**Digitalization in brick-and-mortar retailing: can physical retail outcompete e-retailers in offering tailored services?**

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**Abstract**

Brick-and-mortar business is quickly losing ground to e-commerce. One of the crucial elements that explains this phenomenon is the larger capability of e-retailers to gather data from clients and understand their purchase behaviour. However, digital transformation in the physical retail sector is gaining pace in search of improving its competitive position. The aim of this study is to investigate how digitalisation in physical stores may lessen the gap in data generation and customer knowledge between online and brick-and-mortar businesses. To do so, a comprehensive review of the literature is conducted, followed by the adoption of Interpretative Phenomenological Analysis (IPA) to capture individual-level understanding of the phenomenon from different experts in retail information technology. Our findings show the potential of digitisation of the physical store in data gathering, and outline the implementation of novel loyalty schemes as effective way to encourage customer to willingly share their data. In the discussion and conclusion derived from our findings, we elucidate how digital transformation of brick-and-mortar business has the potential of not only improving the competitiveness of the physical retail sector but improving the bottom line for retailers across all sales channels.

*Keywords: Digitalization, Advanced Services, Datafication, Tailored Services*

**Introduction**

Customer purchase behavior has changed dramatically in the last decade due to the proliferation of new technologies and digital platforms. New techniques and logics have been adopted as a consequence of the growth and popularization of the internet, social media and other digital technologies, and researchers and practitioners alike have begun to pay more attention to the retail sector's digital transformation (Reinartz et al., 2019). The industry is already experiencing new purchasing behaviors while including new selling practices and value-added services due to digitalization (Hagberg et al., 2017; Sheth, 2021). However, the focus of these innovations has mostly been on e-commerce, and consequently, literature has overlooked digital transformation in physical retailing.
E-commerce is undoubtedly expanding and has embraced both small and large shops by integrating platforms such as Amazon that significant impact the competitive landscape (Hagberg et al., 2017). Despite physical retail remaining the dominant sales channel, studies show that the increase in e-commerce sales is, in fact, largely at the expense of brick-and-mortar stores (Stieninger et al., 2021). In addition to that, the Covid-19 pandemic has severely hurt the physical retail market, while unleashing the growth of e-commerce (Nanda et al., 2021). As a result, countless physical stores are going out of business or are forced to invest heavily on an online strategy (Corkery, 2017).

One of the main reasons for such transformation is e-commerce’s data-driven efficiency superiority (Al-Lami & Alnoor, 2021). One of the most critical aspects is to understand how physical retail can withstand the rise of online commerce by learning from its digital superiorities (Hagberg et al., 2017). The data potential of physical stores is larger than e-commerce, provided that a physical space can have substantially more data sources than what website cookies can retrieve (Huré et al., 2017). The brick-and-mortar sector can learn several lessons from the recent success of e-commerce and take it one step further to create competitive advantages through digital services and loyalty initiatives (Turow et al., 2015).

While previous research has explored different technologies and loyalty practices that may proliferate data in the physical retail environment, few authors have concentrated on the adoption of such innovations and explore the potential in the offering of tailored services and customised offers. The physical retail sector contains unique industry dynamics that need to be explored, both theoretically and practically, in order to determine implications of adopting data-enabling technologies. As a result of the aforementioned, this study aims to understand to what extend datafication and the deployment of data-enabling digital technologies level the playing field for physical retail to better compete with e-commerce and offer value-added services.

**Methodology**

To achieve the described research aim, the attributes that make e-commerce surpass physical retail must first be identified by means of literature review, having an emphasis on embedded data collection mechanisms and its business implications. Similarly, the current state of the physical retail industry must be briefed, focusing on the facts that portray the
sector’s lag behind e-commerce. The ultimate purpose of this review is to determine the critical areas where physical retailing might improve to implement more competitive data strategies. Likewise, by analyzing core industry problems and linking them to the lack of data proliferation, the potential of a data-enriched physical retail sector will be explored through existing research. In a second step, insights from retail industry experts working at leading technology firms will be gathered and analyzed by applying IPA (Smith Jonathan et al., 2009) to understand the true state and priorities of this industry and discuss the potential and effects of the adoption of data-enabling technologies. Loyalty programs and tailored services will also be examined, with a special emphasis on customer experience, intent of use, and data privacy.

Findings

Our preliminary findings shed new light on the topic of how digitization and data enabling technologies shape physical commerce competitiveness and allow firms the implementation of tailored services. The data potential of physical stores because to the access to physical spaces is larger than e-retailers. Furthermore, data proliferation was found to be a critical source of competitive advantage which leads to personalized offers and services. Finally, given the larger share of purchases being made offline and the higher number of potential touchpoints a brick-and-mortar setting provides, the physical retail market is poised to outperform e-commerce as more and more data-enabling technologies are deployed in physical stores.

References list


