

Original Research Article

STRATEGIC MANAGEMENT CAPABILITIES AND SUPPLY CHAIN RESILIENCE IN NIGERIA'S MANUFACTURING SECTOR: THE MEDIATING ROLE OF ORGANISATIONAL AGILITY

Oboh, Christopher Ikhianosime¹, Aliu, Fatima Jael², Adamu Momohrabiu³, Oboh, Joseph Osigbemhe⁴, Abdullah Umar Zainab³

¹ Department of Procurement and Supply Chain Management, Auchu Polytechnic, Auchu, Edo State, Nigeria

² Directorate of Procurement, Auchu Polytechnic, Auchu, Edo State, Nigeria.

³ Department of Business Administration and Management, Auchu Polytechnic, Auchu, Edo State, Nigeria.

⁴ Department of Marketing, Auchu Polytechnic, Auchu, Edo State, Nigeria.

ORCID:  [OCI 0009-0000-0164](https://orcid.org/0009-0000-0164)¹

Correspondence should be addressed to Oboh, Christopher Ikhianosime: chrisoboh01@gmail.com

Article No: 046 | **Accepted:** 04 July 2026 | **Published:** 10 July 2026

Abstract: The increasing volatility of the business environment has heightened the importance of supply chain resilience, particularly within emerging economies such as Nigeria. This study examines the relationship between strategic management capabilities and supply chain resilience and investigates the mediating role of organisational agility among manufacturing firms in Nigeria. Anchored on Dynamic Capabilities Theory, the study adopts a quantitative cross-sectional survey design and collects data from managerial personnel in manufacturing firms. Data were analysed using Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM). The findings reveal that strategic management capabilities significantly enhance organisational agility and supply chain resilience. Organisational agility was also found to have a significant positive effect on supply chain resilience and partially mediated the relationship between strategic management capabilities and resilience. These results suggest that firms with strong strategic planning, environmental scanning, and resource orchestration capabilities are better positioned to develop agile structures and resilient supply chains. The study contributes to the supply chain resilience and dynamic capabilities literature by providing empirical evidence from Nigeria's manufacturing sector and highlighting the strategic importance of organisational agility in translating managerial capabilities into resilience outcomes. The findings offer valuable implications for managers and policymakers seeking to strengthen the competitiveness and sustainability of manufacturing firms in turbulent business environments.

Keywords: Strategic management capabilities; organisational agility; supply chain resilience; dynamic capabilities theory; manufacturing sector; Nigeria.

1. Introduction

The increasing frequency of global disruptions, including pandemics, geopolitical conflicts, economic instability, and supply chain bottlenecks, has heightened the importance of supply chain resilience as a strategic imperative for organisations. For manufacturing firms in Nigeria, these challenges are compounded by infrastructural deficiencies, foreign exchange volatility, energy shortages, logistics constraints, and regulatory uncertainties, making resilience essential for operational continuity and competitiveness.

Recent scholarship suggests that organisational resilience is influenced not only by operational capabilities but also by strategic and managerial competencies that enable firms to anticipate, adapt to, and respond effectively to environmental changes (Ivanov, 2023; Teece, 2023). Within this context, strategic management capabilities provide the foundation for sensing opportunities and threats, mobilising resources, and implementing adaptive responses. However, the extent to which these capabilities translate into resilient supply chains may depend on organisational agility, which enables firms to respond rapidly and flexibly to changing circumstances.

Despite growing interest in resilience research, empirical evidence on the relationships among strategic management capabilities, organisational agility, and supply chain resilience remains limited within the Nigerian manufacturing sector. Drawing on Dynamic Capabilities Theory, this study examines the direct effect of strategic management capabilities on supply chain resilience and investigates the mediating role of organisational agility. The study contributes to the literature by providing empirical insights into the capability-based mechanisms through which manufacturing firms can enhance resilience in a volatile business environment.

2. Literature Review and Hypothesis Development

2.1 Theoretical Foundation: Dynamic Capabilities Theory

This study is anchored on Dynamic Capabilities Theory (DCT), originally advanced by Teece, Pisano and Shuen (1997) and further refined by Teece (2018, 2023). The theory posits that sustainable organisational success in turbulent environments depends not merely on the possession of valuable resources but on the ability to continuously reconfigure, integrate, and deploy those resources in response to changing environmental conditions. Dynamic capabilities therefore enable firms to sense emerging opportunities and threats, seize opportunities through strategic actions, and transform organisational resources to maintain competitiveness.

The relevance of DCT to the Nigerian manufacturing sector is particularly significant. Manufacturing firms in Nigeria operate in an environment characterised by

economic volatility, infrastructure deficits, fluctuating exchange rates, supply uncertainties, and policy inconsistencies. Under such conditions, firms require adaptive capabilities that allow them to respond effectively to disruptions and sustain operational continuity. Strategic management capabilities represent the managerial mechanisms through which firms sense and interpret environmental changes, while organisational agility reflects the firm's capacity to rapidly implement adaptive responses. Supply chain resilience emerges as an outcome of these dynamic capability processes. Consequently, DCT provides a robust theoretical lens for explaining the relationships among strategic management capabilities, organisational agility, and supply chain resilience.

2.2 Strategic Management Capabilities and Organisational Agility

Strategic management capabilities refer to an organisation's ability to formulate, implement, and continuously adjust strategic decisions in response to environmental changes. These capabilities encompass strategic foresight, environmental scanning, resource orchestration, strategic flexibility, and managerial decision-making competence (Helfat & Peteraf, 2022; Teece, 2023). Firms possessing strong strategic management capabilities are better positioned to identify emerging challenges and opportunities, align resources with strategic priorities, and initiate timely organisational responses.

Organisational agility, on the other hand, reflects the ability of a firm to respond quickly and effectively to environmental changes through flexible structures, adaptive processes, and rapid decision-making. Agility has become increasingly important in contemporary business environments where uncertainty and disruption are frequent occurrences (Shams et al., 2024).

From a dynamic capabilities perspective, strategic management capabilities serve as antecedents to organisational agility. The ability to sense environmental changes and make strategic decisions enhances a firm's responsiveness and adaptive capacity. Empirical studies have reported positive associations between managerial capabilities and organisational agility, suggesting that firms with superior strategic capabilities tend to exhibit greater flexibility and responsiveness to market changes (Aslam et al., 2022; Tallon et al., 2022). In the Nigerian manufacturing context, strategic managers often need to make rapid adjustments to sourcing arrangements, production schedules, and market strategies in response to economic and operational uncertainties. Such adaptive actions are manifestations of organisational agility driven by strategic capabilities.

Accordingly, the following hypothesis is proposed:

H1: Strategic management capabilities have a significant positive effect on organisational agility in Nigeria's manufacturing sector.

2.3 Organisational Agility and Supply Chain Resilience

Supply chain resilience refers to the capability of a supply chain to anticipate, absorb, adapt to, and recover from disruptions while maintaining acceptable levels of performance. Resilient supply chains are characterised by flexibility, adaptability, visibility, collaboration, and rapid recovery capabilities (Ivanov, 2023).

Organisational agility has been increasingly recognised as a critical determinant of supply chain resilience because agile organisations are capable of responding quickly to disruptions and adjusting operational processes without significant performance deterioration. Agility enables firms to modify sourcing strategies, reallocate resources, redesign production schedules, and respond effectively to shifts in customer demand and supply market conditions.

Recent disruptions affecting global and domestic supply chains have reinforced the importance of agility in resilience-building efforts. Firms capable of making timely decisions and implementing rapid responses generally experience shorter recovery periods and reduced operational losses following disruptions (Dubey et al., 2021; Ivanov & Dolgui, 2024). Within Nigeria's manufacturing environment, agility is particularly valuable because firms frequently encounter transportation delays, energy supply interruptions, inflationary pressures, and foreign exchange fluctuations. Organisations that can adapt swiftly to such challenges are more likely to maintain supply continuity and operational stability.

Therefore, it is hypothesised that:

H2: Organisational agility has a significant positive effect on supply chain resilience in Nigeria's manufacturing sector.

2.4 Strategic Management Capabilities and Supply Chain Resilience

Strategic management capabilities play a vital role in enhancing organisational resilience by enabling firms to anticipate risks, allocate resources effectively, and develop adaptive strategies. Through strategic planning, environmental scanning, and resource reconfiguration, managers can proactively address potential disruptions before they escalate into major operational challenges.

Dynamic Capabilities Theory suggests that resilient organisations are distinguished by their ability to continuously transform and renew their capabilities in response to environmental changes. Strategic management capabilities facilitate this process by supporting organisational learning, innovation, and strategic flexibility. Consequently, firms possessing strong strategic capabilities are generally better equipped to withstand disruptions and recover from adverse events.

Empirical evidence increasingly supports the positive relationship between strategic capabilities and resilience outcomes. Studies have shown that organisations with superior strategic planning and adaptive management practices tend to exhibit stronger resilience during periods of uncertainty and crisis (Khan et al., 2023; Teece, 2023). In Nigeria, where manufacturing firms face persistent operational and institutional challenges, strategic management capabilities can provide the foundation for building robust and adaptable supply chains.

Based on this argument, the study proposes that:

H3: Strategic management capabilities have a significant positive effect on supply chain resilience in Nigeria's manufacturing sector.

2.5 The Mediating Role of Organisational Agility

Although strategic management capabilities provide the strategic foundation for resilience, their influence may not be realised automatically. Strategic decisions and managerial competencies must be translated into adaptive organisational actions capable of responding to environmental disruptions. Organisational agility represents the mechanism through which this translation occurs.

From a Dynamic Capabilities perspective, strategic management capabilities enhance a firm's ability to sense environmental changes and formulate appropriate responses, while organisational agility enables the rapid implementation of those responses. Consequently, agility serves as a critical pathway through which managerial competencies influence resilience outcomes.

Within the Nigerian manufacturing sector, firms often operate under conditions that require immediate operational adjustments. Strategic insights alone may be insufficient unless accompanied by the agility necessary to modify sourcing arrangements, production systems, logistics networks, and market responses. Therefore, organisational agility is expected to strengthen the effectiveness of strategic management capabilities in fostering supply chain resilience.

Previous studies have reported mediating effects of agility in the relationship between organisational capabilities and performance outcomes, suggesting that agility enhances the translation of strategic resources into tangible organisational benefits (Aslam et al., 2022; Shams et al., 2024). Extending this argument to supply chain resilience, it is expected that organisational agility will mediate the relationship between strategic management capabilities and resilience.

Thus, the following hypothesis is advanced:

H4: Organisational agility significantly mediates the relationship between strategic management capabilities and supply chain resilience in Nigeria's manufacturing sector.

2.6 Conceptual Framework

Drawing upon Dynamic Capabilities Theory, this study proposes a conceptual framework in which strategic management capabilities function as the exogenous construct, organisational agility serves as the mediating construct, and supply chain resilience represents the endogenous construct. The framework posits that strategic management capabilities enhance organisational agility, which in turn strengthens supply chain resilience. Additionally, strategic management capabilities are expected to exert a direct influence on supply chain resilience.

The proposed framework provides a theoretical basis for examining how managerial capabilities can be leveraged to improve resilience outcomes within Nigeria's manufacturing sector, particularly in an environment characterised by persistent uncertainty and disruption.

3. Materials and Methods

3.1 Research Design

This study adopted a quantitative research approach based on the positivist research paradigm. The quantitative approach was considered appropriate because the study sought to empirically examine the causal relationships among strategic management capabilities, organisational agility, and supply chain resilience within Nigeria's manufacturing sector. Specifically, the study tested a theoretically grounded model derived from Dynamic Capabilities Theory and evaluated the direct and indirect relationships among the study constructs. Consistent with contemporary strategic management and supply chain research, a cross-sectional survey design was employed to obtain data from manufacturing firms operating in Nigeria.

3.2 Population of the Study

The target population comprised manufacturing firms registered with the Manufacturers Association of Nigeria (MAN). These firms operate across diverse manufacturing subsectors, including food and beverages, chemicals and pharmaceuticals, textiles and garments, building materials, electrical and electronics, plastics and rubber products, and industrial goods. The focus on manufacturing firms was informed by the sector's strategic importance to Nigeria's economic development and its exposure to persistent supply chain disruptions arising from infrastructural deficiencies, foreign exchange volatility, logistics challenges, and global market uncertainties.

The unit of analysis was the firm, while the unit of observation consisted of senior managers involved in strategic planning, procurement, supply chain management, logistics, operations, and production management. These categories of respondents were considered suitable because of their direct involvement in strategic decision-making and supply chain activities.

3.3 Sample Size and Sampling Technique

A multi-stage sampling procedure was adopted. In the first stage, manufacturing firms were stratified according to major industrial subsectors to ensure adequate sectoral representation. In the second stage, purposive sampling was used to identify firms with established supply chain structures and active manufacturing operations. Finally, respondents were selected from managerial positions directly associated with strategic and supply chain functions.

Given the complexity of Structural Equation Modelling (SEM), an adequate sample size is necessary to ensure statistical reliability and model stability. Following the recommendations of Hair et al. (2022), a minimum sample size exceeding 400 respondents was considered appropriate for covariance-based SEM involving latent variables and mediation analysis. Accordingly, 500 structured questionnaires were distributed across selected manufacturing firms, while 432 valid responses were retained for analysis after data screening, representing a response rate of 86.4%.

3.4 Instrument Development and Measurement of Constructs

Data were collected using a structured questionnaire developed from validated scales reported in previous studies. Minor modifications were made to reflect the operational realities of Nigeria's manufacturing sector while preserving the original conceptual meanings of the measurement items.

All constructs were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Strategic Management Capabilities (SMC)

Strategic management capabilities were measured using five dimensions adapted from Teece (2018, 2023), Helfat and Peteraf (2022), and related strategic management studies. The dimensions included strategic foresight, environmental scanning, strategic flexibility, resource orchestration, and innovation orientation.

Organisational Agility (OA)

Organisational agility was operationalised using indicators adapted from Tallon et al. (2022) and Shams et al. (2024). The construct captured organisational responsiveness, decision-making speed, operational flexibility, adaptability, and learning capability.

Supply Chain Resilience (SCR)

Supply chain resilience was measured using items adapted from Ponomarov and Holcomb (2009), Dubey et al. (2021), and Ivanov (2023). The measurement dimensions included preparedness, adaptability, recovery capability, supply continuity, and disruption response effectiveness.

A pilot study involving 30 managers from manufacturing firms outside the final sample was conducted to assess clarity, relevance, and comprehensibility of the questionnaire items. Feedback from the pilot study informed minor revisions to improve instrument quality.

3.5 Data Collection Procedure

Data collection was conducted over a four-month period. Questionnaires were administered through a combination of physical distribution and electronic survey platforms. Prior to administration, respondents were informed of the academic purpose of the study and assured of confidentiality and anonymity. Participation was entirely voluntary.

To minimise common method bias, respondents were assured that there were no right or wrong answers and that responses would be used solely for research purposes. Additionally, questionnaire items were arranged logically and construct labels were not disclosed to respondents.

3.6 Preliminary Data Screening

Before hypothesis testing, the dataset was screened for missing values, outliers, normality, and multicollinearity. Missing data were minimal and were addressed using expectation-maximisation procedures. Multivariate outliers were assessed using Mahalanobis distance statistics and observations exceeding critical thresholds were removed.

Normality was evaluated using skewness and kurtosis statistics. The values fell within the acceptable range of ± 2.0 , indicating that the data satisfied normality assumptions for covariance-based SEM. Variance Inflation Factor (VIF) values were below the threshold of 5.0, indicating the absence of multicollinearity concerns.

3.7 Measurement Model Assessment

Confirmatory Factor Analysis (CFA) was conducted using AMOS version 29 to evaluate the reliability and validity of the measurement model. CFA was considered appropriate because the measurement scales were theoretically established and required empirical validation within the Nigerian manufacturing context.

Reliability was assessed using Cronbach's Alpha and Composite Reliability (CR), with threshold values of 0.70 and above considered acceptable. Convergent validity was evaluated through standardised factor loadings and Average Variance Extracted (AVE). Factor loadings greater than 0.70 and AVE values exceeding 0.50 were considered satisfactory.

Discriminant validity was assessed using both the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT). Discriminant validity was deemed satisfactory where the square root of AVE exceeded inter-construct correlations and HTMT values remained below the recommended threshold of 0.85.

3.8 Structural Model Assessment

Following validation of the measurement model, Structural Equation Modelling (SEM) was employed to test the hypothesised relationships among the study variables. SEM was selected because it enables the simultaneous estimation of multiple dependence relationships while accounting for measurement error. This characteristic makes it particularly suitable for examining complex theoretical models involving latent constructs and mediation effects.

The structural model evaluated the direct relationships between strategic management capabilities and organisational agility, organisational agility and supply chain resilience, as well as strategic management capabilities and supply chain resilience.

Model adequacy was assessed using multiple goodness-of-fit indices, including Chi-square divided by degrees of freedom (χ^2/df), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Incremental Fit Index (IFI), Root Mean Square Error of Approximation (RMSEA), and Standardised Root Mean Square Residual (SRMR). The

study adopted widely accepted thresholds of $\chi^2/df < 3.0$, $CFI \geq 0.90$, $TLI \geq 0.90$, $IFI \geq 0.90$, $RMSEA \leq 0.08$, and $SRMR \leq 0.08$.

3.9 Mediation Analysis

The mediating role of organisational agility in the relationship between strategic management capabilities and supply chain resilience was examined using bootstrapping procedures. Following contemporary SEM practice, 5,000 bootstrap samples were generated to estimate indirect effects and construct bias-corrected confidence intervals.

Mediation was considered significant where the confidence interval for the indirect effect did not include zero. This approach is regarded as more robust than traditional causal-step procedures because it provides direct statistical evidence of mediation effects.

3.10 Ethical Considerations

Ethical standards were strictly observed throughout the study. Respondents were informed about the purpose and objectives of the research and provided informed consent prior to participation. Confidentiality and anonymity were guaranteed, and respondents were assured that their information would be used exclusively for academic purposes. Participation was voluntary, and respondents retained the right to withdraw from the study at any stage without penalty.

3.11 Model Specification

Based on the study hypotheses and the underlying assumptions of Dynamic Capabilities Theory, the structural model was specified as follows:

$$OA = \beta_1(SMC) + \varepsilon_1$$

$$SCR = \beta_2(OA) + \beta_3(SMC) + \varepsilon_2$$

Where:

SMC = Strategic Management Capabilities

OA = Organisational Agility

SCR = Supply Chain Resilience

β = Path coefficients

ε = Error terms

The model assumes that strategic management capabilities positively influence organisational agility and supply chain resilience, while organisational agility mediates the relationship between strategic management capabilities and supply chain resilience.

4. Results

4.1 Response Rate and Respondent Profile

A total of 500 questionnaires were distributed to managerial personnel across selected manufacturing firms in Nigeria. Of these, 448 questionnaires were returned,

representing a response rate of 89.6%. Following data screening for completeness and consistency, 432 questionnaires were found suitable for analysis, yielding an effective response rate of 86.4%. This response rate was considered adequate for Structural Equation Modelling (SEM) and exceeded the minimum sample size recommended for studies involving latent variable analysis.

The respondents comprised senior managers, procurement managers, supply chain managers, production managers, operations managers, and logistics managers. Their positions within the organisations provided them with sufficient knowledge of strategic management practices and supply chain operations, thereby enhancing the reliability of the data collected.

4.2 Descriptive Statistics

Descriptive statistics were computed to provide an overview of respondents' perceptions regarding strategic management capabilities, organisational agility, and supply chain resilience.

Table 4.1 Descriptive Statistics of Study Variables

Variable	Mean	Standard Deviation
Strategic Management Capabilities	4.08	0.71
Organisational Agility	3.97	0.74
Supply Chain Resilience	4.02	0.69

The results indicate relatively high mean scores across the three constructs, suggesting that respondents generally perceived their organisations as possessing moderate to high levels of strategic management capabilities, organisational agility, and supply chain resilience. The standard deviation values indicate acceptable variability in responses and suggest that the data were suitable for subsequent multivariate analysis.

4.3 Assessment of the Measurement Model

The measurement model was evaluated using Confirmatory Factor Analysis (CFA) to determine the reliability and validity of the latent constructs.

4.3.1 Model Fit Assessment

The overall measurement model demonstrated satisfactory fit to the observed data.

Table 4.2 Measurement Model Fit Indices

Fit Index	Recommended Threshold	Obtained Value
χ^2/df	< 3.00	2.184
CFI	≥ 0.90	0.947

TLI	≥ 0.90	0.939
IFI	≥ 0.90	0.948
RMSEA	≤ 0.08	0.052
SRMR	≤ 0.08	0.046

The fit indices exceeded recommended thresholds, indicating that the measurement model adequately represented the underlying data structure. Consequently, further assessment of reliability and validity was undertaken.

4.3.2 Reliability and Convergent Validity

Reliability was assessed using Cronbach's Alpha and Composite Reliability (CR), while convergent validity was evaluated through factor loadings and Average Variance Extracted (AVE).

Table 4.3 Reliability and Convergent Validity Results

Construct	Cronbach's Alpha	CR	AVE
Strategic Management Capabilities	0.892	0.911	0.673
Organisational Agility	0.884	0.902	0.648
Supply Chain Resilience	0.901	0.918	0.691

The results indicate that all constructs exceeded the recommended reliability threshold of 0.70. Similarly, AVE values were above 0.50, demonstrating adequate convergent validity. The findings suggest that the measurement items consistently captured the intended latent constructs.

4.3.3 Discriminant Validity

Discriminant validity was examined using the Fornell-Larcker criterion.

Table 4.4 Fornell-Larcker Criterion

Construct	SMC	OA	SCR
Strategic Management Capabilities (SMC)	0.820		
Organisational Agility (OA)	0.612	0.805	
Supply Chain Resilience (SCR)	0.594	0.681	0.831

The square roots of the AVE values (diagonal elements) exceeded the corresponding inter-construct correlations, confirming adequate discriminant validity among the study variables.

4.4 Structural Model Assessment

Following validation of the measurement model, Structural Equation Modelling (SEM) was performed to test the hypothesised relationships among the study constructs.

4.4.1 Structural Model Fit

The structural model demonstrated satisfactory goodness-of-fit.

Table 4.5 Structural Model Fit Indices

Fit Index	Recommended Threshold	Obtained Value
χ^2/df	< 3.00	2.337
CFI	≥ 0.90	0.941
TLI	≥ 0.90	0.934
IFI	≥ 0.90	0.942
RMSEA	≤ 0.08	0.055
SRMR	≤ 0.08	0.049

The results confirm that the proposed structural model adequately fits the observed data and is suitable for hypothesis testing.

4.4.2 Hypothesis Testing

The hypothesised relationships were assessed using standardised path coefficients, critical ratios (C.R.), and probability values.

Table 4.6 Structural Path Estimates

Hypothesis	Relationship	B	C.R.	p-value	Decision
H1	SMC \rightarrow OA	0.673	9.842	<0.001	Supported
H2	OA \rightarrow SCR	0.524	8.116	<0.001	Supported
H3	SMC \rightarrow SCR	0.318	4.905	<0.001	Supported

The findings reveal that strategic management capabilities exert a strong positive effect on organisational agility ($\beta = 0.673$, $p < 0.001$), supporting H1. This result suggests that manufacturing firms with stronger strategic capabilities are more likely to develop flexible and responsive organisational systems.

Similarly, organisational agility was found to positively influence supply chain resilience ($\beta = 0.524$, $p < 0.001$), providing support for H2. The result indicates that agile organisations are better positioned to withstand disruptions, adapt to changing conditions, and maintain supply chain continuity.

The direct effect of strategic management capabilities on supply chain resilience was also positive and significant ($\beta = 0.318, p < 0.001$), thereby supporting H3. This finding suggests that strategic managerial competencies contribute directly to resilience-building efforts within manufacturing organisations.

4.5 Mediation Analysis

The mediating effect of organisational agility was assessed using bootstrapping procedures involving 5,000 resamples.

Table 4.7 Mediation Analysis Results

Relationship	Direct Effect	Indirect Effect	Total Effect	95% Confidence Interval	Decision
SMC → OA → SCR	0.318	0.353	0.671	0.248 – 0.462	Significant

The bootstrapping results indicate that the indirect effect of strategic management capabilities on supply chain resilience through organisational agility was positive and statistically significant. The confidence interval did not include zero, confirming the presence of mediation.

Furthermore, because both the direct and indirect effects remained significant, the findings suggest the existence of partial mediation. This implies that strategic management capabilities influence supply chain resilience both directly and indirectly through organisational agility.

Accordingly, H4 was supported.

4.6 Summary of Findings

The results provide strong empirical support for the proposed Dynamic Capabilities framework. Strategic management capabilities significantly enhance organisational agility, while organisational agility contributes positively to supply chain resilience. In addition, strategic management capabilities exert a direct positive influence on supply chain resilience. Most importantly, organisational agility partially mediates the relationship between strategic management capabilities and supply chain resilience.

These findings suggest that Nigerian manufacturing firms can strengthen resilience not only through strategic managerial capabilities but also through the development of agile organisational structures and processes that enable rapid adaptation to environmental disruptions and operational uncertainties.

5. Discussion

This study examined the relationships among strategic management capabilities, organisational agility, and supply chain resilience within Nigeria's manufacturing sector from a Dynamic Capabilities perspective. The findings provide empirical support for the proposed theoretical model and offer important insights into how manufacturing firms can

strengthen resilience in an increasingly volatile business environment. Overall, the results suggest that strategic management capabilities constitute a critical organisational resource that enhances supply chain resilience both directly and indirectly through organisational agility.

The first hypothesis proposed that strategic management capabilities positively influence organisational agility. The findings confirmed this relationship, indicating that firms possessing stronger capabilities in strategic planning, environmental scanning, resource orchestration, and strategic flexibility are more likely to develop agile organisational systems. This result reinforces the central argument of Dynamic Capabilities Theory that managerial capabilities play a pivotal role in enabling organisations to sense environmental changes and respond effectively to emerging challenges. The finding suggests that agility is not an isolated organisational attribute but rather an outcome of deliberate strategic management processes.

Within the Nigerian manufacturing context, this finding is particularly significant. Manufacturing firms frequently operate under conditions characterised by unstable exchange rates, fluctuating energy costs, transportation bottlenecks, supply shortages, and regulatory uncertainties. Under such circumstances, managers who possess the capability to anticipate environmental changes and coordinate organisational resources effectively are better positioned to promote rapid decision-making and operational adaptability. Consequently, strategic management capabilities become an essential foundation for organisational agility.

The second hypothesis examined the relationship between organisational agility and supply chain resilience. The results revealed a positive and significant effect, indicating that agile organisations are more capable of anticipating disruptions, adapting operational processes, and recovering from adverse events. This finding supports contemporary resilience literature, which increasingly views agility as a prerequisite for organisational survival in uncertain environments. Rather than relying solely on static contingency plans, agile organisations continuously adjust their operations and resource configurations in response to changing circumstances.

The practical implications of this finding are particularly relevant for Nigerian manufacturers. Recent disruptions associated with foreign exchange scarcity, transportation challenges, inflationary pressures, and supply shortages have demonstrated the importance of organisational responsiveness. Firms capable of rapidly adjusting sourcing arrangements, modifying production schedules, and reallocating resources are more likely to sustain operational continuity than firms constrained by rigid organisational structures. Therefore, agility serves as a critical mechanism through which manufacturing firms enhance resilience and minimise the adverse effects of environmental disruptions.

The findings further revealed a significant positive relationship between strategic management capabilities and supply chain resilience. This result suggests that strategic managerial competencies contribute directly to resilience-building efforts within manufacturing organisations. Firms that invest in strategic foresight, environmental

intelligence, resource coordination, and adaptive decision-making are better equipped to anticipate disruptions and develop effective response mechanisms.

This finding extends existing resilience research by demonstrating that resilience is not solely an operational outcome but also a strategic capability embedded within organisational management processes. In many Nigerian manufacturing firms, resilience is often discussed in terms of inventory management, supplier diversification, or logistics optimisation. While these operational measures remain important, the findings of this study suggest that resilience ultimately originates from strategic leadership and managerial capability. Organisations are able to respond effectively to disruptions because their leaders possess the competence to interpret environmental signals, mobilise resources, and implement adaptive strategies.

Perhaps the most important contribution of this study relates to the mediating role of organisational agility. The results demonstrated that organisational agility partially mediates the relationship between strategic management capabilities and supply chain resilience. This finding provides a more nuanced understanding of the mechanisms through which strategic capabilities influence resilience outcomes. While strategic management capabilities exert a direct effect on resilience, a substantial portion of their influence is transmitted through organisational agility.

This result supports the core assumptions of Dynamic Capabilities Theory. Strategic management capabilities enable organisations to sense opportunities and threats and formulate appropriate responses. However, these strategic insights only create value when organisations possess the agility necessary to translate them into operational actions. Organisational agility therefore functions as the mechanism through which strategic intentions are transformed into adaptive organisational behaviours that strengthen resilience.

The finding is particularly relevant within the context of Nigeria's manufacturing sector, where environmental conditions often change rapidly and unpredictably. Strategic plans alone may be insufficient if organisations lack the flexibility required to implement adjustments in real time. Manufacturing firms that combine strong strategic management capabilities with agile structures and processes are more likely to sustain supply chain continuity and maintain competitive performance despite environmental turbulence.

From a theoretical perspective, this study contributes to the growing body of literature linking Dynamic Capabilities Theory to supply chain resilience. Existing studies have frequently examined strategic capabilities, agility, and resilience as separate constructs. The present study advances the literature by demonstrating how these constructs interact within a unified capability-based framework. Specifically, the findings suggest that strategic management capabilities represent higher-order dynamic capabilities that facilitate organisational agility, which in turn enhances resilience outcomes. This integrated perspective provides a more comprehensive explanation of resilience development within emerging economy contexts.

Furthermore, the study contributes to the limited empirical literature on supply chain resilience in Sub-Saharan Africa. Much of the existing resilience literature is dominated by evidence from developed economies characterised by relatively stable institutional environments. By focusing on Nigeria's manufacturing sector, the study demonstrates that the principles of Dynamic Capabilities Theory remain relevant within environments characterised by institutional complexity, infrastructural constraints, and economic volatility. However, the findings also highlight the heightened importance of managerial adaptability and organisational flexibility in such contexts.

Overall, the results underscore the strategic importance of developing managerial competencies and organisational agility as complementary capabilities for resilience building. The evidence suggests that manufacturing firms seeking to improve resilience should move beyond traditional risk management approaches and adopt a capability-development perspective that emphasises strategic foresight, organisational responsiveness, and continuous adaptation. Such an approach is likely to enhance not only resilience but also long-term competitiveness in an increasingly uncertain business environment.

6. Conclusion, Implications, Limitations, and Future Research Directions

6.1 Conclusion

This study examined the relationships among strategic management capabilities, organisational agility, and supply chain resilience within Nigeria's manufacturing sector through the lens of Dynamic Capabilities Theory. The study was motivated by the growing vulnerability of manufacturing supply chains to environmental disruptions and the need to understand the organisational capabilities that enable firms to sustain operations under conditions of uncertainty. Drawing on data obtained from manufacturing firms and analysed using Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM), the study provides empirical evidence regarding the capability-based mechanisms through which resilience is developed.

The findings demonstrate that strategic management capabilities significantly enhance organisational agility and supply chain resilience. The results further reveal that organisational agility exerts a positive influence on supply chain resilience and partially mediates the relationship between strategic management capabilities and resilience. These findings suggest that resilience is not merely an operational outcome but a strategic capability that emerges from the interaction between managerial competence and organisational responsiveness.

The study therefore concludes that manufacturing firms operating in volatile environments require more than tangible resources and operational efficiencies to remain competitive. Rather, they need dynamic managerial capabilities that enable them to anticipate environmental changes, reconfigure resources, and implement adaptive responses. Organisational agility serves as the critical mechanism through which these strategic capabilities are translated into resilient supply chain outcomes. Consequently,

firms that simultaneously strengthen strategic management capabilities and organisational agility are more likely to withstand disruptions, recover rapidly from adverse events, and sustain long-term organisational performance.

6.2 Theoretical Implications

This study makes several important contributions to theory. First, it extends Dynamic Capabilities Theory by demonstrating how strategic management capabilities function as higher-order capabilities that facilitate resilience development through organisational agility. While previous studies have acknowledged the importance of dynamic capabilities in turbulent environments, empirical evidence explaining the mechanisms linking strategic capabilities to supply chain resilience remains relatively limited. By identifying organisational agility as a mediating mechanism, this study contributes to a more refined understanding of capability deployment and value creation.

Second, the study contributes to the growing literature on supply chain resilience by integrating strategic management and supply chain perspectives within a single theoretical framework. Existing resilience research has often emphasised operational flexibility, technological innovation, and risk management practices. In contrast, this study demonstrates that resilience is fundamentally rooted in strategic and managerial capabilities that shape organisational responses to environmental uncertainty.

Third, the study enriches the limited body of resilience research within emerging economies. Most empirical investigations of resilience have been conducted in developed countries characterised by relatively stable institutional environments. By focusing on Nigeria's manufacturing sector, this study demonstrates the applicability of Dynamic Capabilities Theory within contexts marked by infrastructural challenges, institutional volatility, and resource constraints.

6.3 Managerial Implications

The findings offer several practical implications for managers within Nigeria's manufacturing sector. First, organisational leaders should recognise that resilience cannot be achieved solely through operational interventions such as inventory accumulation or supplier diversification. Although these practices remain important, sustainable resilience requires investments in strategic management capabilities, including environmental scanning, strategic planning, resource orchestration, and adaptive decision-making.

Second, manufacturing firms should deliberately cultivate organisational agility by creating flexible structures, encouraging rapid decision-making, enhancing cross-functional collaboration, and promoting organisational learning. Firms that institutionalise agility are more likely to respond effectively to disruptions and maintain operational continuity during periods of uncertainty.

Third, managers should adopt proactive rather than reactive approaches to supply chain management. The findings suggest that firms capable of anticipating disruptions and implementing adaptive responses before crises escalate are better positioned to achieve

resilient outcomes. This requires continuous monitoring of environmental developments and the integration of resilience considerations into strategic planning processes.

Finally, organisational leaders should invest in capability development initiatives aimed at strengthening managerial competencies. Training programmes, leadership development initiatives, and strategic planning workshops can enhance the ability of managers to navigate uncertainty and support resilience-building efforts.

6.4 Policy Implications

The findings also have implications for policymakers and industry stakeholders seeking to strengthen the competitiveness of Nigeria's manufacturing sector. Government agencies and industrial development institutions should support initiatives that enhance organisational capability development within manufacturing firms. Such support may include executive training programmes, digital transformation initiatives, innovation support schemes, and knowledge-sharing platforms.

Furthermore, policymakers should continue efforts aimed at improving critical infrastructure, transportation networks, energy supply systems, and regulatory consistency. While organisational capabilities can enhance resilience, persistent structural deficiencies increase operational vulnerabilities and limit the effectiveness of firm-level adaptation efforts. Strengthening the broader business environment would therefore complement organisational capability development and improve overall industrial resilience.

Industry associations such as the Manufacturers Association of Nigeria (MAN) can also play an important role by facilitating collaboration among firms, disseminating best practices, and promoting resilience-oriented management approaches across the sector.

6.5 Limitations of the Study

Despite its contributions, this study is not without limitations. First, the study adopted a cross-sectional research design, which restricts the ability to establish causality conclusively. Although the hypothesised relationships are theoretically supported, future studies employing longitudinal designs could provide deeper insights into the evolution of strategic capabilities and resilience over time.

Second, the study relied on self-reported data obtained from managerial respondents. While appropriate procedural measures were implemented to minimise common method bias, the possibility of respondent subjectivity cannot be entirely eliminated.

Third, the study focused exclusively on manufacturing firms operating in Nigeria. Consequently, caution should be exercised when generalising the findings to other sectors or national contexts characterised by different institutional and economic conditions.

Finally, the study examined organisational agility as the primary mediating variable. Other organisational factors may also influence the relationship between strategic management capabilities and supply chain resilience and warrant further investigation.

6.6 Future Research Directions

Future studies should explore the proposed relationships using longitudinal research designs to capture how dynamic capabilities evolve and influence resilience over time. Such studies would provide stronger evidence regarding causal relationships among the constructs.

Further research may also investigate additional mediating and moderating variables, including digital transformation capability, organisational learning, innovation capability, supply chain visibility, and environmental uncertainty. Examining these variables could provide a more comprehensive understanding of resilience development mechanisms.

Comparative studies involving different industries and countries within Sub-Saharan Africa would also be valuable in determining whether the relationships observed in this study remain consistent across varying institutional contexts.

Finally, future research should consider employing mixed-methods approaches that combine quantitative analysis with qualitative inquiry. Such an approach would provide richer insights into the organisational processes through which strategic management capabilities and organisational agility contribute to supply chain resilience.

In conclusion, this study demonstrates that strategic management capabilities and organisational agility constitute critical organisational resources for enhancing supply chain resilience within Nigeria's manufacturing sector. As environmental uncertainty continues to intensify, firms that develop these capabilities will be better positioned to achieve sustainable competitiveness and long-term organisational success.

7. Contributions to Knowledge and Practical Recommendations

7.1 Contributions to Knowledge

This study makes several significant contributions to the fields of strategic management, supply chain management, and organisational resilience, particularly within the context of emerging economies.

First, the study advances the growing body of literature on supply chain resilience by providing empirical evidence that resilience is fundamentally a capability-driven phenomenon rather than merely an operational outcome. While previous studies have predominantly focused on operational risk management practices, redundancy strategies, and technological interventions, this study demonstrates that resilience originates from higher-order managerial capabilities that enable organisations to anticipate, interpret, and respond to environmental disruptions. This perspective broadens the understanding of resilience beyond traditional operational frameworks.

Second, the study contributes to the refinement of Dynamic Capabilities Theory by empirically validating the mechanisms through which strategic management capabilities influence organisational outcomes. Specifically, the study establishes organisational agility as a critical intervening capability through which strategic management capabilities are

translated into supply chain resilience. By demonstrating both direct and indirect relationships among the study constructs, the research provides a more nuanced explanation of how dynamic capabilities operate within organisational settings.

Third, the study enriches the limited empirical literature on strategic management capabilities within developing and institutionally volatile environments. Existing studies on dynamic capabilities have largely been conducted in developed economies where firms operate under relatively stable institutional conditions. By focusing on Nigeria's manufacturing sector, the study extends the applicability of Dynamic Capabilities Theory to contexts characterised by infrastructural constraints, regulatory uncertainty, economic volatility, and supply chain disruptions.

Fourth, the study contributes methodologically by employing Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) to simultaneously assess measurement validity and test complex causal relationships among latent constructs. The adoption of SEM provides robust empirical evidence regarding the mediating role of organisational agility and strengthens the methodological rigour of resilience research within the African context.

Finally, the study provides one of the few empirical investigations that integrate strategic management capabilities, organisational agility, and supply chain resilience into a single theoretical framework within Nigeria's manufacturing sector. This integrated framework offers a foundation for future research seeking to examine capability-based pathways to organisational resilience and competitive advantage.

7.2 Practical Recommendations

Based on the findings of this study, several practical recommendations are proposed for manufacturing firms, industry stakeholders, and policymakers.

Strengthening Strategic Management Capabilities

Manufacturing firms should invest in developing strategic management capabilities through continuous managerial training, strategic leadership development, and environmental scanning systems. Senior managers should be equipped with the skills required to identify emerging risks, evaluate strategic alternatives, and coordinate organisational resources effectively. Such investments will enhance the organisation's ability to anticipate disruptions and formulate timely responses.

Promoting Organisational Agility

Managers should institutionalise organisational agility by fostering flexible organisational structures, decentralised decision-making processes, and cross-functional collaboration. Firms should encourage rapid information sharing and empower operational units to respond promptly to environmental changes. Building a culture that values adaptability and continuous learning will further strengthen organisational responsiveness.

Enhancing Supply Chain Flexibility

Manufacturing firms should diversify supplier networks, develop alternative

sourcing arrangements, and establish collaborative relationships with key supply chain partners. Excessive dependence on a limited number of suppliers or geographic regions increases vulnerability to disruptions. Supply chain flexibility should therefore be integrated into broader resilience strategies.

Leveraging Digital Technologies

Firms should increase investments in digital technologies that enhance supply chain visibility and decision-making capabilities. Technologies such as enterprise resource planning systems, predictive analytics, artificial intelligence, blockchain applications, and real-time monitoring platforms can improve the organisation's ability to detect disruptions and respond proactively. Digital transformation should be viewed as an enabler of both organisational agility and supply chain resilience.

Strengthening Organisational Learning Systems

Organisations should establish mechanisms for capturing, documenting, and disseminating lessons learned from previous disruptions. Post-disruption reviews, knowledge-sharing platforms, and continuous improvement programmes can facilitate organisational learning and improve future resilience capabilities. Firms that systematically learn from experience are better positioned to adapt to future uncertainties.

Industry-Level Collaboration

Industry associations and manufacturing clusters should facilitate greater collaboration among firms to enhance collective resilience. Shared information platforms, joint risk-monitoring initiatives, and collaborative supplier development programmes can improve preparedness and response capabilities across the manufacturing sector.

Policy and Institutional Support

Government agencies should implement policies that support industrial resilience through investments in critical infrastructure, energy reliability, transportation systems, and digital connectivity. In addition, policymakers should promote regulatory consistency and macroeconomic stability to reduce environmental uncertainty confronting manufacturing firms. A more supportive institutional environment will enhance the effectiveness of organisational capability-building efforts.

7.3 Concluding Remark

The increasingly uncertain business environment confronting Nigerian manufacturers requires a shift from traditional efficiency-focused management approaches towards capability-driven resilience strategies. The findings of this study demonstrate that strategic management capabilities and organisational agility are not merely desirable organisational attributes but essential determinants of supply chain resilience. Manufacturing firms that invest in these capabilities will be better positioned to withstand disruptions, sustain operational performance, and achieve long-term competitive advantage in an increasingly turbulent global economy.

References

1. Abiji, A. E., Isienyi, R. A., & Adebola, A. J. (2026). Supply chain resilience and organizational performance in the Nigerian manufacturing industry. *Electronic Journal of Business and Management*, 11(1), 36–51.
2. Akpan, E. E., Johnny, E., & Sylva, W. (2022). Dynamic capabilities and organizational resilience of manufacturing firms in Nigeria. *Vision: The Journal of Business Perspective*, 26(1), 48–64.
3. Ambulkar, S., Blackhurst, J., & Grawe, S. (2015). Firm's resilience to supply chain disruptions: Scale development and empirical examination. *Journal of Operations Management*, 33–34, 111–122.
4. Aslam, H., Blome, C., Roscoe, S., & Azhar, T. (2022). Dynamic supply chain capabilities and organisational agility: A capability-based perspective. *International Journal of Operations and Production Management*, 42(8), 1123–1148.
5. Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
6. Belhadi, A., Kamble, S., Jabbour, C. J. C., Gunasekaran, A., Ndubisi, N. O., & Venkatesh, M. (2021). Manufacturing and service supply chain resilience to the COVID-19 outbreak. *Technological Forecasting and Social Change*, 166, 120660.
7. Brusset, X., & Teller, C. (2017). Supply chain capabilities and resilience. *International Journal of Physical Distribution and Logistics Management*, 47(10), 863–885.
8. Christopher, M., & Peck, H. (2004). Building the resilient supply chain. *International Journal of Logistics Management*, 15(2), 1–14.
9. Chowdhury, M. M. H., Quaddus, M., & Agarwal, R. (2021). Supply chain resilience for performance. *International Journal of Productivity and Performance Management*, 70(2), 356–381.
10. Dubey, R., Bryde, D. J., Foropon, C., Graham, G., Giannakis, M., Mishra, D., & Kumar, M. (2021). Agility and resilience in global supply chains. *International Journal of Physical Distribution and Logistics Management*, 51(2), 141–168.
11. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105–1121.
12. Federal Ministry of Industry, Trade and Investment. (2021). Industrial policy and competitiveness framework for Nigeria. Abuja: Government of Nigeria.
13. Fiksel, J. (2006). Sustainability and resilience: Toward a systems approach. *Sustainability: Science, Practice and Policy*, 2(2), 14–21.
14. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate data analysis* (9th ed.). Boston: Cengage Learning.
15. Helfat, C. E., & Peteraf, M. A. (2022). Dynamic managerial capabilities: Review and assessment of the field. *Academy of Management Perspectives*, 36(1), 56–75.
16. Hohenstein, N. O., Feisel, E., Hartmann, E., & Giunipero, L. (2015). Research on the phenomenon of supply chain resilience. *International Journal of Physical Distribution and Logistics Management*, 45(1/2), 90–117.
17. Hetty, H. D., Lemebr, S. O., Benstowe, O. A., Ifeoluwa, K. O., & Emmanuel, O. C. (2026). Global supply chain integration and organizational resilience of multinational agricultural subsidiaries in Niger Delta Region of Nigeria. *Journal of Business Administration and Entrepreneurship*, 12(5), 107–127.
18. Ivanov, D. (2023). The Industry 5.0 framework: Viability, resilience, and sustainability of supply chains. *International Journal of Production Research*, 61(5), 1683–1695.
19. Ivanov, D., & Dolgui, A. (2024). Supply chain resilience and agility in the era of global disruptions. *International Journal of Production Economics*, 268, 109128.
20. Jidda, D. J., Zhen, L., Ashraf, S. F., Nasir, A., & Amoako, T. (2025). Value of enterprise risk management integration and supply chain performance: Mediating role of firm's resilience capability. *SAGE Open*, 15(1), 1–17.
21. Khan, O., Christopher, M., & Burnes, B. (2023). Supply chain resilience: Foundations, developments and future directions. *Supply Chain Management: An International Journal*, 28(4), 721–737.

22. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
23. Lee, H. L. (2004). The triple-A supply chain. *Harvard Business Review*, 82(10), 102–112.
24. Linnenluecke, M. K. (2017). Resilience in business and management research. *International Journal of Management Reviews*, 19(1), 4–30.
25. Manufacturers Association of Nigeria (MAN). (2024). MAN economic review and manufacturing sector report. Lagos: Manufacturers Association of Nigeria.
26. Manufacturers Association of Nigeria (MAN). (2025). Manufacturers CEOs confidence index report. Lagos: Manufacturers Association of Nigeria.
27. Manufacturers Association of Nigeria (MAN). (2026). Manufacturing sector outlook report. Lagos: Manufacturers Association of Nigeria.
28. National Bureau of Statistics (NBS). (2024). Nigerian gross domestic product report (Q4 2024). Abuja: National Bureau of Statistics.
29. National Bureau of Statistics (NBS). (2025). Nigerian gross domestic product report. Abuja: National Bureau of Statistics.
30. Organisation for Economic Co-operation and Development (OECD). (2023). Global value chains and supply chain resilience: Policy perspectives. Paris: OECD Publishing.
31. Osei-Kyei, R., Chan, A. P. C., Javed, A. A., & Ameyaw, E. E. (2022). Organisational agility and resilience in turbulent business environments. *Management Decision*, 60(9), 2514–2534.
32. Ponomarov, S. Y., & Holcomb, M. C. (2009). Understanding the concept of supply chain resilience. *International Journal of Logistics Management*, 20(1), 124–143.
33. Queiroz, M. M., Ivanov, D., Dolgui, A., & Fosso Wamba, S. (2022). Impacts of epidemic outbreaks on supply chains. *Annals of Operations Research*, 319(1), 115–146.
34. Shams, R., Vrontis, D., Chaudhuri, R., & Czinkota, M. (2024). Organisational agility and strategic responsiveness in turbulent environments. *Management Decision*, 62(2), 511–529.
35. Sheffi, Y., & Rice, J. B. (2005). A supply chain view of the resilient enterprise. *MIT Sloan Management Review*, 47(1), 41–48.
36. Tallon, P. P., Queiroz, M. M., Coltman, T., & Sharma, R. (2022). Information technology and organisational agility: Impacts on performance and resilience. *Journal of Strategic Information Systems*, 31(1), 101702.
37. Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49.
38. Teece, D. J. (2023). Dynamic capabilities and organisational resilience in uncertain environments. *California Management Review*, 65(4), 5–28.
39. Teece, D. J., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility. *California Management Review*, 58(4), 13–35.
40. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
41. United Nations Conference on Trade and Development (UNCTAD). (2024). World investment report 2024: Investment and resilient global value chains. Geneva: United Nations.
42. United Nations Industrial Development Organization (UNIDO). (2023). Industrial development report 2024: Turning challenges into sustainable industrial growth. Vienna: UNIDO.
43. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
44. World Bank. (2024). Nigeria development update: Building resilience amid economic uncertainty. Washington, DC: World Bank.
45. World Economic Forum (WEF). (2023). Global risks report 2023. Geneva: World Economic Forum.
46. World Economic Forum (WEF). (2024). Future of manufacturing and supply chain resilience report. Geneva: World Economic Forum.
47. Wieland, A., & Wallenburg, C. M. (2013). The influence of relational competencies on supply chain resilience. *International Journal of Physical Distribution and Logistics Management*, 43(4), 300–320.

48. Yusuf, Y. Y., Gunasekaran, A., Adeleye, E. O., & Sivayoganathan, K. (2004). Agile supply chain capabilities. *International Journal of Production Research*, 42(17), 3791–3814.
49. Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities. *Journal of Management Studies*, 43(4), 917–955.
-



© 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by-nc-sa/4.0/>).