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EFFECT OF ENTREPRENEURSHIP ORIENTATION ON SALES GROWTH OF SMALL ENTERPRISES IN KARU LOCAL GOVERNMENT, NASARAWA STATE, NIGERIA

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Abstract

Small enterprises in Karu Local Government Area are vital to local jobs and household income, yet many of these enterprises are faced with inconsistent sales growth. While innovativeness and risk-taking drive expansion globally, Karu's businesses face hurdles like poor finance access, limited market knowledge, and outdated models, restricting their ability to convert strategies into real sales outcomes. This study examined the effect of entrepreneurship orientation on the sales growth of small enterprises in Karu Local Government, Nasarawa State, Nigeria. the study adopted a survey research design, with population of 429 registered small enterprise in Karu Local Government, given that the population size was relatively small, the entire population was used as the sample, and a census sampling technique was adopted to ensure full coverage and representativeness The study utilized adapted questionnaire as the instrument for data collection and the data obtained was analysis using Partial Least Square Structural Equation Model (PLS-SEM). The study found that risk-taking has positive but insignificant effect on the sales growth of small enterprises in Karu Local Government, Nasarawa State, while, innovativeness has positive and significant effect on the sales growth of small enterprises in Karu Local Government, Nasarawa State. The study conclude that entrepreneurship orientation positively influences the sales growth of small enterprises in Karu Local Government, Nasarawa State. Thus, the study recommends that Small enterprise owners in Karu are encouraged to take a more calculated approach to risk by weighing potential gains against losses, supported with training, advisory services, and institutional backing. At the same time, they should sustain an innovative mindset through continuous investment in new products, better services, and creative marketing to drive consistent sales growth.

Key Words: Entrepreneurship, Growth, Innovativeness, Orientation, Risk-Taking, Small Enterprises

1. Introduction

The sales growth of small enterprises has become a global concern given their contribution to job creation, poverty reduction, and inclusive development. Worldwide, small businesses account for nearly 90% of all enterprises and provide more than half of global employment, yet many continue to struggle with survival as economic disruptions erode their revenues, with reports showing that up to 80% lost nearly half of their income during the COVID-19 pandemic (Zhou,

2025; World Bank, 2019). Across Africa, small businesses contribute more than 50% of GDP and create around 80% of jobs, but their sales growth is often hampered by financial exclusion, poor infrastructure, and volatile market conditions (PACCI, 2024). In Nigeria, with more than 40 million small businesses forming the backbone of the economy, they contribute about 46% to GDP and employ roughly 84% of the workforce. However, sales growth remains a major challenge as inflation, weak consumer demand, and high failure rates undermine performance, with nearly 80% of small businesses collapsing before reaching their fifth year (SMEDAN, 2022; Kumdi et al., 2020). In Nasarawa State, and particularly within Karu Local Government—an area bordering Abuja and serving as a bustling commercial hub small businesses dominate the retail and informal sectors but remain highly vulnerable to fluctuating purchasing power and stiff competition, making sales growth a vital indicator of their survival and competitiveness.

Entrepreneurial orientation (EO), particularly innovativeness and risk-taking, has emerged as a crucial determinant of sales growth for small enterprises. Empirical studies reveal that while innovativeness enables firms to introduce new products, adapt to consumer preferences, and enhance competitiveness, risk-taking encourages bold investments in uncertain but potentially profitable markets (Mbama et al., 2025; Adegbe, 2017). Evidence from Benue State shows that risk-taking had a significant positive effect on SME growth, while innovativeness sometimes yielded mixed results depending on contextual constraints (Okafor et al., 2012; Kumdi et al., 2020). Recent research in Rivers and Lagos States further demonstrates that entrepreneurial innovativeness significantly improves market share and sales growth, while risk-taking strengthens competitiveness in dynamic markets (Georgewill, 2024; Mbama et al., 2025). International studies also confirm that innovativeness and risk-taking are strong predictors of micro and small enterprise sales expansion (Pelegrin et al., 2022; Kaur et al., 2025). Therefore, in the competitive business landscape of Karu LGA, where enterprises face intense rivalry and fluctuating consumer demand, the ability of small businesses to embrace innovativeness and calculated risk-taking is critical to sustaining and accelerating their sales growth.

Small enterprises in Karu Local Government Area are vital to local jobs and household income, yet many of these enterprises are faced with inconsistent sales growth. While global evidence suggests that firms embracing innovativeness and risk-taking are more likely to expand their sales base, small businesses in Nigeria and particularly in Karu, where competition is intense owing to its proximity to Abuja often operate within structural limitations such as poor access to finance, limited market intelligence, and reliance on traditional business models. These constraints weaken their capacity to translate entrepreneurial orientation into tangible sales outcomes. Empirical studies in Nigeria have shown that most small firms exhibit low levels of innovation and calculated risk-taking, which hinders their competitiveness and reduces growth prospects (Akinwale & Adepoju, 2024; Abdullahi, 2024). Consequently, the problem persists that while small enterprises dominate the business landscape in Karu, their sales growth remains inconsistent, raising concerns about their long-term sustainability and their potential to contribute meaningfully to local and national economic development.

Previous studies have found a mixed result in this area, for example, Ezenne and Islam (2025) found that innovativeness strongly influenced SME performance in Lagos State, while, risk-taking showed no significant impact. Conversely, Ilemobayo (2025) revealed that psychological and social risk-taking predicted higher sales in Southwest Nigeria. Similarly, Adigun and Bello (2022) reported that risk-taking behaviour improved profitability among small manufacturing firms, whereas Ogunyomi and Brikend (2021) found the opposite among retail SMEs in Abuja. These inconsistencies highlight a lack of consensus regarding which EO dimensions most strongly predict sales growth, particularly in micro and small enterprises operating within semi-urban business environments like Karu.

Moreover, most previous studies have focused on large-scale or urban-based SMEs, and focused less on smaller enterprises in peri-urban localities where entrepreneurial practices are shaped by limited resources, consumer behaviour changes, and informal business networks (Adim & Bassey, 2023; Baba & Onuoha, 2018). Furthermore, prior works often rely on generalized SMEs populations without disaggregating "small" enterprises from broader SMEs categories, leaving a conceptual blind spot in understanding their peculiarities (Kitigin, 2017; Ilemobayo, 2025; Ezenne & Islam, 2025; Baba & Thiong'o, 2019).

Therefore, the general objective of this study is to examine the effect of entrepreneurship orientation on sales growth in Karu Local Government Araea (LGA), Nasarawa State, Nigeria, and the specific objectives to:

i. assess the effect of risk-taking on sales growth in Karu LGA, Nasarawa State; and
ii. assess the effect of innovativeness on sales growth in Karu LGA, Nasarawa State.

In line with the objective, this study addressed the following hypotheses:

H_{01}: Risk-taking has no significant effect on sales growth in Karu LGA, Nasarawa State.

H_{02}: Innovativeness has no significant effect on sales growth in Karu LGA, Nasarawa State.

2. Literature Review

2.1 Conceptual Review

Sales Growth

Sales growth refers to the measurable increase in a business's revenue generated from the sale of its products or services over time. Sales growth is widely recognised as a critical performance indicator that reflects how well a business is able to expand its revenue over time. Pelegrin, et al. (2022) explained sales growth as the increase in a company's sales performance, which demonstrates not only its capacity to retain customers but also to capture new markets and sustain competitiveness. They emphasised that sales growth is directly influenced by entrepreneurial factors such as innovativeness and risk-taking, which enable businesses to differentiate themselves and strengthen financial performance. Similarly, Georgewill (2024) affirmed that sales growth represents an essential dimension of business success because it shows how innovative strategies and entrepreneurial practices contribute to higher customer patronage and improved market share. Therefore, sales growth can be seen as a practical measure of how effectively a small business translates its strategies into tangible increases in revenue and long-term survival.

Small Intersperses

SMEDAN (2021) defines small enterprises under Nigeria's National Policy on MSMEs using a dual-criterion approach based on number of employees and asset size (excluding land and buildings). According to SMEDAN (2021) and the National Bureau of Statistics (2017) classification, a small enterprise is one that employs between 10 and 49 people and has an annual turnover (or assets excluding land/buildings) of between ₦5 million and ₦50 million (or within similar thresholds) (SMEDAN 2021, NBS, 2017; see also research summaries). The Nasarawa State Ministry of Commerce and Industry (2024) adopt this national benchmark but also add local conditions such, as limiting eligibility to enterprises registered within the state. Such state-level definition ensures that an enterprise qualifies as "small" if it operates in Nasarawa, employs up to about 49 persons, and meets locally adapted asset or revenue ceilings as approved by the Ministry.

Entrepreneurship Orientation

Entrepreneurial orientation (EO) refers to the mindset and behaviours that guide entrepreneurs in recognising opportunities, making bold decisions, and creating value in uncertain environments. Adegbe (2017) defined EO as the ability of small business owners to creatively deliver products and services by drawing on

key dimensions such as risk-taking, innovativeness, proactiveness, and competitive aggressiveness. Similarly, Okafor, et al. (2017) described EO as a set of strategy-making processes and practices that shape entrepreneurial decision-making and business growth, particularly through innovativeness, risk-taking, and proactiveness. EO is therefore not merely a theoretical construct; it represents a practical orientation that determines how entrepreneurs position their businesses in competitive markets and how effectively they adapt to environmental changes to ensure survival and growth.

This study adapts the definition of entrepreneurial orientation (EO) by Okafor et al. (2017), but focuses specifically on innovativeness and risk-taking because these two dimensions directly influence the sales growth of small enterprises operating in competitive and uncertain environments. Innovativeness enables businesses to introduce new ideas, products, and processes that meet changing consumer demands, while risk-taking allows entrepreneurs to commit resources to uncertain but potentially rewarding opportunities. Empirical evidence confirms that innovativeness and risk-taking are the most consistent predictors of performance outcomes such as sales growth, especially in volatile markets where survival depends on creativity and the willingness to embrace uncertainty (Georgewill, 2024; Ilemobayo, 2025). By narrowing to these two dimensions, the study captures the most relevant entrepreneurial behaviours that shape the growth trajectory of small enterprises in Karu Local Government.

Risk-Taking

Risk-taking is one of the defining characteristics of entrepreneurship, often described as the willingness of entrepreneurs to commit resources to uncertain opportunities in pursuit of growth and success. Ilemobayo (2025) conceptualised risk-taking as the entrepreneur's readiness to engage in business activities that involve uncertainty and potential loss, highlighting that different dimensions of risk such as uncertainty, psychological, and social risks—significantly predict outcomes like sales growth, employment growth, and customer satisfaction. In a similar vein, Adim and Bassey (2023) found that entrepreneurial risk-taking propensity has a strong positive influence on sales growth of small businesses in Bayelsa State, stressing that entrepreneurs who are willing to take calculated risks are better positioned to expand their market share and revenue. Baba and Thiong'o (2019) also confirmed that risk-taking enhances SME performance in Nigeria by encouraging bold investment in new markets and technologies. Hence, risk-taking is not about reckless decisions but about calculated ventures into new opportunities that can yield long-term growth.

Innovativeness

Innovativeness is the entrepreneurial capacity to generate, adopt, and implement new ideas, products, processes, or services that improve competitiveness and ensure sustained business success. Georgewill (2024) argued that innovativeness is significantly linked to sales growth and market expansion, particularly in the context of SMEs in Rivers State, where creative business practices enhance performance. Kaur, Bedi, and Saini (2025) further described innovativeness as a vital determinant of business performance, explaining that firms which embrace innovation through product improvement, process changes, or technological upgrades are better able to survive and thrive in competitive and fast-changing environments. Baba and Onuoha (2018) also stressed that innovativeness, when combined with other entrepreneurial orientation traits such as risk-taking and proactiveness, fosters competitiveness and sustainability in SMEs. In essence, innovativeness enables small businesses to continuously refresh their strategies and adapt to shifting customer demands, thereby enhancing both survival and growth prospects.

2.2 Empirical Review

Risk-Taking and Sales Growth

Ilemobayo (2025) examined how risk-taking (and other EO facets) shape small-business performance in Southwest Nigeria, drawing on a sample of 394 SMEs

and employing a quantitative survey design with OLS regression and reliability checks. The study found that risk-taking exerts a significant positive effect on core performance outcomes such as financial viability and productivity outcomes typically intertwined with sustained sales growth in small ventures. The study adds scale and robustness to the Nigerian evidence base; however, performance was measured broadly (not solely sales), and the cross-sectional approach limits claims about directionality over time.

Adim and Bassey (2023) examined whether entrepreneurs' risk-taking propensity actually moves the sales needle for small businesses in Bayelsa State. They used a cross-sectional survey of owner-managers registered with SMEDAN; the population was 300 SMEs, and the authors adopted a census approach using a structured questionnaire with reliability above 0.70 (Cronbach's alpha). Analysis mixed descriptive statistics with PPMC, one-way ANOVA, and simple regression, all at the 5% level. They reported a clear, positive and significant effect of risk-taking propensity on sales growth, and recommended that small firms embrace calculated risks in product/market decisions to grow revenue. Methodologically, the study is careful and transparent, but its single-state focus and cross-sectional design limit causal inference and broader generalizability.

Focusing on Ogun State (Ado-Odo/Ota LGA), Samuel and Samuel (2022) investigated the effect of risk-taking on SMEs' market share, a performance proxy closely tied to sales momentum. Using a survey of 153 owners/managers/supervisors/employees, they analyzed responses in SPSS with multiple regression. Results showed a substantial association ($R = 0.58$) and a highly significant model ($F = 18.3$, $p = 0.000$), with risk-taking indicators jointly explaining 58% of the variance; willingness to move ahead with promising new approaches and cultivating a risk-taking culture were especially influential. The evidence credibly links bolder behavior to competitive outcomes, though the single-LGA scope, reliance on self-reports, and emphasis on market share rather than direct sales figures temper the strength of practical prescriptions

Innovativeness and Sales Growth

Kaur, et al. (2025) conducted a study in Punjab, India, the research assessed the relationship between innovativeness and SME performance, while testing learning orientation as a moderator. A quantitative survey of 413 SMEs was carried out, with data analysed using structural equation modelling (SEM). Findings showed that innovativeness significantly improved business performance, and this relationship was strengthened by learning orientation. The study offered fresh insights into how continuous learning supports innovation-driven competitiveness. However, as the study was conducted in a single Indian state, cultural and institutional differences may limit application in other contexts such as Nigeria

Ezenne and Islam (2025) examined the individual effects of EO dimensions on SME performance in Nigeria. Using a systematic random sample of 211 SME owners and managers in Lagos State, data were collected through questionnaires and analysed with Spearman correlation and multiple regression. Results revealed that innovativeness, proactiveness, and competitive aggressiveness significantly enhanced SME performance, while risk-taking and autonomy had no significant direct effect. The study concluded that internal strategic behaviours are critical for SME growth in volatile environments. However, the reliance on Lagos-based SMEs may limit the findings' generalisation to more rural settings.

Georgewill (2024) explored the link between entrepreneurial innovativeness and business success of SMEs in Rivers State. Using a cross-sectional survey of 313 SMEs, questionnaires and interviews generated data, of which 99 valid responses were analysed with Spearman's rank correlation. The study found a significant positive relationship between innovativeness and business success, particularly in terms of market share and sales growth. It concluded that fostering innovation cultures enhances SME competitiveness. Nevertheless, the low response rate raises concerns about sample representativeness, and reliance on self-reports may bias findings.

In the Philippines, Pelegrin et al. (2022) examined how entrepreneurial orientation traits proactiveness, innovativeness, and risk-taking propensity affect sales growth performance of micro-businesses. A quantitative survey of 100 micro-businesses was carried out, with data collected via structured questionnaires and tested for reliability (Cronbach's $\alpha = 0.915$). Using frequency analysis, regression, and ANOVA, the results showed a significant positive relationship between EO dimensions and sales growth, confirming EO as a competitive resource under the resource-based view (RBV) framework. While insightful, the study was limited to micro-businesses, which narrows its applicability to larger SMEs.

Kumdi, et al (2020) investigated the effect of entrepreneurial orientation (EO) on the growth of SMEs in Plateau State during the COVID-19 pandemic. Using a survey design, questionnaires adapted from Lumpkin and Dess (2001) were distributed to 319 SME owners/managers, with data analysed in SPSS using multiple regression. The findings revealed that innovativeness, proactiveness, autonomy, and competitive aggressiveness significantly promoted SME growth, while risk-taking showed no significant effect. The study emphasised the need for SMEs to be more innovative and proactive to survive shocks like COVID-19. However, the study's focus on one state and the pandemic context limits generalisation across Nigeria.

2.3 Theoretical Framework

Resource-Based View (RBV) theory

This study is grounded on Resource-Based View (RBV) theory. The theory was formally articulated by Barney (1991), explains that firms achieve sustained competitive advantage and superior performance when they possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN). The theory emphasises that internal resources and capabilities, rather than just external market positioning, determine long-term success. Earlier, Wernerfelt (1984) laid the foundation by describing firms as bundles of resources, while Prahalad and Hamel (1990) introduced the concept of core competencies as unique combinations of skills and assets that drive innovation. Grant (1991) further refined RBV by highlighting the strategic integration of resources to achieve superior performance, and Peteraf (1993) added a structural perspective by identifying the conditions necessary for resources to generate sustained advantage. Together, these scholars established RBV as a central framework in strategic management, focusing on how internal strengths such as entrepreneurial orientation (EO) through innovativeness and risk-taking—can shape performance outcomes.

Despite its strengths, RBV has been criticised for being static and somewhat tautological, as it sometimes assumes resources are valuable simply because they yield performance (Priem & Butler, 2001). Critics also note that RBV underplays the impact of external environmental changes, regulatory pressures, and institutional constraints, which are particularly relevant in emerging economies. However, the theory remains highly relevant to this study on the effect of entrepreneurial orientation on sales growth of small enterprises in Karu Local Government, Nasarawa State. Innovativeness and risk-taking can be conceptualised as intangible resources that give small enterprises competitive leverage in highly volatile markets. By anchoring the study in RBV, it becomes possible to justify how these entrepreneurial behaviours serve as strategic resources that enable small businesses to withstand consumer volatility, outcompete rivals, and achieve sustained sales growth, making the theory a suitable underpinning framework.

3. Methodology

3.1 Research Design

This study adopted a quantitative research design to examine the effect of entrepreneurial orientation on the sales growth of small enterprises in Karu Local Government Area, Nasarawa State, Nigeria. The quantitative approach was considered suitable because it allows for the collection of numerical data that can be statistically analyzed to determine the nature and strength of relationships between variables. The design

provided an objective and systematic framework for testing the hypothesized relationship between entrepreneurial orientation measured through innovativeness and risk-taking and the sales growth of small enterprises. This approach aligns with similar studies in entrepreneurship research that use structured data to explore how managerial behaviors and strategic orientations drive firm performance (Okafor et al., 2017).

3.2 Data and Sources

The study relied on primary data collected directly from owner-managers of small enterprises operating within Karu Local Government Area. These individuals were chosen because they play key roles in shaping strategic decisions related to innovation and risk-taking, two essential components of entrepreneurial orientation. Data were obtained using a structured and well-adapted questionnaire, designed to capture measurable insights on innovativeness, risk-taking, and sales growth. The instrument was adapted from previous empirical studies conducted by Georgewill (2024) and Akinwale and Adepoju (2024), both of which focused on entrepreneurial orientation and firm performance. To ensure the credibility and appropriateness of the instrument, subject-matter experts in entrepreneurship and small business management reviewed it for content and face validity.

A pilot test was carried out among 10 owner-managers from small enterprises outside the study area. Their feedback led to adjustments that enhanced the clarity, relevance, and contextual fit of the questionnaire items. Cronbach's alpha was used to assess the internal consistency of the constructs, with a reliability threshold of 0.70 accepted as adequate, in line with Taber (2018). Items with weak loadings or low reliability were refined or removed to strengthen the overall instrument quality.

3.3 Population Size of the Study

The study population comprised all 429 registered small enterprises operating in Karu Local Government Area, as recorded by the Nasarawa State Ministry of Commerce and Industry (2024). This population included diverse enterprises across different sectors such as retail, manufacturing, and services. Because the total number of registered firms was relatively small and manageable, the study did not require sampling. Instead, the entire population was included to ensure full representation of the business environment within the area.

3.4 Sampling and Sample Size of the Study

Given the modest population size of 429 enterprises, the study adopted a census sampling technique. This means every registered small enterprise within Karu LGA was included in the survey. The census approach was preferred to eliminate sampling bias and ensure that the findings reflect the realities of all the enterprises in the area. Data collection was carried out physically with the help of four trained research assistants who visited each business to administer the questionnaire. This approach enhanced response accuracy and ensured that each owner-manager properly understood and completed the questionnaire. Ethical standards were strictly maintained respondents were informed about the purpose of the study, participation was voluntary, and confidentiality was guaranteed, consistent with the ethical guidelines of Israel and Hay (2006).

3.5 Method of Data Analysis

Data collected from the questionnaires were analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). This analytical technique was chosen because it is well-suited for evaluating predictive models involving multiple latent variables, particularly when the research aims to test theoretical relationships in complex frameworks. The PLS-SEM method allowed the study to assess both the measurement model—testing the reliability and validity of the entrepreneurial orientation constructs (innovativeness and risk-taking) and the structural model, which examined the hypothesized effect of entrepreneurial orientation on sales growth. Following Hair et al. (2019), the analysis proceeded in two stages: first validating the constructs to confirm measurement

adequacy, and then testing the structural relationships to determine the strength and significance of the predictive paths between entrepreneurial orientation and sales growth.

This analytical approach provided robust statistical evidence to support conclusions about how entrepreneurial behaviors like innovation and risk-taking contribute to the growth and competitiveness of small enterprises in Karu, Nasarawa State. The model of this is presented as Fig 1:

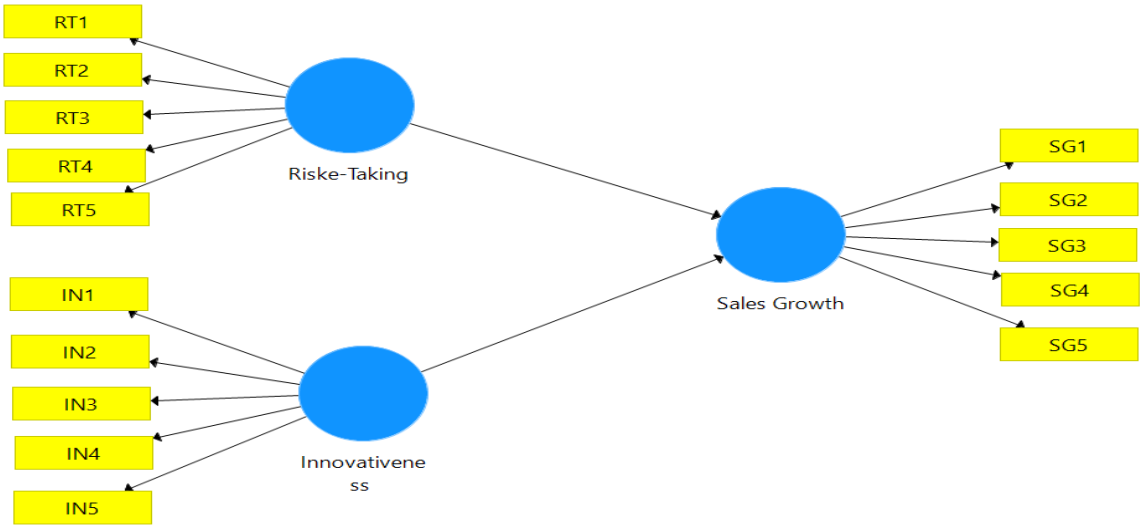

Figure1: Structural Equation Model

Source: SmartPLS 2025

4. Result and Discussion

Table 1: Questionnaire Response Rate

S/N		Number
1	Valid questionnaire used for analysis	319
2	Percentage of Valid questionnaire used (questionnaire respond rate) out of total questionnaire administered	74%

Source: Field Survey, 2025

A total of 429 copies of questionnaire distributed, 319 constituting response rate of 74% were completed, returned and valid for the analysis. Therefore, all subsequent analyses were conducted using the data collected from these 319 responses.

For this study, the data collected was first subjected to screening using statistical tools such as frequency checks to identify missing or incomplete responses, and reliability testing through Cronbach's alpha to confirm the internal consistency of the items. Validity was also assessed to ensure the questions truly measured the constructs under study. After this rigorous screening process, 319 questionnaires were retained as valid for analysis, giving a strong response rate of 74%. This reliable set of data provided a solid base for applying the most appropriate analytical techniques, ensuring that the results genuinely capture the experiences and realities of small enterprise owners and operators in the study area.

Assessment of Measurement Model

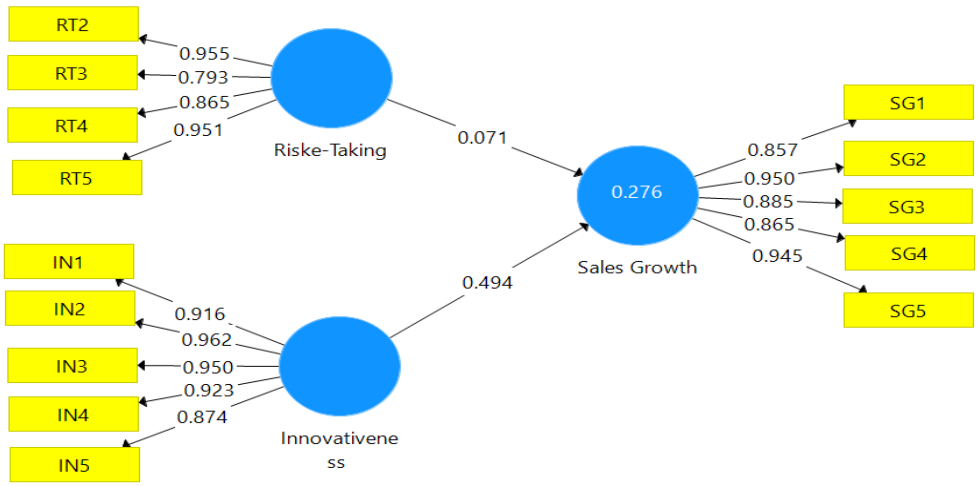

Fig. 2: Measurement model of the study constructs and indicators.
Source: SmartPLS Output, 2025

Table 2: Construct Reliability and Convergent

Variables	Items	Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
Sales Growth	SG1	0.857	0.942	0.968	0.857
	SG2	0.950			
	SG3	0.885			
	SG4	0.865			
	SG5	0.945			
Risk-Taking	RT2	0.955			
	RT3	0.793	0.915	0.940	0.799
	RT4	0.865			
	RT5	0.951			
Innovativeness	IN1	0.916	0.958	0.956	0.812
	IN2	0.962			
	IN3	0.950			
	IN4	0.923			
	IN5	0.874			

Source: SmartPLS Output, 2025

The construct reliability and convergent validity results for sales growth show very strong measurement quality. All five items (SG1–SG5) recorded high factor loadings ranging from 0.857 to 0.950, indicating that each question reliably captured the sales growth construct. The Cronbach's alpha of 0.942 and composite reliability of 0.968 far exceed the recommended threshold of 0.70, confirming excellent internal consistency among the items. Furthermore, the Average Variance Extracted (AVE) of 0.857 demonstrates that

the construct explains a large proportion of the variance in its indicators, establishing good convergent validity. These results confirm that the sales growth construct was well measured, and the responses accurately reflect the sales performance of small enterprises in Karu.

The results for risk-taking also reflect strong reliability and validity, though one item (RT1) was deleted due to low factor loading. The remaining four items (RT2–RT5) demonstrated acceptable factor loadings, ranging from 0.793 to 0.955, showing that the retained items reliably represented the construct. The Cronbach's alpha of 0.915 and composite reliability of 0.940 indicate high internal consistency, meaning the items worked well together in measuring risk-taking. The AVE of 0.799 further confirms convergent validity, suggesting that the majority of the variance in the items was explained by the construct itself. Overall, even after dropping one item, the risk-taking construct remained robust and a dependable measure of entrepreneurial orientation.

The innovativeness construct showed particularly strong results, with all five items (IN1–IN5) achieving very high factor loadings between 0.874 and 0.962, reflecting the strength of each item in capturing this dimension. The Cronbach's alpha of 0.958 and composite reliability of 0.956 highlight excellent internal consistency, well above the recommended benchmark, while the AVE of 0.812 demonstrates strong convergent validity. These findings suggest that innovativeness was one of the most consistently and strongly measured constructs in the study, indicating that the items accurately captured how small enterprises in Karu adopt and apply innovative practices to enhance their sales growth.

Discriminant Validity

Table 3: Heterotrait-Monotrait Ratio (HTMT) Criterion

	Sales Growth	Risk-Taking	Innovativeness
Sales Growth			
Risk-Taking	0.546		
Innovativeness	0.401	0.275	

Source: SmartPLS Output, 2025

The HTMT results show that the relationships between the constructs are well below the accepted threshold of 0.85, confirming that each construct is distinct and measures a unique aspect of entrepreneurship orientation and sales growth. Specifically, the HTMT value of 0.546 between sales growth and risk-taking, 0.401 between sales growth and innovativeness, and 0.275 between risk-taking and innovativeness indicate that while there are moderate positive associations among the constructs, they are not overlapping. This means sales growth, risk-taking, and innovativeness were clearly discriminant, allowing the study to draw valid conclusions about their individual contributions to the performance of small enterprises in Karu.

Assessment of Structural Model

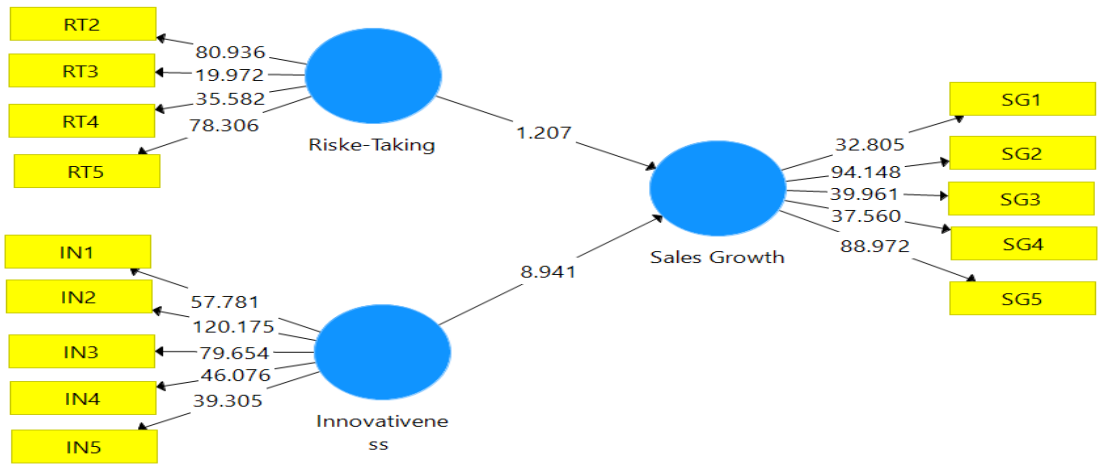

Figure. 3: Path Coefficients of the Regression Model

Source: SmartPLS Output, 2025

Path Coefficients

The results presented in the path coefficient table 4 show the effect of entrepreneurship orientation factors on the sales growth of small enterprises in Karu Local Government, Nasarawa State. These evaluate the hypotheses and draw meaningful conclusions about how risk-taking and innovativeness effect on the sales performance of small enterprises in the study area.

Table 4: Path Coefficient

Null Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
Risk-Taking ->Sales Growth	0.071	0.072	0.059	1.207	0.228	Accepted
Innovativeness-> Sales Growth	0.494	0.493	0.055	8.941	0.000	Rejected

Source: SmartPLS Output, 2025

Figure 3 and Table 4 present the structural model alongside the results of the hypotheses testing for this study. The table provides the values for the Original Sample (O), Sample Mean (M), Standard Error, T-statistics, and P-values. In evaluating the structural model, emphasis was placed on the beta coefficients, t-values, and their corresponding p-values, which together indicate the strength and significance of the relationships tested. These results were obtained using the bootstrapping procedure, ensuring a reliable and robust assessment of the model.

Hypothesis 1: Risk-taking has no significant effect on sales growth in Karu LGA, Nasarawa State. The analysis conducted with regard to this hypothesis does not provide sufficient ground for it rejection, therefore this hypothesis is hereby accepted.

The path coefficient for risk-taking and sales growth revealed that risk-taking has postrave but statistical insignificant effect on sales growth in Karu LGA, Nasarawa State. The results show that risk-taking had a weak and statistically insignificant effect on sales growth, with a beta value of 0.071, a t-statistic of 1.207,

and a p-value of 0.228, which is above the 0.05 significance threshold. This means that, for small enterprises in Karu, adopting risky ventures did not significantly translate into improved sales growth. This could be due to the unfavourable business environment in the area, where high risks are often not matched with adequate institutional support such as access to credit, stable infrastructure, and policy protection. Many small business owners may also lack the financial buffers or managerial capacity to absorb potential losses, making risk-taking more harmful than beneficial. Additionally, cultural tendencies towards cautious investment and the uncertainty of market demand in Karu could discourage entrepreneurs from pursuing bold but uncertain opportunities, thereby limiting the positive impact of risk-taking on sales growth.

This finding aligns with the study by Samuel and Samuel (2022), who, although linking risk-taking to market share, noted that contextual limitations such as reliance on self-reported data and narrow geographical scope temper the practical implications of risk-taking for direct sales outcomes. Both studies suggest that boldness in decision-making does not automatically guarantee improved sales performance, especially in environments with structural and market constraints. On the other hand, the result from Karu contradicts the evidence of Adim and Bassey (2023), who found a clear and significant positive effect of risk-taking on sales growth in Bayelsa State. Unlike Karu, their context suggested that calculated risks in product and market decisions could indeed drive revenue, pointing to the possibility that local business conditions and institutional support play a decisive role in whether risk-taking translates into tangible sales growth.

Hypothesis 2: Innovativeness has no significant effect on sales growth in Karu LGA, Nasarawa State. For the second hypothesis, the analysis conducted with regard to this hypothesis has provide sufficient ground for its rejection, therefore this hypothesis is hereby accepted.

The path coefficient for innovativeness and sales growth has positive and statistically significant effect on sales growth in Karu LGA, Nasarawa State. The findings reveal that innovativeness had a strong and statistically significant positive effect on sales growth, with a beta value of 0.494, a very high t-statistic of 8.941, and a p-value of 0.000, which is well below the 0.05 threshold. This indicates that innovative practices such as developing new products, improving services, or adopting fresh marketing approaches substantially enhanced the sales performance of small enterprises in Karu. The result underscores the importance of innovativeness as a driver of competitiveness and revenue growth, suggesting that small enterprises that actively innovate are more likely to achieve sustainable sales expansion.

This finding is in consistent with the findings of Georgewill (2024), who also reported that entrepreneurial innovativeness significantly boosted SME success in Rivers State, particularly by enhancing market share and sales growth. Both studies highlight how innovation-driven strategies give small businesses a competitive edge and translate into tangible revenue gains. However, the Karu findings contrast with the results of Kumdi et al. (2020), who, while acknowledging that innovativeness alongside other EO dimensions promoted SME growth during the COVID-19 pandemic in Plateau State, found that the effect of risk-taking was more muted, and the broader pandemic context may have influenced how innovation impacted sales outcomes. This difference suggests that while innovativeness is generally powerful, external shocks and environmental conditions can shape the extent of its impact on SME performance.

Coefficient of Determination

The R Square (R^2) and Adjusted R Square (R^2 Adjusted) values were used to assess the explanatory power of the model in predicting sales growth.

Table 5: R-Square

	R Square	R Square Adjusted
Sales Growth	0.276	0.271

Source: SmartPLS Output, 2025

The R-square result of 0.276 indicates that risk-taking and innovativeness together explain about 27.6% of the variation in sales growth among small enterprises in Karu Local Government. The adjusted R-square of 0.271, which accounts for model complexity, confirms the stability of this explanatory power. This means that while entrepreneurial orientation factors play an important role in shaping sales growth, more than 70% of the changes in sales performance are influenced by other factors outside the model such as access to finance, market conditions, infrastructure, and managerial capacity. In essence, the model provides a meaningful but partial explanation of what drives sales growth, highlighting the complexity of business performance in the study area.

Effect Sizes (F^2)

The analysis of the effect size (f^2) was conducted to evaluate the relative effect of each independent risk-taking and innovativeness on sales growth. According to Cohen (1988) effect sizes can be classified as small ($f^2 \geq 0.02$), medium ($f^2 \geq 0.15$), or large ($f^2 \geq 0.35$).

Table 6: Effect Size

	Sales Growth
Risk-taking	0.028
Innovativeness	0.287

Source: SmartPLS Output, 2025

The effect size results show that risk-taking had only a very small influence on sales growth ($f^2 = 0.028$), meaning its contribution to explaining variations in sales performance among small enterprises in Karu was minimal. In contrast, innovativeness recorded a much stronger effect size ($f^2 = 0.287$), indicating a substantial impact on sales growth. This highlights that while taking risks added little to improving business outcomes, innovative practices such as creating new products, enhancing services, or adopting fresh market approaches played a far more meaningful role in driving the sales performance of small enterprises in the study area.

Multicollinearity

A collinearity test was conducted to ensure the absence of multicollinearity which could lead to bias in the results.

Table 7: Inner VIF

Variables	**Sales Growth**
Risk-taking	2.114
Innovativeness	1.171

Source: SmartPLS Output, 2025

The inner VIF results indicate that both risk-taking (2.114) and innovativeness (1.171) fall well below the common threshold of 5, confirming that multicollinearity was not a concern in the model. This means that the two variables were sufficiently independent of each other, and their effects on sales

growth could be assessed without distortion from overlapping influences. In simple terms, risk-taking and innovativeness each contributed their own unique input to explaining sales growth among small enterprises in Karu, ensuring the results are both reliable and robust.

Model Goodness of Fit Test

The model's goodness of fit was assessed using a range of indices, including the standardized root mean square residual (SRMR), the unweighted least squares discrepancy (d_ULS), the geodesic discrepancy (d_G), the chi-square statistic, and the normed fit index (NFI).

Table 8: Model Goodness of Fit

	Saturated Model	Estimated Model
SRMR	0.046	0.046
d_ULS	0.227	0.227
d_G	1.755	1.755
Chi-Square	1611.057	1611.057
NFI	0.733	0.733

Source: SmartPLS Output, 2025

The model goodness of fit results show that the SRMR value of 0.046 is well below the recommended threshold of 0.08, indicating an excellent overall model fit. Both the d_ULS (0.227) and d_G (1.755) values are low, further confirming that the model's predicted relationships closely matched the observed data. The chi-square statistic of 1611.057 is acceptable given the complexity of the model, while the NFI value of 0.733, though moderate, still demonstrates a reasonable level of model fit. Altogether, these indices suggest that the structural model used in this study provided a reliable and credible representation of how risk-taking and innovativeness influence the sales growth of small enterprises in Karu.

5. Conclusion and Recommendations

The study concluded that risk-taking, although showing a positive relationship with sales growth, did not have a statistically significant effect on the performance of small enterprises in Karu. This suggests that while some entrepreneurs may engage in bold or uncertain business ventures, the challenging business environment marked by limited access to finance, unstable infrastructure, and market uncertainties reduces the chances of such risks translating into meaningful sales growth outcomes. In contrast, the study found that innovativeness had a strong and statistically significant effect on sales growth, highlighting it as a key driver of competitiveness and success among small enterprises in Karu. Entrepreneurs who embraced innovative practices such as introducing new products, improving services, and adopting creative market strategies were better positioned to expand their customer base and achieve sustainable increases in sales, making innovativeness a crucial factor for growth in the area.

Based on these findings, the study recommended that:

i. Small enterprise owners in Karu should improve on risk-taking by way of adopting a more calculated approach to risk-taking by carefully weighing potential benefits against possible losses. This should be supported by training programmes in financial management, access to advisory services, and improved institutional support, so that risks taken are strategic and more likely to translate into tangible sales outcomes.

ii. Small enterprises in Karu should maintain innovative orientation by continuing investing in new product development, service improvement, and creative marketing strategies to help continuing improving their sales growth.

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