



DIGITALIZATION AND SMALL BUSINESS COMPETITIVENESS IN DEVELOPING ECONOMIES

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<https://doi.org/10.5281/zenodo.20593139>

Abstract: Digitalization has become an important factor influencing the competitiveness of small businesses in developing economies. This study examines how the adoption of digital technologies can enhance productivity, improve market access, and strengthen the overall performance of small and medium-sized enterprises (SMEs). The findings suggest that digitalization can support business growth and competitiveness, although challenges related to digital skills, infrastructure, and technology adoption remain significant.

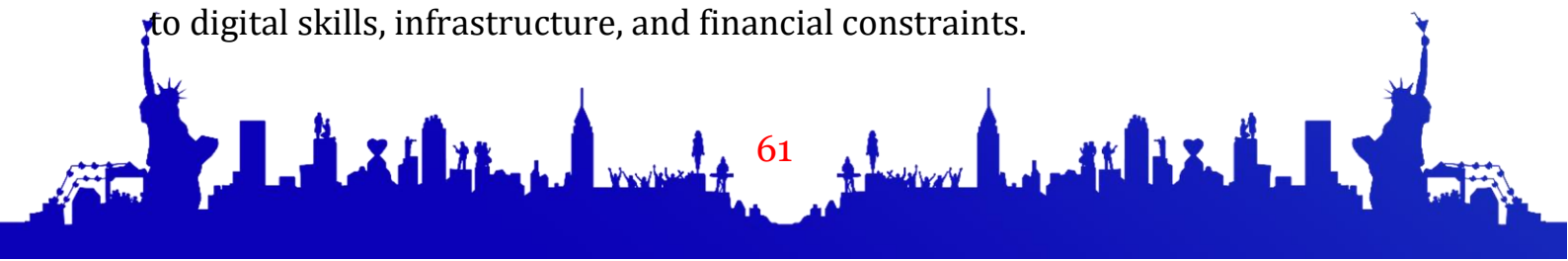
Keywords: digitalization, SMEs, competitiveness, developing economies, digital technologies.

Introduction

Small and medium-sized enterprises (SMEs) play a crucial role in economic development by generating employment, fostering innovation, and contributing to national income. In many developing economies, SMEs account for a significant share of business activity and serve as an important source of economic growth. However, increasing competition, changing consumer preferences, and rapid technological advancement have created new challenges for small businesses.

Digitalization has emerged as an important strategy for improving business performance and competitiveness. The adoption of digital technologies such as e-commerce platforms, digital payment systems, cloud computing, and digital marketing tools enables SMEs to enhance productivity, reduce operational costs, and expand access to local and international markets. As a result, digital transformation is increasingly viewed as a key factor supporting the long-term growth and resilience of small businesses. These findings are consistent with OECD (2021), which highlights the role of digital technologies in improving SME productivity, innovation, and market access.

Despite the potential benefits of digitalization, many SMEs in developing countries continue to face barriers related to limited digital skills, inadequate infrastructure, financial constraints, and low levels of technology adoption. These challenges may restrict the ability of small businesses to fully benefit from digital opportunities and compete effectively in an increasingly digital economy. Similar barriers have been identified by the World Bank (2022), particularly in relation to digital skills, infrastructure, and financial constraints.





Although previous studies have examined the relationship between digital technologies and business performance, limited attention has been given to the specific mechanisms through which digitalization enhances SME competitiveness in developing economies. This study addresses this gap by examining the role of digitalization in improving productivity, market access, and business competitiveness.

The purpose of this study is to analyze how digital technologies contribute to the competitiveness of SMEs in developing economies and to discuss the main challenges that influence the digital transformation process. The growing importance of SME digitalization has also been highlighted by recent OECD D4SME initiatives, which emphasize the role of digital technologies in improving business competitiveness and resilience (D4SME, 2024; D4SME, 2025).

Methodology

This study employs a qualitative research approach to examine the relationship between digitalization and small business competitiveness in developing economies. The analysis is based on secondary data obtained from international reports, academic literature, and policy documents related to SME digitalization and business development.

Particular attention is given to the adoption of digital technologies, including e-commerce platforms, digital payment systems, cloud-based solutions, and digital marketing tools. The study evaluates how these technologies influence productivity, market access, innovation, and the overall competitiveness of small and medium-sized enterprises (SMEs).

A descriptive and analytical method is applied to identify the opportunities and challenges associated with SME digitalization. The analysis primarily draws on recent publications from international organizations, including the OECD, the World Bank, and UNCTAD, which provide evidence on digital transformation and SME competitiveness in developing economies.

Results and discussion

The analysis indicates that digitalization plays an important role in strengthening the competitiveness of small and medium-sized enterprises (SMEs) in developing economies. Recent international studies suggest that digital technologies enable SMEs to improve operational efficiency, expand market access, enhance innovation capabilities, and strengthen business resilience. Recent OECD evidence also suggests that SME digitalisation contributes to business resilience and competitiveness in rapidly changing market environments (OECD, 2025).





Table 1.

Digital Technologies and Their Impact on SME Competitiveness

No.	Digital Technology	Main Benefit for SMEs	Impact on Competitiveness
1	E-commerce platforms	Access to wider markets and customers	High
2	Digital payment systems	Faster and more secure transactions	Medium
3	Cloud computing	Improved efficiency and lower operating costs	High
4	Digital marketing tools	Enhanced customer engagement and visibility	High
5	Artificial intelligence tools	Better decision-making and productivity	Medium

Source: Author's compilation based on OECD (2025), OECD (2021), World Bank (2022), and UNCTAD (2025).

The results are also consistent with the findings of Bianchini and Lasheras Sancho (2025), who identify digitalization as a key driver of SME competitiveness and business resilience.

One of the most significant benefits of digitalization is improved market access. Digital platforms and e-commerce solutions allow SMEs to reach customers beyond their local markets and participate more actively in national and international trade. According to OECD (OECD, 2021) studies, digital technologies help reduce information barriers and create new business opportunities for smaller firms.

Digitalization also contributes to higher productivity and operational efficiency. Technologies such as cloud computing, digital management systems, and online collaboration tools enable businesses to streamline processes, reduce administrative costs, and improve resource utilization. These advantages are particularly important for SMEs, which often operate with limited financial and human resources.

Another important finding is the growing role of digital technologies in supporting innovation. SMEs that adopt digital tools are generally better





positioned to develop new products and services, improve customer experiences, and respond more effectively to market changes. In addition, digital technologies facilitate access to information, knowledge, and business networks that can strengthen competitiveness.

Similar findings are reported in the World Bank Digital Progress and Trends Report (2024), which notes that firms with higher levels of digital adoption are generally better positioned to participate in the digital economy and respond to market changes.

However, several challenges continue to limit the digital transformation of SMEs in developing economies. These include insufficient digital infrastructure, limited access to finance, inadequate digital skills, and concerns related to cybersecurity. Small businesses often face difficulties in adopting advanced technologies due to resource constraints and a lack of technical expertise. UNCTAD (2025) further emphasizes that digital infrastructure gaps and limited access to technology remain major obstacles for SMEs in many developing economies.

Overall, the findings suggest that digitalization can significantly enhance SME competitiveness when supported by appropriate infrastructure, skills development, and policy measures. Strengthening these enabling factors can help SMEs take greater advantage of digital opportunities and contribute more effectively to economic development.

Conclusion

This study examined the relationship between digitalization and small business competitiveness in developing economies. The findings indicate that digital technologies can significantly improve SME performance by increasing productivity, expanding market access, enhancing innovation, and strengthening business resilience. Digital tools such as e-commerce platforms, cloud computing, digital payment systems, and digital marketing solutions provide important opportunities for small businesses to compete more effectively in an increasingly digital environment.

At the same time, the study identified several challenges that continue to hinder SME digitalization, including limited digital skills, inadequate infrastructure, financial constraints, and cybersecurity concerns. Addressing these barriers requires supportive policies, investment in digital infrastructure, and capacity-building initiatives. Strengthening these enabling conditions can help SMEs maximize the benefits of digitalization and contribute more effectively to sustainable economic development in developing economies.





References:

1. Organisation for Economic Co-operation and Development (OECD). (2025). SME Digitalisation for Competitiveness: The 2025 OECD D4SME Survey. OECD SME and Entrepreneurship Papers. Paris: OECD Publishing.
2. Organisation for Economic Co-operation and Development (OECD). (2021). The Digital Transformation of SMEs. OECD Studies on SMEs and Entrepreneurship. Paris: OECD Publishing.
3. World Bank. (2022). Digitalizing SMEs to Boost Competitiveness. Washington, DC: World Bank.
4. United Nations Conference on Trade and Development (UNCTAD). (2025). Leveraging Digital Technologies for MSMEs' Integration into Regional Value and Supply Chains: The Cases of Ethiopia, Malawi, United Republic of Tanzania and Uganda. Geneva: United Nations.
5. World Bank. (2024). Digital Progress and Trends Report 2023. Washington, DC: World Bank.
6. OECD Digital for SMEs Global Initiative (D4SME). (2025). SMEs in the Digital Economy: Stakeholder Pledge. Paris: OECD.
7. OECD Digital for SMEs Global Initiative (D4SME). (2024). D4SME Global Initiative: Supporting SME Digitalisation. Paris: OECD.
8. Bianchini, M., & Lasheras Sancho, M. (2025). SME Digitalisation for Competitiveness: The 2025 OECD D4SME Survey. OECD SME and Entrepreneurship Papers. Paris: OECD Publishing..

