

**EFFECT OF ENTREPRENEURSHIP COMPETENCIES ON PERFORMANCE OF SELECTED
SMEs IN NASARAWA STATE, NIGERIA**

Umar Hannatu

**Department of Business Administration
Federal university of Lafia, Nasarawa State
hanbash2012@gmail.com**

and

Iorpuu Timothy

**Department of Entrepreneurship and Innovation
Phoenix University Agwada, Nasarawa State.
timothy.iorpuu@phoenixuniversity.edu.ng**

DOI: <https://doi.org/10.7118/ajbam-04-2024-68>

ABSTRACT

Entrepreneurship and small and medium-sized enterprises (SMEs) are crucial for driving economic transformation and development in Nigeria. However, SMEs consistently fall short of expectations, struggling to achieve their potential impact on the economy. This study investigated the effect of entrepreneurial competencies on the business performance of SMEs in Nasarawa State, Nigeria, using a sample of 347 SMEs and a structured 5-point Likert scale questionnaire for data collection, analyzed with Smart PLS-SEM. The study identifies personal competency, technical competency and managerial competency as significant drivers influencing business performance. While proactive competency does not show a significant effect, the study advocated for a proactive business strategy, urging SMEs to stay attuned to market dynamics and engage in scenario planning. The study recommended that tailored interventions for SME owners to enhance personal competencies, emphasizes the importance of leadership development and strategic planning for managerial competency, and stresses the continuous development of technical skills to ensure SMEs' competitiveness in the dynamic business landscape of Nasarawa State, Nigeria.

Keywords: Entrepreneurship Competencies, Personal Competency, Managerial Competency, Proactive Competency, Technical Competency, SMEs Performance.

INTRODUCTION

Globally, entrepreneurship and small and medium-sized enterprises (SMEs) are essential for economic transformation and development, significantly reducing unemployment and poverty

rates while increasing government revenue and domestic income (Calza & Goedhuys, 2016; McCann & Ortega-Argilés, 2016). SMEs are also known for driving innovation, thus acting as catalysts for economic growth (Taiwo et al., 2016; Imeokparia & Edigbonya, 2014). By creating

employment opportunities, fostering technological advancements, and supporting entrepreneurial endeavors, SMEs contribute to inclusive and balanced economic progress, forming the foundation of private sector activities.

The 21st century has brought global economic integration and accompanying challenges, necessitating a shift towards entrepreneurial leadership in the business environment (Mishra & Mishra, 2017). SME owners and leaders must stay informed about global business changes and establish a clear vision supported by entrepreneurial actions to survive and succeed. Leaders must understand their capabilities, competencies, and leadership styles, being proactive, creative, and willing to take risks to achieve growth and create competitive advantage (Palalic, 2017). The contribution of SMEs to economic growth is crucial, providing training environments, enhancing productivity, and aiding economic diversification.

In contemporary times, SMEs face intense competitive pressure and must enhance their competitive abilities to ensure long-term development (Yang, 2018). Entrepreneurial leadership is crucial for restructuring organizations

to capitalize on new opportunities and improve competence, enabling them to compete in unpredictable environments (Huang et al., 2014). Emerging economies like Nigeria are expected to transform into industrial societies where entrepreneurial competencies and orientation are core elements of company success (Sawaeen & Ali, 2020). Empowering employees to realize the organization's vision is key to achieving goals, requiring leaders to exhibit entrepreneurial leadership styles (Kautsar et al., 2018).

The subject of entrepreneurial competency is gaining global popularity as organizations recognize that leadership potential is critical to success (Sandybayev, 2019). In Nigeria, weak leadership potential hinders firm growth and efficiency, with many SMEs struggling despite government support (SMEDAN, 2021). These businesses face challenges such as fundamental strategy changes, new product development, and finding talented employees with entrepreneurial competencies (Putsom et al., 2019). Entrepreneurial competency, encompassing personal, managerial, proactive, and technical dimensions, enables individuals to identify and exploit opportunities for innovation and value creation in business (Scarborough, 2018).

SMEs are widely recognized as crucial drivers of economic growth and poverty alleviation in both developed and developing countries, including Nigeria, where they provide significant job opportunities and contribute substantially to the economy (Shehu et al., 2013). Despite government support and policies aimed at enhancing SME capacity, many fail to sustain operations beyond five years, reflecting challenges such as low performance and difficulty in scaling up (Adebisi & Gbegi, 2013; SMEDAN, 2021). In Nigeria, SMEs contribute about 50% to the GDP, yet this falls short compared to contributions in other regions like Asia and the USA (NBS, 2022). Research on entrepreneurial leadership competencies highlights dimensions such as personal, managerial, proactive, and technical competencies, emphasizing their role on SME performance (Quaye & Mensa, 2019; Putsom et al., 2019). This study in Nasarawa State examines these competencies to understand their influence on SME business performance, aiming to address the challenges faced by SMEs in Nigeria's economic landscape.

The study is guided on the following stated null hypotheses:

H₀₁: Personal competency has no significant effect on business performance of selected SMEs in Nasarawa State.

H₀₂: Managerial competency has no significant effect on business performance of selected SMEs in Nasarawa State.

H₀₃: Proactive competency has no significant effect on business performance of selected SMEs in Nasarawa State.

H₀₄: Technological competency has no significant effect on business performance of selected SMEs in Nasarawa State.

LITERATURE REVIEW

Entrepreneurship Competency

Entrepreneurship competency is a multifaceted concept crucial for navigating the dynamic and

competitive business environment. It encompasses a blend of qualities, competencies, and behaviors that enable individuals not only to identify and seize business opportunities but also to inspire and guide others towards achieving shared entrepreneurial goals (Scarborough, 2018). Khan et al. (2019) underscore creativity, resourcefulness, and the capability to mobilize resources as integral to entrepreneurial competency, emphasizing its role in sustaining new ventures. Lei (2023) further elaborates, defining entrepreneurial competency as the ability to recognize market opportunities and strategically position ventures for long-term success in a rapidly evolving business landscape. Bayon et al. (2015) highlight proactive risk management as central to entrepreneurial competency, while Fisher et al. (2020) emphasize strategic planning, leadership, and effective stakeholder management as critical components essential for establishing and maintaining successful ventures. Together, these perspectives underscore the dynamic nature and critical importance of entrepreneurial competency in fostering innovation and sustainable business growth.

Personal competence

Personal competencies refer to a broad range of personality characteristics encompassing skills, behavior patterns, and values crucial for managerial roles and other professions, facilitating creative problem-solving and social interactions (Ng'aru et al., 2018). These competencies emphasize interaction over control, enabling leaders to envision successful futures, formulate innovative visions, and identify opportunities to enhance organizational performance (Sawaeen & Ali, 2020). Northouse (2018) views personal competency as a multifaceted construct involving the emotional and behavioral capabilities necessary for managing one's emotions effectively. Veshnevai and Melnikovii (2012) describe it as a comprehensive framework essential for success in specific roles. According to Gray and Irons (2016), personal competency includes personal qualities and abilities that enhance individual effectiveness in challenging tasks, such as managing a business. Pahljina-Reinić and Kolić-Vehovec (2017) emphasize the capacity to recognize and manage one's emotions, motivation, and behavior to

achieve goals. Ahmad (2007) highlights self-control, stress tolerance, and the ability to leverage strengths and weaknesses for business success.

Managerial Competence

Managerial competency refers to the essential leadership skills needed for effective planning, coordination, and job performance in managerial roles (Renko et al., 2015; Lawal & Umoru, 2022). It is the cornerstone of effective management, encompassing a diverse skill set that enables managers to navigate the complexities of modern business (Dessler, 2015). This includes the ability to formulate strategic plans, organize resources efficiently, provide visionary leadership, and exercise precise control over organizational activities. Managerial competency is crucial for organizational success, blending knowledge, attributes, and behaviors necessary for effective management (Robbins & Coulter, 2017). Defined by Zarefard et al. (2018) as characteristics related to effective job performance, these competencies are vital for new businesses founded by entrepreneurs. Yahya and Elsayed (2012) highlight those managerial skills, encompassing qualities and attributes that enable effective workforce management, significantly enhance organizational efficiency and performance.

Proactive Competence

Proactive competency refers to the ability to anticipate future problems, recognize the need for change, and pursue favorable business opportunities aggressively (Ngigi et al., 2018). It encompasses a leader's ability to identify new opportunities, adapt to situations rather than change them, and seek new dimensions for organizational success, closely linked to entrepreneurial alertness (Psychol, 2018). Proactivity involves active efforts to effect changes in one's environment, with a proactive personality being crucial for entrepreneurial alertness and opportunity identification (Tang et al., 2012). It emphasizes planning for the future rather than merely reacting to events (Fida & Christian, 2021). Proactiveness is a key trait of entrepreneurial leaders, enabling them to sense future challenges,

identify business opportunities, and plan for forthcoming changes (Bagheri & Pihie, 2011).

Technical Competence

Technical competency refers to a leader's ability to effectively utilize technology in the workplace, encompassing skills related to computers, automation, robotics, machine learning, and the Internet of Things (Songkunnatham, 2018). This competency is crucial for modern entrepreneurs, as it involves not only possessing technical skills but also applying them to enhance business operations and innovate entrepreneurial activities (Elia et al., 2020). By acquiring and providing technical skills training, leaders can boost employees' confidence in their ability to perform tasks efficiently. This confidence is essential for improving business methods and driving innovations that translate into business success (Geissinger et al., 2019; Tomy & Pardede, 2018). Mastery in technical competency also involves the ability to analyze and solve complex technical problems, applying specialized knowledge to achieve high-quality results (Oleynikov, 2012; Derkach, 2013). This skill set is fundamental for leaders to navigate the evolving technological landscape and maintain a competitive edge in their industries (Deloitte, 2023; Linear, 2023).

Concept Business Performance

Business performance refers to the operational capability of a company to meet the expectations of its owners or major shareholders (Smith & Reece, 1999). It involves assessing how well a firm's strategies adapt to changes in the business environment (Hendrayati & Gaffar, 2015). According to Seo and Lee (2019), business performance includes both financial performance, which can be measured in monetary terms, and non-financial performance, which includes metrics such as brand reputation, customer satisfaction, organizational performance, and innovation activities. Chavez et al. (2017) describe business performance as an index that indicates how well an organization has met its market and financial goals. Iqbal et al. (2018) further explain that business performance measures organizational success by evaluating how efficiently and effectively resources are used to achieve goals, focusing on profitability and sales turnover (Were, 2022).

Empirical Review

Personal Competency and SMEs Performance

Yimer and Ahmed (2018) explored the essential factors influencing entrepreneurial competencies for managing micro and small enterprises in Ethiopia, identifying eight key competencies, including personal, strategic, and organizing competencies. Their factor analysis on data from 200 respondents highlighted the importance of these competencies in successful enterprise management. Similarly, Hien et al. (2019) studied women entrepreneurs in Vietnam, revealing that personal competency was the most potent predictor of SME performance, alongside other significant competencies like opportunity recognition and strategic planning. These studies emphasize the critical role of personal and strategic competencies in enhancing business performance. Moreover, Puteri Fadzline (2017) found that personal competency had the highest impact on the success of small construction firms in Malaysia, reinforcing the need for targeted competency development programs. In contrast, Masakale and Poee (2022) demonstrated the significant influence of personal competencies on dynamic capabilities and SME performance in South Africa, highlighting the complex interplay between personal attributes and organizational capabilities.

Putsom et al. (2019) further examined the impact of entrepreneurial leadership, including personal, managerial, proactive, and technological competencies, on value creation and business performance among automotive-parts manufacturers in Thailand. Using structural equation modeling, they confirmed a substantial influence of these competencies on business performance through value creation. While these studies collectively underscore the importance of various entrepreneurial competencies in diverse contexts, they also highlight the necessity of contextual adaptation when applying these findings to SMEs in Nasarawa State, Nigeria. The unique socioeconomic and cultural conditions in Nasarawa State necessitate localized research to

determine how personal, proactive, managerial, and technical competencies specifically influence SME performance in this region. Thus, while existing literature provides a robust framework, it is imperative to conduct region-specific studies to accurately assess the effect of entrepreneurship competencies on the performance of SMEs in Nasarawa State.

Managerial Competency and SMEs Performance

Anoke et al. (2022) examined the impact of managerial competencies on the growth of SMEs in Abuja Metropolis, Nigeria, finding that technical and personal competencies significantly and positively influence SME growth, whereas conceptual skills had a negative and insignificant effect. Mashavira et al. (2021) explored the role of managerial political competencies in the performance of SMEs in Gauteng Province, South Africa, revealing a significant relationship between political competencies (such as social astuteness and networking abilities) and performance indicators like innovation and ROI. Similarly, Sidek and Muhammad (2019) highlighted the positive effects of technical, generic, and conceptual skills on small business growth among microfinance participants in Kelantan and Terengganu. Velu and Manxhari (2017) also supported the positive association between managerial competency and firm performance, using data collected via structured questionnaires. Jena and Kumar (2014) identified key predictors of superior managerial performance in manufacturing units, emphasizing the importance of business knowledge, competitiveness, and leadership dimensions.

While these studies collectively underscore the critical role of various competencies and conceptual in enhancing SME performance across different contexts, their applicability to Nasarawa State, Nigeria, requires cautious consideration. The unique socioeconomic and cultural environment of Nasarawa State necessitates localized research to validate and potentially adjust these findings. Although the existing literature provides a solid foundation, the distinct conditions in Nasarawa State might influence how these competencies

impact SME performance, highlighting the need for tailored research to accurately capture the nuances of this particular region.

Proactive Competency and SMEs Performance

Putsom et al. (2019) examined the impact of personal, managerial, proactive, and technological competencies on value creation and business performance among 235 automotive-parts manufacturers in Thailand. Using structural equation modeling (SEM), they found a robust fit between their conceptual model and empirical data, revealing that entrepreneurial leadership significantly affects business performance through the mediation of value creation. This suggests that enhancing entrepreneurial competencies can lead to improved business outcomes. Similarly, Hsu et al. (2011) introduced the concept of entrepreneurial supply chain management competence (SCM) for SMEs, identifying innovation orientation, proactiveness, risk-taking, relational capital, and coordination capability as key dimensions. Their study, based on data from automotive OEM suppliers in ASEAN countries, demonstrated that these competencies indirectly affect firm performance through SCM strategies. These findings underscore the importance of entrepreneurial competencies in diverse contexts, including supply chain management and value creation, for improving business performance.

Ibidunni et al. (2019) focused on the moderating effect of entrepreneurial orientation on the relationship between entrepreneurial competencies and the performance of agrobased SMEs in Lagos State, Nigeria. Using hierarchical multiple regression analysis on data from 230 managers, they found that competencies directly influence firm performance, with innovativeness, proactiveness, and autonomy moderating this relationship. Additionally, Prieto (2010) highlighted the role of individual traits like proactive personality, organizational identification, and political skill in entrepreneurial leadership. He argued that proactive individuals, who show initiative and take action to effect change, are better suited for entrepreneurial

leadership roles, enhancing organizational performance and adaptability. These studies collectively emphasize the critical role of personal, proactive, managerial, and technical competencies in driving SME performance, aligning well with the proposed study on the effect of entrepreneurship competencies on selected SMEs in Nasarawa State, Nigeria. However, they also highlight the necessity of contextual adaptation, as the unique environmental and cultural conditions in Nasarawa State might influence how these competencies impact SME performance, necessitating localized research to validate and expand upon these broader findings.

Technical Competency and SMEs Performance

Ainim et al. (2010) investigated the relationship between technological competencies specifically technical capability, firm innovativeness, and e-business practices and business performance among professional service firms in various sectors such as accounting, legal, engineering, and architecture. Their findings revealed that all three factors moderately affect business performance, with technical capability being the most influential predictor. In contrast, Shika et al. (2021) examined the impact of competitil, generic, and conceptual skills on SME performance in Abuja, Nigeria. Utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM) for analysis, they found that while generic and conceptual skills significantly improved SME performance, technical skills did not have a substantial impact. Both studies suggest that competencies play a critical role in business performance, yet highlight the need to consider specific contextual differences when applying these findings to other regions, such as Nasarawa State.

Putsom et al. (2019) explored the influence of entrepreneurial leadership on value creation and business performance in the Thai automotive-parts industry, focusing on personal, managerial, proactive, and technological competencies. Their structural equation modeling (SEM) approach revealed a significant relationship between these competencies and business performance, mediated by value creation. Similarly, Phuong et al. (2021) investigated the effects of entrepreneurial

leadership, orientation, and technological innovation capability on IT SME performance in Vietnam, finding that leadership significantly enhances performance through mediating factors like team creativity and dynamic capabilities. Ng and Kee (2018) and Martín-Rojas (2017) also emphasized the importance of transformational leadership and technological competencies in enhancing firm performance through innovation and corporate entrepreneurship. While these studies underscore the relevance of various competencies in different contexts, their applicability to SMEs in Nasarawa State requires careful consideration. The unique socioeconomic and cultural conditions in Nasarawa State necessitate localized research to determine how personal, proactive, managerial, and technical competencies specifically influence SME performance in this region, as generalizations from other settings may not fully capture the nuances of the local business environment.

The Resource-based Theory (RBV)

The Resource-Based View (RBV), originated by Penrose (1959) and popularized by Barney (1991), posits that a business's strategic advantage is primarily derived from its core competencies and the effective management of its unique, rare, and inimitable resources. These resources, which include both tangible and intangible assets, provide a sustainable competitive advantage and drive firm growth. The theory suggests that the combination of capabilities and resources allows a firm to differentiate itself from competitors, leading to superior offerings and performance. This internal focus on leveraging unique capabilities is especially critical for firms seeking long-term success. However, a notable weakness for SMEs is their frequent lack of size-specific advantages, such as access to finance and the ability to fully exploit their capabilities. Entrepreneurial competencies are thus considered vital resources that enhance organizational performance, aligning with the RBV's emphasis on the strategic importance of unique capabilities and resources (Barney 1991; Wernerfelt 1984, 1995; Samsudin & Ismail 2019; Agyapong et al. 2016; Tehseen et al. 2019; Pauceanu et al. 2021).

In applying the RBV theory to entrepreneurial leadership, it is evident that the theory is crucial in enhancing leadership skills by emphasizing the development of intangible resources, such as analytical thinking, emotional intelligence, and accountability. These characteristics align with the four well-known RBV traits: value, rareness, imperfect imitability, and non-substitutability. Entrepreneurial leaders leverage these capabilities to achieve competitive advantage, sustainability, and improved firm performance. The connection between RBV and entrepreneurial leadership is further reinforced by the idea that internal resources, rather than external ones, should be the primary focus for achieving competitiveness. This 'inside-out' approach to strategy formulation highlights the role of entrepreneurial leaders in harnessing their unique capabilities to drive the firm's success. Thus, the integration of RBV into entrepreneurial leadership underscores the importance of intangible resources and strategic capabilities in fostering firm performance and competitive advantage (Grant 1991; Leitch 2017; Al Mamun et al. 2018; Mahoney & Pandian 1992; Priem & Butler 2001).

METHODOLOGY

This quantitative study employs a survey research design with a five-point Likert scale questionnaire to gather primary data, streamlining responses for analysis. The population comprises 1,816 owner/managers of SMEs in Nasarawa State, registered with the Nasarawa State Ministry of Commerce, with eligibility criteria of at least 36 months of ownership/management. Using the Taro Yamane formula, a sample size of 347 was determined and respondents were purposively distributed across local government councils: Akwanga, Awe, Doma, Karu, Keana, Kokona, Lafia, Nasarawa, Nasarawa Eggon, Obi, Toto, Wamba, and Keffi. Data were collected personally and via research assistants. Hypotheses were tested at a 0.05 significance level using Partial Least Squares Structural Equation Modelling (PLS-SEM) with the aid of SmartPLSv3.

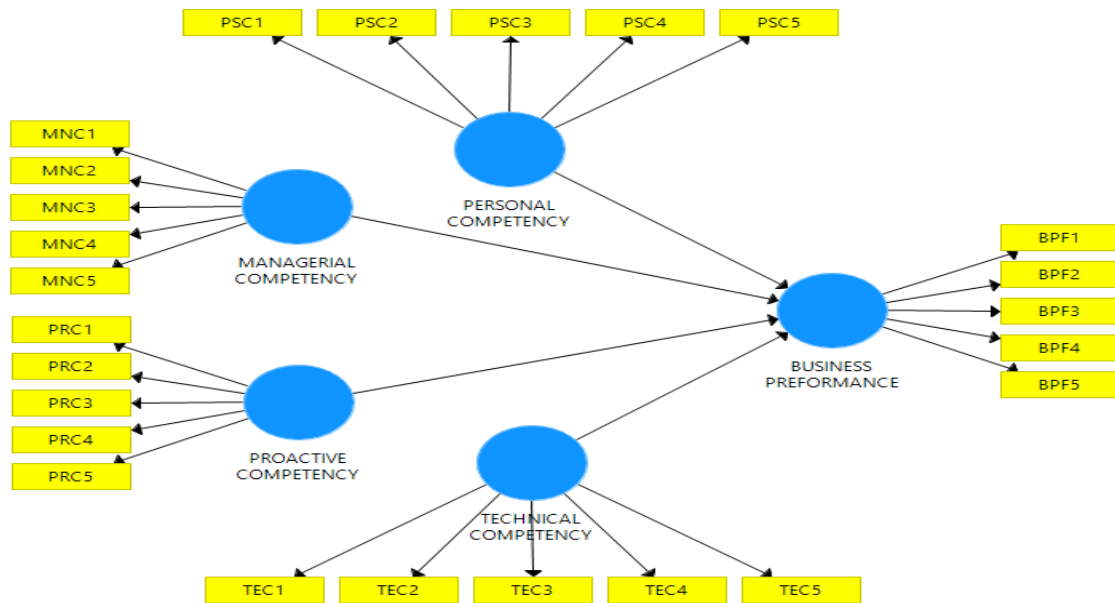


Figure 1 Model of study

RESULT AND DISCUSSIONS

The study administered 361 copies of questionnaire to the selected SMEs owners/managers who were available on ground

and accepted to participate in the study out of which 347 questionnaire were filled representing a response rate of 95%. As a result of having filled, the study did not fall beyond the require sample size and found valid for further analysis and computation. Subsequently, the analyses were conducted using the 347 responses collated.

Table 1 Descriptive Statistics

Variable	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
PSC	4.752	5.000	3.000	5.000	0.494	2.688	-1.867
MNC	4.352	5.000	2.000	5.000	0.837	1.016	-1.271
PRC	4.383	5.000	3.000	5.000	0.732	-0.793	-0.741
TEC	3.928	4.000	2.000	5.000	0.868	-0.604	-0.392
BPF	4.458	4.000	3.000	5.000	0.568	-0.766	-0.450

Source: Smart PLS Output 2024

Table 1 presents descriptive statistics for personal competency (PSC), managerial competency (MNC), proactive competency (PRC), technical

competency (TEC), and business (BPF). For PSC, the mean is 4.752 with a median of 5.000, indicating a slightly left-skewed distribution with a

standard deviation of 0.494. The excess kurtosis of 2.688 indicates heavy tails in the distribution, and the skewness of -1.867 signifies a substantial negative skew. MNC has a mean of 4.352 and a median of 5.000, demonstrating a negatively skewed distribution with a standard deviation of 0.837. PRC exhibits a mean of 4.383 and a median of 5.000, with a standard deviation of 0.732, indicating a relatively narrow spread. TEC has a

Assessing the Measurement Model

The initial step in evaluating the measurement model involves assessing the item outer loadings. Generally, loadings that exceed 0.70 are considered acceptable since they indicate that the construct explains over 50% of the variance in the

mean of 3.928 and a median of 4.000, suggesting a slightly left-skewed distribution with a standard deviation of 0.868. Lastly, BPF has a mean of 4.458 and a median of 4.000, indicating a moderately left-skewed distribution with a standard deviation of 0.568. The excess kurtosis for BPF is -0.766, indicating lighter tails, and the skewness is -0.450, reflecting a mild negative skew.

indicator. This level of loading ensures reliable measurement of the item, as stated by Hair et al. (2019). However, while a factor loading of 0.7 or above is ideal, loadings as low as 0.5 can be retained if the construct's reliability and validity measures are strong (Hair, et al., 2017)

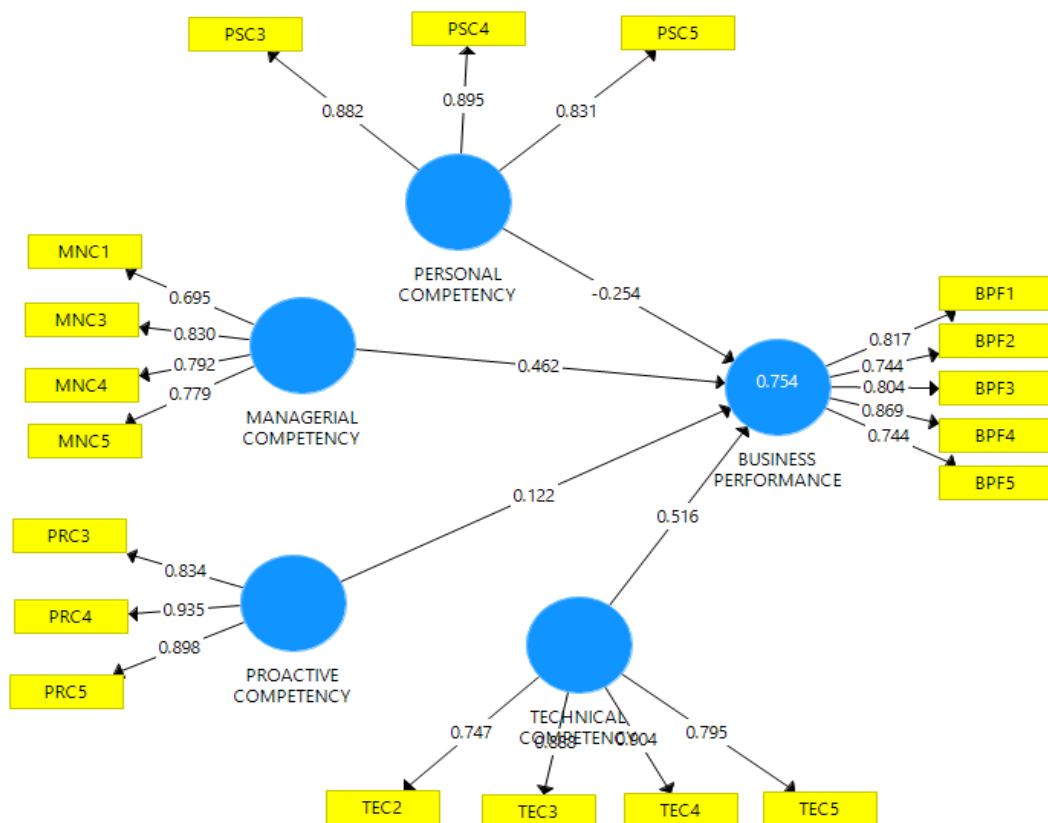


Figure 2: Indicator Outer Loading

Table 2: Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
BUSINESS PERFORMANCE	0.858	0.877	0.897	0.635
MANAGERIAL COMPETENCY	0.788	0.832	0.857	0.601
PERSONAL COMPETENCY	0.839	0.847	0.903	0.756
PROACTIVE COMPETENCY	0.869	0.875	0.919	0.792
TECHNICAL COMPETENCY	0.856	0.881	0.902	0.699

Source: Smart PLS Output 2024

Table 2 presents the reliability and validity metrics for five constructs: Business Performance, Managerial Competency, Personal Competency, Proactive Competency, and Technical Competency. All constructs exhibit strong reliability, as evidenced by Cronbach's Alpha values above 0.7, indicating internal consistency. Specifically, Proactive Competency has the highest reliability (0.869), while Managerial Competency has the lowest (0.788). The rho_A

and Composite Reliability values further confirm the constructs' reliability, with all exceeding the 0.7 threshold. The Average Variance Extracted (AVE) values, all above 0.5, indicate good convergent validity, meaning the constructs explain a substantial portion of the variance in their indicators. Overall, the constructs demonstrate robust reliability and validity, supporting their use in the study.

Table 3: Discriminant validity using Heterotrait-Monotrait Ratio

	BUSINESS PERFORMANCE	MANAGERIAL COMPETENCY	PERSONAL COMPETENCY	PROACTIVE COMPETENCY	TECHNICAL COMPETENCY
BUSINESS PERFORMANCE					
MANAGERIAL COMPETENCY	0.777				
PERSONAL COMPETENCY	0.383	0.772			
PROACTIVE COMPETENCY	0.739	0.835	0.573		

TECHNICAL COMPETENCY	0.537	0.797	0.452	0.717	
-------------------------	-------	-------	-------	-------	--

Source: SmartPLS Output 2024

In assessing discriminant validity, this study employed the Heterotrait-Monotrait Ratio (HTMT) of correlations, a metric reflecting the mean value of item correlations across constructs in comparison to the geometric mean of average correlations for items measuring the same construct (Voorhees et al., 2016). According to Henseler et al. (2015), potential issues with discriminant validity may arise if HTMT values exceed 0.85. However, in the current investigation as shown in table 3, the observed HTMT values were found to be below 0.85. This implies an absence of discernible problems with discriminant validity, suggesting that the constructs in the study are adequately distinct from

each other. The results indicate that the HTMT values fall within an acceptable range, reinforcing the conclusion that the constructs exhibit satisfactory discriminant validity.

Assessing the Structural Model

In assessing the structural model, the standard assessment criteria was consider which include the path coefficient-values, p-values, and coefficient of determination(R^2), the blindfolding-based cross validity redundancy (Q^2). The bootstrapping procedure was conducted using a resample of 5000.

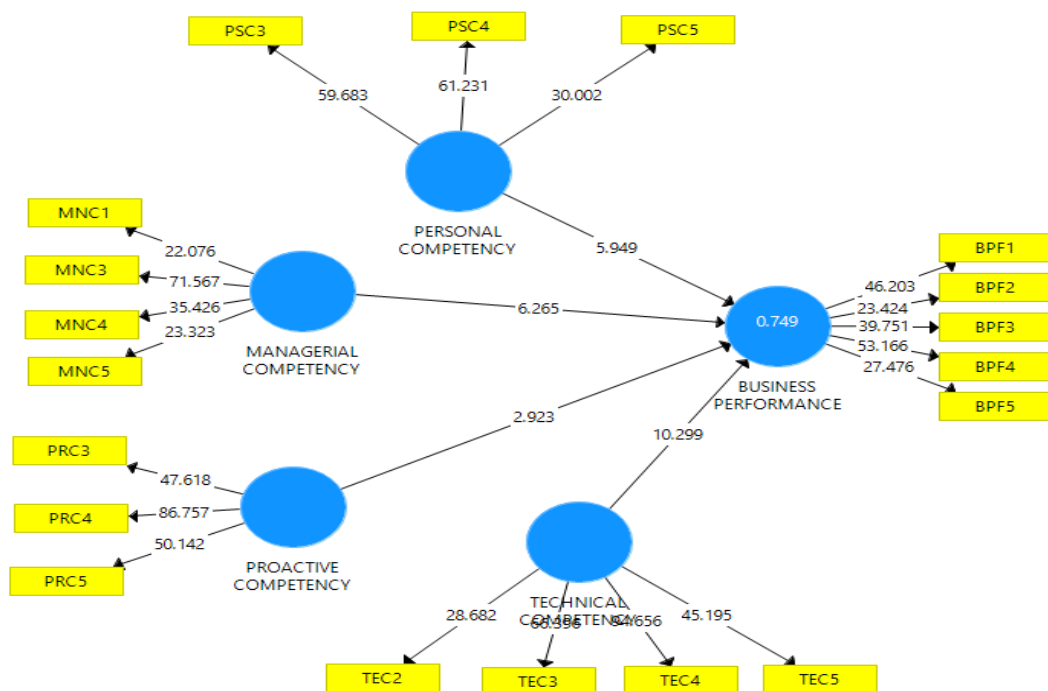


Figure 3: Path Coefficient of the Regression Model

Table 4: Path coefficient of the relationship

Variables	Path Coefficient **(Beta)	T- Values	P -Values	Decision
PERSONAL COMPETENCY -> BUSINESS PERFORMANC E	0.262	5.949	0.000	Rejected
MANAGERIAL COMPETENCY -> BUSINESS PERFORMANC E	0.463	6.265	0.000	Rejected
PROACTIVE COMPETENCY -> BUSINESS PERFORMANC E	0.120	2 .9 23	0.00 3	Rejected
TECHNICAL COMPETENCY -> BUSINESS PERFORMANC E	0.517	10.299	0.000	Rejected

Source: SmartPLS Output 2024

Table 4 shows the result of the Path coefficient for the direct relationship of the study variables.

Test of Hypotheses

Ho1: Personal competency has no significant effect on business performance of selected SMEs in Nasarawa State, Nigeria.

The path coefficient table in 4.8 showed that personal competency has a significant effect on business performance of selected SMEs in Nasarawa State as seen in the corresponding T-value 5.949, and P-value of 0.000, which is less than 0.05. the study therefore has no ground to accept the null hypothesis as such the alternative hypothesis which states that personal competency has significant effect on business performance is accepted.

Ho2: Managerial competency has no significant effect on business performance of selected SMEs in Nasarawa State, Nigeria.

The path coefficient table in 4.8 showed that managerial competency has a significant effect on

business performance of selected SMEs in Nasarawa State as seen in the path coefficient value of 0.463, with a T-value of 6.265 and a P-value of 0.000, resulting in the rejection of the null hypothesis (H02). This indicates a significant positive effect of managerial competency on business performance of selected SMEs in Nasarawa State.

Ho3: Proactive competency has no significant effect on business performance of selected SMEs in Nasarawa State, Nigeria.

The path coefficient table in 4.8 showed that proactive competency has a significant effect on business performance of selected SMEs in Nasarawa State as seen in the T-value of 2 .9 23, and a P-value of 0.00 3 which is less than 0.05. the study therefore reject the null hypothesis This finding implies that proactive competency has a significant role in influencing the business performance of the selected SMEs in Nasarawa State.

Ho4: Technological competency has no significant effect on business performance of selected SMEs in Nasarawa State, Nigeria.

The path coefficient table in 4.8 showed that technical competency has a significant effect on business performance of selected SMEs in Nasarawa State as seen in the corresponding T-value 10.299, and P-value of 0.000, which is less than 0.05. the study therefore has no ground to accept the null hypothesis as such the alternative hypothesis which states that technical competency has significant effect on business performance is accepted.

The explanatory power of the model was assessed using the coefficient of determination (R-square). The R-square value stood at 0.749 for SMEs

business performance indicating that variation in the effect of entrepreneurial competency on business performance is explained by the study to the degree of 75%, the remaining 25% variation could be explained by other factors.

The Q^2 value was employed to assess the predictive relevance of the model. The Q^2 value was obtained through the blindfolding procedure and the cross-validated redundancy method. The Q^2 value should be greater than zero for specific endogenous construct to exhibit predictive accuracy of the structural model for that construct. The Q^2 value in table 4.9 indicates acceptable predictive relevance.

Table 4.9 R² and Predictive Relevance of the Model

	R²	Q² (=1-SSE/SSO)	P. value
BUSINESS PERFORMANCE	0.749	0.647	0.000

Source: SmartPLS Output 2024

Discussion of Findings

The study on the effect of entrepreneurship competencies on the performance of selected SMEs in Nasarawa State, Nigeria, underscores the crucial role of personal, managerial, proactive, and technical competencies in driving business success. The findings reveal that personal competencies, such as self-awareness, emotional intelligence, and adaptability, significantly contribute to SME performance, aligning with the results of Yimer and Ahmed (2018), Hien et al. (2019), and Puteri Fadzline (2017). Similarly, managerial competencies are found to be essential for success, consistent with Anoke et al. (2022) and Velu and Manxhari (2017), emphasizing the need for entrepreneurs to invest in leadership development and strategic planning. Furthermore, the study highlights that a proactive mindset positively influences business performance, which corroborates the findings of Putsom et al. (2019). Additionally, technical competencies play a critical role, with the study recommending ongoing training, technology adoption, and collaboration with experts to maintain a competitive edge. This

is in line with previous studies by Shika et al. (2021), Putsom et al. (2019), and Phuong et al. (2021). These competencies collectively contribute to enhancing the overall performance and sustainability of SMEs in Nasarawa State.

CONCLUSION AND RECOMMENDATIONS

This study has delved into the relationship between entrepreneurial competencies and the business performance of selected SMEs in Nasarawa State. The findings underscore the critical role of personal and managerial competencies in shaping the success of these enterprises. Entrepreneurs and SME owners are urged to recognize the significance of investing in their own personal development, cultivating self-awareness, emotional intelligence, and adaptability. Moreover, the study emphasizes the pivotal role of effective managerial practices, recommending the implementation of leadership development initiatives, strategic planning workshops, and fostering a collaborative decision-making culture

to enhance overall managerial competencies within SMEs.

Furthermore, the study identifies proactive and technical competencies as key drivers of business performance. It underscores the need for entrepreneurs to adopt a proactive mindset, constantly monitoring their business environment for new opportunities and challenges, thereby enabling swift adaptation to market changes. Additionally, technical competency emerged as a critical factor, urging SMEs to invest in continuous training, embrace technological advancements, and collaborate with technical experts to stay competitive. Notably, personal, managerial, and technical competencies demonstrated the most significant impact on performance, highlighting the necessity for a well-rounded approach to competency development to achieve sustained business success in Nasarawa State's SME sector.

Based on the study findings the study recommends thus:

- i. SME owners focus on the development of personal competencies. Attending training programs, workshops, and mentorship initiatives can be implemented to enhance skills related to self-awareness, emotional intelligence, and adaptability. Moreover, fostering a culture of continuous learning within the entrepreneurial community can contribute to the long-term development of personal competencies. Entrepreneurs should form networks that actively seek opportunities to expand their knowledge and skills, ensuring they remain well-equipped to navigate the dynamic business landscape.
- ii. SME owners and managers should invest in leadership development programs, strategic planning workshops, and communication training. Creating a supportive work environment that encourages collaborative decision-making and problem-solving can also contribute to the enhancement of managerial skills. Additionally, networking opportunities with experienced managers and industry experts can provide valuable insights and

mentorship for SME leaders seeking to refine their managerial competencies.

- iii. SMEs in Nasarawa State to consider a proactive approach as part of their overall business strategy. This involves staying vigilant to market trends, emerging opportunities, and potential challenges. SMEs are encouraged to establish mechanisms for continuous environmental scanning, scenario planning, and risk assessment. Engaging in proactive decision-making processes and maintaining a flexible organizational structure can position SMEs to respond effectively to changing circumstances. It is crucial for entrepreneurs to understand the specific context of their industry and proactively adapt their business models to stay competitive, use of data analytics to support predictive ability of the entrepreneur.
- iv. SMEs in Nasarawa State should prioritize the development and acquisition of technical skills relevant to their industry. This may involve investing in employee training programs, adopting advanced technologies, and staying updated on industry best practices. Collaborating with technical experts and professionals can provide SMEs with the necessary expertise to implement and leverage technological advancements effectively. Furthermore, fostering a culture of innovation within the organization can contribute to the continuous improvement of technical competencies. SMEs are encouraged to embrace a forward-thinking approach, integrating technology into their operations to enhance efficiency and competitiveness.

Limitations of the Study

The research was confined to Nasarawa State, limiting the generalizability of the findings to SMEs in other geographical locations. The use of a survey method and self-reported data may introduce response bias. Furthermore, the study focused on specific competencies, and other

contextual factors that could influence business performance were not extensively explored.

REFERENCES

- Adebisi, J. F., & Gbegi, D. O. (2013). Effects of multiple taxation on the performance of Small & Medium Scale business enterprises. (A study of West African Ceramics Ajaokuta, Kogi state). *Mediterranean Journal of social sciences*, 4, 324-334. doi: [10.5901/mjss.2013](https://doi.org/10.5901/mjss.2013)
- Al Mamun, A., Ibrahim, M. D., Nor, M., Yusoff, H. M. & Fazal, S. A (2018). Entrepreneurial Leadership, Performance, and Sustainability of Micro- Enterprises in Malaysia, *Sustainability*, 10, 1591; doi: [10.3390/su10051591](https://doi.org/10.3390/su10051591)
- Anoke, A. F., Onu, A. N., & Agagbo, O. C. (2022). Managerial Competencies and Growth of Small and Medium Enterprise (SMEs) in Abuja Metropolis, Nigeria. *International Journal of Financial, Accounting, and Management*, 4(3), 255-268.
- Bagheri, A., & Pihie, Z. A. L. (2011). Entrepreneurial leadership: Towards a model for learning and development. *Human Resource Development International*, 14(4), pp 447–463.
- Barney, J.B., (1991), 'Firm resources and sustained competitive advantage', *Journal of Management* 17(1), pp 99–120.
- Bayon, M. C., Lafuente, E., & Vaillant, Y. (2015). Does entrepreneurial confidence influence the nature of entrepreneurial projects chosen by individuals with high ability? *International Journal of Entrepreneurship and Small Business*, 26(2), 248. <https://doi.org/10.1504/ijesb.2015.071826>
- Calza, E. & Goedhuys, M. (2016) Entrepreneurial Heterogeneity and the Design of Entrepreneurship Policies for Economic Growth and Inclusive Development, No. 043, United Nations University-Maastricht Economic and Social Research Institute on Innovation and Technology (MERIT).
- Chavez, R., Yu, W., Jacobs, M. A., & Feng, M. (2017). Manufacturing capability and organizational performance: The role of entrepreneurial orientation. *International Journal of Production Economics*, 184, pp 33-46.
- Derkach, I. I. (2013). State and problems of development of automated systems for monitoring the technical condition complex technical systems. *Military Technical Collection*, 0(9), 20–23. <https://doi.org/10.33577/2312-4458.9.2013.20-23>
- Dessler, G. (2015). *Management: Leading People and Organizations in the 21st Century*. Pearson.
- Elia, G., Margherita, A., and Passiante, G. (2020). Digital entrepreneurship ecosystem: how digital technologies and collective intelligence are reshaping the entrepreneurial process. *Technol. Forecast. Soc. Change* 150:119791. doi: 10.1016/j.techfore.2019.119791
- Fisher, G., Stevenson, R., Neubert, E., Burnell, D., & Kuratko, D. F. (2020). Entrepreneurial Hustle: Navigating Uncertainty and Enrolling Venture Stakeholders through Urgent and Unorthodox Action. *Journal of Management Studies*, 57(5), 1002–1036. <https://doi.org/10.1111/joms.12584>
- Geissinger, A., Laurell, C., Sandström, C., Eriksson, K., & Nykvist, R. (2019). Digital entrepreneurship and field conditions for institutional change—Investigating the enabling role of cities. *Technol. Forecast. Soc. Change* 146, 877–886. doi: 10.1016/j.techfore.2018.06.019
- Grant, R.M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *Calif. Manag. Rev.*, 33, 114–135.
- Hair, J.F., Hult, G.T.M., Ringle, C.M. & Sarstedt, M. (2017), *A Primer on Partial Least*

- Squares Structural Equation Modeling (PLS-SEM), Sage, Thousand Oaks, CA
- Hair, J.F., Sarstedt, M., Matthews, L. & Ringle, C.M. (2016), "Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I - method", *European Business*
- Hiền, H. L. P., Quân, T. T., & Hào, D. Đ. Q. (2019). Influence of entrepreneurial competencies of women entrepreneurs on the performance of small and medium enterprises in Thua Thien Hue province. *Hue University Journal of Science: Economics and Development*, 128(5B), 23-36.
- Hsu, C. C., Tan, K. C., Laosirihongthong, T., & Leong, G. K. (2011). Entrepreneurial SCM competence and performance of manufacturing SMEs. *International Journal of Production Research*, 49(22), 6629-6649.
- Huang, S., Ding, D., & Chen, Z. (2014). Entrepreneurial Leadership and Performance in Chinese New Ventures: A Moderated Mediation Model of Exploratory Innovation, Exploitative Innovation and Environmental Dynamism. *Creativity and Innovation Management*, 23(4), pp 453-471.
- Ibidunni, A. S., Atolagbe, T., Obi, J., Olokundun, M., Oke, O. A., Amaihian, A. B., ... & Obaoye, D. (2018). Moderating effect of entrepreneurial orientation on entrepreneurial competencies and performance of agrobased SMEs. *International Journal of Entrepreneurship*, 22(1), 1-9.
- Ibidunni, A. S., Atolagbe, T., Obi, J., Olokundun, M., Oke, O. A., Amaihian, A. B., ... & Obaoye, D. (2018). Moderating effect of entrepreneurial orientation on entrepreneurial competencies and performance of agrobased SMEs. *International Journal of Entrepreneurship*, 22(1), 1-9.
- Imeokparia, P.O. & Ediagbonya, K. (2014) 'Small and medium scale enterprises (SMEs): a catalyst in promoting economic development in Nigeria', *Small*, 5 (33),92–98.
- Jena, S., & Kumar Sahoo, C. (2014). Improving managerial performance: a study on entrepreneurial and leadership competencies. *Industrial and Commercial Training*, 46(3), 143-149.
- Khan, N., Li, S., Safdar, M., & Khan, Z. (2019). The Role of Entrepreneurial Strategy, Network Ties, Human and Financial Capital in New Venture Performance. *Journal of Risk and Financial Management*, 12(1), 41. <https://doi.org/10.3390/jrfm12010041>
- Lei, L. (2023). The impact mechanism of entrepreneurial competency and entrepreneurial model matching on entrepreneurial performance. *Venture Capital*, 1–18. <https://doi.org/10.1080/13691066.2023.2265564>
- Leitch, C. M., McMullan, C. & Harrison, R. T. (2013). The Development of Entrepreneurial Leadership: The Role of Human, Social and Institutional Capital." *British Journal of Management* 24 (3), 347–366.
- Mahoney, J.T. & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*. 13, 363–380.
- Masakale, A. M., & Poee, D. (2022). The relationship between personal entrepreneurial competencies, dynamic capabilities and SME performance. *Journal of Contemporary Management*, 19(2), 729-755.
- Mashavira, N. & Chipunza, C. (2021). 'Managerial conceptual competencies and the performance of small and medium-sized enterprises in Zimbabwe', *Southern African Journal of Entrepreneurship and Small Business Management* 13(1), a386. <https://doi.org/10.4102/sajesbm.v13i1.386>

- McCann, P. & Ortega-Argilés, R. (2016) 'Smart specialisation, entrepreneurship and SMEs: issues and challenges for a results-oriented EU regional policy', *Small Business Economics*, Vol. 46, No. 4, pp.537–552.
- Mishra, P., & Misra, R. K. (2017). Entrepreneurial Leadership and Organizational Effectiveness: A Comparative Study of Executives and Non-executives. *Procedia*
- Ng, H. S., & Kee, D. M. H. (2018). The core competence of successful owner-managed SMEs. *Management Decision*, 56(1), 252-272.
- Ng'aru, N. P., Mukulu, E., & Sakwa, M., (2018), Relationship between Managerial Competence and Growth of Top 100 Enterprises in Kenya, *Journal of Human Resource & Leadership* Vol 2(1) pp. 59-72.
- Ngigi, S., McCormick, D., & Kamau, P.(2018) Entrepreneurial leadership competencies in the 21st century: an empirical assessment. *DBA Africa Management Review* Vol 8 No.2, 2018 pp 1-17 ISSN - 2224-2023 1
- Oleynikov, D. (2012). Proficiency, Competency, and Mastery. *Archives of Surgery*, 147(4), 322.
<https://doi.org/10.1001/archsurg.2011.1342>
- Pahljina-Reinić, R., & Kolić-Vehovec, S. (2017). Average personal goal pursuit profile and contextual achievement goals: Effects on students' motivation, achievement emotions, and achievement. *Learning and Individual Differences*, 56, 167–174.
<https://doi.org/10.1016/j.lindif.2017.01.020>
- Palalic, R. (2017). The phenomenon of entrepreneurial leadership in gazelles and mice: A qualitative study from Bosnia and Herzegovina. *World Review of Entrepreneurship, Management and Sustainable Development*, 13(2–3), pp 211–236.
- Pauceanu, A.M.; Rabie, N.; Moustafa, A. & Jiroveanu, D.C.(2021) Entrepreneurial Leadership and Sustainable Development—A Systematic Literature Review. *Sustainability*, 13, 11695.
<https://doi.org/10.3390/su132111695>
- Phuong V. N., Hien -Thi N. H., Long N. Hai L., Toan B. L. & Nghi, H. X. (2021), The impact of entrepreneurial leadership on SMEs' performance: the mediating effects of organizational factors, *Heliyon* 7
<https://doi.org/10.1016/j.heliyon.2021.e07326>
- Priem, R.L.; Butler, J.E. (2001) Is the resource-based “view” a useful perspective for strategic management research? *Acad. Manag. Rev.* 26, 22.
- Prieto, L. C. (2010). Proactive personality and entrepreneurial leadership: exploring the moderating role of organizational identification and political skill. *Academy of Entrepreneurship Journal*, 16(2), 107.
- Putsom, W., Suwannarat, P. & Songsrirote, N.(2019) The Effect of Entrepreneurial Leadership, Value Creation and Automotive Parts Manufacturing Businesses Performance in Thailand. *Human resource and organization development journal* Vol. 11 No. 2, pp 1-33
- Quaye, D. M. & Mensah, I.(2019) Entrepreneurial leadership and performance of female-owned small and medium-sized enterprises in Ghana, *Int. J. Entrepreneurship and Small Business*, Vol. 38, Nos. 1/2, pp 19-45
- Renko, M., El-Tarabishy, A., Carsrud, A. L., & Brännback, M. (2015). Understanding and measuring entrepreneurial leadership style. *Journal of Small Business Management*, 53(1), 54–74.
- Robbins, S. P., & Coulter, M. (2017). *Management* (14th ed.). Pearson.
- Samsudin, Z. B., & Ismail, M. D. (2019). The Concept of Theory of Dynamic Capabilities in Changing Environment.

- International Journal of Academic Research in Business and Social Sciences, 9(6), 1071–1078.
- Sandybayev, A. (2019). Impact of Effective Entrepreneurial Leadership Style on Organizational Performance: Critical Review *International Journal of Economics and Management*, 1 (1) , 47 – 55.
- Sawaeana, F. A.A. & Ali, K. A. M. (2020). The impact of entrepreneurial leadership and learning orientation on organizational performance of SMEs: The mediating role of innovation capacity, *Management Science Letters* 10,pp 369–380
- Scarborough, N. M. (2018). Effective small business management: An entrepreneurial approach. Pearson.
- Seo, Y.W., & Lee, Y.H., (2019). Effects of internal and external factors on business performance of start-ups in South Korea : the engine of new market dynamics, 11,1– 12.
- Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2012)
- Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2013)
- Smith, T. M., & Reece, J. S. (1999). The relationship of strategy, fit, productivity, and business performance in a services setting. *Journal of Operations Management*, 17(2), 145-161.
- Taiwo, J. N., Falohun, T.O. & Agwu, M.E. (2016) ‘SMEs financing and its effects on Nigerian economic growth’, *European Journal of Business, Economics and Accountancy*, 4, (4), 38–54.
- Tang J., Kacmar K. M. & Busenitz L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *J. Bus. Venturing* 27 77–94.
[10.1016/j.jbusvent.2010.07.001](https://doi.org/10.1016/j.jbusvent.2010.07.001)
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & Ramayah, T. (2019). Entrepreneurial competencies and SMEs’ growth: the mediating role of network competence. *Asia- Pacific Journal of Business Administration*, 11(1), 2- 29.
- Velu, L., & Manxhari, M. (2017). The impact of managerial competencies on business performance: SME’s in Kosovo. *Journal of Management*, 30(1), 59-65.
- Were, J. (2022). Managerial Competencies and Firm Performance in the Furniture Manufacturing Sector in Kenya. *European Journal of Management Issues*, 30(1), 25-35. [doi:10.15421/192203](https://doi.org/10.15421/192203).
- Yahya, H. A. & Elsayed, K. A. (2012). The Influence of the Factors of Managerial Competencies among SMEs in Selangor, Malaysia A Preliminary Study of Human Resources, *Australian Journal of Basic and Applied Sciences*, 6(13):pp 123-134, ISSN 1991-8178
- Yang, C. C. (2018). The effectiveness analysis of the practices in five quality management stages for SMEs. *Total Quality Management & Business Excellence*, pp 1-23.
<https://doi.org/10.1080/14783363.2018.1456010>
- Yimer, D. B. K., & Ahmed, H. M. (2018). Critical Factors of Entrepreneurial Competencies for Successfully Managing Micro and Small enterprise in Ethiopia. *IOSR Journal of Business and Management (IOSRJBM)* Volume, 20, 84-91.
- Zarefard, M. & Beri, S. E. C. (2018) .Entrepreneurs’ managerial competencies and innovative start-up intentions in university students: focus on mediating factors. *International Journal of Entrepreneurship* Volume 22, Issue 1.

