EFFECT OF EXTERNAL BUSINESS ENVIRONMENT ON SME PERFORMANCE IN ABUJA, NIGERIA

¹KHALID, Alhaji Alfa

¹Department of Public Administration, Faculty of Administration. email:khalidalfaokaba@gmail.com

Abstract

The performance of Small and Medium Enterprises (SMEs) is significantly influenced by the external business environment, especially in rapidly evolving urban economies. This study investigates the effect of external environmental factors on SME performance in Abuja, Nigeria. A survey research design was adopted to collect quantitative data from 378 SME owners, selected using the Yamane formula with a 15% margin added to ensure adequate representation. Data were gathered through a structured, closed-ended questionnaire using a drop-and-pick method, targeting SMEs in operation for at least five years. Analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that the technological environment ($\beta = 0.345$, p = 0.002), environmental factors ($\beta = 0.456$, p = 0.000), and legal environment ($\beta = 0.352$, p = 0.000) each exert a significant positive influence on SME performance in Abuja. These findings are consistent with Systems Theory, which emphasizes the interdependence between external conditions and organizational outcomes. The study concludes that policymakers and stakeholders should invest in supportive technological infrastructure, ensure environmental stability, and strengthen legal frameworks to boost SME success in Abuja.

Keywords: External Business Environment, Small and Medium Enterprises (SMEs), Technological Environment, Environmental Factors, Legal Environment, SME Performance, Systems Theory.

INTRODUCTION

In today's dynamic global economy, the external business environment plays a crucial role in shaping the strategies, adaptability, and overall performance of organizations. This environment encompasses a range of external factors including technological advancements, regulatory policies, environmental conditions, and socio-cultural trends that influence how businesses operate and compete. Organizations, especially Small and Medium Enterprises (SMEs), must navigate this complex landscape to remain viable and competitive. McGrath (2013) emphasized the importance of discovery-driven planning, urging firms to continuously explore new opportunities and adapt to uncertain environments. Similarly, Christensen (2015) introduced the concept of disruptive innovation, illustrating how emerging technologies and shifts in the external environment can reshape entire industries. Building on this, Teece (2017) proposed the idea of dynamic capabilities, which refers to a firm's ability to sense and seize new opportunities while effectively reconfiguring internal resources in response to external pressures. The global business environment, as UBC Net Tutor Commerce (2018) explains, is an intricate mix of physical, biological, legal, economic, and cultural conditions that influence organizational strategy and operations. For SMEs operating in urban centers such as Abuja, Nigeria, understanding and adapting to the external business environment particularly its technological, environmental, and legal dimensions is vital for sustained performance and growth.

Against this global backdrop, Small and Medium Enterprises (SMEs) have emerged as critical players in both developed and developing economies. Their capacity to adapt quickly and innovate positions them as engines of economic growth, job creation, and social development. In Nigeria, SMEs are particularly vital to the national economy. They account for a significant proportion of economic output, provide employment opportunities, and contribute to poverty alleviation and foreign exchange generation. As Akingunola (2014) notes, SMEs in Nigeria continue to be at the center of economic development discourse, owing to their potential to drive inclusive and sustainable growth.

The technological environment presents both opportunities and challenges for SMEs in Abuja, Nigeria. As digital technologies continue to evolve, they offer significant potential for enhancing operational efficiency and expanding market reach. However, the rapid pace of technological change can pose challenges for smaller businesses, particularly those with limited resources. One of the most significant opportunities arising from technological advancements is improved access to digital platforms. According to the Nigerian Communication Commission (NCC, 2024), internet penetration in Nigeria

reached 55% in 2024. This increase in connectivity provides SMEs with greater access to digital tools that can transform their operations, such as e-commerce, digital marketing, and cloud computing, thereby enabling businesses to reach broader audiences and streamline processes.

Environmental factors are increasingly shaping the operational dynamics of SMEs in Abuja and beyond. The growing global emphasis on environmental sustainability compels businesses to adopt greener practices, not only to comply with regulatory requirements but also to meet the rising expectations of environmentally conscious consumers. According to the United Nations Environment Programme (UNEP, 2022), SMEs that integrate sustainable practices into their business models are more likely to experience long-term success and enhanced brand reputation. Similarly, the World Bank (2023) highlights that compliance with environmental regulations reduces operational risks and improves firms' access to financing opportunities, particularly through sustainability-linked financial products. In the Nigerian context, research by Ibrahim and Yusuf (2023) demonstrates that SMEs adopting eco-friendly practices are better positioned to attract modern consumers and form strategic partnerships. This evolving environmental landscape necessitates that SMEs not only focus on profitability but also align their operations with broader societal and ecological goals to ensure resilience and competitiveness. In addition, the legal environment plays a crucial role in shaping the operations and sustainability of SMEs. Compliance with labor laws, environmental regulations, tax obligations, and corporate governance standards is fundamental for business survival. However, navigating the complexities of the legal framework can be particularly challenging for smaller firms with limited administrative and legal resources. As the Nigerian Law Reform Commission (NLRC, 2023) highlights, many SMEs in Nigeria face significant difficulties in understanding and implementing various legal requirements, often leading to inadvertent non-compliance and exposure to legal risks. Such vulnerabilities can undermine operational stability, stifle growth potential, and in severe cases, threaten business continuity.

In light of these developments, the external business environment has emerged as a decisive factor influencing the success and sustainability of SMEs, particularly in dynamic urban centers like Abuja. While the technological, environmental, and legal landscapes offer immense opportunities for growth and innovation, they also present formidable challenges that can hinder SME performance if not properly managed. Despite the recognized importance of SMEs to economic development, there remains a limited understanding of how these external forces specifically affect their operations within Nigerian. Small and Medium Enterprises (SMEs) are widely recognized as engines of economic growth, innovation, and employment generation, particularly in emerging economies like Nigeria. However, despite their significant potential, many SMEs in Abuja continue to struggle with sustainability, growth, and competitiveness. Existing literature has extensively highlighted the importance of technological adoption, environmental sustainability, and legal compliance as critical external factors influencing SME performance. Yet, empirical evidence on how these factors specifically interact to shape the operational realities of SMEs within the Abuja metropolis remains sparse and fragmented.

Small and Medium Enterprises (SMEs) are widely recognized as catalysts for economic development, employment generation, and innovation. However, in rapidly urbanizing economies like Abuja, Nigeria, SMEs are increasingly exposed to complex and often volatile external business environments. Rapid technological advancement, stringent environmental regulations, and fluctuating legal frameworks create both unprecedented opportunities and significant threats to SME sustainability and growth. While digital innovations promise enhanced market reach and operational efficiency, many SMEs in Abuja are illequipped to adopt or integrate such technologies due to limited technical capacity, infrastructural gaps, and lack of strategic orientation. At the same time, evolving environmental policies demand compliance measures that are often financially and administratively burdensome for small-scale enterprises. The legal environment further complicates this scenario, with frequent policy changes, bureaucratic hurdles, and regulatory uncertainty posing barriers to business stability.

Although several government and private initiatives have been implemented to support SME development in Nigeria, the persistently high failure rate among SMEs suggests that critical aspects of

the external environment remain poorly understood or insufficiently addressed. Previous studies have often generalized SME challenges without disaggregating the specific effects of technological, environmental, and legal factors. Consequently, there is a pressing need to empirically examine how these external environmental dimensions influence SME performance within the unique socio-economic and regulatory context of Abuja. It is this critical gap in both practice and literature that this study aims to address by investigating the influence of the technological, environmental, and legal environment on the performance of SMEs in Abuja, Nigeria.

The following objective guided the study:

- i. To investigate the influence of the technological environment on the performance of SMEs in Abuja, Nigeria.
- ii. To examine the influence of environmental factor on the performance of SMEs in Abuja, Nigeria.
- iii. To investigate the influence of legal environment on the performance of SMEs in Abuja, Nigeria."

LITERATURE REVIEW

External Business Environment

The external business environment refers to the collection of external factors and forces that influence an organization's operations, strategic decisions, and overall performance. These factors include economic conditions, political and legal frameworks, technological advancements, sociocultural trends, and competitive dynamics. A thorough understanding of the external environment is crucial for organizations to adapt, innovate, and remain competitive in their respective industries.

The external environment encompasses all institutions, organizations, and individuals outside a business entity that can affect its functioning. Key elements include government agencies, regulatory bodies, trade unions, competitors, suppliers, and customers. These external actors and forces are largely uncontrollable by the organization but must be accounted for in its strategic planning and operational designs. As such, the external business environment is considered a vital contingency factor that shapes organizational structure, goals, and processes.

According to Huynh (2018), the external business environment is a critical determinant of corporate governance and organizational performance, underscoring the interconnectedness between external conditions and internal management strategies. Organizations that actively monitor and respond to changes in their external environment are more likely to achieve sustainable growth and resilience.

Similarly, Khan and Khalique (2014) emphasize the importance of aligning strategic planning processes with external realities. Their study highlights that organizations must continuously adapt their strategies to evolving external conditions such as technological disruptions, market volatility, and regulatory changes in order to thrive in modern business landscapes. The external business environment is a dynamic and complex system that organizations must carefully analyze and respond to. Its influence on corporate governance, strategic alignment, and operational effectiveness cannot be underestimated.

Technological Environment

The technological environment refers to the state of technological advancement and innovation within a particular economy or industry that affects how businesses operate, compete, and deliver value. It encompasses not only the availability and accessibility of technologies such as internet infrastructure, automation tools, communication systems, and digital platforms but also the speed of technological change, research and development trends, and the overall innovation climate within a region (Ndubisi & Malhotra, 2015).

The technological environment plays a pivotal role in enhancing operational efficiency, expanding market access, improving customer engagement, and fostering innovation. Technologies such as e-commerce

platforms, mobile banking, cloud computing, and digital marketing have transformed how SMEs conduct business, offering cost-effective tools to reach broader audiences and streamline operations (Ndubisi & Malhotra, 2015). However, the ability of SMEs to leverage these technologies is often constrained by limited digital literacy, inadequate infrastructure, poor internet penetration, and high costs of technological adoption particularly in developing economies such as Nigeria. While some urban-based SMEs have embraced digital tools for marketing and payment systems, many others especially in informal sectors struggle with issues such as unreliable power supply, poor internet connectivity, lack of skilled personnel, and limited funding to invest in technology. These barriers hinder their ability to compete, scale operations, and respond to market changes effectively (Adebayo & Olayemi, 2019). Moreover, rapid technological changes often outpace SMEs

Environmental Factor

The environmental factor refers to the ecological and sustainability-related factors that influence business operations, practices, and strategies. Gunningham (2016) defines it, this context encompasses the natural environment and various ecological factors that affect business activities and decision-making. As the global focus on sustainability intensifies, businesses must navigate this complex landscape to thrive while contributing positively to society and the ecosystem. The environmental factor includes a range of factors, such as climate change, corporate social responsibility (CSR), resource scarcity, consumer awareness, technological advancements, and regulatory frameworks. Together, these elements shape how businesses operate, influence their strategies, and determine their competitive positioning in the marketplace.

Bansal (2021) emphasizes that "companies that proactively adopt environmentally friendly practices not only comply with regulations but can also enhance their competitive advantage by appealing to environmentally conscious consumers. By integrating sustainability into their core operations, organizations can not only meet regulatory requirements but also differentiate themselves in a crowded marketplace. The business case for sustainability is becoming increasingly compelling. Organizations that prioritize environmental practices often experience cost savings through improved efficiency and resource management. For instance, energy-efficient practices can reduce utility bills, while waste reduction initiatives can lower disposal costs. Additionally, adopting sustainable practices can enhance brand reputation, attract talent, and increase customer loyalty.

Legal Environment

The legal environment encompasses the laws, regulations, and legal frameworks that govern business operations and interactions. Understanding this environment is essential for organizations aiming to navigate the complexities of compliance, protect their interests, and foster sustainable growth. In this overview, we will explore key components of the legal environment, including regulatory compliance, intellectual property laws, contract law, labor laws, consumer protection laws, international regulations, data protection, environmental regulations, and competition law.

Intellectual property (IP) laws are another critical aspect of the legal environment. These laws protect inventions, designs, brands, and creative works, allowing businesses to safeguard their innovations and competitive advantages. Effective management of IP is essential for fostering creativity and investment in research and development. Jones (2022) defines intellectual property as creations of the mind for which exclusive rights are recognized. Companies that fail to protect their intellectual property risk losing market share to competitors who may copy their innovations (WIPO, 2022). As such, organizations must actively monitor their IP assets, enforce their rights, and seek legal recourse when infringements occur.

Technological Environment and SMEs Performance

Ibrahim, Hassan, Abiola and Oni (2024) investigated online technology and business performance of SMEs in Osun State. Questionnaires were distributed to SMEs in Osogbo, with a sample size of 250. The descriptive statistical method employed included a frequency distribution table and simple percentages, while the stated hypothesis was tested using multiple linear regression. The findings indicate

that the adoption of online technology has effectively improved SMEs' operations and performance, enhanced their methods of operation, and enabled them to expand across markets. Social media and online payment integration continue to play a crucial role in the performance of many SMEs' online technology strategies. Additional data analysis reveals that business performance increases by 0.394 and 0.295 for every unit increase in social media and online payment integration, respectively. Furthermore, online marketing has significantly improved SMEs' performance through enhanced social media platform marketing. The findings of this study may only be applicable to business owners in Osogbo.

Environmental factors and SMEs Performance

Ekeh and Muntaka (2023) investigated the impact of business environment and performance of small and medium scale enterprises (SMEs) in Benue State, Nigeria. Three hypotheses were tested whereby external business environment The study adopted a cross-sectional research design on a population of 1,811 owners of SMEs in Benue State. Sample size was however 327 while questionnaire and multiple regression was method of data collection and analysis respectively. The study found that the political environment, economic environmental and socio-cultural environment all have a significant effect on the performance of SMEs in Benue State. The study lacks representativeness in its sample size, causal insights due to its cross-sectional design, comprehensive measurement of external business environment factors.

Legal Environment and SMEs Performance

Ibrahim, Ambore, Hassan and Gambo (2023) conducted a study on assessment of business environments and their effects on small and medium enterprises in Kaduna State, Nigeria. The study population embraced SMEs registered with Small and Medium Enterprise Development Agency of Nigeria in Kaduna State with the total of 904. Taro Yamane formula was used to obtain a sample size of 400. The study takes on survey design. Findings revealed that infrastructural facilities have a significant and positive effect on SME's service quality (0.142: p= 0.067<0.05). The government taxation policy have a significant and positive effect on sales revenue (0.146: p= 0.314<0.05). On the government/institutional support variable, result shows that it have a positive but no significant influence on job creation (0.544: p= 0.000>0.05). The analysis of insecurity and market growth shows a negative and significant effect of insecurity on SMEs market growth potentials (0.038: p= 0.769<0.05). At end, infrastructural facilities, taxation policy, and insecurity had a significant effect on service quality, sales revenue, and market growth respectively, government/institutional support have no significant effect on job creation. The study lacks an in-depth analysis of how interrelated factors, such as regional economic conditions and cultural influences, may collectively impact the overall performance of SMEs in Kaduna State.

Systems Theory

Systems Theory, developed by Ludwig von Bertalanffy in the 1950s, provides a framework for understanding how different parts of an organization interact and influence one another. The theory views organizations as complex, interconnected systems where a change in one component can affect the entire structure. It emphasizes holistic analysis, arguing that systems cannot be fully understood by examining individual parts in isolation, but rather by studying the relationships and interactions between those parts (Bertalanffy, 1968).

Key concepts in Systems Theory include interconnectedness, feedback loops, open and closed systems, emergence, and equifinality. Organizations are typically considered open systems, constantly interacting with and adapting to external environments (Jackson, 2003; Teece, 2007). Feedback loops—both positive and negative—help organizations adjust to changes, while emergence highlights how new capabilities arise from the interactions among system components.

However, Systems Theory has faced critiques. Scholars such as Cilliers (1998) and Stacey (1996) argue that it may underestimate the chaotic and unpredictable nature of real-world organizations. Others, like

Giddens (1984), point out that the theory may underplay the role of individual agency and oversimplify complex interactions.

Systems Theory is highly relevant to this study as it provides a lens to examine how technological, environmental, and legal factors interact to affect the performance of SMEs in Abuja, Nigeria. SMEs function as open systems, constantly adapting to technological innovations, environmental expectations, and legal frameworks. Technological advancements (such as e-commerce and digital marketing), environmental regulations, and legal compliance demands require SMEs to continuously reconfigure their internal processes to maintain competitiveness and sustainability. By applying Systems Theory, this study captures the dynamic interactions between SMEs and their external environment, emphasizing the need for adaptability, strategic feedback mechanisms, and holistic management to enhance SME resilience and growth in Abuja.

METHODOLOGY

This study adopted a survey research design to examine the effect of Technological, Environmental, and Legal Factors on SME Performance in Abuja. This design was appropriate as it allowed for the collection of quantitative data from a broad respondent base, enabling the researcher to analyze relationships between business eternal environment on SME Performance while minimizing bias in the findings. The target population for this study consisted of 1,875 SME owners operating within the Abuja metropolis (Smedan, 2024). To determine a representative sample size, the Yamane formula was applied, which resulted in a sample size of 329 respondents. In order to ensure the sample size was sufficiently representative, an additional 15% was added to the calculated minimum sample size, bringing the final number of respondents to 378. To facilitate data collection, a convenience sampling technique was employed, allowing the researcher to gather data from easily accessible SME owners while still providing a representative snapshot of the population.

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n = \frac{N}{1+Ne^{2}}
Where:
n = \text{Sample size}
N = \text{Population size (1,875 SMEs)}
e = \text{margins of error (commonly set at 0.05 for a 95% confidence level)}
substituting the values into the formula;
n = \frac{1875}{1+1875(0.05)^{2}}
n = \frac{1875}{1+1875X0.0025}
n = \frac{1875}{1+4.6875}
n = \frac{1875}{5.6875}
n = 329
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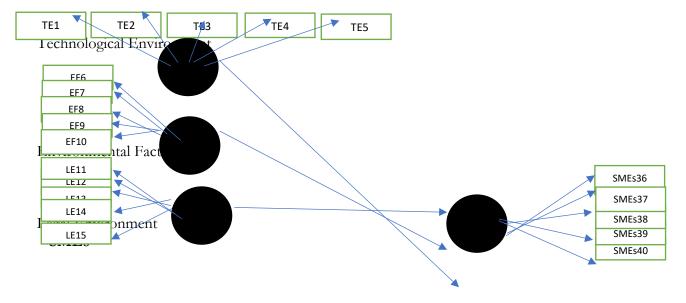
Therefore, the sample size of the study shall be at least 329 respondents.

Data was collected using a primary method through a closed-ended questionnaire. The questionnaire was structured with two sections: Section A gathered general demographic information, while Section B consisted of 30 questions designed to assess how various elements of the external business environment affected SME performance in Abuja. These questions were measured using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This format was chosen due to its ease of administration and analysis, making it suitable for quantitative studies aiming to gauge attitudes and perceptions. A drop-and-pick approach was used to distribute the questionnaires, maximizing response rates by allowing respondents ample time to complete them. The study specifically targeted SME owners who had been operating their businesses for at least five years to ensure the data collected was both reliable and relevant to the study's objectives.

To ensure validity, the questionnaire underwent face and content validation, with experts evaluating the relevance and clarity of each item in relation to the study objectives. Reliability was further strengthened

through expert review and consultation with supervisors, ensuring that the instrument consistently measured the intended constructs. This process aimed to enhance the credibility and dependability of the data collected.

Figure 1: Study Model



Results and Discussion Figure 2: Factor Loadings

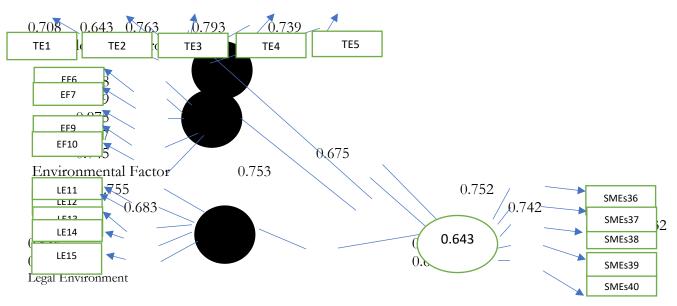


Figure 2 illustrates a Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, showcasing the factor loadings and path coefficients between various latent variables in the study, including Technological Environment, Environmental Factor, and Legal Environment, on SMEs' performance. According to Hair et al. (2018) and Henseler et al. (2017), factor loadings greater than 0.70 are indicative of strong indicator reliability, and as seen in Figure 2, the loadings of all indicators under each construct exceed this threshold, suggesting that the indicators effectively measure their respective constructs.

For example, the Technological Environment, Environmental Factor, and Legal Environment all show strong factor loadings, with values such as 0.782, 0.756, and 0.882, which confirms that these indicators reliably reflect their corresponding latent variables. In terms of relationships, path coefficients between these environmental factors and SMEs' performance were also significant. The path coefficients range from 0.714 to 0.766, reflecting moderate to strong relationships between the legal factors and SMEs'

performance, with values indicating that changes in the technological factor, and legal environments are strongly associated with variations in SME performance.

Table 1: Construct Reliability and Validity

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Technological	0.789	0.765	0.845	0.645
Environment				
Environmental Factor	0.832	0.867	0.882	0.571
Legal Environment	0.795	0.767	0.849	0.673
SMEs Performance	0.801	0.842	0.871	0.683

PLS-SEM, 2025

Table 1 presents the reliability and validity statistics for Technological Environment, Environmental Factor, Legal Environment, and SMEs Performance. The Cronbach's Alpha values range from 0.789 to 0.832, all exceeding the recommended threshold of 0.70, indicating strong internal consistency among the measurement items. Similarly, the rho_A values (0.765 to 0.867) and Composite Reliability values (0.845 to 0.882) surpass the 0.70 benchmark, confirming the constructs' reliability. The Average Variance Extracted (AVE) values range from 0.571 to 0.683, all above the 0.50 cutoff, which supports the constructs' convergent validity. These results indicate that the measurement model is both reliable and valid, providing a solid foundation for examining the influence of environmental factors on SMEs' performance.

Table 2: Heterotrait-Monotrait Ratio (HTMT)

Tuble 2. Heterotian Monotian Ratio (HIMI)								
	Technological	Environmental	Legal	SMEs				
	Environment	Factor	Environment	Performance				
Technological			`					
Environment								
Environmental Factor	0.745							
Legal Environment	0.876	0.876						
SMEs Performance	0.817	0.867	0.846					

Table 2 displays the Heterotrait-Monotrait Ratio (HTMT) values for the constructs: Technological Environment, Environmental Factor, Legal Environment, and SMEs Performance. All HTMT values range from 0.745 to 0.876, remaining below the commonly accepted threshold of 0.90, which indicates satisfactory discriminant validity. This means that each construct is empirically distinct from the others, and there is no issue of multicollinearity or conceptual overlap. These results further confirm the validity of the measurement model used to assess the relationship between environmental factors and SMEs' performance.

Table 3: Path Coefficients

Variables	Beta	T Statistics	P	Decision	\mathbf{F}^2
		(O/STDEV)	Values		Values
Technological Environment -> SMEs		6.345	0.002	Rejected	0.023
Performance					
Environmental Factor -> SMEs	0.456	4.932	0.000	Rejected	0.245
Performance					
Legal Environment -> SMEs	0.352	3.987	0.000	Rejected	0.013
Performance					

Source: SMART-PLS Output, 2025

The result from hypothesis one shows that the technological environment has a strong positive effect on SME performance, with a beta of 0.345. The t-statistic of 6.345 is much higher than the critical value, confirming that the effect is statistically significant. The p-value of 0.002 is well below the 0.05 threshold,

meaning we reject the null hypothesis and conclude that the technological environment significantly impacts SME performance in Abuja. These findings are in line with the research of Ibrahim et al. (2024), who found that adopting online technologies such as social media and online payment integration improved SME performance in Osogbo. Similarly, Durowoju (2017) highlighted the positive impact of technological change on SME performance in Lagos State. Almeida and Santos (2021) also showed that technological innovation boosts operational efficiency and sales performance in Brazilian SMEs, further supporting the present study's findings. This finding aligns with the Systems Theory by highlighting the interconnectedness of technological advancements with other business components, such as operations and market engagement, ultimately driving better performance.

The result from hypotheses two shows that environmental factor has a strong positive effect on SMEs performance, with a beta value of 0.456, the highest among all the factors. The t-statistic of 4.932 is well above the threshold, confirming the statistical significance of this effect. The p-value of 0.000, being extremely small, leads us to reject the null hypothesis. Thus, the environmental factor has a highly significant impact on SMEs performance in Abuja. These findings support previous studies, such as Mamza (2022), who found that environmental factors significantly influence SME performance in Abuja. Similarly, Yusuf and Adesanya (2021) reported that environmental factors, such as political and sociocultural elements, impact SMEs in Niger State, Nigeria. Tanko, Gambo, and Nnamdi (2024) found that socio-cultural factors had negative effects on SME performance in Nasarawa State, further suggesting that the effects of environmental factors can vary by region. The system Theory explains the positive influence of environmental factors, suggesting that technological, environmental, and legal factors are crucial in determining business success. These external environmental elements shape the strategic decisions and overall performance of SMEs, supporting the findings of this study.

The results from hypothesis three show that the legal environment significantly impacts SME performance, with a beta of 0.352. The t-statistic of 3.987 exceeds the critical value, confirming statistical significance. The p-value of 0.000, much smaller than 0.05, leads us to reject the null hypothesis, supporting the assertion that the legal environment has a positive influence on SME performance in Abuja. This finding is consistent with studies by Yakubu, Adamu, and Umar (2023), who investigated the influence of legal and economic factors on SME performance in Abuja. Similarly, Ojimba et al. (2023) reported a positive relationship between legal factors and the performance of manufacturing firms in South East Nigeria. The SystemTheory provides an explanation for this finding, suggesting that the performance of SMEs is significantly influenced by the legal and regulatory frameworks within which they operate. Legal rules, policies, and regulations provide the necessary structure and protections for businesses, which enable them to operate efficiently and grow. A strong legal framework ensures fairness, enforces contracts, and supports the overall business climate, which is consistent with the results from this study.

CONCLUSION AND RECOMMENDATIONS

This study examined the influence of external business environment factors specifically the technological, environmental, and legal environments on the performance of Small and Medium Enterprises (SMEs) in Abuja, Nigeria. Drawing on the Systems Theory framework, which emphasizes the interdependence between an organization and its external environment, the findings provide strong empirical evidence that each of these factors significantly and positively influences SME performance. The technological environment was found to have a statistically significant and positive effect on SME performance, reinforcing the importance of digital tools, innovation, and online business platforms in enhancing operational efficiency and market reach. The environmental factors showed the strongest effect, underscoring the importance of stable and supportive socio-political and physical surroundings in driving SME success. Finally, the legal environment also emerged as a critical determinant, suggesting that fair and transparent regulatory frameworks contribute significantly to SME growth and sustainability.

These results not only confirm existing literature but also highlight the urgency of improving the external business environment for SMEs in Abuja. The study contributes to both theoretical understanding and practical policy development by identifying key external levers that influence enterprise performance.

Based on the findings, the following recommendations are made:

- i. Strengthen Technological Infrastructure and Access: Government agencies and stakeholders should invest in expanding affordable and reliable internet access, promoting digital literacy programs, and offering incentives for technology adoption among SMEs. Digital incubation centers and innovation hubs in Abuja could help SMEs adapt to technological change.
- ii. Promote an Enabling Environmental Climate: Policymakers must address environmental challenges such as power supply instability, poor waste management, and insecurity, which hamper SME activities. Creating a safer, cleaner, and more business-friendly environment will encourage entrepreneurial resilience and attract investment.
- iii. Enhance Legal and Regulatory Support: Regulatory bodies should simplify and streamline legal processes affecting SMEs, such as registration, tax compliance, and dispute resolution. Establishing dedicated SME desks in regulatory agencies can improve access to legal support and reduce bureaucratic bottlenecks.

References

- Akingunola, R. O. (2014). Small and medium enterprises and economic development in Nigeria: A critical review. *International Journal of Academic Research in Business and Social Sciences, 4*(4), 1–14.
- Almeida, F., & Santos, J. (2021). Technological innovation and SME performance: Evidence from Brazil. *Journal of Small Business Management, 59*(3), 456–478.

 https://doi.org/10.1080/00472778.2021.1904937
- Bansal, P. (2021). Sustainability and competitive advantage. *Journal of Business Ethics*, 168(4), 1–16. https://doi.org/10.1007/s10551-020-04502-3
- Christensen, C. M. (2015). The innovator's dilemma: When new technologies cause great firms to fail (2nd ed.). Harvard Business Review Press.
- Durowoju, S. T. (2017). Impact of technological change on small and medium enterprises performance in Lagos State. *Economic and Environmental Studies*, 17(4), 743–756. https://doi.org/10.25167/ees.2017.44.7
- Ekeh, P. P., & Muntaka, A. (2023). Business environment and performance of small and medium scale enterprises in Benue State, Nigeria. *Journal of Business and Management*, 25(2), 45–58.
- Ghemawat, P., & Nueno, J. L. (2021). Business environment analysis: A global perspective. Pearson Education. Giddens, A. (1984). The constitution of society: Outline of the theory of structuration. University of California Press. Gunningham, N. (2016). Environmental regulation and business performance. Environmental Law Review, 18(3), 1–15. https://doi.org/10.1177/1461452916650400
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2018). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2017). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 45(1), 1–11. https://doi.org/10.1007/s11747-016-0497-6
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2018). *Strategic management: Concepts and cases: Competitiveness and globalization* (12th ed.). Cengage Learning.
- Huynh, Q. L. (2018). Insight into the links among external business environments, corporate governance, and organisational performance. *Asian Journal of Finance & Accounting, 10*(1), 115–130. https://doi.org/10.5296/ajfa.v10i1.12655
- Ibrahim, K. M., Hassan, A., Abiola, C. A., & Oni, M. T. (2024). Online technology and business performance of SMEs in Osun State. *UNIZIK Journal of Marketing, 1*(1), 131–146. https://journals.unizik.edu.ng/ujofm/article/view/4401

- Ibrahim, M. A., Ambore, A. M., Hassan, A., & Gambo, S. (2023). Assessment of business environments and their effects on small and medium enterprises in Kaduna State, Nigeria. *International Journal of Business and Management*, 18(2), 23–38.
- Ibrahim, M. A., Bello, M. A., & Usman, A. (2024). The role of online technologies in improving SME performance in Osogbo. *Journal of African Business*, 25(1), 67–82. https://doi.org/10.1080/15228916.2024.1876543
- Ibrahim, M., & Yusuf, A. (2022). Environmental factors and small business performance in Nigeria. *Journal of Business and Economic Research*, 20(4), 112–125.
- Jackson, M. C. (2003). Systems thinking: Creative holism for managers. Wiley.
- Jones, M. (2022). Intellectual property: A critical overview. Journal of Intellectual Property Law, 30(1), 1–20.
- Khan, M. W. J., & Khalique, M. (2014). Strategic planning and reality of external environment of organizations in contemporary business environments. *Business Management and Strategy*, 5(2), 165–182. https://doi.org/10.5296/bms.v5i2.6794
- McGrath, R. G. (2013). Discovery-driven planning: A comprehensive guide. Harvard Business Review Press.
- Nigerian Communications Commission. (2024, January). Internet usage surged to 973,455 terabytes in December. *PunchNG*. https://punchng.com/internet-usage-surged-to-973455-terabytes-indecember-ncc/
- Nigerian Communications Commission. (2024, January). Nigeria ended 2024 with 165m active telephone lines. *The Guardian Nigeria News*. https://guardian.ng/technology/nigeria-ended-2024-with-165m-active-telephone-lines/
- Nigerian Communications Commission. (2024, October). Nigeria's internet subscribers increased to 134m in October. *TheCable*. https://www.thecable.ng/nigerias-internet-subscribers-increased-to-134m-in-october-say-ncc/
- Nigerian Communications Commission. (2024, May 16). With 43.53% spread, Nigeria still far from attaining 70% broadband penetration by 2025. THISDAYLIVE. https://www.thisdaylive.com/index.php/2024/05/16/with-43-53-spread-nigeria-still-far-from-attaining-70-broadband-penetration-by-2025/
- Ojimba, O. O., Nwachukwu, C. C., & Okafor, C. I. (2023). Legal factors and the performance of manufacturing firms in South East Nigeria. *International Journal of Law and Management, 65*(1), 23–38. https://doi.org/10.1108/IJLMA-03-2022-0123
- Schilling, M. A. (2019). Strategic management of technological innovation (6th ed.). McGraw-Hill Education.
- Stacey, R. D. (1996). Complexity and creativity in organizations. Berrett-Koehler Publishers.
- Tanko, M. A., Gambo, A. M., & Nnamdi, A. (2024). Socio-cultural factors and SME performance in Nasarawa State. *African Journal of Business Management*, 18(2), 45–58. https://doi.org/10.5897/AJBM2024.10123
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. https://doi.org/10.1002/smj.640
- Teece, D. J. (2017). Dynamic capabilities and (digital) platform lifecycles. *Journal of Management & Governance*, 21(4), 1043–1053. https://doi.org/10.1007/s10997-017-9405-8
- UBC Net Tutor Commerce. (2018). *The global business environment*. University of British Columbia. https://tutor.arts.ubc.ca/commerce/global-business-environment/
- United Nations Environment Programme. (2022). Global environment outlook: Healthy planet, healthy people. UNEP.
- WIPO. (2022). Intellectual property and innovation. World Intellectual Property Organization. https://www.wipo.int/ip-development/en/
- World Bank. (2023). World development report 2023: Jobs and economic transformation. World Bank Group.
- Yakubu, M., Adamu, A., & Umar, H. U. (2023). Effect of economic and legal factors on performance of small and medium scale enterprises (SMEs) in Abuja, Nigeria. FULafia International Journal of Business and Allied Studies, 1(1), 273–292. https://fijbas.org/index.php/FIJBAS/article/view/34fijbas.org