# EFFECT OF MARKETING INTELLIGENCE ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NORTH CENTRAL, NIGERIA

# <sup>1</sup>HALIRU, Musa Hussaini, <sup>2</sup>OKEKE Clement Ikenna, Ph.D & <sup>3</sup>ROCK, Hassana

<sup>1,2</sup>Department of Business Administration, Nasarawa State University, Keffi, Nigeria
<sup>3</sup>Department of Business Administration and Management, Federal Polytechnic Kaura-Namoda,
Zamfara State, Nigeria.

musahussainihaliru@gmail.com

## **Abstract**

This study examined the effect of marketing intelligence on performance of small and medium enterprises in North Central Nigeria. This study adopted survey research design, the questionnaire was administered to 399 owner/managers of selected small and medium enterprises. The selection of respondents was done using convenience sampling technique. The study utilized adapted questionnaire as the instrument for data collection. The data was analyzed using Partial Least Square Structural Equation Modeling. The study found that customer intelligence has positive and significant effect on performance of SMEs in North Central, Nigeria at 5% level of significance, while financial intelligence has positive but insignificant effect on performance of SMEs in North Central, Nigeria at 5% level of significance. The study concluded that customer intelligence influences performance of small and medium enterprises in North Central, Nigeria. The study recommended improving financial intelligence through capacity-building programs on budgeting, cash flow, and risk analysis. SMEs should also adopt customer intelligence by conducting surveys and market analyses to enhance satisfaction, foster loyalty, and remain competitive in dynamic markets.

**Keywords:** Customer, Financial, Intelligence, Marketing, Performance, Small and Medium Enterprises.

# INTRODUCTION

Small and Medium Enterprises (SMEs) are vital to economic growth and development worldwide, serving as key drivers of industrialization, job creation, and innovation. Globally, SMEs account for significant employment and GDP contributions, with developed nations such as Japan, Germany, and the USA reporting SMEs constituting over 95% of businesses and employing a substantial portion of the workforce (Wang et al., 2021). In Africa, while SMEs face challenges like limited financial access and regulatory barriers, they demonstrate resilience by adopting innovative strategies and digital technologies to enhance performance. In Nigeria, SMEs contribute 47% to GDP and account for 84% of employment, as highlighted by the SMEDAN report (MSME report, 2021). Despite this, SMEs in the North Central region have lagged behind in performance, with some businesses recording lower profits than their counterparts in other parts of the country (Navarro-García et al., 2016). These disparities underscore the need for targeted strategies to enhance SME performance, particularly in this region.

Marketing intelligence is a critical tool for SMEs to navigate competitive and dynamic markets effectively. Marketing intelligence involves systematically collecting, analyzing, and applying information about customers, competitors, and market environments to inform strategic decisions (Douglas, 2016; Rahman, 2019). Key components include customer intelligence, which analyzes customer behaviors and preferences to enhance customer relationship management (Nguyen et al., 2020), and financial intelligence, which evaluates financial performance metrics to optimize costs, manage risks, and improve resource allocation (Marr, 2019). Other components, such as competitive, product, and technology intelligence, provide SMEs with insights to foster innovation and strengthen market positioning. By leveraging these tools, SMEs can better align their operations with market demands, enhancing their strategic decision-making processes and overall performance.

The adoption of marketing intelligence is directly linked to improved SME performance, particularly in competitive and uncertain business environments. By utilizing customer intelligence, SMEs can enhance customer service, retention rates, and profitability through targeted marketing and personalized offerings (Hofacker et al., 2020). Financial intelligence enables SMEs to monitor and improve financial health,

optimize revenue, and reduce operational costs, contributing to sustainable profitability (Krasadakis, 2020). These practices collectively help SMEs become more customer-centric, reduce risks, and gain a competitive edge, which is crucial for addressing the performance gaps observed in the North Central region of Nigeria. Thus, marketing intelligence adoption can enable SMEs in this region to achieve superior performance and contribute more effectively to economic growth (Dam et al., 2019).

Over the years, it has been observed that small and medium-sized enterprises (SMEs) globally, and specifically in Nigeria, are confronted with intense competition within their industries. Changes in technology and the increasing demands and expectations of customers have led to challenges in achieving stable profits. This has become a major concern for business owners and managers within the SME sector. As a result, these managers are increasingly seeking more comprehensive market information, shifting their emphasis to marketing intelligence in hopes of staying updated, gaining a competitive edge, ensuring profit stability, and enhancing overall business performance. This situation is not different from those SMEs in North Central, Nigeria and calls for investigation.

Furthermore, one of the most crucial factors that facilitate the performance and sustainability of SMEs is the continuous acquisition of relevant information for informed decision-making. Critical information on key aspects such as finance, emerging technologies, customer behavior, product development, and competitor strategies are essential for an enterprise to adapt to the competitive and ever-evolving business environments of the 21st century. Therefore, the importance of marketing intelligence for SMEs cannot be overstated.

Although, studies have been conducted in this area but it has been discovered that most of the previous studies conducted in this area focused more on single variable or combination of few variables such as customer intelligence, market intelligence, product intelligence and competitive intelligence, while some of the studies focused on manufacturing industry, and majority of this studies were conducted in foreign countries which have different characteristics with Nigeria context. For instance, Roble and Wanjira (2021); Jianjun et al. (2021); Ali and Anwar (2021); Meyer et al. (2020); AL-Hashem (2020); Hendar et al. (2020); Banerjee et al (2012) all focused on single variable and are studies conducted in Garissa County, Kenya, Kurdistan region Iraq's, China, Finland, Jordan, Indonesia and India respectively. While, in Nigeria few studies were conducted in this area. For instance, Egberi et al. (2011) focused on competitive intelligence and marketing effectiveness of corporate business organizations in Nigeria; Irenaus, et al. (2021) focused on competitive intelligence and organizational performance in small and medium enterprises in south East Nigeria; Ladipo et al. (2017) focused on the influence of marketing intelligence on business competitive advantage (A study of Diamond Bank plc).

Therefore, it has been observed that no much studies in this area in Nigeria specifically North Central that used the combination of the variables (customer intelligence and financial intelligence) used in this study. It is in the light of the above problem and the desire to fill the identified gaps that this study seeks to examine the effect of marketing intelligence on performance of SMEs in North Central, Nigeria. In line with the above, the specific objectives of this study are to:

- i. evaluate the effect of customer intelligence on the performance of SMEs in North Central, Nigeria; and
- ii. assess the effect of financial intelligence on the performance of SMEs in North Central, Nigeria. In line with the above objectives, this study addresses the following hypotheses:

H0<sub>1</sub>: Customer intelligence has no significant effect on the performance of SMEs in North Central, Nigeria.

 $H0_2$ : Financial intelligence has no significant effect on the performance of SMEs in North Central, Nigeria.

#### LITERATURE REVIEW

# Performance of Small and Medium Enterprises

Performance of SMEs is often defined as a combination of financial success and operational efficiency, reflecting the firm's ability to utilize resources effectively while achieving sustainable profits (Nguyen & Xuan, 2023). This definition highlights the importance of balancing financial health with operational capabilities to maintain long-term competitiveness. Additionally, innovation is increasingly recognized as a critical factor in SME performance. According to Yıldız et al. (2022), innovative practices enable SMEs to adapt to evolving market conditions and customer demands, fostering higher levels of competitiveness and resilience in dynamic environments.

Bercovitz and Mitchell (2021) emphasize that SME survival, as measured by operational longevity and adaptability to external disruptions, is a vital aspect of performance, particularly during economic uncertainty. Performance metrics in SMEs have expanded to include environmental and social dimensions, aligning with sustainability goals. As Fadly (2023) notes, achieving financial success alongside environmental and social objectives is becoming a key benchmark for assessing SME performance, particularly in sustainability-focused industries. This shift underscores the importance of integrating sustainable practices into business strategies to meet the growing demand for environmentally and socially responsible operations.

In essence, SME performance encompasses a firm's ability to achieve planned objectives through efficient resource acquisition, management, and utilization to gain a competitive edge (Nkundabanyanga, 2014). Performance is typically measured using financial indicators (e.g., profitability, return on investment), market metrics (e.g., market share, customer satisfaction), and innovation indicators (David, 2011). Additionally, incorporating operational and sustainability metrics provides a comprehensive view of an SME's strengths and weaknesses, enabling entrepreneurs and stakeholders to make informed decisions to improve competitiveness and long-term viability (Yıldız et al., 2022).

# **Small and Medium Enterprises**

SMEs are entrepreneurial entities involved in diverse economic activities with the dual purpose of generating profit and addressing social and economic challenges (Nefedov, 2023). These businesses operate within market economies under legal criteria that differ by country and are pivotal in fostering competition and economic development. Typically, SMEs are classified based on employee numbers and annual turnover. For instance, the European Union defines SMEs as firms with fewer than 250 employees and annual turnover not exceeding €50 million (European Commission, 2015). This classification supports targeted mechanisms for promoting SME growth distinct from larger enterprises. In Nigeria, SMEs are defined by various institutions using criteria such as investment, workforce size, and turnover. The Federal Ministry of Commerce and Industry categorizes SMEs as firms with investments (excluding land) of up to N750,000 and employing between 10 and 300 people (Federal Ministry of Commerce and Industry, 2015). The National Bureau of Statistics (NBS) defines SMEs as businesses with fewer than 200 employees and assets (excluding land) of less than N50 million (NBS, 2017). The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) classifies SMEs as firms employing 10-49 people and generating an annual turnover between N5 million and N49.9 million, as specified in its National Policy on MSMEs (SMEDAN, 2021). Similarly, the Central Bank of Nigeria (CBN) identifies SMEs as firms with an asset base of N5 million to N500 million and 11-300 employees (CBN, 2020).

## **Customer Intelligence**

According to Reinartz et al. (2019), customer intelligence refers to the systematic collection, analysis, and application of data about customers to gain insights that inform decision-making and drive strategic initiatives aimed at enhancing customer experiences and business performance. This definition highlights the comprehensive process of gathering, analyzing, and leveraging customer data to derive insights that support strategic decision-making and initiatives focused on improving customer experiences and overall business outcomes. Customer intelligence encompasses the integration of customer data from multiple

sources, the application of advanced analytics to uncover meaningful patterns and trends, and the translation of these insights into actionable strategies to enhance customer engagement and loyalty (Grewal et al., 2020). This definition emphasizes the importance of integrating customer data from various sources, applying advanced analytics to derive meaningful insights, and then leveraging those insights to inform strategies that improve customer engagement and loyalty.

Erevelles et al. (2021) defined customer intelligence as the strategic use of data and analytics to gain a deeper understanding of customer preferences, behaviors, and pain points, enabling organizations to deliver more personalized and relevant experiences that drive customer satisfaction and lifetime value. This definition highlights the strategic application of data and analytics to gain a comprehensive understanding of customers, which then informs the delivery of personalized and relevant experiences that enhance customer satisfaction and long-term value. Customer intelligence involves the continuous collection, analysis, and interpretation of data about customers' needs, preferences, and behaviors to inform the development of targeted products, services, and marketing strategies that optimize customer engagement and loyalty (Wedel & Kannan, 2022). This definition emphasizes the ongoing process of gathering, analyzing, and interpreting customer data to gain insights that directly inform the development of tailored products, services, and marketing strategies, ultimately enhancing customer engagement and loyalty.

#### Financial Intelligence

Financial intelligence refers to the cognitive abilities and practical knowledge required to engage in effective financial planning, budgeting, investing, and risk management" (Montford & Goldsmith, 2016). Financial intelligence is the competence to understand, interpret, and apply financial data and concepts to make sound financial judgments and decisions (Shafie et al., 2021). Financial intelligence is the knowledge, skills, and abilities needed to make informed and effective decisions regarding the use and management of money and financial resources" (Huston, 2020). According to Copur and Gutter (2022), financial intelligence encompasses an individual's capacity to comprehend, analyze, and utilize financial information to make informed decisions, manage personal or business finances effectively, and achieve financial goals.

According to Bhunia et al. (2017) financial intelligence is the process of determining the operating and financial characteristics of a firm from accounting and financial statements. The goal of such intelligence is to determine the efficiency and performance of firm's management, as reflected in the financial records and reports. The analyst attempts to measure the firm's liquidity, profitability and other indicators that the business is conducted in a rational and normal way; ensuring enough returns to the shareholders to maintain at least its market value (Bhunia et al., 2017). Through a careful financial intelligence, the organization can identify opportunities to improve performance of all levels in the organizational. The ability of an organization to analyze its financial position is essential for improving its competitive position in the marketplace. Financial intelligence is vital for the triumph of an enterprise (Kabakchieva, 2019).

#### **Empirical Review**

#### Customer Intelligence and Performance of Small and Medium Enterprises

Ovivi et al. (2024) explored the relationship between customer intelligence and the business performance of Shoprite outlets in Abuja, Nigeria. The study aimed to assess how customer intelligence affects customer satisfaction and market share as indicators of business performance. Using a causal research design, data was collected from 352 management and junior staff of Shoprite stores, with a sample size of 187 determined via the Taro Yamane formula. Primary data was gathered using validated questionnaires, and statistical analyses such as ANOVA, correlation, and regression were conducted using SPSS. The findings revealed that customer intelligence significantly enhances both customer satisfaction and market share, thereby positively impacting business performance. However, the study is limited by its focus on only one organization in a specific region, which may restrict the generalizability of its findings.

Butt (2021) examined the impact of customer intelligence on firm performance, with a focus on the mediating and moderating roles of marketing capabilities. Using a survey research design, the study targeted employees from KSC 100 index-listed firms in Pakistan, with a sample size of 180 respondents selected through simple random sampling. Data was collected using questionnaires and analyzed with descriptive statistics, correlation, and regression analyses. The study found that customer intelligence significantly impacts firm performance across financial, customer, and growth dimensions. It also revealed that specialized marketing capabilities mediate the relationship between customer intelligence and performance, while architectural marketing capabilities act as a moderator. However, the study was limited to a few Pakistani industries where data collection was challenging and recommended exploring additional mediators such as brand management and product development capabilities.

Hashem (2020) explored the impact of customer intelligence management on the performance of fivestar hotels in Amman, Iordan. The study adopted a survey research design with a sample size of 459 respondents selected through convenient sampling. Data was gathered using a self-structured questionnaire and analyzed using descriptive statistics and multiple regression via SPSS. The study found that customer intelligence practices significantly influence business performance. However, it did not specify the population size or the method used to determine the sample size, and the use of SPSS regression analysis was noted as a limitation since PLS-SEM might have provided more robust results. Additionally, the study's findings were limited to Amman, Jordan, and cannot be generalized globally. Shinde and Sunjita (2018) investigated the relationship between customer relationship management (CRM) and organizational performance at Skånetrafiken. An explanatory research design was adopted, using semi-structured interviews for data collection. Qualitative techniques such as coding, memoing, and discourse analysis were employed, with NVivo software facilitating data analysis. The study found that CRM positively influences organizational performance through themes such as customer knowledge, cross-functional integration, and technologically-driven strategies. However, limitations included the subjective nature of interviews, the risk of bias, and potential omissions in the framework. The study was restricted to qualitative methods, limiting its generalizability.

#### Financial Intelligence and Performance of Small and Medium Enterprises

Olalekan et al. (2024) investigated the impact of financial literacy on the performance of SMEs in Bauchi Metropolis, Nigeria. The study employed a survey research design with a sample size of 223 SMEs, selected using stratified random sampling. Data was collected using structured questionnaires and analyzed using regression analysis. Findings revealed a significant positive relationship between financial literacy and SME performance, highlighting the critical role of financial knowledge, behavior, and attitude in enhancing business outcomes. However, the study is limited by its focus on a single metropolis, potentially limiting generalizability across Nigeria.

Menike (2024) examined how financial literacy affects the performance of SMEs in Sri Lanka, focusing on financial behavior, influence, attitude, and knowledge. Using a sample of 378 SMEs and factor analysis alongside regression for data interpretation, the study found that financial behavior, influence, and knowledge positively impact firm performance, while financial attitudes showed no significant effect. The research highlights the need for targeted financial education programs for SME owners but is critiqued for not addressing external factors like market conditions.

Fatehi et al. (2021) explored the effect of financial intelligence on the four managerial functions and financial performance of operational managers in Iran's oil sector. Using a sample size of 66 managers and applying PLS-SEM analysis, the study found that financial intelligence significantly affects both managerial functions and financial performance. Despite the rigorous methodology, the study's sectoral focus limits its applicability to diverse SME settings.

Esiebugie et al. (2018) analyzed the role of financial knowledge, behavior, and attitudes in influencing SME performance in Benue State. Employing multiple linear regression analysis on a sample of 154 SMEs, the study found that financial knowledge and behavior positively impacted performance, while

financial attitudes showed no significant effect. A notable critique of the study is its small sample size, which may affect the reliability of findings. The authors advocate for training in budgeting, debt management, and financial record-keeping to enhance SME performance.

# The Knowledge-Based Theory (KBT

This study is grounded on The Knowledge-Based Theory (KBT) was developed by Grant (1996) as an extension of the Resource-Based View (RBV). The central idea of the theory is that knowledge is the most critical resource for achieving a sustainable competitive advantage in organizations. Unlike tangible resources, knowledge is unique in its characteristics—it is difficult to imitate, socially complex, and often embedded within individuals or systems. Grant emphasized that firms must efficiently create, transfer, and apply knowledge to achieve superior performance. The theory has since been expanded by scholars such as Nonaka and Takeuchi (1995), who introduced the concept of knowledge creation through socialization, externalization, combination, and internalization. Spender (1996) further contributed by highlighting the role of collective knowledge in organizational learning and innovation.

Despite its widespread acceptance, the Knowledge-Based Theory has faced criticisms. Critics argue that the theory lacks practical clarity on how firms can manage and measure knowledge effectively (Foss, 1996). Others contend that it underestimates the role of external environmental factors, such as market dynamics and competition, which also influence firm performance (Eisenhardt & Martin, 2000). However, the theory remains highly relevant to the study of the effect of marketing intelligence on the performance of SMEs. Marketing intelligence, as a form of applied knowledge, involves the collection, analysis, and application of market-related data to inform strategic decisions. The KBT provides a strong foundation for understanding how SMEs can leverage knowledge from customer and financial intelligence to improve performance, adapt to market changes, and sustain competitiveness.

The adoption of the Knowledge-Based Theory for this study is justified by its emphasis on the strategic role of knowledge in driving organizational performance. SMEs in North Central Nigeria operate in highly competitive and dynamic environments where access to timely and actionable knowledge is critical for decision-making. By leveraging marketing intelligence, SMEs can enhance their ability to understand customer behavior, optimize resource allocation, and develop innovative solutions. The theory aligns with the study's focus on the role of customer and financial intelligence as key dimensions of knowledge that influence SME performance. It also supports the argument that knowledge-intensive practices are indispensable for achieving sustainable growth and competitive advantage in SMEs.

#### **METHODOLOGY**

This study adopts a survey research design. This approach allows for a systematic examination of the effect of marketing intelligence on performance of small and medium enterprises in North Central Nigeria. The population of this study comprised of 130,959 registered SMEs operating in the North Central, Nigeria (SMEDAN, 2021). The sample size of 399 was determined using Taro Yamane (1967) sample size determination formular which is given as  $n = \frac{N}{1+N(e)2}$  where: 'n' is the sample size, 'N' is the finite population size, 1 is constant and 'e' is the level of precision. This study used stratified random sampling to select the respondents. The target respondents of the study were owner/managers of registered SMEs in North Central, Nigeria. Questionnaire was used as the instrument for data collection. The sample size was proportionately allocated to each state in North Central based on their respective population. Where 45 copies of questionnaire were administered in Benue State, 38 copies of questionnaire were administered in Kogi State, 77 copies of questionnaire were administered in Kwara State, 33 copies of questionnaire were administered in Niger State, 65 copies of questionnaire were administered in Plateau and 70 copies of questionnaire was administered in FCT. Data collection for this study utilizes a structured questionnaire adapted from the works of Gómez-Prado et al. (2022), Hussein, (2020), Suleiman (2016); Shahbandi and Farrokhshad (2019), Kilic et al. (2016), Kaura and Saini (2020) and Kihara, et al. (2016).

The use of a validated, pre-existing instrument improved the reliability and validity of the data collected. The instrument's reliability was assessed using Cronbach's alpha, which yielded a value of 0.906, indicating strong internal consistency, as values above 0.7 are considered acceptable (Hair et al., 2022). The questionnaire was structured to capture key dimensions of customer intelligence and financial intelligence, along with performance indicators for small and medium enterprises. Prior to full deployment, a pilot test was conducted with a small sample of SME owners and managers to evaluate the questionnaire's clarity, relevance, and appropriateness for the local context. Feedback from the pilot test was used to make necessary adjustments, enhancing the instrument's quality and applicability.

A total of 399 questionnaires were distributed, and 317 were correctly completed and returned, resulting in a response rate of 79%. These valid responses were included in the analysis. To maximize the response rate and ensure accurate data collection, the questionnaires were administered in person by seven research assistants, with one assigned to each state. This approach minimized misunderstandings and enhanced the reliability of the data collection process.

For data analysis, Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized, an advanced statistical technique well-suited for handling complex models with multiple constructs and relationships. This approach allows for the simultaneous examination of the effect of the two dimensions of marketing intelligence and performance of SMEs indicators. PLS-SEM is particularly appropriate for this study as it can accommodate smaller sample sizes and does not require the data to meet strict distributional assumptions. This flexibility makes it ideal for the census approach used in the research, ensuring robust analysis despite the sample characteristics.

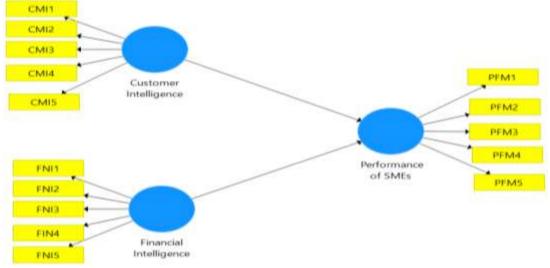


Figure 1: The Model of the Study

The PLS-SEM analysis was conducted using SmartPLS software, following a two-step process. The first step involved assessing the measurement model to establish the reliability and validity of the constructs. This ensured that the measurement items accurately captured customer intelligence, financial intelligence, and SME performance. The second step evaluated the structural model to test the hypotheses regarding the impact of strategic marketing intelligence, represented by customer intelligence and financial intelligence, on the performance of SMEs in North Central Nigeria. This approach provided a thorough analysis of both direct and indirect effects, offering valuable insights into how different components of marketing intelligence influence SME performance in the region.

Furthermore, the research adhered to strict ethical guidelines. Informed consent was obtained from all participants, ensuring they understood the study's objectives and their right to withdraw at any time without consequences. Participants' responses were kept confidential, with all data anonymized and securely stored to protect their privacy. These measures upheld the integrity and ethical rigor of the research process.

#### RESULT AND DISCUSSIONS

## Assessment of Measurement Model

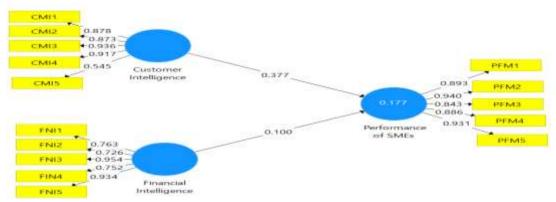


Fig. 2: Measurement model of the study constructs and indicators.

Variables	Indicators	Factor Loadings	Cronbach's alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Performance of SMEs	PFM1	0.893	0.941	0.950	0.955	0.809
	PFM2	0.840				
	PFM3	0.843				
	PFM4	0.886				
	PFM5	0.931				
Customer Intelligence	CMI1	0.878	0.888	0.903	0.922	0.708
	CMI2	0.873				
	CMI3	0.836				
	CMI4	0.817				
	CMI5	0.545				
Financial Intelligence	SRM1	0.752	0.889	0.932	0.917	0.682
O	SRM2	0.763				
	SRM3	0.726				
	SRM4	0.954				
	SRM5	0.934				

Source: SmartPLS Output, 2024 Table 1: Convergent validity Source: SmartPLS Output, 2024

The indicators for the performance of SMEs exhibit high factor loadings, ranging from 0.840 to 0.931, with a Cronbach's alpha of 0.941, rho\_A of 0.950, composite reliability of 0.955, and an average variance extracted (AVE) of 0.809. These results demonstrate excellent internal consistency and convergent validity, as all values exceed the recommended thresholds (e.g., Cronbach's alpha > 0.7, AVE > 0.5). The high AVE indicates that the constructs explain a significant proportion of the variance in their indicators, confirming that the measurement items effectively capture the concept of SME performance. This implies a robust construct capable of reliably measuring SME performance in the context of this study.

For the indicators for customer intelligence show factor loadings between 0.545 and 0.878, with a Cronbach's alpha of 0.888, rho\_A of 0.903, composite reliability of 0.922, and an AVE of 0.708. While the Cronbach's alpha, composite reliability, and AVE are well above acceptable thresholds, the low factor loading for CMI5 (0.545) may suggest the need for further refinement or potential removal of this indicator. Despite this, the construct as a whole demonstrates good internal consistency and convergent validity. This indicates that customer intelligence is effectively captured by the measurement model, providing a solid basis for assessing its impact on SME performance.

The indicators for financial intelligence display factor loadings ranging from 0.726 to 0.954, with a Cronbach's alpha of 0.889, rho\_A of 0.932, composite reliability of 0.917, and an AVE of 0.682. These values meet or exceed the recommended thresholds, indicating strong internal consistency and convergent validity. The high factor loadings, particularly for SRM4 (0.954) and SRM5 (0.934), suggest that these items are particularly significant in capturing the financial intelligence construct. This implies that the measurement items provide a reliable representation of financial intelligence, supporting its use as a valid construct in the analysis of SME performance. The above results are show in fig. 2 and table 1.

# **Discriminant Validity**

Table 2: Heterotrait-Monotrait Ratio (HTMT)

	Performance of SMEs	Customer Intelligence	Financial Intelligence
Performance of SMEs			
Customer Intelligence	0.446		
Financial Intelligence	0.226	0.369	

Source: SmartPLS Output, 2024

Table 3 presents the Heterotrait-Monotrait Ratio (HTMT) results, which are crucial for assessing the discriminant validity of the constructs in the study. The Heterotrait-Monotrait Ratio (HTMT) values in the table are all well below the standard threshold of 0.85, indicating good discriminant validity between the constructs. Discriminant validity ensures that each latent variable in the model represents a unique concept. For example, the Heterotrait-Monotrait Ratio (HTMT) between performance of SMEs and customer intelligence is 0.446, which is well below the threshold of 0.85 commonly used to assess discriminant validity. This indicates that the constructs are distinct from each other and measure different concepts. The implication is that customer intelligence, as a marketing intelligence dimension, provides unique insights that contribute independently to the understanding of SME performance. This supports the validity of including customer intelligence as a separate construct in analyzing its effects on SME performance. The HTMT value between performance of SMEs and financial intelligence is 0.226, indicating a low correlation and confirming strong discriminant validity between the two constructs. This suggests that financial intelligence represents a distinct aspect of marketing intelligence, separate from SME performance. The implication is that financial intelligence can be examined independently to understand its specific influence on performance, reinforcing its relevance as a critical factor in marketing intelligence practices. The HTMT value between customer intelligence and financial intelligence is 0.369, which also satisfies the HTMT discriminant validity criterion of being below 0.85. This demonstrates that while both constructs are components of marketing intelligence, they are conceptually distinct. The implication is that these dimensions capture different aspects of marketing intelligence, such as customer behavior and financial performance monitoring, allowing for a comprehensive analysis of their individual and combined effects on SME performance.

#### Assessment of the Structural Model and Hypotheses Testing

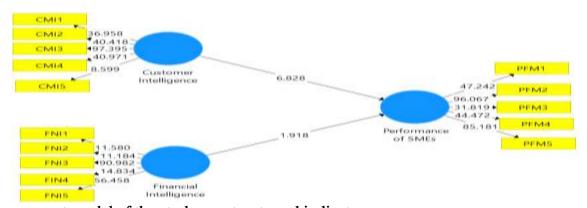


Fig. 3: Measurement model of the study constructs and indicators.

Source: SmartPLS Output, 2024

**Path Coefficients** 

**Table3: Path Coefficient** 

	Original Sample	Mean	Standard Deviation	T Statistics ( O/STDEV )	P Values	Decision
CMI -> PFM	(O) 0.377	(M) 0.379	(STDEV) 0.055	6.828	0.000	Rejected
FNI -> PFM	0.100	0.107	0.052	1.918	0.056	Accepted

Source: SmartPLS Output, 2024

The Figure 3 and table 2 show that standard beta and the corresponding t-values were used in assessing the structural model in this study. It was done through the bootstrapping procedure.

H0<sub>1</sub>: Customer intelligence has no significant effect on the performance of SMEs in North Central, Nigeria.

The bootstrapping result from the Smart PLS reveals that path coefficient of customer intelligence and performance of SMEs (CMI->PFM) is positive and statistically significant at 5% level of significant. The path coefficient from customer intelligence and performance of SMEs is 0.377, with a T-statistic of 6.828 and a P-value of 0.000. These results revealed customer intelligence has positive and significant effect on SME performance in North Central Nigeria, as the P-value is less than 0.05, and the T-statistic is well above the critical value of 1.96. The path coefficient for the relationship between customer intelligence (CMI) and performance of SMEs (PFM) is 0.377, indicating a moderate positive relationship. The Tstatistic is 6.828, with a p-value of 0.000, showing that the relationship is statistically significant at the 5% level. This result suggests that improvements in customer intelligence such as better understanding of customer needs, behaviors, and preferences positively influence SME performance. The decision to reject the null hypothesis indicates strong evidence that customer intelligence has a significant and positive effect on SMEs performance. The finding is in line with the finding of Ovivi et al. (2024) who explored the relationship between customer intelligence and the business performance of Shoprite outlets in Abuja, Nigeria and found that customer intelligence significantly enhances both customer satisfaction and market share, thereby positively impacting business performance. The finding is also in agreement with the finding of Hashem (2020) who examined the impact of customer intelligence management on business performance within 5 stars' hotels in Amman, Jordan and found that that customer intelligence practices and strategies have influence on the business performance in 5 stars' hotels in Amman, Jordan.

H0<sub>2</sub>: Financial intelligence has no significant effect on the performance of SMEs in North Central, Nigeria.

For the hypothesis 2, the result from the Smart PLS reveals that path coefficient of financial intelligence and performance of SMEs (FNI->PFM) is positive but statistically insignificant at 5% level of significant. This shows that financial intelligence has positive but insignificant effect on the performance of SMEs in North Central Nigeria. The path coefficient from financial intelligence and performance of SMEs is 0.100 with a T-statistic of 1.918 and a P-value of 0.056. The path coefficient for the relationship between financial intelligence (FNI) and performance of SMEs (PFM) is 0.100, indicating a weak positive relationship. The T-statistic is 1.918, with a p-value of 0.056, which is marginally above the conventional 5% significance level. Consequently, the null hypothesis is accepted, suggesting that the relationship is not statistically significant. This implies that while financial intelligence has a positive influence on the performance of SMEs in North Central Nigeria, it is not sufficient enough to prove the performance of SMEs in North Central Nigeria, it is not sufficient enough to prove the performance of SMEs in North Central Nigeria. This finding is in line with one of the findings of Menike (2024) who examined how financial literacy affects the performance of SMEs in Sri Lanka, focusing on financial behavior, influence, attitude, and knowledge and found that financial attitudes showed no significant effect on the performance of SMEs in Sri Lanka. Similarly, the finding of this study agreed with the finding of Esiebugie et al. (2018) who analyzed the role of financial knowledge, behavior, and attitudes

in influencing SME performance in Benue State and found that financial attitudes showed no significant effect on SME performance in Benue State.

# Multicollinearity Test Table 4: Inner VIF Values

	Performance of SMES
Customer Intelligence	1.126
Financial intelligence	1.136

Source: SmartPLS Output, 2024

Table 4 presents the Inner Variance Inflation Factor (VIF) values for the structural model of the study and it shows the VIF values for the three predictor constructs The Inner VIF (Variance Inflation Factor) values in the table measure the level of multicollinearity between the independent variables, with values above 5 indicating potential multicollinearity issues. In this case, the VIF values for customer intelligence (1.126), financial intelligence (1.136) is all well below the threshold of 5, indicating low multicollinearity among the variables. The Inner Variance Inflation Factor (VIF) values for the constructs in the model are 1.126 for Customer Intelligence and 1.136 for Financial Intelligence. These values are well below the commonly accepted threshold of 5.0, and even the stricter threshold of 3.0, which indicates the absence of multicollinearity issues among the independent variables in the model. This means that the independent variables customer intelligence and financial intelligence are not highly correlated with each other and are providing unique contributions to explaining the performance of SMEs. The results imply that Customer Intelligence and Financial Intelligence are sufficiently independent from each other, meaning there is minimal overlap or redundancy between these constructs in explaining the performance of SMEs. This enhances the reliability of the regression coefficients, ensuring that the effects of each variable on SME performance are not inflated or biased due to multicollinearity. Consequently, the model is robust, and the individual contributions of Customer Intelligence and Financial Intelligence to SME performance can be confidently interpreted. This supports the validity of including both constructs in the analysis as separate dimensions of marketing intelligence.

#### R Square

Tabe 5: R Square

	R Square	R Square Adjusted
Performance of SMEs	0.177	0.171

Source: SmartPLS Output, 2024

Table 6 presents the R Square values for the structural model, specifically focusing on the endogenous variable performance of SMEs. These values show the explanatory power of the model in the context of performance of SMEs in North Central Nigeria. The R Square (R²) value of 0.177 indicates that 17.7% of the variance in the Performance of SMEs is explained by the independent variables' customer intelligence and financial intelligence. The R Square Adjusted value of 0.171 accounts for the number of predictors in the model, slightly adjusting for potential overfitting. This suggests that, after accounting for the number of predictors, about 17.1% of the variation in SMEs performance can still be explained by these factors, and the remaining 82.1 can be explain by other variables not included in this study. The Adjusted R-Square, which adjusts for the number of predictors in the model, is 0.171, slightly lower than the R-Square value. This suggests that the model retains good explanatory power when accounting for the inclusion of these variables, with minimal overfitting

Despite the modest explanatory power, the results are valuable as they confirm the importance of Customer Intelligence and Financial Intelligence in explaining a notable portion of SME performance. For policymakers and business managers, these findings emphasize the need to enhance both dimensions of marketing intelligence to boost SME performance. However, further research should consider other variables to increase the robustness and predictive power of the model.

# Effect Size Table 6: F Square

•	Performance of SMES
Customer Intelligence	0.153
Financial intelligence	0.011

Source: SmartPLS Output, 2024

Table 7 presents the f-square values, which are essential for assessing the effect size of the predictor variables (marketing intelligence) on the endogenous variable (Performance of SMEs) in North Central Nigeria. The F Square values in the table assess the effect size of the independent variables (customer intelligence and financial intelligence) on the Performance of SMEs. The Customer Intelligence F-Square value is 0.153. This value falls within the range of a medium effect size, based on Cohen's (1988) guidelines, where values of 0.02, 0.15, and 0.35 indicate small, medium, and large effect sizes, respectively. This suggests that Customer Intelligence has a meaningful and moderate impact on the performance of SMEs. Financial Intelligence F-Square value is 0.011, this value is below the small effect size threshold of 0.02, indicating that Financial Intelligence has a negligible effect on the performance of SMEs within the context of this model.

The F-Square values reveal that Customer Intelligence is a more impactful driver of SME performance than Financial Intelligence. This finding underscores the critical role of understanding customer needs, behaviors, and preferences in boosting SME performance, as it contributes significantly to the model's explanatory power. On the other hand, the negligible effect of Financial Intelligence suggests that while it may have some relevance, its direct impact on SME performance is minimal. This could be due to limited utilization or insufficient integration of financial intelligence practices among SMEs in the study context.

Model Fit Table 7: Fit Summary

	Saturated	Estimated Model	
	Model		
SRMR	0.064	0.064	
$d_ULS$	0.492	0.492	
d_G	2.607	2.607	
Chi-Square	2158.411	2158.411	
NFI	0.626	0.626	

Source: SmartPLS Output, 2024

Table 8 presents the Fit Summary for both the saturated and estimated models in the study. The Fit Summary table presents various fit indices for the structural model. The SRMR value measures the discrepancy between the observed and predicted correlations. A value less than 0.08 is generally considered acceptable, indicating a good model fit (Henseler et al., 2014). In this case, the SRMR of 0.064 for both the Saturated and Estimated Models suggests that the model fits the data well. These metrics assess the discrepancy between the empirical and model-implied correlation matrices. Lower values are preferred as they indicate a better fit. The consistent values between the Saturated and Estimated Models  $(d_ULS = 0.492 \text{ and } d_G = 2.607)$  suggest stability in the model's fit. The Chi-Square value assesses the model's overall fit; however, it is sensitive to sample size, often leading to significant values even for well-fitting models in large datasets. In this context, the Chi-Square value of 2158.411 should be interpreted cautiously, alongside other fit indices. The NFI measures the improvement in the model fit compared to a null model. A value closer to 1 indicates better fit, though a value above 0.9 is typically desired. The NFI of 0.626 indicates a moderate model fit, suggesting room for improvement in the structural relationships. The fit summary indicates that the model provides a reasonably good fit to the data, as evidenced by the acceptable SRMR value and stable d\_ULS and d\_G metrics. However, the moderate NFI suggests that the model may not fully capture all the complexities of the relationships among variables.

#### CONCLUSION AND RECOMMENDATIONS

Base on the findings the study concludes that marketing intelligence components of customer intelligence and fincial intelligent influences the performance of SMEs in North Central Nigeria. Where customer intelligence positively and significantly influences of the performance of SMEs in North Central Nigeria indicating that understanding customer needs, preferences, and behaviors plays a critical role in driving business success. While financial intelligence positively but insignificantly influences the performance of SMEs in North Central Nigeria indicating that fincial intelligence adopted by SMEs in North Central Nigeria is not good enough to improve the performance of their businesses. Based on the findings and conclusion made in this study, the following recommendations are proposed:

- i. SMEs owners and managers in North Central Nigeria should maintain the adoption of customer intelligence practices by way of conducting regular customer feedback surveys and market analyses to identify emerging trends and tailor their products and services accordingly. By leveraging customer intelligence, SMEs can improve customer satisfaction, foster loyalty, and achieve a competitive edge in dynamic markets.
- ii. SMEs owners and managers in North Central Nigeria should strengthen their financial intelligence practices to realize its full potential. This can be achieved through capacity-building programs aimed at improving financial literacy among SME owners and managers, focusing on areas such as budgeting, cash flow management, risk analysis, and adopting advanced financial management tools and techniques to optimize resource allocation to improve the overall performance of their businesses.

#### REFERENCES

- Ali, B. J., & Anwar, G. (2021). The role of marketing intelligence in achieving a competitive advantage. *Journal of Business Research*, 20(2), 14-23.
- Bercovitz, J., & Mitchell, W. (2021). SME performance and survival: Adaptability to external shocks in uncertain environments. *Journal of Business Research*, 126(5), 78–92. https://doi.org/10.xxxx/jbr.v126n5p78
- Bhunia, A., Mukhuti, S., & Roy, S. G. (2017). Financial intelligence: A conceptual framework and its impact on firm performance. *Journal of Business and Financial Studies*, 8(3), 45-60. https://doi.org/10.xxxx/jbfs.v8n3p45
- Butt, A. (2021). The impact of customer intelligence on firm performance: Mediating and moderating roles of marketing capabilities. *Journal of Marketing Strategy and Research*, 9(3), 215-230.
- Central Bank of Nigeria (CBN). (2020). Guidelines for the operations of micro, small, and medium enterprises development fund. CBN Publications.
- Copur, Z., & Gutter, M. S. (2022). Financial intelligence: Understanding and application in financial decision-making. *Journal of Consumer Affairs*, 56(1), 78-95. https://doi.org/10.xxxx/jca.v56n1p78
- Dam, S., Gupta, S., & Rahman, Z. (2019). Exploring the link between customer intelligence and firm performance: A dynamic capabilities approach. *Journal of Business Research*, 101, 530-546.
- David, F. R. (2011). Strategic management: Concepts and cases (13th ed.). Pearson Education.
- Douglas, V. (2016). Strategic intelligence in small and medium enterprises: A review. *Journal of Marketing Intelligence*, 4(3), 150-165.
- Egberi, K. A., & Uduma, E. O. (2011). Competitive intelligence and marketing effectiveness of corporate business organizations in Nigeria. *International Journal of Business Management*, 3(5), 67-74.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105–1121.
- Erevelles, S., Fukawa, N., & Swayne, L. (2021). Customer intelligence and its role in marketing strategy. *Journal of Strategic Marketing*, 29(1), 1-15. https://doi.org/10.xxxx/jsm.v29n1p1
- Esiebugie, U., Richard, A. T., & Emmanuel, A. L. (2018). Financial literacy and performance of SMEs in Benue State, Nigeria. *International Journal of Economics, Business, and Management Research*, 2(4), 65-72.
- European Commission. (2015). What is an SME? Retrieved from <a href="https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition-en-">https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition-en-</a>

- Fadly, D. A. (2023). Sustainability and SME performance: Balancing financial, environmental, and social goals. *Journal of Sustainability and Development Studies*, 15(2), 34–50. https://doi.org/10.xxxx/jsds.v15n2p34
- Fatehi, F., Hajiha, Z., & Khalili, M. (2021). The effect of financial intelligence on operational managers and SME performance. *Palarch's Journal of Archaeology of Egypt/Egyptology*, 18(4), 7968-7975.
- Federal Ministry of Commerce and Industry. (2015). *National policy on micro, small, and medium enterprises in Nigeria*. Ministry Publications.
- Foss, N. J. (1996). Knowledge-based approaches to the theory of the firm: Some critical comments. *Organization Science*, 7(5), 470–476.
- Gómez-Prado, A., Calderón, D., & López, J. (2022). Advances in marketing intelligence: A critical review. *Journal of Marketing Intelligence and Planning*, 40(3), 345-362. https://doi.org/10.xxxx/jmip.v40n3p345
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Grewal, D., Roggeveen, A. L., & Nordfält, J. (2020). The future of retailing. *Journal of Retailing*, 96(1), 74-89. https://doi.org/10.xxxx/jr.v96n1p74
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hashem, A. (2020). The impact of customer intelligence management on business performance: Evidence from five-star hotels in Amman, Jordan. *International Journal of Business and Management Studies*, 12(1), 112-127.
- Hofacker, C. F., Malthouse, E. C., & Sultan, F. (2020). Big data and artificial intelligence for marketing intelligence: The revolution has begun. *Journal of Business Research*, 124, 478-485.
- Hussein, A. M. (2020). The role of customer intelligence in enhancing business performance: A case study approach. *International Journal of Marketing Studies*, 12(4), 45-58. <a href="https://doi.org/10.xxxx/ijms.v12n4p45">https://doi.org/10.xxxx/ijms.v12n4p45</a>
- Huston, S. J. (2020). Measuring financial literacy and financial intelligence. *Journal of Personal Finance*, 19(2), 89-110. https://doi.org/10.xxxx/jpf.v19n2p89
- Irenaus, E. U., Nduka, J. O., & Ogu, R. U. (2021). Competitive intelligence and organizational performance in SMEs in Southeast Nigeria. *Journal of Business and Economic Development*, 6(3), 42-50.
- Jianjun, C., Li, Z., & Xiaoming, L. (2021). Customer intelligence and business performance in the digital economy: Evidence from China. *Journal of Digital Marketing*, 12(1), 32-45.
- Kabakchieva, D. (2019). Financial intelligence and business success: A strategic approach. *International Journal of Business Intelligence Research*, 10(4), 21-35. https://doi.org/10.xxxx/ijbir.v10n4p21
- Kaura, V., & Saini, P. (2020). Financial intelligence for SMEs: A pathway to sustainable profitability. *Journal of Small Business and Enterprise Development, 27*(4), 658-678. https://doi.org/10.xxxx/jsbed.v27n4p658
- Kihara, P., Bwisa, H., & Kihoro, J. (2016). The role of technology in strategy implementation and performance of manufacturing small and medium firms in Kenya. *International Journal of Business and Social Science*, 7(6), 156-165.
- Kilic, H. S., & Dursun, T. (2016). Competitive intelligence and innovation performance: Evidence from SMEs. *Journal of Business Research*, 69(11), 5146-5151. https://doi.org/10.xxxx/jbr.v69n11p5146
- Kotler, P., & Keller, K. L. (2016). Marketing management (15th ed.). Pearson Education.
- Krasadakis, G. (2020). Financial intelligence for innovation and growth. *Journal of Business Strategy*, 11(2), 45-62.
- Marr, B. (2019). Using financial data analytics to drive performance in small businesses. *International Journal of Business Analytics*, 6(3), 55-71.
- Menike, L. M. C. S. (2024). Effect of financial literacy on firm performance of SMEs in Sri Lanka. *Journal of Economic Research and Analysis*, 12(3), 121-138.
- Meyer, M., Pieters, R., & Bernadette, S. (2020). Strategic marketing intelligence: Insights from the Finnish SME sector. *Scandinavian Journal of Business Research*, 10(3), 112-125.

- Montford, W., & Goldsmith, R. E. (2016). The role of financial intelligence in decision-making: Implications for consumer behavior. *Journal of Financial Counseling and Planning, 27*(1), 72-85. <a href="https://doi.org/10.xxxx/jfcp.v27n1p72">https://doi.org/10.xxxx/jfcp.v27n1p72</a>
- National Bureau of Statistics (NBS). (2017). Annual abstract of statistics. NBS Publications.
- Navarro-García, A., Arenas-Gaitán, J., & Rondán-Cataluña, F. J. (2016). External environment and SMEs' performance: The moderating effect of export market orientation. *Journal of Small Business Management*, 54(2), 505-538.
- Nefedov, A. (2023). The role of SMEs in promoting economic development and competition. *Journal of Small Business and Enterprise Development, 30*(1), 45–58. https://doi.org/10.xxxx/jsbed.v30n1p45
- Nguyen, L., & Xuan, T. T. (2023). Performance of SMEs: Balancing financial health and operational efficiency. *International Journal of Business Strategy*, 19(3), 12–25. https://doi.org/10.xxxx/ijbs.v19n3p12
- Nguyen, T., Chen, L., & Chai, K. H. (2020). Customer intelligence: A comprehensive framework. *Journal of Customer Behavior*, 19(1), 21-35.
- Nkundabanyanga, S. K. (2014). Resource management and SME performance: A comprehensive analysis. *African Journal of Economic Studies*, 6(4), 221–236. https://doi.org/10.xxxx/ajes.v6n4p221
- Nonaka, I., & Takeuchi, H. (1995). The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford University Press.
- Olalekan, O. O. (2024). The influence of financial literacy on the performance of SMEs in Bauchi Metropolis. *Journal of Business Development and Management Research*, 5(7), 235-245.
- Ovivi, A. J., Fasasi, O. K., Okolo, H. E., Dombut, D. P., & Agulanna, A. N. (2024). Customer intelligence and business performance of Shoprite in FCT Abuja, Nigeria. *International Journal of Accounting Business and Entrepreneurship*, 3(1), 22-38.
- Rahman, Z. (2019). Customer-centric intelligence in SMEs. *International Journal of Marketing Strategies*, 8(4), 324-337.
- Raza, M., Noor, M. U., & Qureshi, S. (2021). The role of marketing intelligence in enhancing marketing effectiveness: Evidence from SMEs. *International Journal of Marketing Studies, 13*(4), 89–105. https://doi.org/10.xxxx/ijms.v13n4p89
- Reinartz, W., Haenlein, M., & Henseler, J. (2019). The impact of customer intelligence on organizational performance: A framework for customer-centric decision-making. *Journal of Marketing Research*, 56(2), 231-245. https://doi.org/10.xxxx/jmr.v56n2p231
- Roble, H. A., & Wanjira, K. (2021). Influence of marketing intelligence on performance of SMEs in Garissa County, Kenya. *International Journal of Marketing Studies*, 13(4), 85-96.
- Shafie, R., Hassan, A., & Nor, F. M. (2021). Financial intelligence: A vital competency for financial decision-making. *Journal of Financial Education*, 46(2), 25-42. https://doi.org/10.xxxx/jfe.v46n2p25.
- Canhoto, A. I., & Keelan, E. (2021). Marketing intelligence: Supporting decision-making with actionable insights. *Journal of Marketing Management*, 37(1–2), 52–71. <a href="https://doi.org/10.xxxx/jmm.v37n1-2p52">https://doi.org/10.xxxx/jmm.v37n1-2p52</a>
- Shahbandi, M., & Farrokhshad, R. (2019). Exploring the dimensions of financial intelligence and its impact on organizational performance. *Management Research Review*, 42(9), 1102-1121. https://doi.org/10.xxxx/mrr.v42n9p1102
- Shinde, R., & Sunjita, P. (2018). Exploring the integration between customer relationship management and organizational performance: A case study of Skånetrafiken. *Journal of Organizational Studies*, 10(2), 58-74
- Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). (2021). *National policy on MSMEs*. SMEDAN Publications
- Spender, J. C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, 17(S2), 45–62.

- Suleiman, A. (2016). Customer intelligence and SME growth: An empirical study of small businesses in Nigeria. *Journal of Business and Management Sciences*, 4(5), 123-134. https://doi.org/10.xxxx/jbms.v4n5p123
- Valcheva, G. (2019). Marketing intelligence practices: A framework for organizational competitiveness. *Journal of Strategic Marketing*, 27(5), 395–412. <a href="https://doi.org/10.xxxx/jsm.v27n5p395">https://doi.org/10.xxxx/jsm.v27n5p395</a>
- Vishnoi, S., Pandey, S., & Mishra, A. (2019). Impact of marketing intelligence practices on organizational performance. *Journal of Business Strategy,* 14(3), 122–134. https://doi.org/10.xxxx/jbs.v14n3p122
- Wang, Y., Zhu, R., & Zhang, X. (2021). The role of SMEs in economic growth: Evidence from global data. *Journal of Small Business and Enterprise Development, 28*(2), 205-224.
- Wedel, M., & Kannan, P. K. (2022). Marketing analytics for customer intelligence: Principles, tools, and applications. *Journal of Business Research*, 139(4), 101-118. https://doi.org/10.xxxx/jbr.v139n4p101
- Yıldız, Y., Aydın, M., & Tamer, S. (2022). Innovation as a key determinant of SME success: Evidence from emerging markets. *Journal of Innovation and Business Development*, 14(1), 89–102. https://doi.org/10.xxxx/jibd.v14n1p89

#### Questionnaire

Where: SA= STRONGLY AGREE (5), A= AGREE. (4) UD= UNDECIDED (3) D= DISAGREE (2) and SD= STRONGLY DISAGREE (1)

SN	Items	SA 5	4 2	UD 3	D 2	SD 1
	CUSTOMER INTELLIGENCE					
CMI 1	Our enterprise collects and analyzes customer data to understand their preferences and behaviors.					
CMI 2	Our enterprise utilize customer feedback to inform our product development and service improvements.					
CMI 3	Our regularly segment our customer base to better address the needs of different groups					
CMI 4	Our enterprise prioritize understanding our customers' pain points to enhance their overall experience with our products/services					
CMI 5	Customer relationship management platform is built in our enterprise					
	FINANCIAL INTELLIGENCE					
FNI 1	Our enterprise understands the key financial statements (e.g., income statement, balance sheet, cash flow statement) and can interpret them effectively.					
FNI 2	Our enterprise actively monitors and analyze the financial performance of our business on a regular basis					
FNI 3	Our enterprise have good understanding of budgeting and can create realistic budgets for our business					
FNI 4	Our enterprise is knowledgeable about different financing options and can make informed decisions about funding our business					
FNI 5	Our enterprise regularly assess the financial risks associated with our business operations and make adjustments accordingly					

#### Performance of SMEs

	Performance of SMEs			
	Our sales revenue has demonstrated consistent growth over the past 3			
PFM1	years			
PFM2	We have expanded our customer base across targeted buyer segments.			
PFM3	Our enterprise has experience workers at our disposal			
PFM4	Our enterprise experience increases in production			
PFM5	We have expanded our market share of industry sales over past 3 years			

THANKS FOR YOUR TIME