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DIGITAL OPENNESS AS A MEDIATOR: LINKING MARKET AND ENTREPRENEURIAL ORIENTATIONS TO SME PERFORMANCE IN NIGERIA

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ABSTRACT

This study examines the mediating role of digital openness in the relationships between market orientation, entrepreneurial orientation, and SME performance in Northwestern Nigeria. Using a cross-sectional survey design, data were collected from 512 SME owners/managers across Katsina, Kano, and Kaduna states using stratified random sampling. The study employed PLS-SEM to test relationships among constructs measured with validated scales: Market Orientation (15 items), Entrepreneurial Orientation (9 items), Digital Openness (12 items), and Firm Performance (10 items). Results indicate that market orientation (β=0.215, $p<0.001$) and entrepreneurial orientation (β=0.224, $p<0.001$) significantly influence SME performance. Digital openness partially mediates both relationships (MO→DO→FP: β=0.216; EO→DO→FP: β=0.214), explaining 67.3% of variance in performance. The findings suggest that SMEs should invest in digital infrastructure, adopt cloud-based collaboration tools, and integrate digital analytics into strategic decision-making to enhance performance outcomes.

Keywords: Market Orientation, Entrepreneurial Orientation, Digital Openness, SMEs Performance, Nigeria,

Introduction

Small and medium-sized enterprises have been recognised as foundational to economic growth and development worldwide, whether in developed or developing economies (OECD, 2024). In emerging economies such as Nigeria, SMEs play a crucial, indispensable role as engines of innovation and employment generation. It has been estimated by the World Bank (2025) that SMEs are responsible for well over 60% of employment and contribute about 40% of GDP in such contexts. Despite not enjoying the economies of scale standard to larger firms, SMEs typically capitalise on their size by remaining flexible and responsive, which helps them survive—sometimes even thrive—amid economic fluctuations (OECD, 2024).

Now, focusing specifically on Nigeria, the SME sector is a vibrant source of economic activity but continues to confront persistent challenges that seem to undermine its full potential. For example, according to PricewaterhouseCoopers (PwC, 2024), Micro, Small, and Medium Enterprises (MSMEs) contributed 46% to the country's GDP in 2010, rising to 47.88% in 2013 and peaking at 49.78% by 2017. Unfortunately, that upward trend reversed in 2020, when MSMEs saw their contribution drop to 46.31%, a 3.5% decline from 2017. This decline stands out in sharp contrast to trends in other African nations, like Ghana (70% GDP), Kenya (80%), and South Africa (52%), essentially signalling that there is considerable untapped potential that is hampered by, among other things, insufficient strategic capability and digital integration. (Karacuka et al., 2024) This reduction in contribution is often attributed to systemic deficiencies within SMEs, including an absence of innovative practices and managerial expertise, which collectively limit their sales volume and economic impact (Egwakhe, 2021; Rana & Choudhary, 2019).

Prior research has identified strategic orientations—such as market orientation and entrepreneurial Orientation, as important drivers of SME performance and, more recently, has begun to recognise the essential mediating role of digital openness in this relationship (Rogo et al., 2023). Market orientation typically refers to a company's ability to identify and satisfy market needs, and is characterised by customer orientation, competitor orientation, and inter-functional coordination (Narver & Slater, 1990). Meanwhile, entrepreneurial Orientation focuses on innovativeness, proactiveness, and risk-taking (Miller, 1983), operating in tandem with market orientation to generate competitive advantage.

Digital openness—defined as a firm's readiness to adopt open digital practices, such as data sharing, digital collaboration, and the use of technology to enhance connectivity—is an increasingly central component of what has been called digital Orientation (Dantsoho et al., 2020). So, basically, it enables SMEs to harness digital tools and platforms, fostering deeper engagement with both internal and external stakeholders, which tends to drive collaboration, innovation, and adaptability in the so-called digital economy (Barragan & Becker, 2025; Kaplan & Sis Atabay, 2024; Nambisan et al., 2017).

Statement of the Problem

Despite the recognized importance of strategic orientations, Northwestern Nigerian SMEs continue to underperform relative to their counterparts in other African nations. While market orientation and entrepreneurial orientation are established performance drivers, their inconsistent effects in the Nigerian context remain unexplained. Furthermore, the mechanism through which digital capabilities transform strategic orientations into performance outcomes is undertheorized. This study addresses three critical gaps: (1) the inconsistent MO-performance and EO-performance relationships in Nigerian SMEs, (2) the unexplored mediating role of digital openness in these relationships, and (3) the lack of context-specific research in Northwestern Nigeria's unique institutional environment.

Research Objectives

1. To examine the direct effect of market orientation on SME performance in Northwestern Nigeria
2. To investigate the direct effect of entrepreneurial orientation on SME performance
3. To assess the mediating role of digital openness in the MO-performance relationship
4. To determine the mediating role of digital openness in the EO-performance relationship

Research Questions

1. To what extent does market orientation influence SME performance?
2. How does entrepreneurial orientation affect SME performance?
3. Does digital openness mediate the relationship between market orientation and SME performance?
4. Does digital openness mediate the relationship between entrepreneurial orientation and SME performance?

Research Hypotheses

H1: Market orientation positively influences SME performance in Northwestern Nigeria.
H2: Entrepreneurial Orientation positively influences SME performance in Northwestern Nigeria.
H3: Digital openness mediates the relationship between market orientation and SME performance in Northwestern Nigeria.
H4: Digital openness mediates the relationship between entrepreneurial orientation and SME performance in Northwestern Nigeria.

Literature Review

Theoretical Foundation

This study integrates three complementary theoretical perspectives through a sequential logic. First, RBV (Barney, 1991) establishes MO and EO as valuable, rare, and inimitable strategic resources. However, RBV alone cannot explain how static resources generate performance in dynamic environments. Second, DCV (Teece et al., 1997) addresses this limitation by conceptualizing how firms sense opportunities (MO), seize them (EO), and reconfigure resources. Yet DCV underspecifies the contemporary mechanisms enabling these capabilities in digital economies.

Third, DTT (Vial, 2019) completes the framework by positioning digital openness as the operational mechanism that: (a) enhances sensing capabilities through real-time market intelligence, (b) accelerates seizing through digital innovation platforms, and (c) enables reconfiguration via digital collaboration ecosystems.

Digital openness functions as a transformative dynamic capability that amplifies the performance effects of market and entrepreneurial orientations by enabling rapid information processing, stakeholder connectivity, and resource fluidity in resource-constrained environments.

Conceptual Review

1. Market Orientation

MO represents an organisational culture and behavioural paradigm fundamentally oriented toward creating superior customer value through systematic market intelligence generation, dissemination, and responsiveness to market information (Narver & Slater, 1990). This construct encompasses three critical dimensions: customer orientation (understanding buyers' needs and preferences), competitor orientation (analysing rival strategies and capabilities), and interfunctional coordination (ensuring organisational alignment to deliver value) (Kohli & Jaworski, 1990). MO serves as a market-driven philosophy that helps firms anticipate, understand, and respond to evolving market dynamics, thereby MO is a determinant of long-term competitive advantage and organisational

2 Entrepreneurial Orientation

EO refers to the entrepreneurial processes, practices, and decision-making styles that characterise how organisations pursue entrepreneurial activities (Lumpkin & Dess, 1996). EO is multidimensional, including innovativeness (propensity to engage in creative processes, supporting new ideas and departures from extant practices), proactiveness (forward-looking perspective and opportunity-seeking), and risk-taking (willingness to commit resources to ventures characterised by uncertainty) (Miller, 1983). EO embodies a strategic orientation through which firms pursue new opportunities, behave entrepreneurially, and drive both innovation and renewal for business growth.

3 Digital Openness

DO has emerged more recently as a contemporary strategic construct that represents an organisation's readiness, capability, and commitment to using digital technologies, platforms, and ecosystems for collaboration, transparency, and stakeholder engagement (Nylén & Holmström, 2015). Digital openness differs from mere digital adoption by emphasizing transparency, collaboration, and ecosystem participation (Dantsoho et al., 2020; Nylén & Holmström, 2015). Three dimensions characterize DO:

1. Digital Transparency: Willingness to share data with partners, customers, and suppliers through digital platforms
2. Digital Collaboration: Active participation in digital ecosystems, co-creation, and open innovation networks
3. Digital Connectivity: Infrastructure readiness and strategic commitment to digital stakeholder engagement

In Northwestern Nigeria's context, DO manifests through mobile money adoption (transparency), WhatsApp Business groups (collaboration), and cloud-based supplier networks (connectivity). This openness-as-practice conceptualization distinguishes the construct from simple technology use.

4 SME Performance

SME Performance is operationalised as a multidimensional construct encompassing achievement across several domains—financial, operational, and strategic (Venkatraman & Ramanujam, 1986; Kaplan & Norton, 1996). Performance measurement, as used in this study, included financial metrics (profitability, revenue growth, ROI) and strategic dimensions (market share growth, customer satisfaction, competitive positioning), providing a holistic assessment framework that captures the complexity and diversity of SME success criteria.

Market Orientation and SME Performance

Market orientation centres on a firm's commitment to identifying and satisfying customer needs, drawing from customer orientation, competitor orientation, and inter-functional coordination (Narver & Slater, 1990). Firms with pronounced MO tend to deeply understand their clientele, closely monitor competitors, and encourage coordination across departments, which, together, are supposed to foster efficiency and adaptability (Arshad et al., 2024; Kajalo & Lindblom, 2015). While a substantial body of global research links MO to improve financial outcomes and market share (Ahmed et al., 2023), empirical results in Nigeria remain inconsistent. Some studies do confirm a positive relationship (Buli, 2017; Roshan, 2023), though others report weak or context-bound effects (Rahman et al., 2021; Rogo et al., 2017). In Northwestern Nigeria, MO tends to be weak, limiting SMEs' ability to adapt their offerings to changing demand (Yabo & Muazu, 2024). Nevertheless, there is ample theoretical and some empirical evidence to expect that MO should enhance performance.

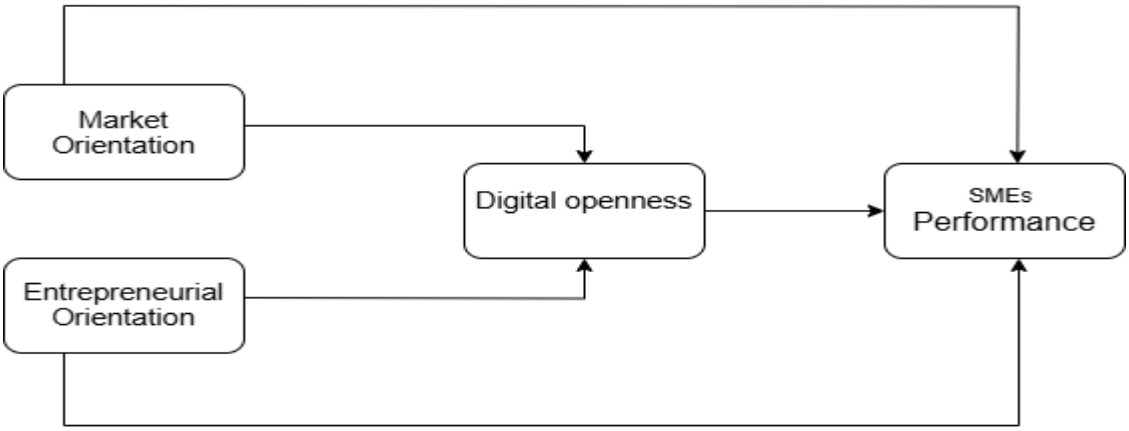
Entrepreneurial Orientation and SME Performance

Entrepreneurial Orientation is conceptualised through innovativeness, proactiveness, and risk-taking (Miller, 1983). These dimensions, taken together, empower organizations to develop novel solutions, act swiftly on opportunities, and embrace uncertainty (Covin & Wales, 2019; Apere, 2024). Globally, EO is widely linked to SME growth (Falahat et al., 2021), although in the Nigerian context, findings are somewhat mixed. While EO has generally been associated with superior performance in dynamic or resource-scarce contexts like Kaduna or Kano (Rogo et al., 2023; Tagha et al., 2023), structural constraints in Nigeria sometimes appear to dilute its full effect (Adamu, 2020; Ogbaini et al., 2024). Despite such challenges, EO's potential contribution to SME competitiveness remains important.

Digital Openness as Mediator

Digital openness is theorized as a fundamental mediating construct, connecting strategic orientations (MO, EO) and SME performance. Enabled by DO, SMEs can use digital tools and networks to engage stakeholders, foster collaboration, and accelerate adaptation (Nambisan et al., 2017). For resource-constrained SMEs, access to shared digital resources (like cloud software and analytics) supports innovation and even co-creation (Khin & Ho, 2019). DO augments MO with real-time market intelligence and enhances EO with rapid digital innovation avenues (Abubakar et al., 2025). This agility, along with open innovation, allows integration of external knowledge (Chesbrough, 2017). Importantly, DO may help bridge typical market access gaps faced by SMEs in Northern Nigeria.

Figure 1. *Conceptual Model*



Methodology

This study employed a cross sectional survey research design using quantitative approach, grounded in the positivist paradigm to empirically examine the relationships between Market Orientation, Entrepreneurial Orientation, Digital Openness, and SME performance in Northwestern Nigeria. The target population was 86,194 SME owners and managers operating within Katsina, Kano, and Kaduna states (SMEDAN, 2021), selected for their economic significance and diverse industrial representation of the area. A stratified random sampling technique was employed. First, SMEs were stratified by state (Katsina, Kano, Kaduna) and industry sector (manufacturing, retail, services). Sample size was determined using Krejcie and Morgan's (1970) formula for a population of 86,194, yielding a minimum required sample of 383. To account for non-response, we targeted 798 respondents (110% buffer), achieving 512 valid responses (64.2% response rate). Non-response bias was tested using wave analysis comparing early and late

respondents across key variables; no significant differences emerged ($p>0.05$). Data normality was assessed using skewness and kurtosis. Values fell within the recommended range of ±2 for skewness and ±7 for kurtosis, consistent with the criteria established by Curran et al. (1996) for multivariate normality.

Data collection was conducted through structured questionnaires incorporating validated scales: Narver and Slater's (1990) 11 item Market Orientation scale, Covin and Lumpkin's (2011) 9 item Entrepreneurial Orientation scale, Dantsoho et al.'s (2020) 6 item Digital Openness scale, and SME performance measures were adapted from Calantone et al. (2002), Keskin (2006) 6 item scale. All constructs were measured using five-point Likert scales to ensure consistency and statistical rigor. Data analysis was done using Structural Equation Modelling with partial least squares (PLS-SEM) approach using SmartPLS software version 4. The analysis commenced with preliminary data screening and descriptive statistics, followed by measurement model assessment examining construct reliability, convergent validity, and discriminant validity. Subsequently, structural model evaluation was performed to assess path coefficients, explanatory power (R^2), effect sizes (f^2), and predictive relevance (Q^2). Mediation analysis employed bootstrap procedures to examine the indirect effects, as well as Variance Accounted For, (VAF) analysis for mediation effect strength.

Results

The primary objective of this study was to examine the direct and mediating effects of Market Orientation, Entrepreneurial Orientation, and Digital Openness on SMEs performance in Northwestern Nigeria. The findings from the mediation analysis, as presented in Table 1, provide crucial insights into these relationships, particularly highlighting the pivotal role of Digital Openness.

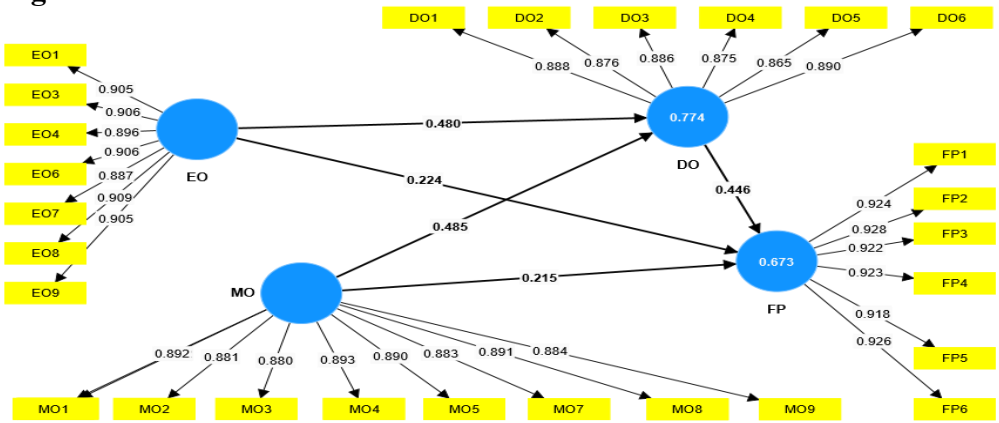
Preliminary Analysis

Common Method Variance (CMV)

Since data were collected from single respondents per firm, we tested for CMV using Harman's single-factor test. Unrotated exploratory factor analysis yielded four factors with eigenvalues >1, with the first factor explaining 38.2% of variance—below the 50% threshold (Podsakoff et al., 2003). Additionally, the full collinearity VIF test showed all VIF values <3.3, confirming CMV is not a concern (Kock, 2015).

Measurement Model Assessment

Figure 2. *Measurement Model*



The measurement model was evaluated using reliability, convergent validity, and discriminant validity criteria. Table 1 presents the reliability and validity assessment results. All constructs demonstrated excellent internal consistency reliability, with Cronbach's alpha values from 0.942 to 0.966, exceeding the threshold of 0.70 (Hair et al., 2019). The composite reliability coefficients (rho_c) ranged from 0.954 to 0.972, surpassing the 0.70 threshold and approaching 0.95, indicating robust internal consistency (Fornell & Larcker, 1981). For convergent validity, all constructs achieved Average Variance Extracted (AVE) values above 0.50, ranging from 0.775 to 0.853, showing each construct explains over half of its indicators' variance (Fornell & Larcker, 1981). Firm Performance had the highest AVE (0.853), followed by Entrepreneurial Orientation (0.814), Market Orientation (0.786), and Digital Openness (0.775). Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) criterion (Henseler et al., 2015). Table 2 presents the HTMT matrix. All HTMT values remained below the 0.85 threshold (Kline, 2015), ranging from 0.688 to 0.842. The highest HTMT value was between Digital Openness and Entrepreneurial Orientation (0.842), while the lowest was between Entrepreneurial Orientation and Market Orientation (0.688).

While Cronbach's alpha values (0.94-0.97) approach the upper threshold, composite reliability (rho_c) values and AVE scores confirm construct validity. High alphas may reflect the homogeneous SME context in Northwestern Nigeria rather than item redundancy, as discriminant validity (HTMT<0.85) was achieved across all constructs.

Table 1. *Reliability and Validity Assessment*

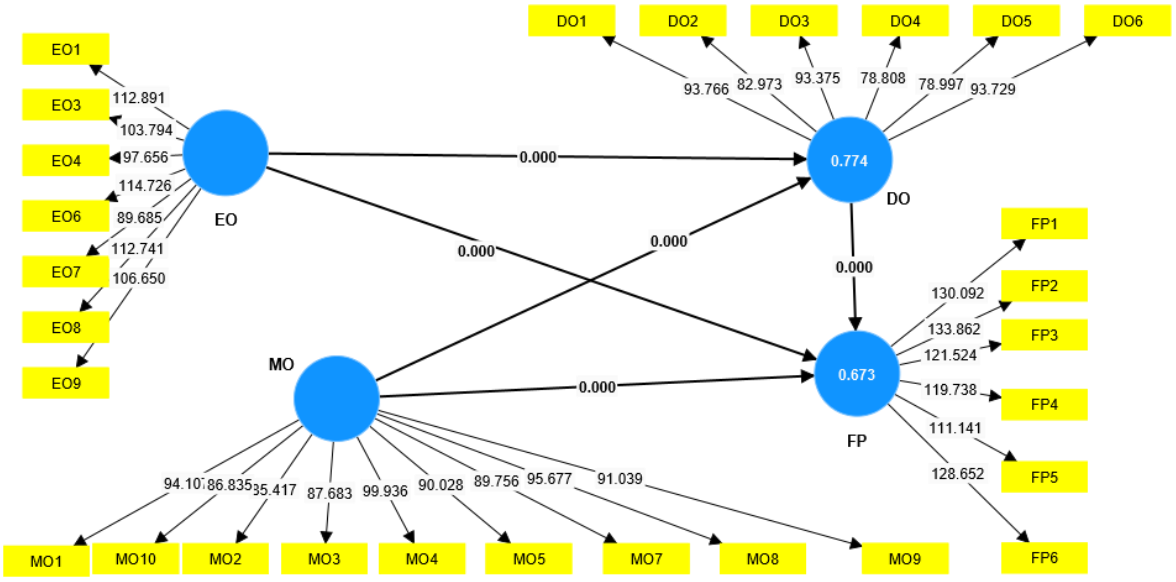
Construct	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	AVE
Digital Openness (DO)	0.942	0.942	0.954	0.775
Entrepreneurial Orientation (EO)	0.962	0.962	0.968	0.814
Firm Performance (FP)	0.965	0.966	0.972	0.853
Market Orientation (MO)	0.966	0.966	0.971	0.786

Table 2. *Heterotrait-Monotrait (HTMT) Matrix*

Construct	DO	EO	FP	MO
Digital Openness (DO)	-			
Entrepreneurial Orientation (EO)	0.842	-		
Firm Performance (FP)	0.837	0.751	-	
Market Orientation (MO)	0.841	0.688	0.747	-

Structural Model Assessment

Figure 3. *Structural Model*



The structural model demonstrated strong explanatory power and predictive relevance. Table 3 presents the coefficient of determination (R^2) values for the endogenous constructs.

Table 3. *Coefficient of Determination (R^2) Assessment*

Construct	R^2	R^2 Adjusted
Digital Openness (DO)	0.774	0.773
Firm Performance (FP)	0.673	0.672

Table 4. *Structural Model Path Coefficients and Hypothesis Testing*

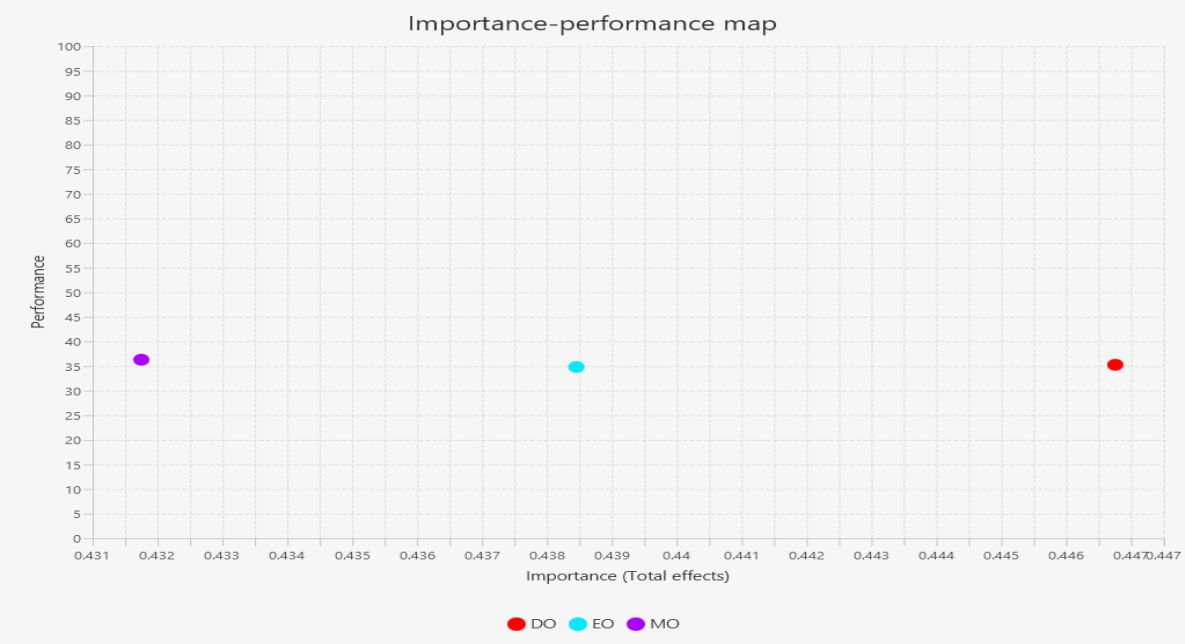
Path	Original Sample (β)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values	Decision
Direct Effects						
DO → FP	0.446	0.446	0.046	9.744	0.000	Supported
EO → FP	0.224	0.225	0.039	5.793	0.000	Supported
MO → FP	0.215	0.215	0.035	6.100	0.000	Supported
Indirect Effects (Mediation)						
EO → DO → FP	0.214	0.214	0.025	8.542	0.000	Supported
MO → DO → FP	0.216	0.216	0.025	8.729	0.000	Supported

According to the direct effects analysis, all hypotheses showed statistical significance at $p < 0.001$. Digital Openness had the strongest direct effect on Firm Performance ($\beta = 0.446$, $t = 9.744$, $p < 0.001$), indicating a 0.446 unit increase in firm performance per unit increase in digital openness, representing a large effect size per Cohen's (1988) guidelines. This validates digital transformation

capabilities' role in driving SME performance in emerging markets. Entrepreneurial Orientation showed a positive effect on Firm Performance ($\beta = 0.224$, $t = 5.793$, $p < 0.001$), confirming that entrepreneurial behaviours contribute to organisational success. Market Orientation demonstrated a positive effect on Firm Performance ($\beta = 0.215$, $t = 6.100$, $p < 0.001$), supporting that customer-focused strategies enhance performance. The similar effect sizes for Entrepreneurial and Market Orientation ($\beta = 0.224$ vs. $\beta = 0.215$) suggest balanced contributions to firm performance, indicating that Northwestern Nigerian SMEs benefit from both approaches. The analysis of the mediation pathways showed significant indirect effects through Digital Openness. Entrepreneurial Orientation's indirect effect on Firm Performance was significant ($\beta = 0.214$, $t = 8.542$, $p < 0.001$), indicating entrepreneurial behaviours enhance performance through digital capabilities. Market Orientation's indirect effect was also significant ($\beta = 0.216$, $t = 8.729$, $p < 0.001$). The similar mediation effects ($\beta = 0.214$ vs. $\beta = 0.216$) indicate that Digital Openness mediates both strategic orientations equally.

Importance-Performance Map Analysis (IPMA)

Figure 4. *Importance Performance Map*



The Importance-Performance Map Analysis (IPMA) was conducted to identify the relative importance and performance of each construct in predicting firm performance. Figure 1 presents the IPMA results for the study constructs. Figure 3 shows Digital Openness positioned at the highest importance and performance (0.446, 35), followed by Entrepreneurial Orientation at moderate levels (0.439, 35), and Market Orientation at lower levels (0.432, 36). IPMA results reveal Digital Openness as the most critical factor for SME performance, with the highest importance (total effect = 0.446) and moderate performance (score = 35). This indicates substantial room for improvement in Northwestern Nigerian SMEs. Entrepreneurial Orientation shows moderate importance (total effect = 0.439) and performance (score = 35). Market Orientation demonstrates the lowest importance (total effect = 0.432) with the highest performance (36), suggesting well-developed market practices but diminishing returns compared to digital initiatives.

Cross-Validated Predictive Ability Test (CVPAT)

Table 5. *Cross-Validated Predictive Ability Test (CVPAT) Results*

Construct	PLS Loss	IA Loss	Average Loss Difference	t-value	p-value
Digital Openness (DO)	0.122	0.302	-0.180	12.901	0.000
Firm Performance (FP)	0.157	0.335	-0.179	11.254	0.000
Overall	**0.139**	**0.319**	**-0.179**	**14.200**	**0.000**

The Cross-Validated Predictive Ability Test (CVPAT) assessed the model's predictive superiority over benchmark models. Table 8 presents the CVPAT results comparing PLS-SEM with benchmark predictions. The results show that PLS-SEM has significant predictive superiority across all endogenous constructs. For Digital Openness, PLS-SEM achieved lower prediction loss (0.122) versus benchmarks (0.302), with an average loss difference of -0.180 ($t = 12.901$, $p < 0.001$). For Firm Performance, PLS-SEM showed prediction loss of 0.157 versus 0.335, yielding a loss difference of -0.179 ($t = 11.254$, $p < 0.001$). The overall comparison reveals an average loss difference of -0.179 ($t = 14.200$, $p < 0.001$), validating the theoretical framework's practical utility for predicting SME performance in northwestern Nigeria.

Discussion

The present study elucidates the direct and indirect effects of market orientation, entrepreneurial Orientation, and digital openness on the performance of SMEs operating within Northwestern Nigeria. Consistent with established strategic management literature, our findings indicate that MO, EO, and DO each exert significant and positive influences on SMEs' performance. The mediation analysis offered deeper insights within this dynamic regional context, underscoring digital openness as a transformative capability for SMEs seeking to transcend environmental limitations.

Notably, the evidence confirms that digital openness mediates the relationship between entrepreneurial Orientation and SME performance—this is especially significant in environments where conventional approaches are continually challenged by infrastructural inadequacies, limited resources, and institutional voids. By clarifying ongoing discrepancies in the extant Nigerian literature—wherein studies like Ayinla (2009), Shehu and Mahmood (2015), and Abiodun and Kida (2016) identify significant associations, while Duru et al. (2018) and Akpa and Falade (2020) report otherwise—this research advances our understanding. The fact that digital openness serves as an intermediary helps reconcile these divergent outcomes, particularly where SMEs employ mobile technologies and digital platforms to mitigate infrastructural barriers and access new market opportunities.

In the context of Northwestern Nigeria, digital platform integration has emerged as indispensable for improving SME performance. Enterprises face unique regional challenges, such as dispersed markets, restricted infrastructure, and traditional business models that may limit strategic flexibility. Digital technologies offer a means to overcome geographic constraints, facilitate innovation, and support risk management practices amidst pronounced economic uncertainty.

Further, the analysis confirms that digital openness mediates the nexus between market orientation and SME performance. This finding is pertinent for firms operating across culturally diverse and fragmented market landscapes, marked by varying customer preferences. The extant literature—Asomaning and Abdulai (2015), Neneh (2016), and Diba and Omwenga (2019) observe positive effects, whereas Akpa and Falade (2020), Shehu and Mahmood (2014), and Kraa (2016)

document less favorable or non-significant outcomes—suggests that digital openness functions as the mechanism through which market-oriented strategies truly translate to enhanced performance.

Digital infrastructure thus enables SMEs to better navigate multicultural environments, surmount language barriers, and address heterogeneous market needs. In aggregate, our findings provide robust support for conceptualizing digital openness as a dynamic capability that transforms strategic Orientation into competitive advantage. The integration of resource-based view (RBV), digital transformation theory (DTT), and the dynamic capabilities view (DCV) demonstrates that digital integration is indeed fundamental for strategic effectiveness in emerging economies, especially those characterized by institutional gaps and infrastructural constraints.

Conclusion

The evidence presented affirms that both market orientation and entrepreneurial Orientation serve as pivotal drivers of SME performance within Northwestern Nigeria, with each contributing in a balanced and complementary manner. Digital openness is placed at the core of the framework, not merely as a technological feature but as a strategic enabler—one that empowers firms to surmount local infrastructural challenges and achieve improved performance outcomes. Consequently, digital transformation should be regarded as an essential strategic capability, rather than only a tool for technological adoption, allowing SMEs to leapfrog conventional development trajectories and realize distinct competitive advantages in resource-constrained environments. The mediating role of digital openness also helps explain the variability observed in previous works on the EO–performance and MO–performance relationships, underscoring the necessity of integrating digital capabilities in contemporary SME management models.

Recommendations

Based on the findings, the following recommendations are provided:

1. SME Managers should adopt affordable digital tools such as mobile-based financial management apps and social commerce platforms to enhance market responsiveness and customer engagement.
2. Governments should establish Digital Innovation Hubs in key commercial centers to support SMEs in digital adoption by providing access to high-speed internet and subsidized digital infrastructure.
3. Policymakers should introduce a Digital SME Tax Credit or subsidy program to encourage SMEs to invest in digital tools and technologies, making digital transformation more accessible.
4. Business Development Service Providers (BDSPs) and tertiary institutions should integrate Applied Digital Competencies into their training programs, focusing on digital marketing analytics, e-commerce, and cyber security

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