
ENTREPRENEURIAL ORIENTATION AND PERFORMANCE OF SMES: THE MODERATING EFFECT OF ENTREPRENEURIAL ECOSYSTEM

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ABSTRACT

Research has shown that entrepreneurial orientation is important for organisational success. But literature has indicates that research on entrepreneurial orientation among small and medium-sized enterprises (SMEs) the Nigeria is scanty, and the few existing studies report conflicting result. Using Resource-Based View as a theoretical foundation, this research investigated the relationship between entrepreneurial orientation (EO) and performance of SMEs and the mediating role of entrepreneurial ecosystem (EE) on the relationship between EO and performance of SMEs. The study employed a survey research design, while its population consists 1,013 SMEs in Katsina State. 281 SMEs owner/mangers were purposively selected to participate in the study. Data analysis was conducted using PLS-SEM with the aid of Smart-PLS 3.2.8. The study found that EO (in terms of innovativeness, proactiveness, and risk-taking) has significant positive relationships with performance of SMEs in Katsina State. The results also indicates EE mediated the relationship between EO and performance of SMEs. This study rwcommends that business owners and managers should maintain commitment to fostering creativity and innovation and be proactive and taking well-considered risks.

Keywords: Entrepreneurial orientation, entrepreneurial ecosystem, SMEs performance, Nigeria

INTRODUCTION

Small and Medium-sized Enterprises (SMEs) are globally recognized as essential instruments for fostering economic growth, progress, and development. They also hold a significant position in various economies worldwide, propelling social and economic evolution, including the process of industrialization. It is well-established that they offer a vital platform for nurturing technical, technological, and entrepreneurial skills among key segments of the population. SMEs have thus been, and will continue to be of interest and subject of debate (Ibrahim & Mahmood, 2016; McKelvie & Wiklund, 2010), even as nations leverage SMEs to revive or strengthen their economies (Ateke & Oluigbo-Moses, 2023). Thus, persistent research endeavors are being made to better grasp how SME performance can be improved and advanced. These dedicated efforts are crucial, given that the SME sector is a key driver of economic growth (Ismail, 2018; Rogo et al., 2018; Shettima, 2019).

The Nigerian government has implemented various policies and established institutions over the years to promote SMEs, with notable initiatives like SMEDAN, NACRDB (now BOA), NERFUND, BOI, and NEXIM BANK. Additional policy-oriented organizations, such as SMEEIS and NEDEP, have been established to provide technical and financial support to SMEs. Despite these efforts, SMEs in Nigeria have struggled to significantly contribute to economic growth, job creation, and poverty alleviation. Their performance is marked by low market share, poor sales growth, and limited innovation due to the dynamic and challenging business environment, influenced by global fluctuations, technological changes, shifting consumer needs, and intense competition.

Recognizing the need for SMEs to navigate this turbulent environment, entrepreneurial orientation (EO) emerges as a critical concept affecting SME performance. Despite extensive research, the relationship between EO and SMEs' performance remains inconclusive, with conflicting findings in literature; as some studies suggest a positive association between EO and firm performance, while others indicate a negative link. One significant gap in existing studies is the lack of consideration for external environmental variables as explanatory factors.

Scholars have called for more comprehensive investigations into the role of ecosystems in understanding the impact of EO on firm performance. Thus, the entrepreneurial ecosystem (EE) emerges as a crucial external mechanism that could clarify the influence of EO on SME performance. Building on resource-based view (RBV) and dynamic capability theory (DCT), this study explored the mediating role of EE in the relationship between EO and performance of SMEs. The aim is to provide a more nuanced understanding of how external factors contribute to performance dynamics of SMEs in Nigeria.

LITERATURE REVIEW

Concept of SMEs Performance

There is no commonly agreed definition of a SMEs, instead two approaches to their definition exists. One is the quantitative approach, while the other is the qualitative approach (Berisha & Pula, 2015). Researchers and other interested parties examined the issue using a variety of specific criteria, including value added and asset value (Adebayo et al., 2013). The World Bank defines SMEs as any small firm with more than ten employees but fewer than 300 employees and total assets of more than \$10,000 but less than \$15,000,000. (Berisha & Pula, 2015).

Similarly, the African Development Bank defines SME as any small enterprise with fewer than 50 employees, while the Central Bank of Nigeria (CBN) defined SMEs according to their total asset value and staff count (Chendo, 2013). Nonetheless, the National Council of Industries (2009) defines SMEs as business enterprises having total cost of less than N200, 000,000, excluding land, and between 11 and 100 staff (Aremu, 2011). Additionally, SMEDAN (2017) defined small enterprises as those with 10 to 49 workers or annual revenue of N5 million to N50 million; while and Medium-sized firms are those with 50 to 199 workers or annual revenue of N50 million to N500 million.

SMEs performance is viewed as an important dependent variable by researchers in practically all fields of management (Richard et al., 2008), as it reflects firm's overall health (Obiwuru et al., 2011). Different authors approached the topic of firm performance from different angles, and as a result, there is no consensus on a single definition. According to Olabisi et al., (2013), a firm's performance is defined by its ability to provide acceptable outcomes and activities. According to Bature and Cheng (2017), firm performance is defined as the actual financial or non-financial results of a firm's in relation to its goals and objectives (Santos & Brito, 2012; Singh et al., 2016). SMEs performance in the view of (Kiyabo & Isaga, 2020, as cited in Ateke Godday, 2023) represent results of business activities of SMEs, including sales growth, employee satisfaction, profitability, and growth in assets and equity.

Concept of Entrepreneurial Orientation

EO has a foundation in strategy literature and has been used in strategic management to refer to approaches taken by businesses with entrepreneurial tendencies (Eggers et al., 2013). Numerous studies have been conducted on EO as an organizational approach (Fernández-Mesa & Alegre, 2015; Lomberg et al., 2017; Semrau et al., 2015). Additionally, it has been discovered as a motivator for organizations to engage in entrepreneurial activities, resulting in extensive research in the field of entrepreneurship studies (Covin & Wales, 2012; Gupta & Wales 2017).

Despite widespread agreement on the influence of EO on firm performance, there are still disagreements on the concept's definition and operationalization (Lyon et al., 2000). Additionally, authors maintain that previous conceptualizations implied that EO is a one-dimensional concept (e.g., Miller, 1983). However, Covin and Slevin (1989) viewed all three dimensions established by Miller (1983) as components of a unidimensional EO construct (i.e., innovation, risk-taking, and proactiveness). On the other hand, Lumpkin and Dess (1996) defined and operationalized EO as a multidimensional construct. Therefore in this study EO is conceptualized as having three

primary dimensions: innovativeness, proactiveness, and risk-taking, as introduced by Miller (1983) and developed by Covin and Slevin (1989).

Entrepreneurial Ecosystems

The concept of the entrepreneurial ecosystem is relatively recent and lacks universally accepted definition. According to Cavallo et al. (2019), it underscores how entrepreneurship is facilitated by a comprehensive array of resources and actors, all of which play pivotal roles in enabling entrepreneurial activities. This ecosystem facilitates effective collaboration among individuals, businesses, and society with the goal of creating wealth and prosperity. Stam and Van de Ven (2021) offer a definition of entrepreneurial ecosystem, emphasizing its role in effectively bringing together various stakeholders with diverse objectives and expectations. Mason and Brown (2014) define it as a network of interconnected entrepreneurial actors and processes that collectively shape local entrepreneurial environments, both formally and informally. These elements work together to connect, mediate, and govern performance within the local entrepreneurial ecosystem.

Brown and Mason (2017) stress the connection between entrepreneurial ecosystems and local economic development. They emphasize the importance of these ecosystems in fostering new businesses as they involve a blend of entrepreneurial actors and processes that interact formally and informally to influence the local environment. Neglecting the interplay of these elements and attempting to isolate entrepreneurship from its local context can lead to adverse outcomes, particularly in the absence of entrepreneurs (Hakala et al., 2020).

Scholars identify key pillars of entrepreneurial ecosystem. Wang et al. (2021) outline seven factors, including informal networks, formal networks, universities, government, professional and support services, capital services, and talent pools. Isenberg (2011) identifies six domains: policy, finance, culture, market, human capital, and support systems. Acs et al. (2018) include dimensions like market structure, infrastructure, research and development (R&D) system, financial sector, corporate sector, government, and education in the entrepreneurial ecosystem. Herein, we accommodate infrastructure support, financial support, government policy, institutional support and business networks as components of entrepreneurial ecosystem.

Infrastructure support

Infrastructure support, as described by Akinyele et al. (2016), encompasses the fundamental physical and organizational frameworks that play a pivotal role in enhancing the operations of a society or enterprise. This term holds significant importance in evaluating the development status of a country or region. Typically, it pertains to the technical structures that underpin a society, including but not limited to roads, bridges, water supply, sewage systems, electrical grids, telecommunications, and more, and can be described as "the tangible elements of interlinked systems that deliver essential goods and services required to enable, sustain, or enhance the living conditions of a society. Research on infrastructure encompasses various areas, such as education, transportation, water supply, power distribution, telecommunications, and healthcare facilities, as discussed by Orekan (2015) and Tomal (2021).

Financial support

Financial support involves the provision of funds to sustain the operations of an organization, as described by Xu et al. (2020). Typically, this monetary assistance is offered by various sources, including government entities, individuals, groups, or financial institutions. Financial support encompasses a range of financial instruments, including loans, guarantees, security, and other forms of monetary aid, whether real or potential, as elucidated by Xiang & Worthington (2017). In essence, it refers to the financial resources furnished to enable the initiation or realization of specific projects. This type of monetary assistance is extended by supporting entities to facilitate the establishment and growth of small businesses, as articulated by Cusmano (2018). Perevozova et al. (2019) characterize financial support services as comprising all accessible sources of finance tailored for small and medium-sized enterprises (SMEs). According to Erin et al. (2018), these services entail activities aimed at aiding organizations in overcoming challenges related to securing suitable funding, particularly during the phases of consolidation and expansion in their development.

Government policy

Government policy comprises regulations and principles intended to provide guidance for making decisions that ideally lead to favorable outcomes that enhance the community or a specific entity, as proposed by Setiawan et al. (2020). Eniola (2015) characterizes government policies as measures designed to shape the relationship between entrepreneurship and the economic advancement of SMEs, ultimately contributing to wealth creation and job generation. Government support agencies, as elucidated by Bouazza et al. (2015), are institutions dedicated to regulating and enhancing the conditions for SMEs and entrepreneurs, encompassing supportive, implementation, and funding policies set forth by the government. According to this definition, government policy, in the context of business practices, is aimed at promoting businesses by creating a conducive environment for organizations and entrepreneurs. It achieves this by enacting guidelines that oversee business activities, recognizing that business entities are the cornerstone of a nation's journey toward industrialization.

Institutional support

Institutional support can be defined as the assistance provided by official bodies, whether governmental or non-governmental, which may also include religious institutions, as outlined by Anugwom (2019). According to Zhang et al. (2017), institutional support represents a broad spectrum of assistance, encompassing policies, programs, financial backing, technical guidance, and various forms of support originating from government entities and their agencies, as well as non-governmental organizations.

Business network

A business network denotes an informal commercial alliance that has the capability to establish structures and processes, enabling collaborative decision-making and pooling the efforts of members for the purpose of developing and producing goods and services, as well as exchanging information and other resources, as described by Rasouli et al. (2019). Mohamad and Chin (2019) highlight that one of the advantages of networking is its ability to facilitate the creation of trusting relationships among businesses. Moreover, small and medium-sized enterprises (SMEs) benefit from personal connections in their networks, including interactions with suppliers, customers, friends, and family, for various beneficial purposes, as outlined by Chung et al. (2020). Regardless of whether networking serves social or business objectives, it can assist entrepreneurs in forming new venture teams, securing capital, recruitment, finding customers and distribution channels, accessing valuable advice and knowledge, and establishing international contacts, according to Elfring et al. (2021).

Entrepreneurial Orientation and SMEs Performance

Scholars have demonstrated the critical role EO plays in enhancing firm performance (Covin & Slevin 1988; Wiklund, & Shepherd, 2005). Covin and Wales (2019) assert that managers with a higher EO will contribute to improved organizational performance. Previous researchers have confirmed that businesses with solid EO have a greater chance of success than those with low EO (Ali et al., 2020; Ibrahim & Martins, 2020; Irawan et al., 2023; Issau et al., 2022; Susanto et al., 2021). Because of the multidimensional nature of EO, researchers can examine its effect on company performance using its individual dimensions. While some researchers discovered a positive correlation concerning EO-firm performance, others did not (Kreiser & Davis, 2010; Wiklund, & Shepherd 2005).

The first EO dimension is innovativeness. It means the readiness to invest in creation of profitable new products, services, and processes (Certo et al., 2009; Lumpkin, & Dess 1996). It has been argued that innovation is critical to the development of corporate success since it promotes sustainability and growth (Fowowe 2017) and can aid in firm success (Budiarto & Pramudiati, 2018). Numerous forms of inventive activities are connected to many aspects of performance. Financial and non-financial metrics can be used to determine the influence of innovativeness on corporate performance (Mashal 2018).

Proactiveness is the second aspect of EO. It is defined by Lumpkin and Dess (1996) as enterprises' timely responsiveness to market needs or wants, and their generation of market opportunities. Proactivity as an aspect of entrepreneurial orientation refers to an opportunity-seeking and forward-looking posture that entails spending resources in anticipation of future demand and trends and then capitalizing on these opportunities. Proactiveness enables SMEs to forecast future market needs and also to anticipate rival demands (Covin, & Slevin 1989).

Proactiveness, empirically, results in increased sales and staff growth, profitability, and product and customer performance (Baba & Elumalai, 2011). Researches on the influence of EO on firm performance found that proactiveness has a significant favorable effect on the SMEs business performance (Akbar et al., 2020; Badamasi et al., 2023; Cannavale & Nadali, 2019; Ibrahim & Abu, 2020; Unver 2016).

In this study, the third and last dimension of EO is risk taking. It is the business's willingness to chase chances with an uncertain outcome (Deakins & Freel, 2012). It requires behaving courageously in uncertain situations. Risk taking may also be defined as a company's management purposefully investing huge resources to initiatives in the expectation of significant returns, but it also entails higher chances of failure (Mahmoud & Hanafi, 2013). Previous studies (Badamasi et al., 2023; Haider et al., 2017; Lu & Zhang 2016; Olaniran et al., 2016; Wang & Yen, 2012) have proven that risk taking has an effect on firm performance.

Entrepreneurial Orientation, Entrepreneurial Ecosystems and SMEs Performance

Drawing from RBV and DCT, this study posits that entrepreneurial ecosystems act as an intermediary between entrepreneurial orientation and SMEs performance. In other words, the influence of entrepreneurial orientation on SMEs performance is partially channeled through entrepreneurial ecosystem. This means that entrepreneurial orientation affects the way SMEs interact with and benefit from their local entrepreneurial ecosystem. Strong entrepreneurial ecosystem provide SMEs with access to funding, networking opportunities, and a supportive environment for innovation. These resources and support systems enhance the impact of SME's entrepreneurial orientation on their overall performance (Guerrero & Espinoza-Benavides, 2021).

Although the examination of entrepreneurial ecosystem in SMEs within developing nations like Nigeria, has been relatively limited, recent initiatives are beginning to contribute insights on this topic. In terms of the connection between the political and legal aspects of the entrepreneurial ecosystem and SMEs performance, research findings exhibit variability (see Al-Abri et al., 2018; Ascarya & Rahmawati, 2018; Ben Hassan, 2020; Hutahayan, 2019; Lafuente et al., 2021; Lux et al., 2020)

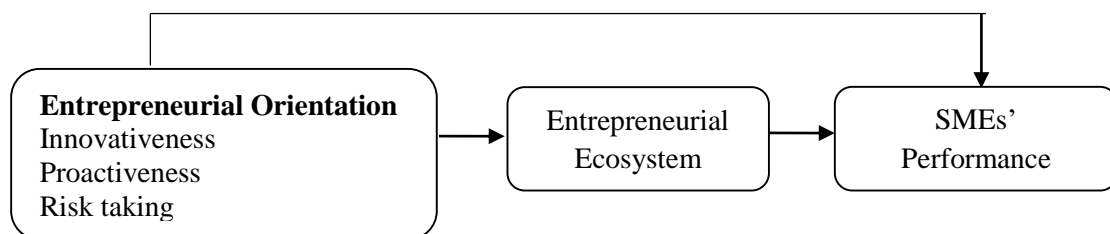
In theory, a robust entrepreneurial ecosystem is believed to enhance entrepreneurial orientation, consequently resulting in improved SME performance. Therefore, exploring the mediating impact of entrepreneurial ecosystems in the link between entrepreneurial orientation and SME performance represents a fresh perspective within the current body of literature. Therefore, based on the theoretical and empirical reviews, the study formulates the following hypotheses:

H₁: There is significant relationship between EO and SMEs performance

H₂: There is significant relationship between EO and EE performance

H₃: There is significant relationship between EE and SMEs performance

H₄: EE mediates the effect of EO dimensions on SMEs performance



The framework for this research is depicted in Fig. 1. The independent variable is EO, represented by innovativeness, risk taking, and proactiveness, while SMEs performance is the dependent variable. Entrepreneurial ecosystem is accommodated as a mediating variable.

METHODOLOGICAL APPROACH

This research employed a survey method that is both descriptive and inductive in its approach. The population of the study comprised 1,013 SMEs in Katsina Central Senatorial District, all of which are registered with the National Association of Small and Medium Enterprises (NASMEs). The study determined a sample size of 300 SMEs using research advisor (2006). The elements of the research were purposively selected to provide. Primary data was collected using structured questionnaire, which utilized a Rensis Likert scale format. A 5-point Likert scale was employed, ranging from '1 (strongly disagree)' to '5 (strongly agree)'.

EO was evaluated using the nine item scale developed by Miller (1983) and Covin and Slevin (1989). The Cronbach's alpha coefficient for the scale within this study was 0.81. Entrepreneurial Ecosystem was measured using the scale adopted from (Aspen Network of Development Entrepreneurs (ANDE, 2013) and (Pranowo et al., 2020) with slight modifications on some of the items. The Cronbach's alpha coefficient for this scale was .87.

To measure SMEs performance, the study adopted the scale developed by Matzler et al. (2008) and Tan et al., (2007). The Cronbach's alpha coefficient for this scale was .80. To ensure content validity, a pilot study was conducted on 30 managers working at various SMEs in Katsina state. Finally the study utilized structural equation modelling (SEM) to analyze the data collected and test the study hypotheses using Smart-PLS package.

RESULTS AND DISCUSSION

PLS-SEM Analysis

The research model in this study was analyzed using structural equation modeling (SEM) with the SmartPLS 3.2.8 software package developed by Ringle et al. (2015). SmartPLS is a second-generation statistical tool designed for effective analysis of smaller sample sizes and non-normally distributed data, (Qalati et al., 2022). The analysis was based on 281 copies of questionnaire that are considered valid. The analysis also followed a two-stage approach, consistent with the methodology outlined by Anderson and Gerbing (1988) and Hair et al. (2017). In the first stage, the measurement model was tested, encompassing assessments of indicator and internal consistency reliability, as well as convergent and discriminant validity, as recommended by Henseler et al. (2009) and Hair et al. (2014; 2017). In the second stage, a bootstrapping procedure was employed in PLS-SEM with 5,000 resamples. The primary objective of the bootstrapping was to derive path coefficients, including beta values, standard errors, t-values, p-values, and bootstrapped confidence intervals, in accordance with the method described by Qalati et al. (2022).

Table 1: Measurement model

Construct	Item	Loadings	CR	AVE
FP	FP1	0.768	0.863	0.559
	FP2	0.829		
	FP3	0.669		
	FP4	0.721		
INNO	INNO1	0.744	0.784	0.548
	INNO2	0.689		
	INNO3	0.786		
PROA	PROA1	0.761	0.839	0.636
	PROA2	0.856		
	PROA3	0.772		
RISK T	RISK T1	0.802	0.853	0.594
	RISK T2	0.845		
	RISK T3	0.662		
EE	EE1	0.820	0.831	0.711
	EE2	0.666		
	EE3	0.764		
	EE4	0.718		

Note: FP, firm performance; INNO, innovativeness; PROA, proactiveness; RISK T, risk taking; EE, entrepreneurial ecosystem.

Analysis of measurement model

This study employed the approach outlined by Hair et al. (2010) to evaluate the measurement model, conducting various tests including assessments of individual item reliability, internal consistency, content validity, convergent validity, and discriminant validity. During the initial stage, it was discovered that the factor loadings of EE5 fell below the designated threshold, leading to the removal of this particular indicator.

Individual item reliability

Guidelines from Duarte and Raposo (2009), Hair et al. (2014), and Hulland (1999) recommended retaining items with loadings between 0.40 and 0.70. The study assessed individual item reliability by examining the outer loadings of each measure (item) for each construct, as indicated by Hair et al. (2012, 2014). The outer loadings for the latent variables in this study all exceeded 0.60, except for EE5, which was eliminated. Consequently, the study met the criteria for individual item reliability, as shown in Table 1.

Internal consistency reliability

To assess internal consistency, Bagozzi and Yi (1988) and Hair et al. (2011) advised that the composite reliability coefficient (CR) should be 0.70 or higher. In Table 1, the CR coefficients for each latent variable ranged from 0.784 to 0.863. These values comfortably exceeded the specified threshold, confirming the internal consistency reliability of the measures, in accordance with the recommendations of Bagozzi and Yi (1988) and Hair et al. (2011).

Convergent validity

Convergent validity, according to Fornell and Larcker (1981), is determined by examining the values of the average variance extracted (AVE). Chin (1998) suggested that AVE scores should be at least 0.50 or higher to establish convergent validity for a given construct. The AVE scores presented in Table 1 demonstrated that all constructs in this study met or exceeded the minimum threshold of 0.50. Therefore, the study confirmed adequate convergent validity in line with Chin's (1998) guidelines.

Discriminant validity

The study assessed discriminant validity using the Heterotrait-Monotrait criterion (HTMT), which is recognized as a conservative approach for evaluating discriminant validity, as recommended by Henseler et al. (2015). Discriminant validity refers to the extent to which a construct is empirically distinct from other constructs, as defined by Hair et al. (2017). More recent advice from Hair et al. (2019) suggested that the HTMT value should not exceed 0.90, as values above this threshold indicate that constructs are conceptually identical. Table 2 revealed that all HTMT scores in this study were below 0.90, confirming the distinctiveness of the measured domains. Additionally, bootstrapping results indicated that HTMT values were significantly lower than 1, further confirming discriminant validity (Hair et al., 2017).

Table 2: Discriminant validity Heterotrait-Monotrait ratio (HTMT)

Constructs	FP	INNO	PROA	RISKT	EE
FP					
INNO	0.288				
PROA	0.454	0.735			
RISKT	0.759	0.362	0.443		
EE	0.497	0.587	0.650	0.504	

Note: FP= firm performance; INNO= innovativeness; PROA=proactiveness; RISKT=risk taking; EE=entrepreneurial ecosystem

Structural equation model

To assess the research model, this study conducted a bootstrapping procedure during the second stage of PLS-SEM, involving 5,000 resamples. The primary aim of employing bootstrapping was to acquire path coefficients, which encompassed beta values, standard errors, t-values, p-values, and bootstrapped confidence intervals, following the methodology described by Hair et al. (2017). The results of hypothesis testing, as presented in Table 3, demonstrate that all hypotheses were supported. The researchers examined the relationship between Entrepreneurial Orientation (Innovativeness, proactiveness and risk taking) and SMEs performance. The findings in Table 3 indicate a significant positive relationship ($\beta = 0.421$, $t = 5.033$, and $p < 0.000$).

Similarly, Hypothesis 2 sought to assess the relationship between entrepreneurial orientation (EO) and entrepreneurial ecosystem (EE). The results in Table 3 shown a significant positive relationship ($\beta = 0.517$, $t = 7.367$, and $p < 0.000$). Likewise, Hypothesis 3 aimed to measure the relationship between EE and SMEs performance. The results in Table 3 shown a significant positive relationship ($\beta = 0.280$, $t = 2.921$, and $p < 0.002$). The final hypothesis was formulated to measure the mediating role of EE in the relationship between EO and SMEs Performance, and the results indicate the existence of mediation ($\beta = 0.138$, $t = 2.977$, and $p < 0.002$). Therefore, all the four hypothesis of the study were accepted.

Table 3: Hypotheses testing

Hypotheses	Relationships	Beta	SE	t-value	P-values
H1	EO -> FP	0.420	0.083	5.032	0.000
H2	EO -> EE	0.517	0.069	7.367	0.000
H3	EE -> FP	0.280	0.092	2.921	0.002
H4	EO -> EE -> FP	0.138	0.047	2.977	0.002

The R-squared statistic measure the variance which is explained in each of the dependent variables, and also measures the model's explanatory power (Rigdon, 2012). The R^2 value ranges from 0 to 1 with the higher value of the R^2 shows that an explanatory power is great while a lower value of R^2 indicates low explanatory power. The benchmark of R^2 value of 0.75, 0.50, and 0.25 can be considered substantial, moderate and weak explanatory power (Hair et al., 2018). Similarly, the acceptable value of R^2 as low as 0.10 is considered satisfactory and also a higher R^2 indicates that the model over fits the data with a value of R^2 greater than 0.90 (Hair et al., 2018). In the context of this study, the R^2 values suggest that EO and EE collectively account for approximately 37% of the variance ($R^2 = 0.371$) in explaining SMEs performance.

Table 4: Coefficient of Determination: R-Squared

Construct	R Square
PF	0.371

Furthermore, to evaluate the criterion of predictive accuracy, Stone-Geisser's Q² value was utilized, as recommended by Anderson (2014). This Q² value played a crucial role in evaluating the predictive accuracy of the PLS Path model, in accordance with the insights provided by Hair et al. (2017). Assessing the predictive accuracy of the PLS path model using the Q² value serves as an additional measure of the model's adaptation within the context of PLS-SEM analysis. Consequently, Q² values exceeding 0, 0.25, and 0.50 typically signify a small, medium, and large degree of predictive relevance associated with the PLS path model, following the guidelines provided by Hair et al. (2022). Table 5 shows the study's Q² of 0.269 approx. 0.27 and this suggests that the study model successfully demonstrated predictive relevance.

Table 5: Predictive Relevance Performance: Q-Square

Constructs	SSO	SSE	Q ² (=1-SSE/SSO)
FP	2185	1596.048	0.269
EO	1311	1311	
EE	1008	1008	

This study applies the resource-based view to evaluate performance of SMEs. RBV asserts that a firm's capabilities are pivotal in driving better performance and creating a competitive advantage (Barney et al., 2011). In this context, the researchers concluded that EO as an internal resource of a firm and entrepreneurial ecosystem as external resource are drivers of SMEs performance. It's worth noting that innovativeness, proactiveness, and risk-taking are key dimensions of entrepreneurial orientation, as supported by various literature sources.

This study makes a significant contribution to the entrepreneurship and SME literature by examining the mediating role of entrepreneurial ecosystem within the context of SMEs in Katsina state. The research findings established a positive relationship between entrepreneurial orientation and SMEs performance in Katsina State, Nigeria. This means that SMEs exhibiting a higher level of EO, characterized by traits such as innovation, proactiveness, and risk-taking, tend to perform better in terms of growth, profitability, and overall success. These findings are consistent with the broader literature on entrepreneurship, which suggests that EO is a key driver of SMEs' performance (Anderson & Eshima, 2013; Agwu, 2018; Boso et al., 2013; Covin & Wales, 2019; Ibrahim & Martins, 2020; Irawan et al., 2023; Olubiyi et al., 2019 Rauch et al., 2009; Rose & Mamabolo, 2019; Wiklund & Shepherd, 2005).

Similarly, the result of the mediating analysis demonstrated the existence of mediation role of EE in the relationship between EO and performance of SMEs operating in Katsina State. This means that the influence of EO on SMEs performance is not direct but is channeled through the entrepreneurial ecosystem. The EE serves as the facilitator of the impact of EO on performance. Since entrepreneurial ecosystem in Nigeria is characterized by various stakeholders, including government agencies, investors, business networks and support organizations, these findings suggest that SMEs with a strong EO actively engage with these ecosystem actors to access resources, knowledge, funding, and support that are essential for their growth and performance. This result is supported by previous studies (Al-Abri et al., 2018; Ascarya & Rahmawati, 2018; Ben Hassen, 2020; Hutahayan, 2019; Lafuente et al., 2021; Lux et al., 2020).

Given the study findings, the researchers concluded that entrepreneurial orientation and ecosystem are important predictors of SMEs performance, and that entrepreneurial ecosystem plays a vital part in connecting and facilitating the development of entrepreneurial firms. It provides the necessary support, resources, and networking opportunities that enable SMEs to fully harness their entrepreneurial orientation. As such, the ecosystem helps SMEs translate their entrepreneurial behaviors and strategies into tangible performance improvements.

This study recommends that business owners and managers should maintain their commitment to fostering creativity and innovation by being proactive and taking well-considered risks. This approach can lead to the introduction of new products or services into the market, while taking advantage of government policies, institutional supports and business networks, this will enable the SMEs to gain a competitive edge and, consequently, improve their performance.

THEORETICAL CONTRIBUTION

This research aimed to provide a comprehensive understanding of how Entrepreneurial Orientation (EO), the Entrepreneurial Ecosystem (EE), and Resource-Based View theory (RBV) collectively influence the performance of Small and Medium Enterprises (SMEs) in Nigeria. This study bridges the gap between different theoretical frameworks by integrating the EO concept, the dynamic nature of the entrepreneurial ecosystem, and the RBV theory. It explores how these components work together to shape the competitive advantage and performance of SMEs in a specific context like Nigeria. This research also contributes by providing a context-specific framework for examining the interplay between EO, the entrepreneurial ecosystem, and RBV in a developing economy. Nigeria's unique socio-economic and regulatory environment offers a distinct backdrop for understanding how these elements affect SME performance.

PRACTICAL CONTRIBUTION

The results of this study hold significant practical relevance for SME policymakers, professionals, and those with vested interests. From the perspective of SME managers and owners, the findings unravel the intricate connections among various elements that have the potential to contribute to the nation's GDP through the performance of SMEs. These elements encompass the influence of government policies on the strategic choices made by SMEs, the crucial role of financial accessibility in enhancing the effectiveness of SME operations, and the broader implications of networks among SME owners and operators.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This research introduced a unique framework that incorporates entrepreneurial ecosystem as an external organizational asset that confers a competitive advantage to Small and Medium-sized Enterprises (SMEs) in Katsina state, Northwestern Nigeria. Nevertheless, there exist several limitations within this study that should be tackled in future research endeavors. First, the study focuses on SMEs in Katsina state, Northwestern Nigeria, and the results may not necessarily apply to SMEs in different countries or regions. Future research could replicate the study in other contexts to validate the findings.

Similarly, the study used sample of 281 and is considered as smaller in size and therefore the findings cannot be generalizable, hence future studies can improve on this by employing larger sample size. Second, the study used cross-sectional data, which provides a snapshot of a specific point in time. Longitudinal or time-series data would provide a more robust understanding of the dynamic relationship between EO, the entrepreneurial ecosystem, and SME performance. Finally, while the study found a mediating role of the entrepreneurial ecosystem, it might not capture all relevant variables that mediate this relationship. Future research could explore additional mediators or moderators that might influence the EO-SME performance relationship.

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