of a city. By adding features like same day delivery and e.g. a loyalty system this platform wants to impact the bottom line of inner city retailers. In theory the benefits of this platform are abundant. The platform is potentially freeing consumers from temporal and spatial constraints of the physical shop. This platform makes the city centre accessible at all times (you don't have to take the effort to go to your favourite shop to buy something) and can therefore (online) support the customer's journey.

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Figure no. 1: Screenshots of the mobile and tablet versions of the platform

To get insights into the acceptance of the local consumer we have developed a research lab. In this paper the results of the study of this concept are presented. The platform is developed by a start-up company with the aim to address the economic problems inner-city retailers are facing nowadays. Most shop owners do not have the possibility to develop their own online mobile presence. Nor do shop owners work together with colleagues in making the city centre more viable. To address these shortcomings the platform (website and app) is developed. In the development process focus has been put on the participation of shop owners in the platform. Less effort is made into capturing the shopping experience of the consumer.

4. Methodology

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For this research we use a living lab approach. William Mitchell from MIT (Boston), one of the first scholars to use the term Living Lab described such a lab as follows: 'Living Labs is a research methodology for sensing, prototyping, validating and refining complex solutions in multiple and involving real life contexts. A living lab configuration offers assistance for designing and conducting research around a new service platform based on ethnographic principles. Ethnography in general and the living lab approach in particular fit in mainly with the actor or interpretative approach (Pierson and Lievens, 2005). Research goal is to gain insights in the (real life) context of use, the user experience of the platform. A (small scale) study have been deployed to address the above-mentioned outcomes. Seven users of the platform are being interviewed about their use experiences. In these (retrospective) interviews concepts from the UTAUT-model (Venkatesh, Ramesh and Massey, 2003) were used as effort expectancy (ease of use) and performance expectancy (usefulness) as well as motivations (hedonic versus utilitarian) in a walkthrough of the app. The users were selected by a call on the Facebook page of the platform.

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Retrospective interviews generate a wealth of qualitative data on meaning related to the product design aspects and underlying human needs (Burmester, Mast, Jäger and Homans, 2010). In these interviews aimed to reveal subjective meanings related to the user experience and serve as the starting point for design improvements.

In this article we will present the results of a number of these user experience interviews with users of the platform. In the user experience interviews the researchers aimed to reveal the subjective meanings related to the user experience and serve as the starting point for design improvements of the platform. Because of the limited number of interviews the findings below should be treated with caution.

5. Findings

In this section the authors would like to share the findings of the research and give insights in what makes an online and mobile shopping platform interesting and functional for customers. This is done by describing the main findings of the research and adapting this to lessons learned that can be of use for retailers that would like to explore the possibilities of mobile shopping.

a) Online shopping behaviour / habit

All the interviewed users are regular online shoppers. They are shopping during leisure time or when they have a moment for themselves. Older users buy online but love to see and feel the article first in the physical shop. We can clearly distinguish different shopping behaviours and customer journeys, implying that a shopping app should take these differences into account, for instance through personalization options.

b) Performance expectancy / perceived usefulness

Respondents are dissatisfied with the selection of shopping offers available through the app. This means that this kind of platform should be designed as a copy of a city centre: all shops in the city centre must have a presence in the app. As long as not all local shops in the city centre can be found in the app many shoppers don't see the added value. Customers seem to want to cross the boundaries between traditional shopping and mobile shopping, and do not wish to shop only online or only offline. Users want to be able to switch channels: use the app for orientation and then visit the store to actual see the product. This app would be far more useful if it would allow users to interact with retailers through multiple touch points and fit the omni-channel strategy described in the previous paragraph (e.g. Rigby, 2011).

c) Coupons

The app has a section where shop owners can offer coupons. These coupons have a limited validity. Some coupons (e.g. catering coupons) have to be redeemed within five minutes. Some users find this coupon section an attractive part of the app. However at this moment the number of available coupons was too limited. Some users stated that they might use the app more often if there would be more (relevant) coupons available. Also here users want to have more control in what coupons to receive (or not). The platform should be more adaptive to the use context (phase in customer journey) and user preferences. Some form of (user tailored) customization or (system tailored) personalisation features should be added to the requirements of such a platform (see e.g. Sunikka, A., and Bragge, J., 2012).

d) Effort expectancy / ease of use

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Many respondents have the opinion that there are too many options in this app. It looks like the developer has made the app over complete. Also some respondents would like to see a categorization e.g. clothing, electronics etc. The design has been described as boring and some respondents said the app could be improved by making it more colourful and cheerful.

The importance of such perceived design aesthetics should not be underestimated. Karvonen (2000) e.g. found that design aesthetics or visual aesthetics (e.g. colour, photographs, font style and lay out) of websites are important for gaining trust from customers. Lih and Yen (2010) found similar results for mobile commerce sites.

e) Safety and trust

Perceived safety and security aren't items included as topics in the user experience interviews. But all respondents more or less spontaneously mentioned the perceived security issue during interviews. Some respondents argue that they don't see an app as a safe shopping environment. They prefer websites for online transactions. This importance of trust in the vendor has been described in multiple studies on e-commerce (see e.g. Beatty et al., 2011 for an overview). Trust beliefs affect online intentions to purchase (Becerra and Korgaonkar (2011). Especially in e-commerce trust in the vendor is essential because of the absence of a physical person or organization.

f) Social influence

Social influence can be described as, the degree to which an individual perceives that important others believe he or she should use the new system (Venkatesh, Thong and Xu, 2012). Recommendations and word of mouth communication seem to play a role in the adoption of the app. However most of the interviewed users didn't recommend the app to their friends or relatives themselves. Apparently the users didn't find the app a tool worth sharing. However, as consumers are not very satisfied with the product, the app faces the risk of negative word of mouth. Sweeney et al. (2014) found that negative word of mouth damaged unknown brands and products more than known brands and products. This suggests the risk perceptions associated with an unknown product as this platform are magnified by negative information.

g) Playful design

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Users are describing the platform as not very entertaining or a playful experience (Deterding, Björk and Nacke, 2013). They don't describe the act of using the app as a fun experience. However respondents are positive about the core idea of the app as a local shopping platform. The platform should try to address this need for entertainment and add more fun, as the 'fun factor' is an important predictor of continuance usage (Zhou, 2011).

Conclusions and implications

Brick and mortar retailers are exploring new ways to reach lost shoppers; consumers that more and more are looking online for their purchases. The future of retail lies in the ability to implement omnichannel strategies. Omnichannel was first described in academic literature by Rigby (2011, p.4) as "an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping". The last few years this definition was extended to the point that it involved not just the simultaneous use of channels, but the experience that derives from the integrated combination of them. In this study an innovative omnichannel application is researched that tries to bridge online and instore shopping with an online platform (website) and a smart-phone app. The aim of this

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platform and app is to enhance the local shopping experience by making the physical city centre available for smart-phones and tablets.

From the user experience interviews the following conclusions can be drawn:

The described study shows it seems that time is on the side of these kinds of initiatives. Users consider innovations like this omni-channel shopping platform as at least an interesting development. This means that consumers are prepared for some experimentation with new possibilities in this area and are willing to at least give these kinds of platforms a try. However in this case, the platform (app and website) has been developed by a small team without direct consultation of the most important stakeholders: consumers and shop owners. And because of unknown user expectations and requirements it seems obvious that, as a developer of new mobile services, you will at least have some form of interaction with consumers in order to reduce failure risks (Hoyer, Chandy, Dorotic, Krafft and Singh, 2010) and involving users in service innovations at least leads to higher perceived user value (e.g. Magnusson, Matthing and Kristensson, 2003). This might be one of the most important reasons why we saw a mismatch between the current service and consumer expectations. Secondly this platform is a one-size-fits-all service. This platform addresses no specific target group. Every resident of the city with an interest in online shopping is a potential user. Park and Gretzel (2010) concluded before that although mobile marketing can deliver relevant, personalized, and contextualized information and marketing offers via shopping apps (and other technologies) not all consumers will want all of these features, no matter how much information, convenience, and flexibility they provide. It is no solution to overcrowd an app with all possible features in the hope that all of these features will appeal to some consumers.

Third conclusion we would like to address is the issue of felt security and trust. Users felt insecure in using an app for financial transactions. They didn't have previous experience with using mobile apps for shopping and probably because of that had a preference for placing orders through a website. Respondents related this issue to the unfamiliarity of the app; the platform is not yet a household name in the city. Investments in brand awareness and building brand reputation seem to be conditional for future success of the platform.

City centres that are thinking about mobile innovations can learn from the experiences gained in this study. Based on this study and also based on the experience of working in a Living Lab together with developers and retailers the following lessons learned can be distinguished:

• Aim for brand awareness and trust. Users will be more likely to shop through an app if they feel the companies behind the app can be trusted. One of the antecedents of trust the users mentioned is brand familiarity. But of course there are more antecedents of trust in online environments, like e.g. social presence (see e.g. the work of Beldad, 2010).

• Add some form of flexibility, providing different options in different use situations, different stages in the customer journey might improve the platform.

• Work together with stakeholders. Developing a functional city centre app is not only a technological challenge. City centre innovation involves collaboration with a broad coalition of stakeholders. Co-innovation seems to be a prerequisite for innovation in complex situations. On the input site you will need full cooperation of all (or at least a very substantial part of) shop owners. Even in a small town you will find hundreds of shop owners. Some working independently, some are part of a retail chain. Aligning all interests should not be underestimated.

• Add value: the notion of value goes beyond just providing useful information or coupons; your app must result in tangible benefits for consumers in terms of convenience, efficiency, flexibility, and relevance. The content provided (message design and format)

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and timing of delivery, must be personalized, contextual, and helpful without being intrusive. Guiding question in the design should be how to create value for shop owners and customers.

• Think omni-channel (Rigby, 2011). Users want to be able to switch channels: use the app for orientation and then visit the store to actual see the product.

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