



East African Journal of Business and Economics

eajbe.eanso.org

Volume 7, Issue 1, 2024

Print ISSN: 2707-4250 | Online ISSN: 2707-4269

Title DOI: <https://doi.org/10.37284/2707-4269>

ENSO
EAST AFRICAN
NATURE &
SCIENCE
ORGANIZATION

Original Article

Digital Capability and Performance of Micro, Small, and Medium-Scale Enterprises: A Review

Joy Kibor^{1*}

¹ Kenyatta University, P. O. Box 43844-00100. Nairobi, Kenya.

* Correspondence ORCID ID: <https://orcid.org/0000-0001-8060-5779>; Email: joycheropk@gmail.com

Article DOI: <https://doi.org/10.37284/eajbe.7.1.1810>

Date Published: ABSTRACT

09 March 2024 Digital Capability is considered one of the cardinal strategies that MSMEs can adopt to enhance their competitiveness and improve performance.

Keywords: However, several business enterprises continue to experience various setbacks, such as poor performance and slow growth, where almost 70 percent of SMEs close their businesses before their third year in operation.

Digital Capability, Organizational Competence, Organizational Performance, Micro, Small and Medium Enterprises This may be attributed to an unfavorable business environment and rapid technological changes, requiring an equal and efficient change in business strategy. This paper, therefore, sought to assess the effect of digital capability on the performance of micro, small, and medium enterprises. Specifically, the study aimed to evaluate the influence of digital infrastructure, organization competency, and digital operations on the performance of Micro, Small, and medium-scale enterprises. The study adopted a qualitative survey design where the scholar did a literature search on different online databases, mainly Google Scholar, EBSCO, and Science Direct. The study was desk research, which involved reviewing academic journals, scholarly articles, and published research. The findings indicated that digital infrastructure, organization competency, and digital operations significantly positively affected the performance of micro, small, and medium enterprises. The study recommended that further studies be carried out using quantitative techniques to assess further the relationship between digital capability and the business sustainability of MSMEs.

APA CITATION

Kibor, J. (2024). Digital Capability and Performance of Micro, Small, and Medium-Scale Enterprises: A Review *East African Journal of Business and Economics*, 7(1), 83-87. <https://doi.org/10.37284/eajbe.7.1.1810>

CHICAGO CITATION

Kibor, Joy. 2024. "Digital Capability and Performance of Micro, Small, and Medium-Scale Enterprises: A Review". *East African Journal of Business and Economics* 7 (1), 83-87. <https://doi.org/10.37284/eajbe.7.1.1810>.

HARVARD CITATION

Kibor, J. (2024) "Digital Capability and Performance of Micro, Small, and Medium-Scale Enterprises: A Review", *East African Journal of Business and Economics*, 7(1), pp. 83-87. doi: 10.37284/eajbe.7.1.1810.

IEEE CITATION

J., Kibor "Digital Capability and Performance of Micro, Small, and Medium-Scale Enterprises: A Review", *EAJBE*, vol. 7, no. 1, pp. 83-87, Mar. 2024.

MLA CITATION

Kibor, Joy. "Digital Capability and Performance of Micro, Small, and Medium-Scale Enterprises: A Review". *East African Journal of Business and Economics*, Vol. 7, no. 1, Mar. 2024, pp. 83-87, doi:10.37284/eajbe.7.1.1810.

INTRODUCTION

Micro, small, and medium enterprises play a significant role in the economic development of many countries. The sector has been recognized as the most significant contributor to the gross domestic product. The sector contributes 60% to GDP in China and Japan, 65% in the United States of America (USA) and 52% in the United Arab Emirates (UAE). For countries with a low per capita income, the MSMEs have provided jobs to at least 78% of the employable population compared to 59% for countries with larger per capita income (Kawira et al., 2019). Regionally, the micro, small, and medium enterprises (MSMEs) constitute 90% of business operations and contribute over 50% to the continent's GDP and employment for millions of people. The sector is estimated to have created employment for over 14.9 million people, and the value of output from the MSMEs is estimated to be Kshs 3,369.1 Billion.

Optimum performance of the MSME sector is thus critical for the economic well-being of a nation as it plays a key role in job creation, advancing creativity, innovativeness, and improved living standards. This has led to the developing of an industrial base at different levels (Lehman et al. 2020). According to Roy and Roy (2019), the emergence of new technologies has disrupted the conventional way of doing business by MSMEs, SMEs, and even big organizations. The emergence of technologies such as Big Data Analytics, the Internet of Things, Robotics, and cloud computing has led to enhanced service delivery, a better understanding of customer needs, and an increased ability to understand the changes in the business environment.

Despite the irrefutable advantages of emerging technologies and innovations, small business organizations are challenged to identify, develop, and utilize these technologies (Buteau, 2021). According to Nabeel-Rehman and Nazri (2019), the success rate of organizations adopting these

technologies in achieving maximum profitability benefits and sustained competitiveness stands at 30%. This has been attributed to a lack of sufficient capital as the technologies require massive capital investment, a lack of transformational leadership ability in organizations, and poor re-alignment of business processes to emerging technologies (Al Mamun, 2018). Zhe and Hamid (2021) contend that for organizations to remain competitive, they should develop digital capabilities to develop new products and new markets and enhance efficiency in business processes to cut costs and increase revenues.

According to Zhe and Hamid (2021), digital capability is the organization's ability to assemble and execute information technology-based tools with other organizations' resources. Businesses that successfully manage information technology tools can collect customers' information and exchange technical expertise, improving business operations. Previous studies have established that organizations with superior digital capabilities have an unmatched competitive advantage over their rivals. However, most organizations have challenges in developing effective digital infrastructure, ideal organizational competency, and efficient digital operations.

Digital infrastructure refers to developing the organization's shared platforms, such as websites, social media, other online platforms, computers, and communication technologies (Flensburg & Lai, 2020). Cueto et al. (2022) and Kawira (2021) established that social media platforms, the internet, and mobile phones contribute to the performance of MSMEs. On the contrary, Onileowo and Fasiku (2021) indicated that communication technologies do not influence the performance of MSMEs.

Kimani (2017) argues that for organizations to manage digital capabilities effectively, they must develop organizational competencies to manage business processes. These competencies include

the ability of the organization to invest in developing digital technologies, personnel development, and business strategies aligned to the adoption of innovative technologies. Hagin and Caesar (2021) and Kimani (2017) indicated that finance resources were key in improving MSMEs' performance. However, according to Yacob et al. (2021), resource capabilities did not affect MSMEs' performance in Indonesia.

Finally, organizations should have effective digital operations to enhance digital acquisition and information sharing, enable easy digital integration, and adopt digital capabilities relationship structures. According to Nabeel-Rehman and Nazri (2019), digital integration influences MSMEs' performances in Pakistan. This has been supported by Cariolle and Carroll (2020), who found that data acquisition and information sharing significantly affected the performance of MSMEs. Buteau (2021) indicated that the performance of MSMEs was not affected by digital support from the government.

LITERATURE REVIEW

Digital Infrastructure and Performance of Micro, Small, and Medium-Scale Enterprises

This digital technology provides the foundation for businesses' information technology. This includes broadband, internet backbone, mobile telecommunications, and digital communication (Flensburg & Lai, 2020). Digital capability and performance of micro, small, and medium-scale enterprises (MSMEs) can be enhanced by using information and communication technology (ICT). The limitations and challenges of ICT adoption on MSMEs' performance include inadequate access to ICT resources, lack of technical knowledge, and poor government policies (Onileowo & Fasiku, 2021). A study by Cueto et al. (2022) on the role of information infrastructure on MSMEs performance in Philippians found that the presence of digital infrastructures, such as internet access, computer hardware, and software, are important factors that can affect the performance of micro, small, and medium-scale enterprises (MSMEs).

Onileowo and Fasiku (2021) explored the adoption of information communication technology on the performance of micro, small, and medium enterprises in Nigeria. They established that information communication technologies had an insignificant effect on the performance of the MSMEs. An assessment of the impact of entrepreneurial marketing on MSMEs' performance in Kenya by Kawira (2021) established that social media platforms, the internet, and mobile phones increased the performance of the MSMEs. This study was carried out using a descriptive survey design with a target population of 8526 MSMEs in the county of Tharaka-Nithi.

Siololo (2022) argued that digitalization positively affects firm revenue growth in Kenya. He argued that digital capabilities, such as ability in accessing new markets, increasing efficiency, and reducing transaction costs, can help Micro, Small, and Medium Scale Enterprises (MSMEs) increase their revenues. Additionally, the study noted that digital capabilities can improve customer service and satisfaction, leading to increased sales and profits.

Organization Competency and Performance of Micro, Small, and Medium-Scale Enterprises

Yacob et al. (2021) conducted a study to assess the effect of resource capability on micro, small, and medium enterprises' performance in Indonesia. The study focused on the effect of resource capabilities, social commerce, and competitive advantages on MSMEs. It was discovered that the digital capability and performance of micro, small, and medium-scale enterprises (MSMEs) in Indonesia can be improved through greater utilization of social commerce and the unique resource capabilities of MSMEs. The authors suggest that by taking advantage of the digital capabilities and resource uniqueness of MSMEs, the performance of these businesses can be improved.

Hagin and Caesar (2021) examined the impact of technological capabilities on small and medium-sized enterprises' performance in Ghana. The study found that MSMEs with higher levels of

digital capability and performance had better financial performance and greater growth opportunities. The study also identified several factors that influence digital capability and performance, such as access to financing, the availability of digital infrastructure, and the level of digital literacy among MSME owners.

Kimani (2017) sought to assess the effect of organizational capability on SME performance in Nairobi County. The study examined how various organizational capabilities, such as technology adoption, use of digital tools, and organizational culture, can affect MSMEs' performance. It maintained that the digital capabilities of MSMEs can be improved through digital tools and strategies, and that this can positively impact their business performance.

Digital Operations and Performance of Micro, Small, and Medium-Scale Enterprises

A digital operation is a technology that infuses business processes with intelligence, agility, and automation to create an operational model that will improve the organization's performance (Nabeel-Rehman & Nazri, 2019). Buteau (2021) examined the government's contributions to providing digital technology to foster MSME growth in India. The study employed a survey research design. It argued that digital technology can help MSMEs increase their performance and capabilities through improved market access, productivity, and better customer service. The study also identified a number of challenges associated with implementing digital technology in MSMEs, such as inadequate access to digital infrastructure, lack of awareness, and lack of financial resources.

Cariolle and Carroll (2020) explored the role of digital acquisition and information sharing on MSMEs' performance in Sub-Saharan Africa. The study indicated that data acquisition and information sharing significantly affected performance. The study concluded that MSMEs must be equipped with digital acquisition knowledge to ensure effective use of the technology. Leila (2021) investigated the effect of ICT adoption on the growth of MSMEs in

Samburu County, Kenya. The study maintained that the implementation of county government strategies can have a positive effect on the growth of MSMEs in Samburu County. Specifically, the study found that county government strategies such as providing financial support, training and capacity building, business environment conducive to MSMEs, and access to market and technology significantly influence the performance and digital capability of MSMEs in the county.

Phiri (2020) explored the digital marketing resources, capabilities, and market performance of small to medium agro-processors. The results of the study revealed that digital resources and capabilities had a positive impact on market performance. The findings also suggested that digital marketing resources and capabilities could be used to enhance the performance of small to medium agro-processors in their respective markets. Furthermore, the study concluded that digital marketing resources and capabilities were important tools for improving the performance of these enterprises.

DISCUSSION AND CONCLUSION

The researcher argues that MSMEs with access to digital capabilities and resources have an advantage in terms of their performance compared to those without such access. Digital infrastructure contributed to increased sales and profits, as well as decreased costs and customer complaints. Moreover, investments in digital infrastructures promote improved performance of MSMEs. This argument is potentially linked to many propositions by Cueto et al. (2022) and Onileowo and Fasiku (2021). The adoption of ICT has the potential to improve the performance of MSMEs, but more efforts should be made to reduce the limitations and challenges associated with ICT adoption. Furthermore, digital capabilities can increase market potential by reducing entry barriers and fostering innovation, making MSMEs manage their resources better and improve their performance.

Organizations should also focus on developing the right skills to leverage digital technologies. This

includes training staff on digital technologies, developing a digital strategy, and building an innovation culture. To ensure that MSMEs can access the right digital technology, they should partner with technology providers, such as cloud providers and software companies. Existing literature explores the idea that MSMEs should focus on using digital capabilities and their unique resources to improve their performance and increase their market share. To take advantage of digital capabilities and unique resources, MSMEs should develop strategies to integrate social commerce into their operations to improve their performance and potentially increase their market share (Yacob et al., 2021). Moreover, based on the reviewed literature, policymakers must increase access to digital capabilities and performance among MSMEs to enhance their success (Hagin & Caesar, 2021). This research findings also indicated that financial resources significantly affected SME growth. It can, therefore, be argued that healthy financial resources strongly enhance the growth of SMEs (Kimani, 2017).

Digital operations and performance can be achieved using various digital tools, such as cloud computing, artificial intelligence, analytics, and blockchain. These tools can help MSMEs to streamline their operations, improve customer experience, and find new markets for their products and services. Additionally, using digital tools can help MSMEs reduce costs, improve productivity, and develop innovative products and services. In addition to using digital tools, MSMEs should also focus on developing a digital strategy that includes a customer-centric approach, an agile business model, and an effective data analytics program. According to this research, MSMEs should be encouraged to share information and acquire inputs to increase their performance (Leila, 2021). This will help MSMEs better understand customer needs, develop customer-centric strategies, and develop innovative products and services. Digital support from the government significantly affects the performance of MSMEs by providing easy digital ecosystems that foster end-to-end solutions for MSMEs (Buteau, 2021). It was also noted that

acquiring ICT inputs and information sharing on ICT enhanced MSMEs' growth.

In conclusion, the empirical analysis carried out by this study established that most of the studies found that digital capability had a strong, positive, and significant influence on business sustainability regardless of the economic sector. However, some of the findings were inconsistent, thus requiring further research on the relationship between the studied variables. For instance, a study on digital infrastructure and the performance of MSMEs carried out by Cueto et al. (2022) and Kawira (2021); established that social media platforms, the internet, and mobile phones increased the performance of the MSMEs. In contrast, Onileowo and Fasiku (2021) found that communication technologies had an insignificant effect on performance.

Equally, on the relationship between organization competency and business sustainability, a study by Hagin and Caesar (2021) and Kimani (2017) found that organization competency enhanced the performance of MSMEs, while that of Yacob et al. (2021) established that organizational competency had no effect on the performance of MSMEs. Based on the above findings, the study recommends that further studies be carried out using quantitative techniques to assess further the relationship between digital capability and the business sustainability of MSMEs. Further, organizations should also develop appropriate competencies and information technology capabilities to increase their competitiveness and performance, leading to sustainability. Finally, the study suggests a roadmap for implementing digital technology in MSMEs, including policies, funding, and training initiatives.

REFERENCES

- Al Mamun, A. (2018). Diffusion of innovation among Malaysian manufacturing SMEs. *European Journal of Innovation Management*, 21(1), 113 – 141.
- Buteau, S. (2021). Roadmap for digital technology to foster India's MSME ecosystem—opportunities and

- challenges. *CSI Transactions on ICT*, 9(4), 233-244.
- Cariolle, J., & Carroll, D. (2020). *Digital Technologies for Small and Medium Enterprises and job creation in Sub-Saharan Africa* (Doctoral dissertation, FERDI).
- Cueto, L. J., Frisnedi, A. F. D., Collera, R. B., Batac, K. I. T., & Agaton, C. B. (2022). Digital Innovations in msmes during economic disruptions: Experiences and challenges of young entrepreneurs. *Administrative Sciences*, 12(1), 8.
- Flensburg, S., & Lai, S. S. (2020). Mapping digital communication systems: Infrastructures, markets, and policies as regulatory forces. *Media, Culture & Society*, 42(5), 692-710.
- Hagin, C., & Caesar, L. D. (2021). The antecedents of success among small-and medium-sized enterprises: evidence from Ghana. *Journal of Global Entrepreneurship Research*, 1-19.
- Kawira, K. D. (2021). Effect of entrepreneurial marketing on the performance of micro, small and medium enterprises (MSMEs) in Kenya. *African Journal of Emerging Issues*, 3(1), 96-110.
- Kawira, K.D., Mukulu, E. & Odhiambo, R. (2019). Effect of Digital Marketing on the Performance of MSMES in Kenya. *Journal of Marketing & Communication* 2(1) 1-23.
- Kimani, K. K. (2017). *Assessment of Organizational Capabilities Affecting Performance of SME's in Nairobi County* (Doctoral dissertation, United States International University-Africa).
- Lehman, K., Fillis, I., & Miles, M. P. (2020). 23. The role of effectuation and entrepreneurial marketing in the creation of a new art venture. *Handbook of entrepreneurship and marketing*, 351.
- Leila, L. M. (2021). *Influence of County Government Implementation of Selected Strategies on Growth of Micro, Small and Medium Enterprises in Samburu County* (Doctoral dissertation, KeMU).
- Nabeel-Rehman, R., & Nazri, M. (2019). Information technology capabilities and SMEs performance: An understanding of a multi-mediation model for the manufacturing sector. *Interdisciplinary Journal of Information, Knowledge, and Management*, 14, 253.
- Onileowo, T. T., & Fasiku, A. I. (2021). The Concept and Application of ICT on SMEs performance in Nigeria: Limitation and Challenges. *e-Academia Journal*, 10(1).
- Phiri, M. (2020). Exploring digital marketing resources, capabilities and market performance of small to medium agro-processors. A conceptual model. *Journal of Business and Retail Management Research*, 14(2).
- Siololo, D. L. (2022). *Effect of Digitalization on Firm Revenue Growth in Kenya* (Doctoral dissertation, University of Nairobi).
- Yacob, S., Erida, E., Machpuddin, A., & Alamsyah, D. (2021). A model for the business performance of micro, small and medium enterprises: Perspective of social commerce and the uniqueness of resource capability in Indonesia. *Management Science Letters*, 11(1), 101-110.
- Zhe, B. O. M., & Hamid, N. A. (2021). The Impact of Digital Technology, Digital Capability and Digital Innovation on Small Business Performance. *Research in Management of Technology and Business*, 2(1), 499-509.