BLENDED SHOPPING
Evaluation Method and Interactive Approaches

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Abstract: In this paper we sketch the sales channels retail and eCommerce. Afterwards the integration of both channels to blended shopping is explained. The behaviour of consumers is influenced by technology driven trends like the development of web 2.0, especially social networks. The combination of the presented topics is the basis for a method to structure the development of blended shopping concepts for retailer. Two prototypes based on the basis of this method are sketched. The paper closes with a future outlook.

1 INTRODUCTION

The shopping world for consumers and traders changed rapidly during the last years. ECommerce is accepted next to traditional sales channels and leads – besides other technology-driven trends – to a complex environment for merchants, consumers and manufacturers. Web 2.0 and social networks influence the shopping behaviour of consumers.

But nevertheless "the digital world" is no integrated part of traditional commerce yet. In this paper we seize these trends and sketch a method that enables retailers to blend retail with web-based content and services in order to create fitting shopping experiences or provide appropriate information.

2 RETAIL, ECOMMERCE, BLENDED SHOPPING

Since a couple of years eCommerce is an established distribution channel besides traditional retail. Many trade chains and merchants run both channels in parallel but don't apply an integrated approach. This was documented in two field studies (Fuchs & Ritz, 2009b), (Fuchs & Ritz, 2009a).

Following both sales channels will be sketched and afterwards blended shopping as combination of both channels will be explained.

2.1 Traditional Retail and eCommerce

Once traditional retail was the main sales channel for consumer goods (Krafft & Mantrala, 2006). Traditional retail combines physical presentation of goods with advice, instant availability and additional services. Digital information regarding customer and buying behaviour are often not available, especially when consumers pay cash. Nowadays traditional retailers face challenges arising from increasing competition (Riekhof, 2004). Due to this more and more trade chains and merchants offer their goods as well via webshop (Krafft & Mantrala, 2006).

ECommerce is a distance selling approach making use of latest technology to support the sales process. In general this contains no physical contact between product and customer (until fulfilment) as well as between merchant and customer. Easily comparable products like books, DVD/CD and electrical equipment (Kroeber-Riel & Weinberg, 2008) have the biggest share in eCommerce. The buying decision is made on a more rational way and is less emotionally influenced (Mobile Fachgruppe im BVDE, 2008). Distribution of web-enabled mobile devices contributes to the establishment of mCommerce (Dholakia, Rask, & Dholakia, 2006),

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which offers new possibilities of blended shopping concepts. Until now obstacles regarding usability (e.g. difficult navigation with mobile devices) often cause a lack in acceptance.

2.2 Blended Shopping

Blended shopping is defined as "execution of the transaction phases (information, mediation, negotiation, contracting, fulfillment and after-sales) involving both, real sales and presentation mechanisms as well as network based sales functionality" (Fuchs & Ritz, 2009a).

The basic idea of blended shopping is to compensate disadvantages of one sales channel by advantages of the other. Selecting processes of both channels for one purchase could be an advantage for the customer (e.g. selecting a pair of ski in the branch and let it be delivered at home by eCommerce, because the customer don't like to carry them when continuing shopping that day) and the merchant (keeping and/or increasing turnover/satisfied customer).

Precondition of blended shopping is that the merchant runs a webshop as well as a branch network. This combination is already quite established (Krafft & Mantrala, 2006). Blended shopping seizes the so called multi-channel behaviour of customers which is already object of investigation. Multi-channel behaviour describes how consumers make use of different distribution channels for one purchase.

In a study (van Baal & Hudetz, 2008) the authors found out that customers make use of the advantages of both sales channels dependent on their needs and attitude, e.g. ¼ of purchases in 2008 were prepared by using the respectively other channel. It has become a common practice to touch and test the product in a branch and order it by eCommerce. But this does not necessarily imply that collecting information about a product and contracting is done by the same retailer. Blended shopping enables merchants to keep customer and turnover within the enterprise by facilitating the customers' sales process.

But blended shopping is scarcely supported by the merchants yet (Fuchs & Ritz, 2009a). Until now traditional retail and eCommerce are in practice viewed as separate channels which may jeopardize the turnover of the other.

3 WEB 2.0 AND SOCIAL NETWORKS

The situation in retail is affected by trends emerging from the widespread availability of internet (ARD-/ZDF-Medienkommission, 2009) like web 2.0 and based on this the development of social networks The term web 2.0 was coined in 2004 (O'Reilly, 2005) as further development of the internet after analyzing the results of the dot com bubble burst. One of the core principles of web 2.0 is the architecture of participation instead of passive consumption of content as it has been before. The penetration of broadband connection at decreasing cost is assumed to be an important precondition for user participation (Horrigan, 2006).

Participation is the basis for social networks. The idea of social networks is not new but the actually widespread distribution was enabled by web 2.0. Bigger parts of services allocated to web 2.0 can be described as social software. They all have centralizing human social behaviour in common.

Testimonials and user-generated content result from the activity in social networks and influence the purchase decisions of consumer.

4 INTERACTIVE CONCEPTS

The trends described in the chapter before make clear that merchants and consumers operate in a complex context. Because of available information and communication technologies as well as social networks consumers are very well informed about products and offers but they have to structure the information themselves. And information from the internet is still separated from the retailer's branch.

We focus our research on exploring how information of third parties can be integrated within traditional retail stores in a structured way. Consumers make use of web 2.0 and social networks at home, we search for ways to embed these sources into the sales process at the POS. Usage of web-based platforms and contents presumes access to the internet. This can be realized either by stationary terminals within the shop or by consumers' mobile web-enabled devices. Both possibilities differ in strategic impacts like e.g. investments in infrastructure and require different frameworks e.g. for appropriate presentation of content related to environmental, situational and device-dependent circumstances. In the upcoming chapter we present

an approach to gather information services from product characteristics.

5 EVALUATION METHOD

For merchants it is often difficult to decide if investments in product information systems (providing public accessible information related to one or more products) are reasonable and how the solution should look like. To support the decision process, a method was developed to evaluate the given situation, to derive requirements regarding the product information system and to support the development of possible approaches.

This method allows structured guidance but demands individual assessment of each situation. We identified three core factors which we apply in this method with differentiated characteristics: customer, product and shopping experience. The factors customer and product are closely connected, e.g. the product type influences the information demand of the customer. Two prototypes created on the basis of this method are outlined in the upcoming chapter.

6 PROTOTYPES OF PRODUCT INFORMATION SYSTEMS

As mentioned, web-based content can be integrated in the shop either by terminals or by consumers' mobile devices.

In subsection 6.1 and 6.2 prototypes for both scenarios are outlined which have been developed upon results of the evaluation method (chapter 5). In subsection 6.3 both concepts are compared.

6.1 Sensor-based Sales Terminal

Information terminals in shops are no new idea. One well known example is the barcode scanner in super markets where the customer can check the price of a product. Since a few years merchants try to develop new concepts of offering digital information on demand, e.g. drug stores connecting product and information system with health guidance.

At the moment the service terminals present available information but do not respond to the specific needs and do not interact with the customer like an "advisor". Solutions to overcome this lack were developed by applying sensor-supported interaction. A physical product is connected via RFID-technology with a terminal located at the retailer. When a consumer picks up a product, the system starts to interact. It identifies the product and gives advice what should be tested (e.g. "try the sports modus of this camera by focussing a moving person. Check the result on the screen."). Additionally information like testimonials from social networks is embedded. The concept aims to generate shopping experience in order to establish an emotional commitment of the consumer. An illustration of the concept is given in figure 1.

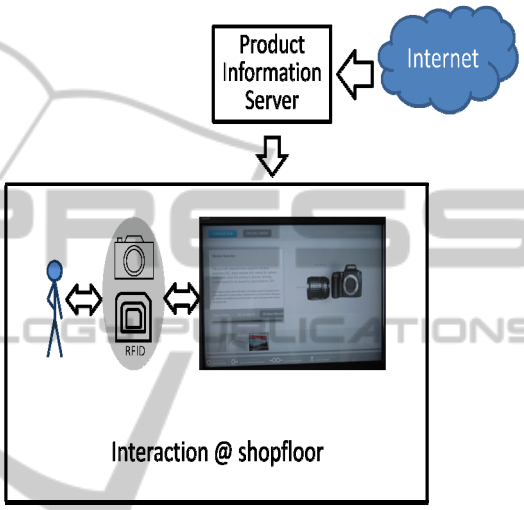

Figure 1: Interaction sensor-based sales Terminal.

6.2 Mobile Solution

Widespread availability of web-enabled devices is a precondition for the usage of mobile applications. It can be assumed that already a relevant rate of consumers makes use of mobile internet and in future the rate will increase (Tudor & Pettey, 2010).

Availability of potential consumers will have impact on the economic assessment. When developing solutions for mobile devices special basic conditions have to be respected as changing light, disconnection time, limited screen size and so on. This illustrates the necessity of analyzing the given or targeted situation. As a mobile blended shopping solution an iPhone application was developed which enables the consumer to receive necessary information like testimonials and prices in the shop during testing the product.

This app can be offered by a merchant to structure information and refer to linked products or accessories. An illustration of the concept is given in figure 2.

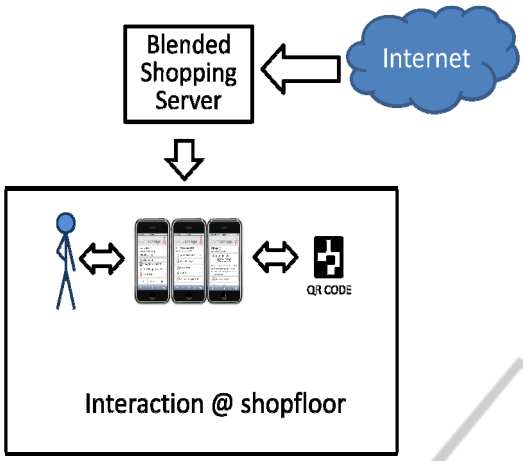

Figure 2: Concept web 2.0 in the shop.

Following advantages and disadvantages of the described prototypes are compared.

6.3 Comparison of Concepts

The main benefits of the stationary prototype are the interaction and the advice generated from the system for more complex products which need to be explained. This service integrates all information necessary for the buying decision and offers a shopping experience as well. Disadvantages are the needed costly infrastructure and the development of advisory structure and content.

The presented mobile solution concentrates on providing the needed information rather than a shopping experience. The customer receives information independent from the merchant which excludes cross selling impulses or any other form of influence. The merchant's efforts are reduced to providing needed information in an appropriate format for mobile devices.

In conclusion both prototypes address different shopping situations and depend highly on the product and the target group.

7 FUTURE PROSPECTS

In this paper we presented the necessary theoretic background to describe the idea of blended shopping. The developed method to evaluate requirements for blended shopping solutions was described. With the help of prototypes we proved the useful utilization of concepts. We emphasize that this method do not include a cost-benefit analysis, new concepts are needed to analyze the cost benefit relation with regards to customer satisfaction.

We started developing blended shopping concepts for consumer mass products, for future projects we focus on supporting mass customization configuration within branches. This will bridge the gap between mass and individual production and will enhance mass customization approaches.

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