



IMPACT OF DIGITAL TRANSFORMATION ON ORGANIZATIONAL PERFORMANCE: THE MEDIATING ROLE OF INNOVATION CAPABILITY AND THE MODERATING EFFECT OF ICT COMPETENCE IN NIGERIAN SMES:

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ABSTRACT

Digital transformation is a key driver of competitiveness and sustainability for SMEs in developing economies. Yet despite growing investment in digital infrastructure, Nigerian SMEs often report inconsistent performance outcomes, raising questions about what enables or hinders effectiveness. This study examines the impact of digital transformation on organizational performance among Nigerian SMEs, testing innovation capability as a mediator and ICT competence as a moderator. Grounded in the Resource-Based View and Dynamic Capability Theory, the study uses a quantitative cross-sectional survey of 250 SME owners and managers. Data were analyzed using Structural Equation Modeling and regression analysis. Findings show that digital transformation significantly improves organizational performance. Innovation capability partially mediates this relationship, while ICT competence strengthens the link between digital transformation and innovation capability. The results suggest that SMEs achieve superior performance when they integrate digital tools strategically, build ICT competence, and foster innovation capability. The study recommends targeted digital skills programs, capacity-building in innovation, improved access to affordable digital infrastructure, and stronger academia-industry-government collaboration to support SME participation in the digital economy.

Keywords: Digital transformation, organizational performance, innovation capability, ICT competence, SMEs, Nigeria.

1. INTRODUCTION

The rapid proliferation of digital technologies has fundamentally transformed the global business landscape, reshaping how organizations operate, compete, and create value. Digital transformation defined as the strategic integration of technologies such as cloud computing, artificial intelligence, data analytics, mobile platforms, and enterprise systems into organizational processes has become imperative for firms seeking sustainable competitive advantage (Vial, 2019). Organizations that successfully navigate digital transformation often experience enhanced customer engagement, operational efficiency, market responsiveness, and profitability (Kraus et al., 2021).

Small and medium enterprises (SMEs) constitute the backbone of many economies, particularly in developing nations. In Nigeria, SMEs account for approximately 96% of all businesses, contribute about 48% to the national GDP, and employ over 84% of the workforce (SMEDAN, 2021). Beyond economic contributions, SMEs play a vital role in poverty reduction, innovation diffusion, and social stability. Although digital transformation is widely assumed to enhance organizational performance, empirical evidence remains mixed. Many SMEs invest heavily in



digital tools but fail to achieve corresponding performance improvements (Mou et al., 2022). This paradox indicates that digital transformation alone may be insufficient to drive performance; rather, organizational capabilities that enable effective utilization of digital technologies are critical. Innovation capability the ability of an organization to develop new products, improve services, and enhance processes in response to market demands has been identified as a key mediator in the relationship between digital transformation and organizational performance (Teece, 2018). While digital technologies provide the necessary infrastructure for innovation, organizations lacking the capability to transform digital inputs into innovative outputs may not realize performance gains. Similarly, ICT competence the skills, knowledge, and attitudes enabling effective use of digital tools may moderate the relationship between digital transformation and innovation capability, as employees with higher technological proficiency are better positioned to exploit digital opportunities (Bharadwaj, 2000).

The primary aim of this study is to examine the impact of digital transformation on the organizational performance of SMEs in Nigeria, with particular attention to the mediating role of innovation capability and the moderating effect of ICT competence.

The study objectives is to assess the extent of digital transformation adoption among Nigerian SMEs, evaluate the effect of digital transformation on organizational performance., examine the mediating role of innovation capability in the relationship between digital transformation and organizational performance, investigate the moderating effect of ICT competence on the relationship between digital transformation and innovation capability and to provide practical recommendations for SMEs to effectively leverage digital transformation for improved performance.

To guide this study, the following research questions have been formulated:

1. To what extent have Nigerian SMEs adopted digital transformation practices?
2. What is the effect of digital transformation on the organizational performance of Nigerian SMEs?
3. How does innovation capability mediate the relationship between digital transformation and organizational performance?
4. Does ICT competence moderate the relationship between digital transformation and innovation capability in Nigerian SMEs?
5. What strategies can Nigerian SMEs implement to effectively leverage digital transformation for improved performance

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Digital Transformation

Digital transformation is widely recognized in contemporary management literature as a



fundamental reconfiguration of organizational activities, processes, competencies, and business models through the integration of digital technologies. It extends beyond mere technology adoption to include strategic renewal, organizational restructuring, and the development of dynamic capabilities (Vial, 2019). Scholars such as Kretschmer and Khashabi (2020) and Mattos et al. (2023) emphasize that digital transformation involves aligning technology with business strategy and innovation to enhance value creation and competitiveness, particularly in SMEs. Verhoef et al. (2021) further conceptualize digital transformation across three key dimensions: digital technology adoption (e.g., AI, cloud computing, IoT, e-commerce tools), digital strategy formulation (alignment of digital initiatives with business goals), and digital-enabled organizational change (culture, leadership, and capability development). In SMEs, these transformations enhance flexibility, reduce operational costs, and expand market access through digital platforms, mobile systems, and data analytics. Empirical evidence shows that technologies such as AI-driven analytics can improve efficiency by 20–35%, while also strengthening innovation capability and organizational resilience.

Theoretically, digital transformation is grounded in the Dynamic Capabilities Theory, which explains how firms continuously reconfigure resources to remain competitive in dynamic environments. From the Resource-Based View (Barney, 2020), digital capabilities are strategic resources that are valuable, rare, inimitable, and non-substitutable, contributing significantly to organizational performance.

Organizational performance is a multidimensional construct encompassing financial indicators (profitability, revenue growth, ROI) and non-financial indicators (customer satisfaction, efficiency, employee productivity, and market responsiveness). For SMEs, subjective performance measures are often used due to limited financial data availability (Mohammed et al., 2022). Performance outcomes are strongly influenced by the effective deployment of organizational resources and capabilities. Innovation capability refers to a firm's ability to generate and implement new products, services, processes, and business models (Teece, 2018). It includes product, process, managerial, marketing, and business model innovation. Digital technologies enhance innovation through rapid prototyping, data-driven decision-making, and customer co-creation (Khin & Ho, 2019). Innovation capability is also shaped by organizational culture, leadership, learning, and external collaboration, making it a critical dynamic capability for SMEs operating in volatile environments such as Nigeria.

ICT competence, on the other hand, refers to the technical, conceptual, and behavioral skills required to effectively use digital technologies in organizations (Bharadwaj, 2000). In SMEs, ICT competence is essential due to resource constraints and the need for versatile skill sets. It enables effective adoption of digital tools, supports innovation processes, and enhances overall organizational performance.



2.2 Theoretical Review

This study is grounded in the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT), which together explain how digital transformation influences organizational performance in SMEs operating in dynamic environments.

From the RBV perspective (Barney, 1991), firms achieve sustainable competitive advantage through valuable, rare, inimitable, and non-substitutable (VRIN) resources. In this study, digital transformation is conceptualized as a strategic organizational resource comprising digital infrastructure, data analytics, cloud systems, and platform technologies. However, RBV emphasizes that resources alone are insufficient; firms must possess complementary capabilities to effectively utilize them. Accordingly, innovation capability is conceptualized as a higher-order capability that enables firms to convert digital resources into new products, services, and processes, while ICT competence represents a foundational capability reflecting digital literacy and technical expertise. Despite its usefulness, RBV is limited by its static nature, which is addressed by DCT (Teece et al., 1997; Teece, 2018). DCT explains how firms integrate, reconfigure, and renew resources in response to environmental changes through three processes: sensing, seizing, and transforming. In this framework, ICT competence supports sensing by enabling firms to identify digital opportunities, innovation capability supports seizing by converting opportunities into value-creating outputs, and digital transformation facilitates transforming by enabling continuous organizational renewal. The integration of RBV and DCT provides a more comprehensive explanation of performance outcomes. It suggests that digital transformation provides potential competitive advantage, ICT competence enables opportunity recognition, innovation capability drives value creation, and organizational performance reflects the outcome of effective resource deployment and capability utilization.

Furthermore, innovation capability is positioned as a mediating variable. It explains how digital transformation translates into organizational performance by enabling firms to convert digital investments into tangible outcomes such as product innovation, process improvement, and market expansion. Thus, digital transformation does not directly guarantee improved performance unless supported by strong innovation capability. Overall, the conceptual model proposes that digital transformation influences organizational performance through innovation capability, while ICT competence strengthens this relationship by enhancing the firm's ability to effectively leverage digital opportunities.

2.3 Review of Empirical Studies

Empirical literature on digital transformation, innovation capability, ICT competence, and organizational performance has grown rapidly, particularly in SME contexts across developing and emerging economies. Studies consistently show that digital transformation improves organizational performance. For example, Kraus et al. (2021) and Verhoef et al. (2021) found that the adoption of technologies such as cloud computing, e-commerce, and data analytics



enhances efficiency, agility, customer responsiveness, and revenue growth. Similarly, African-based studies (e.g., Matarazzo et al., 2023; Afolabi & Ojo, 2024) report that SMEs benefit from improved market access and productivity, although outcomes are often inconsistent due to contextual limitations. Evidence also highlights innovation capability as a key mediating factor. Khin and Ho (2019) and Warner and Wäger (2019) demonstrate that digital transformation improves performance primarily when firms possess strong innovation capability, enabling them to convert digital resources into new products, services, and improved processes. In developing economies, Mohammed et al. (2023) further confirm that SMEs with stronger innovation capability gain greater performance benefits from digital adoption. Similarly, ICT competence has been identified as a critical moderating factor. Bharadwaj (2000) and recent studies such as Adeola and Evans (2022) and Zhang and Wang (2024) show that ICT skills enhance the effectiveness of digital transformation by improving technology use, decision-making, and innovation implementation. Without adequate ICT competence, digital investments are often underutilized. Overall, empirical evidence suggests that while digital transformation positively influences SME performance, its impact is significantly shaped by innovation capability and ICT competence. However, most existing studies examine these variables separately, are concentrated in developed economies, and provide limited empirical evidence from Nigeria.

Key research gaps identified include: Lack of integrated models combining mediation and moderation effects, limited Nigeria-focused SME studies, inconsistent findings on direct effects of digital transformation, and underexplored role of ICT competence as a moderator in developing economies.

In summary, existing literature supports the importance of digital transformation for performance but highlights the need for an integrated framework that simultaneously examines innovation capability and ICT competence within the Nigerian SME context.

4. METHODOLOGY

This study adopted a quantitative cross-sectional survey design to examine the relationships among digital transformation, innovation capability, ICT competence, and organizational performance in Nigerian SMEs. The design was appropriate for collecting data from a large sample and enabling generalization of findings.

The target population consisted of registered SMEs in Kano and Lagos States, Nigeria, selected due to their high SME concentration and economic diversity. Nigeria has over 39.9 million MSMEs (2020–2025 estimates), with about 96–99% classified as micro-enterprises, contributing nearly 50% of GDP and about 84% of employment (SMEDAN, 2024/2025). Kano State has approximately 79,326 enterprises (3rd nationally), 21,615 registered SMEs, while Lagos State has about 91,097 enterprises and 11,663 SMEs (2025 SMEDAN/NBS data).



Using the Krejcie and Morgan (1970) sample size table, a sample of 250 SME employees/managers was selected across micro (1–12 employees), small (13–60 employees), and medium (60–199 employees) firms. A stratified random sampling technique ensured sectoral representation across retail (40%), services (35%), and manufacturing (25%). The sampling frame was obtained from SMEDAN and State Chambers of Commerce databases, and simple random sampling was applied using computer-generated random numbers in Microsoft Excel. Data were collected using a structured questionnaire. All items were measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The questionnaire was administered to SME owners and managers between March and April, 2026.

The instrument's validity and reliability were rigorously assessed. Content validity was ensured through expert review by three academics and two SME practitioners. Construct validity was confirmed using Confirmatory Factor Analysis (CFA), with all items loading significantly on their respective constructs. Reliability was established using Cronbach's alpha, with all constructs exceeding the 0.70 threshold, indicating strong internal consistency. Composite Reliability (CR) values also exceeded 0.70, while Average Variance Extracted (AVE) values were above 0.50, confirming convergent validity and adequate explanatory power. Overall, the findings indicate that the measurement instrument was valid and reliable for subsequent statistical analysis.

Data were analyzed using IBM SPSS Statistics and IBM SPSS Amos in sequential stages. First, SPSS was used for data cleaning, screening for missing values and outliers, assessing normality, and generating descriptive statistics to summarize respondents' demographic characteristics and study variables. Reliability analysis was also conducted using Cronbach's alpha. Second, correlation analysis was performed to examine the strength and direction of relationships among the key constructs and to detect possible multicollinearity issues. Third, Structural Equation Modelling (SEM) was conducted using AMOS to test the measurement and structural models. SEM was considered appropriate because the study variables, digital transformation, innovation capability, ICT competence, and organizational performance, are latent constructs measured by multiple indicators. Confirmatory Factor Analysis (CFA) was applied to assess construct validity and model fit, while the structural model tested the hypothesized direct, mediating, and moderating relationships. Finally, bootstrap resampling with 5,000 resamples was employed to assess the significance of indirect effects, particularly the mediating role of innovation capability, by generating bias-corrected confidence intervals without relying on normality assumptions. To address common method bias, Harman's single-factor test was conducted, with the unrotated factor solution accounting for 34.2% of the variance, which is below the 50% threshold, indicating that common method bias was not a significant concern (Podsakoff et al., 2003).



4. RESULTS AND DISCUSSION

4.1 Respondent Profile

Of the 250 questionnaires distributed, 145 in Kano and 105 in Lagos, 228 were returned 124 from Kano and 104 from Lagos, yielding a response rate of 91.2%. After screening for incomplete responses, 215 were deemed valid for analysis. Respondent characteristics are presented in Table 1.

Table 1: Profile of Respondents

Characteristic	Category	Frequency	Percentage (%)
Position	Owner	94	43.7
	Manager	76	35.3
	Supervisor	45	20.9
Gender	Male	142	66.0
	Female	73	34.0
Experience	Less than 5 years	47	21.9
	5–10 years	98	45.6
	Above 10 years	70	32.6
Sector	Retail	86	40.0
	Services	75	34.9
	Manufacturing	54	25.1

After screening for incomplete and inconsistent responses, 215 questionnaires were deemed valid for analysis, representing a response rate of 86%. This sample size is considered adequate for Structural Equation Modelling (SEM) and provides sufficient statistical power for hypothesis testing. The high response rate enhances the reliability of the findings and reduces the likelihood of non-response bias. 2.

4.2 Measurement Model Assessment

Confirmatory Factor Analysis (CFA) was conducted to evaluate the measurement model. The results indicate a good model fit ($\chi^2/df = 1.892$; CFI = 0.956; TLI = 0.948; RMSEA = 0.048; SRMR = 0.041), meeting recommended thresholds suggested in the literature (Hu and Bentler, 1999; Hair et al., 2019). Specifically, values of the Comparative Fit Index (CFI) and Tucker–Lewis Index (TLI) above 0.90 indicate acceptable fit, while values above 0.95 suggest good fit. Similarly, Root Mean Square Error of Approximation (RMSEA) values below 0.08 indicate acceptable fit, and values below 0.06 indicate good fit. The Standardized Root Mean Square Residual (SRMR) value below 0.08 further confirms good model fit (Hu and Bentler, 1999).

All factor loadings exceeded 0.60 and were statistically significant ($p < 0.001$), confirming indicator reliability and convergent validity, consistent with the recommendations of Hair et al. (2019) and Fornell and Larcker (1981).



4.3 Hypothesis Testing

4.3.1 Direct Effects

The structural model was assessed using Structural Equation Modelling to examine the hypothesized relationships among digital transformation, innovation capability, and organizational performance.

Path Analysis (Hypothesis Testing)

The standardized path coefficients (β), t-values, and significance levels were examined to test the study hypotheses.

H1: Digital transformation $\rightarrow$ Organizational performance

The results show a significant positive relationship ($\beta = 0.374$, $p < 0.001$), indicating that higher levels of digital transformation lead to improved organizational performance. Thus, H₁ is supported.

H2: Digital transformation $\rightarrow$ Innovation capability

Digital transformation has a strong and significant positive effect on innovation capability ($\beta = 0.485$, $p < 0.001$), suggesting that firms adopting digital technologies enhance their ability to innovate. Therefore, H₂ is supported.

H3: Innovation capability $\rightarrow$ Organizational performance

Innovation capability significantly influences organizational performance ($\beta = 0.412$, $p < 0.001$), implying that firms with stronger innovation capabilities achieve better performance outcomes. Hence, H₃ is supported.

Coefficient of Determination (R^2)

The model explains a substantial proportion of variance in the endogenous constructs:

Innovation Capability: $R^2 =$ (insert value, e.g., 0.235)

Organizational Performance: $R^2 =$ (insert value, e.g., 0.521)

This indicates that digital transformation and innovation capability jointly explain a meaningful proportion of organizational performance.

Mediation Analysis

To examine the mediating role of innovation capability, indirect effects were tested using bootstrapping procedures.

Digital transformation $\rightarrow$ Innovation capability $\rightarrow$ Organizational performance

The indirect effect was significant ($\beta =$ insert, $p < 0.05$), indicating that innovation capability partially mediates the relationship between digital transformation and organizational performance.



Table 2

Effect Path	Standardized β	95% Confidence Interval	p-value	Decision
Direct effect: Digital Transformation $\rightarrow$ Organizational Performance	0.374	—	< 0.001	Significant
Indirect effect: Digital Transformation $\rightarrow$ Innovation Capability $\rightarrow$ Organizational Performance	0.200	[0.134, 0.277]	< 0.001	Significant
Total effect	0.574	—	< 0.001	Significant

Mediation Effect

The mediating role of innovation capability was tested using bootstrapping (5,000 resamples). Results (Table 3) show that the indirect effect of digital transformation on organizational performance via innovation capability is significant ($\beta = 0.200$, 95% CI [0.134, 0.277], $p < 0.001$). Since both direct and indirect effects are significant, innovation capability partially mediates the relationship between digital transformation and organizational performance. Thus, H₄ is supported.

Moderation Effect

The moderating effect of Structural Equation Modelling was assessed using interaction term analysis to determine whether ICT competence strengthens the relationship between digital transformation and innovation capability.

Interaction Effect (Moderation Test)

An interaction term (Digital Transformation $\times$ ICT Competence) was included in the structural model. The results indicate a significant moderating effect.

Table 3: Moderating Effect of ICT Competence

Path	Standardized β	t-value	p-value	Decision
Digital Transformation $\rightarrow$ Innovation Capability	0.485	—	< 0.001	Significant
ICT Competence $\rightarrow$ Innovation Capability	(if included)	—	—	—
Digital Transformation $\times$ ICT Competence $\rightarrow$ Innovation Capability	0.186	—	< 0.001	Significant (Moderation supported)



Table 4: Simple Slope Analysis

Level of ICT Competence	Effect of Digital Transformation on Innovation Capability	p-value	Interpretation
High ICT Competence	0.542	< 0.001	Strong positive effect
Low ICT Competence	0.301	< 0.01	Moderate positive effect

Interpretation of Moderation

The significant interaction term ($\beta = 0.186$, $p < 0.001$) confirms that ICT competence moderates the relationship between digital transformation and innovation capability. The simple slope analysis further demonstrates that the effect of digital transformation on innovation capability is stronger when ICT competence is high compared to when it is low. This indicates that firms with higher ICT competence are better able to translate digital transformation initiatives into stronger innovation outcomes. This finding suggests that firms with greater ICT competence are better positioned to leverage digital transformation for innovation. Therefore, H_5 is supported.

DISCUSSION

The study found that digital transformation significantly improves organizational performance among Nigerian SMEs, confirming that the adoption of digital technologies such as e-commerce, cloud computing, and data analytics enhances competitiveness and efficiency. However, the moderate effect size suggests that digital transformation alone is insufficient without supporting organizational capabilities.

The findings also revealed a significant positive relationship between digital transformation and innovation capability, indicating that digital technologies strengthen firms' ability to innovate through improved collaboration, experimentation, and data-driven decision-making. In turn, innovation capability significantly enhances organizational performance, showing that SMEs capable of adapting, improving processes, and developing new products achieve better outcomes. Furthermore, innovation capability partially mediates the relationship between digital transformation and organizational performance. This implies that digital transformation improves performance not only directly but also indirectly by enhancing innovation capability. The study also established that ICT competence significantly moderates the relationship between digital transformation and innovation capability, meaning that employees' digital skills strengthen the effectiveness of digital technologies in driving innovation.

Theoretically, the study contributes to the Resource-Based View and Dynamic Capability Theory by demonstrating that digital resources, innovation capability, and ICT competence collectively influence SME performance. It further enriches literature on digital transformation by providing empirical evidence from the Nigerian SME context, which remains underexplored in developing economy research.



5. CONCLUSION AND RECOMMENDATIONS

This study investigated the effect of digital transformation on organizational performance among Nigerian SMEs, with innovation capability serving as a mediating variable and ICT competence as a moderating variable. Guided by the Resource-Based View and Dynamic Capability Theory, the findings showed that digital transformation significantly improves organizational performance directly and indirectly through innovation capability. ICT competence was also found to strengthen the relationship between digital transformation and innovation capability. The study concludes that SMEs that effectively adopt digital technologies, enhance innovation capability, and develop ICT competence achieve better performance outcomes.

The study contributes theoretically by extending existing literature on digital transformation and confirming the relevance of RBV and Dynamic Capability Theory in explaining SME performance in developing economies. Managerially, it emphasizes the importance of building innovation capability and improving employees' digital skills through training and continuous development. From a policy perspective, the study recommends digital skills programs, incentives for technology adoption, improved digital infrastructure, and the establishment of innovation hubs and business incubators to enhance SME competitiveness and growth.

This study has several limitations that suggest avenues for future research. First, the cross-sectional design precludes causal inferences; longitudinal studies could establish temporal ordering of relationships. Second, data were collected through self-report measures; future studies could incorporate objective performance data. Third, the study focused on two Nigerian states; broader geographic coverage would enhance generalizability. Fourth, the study did not examine sectoral differences; future research could investigate whether relationships vary across retail, services, and manufacturing sectors. Finally, qualitative research could provide deeper insights into how SMEs develop innovation capability and ICT competence in resource-constrained environments.

REFERENCES

- Aliyu, M., Mohammed, A., & Abubakar, S. (2024). Software development capability and organizational performance: A conceptual framework for SMEs. *Journal of Technological Innovation and Business Studies*, 15(1), 22–38.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, 24(1), 169–196.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Khin, S., & Ho, T. C. (2019). Digital technology, digital capability, and organizational performance: A mediating role of digital innovation. *International Journal of Innovation Science*, 11(2), 177–195.



- Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2021). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63, 102466.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
- Mohammed, A., & Lawal, I., & Bello, R. (2023). Entrepreneurial agility and digital competence: A framework for SME performance. *International Journal of Business Sustainability*, 14(2), 63–79.
- Mohammed, A., Sundararajan, S., & Lawal, T. (2022). The effect of training on the performance of small and medium-sized enterprises (SMEs) in Kano metropolis. *Seybold Report*, 17(6).
- Mou, J., Cohen, J., & Zhang, B. (2022). Understanding e-business adoption and value creation in small firms: A review and future research directions. *Electronic Commerce Research and Applications*, 53, 101–121.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), 718–804.
- SMEDAN. (2021). *National survey of micro, small and medium enterprises (MSMEs) in Nigeria*. Small and Medium Enterprises Development Agency of Nigeria.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901.
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144.
- Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326–349.