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Digitalization of the Economy and Its Impact on SME Competitiveness in Emerging Markets

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Abstract

Digitalization has become a critical driver of economic transformation, particularly in emerging markets where small and medium enterprises (SMEs) play a central role in economic development. This study aims to analyze the impact of digitalization on SME competitiveness by synthesizing empirical evidence from recent academic literature. The research adopts a qualitative systematic literature review approach, examining peer-reviewed journal articles published between 2023 and 2025. The findings indicate that digitalization significantly enhances SME competitiveness through improved operational efficiency, market expansion, innovation capability, and customer engagement. However, structural barriers such as limited digital infrastructure, low digital literacy, and regulatory constraints hinder optimal adoption. The study also finds that digital strategy and innovation act as mediating factors that strengthen the relationship between digital adoption and firm performance. The results highlight the importance of integrated policy frameworks and strategic digital capabilities in fostering sustainable competitive advantages. This research contributes to the literature by providing a comprehensive synthesis of digital transformation impacts in emerging economies and offers practical implications for policymakers and SME stakeholders.

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Introduction

Digitalization has emerged as a central driver of economic transformation in the twenty-first century. It reshapes how firms create value, interact with customers, and compete in both domestic and global markets. In emerging economies, this transformation holds particular significance because small and medium enterprises (SMEs) dominate the economic structure and contribute substantially to employment and income generation. SMEs often operate with limited resources and face structural constraints, yet digital technologies offer new opportunities to overcome these limitations. Digital transformation enables SMEs to improve efficiency, reduce transaction costs, and expand market access through digital platforms (Schafer et al., 2023). As a result, digitalization is increasingly viewed as a strategic tool to strengthen SME competitiveness in dynamic and uncertain market environments.

The rapid diffusion of digital technologies such as cloud computing, e-commerce platforms, and data analytics has altered traditional business models. SMEs are no longer confined to local markets, as digital tools enable them to reach broader customer segments and engage in cross-border transactions. Empirical evidence shows that digitalization enhances operational efficiency and customer engagement, which are critical components of firm competitiveness (Jalan, 2025; Dankwa & Yeboah, 2024). Moreover, digital platforms facilitate real-time communication and data-driven decision-making, allowing SMEs to respond more quickly to changes in consumer preferences and market conditions. This shift highlights the increasing importance of digital capabilities as a determinant of business success in emerging markets.

In addition to operational benefits, digitalization contributes to financial performance and productivity growth. Studies indicate that firms adopting digital technologies experience improved sales performance, higher productivity, and more efficient resource allocation (Luu et al., 2023). These improvements occur without necessarily increasing total costs, which makes digitalization an attractive strategy for SMEs with limited financial capacity. Digital tools also support process automation and supply chain integration, which further enhance efficiency and competitiveness. Therefore, digital transformation is not only a technological shift but also a strategic approach that influences multiple dimensions of firm performance.

However, the adoption of digital technologies among SMEs in emerging markets remains uneven. Structural barriers continue to limit the extent to which SMEs can benefit from digital transformation. Infrastructure limitations, including inadequate internet connectivity and technological access, hinder the implementation of digital solutions (Kang, 2024). In addition, many SMEs face challenges related to digital literacy and skill gaps, which restrict their ability to effectively utilize digital tools. Financial constraints and regulatory complexities further complicate the adoption process (Nazaruddin et al., 2024). These challenges create disparities in digital readiness and contribute to unequal competitive outcomes among SMEs.

The existing literature also highlights the role of digital strategy and innovation in enhancing SME competitiveness. Digital transformation does not automatically lead to improved performance unless it is supported by appropriate strategic orientation and organizational capabilities. Research by Díaz-Pelaez et al. (2024) demonstrates that digital strategy significantly influences SME performance, with innovation acting as a mediating factor. This finding suggests that SMEs must integrate digital technologies into their broader strategic framework to achieve optimal results. Similarly, Al-Omush et al. (2023) emphasize that digital culture and organizational readiness play a critical role in translating digital investments into sustainable competitive advantages. These insights indicate that digital transformation requires alignment between technology, strategy, and organizational processes.

Furthermore, digitalization enhances SME resilience in the face of economic uncertainty and external shocks. During periods of crisis, firms with strong digital capabilities are better positioned to maintain operations and adapt to changing market conditions. Digital platforms enable continuity of business activities through online transactions and remote operations, reducing the impact of disruptions. Empirical findings show that digital adoption supports business sustainability and long-term growth by increasing flexibility and adaptability (Hoang et al., 2025). This resilience is particularly important in emerging markets, where economic volatility and institutional challenges are more pronounced.

Despite the growing body of research on digital transformation, several gaps remain. Many studies focus on specific aspects of digitalization, such as technology adoption or financial performance, without providing a comprehensive analysis of its impact on SME competitiveness. In addition, existing research often concentrates on particular regions or industries, limiting the generalizability of findings. There is also limited integration of key variables such as digital strategy, innovation, and external constraints within a

unified analytical framework. As a result, the current literature lacks a holistic understanding of how digitalization influences SME competitiveness in emerging markets.

Another important gap relates to the interaction between internal and external factors in the digital transformation process. While internal capabilities such as digital skills and strategic orientation are critical, external factors including infrastructure, policy environment, and market conditions also play a significant role. Studies indicate that government support and institutional frameworks are essential in facilitating digital adoption among SMEs (Aguado Lingan et al., 2025). However, the extent to which these external factors interact with firm-level capabilities remains underexplored. Addressing this gap is crucial for developing effective policies and strategies that promote inclusive digital transformation.

Given these gaps, there is a need for a systematic and integrative analysis of digitalization and its impact on SME competitiveness in emerging markets. This study aims to synthesize recent empirical findings to identify key drivers, challenges, and outcomes of digital transformation. By integrating evidence from multiple studies, this research seeks to provide a comprehensive understanding of how digitalization influences SME performance and competitive advantage. The study also examines the role of mediating factors such as innovation and digital strategy, as well as moderating factors such as infrastructure and policy support.

The contribution of this study is both theoretical and practical. From a theoretical perspective, the study enriches the literature by providing a structured synthesis of digital transformation and SME competitiveness. It highlights the interconnected roles of technology, strategy, and institutional factors in shaping competitive outcomes. From a practical perspective, the findings offer insights for policymakers and business practitioners. Policymakers can use the results to design targeted interventions that address structural barriers and promote digital inclusion. SME managers can leverage the insights to develop effective digital strategies and enhance organizational capabilities.

In conclusion, digitalization represents a critical pathway for enhancing SME competitiveness in emerging markets. However, its impact depends on the ability of firms to integrate digital technologies into their strategic and operational frameworks. By addressing existing gaps and providing a comprehensive analysis, this study aims to contribute to the development of more effective strategies and policies that support SME growth in the digital economy.

Methods

Research Design

This study employs a qualitative research design using a systematic literature review approach. The design focuses on synthesizing empirical findings related to digitalization and SME competitiveness in emerging markets. A systematic approach ensures that the review process is transparent, replicable, and free from selection bias. The study follows a structured protocol that includes identification, screening, eligibility assessment, and final inclusion of relevant articles. This design is appropriate because the study aims to integrate existing knowledge rather than generate primary data.

Data Sources and Selection Criteria

The data consist of peer-reviewed journal articles and selected academic publications included in the reference list of this study. All sources were published between 2023 and 2025 to ensure relevance and up-to-date analysis. The selection process used specific inclusion criteria. First, the articles must focus on digitalization, digital transformation, or digital technology adoption. Second, the studies must examine SMEs or MSMEs within emerging market contexts. Third, the articles must provide empirical or systematic evidence on competitiveness, performance, innovation, or related outcomes.

Studies that did not meet these criteria were excluded. For example, articles without a clear focus on SMEs or those lacking empirical discussion were not included in the synthesis. This filtering process resulted in a final dataset of 25 articles, including studies by Schafer et al. (2023), Jalan (2025), Luu et al. (2023), Díaz-Pelaez et al. (2024), and Hoang et al. (2025), among others. These studies represent diverse geographical contexts and methodological approaches, which strengthens the robustness of the analysis.

Data Collection Procedure

The data collection process was conducted through a structured review of the selected articles. Each article was examined in detail to extract relevant information. The key elements collected include research objectives, methods, variables, findings, and conclusions. The process also involved identifying patterns related to digital adoption, innovation, operational efficiency, market expansion, and external constraints.

To ensure consistency, the researcher used a standardized extraction format. This format allows for systematic comparison across studies. The extraction process focused on capturing both direct findings and implicit relationships between variables. For example, studies that discuss the mediating role of innovation in digital transformation were categorized accordingly (Díaz-Pelaez et al., 2024; Al-Omush et al., 2023).

Data Analysis Technique

The study applies thematic analysis to interpret the collected data. Thematic analysis involves identifying, organizing, and analyzing recurring patterns across the selected literature. The analysis was conducted in three stages. First, open coding was used to identify key concepts such as digital capability, innovation, performance, and barriers. Second, these concepts were grouped into broader themes, including operational efficiency, market expansion, strategic agility, and structural constraints. Third, relationships between themes were analyzed to develop a coherent analytical framework.

This approach allows the study to move beyond descriptive summaries and provide deeper analytical insights. For example, the analysis identifies how digital strategy influences performance through innovation and how external constraints moderate this relationship. The findings are then compared across studies to ensure consistency and validity.

Validity and Reliability

To ensure validity, the study relies on multiple sources and cross-references findings across different articles. Triangulation is applied by comparing results from various studies that examine similar variables. This approach reduces the risk of bias and strengthens the credibility of the conclusions. For instance, findings related to the impact of digitalization on operational efficiency are consistently supported by multiple studies (Khan & Siddiqui, 2023; Dimoso & Utonga, 2024).

Reliability is ensured through the use of a structured review protocol and consistent data extraction procedures. The study maintains transparency in the selection and analysis process, which allows other researchers to replicate the methodology. In addition, the use of recent and peer-reviewed sources enhances the overall quality and reliability of the findings.

Research Limitations

This study acknowledges several limitations. First, the analysis is limited to secondary data from published literature. As a result, the findings depend on the scope and quality of the selected studies. Second, variations in research methods and contexts across the articles may affect comparability. Third, the study focuses on emerging markets in general, which may overlook country-specific dynamics.

Despite these limitations, the systematic approach and comprehensive selection of sources provide a reliable basis for analysis. The study offers a robust synthesis of current knowledge and identifies key patterns that are relevant for both academic research and practical application.

Results and Discussion

The synthesis of 25 empirical studies reveals a consistent pattern. Digitalization strengthens SME competitiveness through four main dimensions: operational efficiency, market expansion, innovation capability, and strategic agility. Most studies report that SMEs adopting digital tools achieve measurable improvements in productivity and cost efficiency. For example, process automation and digital integration reduce operational delays and transaction costs (Khan & Siddiqui, 2023; Dimoso & Utonga, 2024). These findings confirm that digitalization directly affects internal efficiency, which becomes the foundation of competitive advantage in resource-constrained environments.

To clarify the empirical patterns, Table 1 summarizes the key findings across the reviewed studies.

Table 1. Synthesis of Empirical Findings on Digitalization and SME Competitiveness

Dimension	Key Findings	Supporting Studies
Operational Efficiency	Reduced costs, improved productivity, process automation	Khan & Siddiqui (2023); Dimoso & Utonga (2024)
Market Expansion	Wider customer reach, e-commerce growth, global access	Rampaul (2025); Tunio & Tunio (2025)
Innovation Capability	Product and process innovation, digital-driven differentiation	Díaz-Pelaez et al. (2024); Al-Omush et al. (2023)
Strategic Agility	Faster response to market change, adaptive decision-making	Jemmy (2025); Hoang et al. (2025)
Structural Barriers	Infrastructure gaps, low digital literacy, financial constraints	Kang (2024); Nazaruddin et al. (2024)

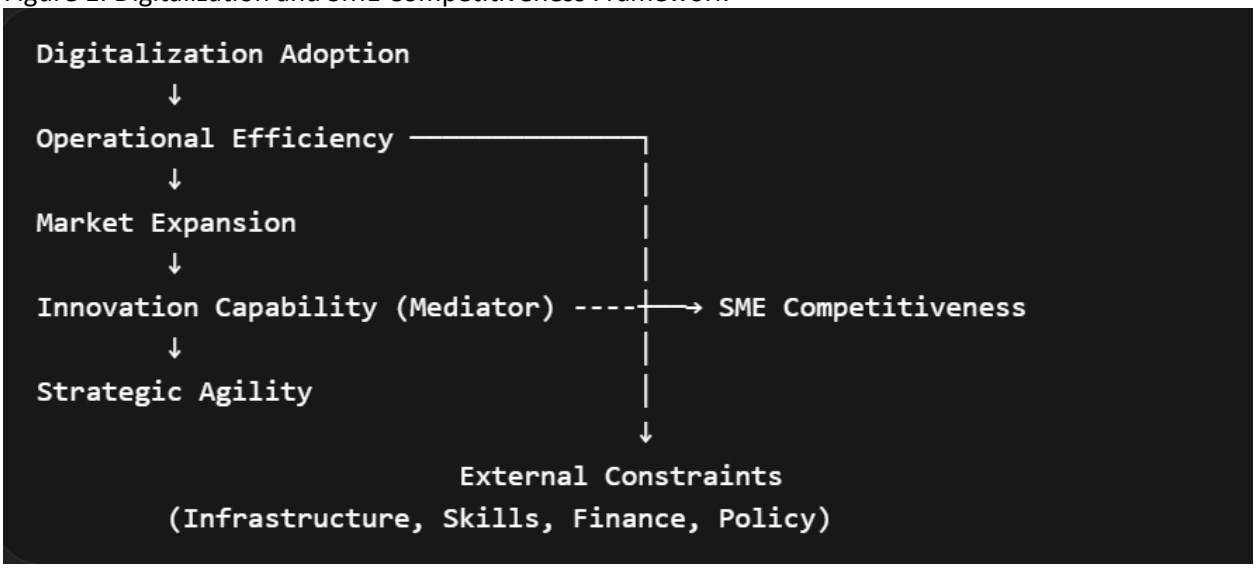
The second major finding relates to market expansion. Digital platforms allow SMEs to overcome geographical limitations and access broader markets. E-commerce adoption increases sales channels and reduces dependency on physical distribution systems (Rampaul, 2025). In addition, digital marketing enhances customer targeting and engagement, which improves conversion rates and customer retention (Tunio & Tunio, 2025). This result aligns with competitiveness theory, where market access and customer interaction are key drivers of firm performance. The evidence shows that SMEs with higher digital adoption achieve stronger market positioning compared to those relying on traditional methods.

Innovation emerges as a critical mediating factor. Digitalization alone does not guarantee improved performance. Firms must integrate digital tools into their innovation processes. Studies indicate that digital strategy significantly influences SME performance through innovation mechanisms (Díaz-Pelaez et al., 2024). Digital tools support rapid prototyping, product customization, and service improvement. Furthermore, organizational culture plays a role in enabling innovation outcomes (Al-Omush et al., 2023). SMEs that align digital adoption with innovation strategy achieve stronger differentiation and long-term competitiveness. This finding confirms that digital transformation is both a technological and strategic process.

However, the results also highlight persistent structural challenges. Limited infrastructure, low digital literacy, and restricted access to finance remain major constraints (Kang, 2024; Nazaruddin et al., 2024). These barriers reduce the effectiveness of digital adoption and create inequality among SMEs. Firms in regions with better digital ecosystems benefit more from digitalization, while others lag behind. In addition, regulatory uncertainty and weak institutional support slow down digital transformation (Aguado Lingan et al., 2025). These findings indicate that external factors moderate the relationship between digitalization and competitiveness.

To illustrate the relationship between key variables, Figure 1 presents a conceptual diagram based on empirical findings.

Figure 1. Digitalization and SME Competitiveness Framework



The final finding emphasizes the role of digital capability and leadership. SMEs with strong digital skills and strategic orientation show higher performance outcomes (Hoang et al., 2025). Leadership commitment influences the success of digital transformation by shaping organizational readiness and resource allocation. This result supports the view that human capital and managerial capability are critical success factors. Without adequate skills and leadership support, digital investments fail to produce optimal results.

Overall, the discussion confirms that digitalization has a significant and multidimensional impact on SME competitiveness. The effect is not linear but depends on the interaction between internal capabilities and external conditions. SMEs that combine digital adoption with innovation and strategic alignment achieve stronger and more sustainable competitive advantages.

Conclusion

This study confirms that digitalization plays a critical role in strengthening SME competitiveness in emerging markets. The findings show that digital adoption improves operational efficiency, expands market access, enhances innovation capability, and increases strategic agility. These dimensions collectively shape the ability of SMEs to compete in dynamic and technology-driven environments. Digital tools enable firms to optimize internal processes, reach broader customer segments, and respond quickly to market changes, which are essential elements of sustainable competitive advantage.

However, the impact of digitalization is not uniform across all SMEs. Structural barriers such as limited digital infrastructure, low levels of digital literacy, and restricted access to financial resources reduce the effectiveness of digital transformation. In addition, regulatory challenges and uneven institutional support further constrain adoption. These factors indicate that digitalization alone is not sufficient. SMEs must align technology adoption with strong digital strategies, innovation practices, and organizational readiness to achieve optimal outcomes.

The study also highlights the importance of innovation as a mediating factor and external conditions as moderating factors in the relationship between digitalization and competitiveness. SMEs that integrate digital tools into their innovation processes and develop internal capabilities show stronger performance. At the same time, supportive policy environments and infrastructure development are necessary to ensure inclusive digital growth.

This research provides practical implications for policymakers and SME practitioners. Governments should prioritize digital infrastructure development, improve digital literacy programs, and expand access to financing. SME managers should focus on building digital capabilities and aligning digital initiatives with business strategies. Future research should examine country-specific dynamics and apply empirical models to test the relationships identified in this study.

References

Aguado Lingan, A. M., Tejada Estrada, G. C., & Pérez-Arboleda, P. A. (2025). Economía digital y transformación empresarial en mercados emergentes. *Revista Venezolana de Gerencia, 30*(112), 1–15. https://doi.org/10.52080/rvgluz.30.112.6

Al-Omush, A. M., Momany, M. T., & Hannoon, A. (2023). Digitalization and sustainable competitive performance in small–medium enterprises: A moderation mediation model. *Sustainability, 15*(21), 15668. https://doi.org/10.3390/su152115668

Anisah, H. U., Friska, N. L., & Hidayatullah, M. (2024). Dampak digitalisasi terhadap pertumbuhan UMKM di negara berkembang. *Jurnal Riset Ilmu Manajemen Widyakarya, 2*(4), 1–10. https://doi.org/10.59581/jrim-widyakarya.v2i4.4157

Chabalala, K., Boyana, S., Kolisi, L., et al. (2024). Digital technologies and channels for competitive advantage in SMEs: A systematic review. *Preprints*, 2024100020, 1–20. https://doi.org/10.20944/preprints202410.0020.v1

Dankwa, D. D., & Yeboah, J. (2024). Digitalization, customer engagement, and performance of small and medium enterprises: Emerging market context. *Taylor & Francis*, 1–12. https://doi.org/10.1201/9781003560449-2

Díaz-Pelaez, A., Chura-Quispe, G., & Clemente-Almendros, J. A. (2024). Analysing the influence of digital strategy and innovation on MSMEs' performance in emerging countries. *Creativity and Innovation Management, 33*(4), 1–15. https://doi.org/10.1111/caim.12642

Dimoso, R. L., & Utonga, D. (2024). A systematic review of digital technology adoption in small and medium-sized enterprises: Implications for performance in developing countries. *International Journal of Development and Management Review, 19*(1), 1–12. https://doi.org/10.4314/ijdmr.v19i1.4

Hoang, D. V., Hien, N. T., Thang, H. V., et al. (2025). Digital capabilities and sustainable competitive advantages: The case of emerging market manufacturing SMEs. *SAGE Open, 15*(2), 1–12. https://doi.org/10.1177/21582440251329967

Jalan, T. (2025). The impact of digital transformation on small and medium enterprises in emerging markets. *International Journal of Information Technology and Management, 24*(1), 1–12. https://doi.org/10.29070/1r0pgy11

Jemmy, J. (2025). Strategic agility in SMEs: How digital transformation shapes competitive advantage in emerging market. *Trends in Business Research, 1*(2), 1–10. https://doi.org/10.63985/ttbr.v1i2.14

Kang, W. (2024). A systematic review: Bridging the digital divide in SME digitalization. *ATOM Journal, 1*(1), 1–12. https://doi.org/10.62594/atom0002

Khan, M. E., & Siddiqui, M. Z. (2023). Evaluating the impact of digital transformation & innovation management strategies on SMEs performance in the emerging economies. *Journal of Sustainable Social Development, 2*(2), 297–305. https://doi.org/10.53664/jssd/02-02-2023-14-297-305

Luu, H. N., Le, D. D., & Nam, V. H. (2023). The impact of digitalization on the financial performance of small- and medium-size enterprises: Empirical evidence from an emerging economy. *International Journal of Information Technology and Decision Making, 22*(3), 1–20. https://doi.org/10.1142/s0219622023500268

Majidah, S. A., & Noer, L. R. (2025). Trends in digital adoption for enhancing the global performance of SMEs: A bibliometric analysis. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam, 6*(9), 1–12. https://doi.org/10.47467/elmal.v6i9.8651

Mayanja, S. N. (2025). Digitization and digitalization in the MSME sector: Success stories and challenges from emergent countries. *International Journal of Small and Medium Enterprises and Business Sustainability, 9*(2), 1–15. https://doi.org/10.25105/ijsmebs.v9i2.24210

Nazaruddin, I., Utami, E. R., & Rahmawati, E. (2024). Digitalization challenges for SMEs: A systematic literature review perspective and future research. *Jurnal Bisnis Teori dan Implementasi, 15*(1), 1–12. https://doi.org/10.18196/jbti.v15i1.20410

Rampaul, K. (2025). Digital transformation and SME growth in emerging markets. *Journal of Emerging Markets Management, 1*(1), 1–10. https://doi.org/10.63385/jemm.v1i1.35

Schafer, L., Bauer, L., & Schäfer, C. (2023). The role of digital transformation in enhancing SMEs' competitiveness in emerging economies. *Proceedings of the International Conference on Economics and Business, 2*(1), 1–10. https://doi.org/10.55606/iceb.v2i1.482

Sidhwa, B., Hamid, M. O., & Mueenuddin, D. (2024). The impact of digital transformation on small and medium enterprises (SMEs) performance: A comparative analysis. *Proceedings of the International Conference on Economics and Business, 3*(1), 1–12. https://doi.org/10.55606/iceb.v3i1.469

Tariq, M. U. (2024). Innovative strategies for enhancing SME competitiveness in emerging economies. In *Advances in Business Strategy and Competitive Advantage* (pp. 1–15). IGI Global. https://doi.org/10.4018/979-8-3693-4046-2.ch007

Tunio, M. N., & Tunio, S. (2025). Navigating digital transformation: A systematic review of SMEs' transitions and growth in the digital age. *Sukkur IBA Journal of Management and Business, 12*(1), 1–12. https://doi.org/10.30537/sijmb.v11i2.1509