Moderating Effect Of Entrepreneurial Intention On The Relationship Between Entrepreneurial Mindset And Performance Of Smes In Delta State, Nigeria

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Abstract

The issues of small and medium enterprises' performance have become a serious debate both in the developing and emerging economies. The objective of the study is to examine the moderating effect of entrepreneurial intention on the relationship between entrepreneurial mindset and performance of SMEs in Delta State, Nigeria. To achieve this objective, this study postulated 7 research hypotheses on the effect of opportunity recognition, risk-taking, and innovativeness on SME performance, as well as the effect of entrepreneurial intention on such relationships. The study adopted a quantitative research design, using a descriptive approach and cross cross-sectional survey design. The study adopted a primary source through a structured questionnaire. The population of the study is 39,664. While the sample size is 570 (Krejcie & Morgan, 1970; Salkind's 1990). The study adopted a stratified sampling technique. The method of data analysis is descriptive and correlation analysis. Out of 570 questionnaires administered, the study were able to retrieved 421 from owners/managers of SMEs in Delta State, Nigeria. The data was analyzed using Statistical Package for Social Science (SPSS), and Partial Least Square – Structural Equation Modelling (PLS-SEM). The findings found that entrepreneurial mindset has significant effect on SME performance in Delta State, Nigeria. Also, the study established that entrepreneurial intention exerts significant moderating effect on the relationship between entrepreneurial mindset and SME performance in Delta State, Nigeria. Hence, the study empirically found that opportunity recognition, risk-taking, innovativeness and entrepreneurial intention have significant effect on SME performance. Additionally, the study empirically established that entrepreneurial intention has significant moderating effect on the relationship between opportunity recognition and SME performance, risk-taking and SME performance, as well as innovativeness and SME performance. Therefore, it is recommended that managers of SMEs should use entrepreneurial intention as avenue to recognize business opportunities, take calculated risk and increase investments in innovativeness, in order to achieve optimum performance, and boost profitability and competitiveness in domestic and international market scenes.

Keywords: *SME performance, entrepreneurial mindset, opportunity recognition, risk-taking, innovativeness, and entrepreneurial intention.*

1.1 Introduction

The performance of small and medium enterprises (SMEs) which has been referred to as SME performance has been a central phenomenon to business studies across the globe, as it has become the major concern of many nations (Molete, Mokhele, Ntombela, & Thango, 2025; Oluwaseun et al., 2022) but many developing economies are still struggling despite, SMEs have been described as the engine of growth, SMEs operate in dynamic and competitive markets globally. Challenges include adapting to changing consumer preferences, scaling operations, and differentiating products and services (Organization for Economic Co-operation and Development, 2024). Effective management of human resources is critical for SMEs to attract and retain skilled talent. Challenges include recruitment, training, and development, as well as ensuring competitive compensation and career advancement opportunities (International Labour Organization, 2021).

Navigating complex regulatory environments and compliance requirements poses significant challenges for SMEs. Compliance costs, bureaucratic red tape, and varying regulations across different jurisdictions can increase operational costs and administrative burdens (World Economic Forum, 2021). SMEs operate in competitive markets where innovation and differentiation are key to success. Challenges include adapting to changing consumer preferences, scaling operations efficiently, and accessing new markets (Organization for Economic Co-operation and Development, 2021).

Additionally, Leithy (2017) maintained that SMEs in Nigeria contributed low to GDP compared to SMEs in Asia and the USA, which contributed about 40% and 50% of GDP. Hence, there are some forces behind their underperformance and low profitability in Nigeria. Furthermore, Leithy (2017) and Anichebe and Agu (2013) maintained that a major challenge for SMEs is to constantly improve performance in the long term in this highly competitive environment. Hence, several SMEs have been characterized by poor performance as most shut down before their fifth anniversary.

In Nigeria, the regulatory environment is often characterized by bureaucratic red tape, corruption, and inconsistent policies, which further complicate the operating landscape for SMEs (Olawale & Garwe, 2010). Simplifying regulatory processes and ensuring consistency in policy implementation are crucial steps towards alleviating these burdens. In Nigeria, the digital divide is more pronounced, with many SMEs lacking access to the internet and digital tools necessary for modern business operations (Asaolu et al., 2012). Bridging this gap is essential for enhancing the competitiveness of Nigerian SMEs in the global market.

The financial constraints are a significant issue for SMEs globally and are particularly pronounced in Nigeria. SMEs worldwide often face difficulties in securing financing due to stringent lending requirements and high interest rates. This challenge is exacerbated in Nigeria, where the financial sector is less developed compared too many other countries. According to the World Bank, around 40% of Nigerian SMEs cite access to finance as a major constraint to their growth (World Bank, 2020). The lack of access to affordable credit limits the ability of these businesses to invest in expansion, technology, and skilled labor, thereby stifling their growth and competitiveness.

Access to markets is another critical challenge for SMEs both globally and in Nigeria. Limited market access can hinder the growth potential of SMEs by restricting their customer base and revenue streams. The International Trade Centre (ITC) reports that SMEs often struggle to penetrate new markets due to a lack of market information, poor infrastructure, and competition from larger firms (ITC, 2018). In Nigeria, this issue is compounded by inadequate transport and logistics infrastructure, which makes it difficult for SMEs to reach broader markets, both domestically and internationally (Akinyemi, 2016).

In addition to the common global challenges, Nigerian SMEs face unique issues that affect their performance. One such challenge is the unreliable power supply, which significantly increases operational costs. A survey by the Nigerian Association of Chambers of Commerce, Industry, Mines, and Agriculture (NACCIMA) found that power outages lead to an average loss of 17% of annual sales for Nigerian SMEs (NACCIMA, 2019). Moreover, the high cost of alternative power sources, such as generators, further erodes profit margins. Another challenge is the limited access to skilled labor. The Nigerian education system often does not align with the needs of the industry, resulting in a workforce that lacks the necessary skills for many SME operations (Osalor, 2019). This skills gap hampers productivity and innovation, which are critical for the growth and competitiveness of SMEs.

Accordingly, the literature showed that many factors are responsible for SMEs' performance (Ndubisi & Iftikhar, 2012). However, SMEs are constrained by a number of challenges and cannot improve their performance level (SMEDAN, 2021). Oyeku et al. (2014) argued that the performance of SMEs is solely the responsibility of an entrepreneur. Hence, developing an entrepreneurial mindset and intention is key to SMEs' performance. Notwithstanding, Oluwaseun et al. (2020) position the gains that having an entrepreneurial mindset such as opportunity recognition, risk-taking, and innovativeness, can offer entrepreneurs the ability to improve SME performance in a challenging environment. Perhaps, the inability of the SME owner/manager's inability to display an effective entrepreneurial mindset could be responsible for the declining performance of SMEs.

Yet, Ukenna, Makinde, Akinlabi, and Asikhia (2019) pointed out that among the many possible reasons responsible for the failure of SMEs is the mindset of those whose responsibility it is to manage the business. Hence, literature has established a link between entrepreneurial mindset – opportunity recognition, risk-taking, innovativeness, and SME performance (Nielsen, Christensen & Storvang, 2021); as well as entrepreneurial intention and SME performance (Changalima, Ismail, & Amani, 2025; Karimi, Ngina & David, 2023; Panigrahi, Shrivastava, & Nudurupati, 2024).

Jemal (2020) recommended further research on the effect of an entrepreneurial mindset on SME performance. Similarly, Karimi, Ngina, and David (2023) and Ebdane and Samar (2019) recommended testing the effect of entrepreneurial intention as either a mediator or moderator in the stream of entrepreneurial mindset and SME performance research. Therefore, this study intends to examine how entrepreneurial intention moderates the effect of entrepreneurial mindset opportunity recognition, risk-taking, and innovativeness on SME performance in Delta State.

2.1 Literature Reviews

2.1.1 The Concept of SME Performance

According to literature, SMEs performance is a heterogeneous concept that is globally recognized as key to survival (Alvarez-Torres et al., 2019). Ndesaulwa (2016) defines the term performance as a systematic process that comprises the actual output or results of an organization measured against its intended outputs (organizational goals and objectives). Likewise, Vivian and Ihinmoyan (2022) contend that SMEs performance is viewed by scholars differently, using financial and non-financial indicators, as well as subjective and objective measures.

Yet, scholars have conceptualized SMEs performance in relation to business success (Oluwaseun et al., 2020), growth (Lombardi et al., 2020), sustainability (Ajor & Joy, 2020), and sustained competitive advantage (Farery & Nyang'au, 2021). Furthermore, Santos and Brito (2012) believes that superior financial performance is a way to satisfy investors and can be represented by profitability, growth and market value where profitability measures the ability of a firm in the past to generate returns and growth demonstrates its ability in the past to increase its size. Therefore, the performance of small and medium enterprises is viewed as their ability to contribute to wealth creation through enterprises start-up, survival and growth (Vivian & Ihinmoyan, 2022; Sirilli, 2004).

There is no universal definition for SMEs due to countries differences in economic development, types of business engaged and sector of operation – service or manufacturing (Jemal, 2020; Ofosuaa et al., 2015). Also, Iorakpen (2014) noted that number of employees, financial strength, sales value, relative size, initial capital outlay and types of industry are common criteria used in defining SMEs. According to United Nations industrial development organization a medium enterprise has 20 to 99 workers in manufacturing firm and exporting companies (Adalessossi & Uktu, 2015).

Literature showed that common indicators of SMEs performance involve profitability, market value, sales, customer and investor satisfaction (Ummah, 2019), business expansion, business size as well as realization of corporate objectives (Lombardi et al., 2020). Also, Tanveer et al. (2013) have identified the dimensions of performance measurement as: growth, profit, size, liquidity, success/failure and others. Similarly, Zairi (1994) categorized performance measurement into four, namely: (1) Profit which include: return on assets, return on investment and return on sales (2) Growth in term of: sales, market share and wealth creation (3) Stakeholder satisfaction which include customer satisfaction and employees' satisfaction and (4) competitive position which include: overall competitive position and success rate in launching new product.

In the same way, Farery and Nyang'au (2021) have measured performance using indicators that comprised of profit and sales growth, stake holder's satisfaction, competitive position and success in launching new products. Still, Cubin (2019) have measured SMEs performance in terms of accomplishment of strategic objectives. On the other hand, Vivian and Ihinmoyan (2022) have adopted a different measures of performance that include sales per employee, export per employee, growth rates of sales, total assets, total employment, operation profit ratio, and return on investment.

2.1.2 The Concept of Entrepreneurial Mindset

Scholars have defined entrepreneurial mindset differently. For instance, Farery and Nyang'au (2021) defined entrepreneurial mindset as a specific state of mind which orientates human conduct towards entrepreneurial activities and outcomes. While, Shane (2015) has described entrepreneurial mindset as ability of entrepreneurs to perceive opportunities and use existing resources in new ways to exploit such opportunities. Yet, Kato and Miyake (2020) maintained that entrepreneurial mindset is interpreted as a person's perception of starting a business, having an attitude that dares to take risks with his own abilities.

On the other hand, Pihie and Sani (2013) claimed that entrepreneurial mindset is a concept that portrays the innovative and energetic search for opportunities of entrepreneurs in order to facilitate actions aimed at exploiting opportunities. Hence, establishing an entrepreneurial mindset is important to sustain the competitiveness of business organizations (Thompson, 2014). However, Daspit et al. (2023) defined entrepreneurial mindset as a cognitive perspective that enables an individual to create value by recognizing and acting on opportunities, making decisions with limited information, and remaining adaptable and resilient in conditions that are often uncertain and complex.

Accordingly, scholars have described entrepreneurial mindset in terms of entrepreneurial orientation (Karimi, Ngina & David, 2023), entrepreneurial behavior (Amir, Burhanuddin & Priatna, 2018), and entrepreneurial attitude (Suheryanto & Ie, 2023). While, entrepreneurial mindset as orientation is manifested through innovation, creativity, business alertness and risk taking (Njeru, 2012). On the other hand, entrepreneurial mindset as attitude, according to Choe et al. (2020) has several dimensions that involves achievement, personal control, innovation and opportunity recognition. Yet, entrepreneurial mindset as behavior, according to Amir et al. (2018) is conceptualized in terms of opportunities responsiveness, innovativeness, risk taking and persistence in doing business.

Jemal (2020) pointed out that acquiring an entrepreneurial mindset requires re-learning and self's motivation to take risk, and become creative and innovation. Thus, cultivating an entrepreneurial mindset requests functioning entrepreneurial orientation that prepares emerging leaders with ability to cope with ambiguity and face complexity in organization (Xu, 2020; Victor, 2018). Entrepreneurial mindset also requests enthusiasm for opportunity (Suvittawat, 2019), being passionate in seeking new opportunities as well as pursuing best opportunities (Jael, 2017). Hence, mindset dimension includes willingness and eagerness in identifying new opportunities and exploit it which provides competitive advantage and help to achieve business success.

Notwithstanding Ahimbisibwe et al. (2023) interpreted entrepreneurial mindset based on personality traits as well as cognitive view. While, the personality traits involve factors that distinguish entrepreneurs from non-entrepreneurs. However, the cognitive focused on predispositions of entrepreneurs, or cognition that resides in mind and makes some individuals able to identify and exploit opportunities; while, others don't. Hence, cognitive predispositions influence entrepreneurs' responses to external environments, risk preferences, recognition of emerging opportunities and how to best exploit them, which ultimately affects their strategic choices and leads to enhanced performance and business growth.

In contrast, Ahimbisibwe et al. (2021) asserted that entrepreneurial mindset is a multidimensional concept composed of a deliberative mindset and an implemental mindset. While, deliberative mindset is the pre-decisional phase, which is characterized conditions that individuals use to evaluate the feasibility of all competing ideas or business opportunities. However, implemental mindset is the post-decisional phase characterized by ability of individuals to initiate actions, seize the most feasible opportunities and implement the selected goal.

Consequently, Karimi, Ngina and David (2023) defined entrepreneurial mindset as willingness and eagerness to identify new opportunities as well as exploiting them leading to a competitive advantage which subsequently help to achieve business success. Hence, entrepreneurial mindset is conceptually associated with features like alertness, opportunity recognition, risk taking propensity, entrepreneur belief and value as well as entrepreneur innovation which all enhance entrepreneur superior performance (Arokodare, Kuforiji, Makinde & Asikhia, 2020).

In addition, Vivian and Ihinmoyan (2022) defined entrepreneurial mindset as the feelings and belief of a particular ability to think out of the box. Scholars have also described entrepreneurial mindset as that ability to repeatedly initiate new product or service ideas, reconverting all resources into new uses, bringing new ideas from many sources. Ideas must be generated, resources assembled, the new product or services produced and delivered to users (Lackéus, 2016). Hence, entrepreneurial mindset is considered a holistic perception of generating novel ideas, evaluating opportunities and risks, as it portrays the innovative and energetic search for opportunities and facilitates actions aimed at exploiting opportunities (Susilo, 2014). The next section are the reviews of entrepreneurial mindset dimensions (Opportunity Recognition, Risk-Taking, and Innovativeness).

2.1.2.1 Opportunity Recognition

Farery and Nyang'au (2021) described the concept as necessary skills that help entrepreneurs to identify and harness new opportunities. Also, Shane (2013) defined opportunity recognition, as entrepreneurs' ability to identify and tap such opportunities. In addition, Lyngsie and Foss (2017) defined opportunity recognition as entrepreneurs' ability to access information and willingness to act upon information in terms of risk and attitude. Hence, one having entrepreneurial skills is key to the growth and progress of any business enterprise, as numerous opportunities are harnessed by those entrepreneurs who could identify them to start or improve their businesses and subsequently, their welfare (Shuka, 2015).

The study of Farery and Nyang'au (2021) established that opportunity recognition had significant positive relationship with performance of women owned micro and small enterprises. Also, Jemal (2020) found that seeking opportunity as one of the parameters of entrepreneurial mindset affects positively and significantly the performance of SMEs. Equally, Amir, Burhanuddin and Priatna (2018) found that opportunities responsiveness had a positive and significant effect on business performance. However, the findings of Suheryanto and Ie (2023) revealed that opportunity recognition has an insignificant effect on the performance of SMEs. Hence, the study formulate the following hypothesis:

Hypothesis One: *Opportunity Recognition has no significant effect on SME Performance in Delta State.*

2.1.2.2 Risk-Taking

Farery and Nyang'au (2021) and Deakins and Freel (2012) defined risk taking as readiness of entrepreneurs to pursue opportunities and act boldly without knowing the consequences, despite uncertainty around the eventual success. Risk taking, may also be viewed as process of devoting huge amount of resources to projects in anticipation of high returns, despite high possibility of higher failure (Mahmoud & Hanafi, 2013). In addition, Oluwaseun et al. (2020) and Wioeniewska, Tarczyñska, and Papiashvili (2015) define risk-taking as the tendency of a firm to engage in highrisk projects with the aid of managerial preferences who choose bold actions to achieve a firm's objective. Hence, risk-taking in entrepreneurship refers to the willingness of entrepreneurs to take calculated business-related

risks, develop emotional resilience and invest resources in business opportunities in anticipation of high returns (Musawa & Ahmad, 2018; Kazemi & Madandar, 2012).

In a study, Jemal (2020) found that risk taking as one of the parameters of entrepreneurial mindset affects positively and significantly the performance of SMEs. The study of Alvarez-Torres et al. (2019) also, found that companies that manifest greater degree of risk-taking have a positive effect on their firm performance. Correspondingly, the study of Farery and Nyang'au (2021) established that risk-taking had significant positive relationship with performance of women owned micro and small enterprises. Likewise, Amir et al. (2018) found that risk taking had a positive and significant effect on business performance. Additionally, the study of Ajor and Joy (2020) revealed that a positive significant relationship exists between the risk-taking mindset and organizational sustainability. On the other hand, Ebdane and Samar (2019) found that risk-taking does not significantly contribute to sustainable growth of micro, small, and medium enterprises. Therefore, the study formulate the following hypothesis:

Hypothesis Two: *Risk-Taking has no significant effect on SME Performance in Delta State*

2.1.2.3 Innovativeness

Oluwaseun et al. (2020) define innovativeness as a firm's propensity to experiment new ideas in order to activate a process that results in new products, services, or technological development. Also, Hoque et al. (2018) defined innovativeness as experimentation of new ideas or creativity efforts in response to new opportunities which results in new products and services. Hence, innovativeness may include fostering a spirit of creativity, supporting research and development (R&D) and experimentation, developing new processes, introducing new products/services, and technological leadership (Balla et al., 2018; Lumpkin & Dess, 2001); as well as improving the existing product, process and method, in order satisfy customers and improve performance (OECD 2017; Guiné, Ramalhosa, & Valente, 2016). The next section is the review of entrepreneurial intention as moderator for the study.

An empirical study by Alvarez-Torres et al. (2019) found that companies that manifest high level of innovativeness have a positive effect on their firm performance. Similarly, Jemal (2020) found that innovation as one of the parameters of entrepreneurial mindset affects positively and significantly the performance of SMEs. Again, Amir et al. (2018) found that innovativeness had a positive and significant effect on business performance. On the contrary, Suheryanto and Ie (2023) that innovation has an insignificant effect on the performance of SMEs. Still, Ebdane and Samar (2019) found that innovation has no significant effect on sustainable growth of micro, small, and medium enterprises. Yet, Vivian and Ihinmoyan (2022) had found an inverse relationship between innovativeness and performance of Tailors. Thus, the study formulate the following hypothesis:

Hypothesis Three: *Innovativeness has no significant effect on SME Performance in Delta State.*

2.1.3 Entrepreneurial Intention as Moderator

The intention of entrepreneurs has always been considered as a relevant field of entrepreneurial research (Ebdane & Samar, 2019), especially as it featured start-up behavior (Dahalan, Jaafar, & Rosdi, 2015), and growth intentions of entrepreneurs (Knockaert, Foo, Erikson, & Cools, 2015). Hence, entrepreneurial intention represents the desirability of a person to translates entrepreneurial activity and willingness develop a business or launch new business, as well as ability of a person to act on that willingness and its capability to do that action (Yousaf et al., 2021; Bae et al., 2014; Kolvereid & Moen, 1997).

According to literature, SMEs performance is a heterogeneous concept that is globally recognized as key to survival (Alvarez-Torres et al., 2019). Ndesaulwa (2016) defines the term performance as a systematic process that comprises the actual output or results of an organization measured against its intended outputs (organizational goals and objectives). Likewise, Vivian and Ihinmoyan (2022) contend that SMEs performance is viewed by scholars differently, using financial and non-financial indicators, as well as subjective and objective measures.

Yet, scholars have conceptualized SMEs performance in relation to business success (Oluwaseun et al., 2023), growth (Lombardi et al., 2020), sustainability (Ajor & Joy, 2020), and sustained competitive advantage (Farery & Nyang'au, 2021). Furthermore, Santos and Brito (2012) believes that superior financial performance is a way to satisfy investors and can be represented by profitability, growth and market value where profitability measures the ability of a firm in the past to generate returns and growth demonstrates its ability in the past to increase its size. Therefore, the performance of small and medium enterprises is viewed as their ability to contribute to wealth creation through enterprises start-up, survival and growth (Vivian & Ihinmoyan, 2022; Sirilli, 2004).

The effect of entrepreneurial intention on SME performance has been empirically tested. The study of Khan et al. (2023) empirically found that entrepreneurial intention has a significant effect on SMEs performance. Also, Ebdane and Samar (2019) have established the effect of entrepreneurial intention on the sustainability growth performance of SMEs as positive and significant. Additionally, the study by Cubin (2019) revealed that entrepreneurial intention has a significant impact on the performance of SMEs operating in the informal sector. Hence, the study formulate the following moderating hypotheses:

Hypothesis Five: *Entrepreneurial Intention does not moderate the effect of Opportunity Recognition, Risk-Taking, and Innovativeness) on SME Performance in Delta State.*

3.1 Theoretical Framework

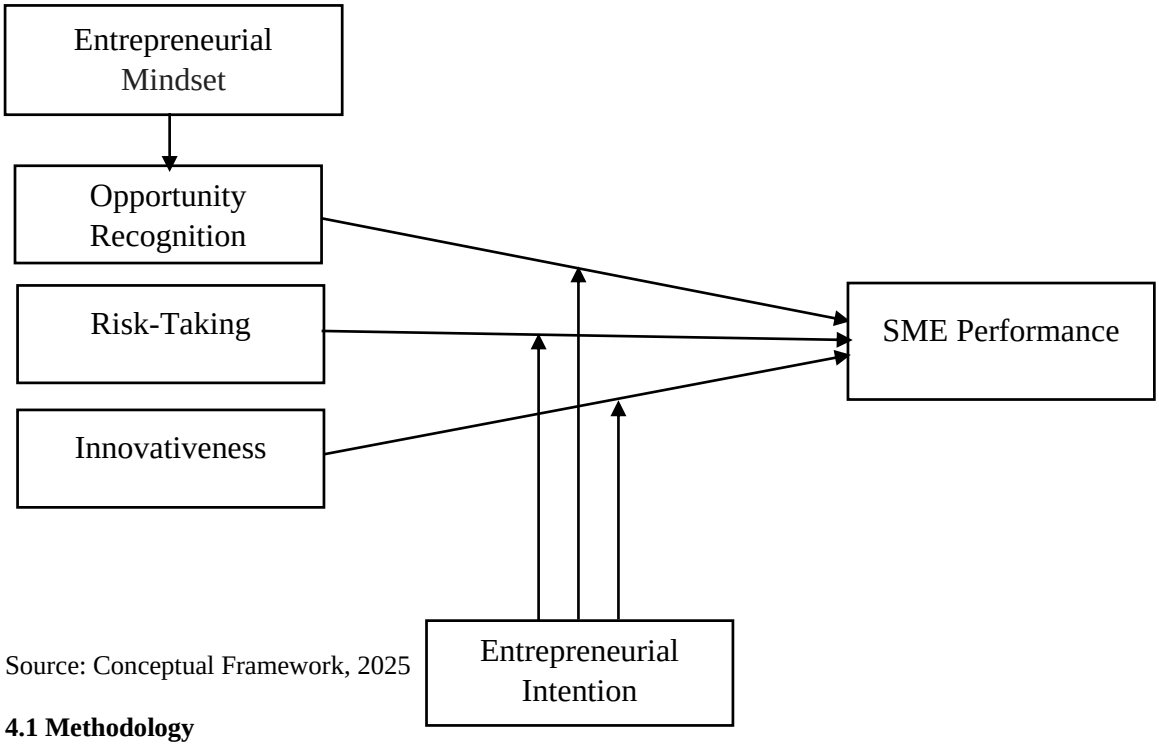
Based on the theoretical review, this study will be underpinned by RBV supported by competency theory because the theories present a holistic view on the influence of entrepreneurial mindsets such as opportunity recognition, risk taking and innovation, as well as entrepreneurial intention on the performance of small and medium enterprises.

3.1.1 Resource-Based View (RBV)

This study is based on the resource-based view, which outlines that the resources and capabilities of the business are the fundamental factors for business performance (Seedee, Sulaiman, & Ismail, 2015). Similarly, the resource-based view is of great relevance in the context of small and medium scale businesses, because it contends that the long-term existence of small and medium enterprises largely is dependent on a business' distinctive product offerings, and the growth of this uniqueness over time is by fostering the business's core capabilities (Kelliher & Reinl, 2009). Hence, having entrepreneurial mindset and intention, result in proper utilization of tangible and intangible resources, which is also considered as means of achieving sustainable performance (Cubin, 2019).

3.1.2 Competency Theory of Action Phases

These competency attributes are observable, measurable and distinguishable between superior and other performers. An entrepreneur is expected to possess high level of competency in different dimensions like intellectual, attitudinal, behavioral, technical, and managerial aspects. Entrepreneurs are therefore permanently challenged to deploy a set of competencies to succeed in their owned small and medium enterprises. This underlying characteristics possessed by a person which result in new venture creation, and the survival and growth of SMEs.



Source: Conceptual Framework, 2025

4.1 Methodology

This study adopts quantitative research and cross-sectional survey design, as data will be collected and analyzed at once. The selection of a specific research design method should align with the research objectives, the type of data needed, available resources, ethical considerations, and the overall research approach. Researchers often choose methods that best suit the nature of their study and research questions to ensure that they collect relevant and valid data. Research designs can vary significantly depending on the research questions and objectives.

Yet, Sharma (2010) described correlation research design as a type of research explores the associations between variables while the researcher has less of an influence on the variable being studied. However, Trochim, Donnelly and Arora (2016) defined descriptive research as process that involves collection and analysis of data, in order to describe the nature of a subject without influencing it in any way. Hence, the overall aim is to describe phenomenon and discover new insights based on inferences or causal relationships.

Therefore, descriptive research design was appropriate for the research because the primary purpose of the study is: to investigate the effect of entrepreneurial mindset – opportunity recognition, risk taking and innovativeness on SMEs performance in Delta State; and test the moderating effect of entrepreneurial intention in the realm of entrepreneurial mindset and SMEs performance research. Accordingly, the questionnaire were used to contain both nominal, ordinal and 5 Likert scales. The nominal and ordinal scales are meant to collect demographic information of respondents. On the other hand, 5 Likert scale is designed to collect responses from respondents related to variables, using structured questions ranging from Strongly Agree (SA) = 1; Agree (A) = 2; Neutral (N) = 3; Disagree (D) = 4; to Strongly Disagree (SD) = 5.

Therefore, the population of this study consists of 39,664 SMEs in Delta State, Nigeria (SMEDAN, 2024). The sample size is 380 SMEs based on the sample size determination table of Krejcie and Morgan (1970). Notwithstanding, in line with Salkind's (1990) to avoid a low response rate, the sample size is increased by 50%, in order to avoid a low response rate, and thus, accounting for a total sample size of 570 SMEs. This study adopted a systematic sampling technique as it gives every element in the population equal opportunity to be chosen.

The data was analyzed by using SPSS version 22 and PLS-SEM, to run preliminary analysis, descriptive statistics, and inferential statistical analysis, in order to establish causality between variables. This conforms to the suggestion of Hair et al. (2019) and Pallant (2011) on the adoption of the method in analyzing causal effects among variables, especially in management research.

In this study, all the measurement that measure the research variables were adopted from the prior studies. Hence, the measures for opportunity recognition involve six (6) questions adopted from Farery and Nyang'au (2021). The measures for risk taking involves five (5) questions adopted from Khan et al. (2023). The measures for innovativeness involves three (3) questions adopted from Alvarez-Torres et al. (2019). The measures for entrepreneurial intention involves six (6) questions adopted from Khan et al. (2023). The measures for SMEs performance involves five (5) questions adopted from Khan et al. (2023).

Table 1: Pilot Study

Variables	Dimensions	Items	Cronbach's Alpha
SMEs Performance	_	5	0.86
Entrepreneurial Mindset	Opportunity Recognition	6	0.89
	Risk-Taking	5	0.77
	Innovativeness	3	0.80
Entrepreneurial Intention	_	6	0.88

Source: Survey, 2025

Reliability refers to the extent to which a measure is free from random measurement errors (Smithson, 2005). If measures have low reliability, they will limit the statistical power to predict relationships. Alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. As the estimate of reliability increases, the fraction of a test score that is attributable to error will decrease. Cronbach's alpha coefficient greater than 0.7 suggests that the instrument is reliable (Cronbach, 1951).

Accordingly, the reliability of the research instruments (that is the questionnaire) was tested by carrying out a pilot test. This means administering the questionnaire to thirty (30) managers / owners of SMEs in Delta State. The reliability of the content of the research instrument is evaluated through the Reliability test with the application of SPSS version 22. The outcome of the analysis demonstrated high reliability level of the questionnaire above 0.7.

5.1 Analysis and Results

This section discussed response rate, data analysis, statistical findings and interpretation of results. The PLS-SEM was used for assessment of measurement model, and structural model to establish causal effect between independent and dependent variables, and as well, test the effect of moderator on such relationships.

Based on the sample size, this study distributed 570 questionnaires to the owners and managers of SMEs in Delta State, Nigeria. Interestingly, 421 questionnaires were properly completed and returned. While, 149 questionnaires were not returned. Accounting for valid response rate of 74% and 26% of unreturned questionnaires.

The descriptive statistics involves analysis of demographic information of respondents and mean and standard deviation of variables. Descriptive statistics analysis showed that most of the people who responded to the survey are male (357), accounting for 85.2% of the total respondents. While, female respondents were 62, accounting for 15.8% of the total respondents. About the age respondents, 147 respondents are within age bracket 31 – 40 years, 135 respondents are within age bracket 18 -30 years, 75 respondents are within age bracket 41 – 50 years, and lastly, 62 respondents are above 51 years of age, accounting for 35.1%, 32.2%, 17.9% and 14.8% of the total respondents.

Regarding educational qualification, the results showed that 147 respondents have Diploma or NCE, 75 respondents have PhD, 73 respondents have Masters, 62 respondents have Bachelor Degree, and 62 respondents have other types of educational qualifications, accounting for 35.1%, 17.9%, 17.4%, 14.8% and 14.8% of the total respondents.

In terms of business sectors, 77 respondents engage in Agricultural businesses, 74 respondents operate in Hotel and Tourism sector, 73 respondents deal in Clothing and Textile material, 62 respondents operate a Tailoring and Fashion Design shops, 61 respondents operate in Food and Beverage industry, and 36 respondents operate in Leather and Shoes subsector. Yet, 36 respondents engage in other type of business activities.

5.2 Partial Least Square – Structural Equation Modelling (PLS-SEM) Analysis

This section presented the statistical analysis using PLS-SEM. Accordingly, Hair et al. (2018) contend that this technique is contemporary method of analyzing complex model, establishing cause-and-effect, and testing of relationship among independent and dependent (exogenous and endogenous) variables, and testing effect of intervening (mediating or moderating) variables. Accordingly, the research model was operationalized as a reflective model with arrows pointing at the items/indicators. Also, this section provided in-depth discussion on assessment measurement model, structural model and predictive relevance. Figure 2 provided general overview of the research model.

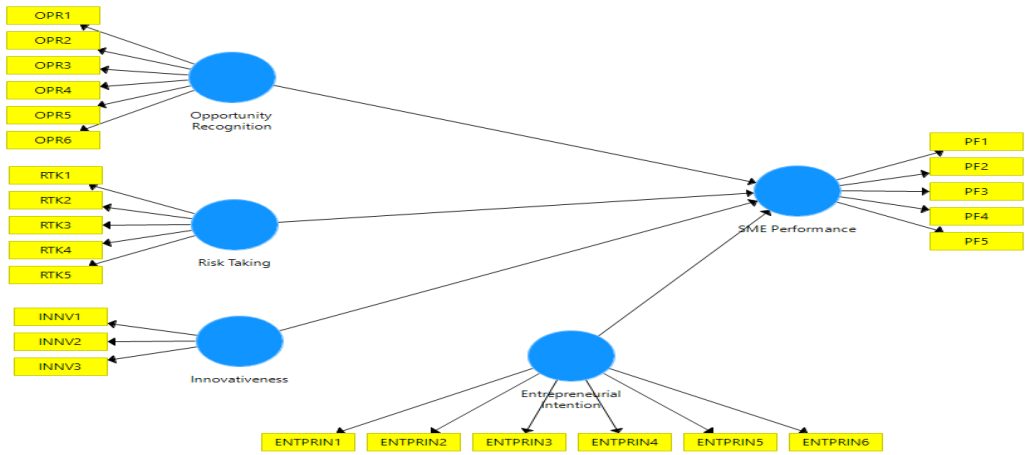


Figure 2: Reflective Research Model

5.2.1 Measurement Model

According to Hair et al. (2014), measurement model is assessed through a number of criteria which include evaluation of individual item reliability, determination of convergent and discriminant validity, as well as evaluation of internal consistency reliability. Figure 3 demonstrated graphical measurement model assessment.

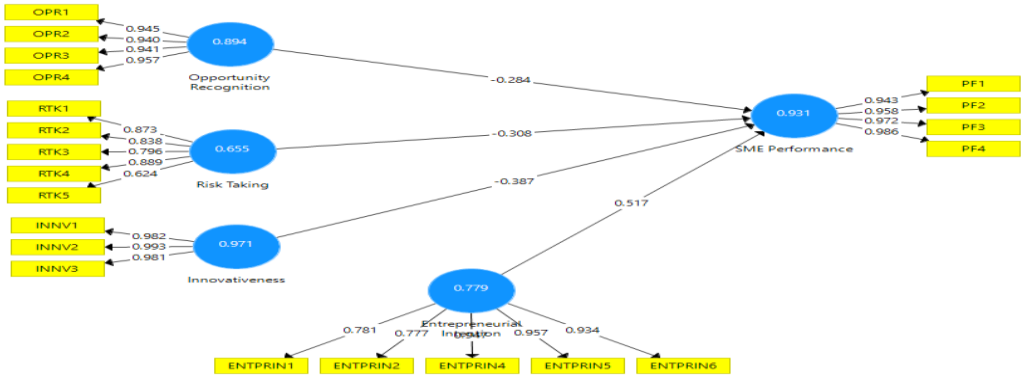


Figure 3: Measurement Model

5.2.1.1 Individual Item Reliability

On a general note, this type of reliability is established based on the weight of outer loadings that satisfy the acceptable cutoff above 0.6 (Hair et al., 2018). Based on this criteria, the result of individual item reliability indicated high level of consistency, with strong outer loadings greater than 0.6. Also, Table 2 demonstrated that all questions used in this study to measure the latent variables loaded strongly. Therefore, all the items measuring the research constructs could be described as reliable.

5.2.1.2 Internal Consistency Reliability

The reliability was assessed through statistical evaluation of size of Cronbach's Alpha coefficient and composite reliability, as both are considered a good measure of testing reliability of instrument that measure the latent variables, with acceptable cutoff of 0.6 and above (Hair et al., 2018). Based on certified criteria, the result of internal consistency reliability demonstrated that each of latent variables have acceptable coefficient which exceeding the cutoff point of 0.6. Accordingly, Table 2 highlighted that SME performance, opportunity recognition, risk taking, innovativeness and entrepreneurial intention have adequate internal consistency, with Alpha and composite reliability of 0.975 and 0.982, 0.961 and 0.971, 0.884 and 0.904, 0.985 and 0.990, and 0.929 and 0.946, respectively.

5.2.1.3 Convergent Validity

This type of validity was evaluated through statistical consideration of level of average variance extract (AVE), as it has been described as a good measure of testing validity of instruments, with acceptable cutoff greater than 0.5 (Hair et al., 2014). Based on certified criteria, the results in Table 2 highlighted that each of latent variables have acceptable validity level, which exceeded the cutoff of 0.5. Hence, SME performance, opportunity recognition, risk taking, innovativeness and entrepreneurial intention have AVE of 0.931, 0.894, 0.655, 0.971 and 0.779, respectively.

Table 2: Construct Reliability and Validity

	Items	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Entrepreneurial Intention	ENTPRIN1	0.781	0.929	0.946	0.779
	ENTPRIN2	0.777			
	ENTPRIN4	0.947			
	ENTPRIN5	0.957			
	ENTPRIN6	0.934			
Innovativeness	INNV1	0.982	0.985	0.990	0.971
	INNV2	0.993			
	INNV3	0.981			
Opportunity Recognition	OPR1	0.945	0.961	0.971	0.894
	OPR2	0.940			
	OPR3	0.941			
	OPR4	0.957			

Risk Taking	RTK1	0.873	0.884	0.904	0.655
	RTK2	0.838			
	RTK3	0.796			
	RTK4	0.889			
	RTK5	0.624			
SME Performance	PF1	0.943	0.975	0.982	0.931
	PF2	0.958			
	PF3	0.972			
	PF4	0.986			

5.2.1.4 Discriminant Validity

Contrary to other forms of validity, discriminant validity is evaluated by means of employing most common criteria, which involved Fornell-Larcker and Cross-Loading criteria, as both are considered a good measure of testing validity of instruments. Based on this criteria, each of the latent variable and individual items that measure the constructs must load highly in their own constructs, and should reflect same pattern in rows and columns. Accordingly, the result showed that the latent variables loaded strongly in their own constructs. Similarly, Table 3 highlighted that the strong loadings were visibly observe appearing in various columns and rows of the constructs. Hence, the discriminant validity is achieved.

Table 3: Fornell-Larcker Criterion

	Entrepreneurial Intention	**Innovativeness**	**Opportunity Recognition**	**Risk Taking**	**SME Performance**
Entrepreneurial Intention	**0.883**				
Innovativeness	0.836	**0.986**			
Opportunity Recognition	0.752	0.799	**0.946**		
Risk Taking	0.806	0.706	0.646	**0.810**	
SME Performance	-0.311	-0.348	-0.404	-0.343	**0.965**

Likewise, using the cross-loading criterion the result in Table 3 showed that all the items that measure the latent variables have loaded strongly in their own constructs both in columns and rows. Hence, the discriminant validity is achieved.

Table 3: Cross Loading Criterion

	Entrepreneurial Intention	**Innovativeness**	**Opportunity Recognition**	**Risk Taking**	**SME Performance**
ENTPRIN1	**0.781**				
ENTPRIN2	**0.777**				
ENTPRIN4	**0.972**				
ENTPRIN5	**0.975**				
ENTPRIN6	**0.934**				
INNV1	0.924	**0.982**			
INNV2	0.937	**0.993**			
INNV3	0.907	**0.981**			
OPR1	0.689	0.751	**0.945**		
OPR2	0.744	0.762	**0.940**		
OPR3	0.658	0.696	**0.941**		
OPR4	0.756	0.814	**0.957**		
PF1	-0.294	-0.325	-0.395	**0.873**	
PF2	-0.287	-0.340	-0.407	**0.838**	

PF3	-0.321	-0.341	-0.371	**0.796**	
PF4	-0.299	-0.337	-0.386	**0.889**	
RTK1	0.615	0.449	0.373	**0.624**	
RTK2	0.464	0.275	0.280	-0.168	**0.943**
RTK3	0.389	0.210	0.192	-0.136	**0.958**
RTK4	0.558	0.395	0.343	-0.213	**0.972**
RTK5	0.836	0.915	0.857	-0.399	**0.986**

5.2.2 Structural Model

The structural model entails evaluating the effect of exogenous variables on endogenous variable, using B, t-statistics and p-value. Yet, coefficient of determination and effect size were utilized, in order to determine the effect of exogenous variables on the endogenous variable. The details of this assessment is shown in Figure 4 and Tables 4, 5, 6, 7, 8, and 9.

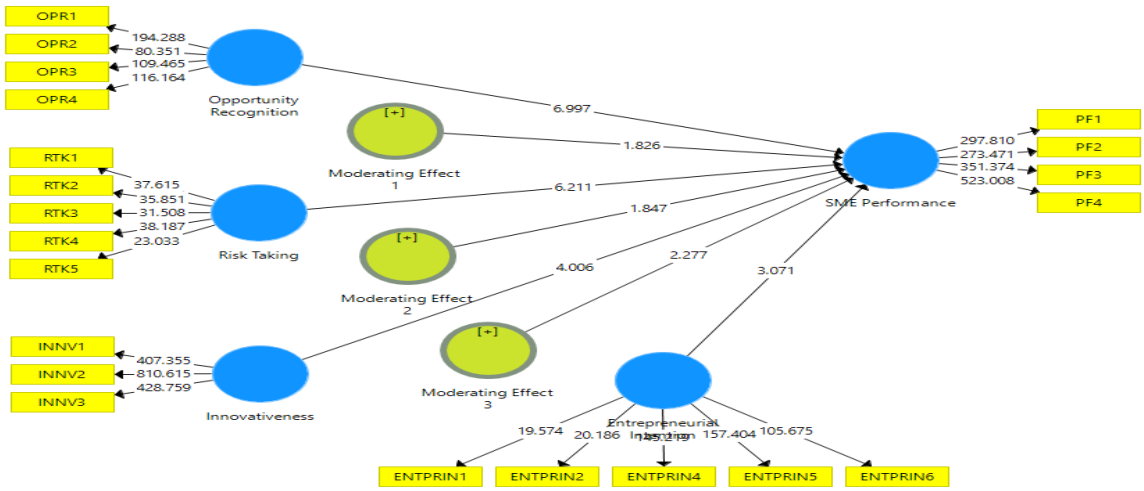


Figure 4: Structural Model

5.2.2.1 Direct Effect

The direct effect of entrepreneurial mindset on SME performance is assessed based on B, t-statistics and p-value. Accordingly, the results in Figure 4 and Table 4 showed that opportunity recognition has a significant effect on SME performance (B = -0.318, t-value = 6.997, p-value = .000). Suggesting that an increase in opportunity recognition will lead to an improvement in SME performance in Delta State. Hence, H1 which stated that opportunity recognition has no significant effect on SME performance in Delta State, lacks statistical support. Yet, the study found that risk taking has a significant effect on SME performance (B = -0.296, t-value = 6.221, p-value = .000). Signifying that when entrepreneurs are averse to risk, take greater risk that will eventually lead to an improvement in SME performance in Delta State. Thus, H2 which stated that risk taking has no significant effect on SME performance in Delta State, is not statistical supported.

Correspondingly, the study established that innovativeness has a significant effect on SME performance (B = -0.767, t-value = 4.006, p-value = .000). Highlighting that an increase in innovativeness will lead to an improvement in SME performance in Delta State. Hence, H3 which stated that innovativeness has no significant effect on SME performance in Delta State, is not supported statistically. Additionally, the study found that entrepreneurial intention has significant positive effect on SME performance (B = 0.633, t-value = 3.071, p-value = .000). Accentuating that an increase in entrepreneurial intention will lead to an improvement in SME performance in Delta State. Hence, H4 which postulated that entrepreneurial intention has no significant effect on SME performance in Delta State, lacks statistical support.

Table 4: Path Coefficients

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Entrepreneurial Intention -> SME Performance	0.633	0.206	3.071	0.001

Innovativeness -> SME Performance	-0.767	0.191	4.006	0.000
Opportunity Recognition -> SME Performance	-0.318	0.045	6.997	0.000
Risk Taking -> SME Performance	-0.296	0.048	6.211	0.000

5.2.2.2 Coefficient of Determination

Coefficient of determination is evaluated using value of R square (R^2), which can be described as small, medium or large (Cohen, 1988). As shown in Table 5, opportunity recognition, risk taking, innovativeness and entrepreneurial intention explained 49.5% variance of SME performance. Hence, the R^2 is substantial.

Table 5: R Square

	R Square	**R Square Adjusted**
SME Performance	0.495	0.487

5.2.2.3 Effect Size

The purpose of evaluating effect size is to determine the amount of effect exogenous variables exerted on endogenous variable, using the level of the f square (f^2), which according to Cohen (1988), can be described as weak, moderate and substantial. As shown in Table 6, opportunity recognition, risk taking, innovativeness and entrepreneurial intention moderate effect on SME performance. Hence, the f^2 ranges from 0.017 to 0,034.

Table 6: f Square

	SME Performance
Entrepreneurial Intention	0.025
Innovativeness	0.017
Opportunity Recognition	0.034
Risk Taking	0.034

5.2.2.4 Moderating Effect

The moderating effect of entrepreneurial intention on the relationship between opportunity recognition, risk taking, innovativeness and SME performance, is assessed using B, t-statistics and p-value. Accordingly, Table 7 showed that that entrepreneurial intention has a significant moderating effect on the relationship between opportunity recognition and SME performance (B = -0.111, t-value = 1.826, p-value = .034). Hence, H5 which postulated that entrepreneurial intention does not moderate the effect of opportunity recognition on SME performance in Delta State, is not supported.

Similarly, the study established that entrepreneurial intention has a significant moderating effect on the relationship between risk taking and SME performance (B = 0.101, t-value = 1.847, p-value = .033). Hence, H6 which asserted that entrepreneurial intention does not moderate the effect of risk taking on SME performance in Delta State, is not supported. Furthermore, the study found that entrepreneurial intention has a significant moderating effect on the relationship between innovativeness and SME performance (B = -0.172, t-value = 2.277, p-value = .012). Hence, H7 which asserted that entrepreneurial intention does not moderate the effect of innovativeness on SME performance in Delta State, is not supported.

Table 7: Path Coefficients

	Original Sample (O)	**Standard Deviation (STDEV)**	**T Statistics (|O/STDEV|)**	**P Values**
Moderating Effect 1 -> SME Performance	-0.111	0.061	1.826	0.034
Moderating Effect 2 -> SME Performance	0.101	0.055	1.847	0.033
Moderating Effect 3 -> SME Performance	-0.172	0.076	2.277	0.012

5.2.3 Predictive Relevance

Predictive relevance is evaluated in order to show the predictive power of the exogenous variables on endogenous variable. Accordingly, Figure 5 showed that opportunity recognition, risk taking, innovativeness and entrepreneurial intention have a strong predictive influence on SME performance.

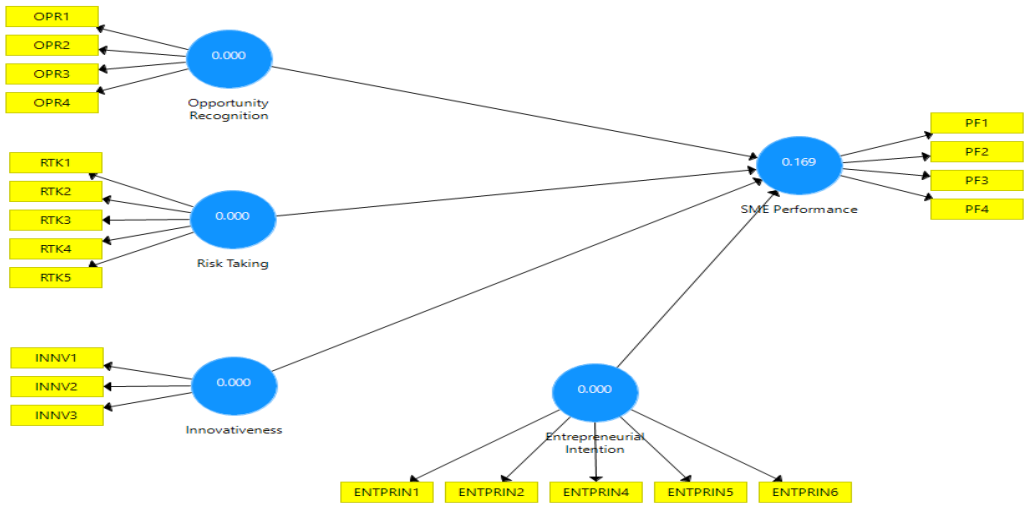


Figure 5: Predictive Relevance

Additionally, the results in Table 8 showed that the model has a Crossvalidated Redundancy (Q^2) value of 0.169. Suggesting that opportunity recognition, risk taking, innovativeness and entrepreneurial intention have a strong predictive power on SME performance.

Table 8: Construct Crossvalidated Redundancy

	SSO	SSE	Q^2 (=1-SSE/SSO)
Entrepreneurial Intention	2095	2095	
Innovativeness	1257	1257	
Opportunity Recognition	1676	1676	
Risk Taking	2095	2095	
SME Performance	1675.9	1391.9	0.169

6.1 Findings and Discussion

6.1.1 Findings

Based on the outcome, the three (3) hypotheses on the direct effect of entrepreneurial mindset on SME performance (H_{01}, H_{02}, and H_{03}) were rejected, as opportunity recognition, risk taking and innovativeness have direct significant effect on SME performance. In the same vein, the four (4) hypotheses on the direct effect of entrepreneurial intention on SME performance, as well as moderating effect of entrepreneurial intention on the relationship between opportunity recognition, risk taking, innovativeness and SME performance (H_{04}, H_{05}, H_{06}, and H_{07}) were rejected. Hence, entrepreneurial intention has a significant effect on SME performance, and as well, entrepreneurial intention has significantly moderated the effect of opportunity recognition, risk taking and innovativeness on SME performance. The summary of findings is shown in Table 9.

Table 9: Decision Table

Hypotheses		Findings	Decision
H1	Opportunity Recognition has no significant effect on SME Performance in Delta State.	Not Supportive	Rejected
H2	Risk-Taking has no significant effect on SME Performance in Delta State.	Not Supportive	Rejected

H3	Innovativeness has no significant effect on SME Performance in Delta State.	Not Supportive	Rejected
H4	Entrepreneurial Intention has no significant effect on SME Performance in Delta State	Not Supportive	Rejected
H5	Entrepreneurial Intention does not moderate the effect of Opportunity Recognition on SME Performance in Delta State.	Not Supportive	Rejected
H6	Entrepreneurial Intention does not moderate the effect of Risk-Taking on SME Performance in Delta State.	Not Supportive	Rejected
H7	Entrepreneurial Intention does not moderate the effect of Innovativeness on SME Performance in Delta State.	Not Supportive	Rejected

6.1.2 Discussion

The research findings provided great insights on the effect of entrepreneurial mindset on SME performance. This is evident particularly as the study found support on the significant effect of opportunity recognition on SME performance. Thus, research objective one has been achieved and research question one has been answered. Similarly, the study found that risk taking has a significant effect on SME performance. Signifying that SME performance is dependent on ability of entrepreneurs to take calculated risk and stimulate SME performance. Hence, research objective two has been achieved and research question two has been answered. The finding is similar to Muddat et al. (2021) who established that a positive effect exists between risk willingness and business performance.

Correspondingly, the study findings underscore the role of innovativeness as an important factor that boost the performance of SMEs. Therefore, research objective three has been achieved, and research question three has been answered. Equally, the study has established a significant effect between entrepreneurial intention and SME performance. Accentuating that an increase in entrepreneurial intention will lead to corresponding increase in SME performance in Delta State. Hence, research objective four has been achieved, and research question four has been answered. The finding is similar to Aghazadeh, and Zandi (2022) who reported that international opportunity recognition and innovativeness exert significant effect on international growth.

Additionally, the study has empirically established that the effect of entrepreneurial intention as a moderating variable on the relationship between opportunity recognition and SME performance is significant. Hence, research objective five has been achieved, and research question five has been answered. Likewise, the study statistically established that entrepreneurial intention has significantly moderated the effect of risk taking on SME performance. Hence, research objective six has been achieved and research question six has been answered.

Nonetheless, the study empirically found that entrepreneurial intention has significant moderated the effect of innovativeness on SME performance. Therefore, research objective seven has been achieved, and research question seven has been answered.

The findings implied that propensity to venture into risky activities and predisposition to recognize opportunities, can greatly contribute to better SME performance. Yet, the outcome demonstrated that entrepreneurs who think critically are committed to changes, as they perceive better opportunities and use their mental ability to sustain competitiveness in market place (Herndon, 2021). Suggesting that entrepreneurs can hone creative abilities, transform their thinking ability, and turn capabilities, as well as imaginative concept into new product, to realize organizational benefits (Venkataraman, 2019). In contrast, entrepreneurs who lack ability to brainstorm, generate new ideas and think critically, cannot realize meaningful organizational benefits of their investment. In general, sustainable business growth and performance were motivated by entrepreneurial mindset conceptualized in terms of propensity to risk taking, courage to spot opportunities and ability to satisfy customers through launch of unique product offering (Van Kleef et al., 2021; Hantman & Gimmon, 2014).

Therefore, profitable opportunities are harnessed through predisposition of entrepreneurs to risk taking (Zainol et al., 2018; Wambugu et al., 2015). On the other hand, business failure occurs from risk aversion behavior of entrepreneurs and inability to sight and threats in market environment (Nuvriasari et al., 2020; Rauch et al., 2009). Accordingly, Kalsom and Ab Rahim (2015) and Lumpkin and Dess (1996) established that familiarity of operating environment, willingness to take risks, and invest in identified opportunities, can lead to better performance and organizational success (Moudry & Thaichon, 2020; Nasuredin et al., 2016). Similarly, Yusof and Tahir (2021) and Salaudeen and Sauri (2020) found that business performance is significantly influenced by proclamation of entrepreneur to opportunity identification. Suggesting that entrepreneurs must be ready to seize opportunity, think strategically, and take profitable initiatives, for them to succeed in marketplace (Owoseni et al., 2020; Reuschke & Houston, 2020). Hence, owners/managers of SMEs should explore new business opportunities, be willing take risk and courageous to venture into growth oriented projects (Jain & Khandelwal, 2020).

However, the findings contradict that of Mostafiz et al. (2021) who asserted that the IOR process positively impacts the non-financial performance of the firm. There is an insignificant direct relationship between IOR process and financial performance. Complimenting,

the IOR process complements financial performance through the non-financial performance of the firm. Creating international foothold, global reach, and reputation through new opportunities help the firms to enhance their overall profitability. A similar positive association between opportunities and performance of early internalised firms have been reported by Mostafiz et al. (2019). The importance of correct IOR process for export manufacturing firms is crucial, especially at the early stage of the market expansion (Chandra et al., 2012).

This study has identified a significant relationship between non-financial performance and the financial performance of export manufacturing firms. As indicated earlier, the international entrepreneurial capability has an indirect effect on the non-financial performance of export manufacturing firms through IOR process.
The result is consistent with Makhloufi et al. (2024) who claimed that entrepreneurial opportunities inspire entrepreneurs to allocate sufficient capabilities to respond to market conditions and achieve and maintain business growth (Patel, 2019). Thus, recognising opportunities requires long entrepreneurial experience to enable entrepreneurs to comprehensively follow, observe and explore entrepreneurial markets (Lim et al., 2021) so that they can create, deliver and respond to customer needs and perceptions. Teece (2016) claims that in an effort to maintain superior EP, OR is the key driver for recognising the valuable capabilities needed to successfully generate unique sources of competitive advantages through entrepreneurial market exploitation. In addition, Li et al. (2020) argued that there are deficiencies in the OR for EP. Meanwhile, another study by Kim et al. (2018) stated that a brilliant entrepreneur with sufficient competencies always grasps profitable opportunities, leading to superior EP. Alternatively, the primary goals of entrepreneurs are survival and business growth.

Accordingly, Mangenda Tshiaba et al. (2021) claimed that entrepreneurial OR assists entrepreneurs in tracking market demands, product position and delivered value, and these are significant influencers of an EP's sustainability. Firms could fulfil market needs through innovative resource integration to deliver superior and unique value (Clark and Ramachandran, 2019). Hence, opportunity refers to an entrepreneur's ability to recognise market needs and deliver value. Mangenda Tshiaba et al. (2021) pointed out that OR positively moderates and strengthens the relationship between dynamic capabilities and EP, further implying that OR empowers entrepreneurs' capabilities to achieve EP and firm performance. Hasan and Almubarak (2016) examined the mediation effect of OR and found that it plays a vital role in the relationship between entrepreneurial goals and EP. Others (Bagheri, 2017; Ploum et al., 2018) believed that entrepreneurs' self-made strategies succeed in the OR.

Again, the finding is consistent with prior studies who considered innovativeness as one of the most important determinants of competitive advantage. Innovativeness is argued as an important strategic orientation for firms to achieve long-term success (Noble et al., 2002; Chen et al., 2009), significant effect on venture performance (e.g. Baum, 1995; Rauch & Frese, 2000) and growth (Brännback, 1999). Zaltman et al. (1973), Hurley & Hult (1988) and Hult et al. (2004) suggested that innovativeness is the initiation process of innovation which in turn represents the notion of openness to new ideas. Van de Ven (1986) considers innovativeness as the organization's culture to recognize the need for new ideas and actions. Grissemann et al. (2013) considered innovativeness as an "attitudinal dimension" of innovation. As a result, this study considered innovativeness as the attitude, values and beliefs and being open-mind by individuals and or firms to the change.

Within tourism SMEs context, there are relevant and comprehensive studies that empirically show the influence of innovativeness on firm performance (see e.g. Grissemann et al., 2013; Tsai & Yang, 2013; Tajeddini, 2010; Tajeddini & Trueman, 2012; Domi, 2018). Hult et al. (2004), Tsai & Yang (2013) in their empirical findings confirmed innovativeness as a crucial factor to enhance firm performance. Tajeddini & Trueman (2012) concluded that if managers and employees are innovative or open to new ideas they are more likely to enhance firm performance in tourism sector. Although these positive relationships, on the other side, several other studies have found that innovativeness has no direct effects on firm performance (see e.g., Terziovski, 2010; Grissemann et al., 2013).
As a result, Tsai and Yang (2013) have argued, even that innovativeness is assumed to enhance performance, the empirical researches have not yet achieved a consensus on that. In addition, studies on innovativeness-firm performance relationship, are still in its infancy (Tajeddini, 2010). In this line, the lack of sufficient empirical results to support the positive relationship between innovativeness and SMEs performance reinforces the need to replicate such studies to a new sample for a developing country. However, the finding is contrary to Domi et al. (2019) who found that innovativeness does not affect SMEs performance directly, its significant effects are indirect, through the mediation role of innovation behavior. Regarding innovation behavior, the results indicate that the more tourism's SMEs innovate in terms of ICT, cooperation (associations, networks etc.), the more their performance will positively increase.

The finding is consistent with Subagja et al. (2022) who reported that innovative mindset of SMEs leads to a consideration that a business innovation should provide relative advantage. This characterizes DOI theory. The experience of SMEs running a business slowly makes an innovation breakthrough even though it is relatively small. This condition, according to innovation diffusion theory, is measured in terms of economy, social achievement, comfort, and satisfaction. Also, the result is dissimilar with that of Jun et al. (2021) suggest that a market development strategy is more important than a technology development strategy for an innovative organization to achieve high business performance. The findings concurred with Rahaman et al. (2021) who reported that risk-taking, has a significant influence on

SME performance. claiming that the business owners love to attempt some daring tasks in order achieve optimum growth. Hence, small firm owners, they believe that business decisions followed by risky elements would get them better financial attainment.

The outcome is consistent with Riswanto et al. (2020) who established that there was a positive correlation between variables, and different patterns of technological innovation had a significant impact on industrial performance. Also, the results show that value creation includes creating value for customers through products and services, and marketing and technology activities have the greatest impact on innovative performance. Innovation includes innovative strategies, management innovation, and uses new methods to carry out activities. Still, the study found that innovativeness had the ability to mediate the influence between market orientation and marketing performance.

Yet, the result is in agreement with Rahaman et al. (2021) who claimed that innovativeness, has an important impact on SME performance. The findings are consistent with prior studies. Introducing innovation in designing and crafting products results in driving business gain (Zahra & Garvis, 2000). During the conversation, respondents described that they always come up with new and innovative designs in their business product portfolio so that their SME products could remain differentiated in the market. They reward their employees every three months for their novel and innovative thinking, and this strategy got them a lot of financial gains such as accelerating SME business growth and sales.

Moreover, the findings corroborated the study of Cubin (2019) who empirically found that entrepreneurial intentions significantly impact the business performance of the informal sector. The finding is in congruence with that of Hossain and Al Asheq (2019) who claimed that risk taking and innovativeness possess a positive significant effect on SME performance

This is in line with assertion that entrepreneurs and SMEs usually categorise the situations in business as highly or less risky (Kreiser, 2013). Moreover, it is widely accepted that small enterprises are more likely to take risks in uncertain environments with the intention to seize opportunity in respective markets. However, it is to be noted that risk-taking behaviour involves the huge resource commitment that is grounded in the entrepreneur's expectation to gain increased returns and other associated benefits (Shihab, Wismiarsi, and Sine, 2011). Moreover, entrepreneurs take calculated business-related risks whenever it comes to making investments in new ventures or tap uncertain market (Le Roux and Bengesi, 2014). In this process of assessing risk so as to make informed decisions, SMEs need to gather the relevant information.

The findings of Tang and Murphy (2012) have suggested that SMEs do not usually invest in new ventures due to perceived high-risks. However, those who invest willingly, intend to generate huge profits and enhance the growth of their firms. Yet, increased competitiveness reflects the attitude of SMEs towards risk-taking in order to deal with their competitors. Fadda (2018) stated that for this purpose, SMEs monitor and counter the strategies of rivals continually. In addition, SMEs even imitate other organisations to achieve a competitive advantage and improve organisational performance. This implies that risk-taking behaviour is positively associated with the SMEs' performance.

In accordance with the findings of Anlesinya, Eshun, and Bonuedi (2015), it was claimed that a significant correlation exists between profitability of SMEs and risk-taking behaviour. Also, Hamdan and Alheet (2020) posited that the notion of 'innovation' is of paramount importance for SMEs. Generally speaking, innovation is professed to be a phenomenon that encapsulates the diffusion, production, and translation of knowledge into improved and new products and services. The process of innovation also involves the development of new techniques of production and processes (Bigliardi, 2013). The innovativeness of a firm reflects on their propensity to support experimentation, new ideas, novelty, and creativity in processes to develop new and improved products and services.

As mentioned earlier, innovation allows SMEs to gain competitive advantage as it involves the exploitation of firm's existing resources by enabling the firm to become first-mover and leader in the marketplace. Eggers et al. (2013) further mentioned that, in order for SMEs to optimise their chances for relishing first-mover benefits, SMEs are required to combine the innovativeness and proactiveness. This combination of EO dimensions facilitates firms in coming up with novel and innovative solutions that are supposed to be breakthrough in the market (Wang, Hermens, Huang & Chelliah, 2015).

The finding is similar to Fiernaningsih et al. (2024) who reported that entrepreneurial intention significantly influenced SME performance. Specifically, entrepreneurial intention has a path coefficient of –0.722 on SME performance, at significant level of p-value < 0.05. These results highlight the necessity of enhancing entrepreneurial intentions to boost SMEs' resilience and performance.

Subsequently, Anwar et al. (2024) proclaimed that sustainable entrepreneurial intentions significantly influence business performance. Asserting that companies with sustainability orientations tend to recover better and have better long-term performance due to the value created by resonating with a rapidly growing consumer market seeking ethical and environmentally aware practices. Hence, sustainable firms seeking long-term stability attract ethical investors and have relatively lower operational risks because their fundamental orientation is towards long-term stability and sustainability. Similarly, sustainably led entrepreneurs have been empirically proven to be

more likely to provide innovative solutions, reduce waste, and have better operational efficiency, leading to generally good business performance.

7.1 Conclusion

Based on the research outcome, the study comes up with the following conclusion: Having entrepreneurial mindset is key for SMEs' managers/owners to achieve superior performance. The performance of SMEs is greatly enhanced by the ability of managers to recognize and take advantage of entrepreneurial opportunities. The ability of managers to take calculated risk taking, irrespective of amount of uncertainties can greatly enhance the performance SMEs.

Innovativeness in form of unique product offering and development of distinctive competencies is critical for SMEs to achieve superior performance. Entrepreneurial intention could go a long way in enhancing SME performance. Entrepreneurial intention can greatly facilitate the relationship between entrepreneurial mindset and SME performance. The effect of opportunity recognition on SME performance is further strengthened by entrepreneurial intention. The effect of risk taking on SME performance is to greater extent reinforced by entrepreneurial intention. The effect of innovativeness on SME performance is inclined to entrepreneurial intention.

8.1 Recommendations

Based on the outcome, the study recommended that: Managers should see entrepreneurial mindset as opportunity for them to achieve superior SME performance level, as it encompassed the ability to spot entrepreneurial opportunities in the market environment, take calculate risk and become more innovative in terms of product offering and setting competitive price. Managers must understand that entrepreneurial intention can go a long way in enhancing SME performance, as it symbolized assertiveness of entrepreneurs to succeed and profit from their investments by creating something of value, identifying market niche and reaching out target customers.

The managers must also recognize that the effect of entrepreneurial mindset on SME performance, is greatly enhanced by entrepreneurial intention. Hence, entrepreneurial intention inspires opportunity recognition effort, reinforces risk taking activities, and supports firms' search for innovative products, in order to achieve superior performance. Policy makers like SMEDAN can assist managers of SMEs to reshape their entrepreneurial mindset and intention, in order to increase competitiveness and performance, by searching for better opportunities, targeting underserved markets and investing more in creativity and innovation.

9.1 Contribution to Knowledge

This study has contributed to knowledge by proving useful information on the effect of entrepreneurial mindset on SME performance. Similarly, the study provided important insights on the moderating effect of entrepreneurial intention on the relationship between entrepreneurial mindset and SME performance. Firstly, the study contributed to the body of literature by testing the effect of various dimensions of entrepreneurial mindset such as opportunity recognition, risk taking and innovativeness on SME performance. Secondly, this study succeeded in testing the effect of entrepreneurial intention as moderator on entrepreneurial mindset and SME performance relationship. Thirdly, the study contributed to literature by testing the model in the context of SMEs located in Delta State, Nigeria.

Furthermore, the study provided empirical evidence on the way entrepreneurial mindset dimensions drive the performance of SMEs in developing country context. Equally, the study provided empirical evidence on the way entrepreneurial intention strengthened the effect of entrepreneurial mindset on SMEs. Lastly, the study provided valuable insights by testing the moderating effect of entrepreneurial intention on entrepreneurial mindset and performance using samples of SMEs operating in service and manufacturing sectors.

10.1 Suggestion for Further Studies

The following suggestions were made for further studies: Future study can broaden the scope by testing the model in a different research context, within or outside Nigeria. Future research can investigate the effect of entrepreneurial mindset on SME performance by integrating other dimensions like implemental and automatic mindset.

Future research can investigate the model in a new setting by collecting data from diverse group of respondents, like middle level and top level managers. Further studies can be carried out by modifying the questionnaire and sourcing of more items from entrepreneurial mindset and SME performance literature. Further studies can test the model by focusing specifically on SMEs operating in a particular sector like manufacturing or services, etc.

References

Acs, Z. J., & Amorós, J. E. (2008). Entrepreneurship and competitiveness dynamics in Latin America. *Small Business Economics*, 31(3), 305–322.

Acs, Z. J., & Audretsch, D. B. (2003). Innovation and technological change. In *Handbook of entrepreneurship research* (pp. 55–79). Springer.

Acs, Z. J., Desai, S., & Hessels, J. (2008). Entrepreneurship, economic development, and institutions. *Small Business Economics*, 31(3), 219–234.

Aftan, Y., & Hanapi, M. (2018). Entrepreneurial mindset and aspiration as critical success factor for small business performance in Iraq. *Asian Journal of Multidisciplinary Studies*, *6*, 3.

Agarwal, P., & Farndale, E. (2017). High-performance work systems and creativity implementation: The role of psychological capital and psychological safety. *Human Resource Management Journal, 27*(3), 440–458. https://doi.org/10.1111/1748-8583.12148

Ahimbisibwe, G. M., Ngoma, M., Nabatanzi-Muyimba, A. K., & Kabagambe, L. B. (2023). Entrepreneurial mindset and SME internationalization in Uganda: the mediating role of international networking. *Review of International Business and Strategy*, *33*(4), 669-690.

Ahimbisibwe, G. M., Ntayi, J. M., Ngoma, M., Bakunda, G., Munene, J. C., & Esemu, T. (2021). Entrepreneurial mindset: Examining the contribution of deliberative and implemental mindsets to SME internationalization. *Journal of Small Business Strategy*, *31*(3), 47-58.

Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.

Alvarez-Torres, F. J., Lopez-Torres, G. C., & Schiuma, G. (2019). Linking entrepreneurial orientation to SMEs' performance: Implications for entrepreneurship universities. *Management Decision, 57*(12), 3364-3386.

Alwin, D. F. (2007). *Margins of error: A study of reliability in survey measurement*. Wiley.

Amir, R. M., Burhanuddin, B., & Priatna, W. B. (2018). The effect of individual, environmental and entrepreneurial behavior factors on business performance of cassava SMEs agroindustry in Padang City. *Indonesian Journal of Business and Entrepreneurship (IJBE)*, *4*(1), 1-1.

Anderson, B., & Eshima, Y. (2013). The influence of firm age and intangible resources on the relationship between entrepreneurial orientation and firm growth among Japanese SMEs. *Journal of Business Venturing, 28*(3), 413–429. https://doi.org/10.1016/j.jbusvent.2011.10.001

Anderson, B., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualizing entrepreneurial orientation. *Strategic Management Journal*, *36*(10), 1579–1596. https://doi.org/10.1002/smj.2298

Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management, 40*(5), 1297–1333. https://doi.org/10.1177/0149206314527128

Andrade-Valbuena, N. A., Merigo-Lindahl, J. M., & Olavarrieta, S., S (2019). Bibliometric analysis of entrepreneurial orientation. *World Journal of Entrepreneurship Management and Sustainable Development, 15*(1), 45–69. https://doi.org/10.1108/WJEMSD-08-2017-0048

Ang, R., Z. Shao, C. Liu, C. H. Yang, and Q. R. Zheng. 2022. "The Relationship Between CSR and Financial Performance and the Moderating Effect of Ownership Structure: Evidence From Chinese Heavily Polluting Listed Enterprises." *Sustainable Production and Consumption* **30**: 117–129.

Anwar, I., Jamal, M., Saleem, I., & Thoudam, P. (2021). Traits and entrepreneurial intention: Testing the mediating role of entrepreneurial attitude and self-efficacy. *Journal for International Business and Entrepreneurship Development, 13*(1), 40–60.

Arefin, M. S., Arif, I., & Raquib, M. (2015). High-performance Work systems and proactive behavior: The mediating role of psychological empowerment. *International Journal of Business and Management, 10*(3), p132. https://doi.org/10.5539/ijbm.v10n3p132

Atiase, V., Wang, Y., & Mahmood, S. (2023). Does managerial training increase SME managers' effectiveness? A capability development approach. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-05-2022-0405

Audretsch, D. B., & Keilbach, M. (2004). Entrepreneurship and regional growth: An evolutionary interpretation. *Journal of Evolutionary Economics*, 14(5), 605–616.

Axtell, C. M., Holman, D. J., Unsworth, K. L., Wall, T. D., Waterson, P. E., & Harrington, E. (2000). Shopfloor innovation: Facilitating the suggestion and implementation of ideas. *Journal of Occupational and Organizational Psychology, 73*(3), 265–285. https://doi.org/10.1348/096317900167029

Barney, & Wright, P. M. (1998). On becmoming a strategic partner: The role of human resources in gaining competitive advantage. *Human Resource Management*, *37*(1), 31. https://doi.org/10.1002/(SICI)1099-050X(199821)37:1%3C;31::AID-HRM4%3E;3.0.CO;2-W

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120. https://doi.org/10.1177/014920639101700108

Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management, 27*(6), 643–650.

Barney, J. B., Ketchen, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. *Journal of Management*, *47*(7), 1936–1955. https://doi.org/10.1177/01492063211021655

Basco, R., Hernández-Perlines, F., & Rodríguez-García, M. (2020). The effect of entrepreneurial orientation on firm performance: A multigroup analysis comparing China, Mexico, and Spain. *Journal of Business Research, 113*, 409–421. https://doi.org/10.1016/j.jbusres.2019.09.020

Bendig, D., Brüss, L., & Degen, F. (2025). Entrepreneurship in the renewable energy sector: A systematic literature review of types, characteristics, and sustainability impacts. *Renewable and Sustainable Energy Reviews*, *212*, 115337.

Bianchi, C., Glavas, C., & Mathews, S. (2017). SME international performance in Latin America: The role of entrepreneurial and technological capabilities. *Journal of Small Business and Enterprise Development*, *24*(1), 176–195. https://doi.org/10.1108/JSBED-09-2016-0142

Block, J. H., Fisch, C. O., & van Praag, M. (2017). The Schumpeterian entrepreneur: A review of the empirical evidence on the antecedents, behavior and consequences of innovative entrepreneurship. *Industry and Innovation*, 24(1), 61–95.

Boxall, P., & Macky, K. (2009). Research and theory on high-performance work systems: Progressing the high-involvement stream. *Human Resource Management Journal*, *19*(1), 3–23. https://doi.org/10.1111/j.1748-8583.2008.00082.x

Cao, M., Zhao, S., & Xu, Y. (2022). How HR systems are implemented matters: High-performance work systems and employees' thriving at work. *Asia Pacific Journal of Human Resources*, *60*(4), 880–899. https://doi.org/10.1111/1744-7941.12307

Casillas, J. C., Moreno, A. M., & Barbero, J. L. (2010). A configurational approach of the relationship between entrepreneurial orientation and growth of family firms. *Family Business Review*, *23*(1), 27–44. https://doi.org/10.1177/0894486509345159

Castro-Lopez, A., Entrialgo, M., Liao, C. T., & Santos-Vijande, M. L. (2025). Towards circular economy through innovation: The role of entrepreneurial orientation and human resource management. *International Entrepreneurship and Management Journal*, *21*(1), 36. https://doi.org/10.1007/s11365-024-01032-x

Changalima, I. A., Ismail, I. J., & Amani, D. (2025). Driving SME performance through technological absorptive capacity and e-business innovation. *Sustainable Technology and Entrepreneurship*, *4*(1), 100089.

Chattopadhyay, P., Glick, W. H., & Huber, G. P. (2001). Organizational actions in response to threats and opportunities. *Academy of Management Journal*, *44*(5), 837–955.

Chaudhuri, A., Subramanian, N., & Dora, M. (2022). Circular economy and digital capabilities of SMEs for providing value to customers: Combined resource-based view and ambidexterity perspective. *Journal of Business Research*, *142*, 32–44. https://doi.org/10.1016/j.jbusres.2021.12.039

Clark, D. R., Pidduck, R. J., Lumpkin, G. T., & Covin, J. G. (2024). Is it okay to Study Entrepreneurial Orientation (EO) at the individual level? Yes! *Entrepreneurship Theory and Practice*, *48*(1), 349–391. https://doi.org/10.1177/10422587231178885

Cohen, P., West, S. G., & Aiken, L. S. (2014). *Applied multiple regression/correlation analysis for the behavioral sciences*. Psychology.

Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much Do High-Performance Work practices Matter? A Meta-analysis of their effects on Organizational Performance. *Personnel Psychology*, *59*(3), 501–528. https://doi.org/10.1111/j.1744-6570.2006.00045.x

Covin, J. G., & Slevin, D. P. (1989). Strategic Management of small firms in hostile and benign environments. *Strategic Management Journal*, *10*(1), 75–87.

Covin, J. G., & Wales, W. J. (2012). The measurement of Entrepreneurial Orientation. *Entrepreneurship Theory and Practice*, *36*(4), 677–702. https://doi.org/10.1111/j.1540-6520.2010.00432.x

Crick, J. M., Crick, D., & Ferrigno, G. (2023). Coopetition and the marketing/entrepreneurship interface in an international arena. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-01-2022-0099

Cubin, L. D. (2019). Managerial capabilities, psychological empowerment, entrepreneurial intention and business performance of informal sector: A structural equation model. *Review of Behavioral Aspect in Organizations and Society*, *1*(2), 179-188.

Daspit, J. J., Fox, C. J., & Findley, S. K. (2023). Entrepreneurial mindset: An integrated definition, a review of current insights, and directions for future research. *Journal of Small Business Management*, *61*(1), 12-44.

Datta, D. K., Guthrie, J. P., & Wright, P. M. (2005). Human Resource Management and Labor Productivity: Does Industry Matter? *The Academy of Management Journal*, *48*(1), 135–145. https://doi.org/10.2307/20159645

de Villiers Scheepers, M. J., Verreynne, M. L., & Meyer, D. (2014). Entrepreneurial configurations of small firms. *International Journal of Entrepreneurial Behavior & Research*, *20*(6), 562–583. https://doi.org/10.1108/IJEBR-09-2013-0135

Dess, G. G., Lumpkin, G. T., & Covin, J. G. (1997). Entrepreneurial strategy making and firm performance: Tests of contingency and configurational models. *Strategic Management Journal*, *18*(9), 677–695.

Dimitratos, P., Lioukas, S., & Carter, S. (2004). The relationship between entrepreneurship and international performance: The importance of domestic environment. *International Business Review*, *13*(1), 19–41.

Dong Liu, Y., Gong, J., & Jia-Chi Huang. (2017). Human Resource Systems, Employee Creativity, and Firm Innovation: The moderating role of firm ownership. *Academy of Management Journal*, *60*(3), 1164–1188. https://doi.org/10.5465/amj.2015.0230

Doty, D. H., Glick, W. H., & Huber, G. P. (1993). Fit, Equifinality, and Organizational Effectiveness: A test of two configurational theories. *Academy of Management Journal*, *36*(6), 56.

Du, Y., & Kim, P. H. (2021). One size does not fit all: Strategy configurations, complex environments, and new venture performance in emerging economies. *Journal of Business Research*, *124*, 272–285. https://doi.org/10.1016/j.jbusres.2020.11.059

Ebdane, T. M. L., & Samar, N. (2019). Entrepreneurial intention towards sustainable growth: the case of tourism MSMEs. *DLSU Business & Economics Review*, *28*(3), 11-20.

Echambadi, R., & Hess, J. D. (2007). Mean-centering does not alleviate collinearity problems in moderated multiple regression models. *Marketing Science*, *26*(3), 438–445. https://doi.org/10.1287/mksc.1060.0263

Elsa, D., Indrawati, H., & Caska, C. (2025). Digital transformation in SMEs: global maps and trends of research. Strategy & Leadership.

Evans, W. R., & Davis, W. D. (2005). High-performance Work systems and Organizational Performance: The Mediating Role of Internal Social structure. *Journal of Management*, *31*(5), 758–775. https://doi.org/10.1177/0149206305279370

Farery, K., & Nyang'au, S. (2021). Entrepreneurial mindset and performance of women-owned micro and small enterprises in Kisii County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME), 4*(2).

Farrukh, M., Ansari, N. Y., Raza, A., Meng, F., & Wang, H. (2022). High-performance work practices do much, but H.E.R.O does more: An empirical investigation of employees' innovative behavior from the hospitality industry. *European Journal of Innovation Management, 25*(3), 791–812. https://doi.org/10.1108/EJIM-11-2020-0448

Festus, G. B. (2024). Finance and Micro, Small and Medium Scale Enterprises (MSMEs) in Nigeria. Nigerian Journal of Accounting and Finance, 16(1).

Frank, H., Güttel, W., & Kessler, A. (2017). Environmental dynamism, hostility, and dynamic capabilities in medium-sized enterprises. *The International Journal of Entrepreneurship and Innovation, 18*(3), 185–194. https://doi.org/10.1177/1465750317723219

Fritsch, M., & Mueller, P. (2004). Effects of new business formation on regional development over time. *Regional Studies*, 38(8), 961–975.

Fu, N., Bosak, J., Flood, P. C., & Ma, Q. (2019). Chinese and Irish professional service firms compared: Linking HPWS, organizational coordination, and firm performance. *Journal of Business Research, 95*, 266–276. https://doi.org/10.1016/j.jbusres.2018.08.021

Fubah, C. N. et al. (2025). *Journal of Small Business and Enterprise Development*. emerald.com

Fulmer, I. S., Barry, B., & Long, D. A. (2009). Lying and smiling: Informational and emotional deception in negotiation. *Journal of Business Ethics, 88*(4), 691–709.

George, G., Wood, R., D., & Khan, R. (2001). Networking strategy of boards: Implications for small and medium-sized enterprises. *Entrepreneurship & Regional Development, 13*(3), 269–285. https://doi.org/10.1080/08985620110058115

Gindling, T. H., & Newhouse, D. (2014). Self-employment in the developing world. *World Development*, 56, 313–331.

Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal, 27*(1), 25–41.

Hair, J. F., Anderson, R. E., Tatham, R. L., & William, C. (1998). Black (1998), Multivariate data analysis.

Han, J., Han, J., & Brass, D. J. (2014). Human capital diversity in the creation of social capital for team creativity: Human capital, social capital, and team creativity. *Journal of Organizational Behavior, 35*(1), 54–71. https://doi.org/10.1002/job.1853

Harman, H. H. (1976). *Modern factor analysis, 3rd rev. ed.* (pp. xx, 487). Oxford, England: U Chicago Press.

Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). *Direct and moderating effects of Human Capital on Strategy and Performance in Professional Service firms* (p. 17). A Resource-Based Perspective.

Hodgkinson, I. R., Hughes, P., Leite, H., & Lee, Y. (2023). Entrepreneurial orientation, proactive market orientation and society: Evidence from public service organizations in Brazil. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-04-2022-0337

Hosseini, M., Dadfar, H., & Brege, S. (2018). Firm-level entrepreneurship and international performance: A simultaneous examination of orientation and action. *Journal of International Entrepreneurship, 16*(3), 338–368. https://doi.org/10.1007/s10843-018-0235-6

Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal, 38*(3), 635–672.

Imanuella, S. F., Idris, A., & Kamaruddin, N. (2025). Social entrepreneurship and rural development in post-independence Indonesia. *Social Enterprise Journal, 21*(1), 46-66.

Isaac, S. K., Moses, C., Taiye, B., Chikodi, M., Agarana, F. E., Moyosoluwa, D. D., & Nifemi, O. (2023). Minimizing smes problems in nigeria for economy sustainability using quantitative technique. International Journal of Economic, Finance and Business Statistics (IJEFBS), 1(1), 69-80.

Ismail, A. R., & Mohamad, B. (2022). Determinants of SMEs' performance: Amalgamation of entrepreneurial, market and brand orientations. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-02-2022-0167

Jemal, S. (2020). Effect of entrepreneurial mindset and entrepreneurial competence on performance of small and medium enterprise, evidence from literature review. *International Journal of Management & Entrepreneurship Research, 2*(7), 476-491.

Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal, 55*(6), 1264–1294. https://doi.org/10.5465/amj.2011.0088

Kam, C., Hue, M., Cheung, H., & Risavy, S. (2020). Factor structure of the attitudes toward cheating scale: An exploratory structural equation modeling analysis. *Current Psychology, 39*(5), 1843–1852. https://doi.org/10.1007/s12144-018-9887-6

Karadag, H., Sahin, F., & Bulut, C. (2023). When does intellectual capital enhance innovation capability? A three-way interaction test. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-12-2021-0976

Karimi, N. J., Ngina, K. T., & David, M. G. (2023). Entrepreneurial Mindset, Lean-Green practices and firm performance among medium hotels in Kenyan cities. *International Journal of Research in Business and Social Science (2147-4478), 12*(8), 74-82.

Ketchen, D. J., Combs, J. G., Russell, C. J., & Runge, J. (1997). Organizational configurations and performance: A Meta-analysis. *Academy of Management Journal, 40*(1), 19.

Khan, H., Mavondo, F., & Zahoor, N. (2022). Integration of outside-in and inside-out entrepreneurial marketing capabilities, marketing agility and resources for entrepreneurial firm performance. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-02-2022-0193

Khandwalla, P. N. (1976). Some top management styles, their context and performance. *Organization and Administrative Sciences, 7*(4), 21–51.

Khandwalla, P. N. (1977). *The design of organizations*.

Kollmann, T., & Stöckmann, C. (2014). Filling the entrepreneurial orientation–performance gap: The mediating effects of exploratory and exploitative innovations. *Entrepreneurship Theory and Practice, 38*(5), 1001–1026.

Kraus, S., Rigtering, J. P. C., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: A quantitative study from the Netherlands. *Review of Managerial Science, 6*(2), 161–182. https://doi.org/10.1007/s11846-011-0062-9

Kreiser, P. M., Anderson, B. S., Kuratko, D. F., & Marino, L. D. (2020). Entrepreneurial orientation and environmental hostility: A threat rigidity perspective. *Entrepreneurship Theory and Practice, 44*(6), 1174–1198. https://doi.org/10.1177/1042258719891389

Lado, A. A., & Wilson, M. C. (1994). Human Resource Systems and sustained competitive advantage: A competency-based perspective. *The Academy of Management Review, 19*(4), 699–727. https://doi.org/10.2307/258742

Lee, Y., Zhuang, Y., Joo, M., & Bae, T. J. (2019). Revisiting Covin and Slevin (1989): Replication and extension of the relationship between entrepreneurial orientation and firm performance. *Journal of Business Venturing Insights, 12*, e00144.

Li, H., & Atuahene-Gima, K. (2001). Product innovation strategy and the performance of new technology ventures in China. *Academy of Management Journal, 13*, 1123–1134.

Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology, 86*, 114–121. https://doi.org/10.1037/0021-9010.86.1.114

Liu, Y., Xi, M., & Wales, W. J. (2024). CEO entrepreneurial orientation, human resource management systems, and employee innovative behavior: An attention-based view. *Strategic Entrepreneurship Journal, 18*(2), 388–413. https://doi.org/10.1002/sej.1488

Lu, Y., Zuo, P., Alves, J. C., & Wang, J. (2023). Unlocking the relationship between entrepreneurial orientation and international performance: A systematic review. *Journal of International Entrepreneurship, 21*(4), 464–504. https://doi.org/10.1007/s10843-023-00340-7

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135–172.

Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal, 13*(5), 363–380. https://doi.org/10.1002/smj.4250130505

Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal, 22*(5), 387–401. https://doi.org/10.1002/smj.158

Martins de Souza, A., Puglieri, F. N. & de Francisco, A. C. (2024). *Sustainability, 16*(17), 7665. tandfon

Matemane, R., Mintah, R., Şahin, F., & Karadağ, H. (2024). A configurational analysis of the impact of entrepreneurial orientation and global mindset on export performance of SMEs. *The International Journal of Entrepreneurship and Innovation*, 14657503241302308. https://doi.org/10.1177/14657503241302308

Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. S. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. *Journal of Applied Psychology, 96*(6), 1105.

Meyer, A. D., Tsui, A. S., & Hinings, C. R. (1993). Configurational approaches to Organizational Analysis. *Academy of Management Journal, 35*(6), 22.

Miles, M. P., Covin, J. G., & Heeley, M. B. (2000). The relationship between environmental dynamism and small firm structure, Strategy, and performance. *Journal of Marketing Theory and Practice, 8*(2), 63–78. https://doi.org/10.1080/10696679.2000.11501869

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science, 29*(7), 770–791.

Miller, D. (1987). The structural and environmental correlates of Business Strategy. *Strategic Management Journal, 8*(1), 55–76.

Miller, D. (1998). Relating Porter's business strategies to environment and structure: Analysis and performance implications. *Academy of Management Journal, 31*(2), 280–308.

Miller, D., & Friesen, P. H. (1982). Innovation in Conservative and Entrepreneurial firms: Two models of Strategic Momentum. *Strategic Management Journal, 3*(1), 1–25.

Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: The third link. *Strategic Management Journal, 4*(3), 221–235.

Minniti, M., & Naudé, W. (2010). What do we know about the patterns and determinants of female entrepreneurship across countries? *European Journal of Development Research*, 22(3), 277–293.

Molete, O. B., Mokhele, S. E., Ntombela, S. D., & Thango, B. A. (2025). The impact of IT strategic planning process on SME performance: A systematic review. *Businesses*, *5*(1), 2.

Nadler, D. A., & Tushman, M. L. (1980). A model for diagnosing Organizational Behavior. *Organizational Dynamics, 9*(2), 35–51. https://doi.org/10.1016/0090-2616(80)90039-X

Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. *Strategic Management Journal, 14*(2), 137–153. https://doi.org/10.1002/smj.4250140205

Naskar, S. T., Hota, P. K., & Gupta, V. (2025). The efficiency paradox: How high-performance work systems interact with entrepreneurial orientation in hostile environments to impact firm performance in US firms. *International Entrepreneurship and Management Journal, 21*(1), 1-39.

Naudé, W. (2010). Entrepreneurship, developing countries, and development economics: new approaches and insights. *Small Business Economics*, 34(1), 1–12.

Navarro-García, A., Schmidt, A. C. M., & Rey-Moreno, M. (2015). Antecedents and consequences of export entrepreneurship. *Journal of Business Research, 68*(7), 1532–1538. https://doi.org/10.1016/j.jbusres.2015.01.047

Nazir, J. & Das, P. K. (2025). *Journal of Innovation and Entrepreneurship, 14*, Article 49. researchgate.net+12innovation-entrepreneurship.springeropen.com+12arxiv.org+12

Newbert, S. L. (2007). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *Strategic Management Journal, 28*(2), 121–146. https://doi.org/10.1002/smj.573

Nielsen, S. L., Christensen, P. R., & Storvang, P. (2021). Does design thinking benefit ambidextrous dynamics between SME managers' entrepreneurial and administrative mindsets?. *The Design Journal*, *24*(5), 683-703.

Okwokwo, J. E., & Odita, A. O. (2025). Effect of Government Policies on the Performance of Small and Medium-Sized Enterprises in Delta State, Nigeria. International Journal of Management & Entrepreneurship Research, 7(3).

Oluwaseun, O., Olalekan, A., Grace, M., & Valerie, O. (2020). Entrepreneurial Mindset and Enterprise Success: The Role of Government Policy. *The International Journal of Business & Management*.

Omonona, B. T., Amadi, G., & Liverpool-Tasie, L. S. O. (2023). A Review of the 2021–2025 National policy on micro, small and medium scale enterprises (MSMEs) in Nigeria.

Ongbali, S. O., Omotehinse, S. A., Adams, C. O., Salawu, E. Y., & Afolalu, S. A. (2024). Analysis of the key factors for small and medium-sized enterprises growth using principal component analysis. Heliyon, 10(13).

Onwe, C. C., Ogbo, A., & Ameh, A. A. (2020). Entrepreneurial orientation and small firm performance: The moderating role of environmental hostility. *Entrepreneurial Business and Economics Review, 8*(4), 67–84. https://doi.org/10.15678/EBER.2020.080404

Panigrahi, R. R., Shrivastava, A. K., & Nudurupati, S. S. (2024). Impact of inventory management on SME performance: a systematic review. *International Journal of Productivity and Performance Management*, *73*(9), 2901-2925.

Patel, P. C., & Conklin, B. (2012). Perceived labor productivity in small firms—the effects of high–performance work systems and group culture through employee retention. *Entrepreneurship Theory and Practice, 36*(2), 205–235.

Penrose, E. T. (1959). *The theory of the growth of the firm*.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, *12*(4), 531–544.

Portalanza-Chavarría, A., & Revuelto-Taboada, L. (2023). Driving intrapreneurial behavior through high-performance work systems. *International Entrepreneurship and Management Journal, 19*(2), 897–921. https://doi.org/10.1007/s11365-023-00848-3

Prameka, A. S., & Kurniawan, D. T. (2023). The Effect of Entrepreneurial Passion and Entrepreneur Managerial Competencies on Digital Entrepreneurial Intention with Entrepreneur Training as Moderation in Generation Z. In *Proceedings of the BISTIC Business Innovation Sustainability and Technology International Conference (BISTIC 2023)* (Vol. 267, p. 264). Springer Nature.

Ramadan J., Alzubi A. & Khadem A. (2024). *Sustainability, 16*(18), 8035. tandfonline.com+1en.wikipedia.org+1mdpi.com+1researchgate.net+1

Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An Assessment of past Research and suggestions for the future. *Entrepreneurship Theory and Practice*, *33*(3), 761–787. https://doi.org/10.1111/j.1540-6520.2009.00308.x

Ripollés, M., & Blesa, A. (2022). International new ventures' international performance: A matter of network entrepreneurial orientation and network management activities. *Management Research Review*, *45*(1), 65–85. https://doi.org/10.1108/MRR-07-2020-0454

Romanello, R., Florean, J., Miani, S. & Dvouletý, O. (2024). *Entrepreneurship & Regional Development, 37*(3–4), 567–592. tandfonline.com

Rosenbusch, N., Rauch, A., & Bausch, A. (2013). The Mediating Role of Entrepreneurial Orientation in the Task Environment–Performance relationship: A Meta-analysis. *Journal of Management, 39*(3), 633–659. https://doi.org/10.1177/0149206311425612

Saebi, T., Lien, L., & Foss, N. J. (2017). What Drives Business Model Adaptation? The Impact of opportunities, threats and Strategic Orientation. *Long Range Planning*, *50*(5), 567–581. https://doi.org/10.1016/j.lrp.2016.06.006

Saeed, S., Yousafzai, S. Y., & Engelen, A. (2014). On Cultural and macroeconomic contingencies of the entrepreneurial orientation-performance relationship. *Entrepreneurship Theory and Practice, 38*(2), 255–290. https://doi.org/10.1111/etap.12097

Scartozzi, G., Delladio, S. & Rosati, F. et al. (2025). *Review of Managerial Science*. link.springer.com+1innovation-entrepreneurship.springeropen.com+1

Semrau, T., Ambos, T., & Sascha Kraus. (2016). Entrepreneurial orientation and SME performance across societal cultures: An international study. *Journal of Business Research, 69*(5), 1928–1932. https://doi.org/10.1016/j.jbusres.2015.10.082

Sharma, R. K. (2024). *Journal of Commerce, Management, and Tourism Studies, 3*(3), 209–220. ympn.co.id

Stam, W., & Elfring, T. (2008). Entrepreneurial orientation and new Venture performance: The moderating role of intra- and Extraindustry Social Capital. *Academy of Management Journal, 51*(1), 97–111. https://doi.org/10.5465/amj.2008.30744031

Stock, D. M., & Erpf, P. (2023). Systematic literature review on entrepreneurial orientation in nonprofit organizations– far more than business-like behavior. *Journal of Philanthropy and Marketing, 28*(4), e1753. https://doi.org/10.1002/nvsm.1753

Strobl, A., Bauer, F., & Matzler, K. (2020). The impact of industry-wide and target market environmental hostility on entrepreneurial leadership in mergers and acquisitions. *Journal of World Business, 55*(2), 100931. https://doi.org/10.1016/j.jwb.2018.03.002

Suheryanto, F. A., & Ie, M. (2023). The Effect of Entrepreneurial Self-Efficacy, Entrepreneurial Attitudes and the Use of Social Media on SMEs Performance. *International Journal of Application on Economics and Business, 1*(2), 401-409.

Sun, L. Y., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal, 50*(3), 558–577.

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics* (Vol. 6). pearson Boston, MA.

Tan, J., & Tan, D. (2005). Environment–strategy co-evolution and co-alignment: A staged model of Chinese SOEs under transition. *Strategic Management Journal, 26*(2), 141–157. https://doi.org/10.1002/smj.437

Tang, Z., & Hull, C. (2012). An investigation of Entrepreneurial Orientation, Perceived Environmental Hostility, and Strategy Application among Chinese SMEs. *Journal of Small Business Management, 50*(1), 132–158. https://doi.org/10.1111/j.1540-627X.2011.00347.x

Teece, D. J. (2014). The foundations of Enterprise Performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives, 28*(4), 328–352. https://doi.org/10.5465/amp.2013.0116

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.

Vivian, M. O., & Ihinmoyan, T. (2022). Entrepreneurial mindset and performance of tailoring business in Owo, Ondo state. *Int. J. Adv. Multidiscip. Res, 9*(7), 24-36.

Wales, W. J., Covin, J. G., Schüler, J., & Baum, M. (2023). Entrepreneurial orientation as a theory of new value creation. *The Journal of Technology Transfer, 48*(5), 1752–1772. https://doi.org/10.1007/s10961-023-10021-1

Wales, W. J., Kraus, S., Filser, M., Stöckmann, C., & Covin, J. G. (2020). The status quo of research on entrepreneurial orientation: Conversational landmarks and theoretical scaffolding. *Journal of Business Research*, 0148296320307177. https://doi.org/10.1016/j.jbusres.2020.10.046

Wang, S., & Zhang, H. (2024). Digital capabilities and metaverse entrepreneurial performance: Role of entrepreneurial orientation. *Journal of Innovation & Knowledge, 9*(4), 100617. https://doi.org/10.1016/j.jik.2024.100617

Way, S. A. (2002). High performance work systems and intermediate indicators of firm performance within the US small business sector. *Journal of Management, 28*(6), 765–785.

Welsh, D. H. B., Kaciak, E., & Shamah, R. (2018). Determinants of women entrepreneurs' firm performance in a hostile environment. *Journal of Business Research, 88*, 481–491. https://doi.org/10.1016/j.jbusres.2017.12.015

Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), 27–56.

Wiklund, J., & Shepherd, D. (2003). Aspiring for, and achieving growth: The moderating role of resources and opportunities. *Journal of Management Studies, 40*(8), 1919–1941.

Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing, 20*(1), 71–91.

Wiklund, J., Patzelt, H., & Shepherd, D. A. (2009). Building an integrative model of small business growth. *Small Business Economics, 32*(4), 351–374. https://doi.org/10.1007/s11187-007-9084-8

Williams, C. C., & Youssef, Y. (2014). Is informal entrepreneurship an impediment to private sector development? A comparative study of the Middle East and North Africa. *International Journal of Entrepreneurship and Small Business*, 23(1-2), 140–159.

Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management, 27*(6), 701–721.

Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *The International Journal of Human Resource Management, 5*(2), 301–326. https://doi.org/10.1080/09585199400000020

Yousaf, U., Ali, S. A., Ahmed, M., Usman, B., & Sameer, I. (2021). From entrepreneurial education to entrepreneurial intention: a sequential mediation of self-efficacy and entrepreneurial attitude. *International Journal of Innovation Science, 13*(3), 364-380.

Zahra, S. A., & Bogner, W. C. (2000). Technology strategy and software new ventures' performance: Exploring the moderating effect of the competitive environment. *Journal of Business Venturing, 15*(2), 135–173.

Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of Business Venturing, 10*(1), 43–58.

Zhai, X., & Tian, X. (2022). Leverage point in high-performance work systems. *Journal of Management & Organization*, 1–16. https://doi.org/10.1017/jmo.2022.53

Zhou, Y., Fan, X., & Son, J. (2019). How and when matter: Exploring the interaction effects of high-performance work systems, employee participation, and human capital on organizational innovation. *Human Resource Management, 58*(3), 253–268. https://doi.org/10.1002/hrm.21950

Zou, N., & Storz, C. (2023). Why do some entrepreneurs thrive? A network content perspective. *Journal of Business Research, 161*, 113821. https://doi.org/10.1016/j.jbusres.2023.113821