THE MEDIATING EFFECT OF COMPETITIVE ADVANTAGE ON THE RELATIONSHIP BETWEEN CUSTOMER-SUPPLIER RELATIONS AND SUPPLY CHAIN PERFORMANCE OF SME'S IN NIGERIA.

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Abstract
This study explores the effect of customer-supplier relationship on Supply Chain Performance (SCP) of manufacturing SMEs in Northwestern Nigeria, with Competitive Advantage (CA) examined as a mediating variable. A quantitative research design was adopted, utilizing structured questionnaire to collect data from 186 respondents across selected manufacturing SMEs in the region. Structural Equation Modelling (SEM) was employed for data analysis using SmartPLS. The findings reveal that customer relations ($\beta = 0.312$, $p < 0.01$) and supplier relations ($\beta = 0.268$, $p < 0.01$) exert the strong direct effects on supply chain performance while Competitive Advantage partially mediates the relationship between the independent variables and SCP. Based on the results, the study recommends that manufacturing SMEs should prioritize creating strong and durable connections with consumers by investing in customer-centric policies, and invest in robust supplier relations to enhance competitiveness and performance. Policymakers should develop supportive frameworks and infrastructure integration among SMEs so as to optimize supply chain outcomes and stimulate regional industrial growth.

Keywords: Supply Chain Performance, Competitive Advantage, Manufacturing SMEs, Northwestern Nigeria.

1.0 Introduction:

Supply Chain Management has become very significant in the management of activities involved in sourcing, production, and distribution, aimed at enhancing business performance and customer satisfaction and is pivotal role in enhancing overall organisational performance in the face of rapid market globalization. Li, Li, and Xie (2020) were of the opinion that technological advancements and the globalization of markets have intensified competition, necessitating robust Supply chain practices to gain a competitive edge

(Cho et al., 2019). Thus, as competitions increase the implementation of supply chain management practices may be considered a base for improvement of organisational supply chain performance. SMEs Supply Chain Performance seeks to understand how small and medium-sized enterprises tend to manage their supply chain operations, challenges and opportunities.

Small and Medium Enterprises (SMEs) play a pivotal role in economic development, particularly in developing countries like Nigeria, where they contribute significantly to employment generation, innovation, and Gross Domestic Product (GDP). The importance of indigenous micro, small, and medium-scale enterprises (MSMEs) to economic development in Nigeria has also been recognised in empirical research, particularly through their contributions to employment generation, poverty reduction, and overall economic activity (Suleiman et al., 2021). SMEs persist as the primary catalysts for income augmentation, employment generation, technological advancement, and the overall advancement of economic prosperity by contributing to the Gross Domestic Product (GDP) of a country (Oyelaran-Oyeyinka, 2020; Adamu et al., 2019; Zafar & Mustafa, 2017; National Bureau of Statistics [NBS] & Small and Medium Enterprise Development Agency of Nigeria [SMEDAN], 2021). The significance of the SME sector transcends borders, and it remains a cornerstone in fostering not only economic growth but also innovation and job creation. According to a study by the United Nations Industrial Development Organisation (UNIDO) and the Organisation for Economic Co-operation and Development (OECD) conducted in 2021, SMEs have maintained their pivotal role in poverty alleviation and continue to be the linchpin of income growth, job creation, and technological advancement in developing nations (Oparah et al., 2023; Global Entrepreneurship Monitor [GEM], 2020; International Finance Corporation [IFC], 2022).

Within Supply Chain Management (SCM); customer–supplier relationships (C-SR); comprising customer relations and supplier relations, are essential drivers of effective supply chain operations. Customer relations focus on maintaining strong interactions with customers to enhance satisfaction and loyalty, while supplier relations emphasize collaboration, trust, and long-term partnerships with suppliers. Despite their importance, SMEs especially in the manufacturing sector face considerable operational challenges that hinder their performance, particularly in supply chain management.

Similarly, while prior studies acknowledge the importance of these relationships, evidence from their studies highlighted direct relationship while suggestion for indirect relationships to better understand the relationship between C-SR and SCP (Zhang, Liu, Tan, Jiang, & Zhu, .., 2018; Li & Zhang 2024). This is because firms must transform these relational capabilities into competitive advantage, which includes cost efficiency, product quality, flexibility, and

delivery reliability, before achieving superior performance outcomes (Oyelaran-Oyeyinka, 2020; Adamu, Wan & Gorondutse, 2019; Zafar & Mustafa, 2017; National Bureau of statistics (NBS) - Small and Medium Enterprise Development Agency of Nigeria (SMEDAN), 2021).

A study on SMEs Supply Chain Performance will highlight how small and medium-sized enterprises have managed their supply chain operations, overcome their unique challenges and harnessed their opportunities. For manufacturing SMEs, this concept is particularly important due to their limited resources and need for agility. Effective SCM practices can lead to improvements in operational efficiency, cost reduction, and increased customer satisfaction—factors that are crucial for the survival of manufacturing SMEs. According to Li, Ragu-Nathan, and Rao (2018), the practices of SCM include agreed vision and goals, information sharing, risk and award sharing, cooperation, process integration, long-term relationships and agreed supply chain leadership.

Most Manufacturing SMEs in Nigeria continue to experience poor supply chain performance due to infrastructural deficiencies, weak collaboration, limited technological adoption, and ineffective communication among supply chain partners (Kippa, 2022). These challenges often lead to increased operational costs, delays, and reduced customer satisfaction. Although customer and supplier relationships are widely recognized as important determinants of supply chain performance, their practical implementation among SMEs remains limited due to resource constraints and lack of strategic orientation (Adebayo & Yusuf, 2021). More importantly, existing studies have largely focused on the direct relationship between SCM practices and performance, neglecting the underlying mechanisms through which these relationships influence outcomes.

While prior studies (e.g., Kumar & Singh, 2023; Mushi et al., 2023; Alam, 2022) have established a positive correlation between SCM practices and SME Supply chain performance, they often overlook the mechanisms through which these practices drive performance. Emerging evidence highlights the importance of mediating variables to uncover the underlying dynamics in such relationships, particularly in contexts with multifaceted challenges **(**Zhang et al. 2018**).** Recent empirical evidence highlights the importance of mediating variables in explaining such relationships (Muthu, et.al. 2024 & Meiranto et al. 2024). However, the mediating role of competitive advantage in the link between customer–supplier relationships and supply chain performance remains insufficiently explored, particularly in the Nigerian SME context. Existing research largely focuses on other regions, offering generalized findings that fail to address the specific contextual challenges of SMEs in Northwestern Nigeria (Adewale & Abiodun, 2020; Usman et al., 2021).

These gaps necessitate a study that examines not only the direct effects of customer–supplier relationships on supply chain performance but also the mediating role of competitive advantage. The Resource-Based View (RBV) provides a theoretical basis for this argument, positing that firm-specific resources and capabilities such as strong customer and supplier relationships must be effectively deployed to generate competitive advantage and enhance performance.

The main objective of this study is to examine the mediating effect of competitive advantage on the relationship between customer–supplier relationships and supply chain performance of SMEs in Nigeria. The Specific objectives are to:

1. Examine the effect of customer relationships on supply chain performance.
2. Assess the effect of supplier relationships on supply chain performance.
3. Determine the effect of competitive advantage on supply chain performance.
4. Examine the mediating effect of competitive advantage on the relationship between customer relationships and supply chain performance.
5. Examine the mediating effect of competitive advantage on the relationship between supplier relationships and supply chain performance.

These objectives were hypothesized in the null form and form the basis of the apriorri expectations of this study.

Ho_1: Customer relations does not have significant effect on SMEs supply chain performance in Nigeria.

Ho_2: Supplier relations does not have significant effect on SMEs supply chain performance in Nigeria.

Ho_3: Competitive advantage does not have significant effect on supply chain performance of SMEs in Nigeria.

Ho_4: Competitive advantage does not significantly mediate the relationship between customer relations and SMEs supply chain performance in Nigeria.

Ho_5: Competitive advantage does not significantly mediate the relationship between supplier relations and SMEs supply chain performance in Nigeria.

2.0 Literature Review

The concept 'Supply Chain Management' (SCM) was first introduced by consultants in the late twentieth century specifically early 1980s (Kerzner, 2017). It has its origins in the logistics literature (Bakieva, 2013) and logistics has continued to have enormous impact on the concept. The whole processes in supply chain management practices require efficiency and effectiveness. These processes may be interwoven as Zhang, Liu and Wang (2023) opined and mostimes the output of one may become the input of another; from sourcing raw materials to

delivering finished products to customers (Oliveira, Santos, & Silva, 2022). It is the ability of the supply chain to deliver products and services efficiently, while minimizing waste and maximising value (Liu & Chen, 2024). For SMEs, supply chain performance typically focuses on operational efficiency, responsiveness, reliability, inventory management, supplier relationship and customer focus.

Li and Zhang (2024) defined supply chain performance as the impact of financial strategies on optimizing cash flow and managing working capital within the supply chain. They were of the opinion that effective supply chain finance practices improved performance by enhancing liquidity and financial stability. They emphasized on the importance of integrating financial strategies into supply chain management to support SMEs growth and performance. Thus, effective supply chain performance helps SMEs achieve a competitive advantage, allowing them to operate with lower costs, greater flexibility and better customer service which are critical for competitive markets.

Supply chain performance is a central issue in manufacturing/business activities that need adequate planning and commitment. Measuring performance is important for all firms because it helps organisations to ascertain the level of organisational success or failure and also serves as a yardstick for achieving significant improvement in the overall organisational activities (Odunmbaku, Onu & Akinlabi, 2021). Measuring supply chain performance involves tracking and analysing key performance indicators (KPIs) that reflect the efficiency, effectiveness and agility of the supply chain such as delivery reliability, responsiveness, customer related measures, sustainability measures and financial measures (Ringim, et al., 2020). The study conceptualises small and medium-sized enterprises (SMEs) supply chain performance as the ability of small and medium-sized businesses to achieve their strategic goals, grow their market share, and generate sustainable financial returns. It focuses on how SMEs manage their supply chain operations, taking into account their unique challenges and opportunities.

Customer Relationships

Customer relationships involve activities aimed at understanding customer needs, managing interactions, and enhancing satisfaction and loyalty. Effective customer relationships improve responsiveness, demand forecasting, and long-term business performance. Customer relationship is described as the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customer, and improving customer satisfaction (Quynh & Huy, 2018). This encompasses all procedures aimed at resolving market grievances, establishing lasting partnerships, and increasing customer happiness (Adebiyi, Adediran, Shodiya & Olusola, 2021). Customer relations are a significant part of the practices of SCM. The most durable benefit of engaged ties is their intrinsic competition

barriers. The rise of mass personalization and customized service leads to a period in which customer relations are essential to the survival of companies (Shahbaz, 2024).

Supplier Relationships

Supplier relationships (SR) refer to long-term partnerships between firms and suppliers charact erized by trust, collaboration, and information sharing. Strong supplier relationships enhance supply reliability, reduce uncertainty, and improve operational efficiency. SR prioritises working cooperatively to maximise value generation and minimise risks with important suppliers. To improve supplier capabilities and competitiveness, it entails actions like supplier segmentation, performance assessment, collaborative innovation, and dispute resolution (Caniëls & Gelderman, 2017). SR manages key suppliers and seeks for new ones while pooling buyer experience, reducing costs and making procurement repeatable and predictable (Oliveira et al. 2022). The aim is to identify and engage with the right stakeholders to create ownership of the relationship, drive effective communication and align strategic objectives (Johnson & Smith 2024; Brown and White 2023).

Competitive Advantage

Competitive advantage represents a firm's ability to outperform competitors through cost leadership, quality, flexibility, and innovation. It serves as a mechanism through which SCM practices influence performance outcomes. According to Hardiani (2020) competitive advantage is a capability acquired by a firm through its characteristics and resources to attain higher performance compared to the other firms in the same industry or same market. Competitive advantage denotes the ability of a company to gain market dominance over its rivals. A competitive advantage offers super-average efficiency in the long run (Kaleka & Morgan, 2018).

Competitive advantage is the key to long-term success and profitability in business. Competitive advantage (CA) involves the deployment of a strategic approach not currently being employed by other organisations that enables a decrease in costs, the use of business opportunities, and/or the neutralization of competitive challenges (Kuo, Lin and Lu, (2017). Without a competitive edge, attracting and retaining clients on a sustained basis is practically inconceivable (Petera, Wagner & Pakšiová, 2021). In other words, the firm would fail eventually without a competitive edge that distinguishes it from its rivals (Kenyon & Sen, 2015).

Competitive advantage results from crucial managerial decisions enabling an organisation to create a defensive position and distinguish itself from the competition (Banerjee & Mishra 2015). Thus, differentiation is a strategy embraced for gaining a competitive edge in which a business provides distinctive goods or services that clients' value. According to Porter (1985) Differentiation is crucial for gaining a competitive edge and establishing premium pricing, it can lead to increased

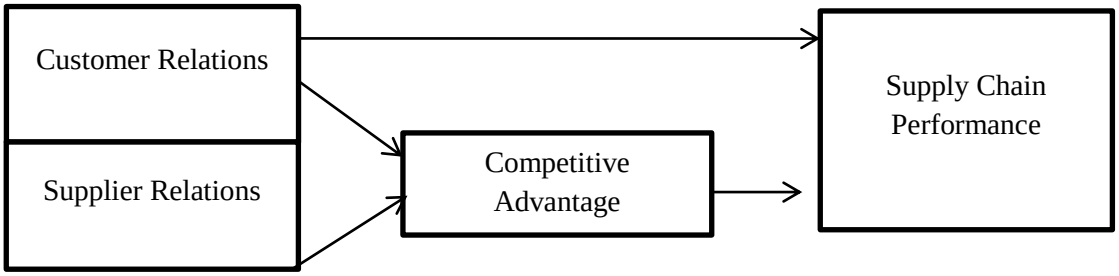
market share, higher profitability, and sustainability in the long run.

Thus, based on literature there is evidence of relationships among the study variables as studies on customer relationships and performance show that effective customer engagement significantly enhances supply chain responsiveness and customer satisfaction, leading to improved performance outcomes. Similarly, empirical findings on supplier relationships indicate that strong supplier partnerships improve supply chain reliability, reduce operational risks, and enhance efficiency. Those on competitive advantage and performance demonstrate that firms with superior capabilities in cost, quality, and flexibility achieve better supply chain performance. In summary, studies also show that competitive advantage partially mediates the relationship between SCM practices and supply chain performance, indicating that relational capabilities must be translated into strategic advantages to achieve optimal results .

Despite these findings, there is limited empirical focus specifically on customer–supplier relationships as a combined construct and the mediating role of competitive advantage in the Nigerian SME context, thereby justifying this study.

Resource-Based View Theory

The Resource-Based View (RBV) posits that firms achieve superior performance by leveraging valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). In this context, customer and supplier relationships are strategic resources that can generate competitive advantage when effectively managed. Competitive advantage, in turn, enhances supply chain performance, making it a critical mediating variable.



3.0 Methodology

This study adopts a quantitative research design using a cross-sectional survey approach to examine the relationships among the variables. The study focused on the population of manufacturing SMEs registered with SMEDAN in Northwest Nigeria, specifically those identified under the One Local Government One Product (OLOP) initiative by SMEDAN. According to a report by SMEDAN and OLOP (2022), there are 186 registered SMEs operating in the Northwest region. These SMEs are primarily involved in manufacturing

activities and were target population for this study. The respondents include managers/owners of SMEs participating in the OLOP initiative. The table below presents the classification of the Northwest population based on OLOP categories as defined by SMEDAN.

Table 3.1: List of Identified Number of Products in the Northwest OLOP

S/N	State	No. of Local Government	OLOP
1	Kaduna	23	23
2	Kano	44	44
3	Katsina	33	33
4	Sokoto	23	23
5	Kebbi	21	21
6	Zamfara	14	14
7	Jigawa	27	27
	Total		**186**

Source: OLOP, SMEDAN, 2022

In this study, the 186 companies observed across the seven North-western States of Nigeria also account for the sample size. Also, the organization (i.e. manufacturing SMEs under the SMEDAN–OLOP initiative in Northwestern Nigeria) is the unit of analysis, while the individual SME owners and managers are the unit of observation. Data was collected primarily using close-ended questionnaires. The instrument uses a Likert-scale format to measure responses with all constructs measured using validated scales adapted from prior studies. Both content and construct validity are ensured through expert review and factor analysis. Reliability is tested using Cronbach's Alpha and Composite Reliability. The data gotten is Data is analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS. The analysis covers the measurement model, structural model evaluation and bootstrapping. Thus, this model will examine the direct effects of customer and supplier relationships on supply chain performance, the direct effect of competitive advantage on performance; as well as the indirect (mediating) effects of competitive advantage.

4.0 Data Analysis

In estimating the measurement model, the statistical results from various analyses, including the reliability of individual items for each latent construct, internal consistency reliability, and discriminant validity, were examined and discussed. The outer loadings of each construct's indicators were used to evaluate the reliability of individual items or components for the reflective constructs (Garson, 2016).

According to the rule of thumb proposed by Hair et al. (2022), an indicator with an outer loading of 0.70 or higher is deemed reliable and suitable for use with established scales. However, Hair et al. (2022), advised that rather than immediately discarding an indicator with a loading below 0.70, researchers should first determine whether its removal enhances the Average Variance Extracted (AVE) and Composite Reliability (CR). Indicators with loadings between 0.40 and 0.70 may be retained if their inclusion improves these metrics.

Table 4.1: *Item Loadings, Internal Consistency, and Average Variance Extracted (AVE).*

Constructs	**Indicators**	**Loadings**	**Composite Reliability**	**AVE**
Competitive Advantage	CA1	0.660	0.903	0.667
	CA2	0.829		
	CA5	0.869		
	CA7	0.830		
	CA8	0.900		
	CA9	0.790		
Customer Relation	CR1	0.846	0.886	0.610
	CR2	0.776		
	CR3	0.733		
	CR4	0.779		
	CR6	0.766		
Supply Chain Performance	SCP1	0.849	0.908	0.779
	SCP2	0.822		
	SCP3	0.931		
	SCP4	0.924		
Supplier Relations	SR1	0.823	0.886	0.613
	SR2	0.803		
	SR4	0.846		
	SR5	0.857		
	SR6	0.542		

Source: Author's Systemisation of SEM output (2026)

Table 4.2: *Measurement Model: Discriminant Validity (Cross Loading)*

Indicators	CA	CR	SCP	SR
CA1	0.660	0.571	0.459	0.457
CA2	0.829	0.576	0.441	0.343
CA5	0.869	0.240	0.374	0.346
CA7	0.830	0.444	0.295	0.269
CA8	0.900	0.221	0.348	0.409
CA9	0.790	0.143	0.478	0.330
CR1	0.230	0.846	0.297	0.575
CR2	0.470	0.776	0.695	0.382
CR3	0.367	0.733	0.536	0.170
CR4	0.463	0.779	0.309	0.326
CR6	0.258	0.766	0.496	0.408
SCP1	0.695	0.405	0.849	0.570
SCP2	0.317	0.483	0.822	0.218
SCP3	0.301	0.257	0.931	0.698
SCP4	0.291	0.462	0.924	0.363
SR1	0.614	0.340	0.630	0.823
SR2	0.618	0.461	0.655	0.803
SR4	0.593	0.509	0.418	0.846
SR5	0.369	0.553	0.481	0.857
SR6	0.419	0.305	0.443	0.542

Source: Author's Systemisation of SEM output (2026)

Table 4.3 *Path Coefficient (Direct Effect)*

Hypotheses	Relationship	Beta	Standard Error	T-Values	P- Values	Decision
H_{01}	CR -> SCP	0.312	0.071	4.395	0.000**	Rejected
H_{02}	SR -> SCP	0.268	0.103	2.616	0.009*	Rejected
H_{03}	CA -> SCP	0.452	0.051	8.862	0.000**	Rejected

****p<0.01, *p<0.05.**

Source: Author's Systemisation of SEM output (2026)

The results in Table 4.3 provided insights into the direct relationships between key independent variables, CR, SR, CA and supply chain performance (SCP).

Table 4.4 *Mediating (Indirect) Effect*

Hypotheses	Relationship	Beta	Standard Error	T-Values	P-Values	Decision
H_{06}	CR -> CA -> SCP	0.748	0.080	9.380	0.000**	Rejected
H_{07}	SR -> CA -> SCP	0.170	0.055	3.100	0.002**	Rejected

****p<0.01, *p<0.05.**

Source: Author's Systemisation of SEM output (2026)

The results presented in Table 4.4 provided an analysis of the mediating effect of competitive advantage (CA) on the relationships between the independent variables and supply chain performance (SCP).

Table 4.5: *Important Performance Map Analysis*

Construct	Importance	Performance (CL)%	Ranking
Competitive Advantage	0.662	70.8	1st
Consumer Relations	0.554	71.8	2rd
Supplier Relations	0.305	73.8	3rd

Source: Author's Systemisation of SEM output (2026)

Table 4.5 further illustrates the usage of a non-standardised total influence of constructs on customer loyalty. The researcher can interpret the IPMA using non-standardised overall effects as follows: A steady improvement in the predecessor's performance raises the performance of the target single construct by the magnitude of the predecessor's non-standardised overall influence.

5.0 Discussion of Findings

Supplier relations have a positive and substantial influence on the supply chain performance of manufacturing SMEs in Nigeria, as successful collaboration and partnership with suppliers boost the seamless flow of materials, cut costs, and improve operational efficiency. This is in tandem with previous studies of e.g., Mehregan et al., 2023; Kumar & Singh, 2023; Chileshe & Phiri, 2022; Alahmad, 2021; Kumar et al., 2020; Doumbia et al., 2020. Strong supplier connections help firms to get timely and high-quality inputs, which are crucial for achieving production schedules and customer expectations (Alahmad, 2021). Strong customer connections help to build trust, loyalty, and cooperation, therefore helping companies to better predict customer demands, increase order accuracy, and lower lead times (Nag & Ferdausy 2021). This alignment between consumer expectations and organisational capabilities significantly increases important supply chain indicators such as delivery dependability, quality, and cost effectiveness (Hejazi, 2022). In a highly competitive industry like Nigeria's SME manufacturing sector, where customer needs are continually

shifting, maintaining good customer interactions is vital for achieving and sustaining supply chain excellence.

The performance of manufacturing enterprises in Nigeria depends positively and significantly on customer relations as good management of customer contacts improves operational efficiency and general performance. This is consistent with previous studies of e.g., Alam, 2022; Nguyen et al., 2022; Hejazi, 2022; Soemadi et al., 2022; Nag & Ferdausy 2021.

By addressing supplier and customer partnerships as strategic assets, as underlined by the RBV, Nigerian businesses may not only boost supply chain efficiency but also position themselves for sustainable development and competitiveness in an increasingly dynamic market. Thus, investing in effective supplier relationship management solutions is vital for enhancing supply chain performance.

Similarly, Competitive advantage has a favourable and significant influence on supply chain performance among manufacturing companies in Nigeria, as it helps enterprises to attain greater efficiency, responsiveness, and customer satisfaction. This is consistent with past studies of e.g., Potjanajaruwit, 2021; Sinaga & Gallena, 2018; Hapsari, 2018; Lasalewo et al., 2016. Competitive advantage develops when firms can differentiate themselves via cost leadership, innovation, or greater product quality (Potjanajaruwit, 2021). In the context of supply chain performance, a competitive advantage helps enterprises to improve their supply chain operations, decrease costs, and provide value to consumers more efficiently (Sinaga & Gallena, 2018). For Nigerian manufacturers, utilizing competitive advantages is crucial to overcoming problems such as market volatility, infrastructure deficiencies, and severe rivalry (Lasalewo et al., 2016).

The research result of a substantial mediating impact of competitive advantage in the link between customer – supplier relations and supply chain performance emphasises the crucial role competitive advantage plays in leveraging excellent customer relationships to improve supply chain outcomes. Customer relations involve fostering trust, loyalty, and satisfaction with customers, which can lead to better demand forecasting, reduced uncertainty, and enhanced operational efficiency, while Supplier relations, which comprise collaboration, trust, and strategic alignment with suppliers, are critical for obtaining timely deliveries, assuring consistent quality, and stimulating innovation in the supply chain. However, these benefits are considerably increased when organisations leverage powerful supplier relationships as a foundation for establishing competitive advantage.

6.0 Summary, Conclusion and Recommendation

This study investigated the effect of selected supply chain management (SCM) practices on the supply chain performance of manufacturing SMEs in Northwestern Nigeria. It especially explored the mediating effect of competitive advantage in this connection. In the Northwest, insecurity,

weak infrastructure, and rising operational costs have particularly undermined supply chain flows and heightened SME mortality rates. Against this backdrop, the study sought to establish whether effective SCM practices could improve supply chain performance and whether competitive advantage serves as the mechanism through which these practices translate into performance outcomes. Having investigated the links among customer relations, supplier relations, competitive advantage, and supply chain performance in the SMEs manufacturing sector of Nigeria; the findings demonstrates that customer relations, supplier relations, are crucial in supply chain performance. The study concludes that supply chain management practices are essential but not sufficient conditions for improving SME supply chain performance in volatile and high-risk contexts such as North-West Nigeria. More so, competitive advantage acts as the "missing link" that enables SCM practices to translate into sustainable performance gains. SMEs that integrate SCM practices into their broader competitive strategies are more likely to survive and thrive in Nigeria's fragile business environment.

Thus, the study recommends that manufacturing SMEs should prioritize creating strong and durable connections with consumers by investing in customer-centric policies, efficient feedback channels, and tailored services. This will assist to promote customer loyalty, thereby, leading to greater supply chain performance. Also, Managers should strategically integrate customer-focused efforts with the firm's competitive advantage. For instance, harnessing consumer data to generate distinct value propositions may dramatically boost the supply chain's overall performance. This research has some shortcomings that need acknowledgement. The study focused only on Northwestern region of Nigeria, restricting the generalisation of the findings to other locations with different socio-economic, cultural, or infrastructural circumstances. Future studies ought to take into account broadening the geographic range of the research to cover other areas of Nigeria or similar developing nations. This would allow for comparison and increase the generalisability of results. Also, future research should also investigate SCM approaches in other sectors or industries like agriculture, services, and retail to understand their unique dynamics or sector-specific dynamics and their influence on supply chain performance.

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