

Micro, Small and Medium Scale Enterprises Digitalisation Practices and Performance in Kogi State in Post COVID-19 Era

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Abstract

This study investigated the impact of digitalisation practices on the performance of Micro, Small, and Medium Enterprises (MSMEs) in Kogi State, Nigeria. A cross-sectional research design was used. The research population consisted of MSMEs located in Lokoja. A sample of two hundred (200) MSMEs was selected using convenience sampling to facilitate efficient data collection amidst the challenges posed by the dispersed nature of these enterprises. A structured questionnaire was employed to gather data on digitalisation practices: digital skills, digital infrastructure, social media marketing and digital payment systems, and MSMEs performance. Out of the 200 questionnaire administered, 185 responses were found to be valid for data analyses. Analysis of the data was conducted using descriptive statistics, correlation analysis and multiple regression analysis via SPSS software. The study found that MSMEs performance has a positive and significant relationship with digital infrastructure, social media marketing and digital payment system. However, the relationship between digital skills and MSMEs performance is positive but not statistically significant. It was recommended that MSMEs should prioritise investments in reliable digital infrastructure to ensure consistent Internet access and appropriate technological resources. This research contributes to the growing literature on digitalisation by providing insights for policymakers and MSME owners seeking to leverage digital technologies to improve business outcomes in Kogi State.

Keywords: Digital infrastructure, Digital payment systems, Digital skills, MSMEs performance, Social media marketing.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are widely recognised as essential drivers of economic development across the globe. In both developed and developing economies, MSMEs contribute significantly to economic growth, job creation, poverty reduction, and innovation (Okuwhere & Adekunle, 2023; Okuwhere, Huynh, Hoyte & Johnston, 2022a). MSMEs stimulate entrepreneurship, foster competition and enhance productivity to play a pivotal role in driving national and regional economic growth (Surya, Menne, Sabhan, Suriani, Abubakar & Idris, 2021). The agility of MSMEs to adapt to new inventions and technologies often grants them a competitive edge over larger organisations and makes them a vital engine of growth in developing economies (Okuwhere et al., 2022a).

In Nigeria, MSMEs form the backbone of the economy and contributing significantly to employment. The NBS/SMEDAN MSME 2021 survey report revealed that MSMEs contributed 46.32% to GDP, 6.21% to exports, made up 96.9% of businesses, and provided 87.9% of employment (PricewaterhouseCoopers (PwC) 2024). Despite their critical role, MSMEs in Nigeria face numerous challenges such as limited access to finance, poor infrastructure and inadequate technical skills. These constraints are further exacerbated in less developed regions like Kogi State where the business environment is characterised by inefficiencies, limited resources and infrastructural deficits. The COVID-19 pandemic also increased these challenges by forcing MSMEs to adapt to new business realities and embrace digitalisation to survive in the post-pandemic economy.

Digitalisation which is the integration of digital technologies into all areas of business (Broccardo, Zicari, Jabeen & Bhatti, 2023) has become a key factor in business sustainability and growth. It enables businesses to streamline operations, expand market reach, improve customer engagement and enhance overall performance (Okuwhere et al., 2022a). For MSMEs, digitalisation is particularly crucial in navigating the rapidly changing business landscape and guarantee long-term competitiveness. However, many MSMEs in Nigeria including those in Kogi State have been slow to adopt digital technologies. The reasons for this lag in digital adoption are caused by financial constraints and lack of infrastructure to low levels of digital literacy and resistance to change (Nwarize, 2023; Okuwhere, Huynh, Hoyte & Johnston, 2022b).

In the wake of the COVID-19 pandemic, the need for MSMEs to digitalise has become more urgent. The pandemic disrupted traditional business models with lockdowns and movement restrictions forcing businesses to shift towards digital platforms to reach customers and maintain operations. MSMEs that had embraced digital technologies were better positioned to weather the challenges of the pandemic while those that relied on traditional methods of operation faced significant disruptions. In Kogi State, the impact of the pandemic highlighted the vulnerabilities of MSMEs that had not yet embraced digitalisation and further showed the importance of adopting digital technologies in the post-COVID-19 era.

In light of these challenges, this study sought to address the gap in understanding how digitalisation practices affect MSME performance in Kogi State. This study empirically analysed how MSMEs digitalisation practices such as digital skills, digital infrastructure, social

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media marketing and digital payment system impact on MSME Performance in the State. The findings of this study would have important implications for policymakers, business owners and industry stakeholders in Kogi State and beyond to enhance MSME performance through digitalisation.

LITERATURE REVIEW

MSMEs Performance

In the post-COVID-19 era, the performance of micro, small and medium-scale enterprises (MSMEs) has become a critical area of focus due to their substantial contribution to the global economy. MSMEs are pivotal drivers of economic growth that fosters innovation and competition in virtually all sectors (Sahut & Peris-Ortiz, 2014). Their role in economic development is reflected in their ability to generate employment, create income, and improve trade balances thus contributing to both the economic and social progress of nations (Ribeiro-Soriano, 2017). As a key mechanism for revitalising economies, SMEs play a central role in income generation and job creation which are essential for national economic advancement (Okuwhere & Adekunle, 2023).

In the aftermath of the COVID-19 pandemic, the capacity for innovation has emerged as a crucial determinant of SME performance. Innovation through the adoption of new technologies enables MSMEs to keep pace with the evolving technological frontier and contribute to sustainable economic growth and development (Chege & Wang, 2020). However, the relatively small size of many MSMEs often presents challenges in fostering process and product innovations which are central to maintaining competitiveness in the modern market (Popa, Soto-Acosta & Martinez, 2017).

SME performance especially in the post-pandemic context can be assessed through various metrics such as the ability to meet sales targets, profitability and the achievement of other specific business objectives (Jevwegaga et al., 2018). A high degree of performance suggests that a business is thriving whereas underperformance may indicate structural or operational issues (Braune, Mahieux & Boncori, 2016). SMEs can refine their operations and promote innovative practices by achieving pre-determined marketing and business objectives which are essential for long-term sustainability (Lin & Lin, 2016).

During the COVID-19 pandemic, the ability of MSMEs to innovate became an essential factor in their survival and recovery. Many MSMEs quickly adapted by incorporating digital tools, e-commerce and new business models to navigate the challenges posed by the global health crisis. These innovative activities played a significant role in enhancing MSME performance during the pandemic and beyond (Okuwhere & Adekunle, 2023; Wang, Hong, Li & Gao, 2020). In the post-COVID-19 era, these innovative capabilities remain crucial as businesses continue to adapt to a rapidly changing environment marked by shifts in consumer behaviour, supply chain disruptions and increasing digitalisation.

MSMEs Digitalisation

In the post-COVID-19 era, the digitalisation of MSMEs has gained critical importance driven by the need for resilience and adaptability in a rapidly changing business landscape. Four key practices - digital skills, digital infrastructure, social media marketing, and digital payment systems have become instrumental in determining the performance and sustainability of MSMEs. This discussion explores each of these constructs, illustrating how they contribute to MSMEs' digital transformation and growth.

Digital Skills: Digital skills refer to the capabilities required to effectively use digital technologies in business processes (Shakina, Parshakov & Alsufiev, 2021). The post-pandemic era has witnessed an accelerated shift towards digital platforms making digital literacy a crucial factor for MSMEs. According to Matarazzo et al. (2021), digital transformation enables enterprises to improve efficiency and innovate, but this process depends largely on the ability of the workforce to harness digital tools. In the case of Nigerian MSMEs, many employees and business owners face a digital skills gap which inhibits their ability to fully exploit digital opportunities (Olayinka & Wynn, 2022). The need for training in areas such as e-commerce, data analytics and digital marketing has become paramount. Without adequate digital skills, MSMEs risk falling behind in a competitive market where digital proficiency is essential for business survival and growth. It is hypothesised that:

H_{o1}: Digital skills do not significantly impact MSMEs performance in Kogi State.

Digital Infrastructure: This consists of the technological frameworks necessary to support the digital activities of MSMEs such as Internet connectivity, cloud computing, and information systems (Hendrawan, Chatra, Iman, Hidayatullah & Suprayitno, 2024). During the pandemic, the global shift towards remote work and digital transactions demonstrated the importance of robust digital infrastructure (Soluk, Kammerlander & Darwin, 2021). For MSMEs in Nigeria, the lack of reliable digital infrastructure remains a significant challenge especially in rural areas where Internet access is limited or unreliable. The development of affordable and accessible digital infrastructure is essential for MSMEs to transition to digital platforms, automate processes and reach wider markets (Amankwah-Amoah, Khan, Wood & Knight, 2021). Efforts by the Nigerian government to expand Internet coverage and encourage the adoption of cloud-based solutions are steps in the right direction, but more needs to be done to bridge the digital divide between urban and rural business environments. It is hypothesised that:

H_{o2}: Digital infrastructure does not significantly impact MSMEs performance in Kogi State.

Social Media Marketing: Social media marketing has emerged as a vital tool for MSMEs in the post-COVID-19 era that offered a cost-effective means of reaching potential customers and building brand awareness (Yusoff & Azmel, 2022). With the restrictions on physical interactions, social media platforms became the primary mode of communication and engagement between businesses and customers. Crupi, Del-Sarto, Di Minin, Gregori, Lepore, Marinelli and Spigarelli (2020) noted that digitalisation allows MSMEs to leverage social networks to reach a broader audience, enhance customer relationships and promote their products or services globally. The ability of MSMEs to create an online presence through

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platforms like Facebook, Instagram, and X has been instrumental in sustaining operations during and after the pandemic. It is hypothesised that:

H₀₃: Social media marketing does not significantly impact MSMEs performance in Kogi State.

Digital Payment Systems: The adoption of digital payment systems has transformed how MSMEs conduct financial transactions which have made payments faster, more secure, and convenient for both businesses and customers (Effiom & Edet, 2022). In the post-pandemic world, contactless and online payments have become a necessity as they reduce physical interactions and align with social distancing protocols. Digital payment platforms such as mobile money services have been crucial in enabling MSMEs in Nigeria to continue operations during periods of lockdown (Tonuchi, 2020). Mobile money services provide flexibility, convenience and help businesses manage cash flow more effectively by offering real-time transaction tracking and reporting. It is hypothesised that:

H₀₄: Digital payment systems do not significantly impact MSMEs performance in Kogi State.

Theoretical Background

This study is grounded in the theory of diffusion of innovation. The theory was propounded by Everett Rogers in 1962 to serve as a framework for understanding how new ideas and technologies are disseminated in social systems. According to Rogers (1995), the theory examined the process by which innovations are communicated through various channels over time among members of a social system. The emphasis on communication highlights the importance of information sharing in promoting the adoption of new technologies particularly in the context of MSMEs navigating the digital environment.

At its core, the diffusion of innovation theory posits that the adoption of new technologies is influenced by several key factors such as the perceived attributes of the innovation, the type of communication channels used, the nature of the social system and the characteristics of the adopters (Rogers, 1995). The perceived attributes such as relative advantage, compatibility, complexity, trialability and observability play a pivotal role in determining whether MSMEs will embrace digitalisation. For instance, if MSMEs perceive digital tools as offering significant advantages such as improved efficiency, reduced costs, and enhanced customer engagement over traditional methods they are more likely to adopt these technologies (Yunis, Tarhini & Kassar, 2018).

Moreover, the role of information and communication technology (ICT) as a managerial tool cannot be overstated. ICT facilitates the sharing of information among stakeholders, coordinates activities and streamlines operations to improve organisational effectiveness (Yunis et al., 2018). For MSMEs, which often operate with limited resources, the ability to utilise ICT for communication and coordination can significantly enhance their operational efficiency and competitive advantage.

Diffusion of innovation theory provides valuable insights into the barriers and facilitators of technology adoption. For example, while some MSMEs may be eager to adopt digital tools,

others may be hindered by perceived complexity or a lack of compatibility with existing practices. Additionally, the social system's characteristics such as the presence of supportive networks or clusters can significantly influence the rate of innovation diffusion. Research has shown that collaboration among MSMEs can enhance their capacity for innovation and technology adoption as firms can share resources, knowledge and best practices (Steiber, Alänge, Ghosh & Goncalves, 2021). Finally, the theory highlights the importance of early adopters and opinion leaders in the diffusion process. These individuals or organisations can serve as champions for innovation in their social networks to embrace new technologies. In the context of MSMEs in Kogi State, Nigeria, identifying and empowering these key actors can accelerate the digitalisation process and enhance performance.

METHODOLOGY

This section outlined the methodological issues discussed in this study. It consisted of the research design, population of the study, sample selection process, research instrument, and method of data analysis. The study adopted a cross-sectional research design. This design is particularly suited to the objectives of the study as it facilitated the examination of the relationship between digitalisation practices and performance among MSMEs in Kogi State. The study gathered data from a diverse range of MSMEs across the retail sector, wholesale and distribution, transport and logistics and servicing. The cost effectiveness of this method makes it advantageous.

The population for this study comprises MSMEs located in Lokoja, the capital city of Kogi State. Lokoja serves as a central hub for business activities and provides a fair representation of various local government areas (LGAs) in the state. The choice of Lokoja as the study location is justified by its strategic significance in facilitating economic activities and its role as a focal point for MSMEs in Kogi State. A sample of two hundred (200) MSMEs was selected for this study. The rationale for this was that accessing respondents in Lokoja posed challenges due to the dispersed nature of MSMEs and varying levels of willingness among owners to participate in the study. Convenience sampling was employed as the sampling technique for this study. The justification for using convenience sampling lies in its efficiency and ability to quickly gather data from a significant number of MSMEs. Though this technique may introduce some bias, it is justified in this context as it facilitated the timely collection of data from a diverse array of businesses in the State.

The research instrument for this study comprised a structured questionnaire designed to elicit responses on various aspects of digitalisation and performance among MSMEs. The questionnaire was developed based on existing literature to ensure its relevance and comprehensiveness. To ensure the reliability of the instrument, a pilot test was conducted with a small group of MSME owners to identify any ambiguities or issues in the questions. Feedback from the pilot test was incorporated into the final questionnaire. Reliability was assessed using Cronbach's alpha with scores of 0.810, 0.945, 0.832, 0.782 and 0.843 for digital skills, digital infrastructure, social media marketing, digital payment systems and MSMEs performance respectively.

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The data collected from the questionnaires were analysed using descriptive statistics, correlation analysis and regression analysis. Descriptive statistics provided an overview of the sample characteristics and the state of digitalisation among the MSMEs. Correlation analysis was employed to explore the relationships between digitalisation practices and performance of MSMEs. Finally, regression analysis was utilised to determine the extent to which digitalisation practices predicts MSME performance. All statistical analyses were conducted using SPSS and hypotheses tested at 5% level of significance.

RESULTS AND DISCUSSIONS

A sample of two hundred (200) MSMEs was selected for this study. However, one hundred and eight-five (185) responses were found to be valid for data analyses. The response rate is 92.5%.

Description of Respondents’ Demographics

This section provides various background information about the respondents consisting of gender, age, duration of business operations, nature of business, number of employees and educational qualifications. The results are detailed in Table 1 below:

Table 1: Respondents’ demographic information

Demographic profile	Category	Frequency	Percent	Cumulative Percent
Gender	Male	94	50.8	50.8
	Female	91	49.2	100.0
	Total	185	100.0	
Age (years)	Less than 26	52	28.1	28.1
	26 - 35	65	35.1	63.2
	36 - 45	45	24.3	87.6
	46 - 55	17	9.2	96.8
	Above 55	6	3.2	100.0
	Total	185	100.0	
Duration of Operations (years)	Less than 5	55	29.7	29.7
	5 - 10	77	41.6	71.4
	11 - 15	14	7.6	78.9
	16 - 20	22	11.9	90.8
	Above 20	17	9.2	100.0
	Total	185	100.0	
Nature of Business	Retail	72	38.9	38.9
	Transport & Logistics	25	13.5	52.4
	Wholesale/Distribution	53	28.6	81.1
	Servicing	20	10.8	91.9
	Others	15	8.1	100.0
	Total	185	100.0	

Demographic profile	Category	Frequency	Percent	Cumulative Percent
Number of Employees	10 & below	116	62.7	62.7
	11 -20	45	24.3	87.0
	Above 20	24	13.0	100.0
	Total	185	100.0	
Educational Qualification	O'Level	43	23.2	23.2
	Diploma/ND/NCE	59	31.9	55.1
	First degree/HND	62	33.5	88.6
	Postgraduate	21	11.4	100.0
	Total	185	100.0	

Source: Authors' computation (2024)

Table 1 showed the gender distribution of the respondents with 50.8% of them being male (n=94) and 49.2% female (n=91). This near-equal gender representation suggests an inclusive participation of both sexes. In terms of age distribution, the majority of respondents (35.1%) fall within the 26-35 years age range (n=65), followed by those under the age of 26 who comprised 28.1% (n=52). A notable proportion (24.3%) are aged between 36 and 45 (n=45) while fewer respondents are in the 46-55 (9.2%, n=17) and above 55 (3.2%, n=6) age brackets. With regard to years of experience, a significant portion of the respondents (41.6%, n=77) reported having between 5 to 10 years of experience, while 29.7% (n=55) have less than 5 years. A smaller percentage (11.9%, n=22) fall within the 16-20 years range, and 9.2% (n=17) have over 20 years of experience. Table 1 also showed industry representation led by the retail sector where 38.9% (n=72) of the respondents are operating. Wholesale and distribution (28.6%, n=53) and transport and logistics (13.5%, n=25) follow with servicing (10.8%, n=20) and other sectors (8.1%, n=15) constituting the remainder. In terms of organisational size (number of employees), the majority of respondents (62.7%, n=116) work in MSMEs with 10 or fewer employees while 24.3% (n=45) are in MSMEs with 11-20 employees. Only 13.0% (n=24) represent larger MSMEs with over 20 employees. Finally, regarding educational qualifications, the largest group of respondents (33.5%, n=62) hold a first degree or Higher National Diploma (HND), while 31.9% (n=59) have attained a diploma or equivalent qualification (ND/NCE). A further 23.2% (n=43) possess O'Level qualifications, and 11.4% (n=21) have postgraduate degrees. This distribution suggests that the sample comprises a well-educated individual with a substantial proportion having tertiary education.

Description of Research Variables

The research variables are described using mean, standard deviation, skewness and kurtosis. The results are shown in Table 2 below:

Table 2: Descriptive statistics of research variables

Variables	Mean	Std. Deviation	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
Digital Skill (DSKIL)	4.141	0.635	-0.743	0.179	1.144	0.355
Digital Infrastructure (DINFR)	3.451	1.037	-0.590	0.179	-0.451	0.355
Social Media Marketing (SSMK)	4.348	0.512	-0.434	0.179	0.313	0.355
Digital Payment System (DPAY)	4.399	0.490	-0.928	0.179	1.517	0.355
MSME Performance (MSPRF)	4.173	0.528	-0.396	0.179	-0.059	0.355

Source: Authors' computation (2024)

Table 2 showed that Digital Skill (DSKIL) has a mean score of 4.141 which indicated a high level of agreement among respondents regarding their digital skill proficiency. The standard deviation of 0.635 suggests moderate variability around the mean. The skewness value of -0.743 indicates a negative skew implying that more respondents rated their digital skills higher than the mean. Furthermore, the kurtosis of 1.144 which is positive suggested that the distribution is more peaked than a normal distribution. Digital Infrastructure (DINFR) has a lower mean score of 3.451 showing relatively less satisfaction or access to digital infrastructure compared to other variables. With a standard deviation of 1.037, this variable shows the highest variability indicating significant differences in respondents' experiences. Social Media Marketing (SSMK) has a mean score of 4.348 to show the strong use or perceived effectiveness of social media marketing strategies. The standard deviation of 0.512 indicated low variability with most respondents having similar views. Digital Payment System (DPAY) exhibited the highest mean at 4.399 connoting strong agreement on the importance or utility of digital payment systems among respondents. The standard deviation of 0.490 revealed very low variability. Table 2 also showed that MSME Performance (MSPRF) has a mean score of 4.173. This suggests generally positive perceptions of MSME performance. The standard deviation of 0.528 points to relatively low variability among responses. A skewness value of -0.396 indicated a slight negative skew while the kurtosis of -0.059 showed that the distribution is approximately normal.

Correlation Analysis

Correlation analysis was used to assess the strength and direction of the relationship between the research variables. The results are presented in Table 3.

Table 3: Pearson correlation coefficient of MSMEs digitalization and performance

Variables	SPERF	DSKIL	DINFR	SSMK	DPAY
MSME Performance (MSPRF)	1				
Digital Skill (DSKIL)	0.450**	1			
Digital Infrastructure (DINFR)	0.453**	0.416**	1		
Social Media Marketing (SSMK)	0.541**	0.511**	0.458**	1	
Digital Payment System (DPAY)	0.585**	0.413**	0.366**	0.417**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Authors' computation (2024)

Table 3 presented the Pearson correlation coefficients between five variables: MSME Performance (MSPRF), digital skills (DSKIL), digital infrastructure (DINFR), social media marketing (SSMK), and digital payment systems (DPAY). MSME performance (MSPRF) demonstrated positive and significant correlations with all other variables: DPAY ($r = 0.585$, $p < 0.01$), SSMK ($r = 0.541$; $p < 0.01$), DINFR ($r = 0.453$; $p < 0.01$) and DSKIL ($r = 0.450$; $p < 0.01$). The results indicated that the correlation coefficients for all constructs are below 0.80. According to the benchmark set by Bryman and Cramer (1997), this finding suggests that multicollinearity is not present in the model as none of the scores exceeded the threshold of 0.80.

Regression Analysis

Multiple regression analysis was used to establish the impact of MSMEs digitalisation practices on performance. The results are shown in Table 4.

Table 4: Estimated relationship between MSMEs digitalisation practices on performance

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Hypotheses Testing
	B	Std. Error	Beta			
(Constant)	0.592	0.305	-	1.939	0.054	-
DSKIL	0.078	0.055	0.094	1.420	0.157	Do not Reject H ₀₁
DINFR	0.079	0.032	0.155	2.443	0.016	Reject H ₀₂
SSMK	0.273	0.070	0.264	3.908	0.000	Reject H ₀₃
DPAY	0.409	0.067	0.379	6.098	0.000	Reject H ₀₄
R = 0.691; R ² = 0.477; Adj R ² = 0.465; F-Statistic = 41.040; F-Statistic (Prob) = 0.000 Durbin-Watson = 1.897 Number of Observation = 185 Dependent Variable: MSPRF MSME Performance (MSPRF); Digital Skills (DSKIL), Digital Infrastructure (DINFR), Social Media Marketing (SSMK), and Digital Payment Systems (DPAY).						

Source: Authors' computation (2024)

Table 4 showed that MSMEs performance has a positive and significant relationship with all the MSMEs digitalisation practices: DINFR ($\beta= 0.079$; $p<0.05$), SSMK ($\beta= 0.273$; $p<0.05$), and DPAY ($\beta= 0.409$; $p<0.05$) except DSKILL ($\beta= 0.078$; $p<0.05$) that has positive but not significant relationship. The coefficient of determination (R²) value of 0.477 indicated that MSMEs digitalisation practices collectively account for 47.7% of the variance in MSMEs performance. Furthermore, the F-statistic of 41.040 which is significant at $p<0.05$ suggests a statistically significant relationship between the dependent and independent variables. Finally, the Durbin-Watson statistic is 1.897 which connotes that no autocorrelation in the residuals of the regression analysis.

Discussion of Findings

The findings of this study indicated a positive and significant relationship between the performance of Micro, Small, and Medium Enterprises (MSMEs) and three key practices of digitalisation: digital infrastructure, social media marketing, and digital payment systems. These results align with the growing body of literature highlighting the critical role of digitalisation in enhancing business performance particularly in the context of the COVID-19 pandemic (Chege & Wang, 2020; Matarazzo et al., 2021; Widayani et al., 2023). However, the relationship between digital skills and MSME performance, while positive, was found not to be statistically significant.

The study found that digital infrastructure significantly influences MSME performance. This reinforced the notion that robust technological frameworks are essential for operational success (Chege & Wang, 2020; Matarazzo et al., 2021). Reliable Internet connectivity and digital resources empower MSMEs to automate processes and extend their market reach to facilitate enhanced performance metrics. This also agreed with the position of Broccardo et al. (2023) who argued that digitalisation has emerged as a fundamental aspect of business sustainability and growth to enable enterprises to streamline operations, broaden market access and enhance customer engagement.

Social media marketing was also found to positively and significantly impact MSME performance. The pandemic highlighted the need for businesses to establish an online presence to engage customers amid physical restrictions. As noted by Crupi et al. (2020), social media platforms allow MSMEs to connect with a broader audience, foster customer relationships, and promote their products effectively. In the context of Kogi State, where traditional marketing methods may have been hampered by logistical challenges during the pandemic, the ability to leverage social media for marketing purposes became increasingly vital for sustaining business operations (Chege & Wang, 2020; Matarazzo et al., 2021; Widayani et al., 2023).

Furthermore, the relationship between digital payment system and MSME performance was found to be positive and statistically significant. This shows that the adoption of digital payment systems has transformed the financial transaction environment for MSMEs by making payments faster and more secure (Widayani, Fiernaningsih & Herijanto, 2022). The convenience of digital payment platforms not only enhances customer satisfaction but also streamlines cash flow management for businesses. During the pandemic, MSMEs that embraced these technologies were better equipped to adapt to disruptions and promote digital payments in maintaining business continuity.

Finally, the relationship between digital skills and MSME performance was found to be positive but not statistically significant. This finding suggested that while digital skills are necessary for the successful adoption of digital tools, they may not be the sole determinant of performance outcomes. Other factors such as the availability of digital infrastructure or the effectiveness of marketing strategies could have a more immediate impact on MSME performance. This aligns with the finding of Olayinka and Wynn (2022) who identified a skills gap in the workforce of Nigerian MSMEs.

CONCLUSION AND RECOMMENDATIONS

This study investigated the relationship between digitalisation practices and the performance of MSMEs in Kogi State by utilising a cross-sectional research design. The analysis revealed that digital infrastructure, social media marketing and digital payment systems have a positive and significant impact on MSME performance. This showed the importance of digitalisation in fostering operational success and competitiveness in the MSME sector. However, the study identified that while digital skills are positively related to performance, the relationship was not statistically significant. The study concludes that digitalisation practices specifically digital infrastructure, social media marketing and digital payment systems significantly enhance the

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performance of MSMEs in Kogi State while digital skills do not exhibit a statistically significant relationship with performance.

Based on the findings, the following recommendations are made to enhance the digitalisation efforts of MSMEs in Kogi State:

- MSMEs should prioritise investments in reliable digital infrastructure to ensure consistent Internet access and appropriate technological resources. Government and private sector stakeholders are encouraged to collaborate in improving the digital environment to sustain and enhance the performance of MSMEs in the State.
- Given the significant relationship between social media marketing and MSME performance, businesses should actively engage in developing effective social media strategies. Training workshops should be organised by government and relevant stakeholders for MSMEs on digital marketing techniques to enhance audiences reach and customer engagement.
- The significant impact of digital payment systems on MSME performance highlights the necessity for MSMEs to consolidate on the usage of digital payment systems into their operations. MSMEs owners should facilitate access to user-friendly and secure payment platforms that can streamline transactions and improve customer experience.
- While digital skills showed a positive trend, the lack of statistical significance suggests a need for comprehensive training programmes tailored to MSME owners and employees. These programmes should focus on enhancing digital proficiency and the integration of digital practices into daily business operations.

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