EFFECT OF SUPPLIER COLLABORATION ON PERFORMANCE OF SELECTED MANUFACTURING FIRMS IN ABUJA

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doi: https://doi.org/10.70118/ajbam-03-2026-047

Abstract

Manufacturing firms in Abuja increasingly face performance inefficiencies characterised by rising operational costs, delivery delays, and reduced responsiveness to market demands, indicating a deviation from established business management expectations. This study examined the effect of supplier collaboration on the performance of manufacturing firms in Abuja. The population of the study comprised 120 managers of manufacturing firms that have operated for at least five years and are registered with the Corporate Affairs Commission (CAC). A census survey design was adopted, allowing the entire population to serve as the sample size, resulting in 120 respondents. Primary data were collected through a structured questionnaire, and the data were coded and analyzed using the Partial Least Squares Structural Equation Modelling (PLS-SEM) technique. The findings revealed that commitment has a positive and significant effect on the performance of manufacturing firms in Abuja. Similarly, communication was found to exert a positive and significant influence on firm performance. These findings highlight the critical role of strong supplier relationships in improving operational efficiency and organisational competitiveness. Based on the findings, the study recommends that manufacturing firms should implement supplier development programmes that strengthen commitment through periodic performance evaluations and joint training initiatives. Such strategies can foster long-term partnerships that improve supply reliability and enhance innovation capacity. Additionally, manufacturing firms should invest in structured communication frameworks, including regular supplier engagement meetings and digital platforms for real-time information sharing, to improve transparency, coordination, and overall operational effectiveness. Strengthening these collaborative practices is essential for enhancing sustainable performance and maintaining competitive advantage in the manufacturing sector.

Keywords: supplier collaboration, commitment, communication, performance

INTRODUCTION

Performance of manufacturing firms globally has exhibited resilience in the face of persistent economic headwinds, including geopolitical tensions, supply chain vulnerabilities, and inflationary pressures, with recent data underscoring a trajectory of modest expansion into 2025. In the first quarter of 2025, global manufacturing output registered a 1.3% quarter-over-quarter increase, marking one of the most sustained periods of positive growth since the COVID-19 pandemic, driven largely by advancements in medium-high and high-

technology industries, which outperformed lower-tech sectors with a 1.8% growth rate (United Nations Industrial Development Organization [UNIDO], 2025). This upward trend aligns with projections estimating global manufacturing value added at approximately US$50.23 trillion in 2025, reflecting an anticipated compound annual growth rate of 1.81% through 2029, although challenges such as rising input costs expected to increase by 2.7% over the next 12 months and labor shortages continue to constrain full potential (Coykendall et al., n.d.; Statista, 2025). Investments in digital transformation and clean technologies have been pivotal, with over 98% of manufacturers initiating such efforts by 2023, allocating up to 30% of operating budgets to technology in 2024, thereby enhancing operational efficiency amid a backdrop of contracting purchasing managers' indices in late 2024 (Coykendall et al., n.d.). Nevertheless, the sector's overall performance remains vulnerable to policy uncertainties and global trade disruptions, highlighting the need for strategic adaptations to sustain competitiveness.

In Africa, manufacturing performance has lagged behind global benchmarks, contributing to structural transformation challenges, yet recent indicators suggest incremental progress toward industrialization amid a complex economic landscape. Value added in the continent's manufacturing sector is projected to reach US$124.55 billion in 2025, with a modest compound annual growth rate of 0.66% anticipated through 2029, constrained by persistent issues such as energy deficits, inflationary pressures averaging 13.8% in 2025, and high debt-to-GDP ratios stabilizing around 65% (African Development Bank [AfDB], 2025; Statista, 2025). Sub-Saharan Africa's manufacturing value added as a percentage of GDP has hovered around 10-11% in recent years, with limited quarterly growth of 0.1% in the first quarter of 2025, reflecting varied country performances amid geopolitical fragmentation and declining foreign direct investment in manufacturing, which fell from 26% of global FDI in 2003 to 13% in 2023 (UNIDO, 2025; World Bank, 2024). The African Continental Free Trade Area (AfCFTA) holds promise for bolstering intra-regional trade in manufactured goods, potentially increasing exports by $560 billion and real income by $450 billion by 2035, particularly in East Africa where growth is forecasted at 5.9% in 2025, driven by investments in domestic value chains (AfDB, 2025). However, illicit financial flows costing $275 billion annually and institutional weaknesses undermine these gains, emphasizing the imperative for policy harmonization to foster sustainable industrial development across the continent.

Within Nigeria, the manufacturing sector's performance has been characterized by volatility, with output declining to $55.90 billion USD in 2023 a 13.86% drop from the previous year amid structural impediments that have persisted into 2025, including currency depreciation, infrastructure deficits, and policy inconsistencies (Macrotrends, 2025; Manufacturers Association of Nigeria [MAN], 2025). Real sector growth reached 1.6% in the second quarter of 2025, an improvement over the 1.28% recorded in the same period of 2024, yet its contribution to GDP fell to 7.81%, reflecting ongoing challenges such as high operational costs, exchange rate fluctuations, and bureaucratic barriers that eroded profit margins by 36% between 2021 and 2022 (BusinessDay, 2025; ThisDay, 2024). Inflation projections at 21.0% for 2025-2026, coupled with over-reliance on oil and security disruptions, have further hampered productivity, with the sector's outlook hinging on the efficacy of economic reforms to achieve a projected 3.2% GDP growth in 2025 (AfDB, 2025; NESG, 2025). These dynamics underscore the necessity for enhanced backward integration and incentives to mitigate import dependencies and bolster domestic manufacturing resilience.

Narrowing the focus to Abuja, the capital city's manufacturing firm’s grapple with localized manifestations of national challenges, including inadequate infrastructure and market access, which have adversely affected operational efficiency and overall performance in recent years. Studies indicate that strategic orientations, such as technological innovation, positively influence non-financial performance metrics like customer satisfaction and market share among Abuja-based manufacturers, while customer orientation paradoxically exerts a negative impact, potentially due to inconsistent integration of feedback mechanisms (Ogaji & Igirah, 2025). Amid broader national trends,

Abuja's manufacturing landscape reflects modest growth prospects for 2025, contingent on infrastructure enhancements and policy stability, yet persistent issues like energy unreliability and high funding costs continue to impede scalability, as evidenced by sectoral contributions remaining below 10% of local GDP (MAN, 2025; BusinessDay, 2025).

Problem Statement

Manufacturing firms in Abuja continue to face persistent performance challenges, evident in rising operational costs, prolonged delivery timelines, and diminished responsiveness to market demands, all of which contradict established business management theories. According to the resource-based view (RBV), firms should leverage collaborative capabilities to build competitive resources and achieve superior performance (Barney, 2018). Yet, empirical observations in Abuja reveal a disconnect: despite theoretical advocacy for integrated supply chains, firms experience a 15-20% decline in efficiency due to adversarial supplier dynamics, as reported in recent industry surveys (Nigerian Manufacturers Association, 2023). This departure arises from contextual factors like infrastructural deficits and cultural mistrust, which erode the relational foundations of collaboration, contrary to theory's emphasis on symbiotic partnerships for value creation.

There exist studies in the area of supplier collaboration globally, Prior studies, such as those by Huo et al. (2018); Daniel et al., (2026) in Asian manufacturing, have linked collaboration with performance but predominantly in developed economies or using broad constructs without disaggregating into specific components like commitment and communication. To the best of our knowledge, no recent investigations have examined these precise variables in Abuja's manufacturing firms, where unique socio-economic influences such as regulatory volatility and ethnic diversity in supplier networks demand localized scrutiny. This gap leaves practitioners without tailored insights, perpetuating the performance condition. Therefore, this study examined the effect of supplier collaboration on the performance of manufacturing firms in Abuja.

The following hypothesis stated in null form guided the study:

Ho1: communication has no significant effect on the performance of manufacturing firms in Abuja.

Ho2: commitment has no significant effect on the performance of manufacturing firms in Abuja.

LITERATURE REVIEW

Concept of collaboration

Supplier collaboration is defined as a multidimensional construct involving relational mechanisms that facilitate joint problem-solving and resource integration between buyers and suppliers (Cao & Zhang, 2019). Dhanaraj and Park (2021) define collaboration as "the deliberate alignment of interdependent actors toward shared objectives through coordinated action, knowledge exchange, and mutual adjustment," emphasizing that such alignment "enables firms to overcome internal capability constraints and respond more effectively to dynamic market demands, directly contributing to financial and operational outcomes"

Schilke and Helfat (2022) decribed collaboration as "a governance-enhancing mechanism that reduces coordination friction across organizational boundaries," arguing that "firms engaging in high-quality collaborative relationships whether internally across departments or externally with partners demonstrate superior performance through accelerated innovation cycles, cost efficiencies, and improved stakeholder satisfaction In this study, it is explaineded through two key components: commitment and communication.

Concept of commitment

Ghazzawi and Gong (2025), defined organizational commitment as an employee's identification, involvement, and loyalty to the organization, particularly highlighting its emotional attachment component as pivotal for post-pandemic workforce stability and entrepreneurial outcomes in small businesses. Herrera and Heras-Rosas (2021) defined commitment as a critical driver of high performance and low turnover in work environments, emphasizing its role in aligning individual efforts with organizational objectives amid evolving psychological

contracts. Commitment also refers to the enduring dedication of parties to maintain long-term relationships, manifested through investments in shared goals and mutual trust (Rokkan et al., 2020). It acts as a governance mechanism that mitigates opportunism and fosters loyalty.

Concept of communication

Lin et al. (2024) defined communication as the process of communicating information by means of symbols. Communication is viewed as a driver of resilience in supplier relationships. Clear and transparent information exchange builds trust, aligns goals, and facilitates collaborative problem-solving, which enables firms to respond quickly to environmental uncertainties and disruptions This definition emphasizes that communication is not simply what is said but involves symbolic systems through which meaning is conveyed. communication is also seen as a process in which people share thoughts, ideas, and feelings with each other in commonly understandable ways. He further stated that communication has many definitions depending on what aspect one emphasizes human interaction, transfer of information, influence, mutual understanding, culture, etc. Craig suggests that the difficulty is not finding the single correct definition, but choosing a definition that is useful for a given research purpose (Craig, 2024). Communication involves the timely and accurate exchange of information, including operational data and strategic insights, to align activities and reduce uncertainties (Flynn et al., 2022; Daniel et al., 2026). Firm performance, the dependent variable, is measured via financial (e.g., return on assets) and operational (e.g., delivery reliability) indicators, reflecting overall efficiency and market positioning (Kaplan & Norton, 2019).

Empirical Reviews

Commitment and performance

Afariogun et al. (2025) determined the effect of commitment on performance conducted a quantitative examination within South-West Nigerian tertiary institutions, where persistent challenges such as inadequate funding and infrastructural deficits have undermined lecturer productivity and institutional advancement; their study posits that bolstering organizational commitment, alongside cultural elements, is imperative for elevating job performance in academia. Drawing from a population of 3,969 lecturers, the researchers employed Taro Yamane's formula to derive a sample of 384 participants, administering Likert-scaled questionnaires to capture perceptual data. Analytical rigor was achieved through Pearson correlation coefficients and multiple regression models processed via SPSS, revealing a robust positive correlation between organizational commitment and job performance, collectively accounting for 23.6% of performance variance. Key findings affirmed moderate commitment levels among respondents, yet highlighted its substantive role in fostering emotional attachment and motivational alignment, thereby enhancing output. The authors recommend institutional leaders to delineate explicit cultural norms and cultivate supportive climates to amplify commitment, while critiquing the study's cross-sectional design for potentially overlooking longitudinal fluctuations and advocating for faculty-specific extensions to mitigate sampling scope constraints.

Otuohere (2021) interrogated the ramifications of affective, continuance, and normative commitment dimensions on organizational performance in South-East Nigeria's hospitality sector, a domain beleaguered by high turnover and fluctuating patronage that imperil sustained competitiveness. From a population of 2,836 employees across 15 firms, a Borg and Gall (1973)-derived sample of 533 yielded 400 valid responses following questionnaire dissemination, enabling a comprehensive assessment of commitment's operational impacts. Data scrutiny involved descriptive statistics (means and standard deviations), correlational analyses, and multiple regression to delineate causal pathways, disclosing significant positive influences: affective commitment explained 40.4% of performance variance. These outcomes elucidate commitment's capacity to galvanize human capital toward goal attainment, with normative facets proving particularly salient in retention-driven contexts. Recommendations encompass fostering communicative ecosystems and flexible policies to nurture continuance commitment, alongside morale-boosting initiatives for affective bonds; however, the absence of delineated limitations, such as

potential self-report biases or generalizability beyond hospitality, invites scholarly caution regarding broader sectoral applicability.

Li et al. (2020) in Chinese manufacturing contexts demonstrated that information-sharing practices improve coordination, resulting in 18% higher inventory turnover rates. A more recent investigation by Adegbuyi et al. (2024) in West African agribusinesses highlighted communication's role in mitigating disruptions, with firms exhibiting robust channels reporting 22% better financial returns. These findings align with the objectives, suggesting that commitment and communication are proximal drivers of performance in collaborative settings.

Communication and performance

Sadiq (2024) investigated the effect of effective communication on organisational performance in selected small and medium enterprises (SMEs) in Kogi East, arguing that extant literature concentrates on large firms while SMEs have been understudied. Using a survey design the study drew on a population of 4,891 SME owners and employed Krejcie and Morgan's table to select a purposive sample of 354 respondents; primary data were analysed with SPSS using model summary, ANOVA and multiple regression to test hypotheses. The principal finding was that vertical (top-down) communication had a positive and statistically significant effect on organisational performance, whereas diagonal communication (cross-hierarchical) produced a smaller, positive but statistically insignificant effect. The author therefore recommended strengthening vertical channels alongside training to improve use of communication tools and inter-departmental linkages. While the study's use of a reasonably large, formula-derived sample and regression analysis are strengths, the purposive sampling of SMEs and the focus on only two communication dimensions limit external validity and the capacity to infer causality or to generalise to different sectors or geographic zones.

Uboegbulam and Green (2024) examined internal communication and organisational performance in hotels in Port Harcourt, motivated by the proposition that effective internal channels (lateral, diagonal, downward) are critical for operational efficiency in the hospitality sector. The quantitative, correlational study targeted a population of 259 hotel employees across twelve hotels and employed Taro Yamane to obtain a sample of 157 respondents; data were collected via questionnaire and analysed using Pearson product-moment correlation (PPMC) in SPSS. Results indicated positive and significant relationships between lateral, diagonal and downward communication and measures of operational efficiency, with correlation coefficients indicating moderate to strong associations (e.g., r values around .48–.58 and substantial explained variance for some dimensions). The authors recommended managerial attention to routine, clear downward communication and periodic training on communication practices. The study contributes useful sector-specific evidence, but its reliance on cross-sectional self-report measures and non-probability purposive sampling raises concerns about common-method bias and limits causal inference; further, the scope is geographically narrow (Obio Akpor LGA) which reduces national generalisability.

Ohanyere and Odebeatu (2024) explored organisational communication and employee performance within Nigerian Bottling Company (South-East), framing the inquiry around communication patterns, structure and medium as predictors of contextual, operational and task performance. The researchers adopted a survey design with a population of 1,648 employees and report a sample determined by Borg and Gall's formula (described as 321, with 300 usable responses appearing in the analysis); statistical techniques included descriptive statistics and Pearson correlation, with hypotheses tested at the 5% significance level. Findings showed strong, statistically significant positive relationships between communication patterns and contextual performance,

communication structure and operational performance, and communication medium and task performance. Recommendations included strengthening communication channels and diversifying media to improve task clarity and operational outcomes. The study's industry-level focus and clear empirical associations are valuable for practitioners; however, the apparent discrepancy between the intended sample size and the analysed N (and the exclusive use of correlation analysis) suggests caution when interpreting effect magnitude and directionality, and the cross-sectional design precludes causal claims.

Olugbo et al. (2023) assessed the impact of effective communication on institutional performance at Bayelsa Medical University, motivated by the increasing role of information technologies and organizational climate in higher-education settings. The study administered questionnaires to 180 participants (25 academic and 155 senior non-academic staff across 14 departments) and employed factor analysis and ANOVA to assess the relationships among communication process, culture/climate, verbal/non-verbal cues and communication techniques on employee performance. Results identified four statistically significant determinants (communication process, culture/climate, verbal/non-verbal cues, and communication techniques) with regression/test statistics (e.g., t and β values) indicating positive, significant effects on employee performance. The authors recommended institutional adoption of structured communication strategies and investments in communication technologies to reduce misunderstanding and conflict. Strengths of this study include clear construct measurement and multivariate analyses, but limitations include the modest, single-institution sample and potential sample composition imbalance (far more non-academic than academic respondents), which may bias findings toward administrative perspectives and limit transferability to other universities.

Theoretical Framework

This study is anchored in the Resource-Based View (RBV) theory, which is a foundational strategic management theory originally articulated by Birger Wernerfelt in 1984, who argued that firms should be analysed based on their internal resource endowments rather than their external environments (Wernerfelt, 1984). The theory was later expanded and popularised by Barney (1991), who formalised the criteria that make firm resources sources of sustainable competitive advantage. According to RBV, organisations possess bundles of resources tangible and intangible that differ across firms, and these heterogeneous and imperfectly mobile resources are the basis for superior performance (Barney, 1991). A resource must be valuable, rare, inimitable, and organizationally supported (VRIO) for it to generate competitive advantage. In other words, communication capability, employee competencies, technology, reputation, and culture can all serve as strategic resources when they meet VRIO attributes.

RBV rest on its explanatory power in showing why some firms outperform others despite facing similar market conditions. Proponents contend that RBV shifts strategic thinking from industry-level analysis to firm-level strategic capability, enabling managers to focus on building unique, hard-to-imitate internal strengths (Wernerfelt, 1984; Barney, 1991). The theory has been applauded for providing a clear framework VRIO for analysing competitive advantage and for its usefulness in empirical studies linking organisational resources to performance across sectors.

However, the RBV is not without criticism. Scholars argue that the VRIO criteria are tautological, especially the "value" dimension, which is sometimes defined in terms of performance outcomes, making the theory difficult to falsify (Priem & Butler, 2001). Critics also note that RBV underemphasizes environmental dynamics and external forces, suggesting that focusing solely on internal resources may cause organisations to overlook market threats and opportunities. Furthermore, some argue that RBV does not sufficiently

explain how resources are created, developed, or renewed over time, a gap that later led to the emergence of the dynamic capabilities framework (Teece et al., 1997).

Our standpoint aligns with the position that RBV offers a strong theoretical foundation for explaining performance differences among organisations, especially in contexts where unique competencies and capabilities such as communication skills, training, ICT capacity, or entrepreneurial resilience are central determinants of performance. Although I acknowledge the criticism that RBV is inward-looking and sometimes static, I maintain that its VRIO framework provides an analytically powerful and empirically testable approach for identifying strategic resources relevant to organisational performance. Nevertheless, it is most effective when applied alongside complementary theories, such as dynamic capabilities or contingency theory, which help address its limitations by incorporating environmental and temporal factors.

Methodology

This study used a cross-sectional survey design, which calls for data collection at a specific time to make an inference about a population of interest. The population of this study comprises of all 120 managers of manufacturing firms in Abuja that been in operation for a minimum period of five (5) years and that are register with the Corporate Affairs Commission (CAC). However, only those who are exclusively focused on manufacturing was included. Because the population of the study is small, the study employed the use of census survey which permit that the entire population be used as sample size. As a result, the sample size is 120 manufacturing firms in Abuja. According to Parker (2011) census sampling is appropriate when the population not extremely huge so as to make sure everyone has the chance to take part in the study and produce a more representative outcome.

For the purpose of this study, only primary sources of information was used. This choice is driven by the desire to quickly and easily acquire reliable information from respondents utilizing a direct approach. The study applied descriptive and inferential statistics to the data collected. The mean, and the standard deviation was use to analyse the survey's item responses, and Smart PLS's Partial Least Square Structural Equation Model (PLS-SEM) was utilized to evaluate the hypotheses that were put forth at the 0.05 level of significance.

The model for the PLS-SEM is pictorially depicted below:

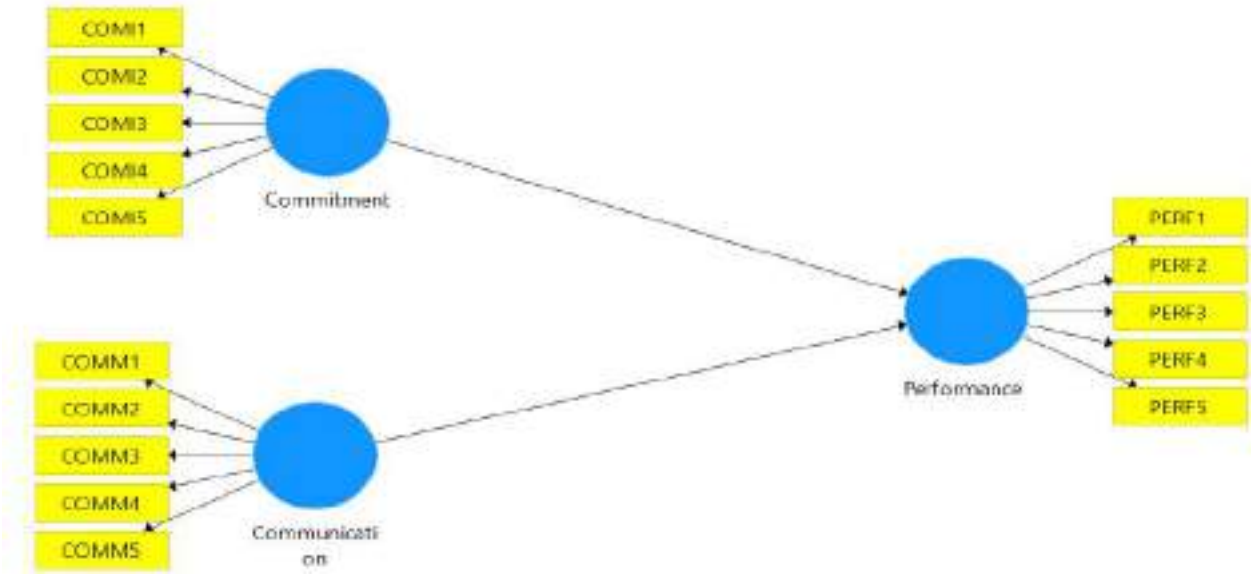

Fig.1: Theoretical Model on effect of supplier collaboration on performance of manufacturing firms in Abuja

Results and Discussion

Out of the one hundred and twenty (120) distributed questionnaires, 109 were properly filled and returned giving a response rate of 96%. Subsequently, all further analyses were done using 109 responses data.

Table 4.1: Descriptive Statistics

variable	Mean	Median	Min	Max	SDV	Kurtosis	Skewness
COMI	3.7	2.04	1.00	5.00	0.96	-1.59	-0.09
COMM	3.07	2.01	1.00	5.00	0.97	0.90	-0.98
PERF	4.10	3.00	1.00	5.00	0.89	0.20	-0.68

Source: SMART, PLS Output, 2024.

Data on the study variables were described in Table 4.1 above in terms of the mean, minimum, maximum, standard deviation, skewness and kurtosis values. Commitment (COMI) revealed an average value of 3.7 with a standard deviation value of 0.96. However, the minimum and maximum values stood at 1 and 5 respectively. Communication (COMM) had minimum and maximum values of 1 and 5 respectively however, it showed an average of 3.07 along with a standard deviation of 0.97. Furthermore, performance (PERF) showed a minimum value of 1 and a maximum value of 5 with an average value of 4.10 accompanied with a standard deviation value of 0.89. All the skewness and kurtosis values were less than 1 which shows that there is a normal distribution of data.

Assessment of Measurement Model

In assessing the measurement model, the researcher began by assessing the item outer loadings. As a rule, loadings above 0.708 are recommended, as they indicate that the construct explains more than 50 percent of the indicator's variance, thus providing acceptable item reliability (Hair, et al., 2019). However, Hair, et al., (2019) posited that low but significant indicator loading of 0.50 can be included hence justifying why indicators with loadings less than 0.708 and above 0.50 were not deleted from the model as seen in figure 2 below.

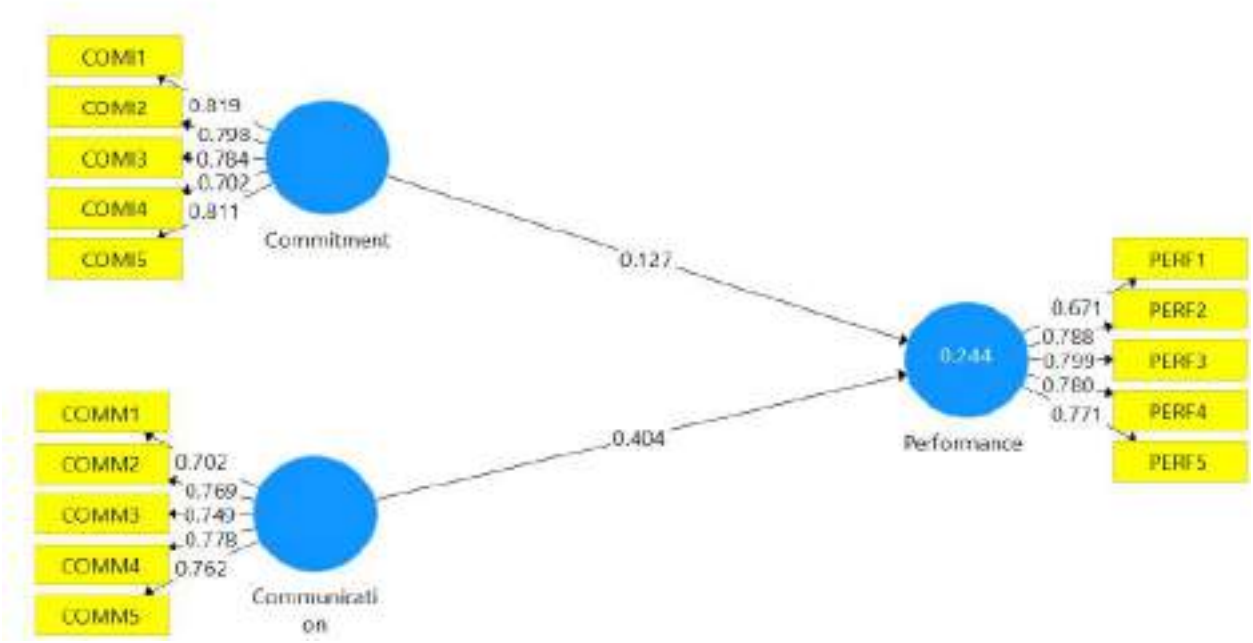

Fig 2: Indicator Loadings.

Table 4.2: Reliability of study scale

S/N	Variables		Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)	No of Items
1	**Commitment (COMI)**	COMI1 COMI2 COMI3 COMI4 COMI5	0.819 0.798 0.784 0.702 0.811	0.849	0.893	0.624	**5**
2	**Communication (COMM)**	COMM1 COMM2 COMM3 COMM4 COMM5	0.702 0.769 0.749 0.779 0.762	0.821	0.875	0.583	**5**
3	**Performance (PERF)**	PERF1 PERF2 PERF3 PERF4 PERF5	0.671 0.788 0.799 0.780 0.711	0.872	0.907	0.661	**5**

Source: SmartPLS Output, 2025

Composite reliability of Jöreskog's (1971) was applied to test for internal consistency of the study. All the values fall within the Hair, et al., (2019) rating of good consistency. The Cronbach alpha value was above 0.60 which is the minimum threshold as recommended by Sekaran (2010). To test for the convergent validity, the average variance extracted (AVE) was used. All the latent variables showed values greater than 0.50 which indicates that the constructs explain at least 50 percent of the variance of its items. According to Henseler, et al., (2015) the Fornell-Larcker criterion does not perform well when explaining discriminant validity, particularly when the indicator loadings on a construct differ only slightly. As a replacement, they proposed the Heterotrait-Monotrait (HTMT) ratio of the correlations which is the mean value of the item correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct (Voorhees et al., 2016). Discriminant validity problems are present when HTMT values are high than 0.90 for structural models (Henseler, et al., 2015).

Heterotrait-Monotrait Ratio (HTMT)

	Commitment	Communication	Performance
Commitment	1.000		
Communication	0.455	1.000	
Performance	0.781	0.587	1.000

Source: SmartPLS Output, 2025

The variance inflation factor (VIF) was used to evaluate collinearity of the formative indicators. All the VIF values were less than 5 indicate the absence of critical collinearity issues among the indicators of formatively measured constructs (Hair, et al., 2019).

Model Goodness of Fit (GoF)

Sequel to the need to validate the PLS model, there is a need to assess the goodness of fit of the model as Hair, et al. (2017) suggested. This study used the standardised root mean square residual's (SRMR). The choice of this index was based on the fact that the SRMR provides the absolute fit measure where a value of zero indicates a perfect fit. The study adopted Hu & Bentler (1998) suggestion that a value of less than 0.08 represents a good fit while applying SRMR for model goodness of fit. The study

result indicates an SRMR value of 0.030. This indicates the model is fit.

Assessing the Structural Model

Having satisfied the measurement model assessment, the next step in evaluating PLS-SEM results is to assess the structural model. Standard assessment criteria, which was considered include the path coefficient, t-values, p-values and coefficient of determination (R^2). The bootstrapping procedure was conducted using a resample of 5000.

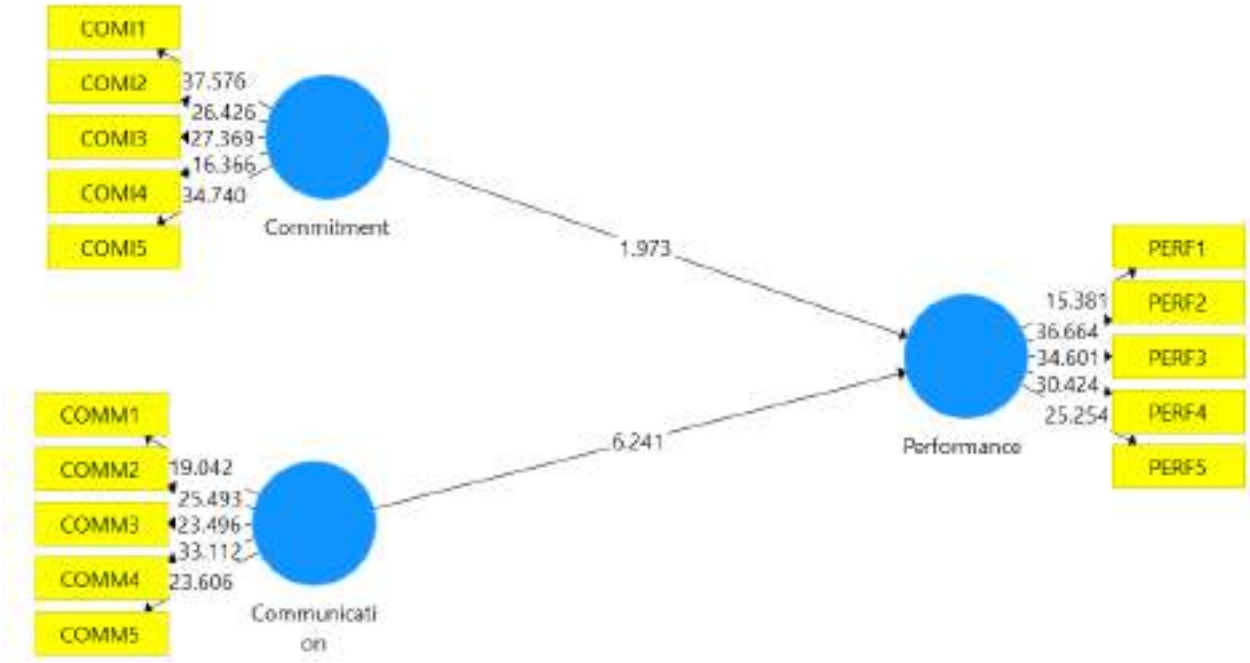

Fig. 3: Path Coefficients of the Regression Model.

R Square Table

	R Square	R Square Adjusted
Performance	0.244	0.241

Source: SmartPLS Output, 2025

The R-square value stood at 24.4% indicating that commitment and communication are responsible for 24.4% variation in the performance of manufacturing firms in Abuja. The remaining 75.6% variation could be explained by other factors not included in the study. Based on Hair, et al., (2019), the r-square is considered moderate but does not jeopardize the result. The result of the path analysis is presented in the table below:

Table 4.4: Path Coefficients

Variable	Beta	T Statistics	P Values	Decision
Commitment -> Performance	0.127	1.973	**0.049**	**Rejected**
Communication -> Performance	0.404	6.241	**0.000**	**Rejected**

Source: SmartPLS Output, 2025

The result from the analysis indicates that commitment has positive and significant effect on performance of manufacturing firm in Abuja. The decision was reached based on the t-value of 1.973 which is greater than 1.964 and a beta value of 0.127 with a p-value of 0.049.

This finding implies that manufacturing managers in Abuja should prioritize cultivating long-term, committed relationships with suppliers to enhance operational efficiency, reduce costs, and improve overall competitiveness, particularly in a context marked by infrastructural challenges and market volatility. This finding is in agreement with that of Abdullahi et al (2018) who found competitive aggressiveness has positive and significantly effect on the performance of firms.

The result from the analysis indicates that communication has positive and significant effect on performance of manufacturing firms in Abuja. The decision was reached based on the t-value of 6.241 which is greater than 1.964 and a beta value of 0. 404 with a p-value of 0.000. This implies that fostering open, timely, and reliable communication channels with suppliers can significantly enhance operational efficiency, cost-effectiveness, and competitive positioning for manufacturing firms, particularly in an environment characterized by logistical bottlenecks and market uncertainties. This finding agrees with that of Mohamed and Abdikarim (2020) who made similar findings about management support and performance.

Conclusion and Recommendations

The study concluded that this finding aligns with broader theoretical frameworks in supply chain literature, which posit that commitment fosters trust, reduces opportunistic behaviors, and enables seamless coordination, thereby contributing to enhanced operational and financial outcomes for manufacturing entities. It is also concluded that this finding aligns with supply chain management theories that emphasize communication as a cornerstone of collaboration, enabling firms to reduce uncertainties, enhance trust, and achieve operational synergies. Based on the study's findings, the study recommended that manufacturing firms should actively implement supplier development programs that emphasize commitment-building activities, such as regular performance reviews and collaborative training initiatives, to cultivate enduring partnerships that enhance supply reliability and innovation capacity, as supported by evidence from Nigerian contexts where such strategies have yielded measurable improvements in operational metrics.

It is recommended that manufacturing firms should invest in structured communication frameworks, such as regular supplier meetings and digital dashboards for real-time data sharing, to foster transparency and coordination. Furthermore, firms are encouraged to explore emerging technologies like block chain for secure and transparent communication with suppliers, which could further enhance trust and efficiency, thereby amplifying performance gains in Nigeria's dynamic market environment.

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