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New Digital Ways of Creating Value in Retail

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ABSTRACT

The development and implementation of innovative solutions have long played only a subordinate role in the retail sector. In particular, small and medium-sized enterprises in this sector very rarely have internal responsibilities and defined procedures for developing new service offerings. Currently, however, the value creation processes in retail are changing and this means that the retail sector is increasingly challenged in the area of digitization. The objective of this paper is to examine the role of new digital solutions for stationary retail. At the beginning, the current challenges in stationary retail are discussed. New digital solutions are then identified and their assessments by experts from practice are presented. The paper concludes with recommendations for small and medium-sized retailers.

Keywords: Retail, Purchasing behavior, Digital technologies, Digital value creation

INTRODUCTION

The COVID-19 pandemic led to a change in consumer behavior in the retail industry. While retailers were already facing increased competition from large online platforms before the Corona crisis, the pandemic has significantly accelerated this process, and also introduced customer groups to online shopping that had not used it in earlier times (Grimmer, 2022). However, there is currently only a hesitant return to earlier shopping habits from which entire regional ecosystems - especially in rural areas and smaller towns - are now suffering. Many stores are giving up, and neighboring service providers (e.g., restaurants, culture, and leisure industry) are also affected (Hedde et al. 2021, Nanda et al. 2021). Nevertheless, the pandemic has also shown that companies, that implemented new - often digitally supported - solutions very quickly, came through the difficult times better (Simmons, 2021). For example, web shops as well as additional online and delivery services were able to mitigate the loss of sales in the stationary business.

But it has to be noted, that retail is traditionally a rather less innovative industry. Expenditure on research and development, for example, is among the lowest in the entire service sector (OECD 2023). It is not uncommon for small and medium-sized retail companies to lack a fundamental awareness of innovation and to have no corresponding processes and responsibilities defined there. The resulting deficits became obvious in the current pandemic and now leave many companies with a dilemma: on the one hand, they notice

that competitors are successful with new digital solutions, but at the same time they often have neither the competence nor the means to implement their own innovations. The know-ledge about digitization as well as about the development of new solutions is simply not available in many small and medium-sized retail companies (Meiren et al. 2022).

Against this background, the paper discusses new digital ways of creating value in retail. It first looks at key challenges in stationary retail. It then discusses the role of digitization and presents new digital solutions for the retail sector. The paper concludes with the results of a workshop with 16 experts from practice, who evaluated the new digital solutions and formulated recommendations for small and medium-sized retail companies.

CHANGES IN VALUE CREATION

The increasing importance of e-commerce is not only leading to structural change in city centers and shopping malls and to changes in the sales of stationary retail, but is also leading to changes within the traditional value chain (Hagi and Zabarauskas, 2022, Roggeveen and Sethuraman, 2020). The primary role of retailers was to help customers select products. If this was also done at an acceptable price, this was the key benefit for consumers, for whom they were also prepared to pay a little more. However, digitization and the corresponding developments mean that retailers are often no longer able to perform precisely these value-adding activities, such as procurement, pre-selection and advice, as they used to. This particularly affects the core functions of assortment and information management.

For example, price and product search engines are increasingly taking over the advisory function, recommendation engines enable customer reviews, social networks bundle opinions and recommendations, "infomediaries" often have greater assortment expertise, and brokers offer an infinitely large selection of products (Nanda et al. 2021). The result is the loss of the dominant role and unique selling propositions of traditional stationary retail. Customers no longer perceive or often even make use of many central stages of the value chain, so that the willingness to pay for them continues to decline. It also becomes problematic for stationary retail when the costs of advice and service are nevertheless included in the price calculation. As a result, stationary retailers will always be significantly inferior to pure online providers in terms of competition and will lose further market share.

Up to now, the entire value creation in the purchase decision process has taken place at the retailer. However, the Internet is leading to a progressive decoupling of the previous value creation stages in stationary retail. Value creation is increasingly being distributed among different players, which consequently also leads to a new distribution of profits and a decrease in the depth of value creation in retail.

CHANGE IN BUYING BEHAVIOR

The changes in the consumer buying process as a result of digitization and increasing online purchases will also lead to a transformation in customer

expectations of stationary retail in the future (Sayyida et al. 2021). In the typical buying process, increasing digitization is more and more blurring the boundaries between the online and offline worlds (Winters, 2021). Customers are coming into contact with digital information and marketing tools during the buying process, for example during the purchase initiation phase through product recommenddations and extensive product information, or during the purchase decision phase through available customer reviews. As a result, people are becoming accustomed to the advantages and new digital shopping elements, so that their absence in stationary retail can have a negative impact on the purchase decision.

These missing digital elements, which are otherwise only known from online retail, disturb many stationary customers. In a current study, 76 percent of younger respondents ("generation Z") expect retailers to have their own website and 58 percent to have their own Internet stores. In addition, 83 percent demand product availability that can be viewed online and 51 percent expect their own WLAN in the store (Kemmer et al. 2023).

Other customer expectations are directed at the experience aspects of stationary retailing. Entertainment in particular is becoming increasingly important, e.g. the term "retailtainment" has been coined, a combination of "retail" and "entertainment". The key to success here will be to offer customers a memorable shopping experience (Ibrahim, 2022). In addition to the customer's desire for entertainment and experience, the social aspects of stationary shopping must also be taken into account. People are communal creatures and like to go shopping in the company of others. Therefore, stationary shopping should additionally create spaces and places for human encounters to promote a social community experience.

In the future, stationary retail should aim to accompany customers along their buying process through an effective combination of stationary elements, such as advisory staff, and innovative, digital elements, such as self-service checkouts, across all channels and process steps (Mason and Knights, 2019). In the process, how stationary advice is provided will also change radically in the future. It will be increasingly important to meet customer expectations by providing customer-oriented and targeted advice. For this purpose, the collection and use of customer data is essential in stationary retail, similar to what is already happening in online retail. This will enable various targeted and personalized offer formats and consulting options to meet customer demands and thus position themselves better concerning online offers (T-Systems 2022).

DIGITIZATION STAGES IN STATIONARY RETAIL

The previous chapters have made it clear how digital technologies and applications are changing value creation in retail. Figure 1 now shows various stages of digitization, both for stationary retail and its connection to the online world.

The lower levels serve to strengthen stationary retail. The aim of this is to encourage customers to visit the store. Starting with the company's website, online communication can be designed for this purpose, e.g., via online

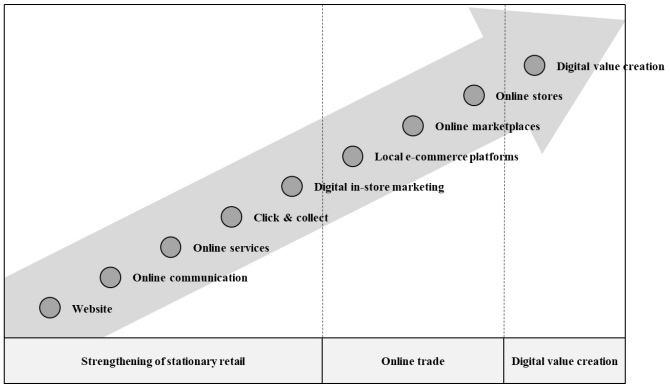

Figure 1: Digitization stages in retail.

marketing and social media. Furthermore, online services such as information on frequently asked questions via chat or email functions, digital bookings of consulting appointments, or registrations for special events can also be offered. This also provides the opportunity to collect customer data and make exclusive offers. Other online services can include reservation and on-site collection ("click & reserve") or online purchase and subsequent on-site collection ("click & collect") of products. As the boundaries to online stores are becoming increasingly blurred here, especially in the case of click & collect, these services can also be assigned to the category of "multi-channel retailing", although the primary aim of these offerings is still to encourage customers to visit the store. It is the same with digital in-store marketing. The aim is to support customers throughout the entire buying process by employing digital technologies in the store and thus to improve the stationary shopping experience. Conceivable examples here include support for the advisory staff by tablets, new forms of contactless payment, indoor navigation, or smart shopping carts and interactive shop windows that enable customer interactions outside opening hours.

In the second digitization stage, there are local e-commerce platforms, such as city apps, which support users in their search for restaurants, sights, cultural offerings, and shopping opportunities, depending on their location. These not only serve as digital showcases for stationary stores, but in some cases also offer direct ordering options and delivery services. In contrast, online marketplaces and stores are limited exclusively to product sales via the Internet. In terms of multi-channel retailing, these can be used in addition to the stationary store as further sales channels to market and sell products.

In digital value creation, the retailer sees itself not only as a pure link between production and consumption, but also actively intervenes in product and service design. In particular, customer-specific information is used to individualize and personalize products and services.

EVALUATION OF DIGITAL SOLUTIONS FOR STATIONARY RETAIL

Recently, a variety of new digital solutions have emerged that can be used in the retail business. Accelerated by the effects of the COVID 19 pandemic as

well as the megatrend of digitalization, not only large companies but increasingly also small and medium-sized enterprises are now interested in new digital solutions.

As part of an expert workshop, relevant digital technologies for stationary retailers were identified and evaluated, and recommendations for action were subsequently derived. The workshop took place on September 22, 2022, in Stuttgart, Germany, and was attended by 16 experts - all with at least ten years of practical experience in retail.

At the beginning, digital solutions for retail were collected and the applications listed in Table 1 were selected for further evaluation:

Then, each of the digital solutions was evaluated by each expert based on the following three criteria:

- Future relevance:
  How important will each digital solution be to the retail industry in the future?
- Customer need:
  To what extent is there a need for each digital solution from the customer's perspective?

Table 1. Overview of the digital solutions selected by the experts.

Digital technologies	Characterization
Online communication	Company profile with basic information on the Internet, own website, use of social media
Internet-based sales channels	Sales on the Internet in addition to stationary business, Online marketplaces, Online stores
Online services	Offering additional services via the Internet, linking stationary business with online channels
Digital price tags	Displaying the prices of products via small digital displays, digitally controlled dynamic price adjustment
Interactive displays	Digital displays that enable interaction with customers via gesture control or touch screen
Interactive shop windows	Digital storefronts composed of screens and other technologies such as cameras, speakers and motion sensors
Digital dressing rooms	Digital provision of product information in the changing room, often using the mirror as a display
Tablets for the sales staff	Equipping staff on the sales floor with tablets, retrieving information in direct conversation with customers
Virtual Reality and Augmented Reality	Generation of interactive virtual, computer-generated environments, e.g. for product presentation or in-store navigation
Service robots	Service robots take over simple tasks in direct contact with customers, to relieve sales staff of routine tasks
Beacon technology	Beacons are small, battery-powered devices that send product information at regular intervals via Bluetooth
Mobile and contactless payment	Payment is made by holding the smartphone, a wearable or a credit card at a short distance from the payment terminal
Self-checkout systems	Self-checkout systems enable customers to register and pay for products independently using scanners
Cashierless payment systems	Product scanning and payment are fully automated, allowing customers to leave the store without a checkout process
Intelligent inventory management	Use of Artificial Intelligence for trend recognition, demand planning and stock management

- Suitability for SME:
  To what extent is each digital solution suitable for small and medium-sized retail enterprises?

A scale of 5 from 1 ("very low") to 5 ("very high") was used for each of the three criteria. The evaluation was carried out individually by each participating expert. The use of the Mentimeter software made it possible to present the results - in particular the mean values and distributions - immediately after the expert evaluation (see Figure 2).

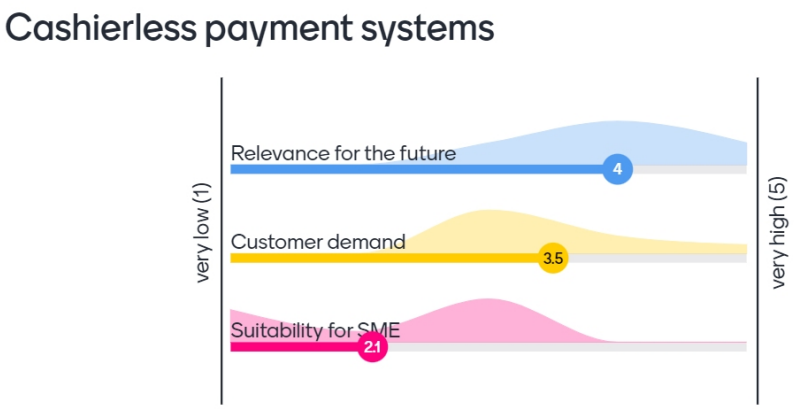

Figure 2: Example of instant display of evaluation results before expert discussion.

The question of future relevance revealed that the technologies assigned to the lower digitization level (see Figure 1) are of particular importance. At the top of the list are online communication and mobile and contactless payment (each with a maximum value of 5.0), followed by online services (4.6) and Internet-based sales channels (4.1). At the bottom end are interactive store windows (2.4), interactive displays (2.3), and service robots (2.0).

With regard to the criteria of customer need, the evaluation results show a similar distribution. The experts see the highest need for mobile and contactless payment (with a value of 4.9) and online communication (4.4), while interactive store windows (2.3), digital dressing rooms (2.1) and service robots (1.9) bring up the rear. The subsequent discussion among the experts also showed that the "future relevance" factor is highly linked to customer needs and expectations.

The third of the evaluation criteria used was suitability for SME. This was due to the observation that large retail companies have recently invested massively in the digitization of their processes and stores and have built up corresponding personnel capacities, while small and medium-sized enterprises often simply lack the resources for this. In line with that, the experts' ratings are also rather low overall. Online communication achieves the highest score of 4.5, but the following tablets for the sales staff (3.9), online services (3.8) and Internet-based sales channels (3.6) only achieve scores in the middle range. Nine of the 15 digital solutions surveyed even receive extremely low scores of less than 2.5.

RECOMMENDATIONS

The evaluation was finally discussed with the experts - particularly with a view to drawing conclusions for small and medium-sized retailers. As a result, the following recommendations for action have been formulated.

1. Develop an own strategy for digitization:
   Retail companies are heterogeneous. While a traditional, family-run retailer may be able to score more with quality and customer orientation, a young start-up has the flexibility and willingness to react quickly to trends. A large company, on the other hand, can invest larger sums and sometimes has an easier time building up the necessary personnel skills. That is why "one size fits all" approaches do not work and every company is well advised to develop its own strategy to digitization.
2. Build competencies for digital business:
   Technological developments and the increasing opportunities for digitization have led to new qualification requirements for employees. Competencies that are currently available and will be required in the future should therefore be systematically collected, analyzed, documented and presented transparently to the workforce at regular intervals. The identified gaps can be closed not only through new hires, but also with targeted training measures.
3. Build company networks and use them for digitization:
   Small and medium-sized retailers often lack the financial and human resources to implement digitization projects in the company. One way out of this is to carry out such projects jointly with other retailers and to establish collaborations with suitable external partners such as IT service providers and consulting firms. Another approach that can help is not to develop everything from scratch, but to use ready-made solutions and instead focus on integrating them into the company's business processes.

The results of the expert workshop make it clear that the innovation dynamic in the retail has increased significantly. The main drivers are the digitization of business, which has been intensified by the COVID 19 pandemic, and changes in customers' buying behavior. A large number of new digital technologies are currently entering the market, and small and medium-sized enterprises in particular are finding it difficult to keep pace with the new developments. It is therefore important to familiarize with the new technical possibilities, develop own strategies and cooperatively implement new solutions in line with customer needs.

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