

Abstract

The retail sector has been considered one of the critical economic growth sectors for emerging countries. Post-pandemic, Central-Eastern European consumers are a new breed of shoppers. The present proposal will address how digitalization is revolutionizing Poland's Retail Sector. Digitalization-based Retail Sectors such as Augmented Reality, Virtual Reality, and Metaverse have excellent potential to help deliver the Sustainable Development Goals (SDGs), especially SDGs 9 (Industry, Innovation, and Infrastructure) and SDGs 12 (Responsible Consumption and Production) in Poland. This Project will provide a roadmap to rebuild a better retail sector in Poland based on digitalization. The overall goal of digitalization is to build a sustainable and inclusive retail ecosystem. Our theoretically robust and practically meaningful Project aims to enhance different stakeholders' experiences using digital solutions and cutting-edge technologies. The proposal emphasizes how adopting digital technologies by retailers contributes to sustainable practices and achieves critical societal goals in Polish society. By integrating AR-enabled technology into the retail sector, this Project seeks to boost individual experiences, heighten supply chains, diminish waste, and encourage sustainable initiatives. The proposal recognizes the retail sector's significant role in economic growth and societal well-being. To uncover the underlying mechanism of retail digitalization, three main essential research questions will be asked:

(1) To what extent have industries in Poland accepted retail digitalization, and how does this acceptance associated with growth in accomplishing SDGs? **(2)** How can adopting digitalization in the retail sector be accelerated? **(3)** What are the primary stimuli to promote sustainable retailing? **(4)** What are the positive impacts of retail digitalization on specific SDGs in the Polish retail sector?

This proposal is going to contribute to the following practical objectives:

(1) How can technology offer a more sustainable future for the industrial sector? **(2)** What are local retailers' crucial challenges and barriers in implementing AR-based digitalization to assist sustainable policies and achieve SDGs in Poland? **(2)** How to promote sustainable consumption and production initiatives in business-to-business (B2B), Business customer (B2C), customer to customer (C2C)? **(3)** To determine, measure, and compare the traditional retail sector with modern economies' retailing firms, and **(4)** What are the primary approaches retailers use to influence AR-based digitalization for sustainable growth efficiently? An extensive systematic literature review will be carried out to answer the above questions. Based on the review, this proposal will employ a mixed-methods approach to collect and analyze the retailers' data. Quantitative and qualitative methods will be used to understand the current state of retail digitalization in Poland, the Czech Republic, and China and its impact on SDGs. Firstly, government officials, retailers, customers, and other stakeholders will be interviewed to gather diverse perspectives, collect primary data, and determine their experiences, beliefs, and views towards digitalization. Based on this qualitative data, a measured conceptual framework will be laid out. Thus, this proposal can perform experimental design studies to collect real-time data on AR-enabled retailing. In addition, a cross countries survey will be conducted to collect primary data from the retail industry, concentrating on their AR-enabled digitalization initiatives and their arrangement with sustainable practices. The analysis of this data will involve statistical techniques and thematic analysis to identify trends and patterns. The proposal will contribute in several ways to the theory and practices of sustainable retailing in Poland. First, it will identify best practices and any challenges retailers face in integrating digital technologies to support sustainable development. It will also propose recommendations and strategies to enhance the positive impact of retail digitalization on SDGs in Poland. The findings of this study will have significant implications for policymakers, retailers, and other stakeholders involved in sustainable development efforts in Poland. By shedding light on the potential of digitalization, the research seeks to encourage responsible business practices, reduce environmental impact, and promote social equity within the retail sector. Ultimately, the goal is to facilitate evidence-based decision-making and contribute to a more sustainable future for Poland, in line with the SDGs.

In summary, this research proposal explores how retail digitalization can contribute to sustainable development in Poland. The study will provide valuable insights and recommendations to foster a more sustainable retail sector, benefitting both businesses and society. It emphasizes the potential of digitalization to advance sustainability, particularly regarding poverty reduction, responsible consumption and production, climate action, and gender equality.