

# Digitalization of retailing: Beyond e-commerce

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## Abstract

“Digitalization”<sup>1</sup> is one of the greatest transformations of contemporary society. The on-going changes due to digitalization are not least important in the retail sector, which both affects and is affected by the development. The Internet's entry has resulted in new business opportunities (e.g. Quelch & Klein, 1996), new companies (e.g. Mols, 2000), business models (e.g. Sorescu et al., 2011) and forms of commerce (e.g. Gloor, 2000). So far in retailing, digitalization and the Internet has primarily been discussed in terms of an increased presence of e-commerce. However, the Internet is becoming more and more integrated in all forms of retailing and the impact of digitalization goes far beyond the phenomena of e-commerce. The transformation of previously physical products into digital services, the use of digital devices in various steps of the purchasing process as well as consumer recommendations and communications through social media are all examples of much broader and vigorous impacts. In recent years the increasing use of digital mobile devices with Internet has started to transform consumer practices in general including shopping behaviours. New consumer products with mobile Internet are launched at a rapid pace and variety of mobile products and technologies are becoming interlinked (see, e.g. Cochoy, 2012). With these mobile devices Internet is also increasingly becoming an element in physical stores (Bodhani 2012). Information retrieval, testing, ordering, payment and service can be done in different channels, and new retail formats such as pop-up stores (Kim et al 2010),

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<sup>1</sup> In the paper the term digitalization refers to the integration of digital technologies into retailing. Although this general term involves all types of digital technologies we particularly concentrate on the integration of digital technologies that in some way or another are connected to the Internet.

click-and-drive (Colla & Lapoule, 2012) and others are developed as we speak. New apps are developed for payments (e.g. iZettle), price comparisons (e.g. Pricerunner) or product information (e.g. GoodGuide). This broader development will probably have far-reaching effects for retailers, consumers, employees, and suppliers. There is a great need for knowledge about this transformation and its effects (Grewal & Levy, 2009; Doherty & Ellis-Chadwick, 2010; Hagberg et al., 2012).

While research on e-commerce is vast and has been extensive already from the outset (e.g. Alba et al., 1997; Burke, 1997; Reynolds, 2000; Bakos 2001; Burt & Sparks, 2003), retailing research has so far largely ignored the more all-encompassing transformations of digitalization. While scholars have recognized the relevance of the Internet for physical stores, retail formats, apps and so on, there is a paucity of studies that has systematically analysed the implications of these developments for retailing. Such analysis is central given the potentially far-reaching effects that digitalization could have in the retail industry. Thus, the need to develop a framework that could be used to problematize the consequences of digitization in a retail context is clear. The purpose of this paper is to analyse how retailing is transformed due to digitalization and to develop research propositions on the consequences of these transformations.

This paper analyses the digitalisation of retailing starting from the retailer-consumer exchange interface, and more specifically along three various facets of exchange: communication, transaction and distribution (Peterson et al., 1997). Communication concerns the access to and exchange of information. Transactions concern the transfer of ownership including monetary transactions, and the actual purchase. Distribution refers to the physical and tangible exchanges of products. In turn, these three facets of exchange are broken down into subcategories, which are further developed with examples from Swedish retailing in order to provide a more detailed understanding of how digitalization transforms retailing in various areas.

Consequences are identified and research proposals are developed based on three different “levels” of retailing: micro, meso and macro, reaching from individual retail employees to societal changes. Among key consequences it is pointed out that digital literacy and skills in the workplace will be a key challenge while also calling for novel forms of knowledge transfer among employees; that the transformations will put pressure on retailers to modify and develop new business models that take challenges and opportunities of digitalization into account; and that it

will affect retailers ability to be cost-effective, sustainable and attractive to consumers. In addition to transforming retailing in several ways, the changes imposed by the digitalization may also have consequences for the role retailing will play in society.

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