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IMPACT OF INFRASTRUCTURAL DEVELOPMENT ON SALES GROWTH AND PROFITABILITY: INSIGHT FROM SMES IN SUB-SAHARAN AFRICA

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ABSTRACT

This paper examines the impact of infrastructural development on business performance, focusing on the impact of socio-economic factors on sales growth and profit performance among small and medium-scale enterprises (SMEs). Stratified random sampling was used to select a sample of 500 respondents from a population of 3,736 registered SMEs registered with the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). The findings reveal that infrastructure ($r = 0.189$, $P < 0.01$) positively influences the profit performance of SMEs. More so, there is a significant relationship between infrastructure and the sales growth of SMEs ($r = 0.197$, $P < 0.01$). The study concludes that enhancing the efficiency and performance of SMEs in Nigeria requires an environment that provides adequate infrastructural facilities. Therefore, the government should adopt and implement enterprise-friendly policies that improve entrepreneurship development, recognizing the important role of SMEs in the nation's economic growth.

Keywords: Infrastructural Development, Business Performance, SMEs, Sales growth, Profit Performance

1 INTRODUCTION

Small and medium business organizations have been established to be indispensable to the economic growth of Nigeria. Nigeria is the country with the largest population in Sub-Saharan Africa. Small and medium businesses play vital roles in job creation, poverty alleviation, wealth creation, industrialization, and technological innovation. Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2023) reported that Micro, small and medium enterprises (MSMEs) make up over 96% of businesses in Nigeria. These enterprises provide significant employment and contribute to the total national working population and gross domestic output (SMEDAN). Recent statistics show that SMEs contribute about 46% to the nation's gross domestic product (GDP) and employ over 80% of the country's workforce (SMEDAN, 2023). Nigerian SMEs have been facing a lot of challenges that hinder their operations, such as lack of access to infrastructure and finance, harsh business regulations, increase in inflation and foreign exchange rate, energy crisis, and lack of entrepreneurial skills among others (World Bank, 2024).

Entrepreneurship has been shown to have many benefits to economic growth, innovation, and organizational competitiveness. The modern study of entrepreneurship focuses on the capacity of entrepreneurs to recognize

opportunities, acquire and deploy resources, create value and adapt quickly to rapidly changing environments (Kuratko et al., 2021). Entrepreneurial orientation, innovation, risk-taking propensity, and proactive behaviour have been established as antecedents of performance, especially among SMEs operating in turbulent business environments (Covin & Wales, 2019; Wales et al., 2021). SMEs, therefore, rely on their entrepreneurial capabilities to deal with environmental uncertainties, take advantage of emerging opportunities, and compete successfully.

Entrepreneurship development has been considered significant in emerging economies like Nigeria because small and medium-sized businesses typically operate in environments characterized by resource scarcity, weak institutions, inadequate infrastructure, and unstable macroeconomic policies. Recent studies show that entrepreneurial skills, innovation, digital technology, and effective management of resources affect SME growth, profitability, and survival intentions (Ayodotun et al., 2021; Ahumada et al., 2022). However, poor infrastructure such as inconsistent power supply, bad roads, inadequate digital networks, and lack of access to low-cost financing continue to affect entrepreneurship productivity and SME performance (Kunawotor et al., 2025; World Bank, 2024).

Past studies have focused on entrepreneurship development and entrepreneurial orientation among SMEs in Nigeria. These studies mostly analyzed entrepreneurial characteristics, business startup and registration, innovation, and finance acquisition but gave little attention to measuring business performance. Most studies measured performance with profitability alone but did not consider other non-financial measures such as sales growth or revenue expansion, market share, and business sustainability (Rauch et al., 2009; Wales et al., 2021). Another area that past studies have overlooked is examining how entrepreneurship development and infrastructure jointly affect these performance metrics in Nigeria.

This study will be significant because Nigeria aims to diversify its economy and grow a sustainable private sector through its national development plan. Analyzing how infrastructural development affects SMEs performance will offer insights into how the government, development organizations, financial institutions, and SME owners can support businesses to perform better. Therefore, this study seeks to determine the effect of infrastructural development on sales growth and profitability of SME business performance in Lagos State, Nigeria. The study measures performance using profitability and sales growth as proxies for organizational performance.

1.1 Research Questions

The following questions will be addressed in this study:

- Is there any relationship between the provision of infrastructure and the profitability of SMEs in Lagos State?
- Is there any relationship between the provision of infrastructure, and the sales growth of SMEs in Lagos State?

1.2 Research Objectives

The general objective of this study is to evaluate the impact of entrepreneurial infrastructure development on business performance indicators for the study which are sales growth and profit in Lagos state, Nigeria. The specific objectives are to:

- Determine the relationship between infrastructure provision and profitability of SMEs in Lagos State.
- Evaluate the relationship between infrastructure provision and sales growth of SMEs in Lagos State.

1.3 Research Hypotheses

The following hypotheses stated in the null form were tested:

- H_{01} : There is no statistically significant relationship between infrastructure provision and SMEs profit in Lagos State.
- H_{02} : There is no statistically significant relationship between infrastructure provision and the sales growth of SMEs in Lagos State.

1.4 Significance of Study

Small and medium-sized enterprises (SMEs) have been identified as crucial drivers of Nigeria's economic transformation. This is because SMEs have historically contributed significant job opportunities, fostered innovation, helped reduce poverty, supported entrepreneurship, and stimulated competition. Despite their substantial contributions to socio-economic development, SMEs in Nigeria continue to operate in an environment with limited access to reliable infrastructure such as electricity, poor roads, inadequate digital connectivity, limited access to quality public institutions, and relatively high costs of doing business. Studies have shown that inadequate infrastructure

services raise operating costs, reduce productivity levels, stifle innovation, and hinder competitiveness among SMEs (World Bank, 2024; African Development Bank [AfDB], 2024).

The study will help advance entrepreneurship and SME literature by demonstrating how infrastructure influences some key indicators of business performance (profitability and sales growth) among SMEs operating in Lagos State. Although previous studies have documented how entrepreneurial traits and access to finance impact organizational performance in Nigeria, there is limited evidence on how entrepreneurs can leverage infrastructure as a strategic tool to boost productivity. Therefore, the current study will help fill gaps in extant literature by focusing on infrastructure as a key determinant of SME competitiveness in emerging markets.

The study will offer valuable insights to policymakers, government agencies, development organizations, investors, financial institutions, and SME owners. Specifically, findings from the study will enable policymakers to advocate for policies that prioritize investments in critical infrastructure that can drive productivity in the private sector. Government agencies and development finance institutions tasked with supporting SME development such as SMEDAN may also use results from the study to implement entrepreneurship-support initiatives that supplement public investments in infrastructure. In addition, commercial banks and development partners could use the study to design affordable financing solutions that incentivize investments in infrastructure-related projects with strong potential to increase SME productivity and competitiveness in the long run.

Similarly, the study will help SME owners and business managers identify areas where investments in alternative sources of power (solar panels, digital technologies), water, and logistics can help improve organizational efficiency, increase profit margins, and stimulate sustainable growth. Therefore, by helping entrepreneurs identify alternative approaches to improving business performance, this study may encourage innovation among SME owners in Nigeria.

Nigeria's electricity demand has consistently outpaced national generation, transmission, and distribution capacity over the last decade. As the Nigerian population continues to grow due to rapid urbanization and increasing industrialization driven by expansionary manufacturing and service sectors, electricity demand is likely to reach 70 gigawatts (GW) by 2030 (International Energy Agency [IEA], 2024). Although the number of electricity consumers in Nigeria has risen by over 50 percent in the last 10 years, power investments have not increased at the same rate, causing serious shortages in electricity supply (IEA, 2024). For instance, Nigerian businesses and homes experience frequent electricity interruptions of an average of three times per day, according to World Bank estimates (World Bank, 2024). As a result, many small businesses encounter unexpected disruptions to production, increased operating costs, reduced profit margins, and low competitiveness.

Existing literature demonstrates that investments in infrastructure, particularly electricity, increase firm productivity, promote innovation, enhance market access, and improve financial performance (Obokoh & Goldman, 2016; Organization for Economic Cooperation and Development [OECD], 2023). Therefore, understanding the relationship between infrastructure and SME performance is necessary for developing evidence-based policies that foster sustainable entrepreneurship and accelerate Nigeria's economic development.

2 LITERATURE REVIEW

2.1 Conceptualizing Entrepreneurship and Entrepreneurial Development

Entrepreneurship has been defined variously throughout the history of entrepreneurship literature. Previously, entrepreneurship meant simply starting a business. However, scholars increasingly view entrepreneurship as a complex phenomenon involving opportunity recognition and exploitation, innovation, resource acquisition, value creation and provision, organizing, growth, etc. Entrepreneur: refers to an individual who spots business opportunities and decides to pursue them while taking calculated risks; Entrepreneurial behavior: defined as cognitive processes and organizational activities through which individuals become entrepreneurs (Zacharakis et al., 2021; Nilsson, 2021). Entrepreneurship: includes both entrepreneur and entrepreneurial behavior but focuses on recognizing, evaluating and exploiting entrepreneurial opportunities; Entrepreneurial process: the process through which opportunities are recognized and screened, resources are acquired, ventures created and formalized, and grown firms are administered for sustainability purposes (Kuratko et al., 2021).

Research has shifted from trying to identify specific personality traits that make someone an entrepreneur to focusing on entrepreneurial skills, knowledge, and behaviors. Trait theory suggested entrepreneurs have unique personality traits such as need achievement, locus of control, risk-taking propensity, desire for autonomy and others (Howard & Boudreaux, 2024). Scholars soon found out that managers, professionals, and other business owners also exhibited these traits rendering them non-distinctive to entrepreneurs alone (Covin & Wales, 2019).

Researchers now agree that entrepreneurial success cannot merely be defined by personality traits but a mixture of skills, abilities, learned competencies, and decision-making capability to maneuver different business situations. One of the most researched concepts of entrepreneurial behavior in recent years has been entrepreneurial orientation. Entrepreneurial orientation has been described as consisting of five dimensions; innovation, proactiveness, risk-taking, competitive aggressiveness, and autonomy (Wales et al., 2021). These five dimensions lead to superior organizational adaptability and competitiveness in the long run. Firms that exhibit higher levels of entrepreneurial orientation are better at sensing market opportunities and dealing with environmental uncertainty to maintain a competitive advantage over rivals.

Entrepreneurial development is the process through which individuals and organizations acquire entrepreneurial skills, knowledge, competencies, and abilities. Entrepreneurship development does not just relate to starting new businesses but enhancing the productivity and profitability of existing businesses. This can be achieved through education, training, entrepreneurship development programs, mentoring, etc. (Ayodotun et al., 2021). Entrepreneurship development helps existing businesses grow by helping them improve on their operations, explore new markets among other opportunities. In places like Nigeria entrepreneurship development can also include ensuring entrepreneurs have access to easy funding (loan facilities), information and communication technology, improved infrastructure, business support services, and encouraging a culture of innovation.

2.2 Small and Medium Enterprise Performance

Performance as a concept has been studied and defined repeatedly in entrepreneurship literature. In general, business performance can be said to refer to the degree to which a business meets its goals and creates value for its stakeholders (Richard et al., 2023). These stakeholders include but are not limited to business owners, managers, employees, customers, and the society in which an organization operates. Business performance is also considered a multidimensional concept.

Recent studies suggested using both financial and non-financial metrics to measure SME performance instead of using one metric. Financial metrics can include profitability, Return on Investment, revenue, and cash flows while non-financial metrics can include sales growth, market share, customer satisfaction, innovation, business survival rate, etc. Profitability measures how well a business converts its revenue into monetary gains. On the other hand, sales growth measures the ability of a business to increase sales over a specific period. Using both indicators to measure SME performance paints a clearer picture of the business' success than using either of the two metrics.

In developing countries like Nigeria however, SME performance has also been found to depend on exogenous factors such as access to and quality of infrastructure in place. Research shows firms with access to consistent power supply, efficient roads, good digital infrastructure, and conducive business environment have higher productivity and were able to maintain decent performance levels during the COVID-19 pandemic (Kunawotor et al., 2025;). This has been the case because technology and digitalization are playing a prominent role in how firms perform.

With the rise of technologies like cloud services, e-commerce, social media, digital payment systems, and others, SMEs performance is also starting to be measured by their digital capabilities. Firms with higher digital capabilities have been found to use digital tools to improve their operations thus translating to better organizational performance (OECD, 2023; Samsudeen et al., 2024). Digitalization, when merged with entrepreneurial skills, helps owners drive more sales, reduce operational costs, and improve on customer relationships. It can therefore be concluded that SME performance is both a direct function of the entrepreneur's competencies and skills and indirect function of the environment in which he operates.

Therefore, this study seeks to analyze not only entrepreneurship but infrastructure provision and how the two affect SME profitability and sales growth in Lagos State.

3 EMPIRICAL REVIEW

Infrastructure has increasingly been defined in modern literature as a catalyst or facilitator of competitiveness, productivity, and sustainable business growth. The body of current literature describes infrastructure not as standalone physical entities but as networks of transportation, electricity, ICT, water, logistics, and business-supporting services that enable firms to operate effectively and access market opportunities (World Bank, 2023). Infrastructure supports SME growth by lowering transaction costs, boosting efficiency, enhancing competitiveness, increasing market reach, stimulating innovation, and contributing to sustained enterprise development (UNIDO, 2023).

Modern literature identifies two broad categories of infrastructure. Economic infrastructure includes transportation, electricity, telecom, digital services, ports, and logistics that directly support economic activities. Institutions and systems that develop society's social capacities such as schools, hospitals, research institutes, courts, and public

administrative organizations constitute social infrastructure (OECD, 2023). Considering the increasing role of digitalization in running business operations, some scholars have expanded the conventional definition of infrastructure to include broadband internet, cloud technology, cybersecurity, and online payment platforms (Atieh et al., 2023). This revision reflects the pivotal role of digital infrastructure in improving SME productivity and competitiveness in emerging economies.

Infrastructure is the entirety of important physical facilities upon which economic, social, and political actions significantly depend (Ukong and Iniodu, 1991). Rao and Srinivasu (2013) opined that infrastructure, in general, is a set of facilities through which products and services are produced for the citizens, and infrastructure installation does not produce goods and services directly but offers inputs for all other economic, social, and political activities. Infrastructure is categorized into two sub-groups, contingent on the issue of interest. The division is between economic infrastructure and social infrastructure. Economic infrastructure includes roads, railways, port facilities, power facilities, and telecommunications networks, while social infrastructure includes educational institutions, hospitals, justice facilities, and community facilities (Srivastava et al., 2023).

Most studies on infrastructure and the performance of SMEs, particularly in the sub-Sahara region of Africa, reported a negative relationship. An example is a study on factors limiting the growth and survival of SMEs in some major Nigerian cities (Okpara, 2011). The data collection instrument used was a questionnaire; the analytical tools used were descriptive and multiple regression analysis through SPSS. The result indicated that infrastructure was negatively associated with small business performance. Olugbenga (2012) found that infrastructure is negatively related to the performance of SMEs in the study conducted to assess the policy support and performance of SMEs in southwest Nigeria. Nabintu (2013), in his study, claims that infrastructure does not significantly influence the performance of SMEs.

Ahmad *et al.* (2012) studied factors affecting the growth of SMEs in Pakistan. A questionnaire was used to collect the data. Pearson correlation analysis was used to analyze the data through SPSS. The result showed that public infrastructure was positively related to the growth of SMEs. Ofoegbu *et al.* (2013) investigated contextual factors' effect on SMEs' performance in Ilorin, Nigeria. A questionnaire was used to collect data, which were analyzed through simple linear regression. The result agreed that there is a significant relationship between the availability of electricity (power), capital (finance), availability of a market for sales products, and SMEs performance.

Okoye *et al.* (2014) studied the effect of business development services on the performances of SMEs in Nairobi, Kenya. They identified market access and infrastructural facilities as the variables that affect the performance of SMEs. A cross-sectional survey was employed, and multiple linear regression was used to analyze the results. The result showed that market access did not have any relationship with the performance of SMEs, but infrastructure had a significant and positive effect on the performance of the enterprises.

The work of cross-sectional study by (Doe and Asamoah, 2014) cross-sectional survey on the effect of electric power instabilities on the profitability and competitiveness of SMEs revealed that without a dependable energy supply, SMEs were impotent in producing to increase in quality and quantity, leading to reduced sales and hence a low level of profitability.

Low profitability adversely affects return on assets (ROA) and return on investment (ROI). If the level of profit is high, ROA and ROI will be high, and SMEs can increase their competitiveness. Akinruwa *et al.* (2013), in their study on the determinants of the performance of SMEs in Ekiti State, Nigeria, identified education, infrastructure, managerial skills, and entrepreneurial competencies as significantly associated with the performance of SMEs at 5% level of significance.

On the influence or effect of infrastructure on business performance, (Ebert and Memillen, 1999) assert that firms are more productive in an environment where stocks of public infrastructure offer a means by which the close spatial nearness of the performance of SMEs will be attained; and that economic activities can lead to improved productivity for all parties. (Anga, 2014) in his study on determinants of small and medium-sized enterprises (SMEs) in Nigeria, used a survey questionnaire to collect data from two hundred and thirty SMEs. The result confirmed that in Nigeria finance, product marketing, and infrastructure impact the performance of SMEs. Also, the finance and market of the product and infrastructure had a contrary effect on the performance of SMEs.

Kessides (1993) opines that infrastructure contributes to economic growth, acting through both demand and supply (SMEs function: buying and selling) in an aggregate sense. The character and availability of infrastructure influence the high productivity of private capital and public investment and complement private investment. At the macroeconomic level, the consequence of infrastructure is seen explicitly through reduced production costs. Therefore, infrastructure affects profitability, output level, income, and employment, particularly for small- and medium-scale enterprises.

Recent literature also agrees that infrastructure plays a vital role in driving macroeconomic growth and development. Infrastructure investments are said to stimulate economic growth by increasing productivity, encouraging private

investments, and lowering production and transaction costs (World Bank, 2023). By improving connectivity, market integration, resource allocation, and attracting investment capital, infrastructure supports enterprise development (UNIDO, 2023). Infrastructure also promotes inclusive industrialization by helping SMEs grow production capacities and assume more significant roles in regional and global value chains.

In conclusion, recent literature strongly agrees that infrastructure has a critical influence on SME productivity. Although the impact of infrastructure may differ in different countries or industrial contexts, most studies support the notion that improvements in power supply, transportation services, ICT, logistics, and institutional support translate to improved sales, profits, productivity, innovation, and sustainability while infrastructure deficits raise operational costs and inhibit firms from scaling their businesses.

4 METHODOLOGY

4.1 Research context

The study is based on the analytical exploration of the impact of infrastructural development on sales growth and profitability among Small and Medium-sized Enterprises (SMEs) in Lagos State, Nigeria. Out of the 490 sample copies of the questionnaire that were distributed, 425 were retrieved from the field, indicating 85% of the overall population sampled. The others (15%) could not be retrieved due to logistics and respondents' inability to complete the questionnaire. The main reason is fear of espionage, as respondents sometimes viewed the researcher as a government agent, tax officer, or a spy of their competitors.

This study among small and medium enterprises (SMEs) selected Lagos State because on the fact that it is of its economic contribution to Nigeria and because of its highest concentration of SMEs concentrates in Nigeria (SMEDAN/NBS, 2023). The state is a pioneer in the industrial estates for all categories of industries – small, medium, and large. Our respondents were owners- managers, directors, managers, and business owners of registered small-and medium-scale enterprises whose employees were not less than ten but not greater than a hundred (SMEDAN, 2023). This category of enterprises must have recorded annual company turnover of less than ₦10 million but not greater than ₦100 million.

The target population consisted of registered SMEs operating across the five administrative divisions of Lagos State (Ikeja, Badagry, Ikorodu, Lagos Island, and Epe). The study focused on enterprises operating within five major sectors of the Nigerian economy: agriculture, manufacturing, building and construction, services, and wholesale/retail trade. These sectors represent the dominant areas of SME activity in Lagos State and significantly contribute to economic development and employment creation (SMEDAN, 2023).

The stratified and simple random sampling techniques were adopted in selecting 490 samples, which comprise 13.4% of the study population and 3,736 registered SME operators within the survey area. Table I shows the breakdown of the study population.

Table 1: Population of the Study

Sector of Business/Division	Lagos	Ikeja	Ikorodu	Epe	Badagry	Total
Agriculture (Corporate Farms)	7	13	17	16	19	72
Building and Construction	18	15	4	5	3	45
Manufacturing	202	347	213	205	228	1195
Service	671	595	243	179	191	1879
Trading	189	161	86	51	58	545
Total	1087	1131	563	456	499	3736

Source: Adapted from SMEDAN/NBS 2023 Survey Report

The distribution of the study sample is shown below in Table 2.

Table 2: Distribution of Study Sample

Sector of Business/Division	Lagos	Ikeja	Ikorodu	Epe	Badagry	Sample Selected	% Sample Selected
Agriculture (Corporate Farms)	3	5	5	6	7	26	36
Building & Construction	6	5	3	3	2	19	42
Manufacturing	22	37	26	26	31	142	13
Service	71	64	25	18	20	198	11
Trading	30	27	17	15	16	105	21
Total Sample Selected	132	138	76	68	76	490	13.4

Source: Author's Compilation, 2024

4.2 Data Analysis

The primary data source for this study was generated from a quantitative survey of the sample size. Secondary data were also collected from the record of SMEDAN activities and extracted from research publications, newspaper publications, seminar papers, and conferences. The measurement scale for the study was developed through the Likert scale, a bipolar method, which is used to measure either positive or negative responses to a statement. The Likert scale remains one of the most widely accepted measurement approaches for assessing attitudes, perceptions, and behavioral intentions in business and management research because of its simplicity, reliability, and suitability for multivariate statistical analysis (Hair et al., 2022). To establish the validity of the instrument, several steps were taken, such as expert opinions of experts in SMEs and entrepreneurship development were sought. Experts in SMEs and entrepreneurship development reviewed the instrument to assess the relevant, clarity and adequacy of the questions.

As identified in Table 3., two business performance indicators are captured to be (profitability) and (sales growth), while the entrepreneurship development indicator is defined represented as x- the provision of infrastructure. The survey data were entered into a database and analyzed using the Statistical Package for the Social Sciences (SPSS) Version 29. Data analysis was determined and evaluated with a weighted mean score (WMS); and an inferential statistical tool; Pearson Product Moment Correlation Coefficient (PPMC).

This study used two dependent variables (profitability and sales growth) and one independent variable (provision of infrastructure) were used to measure the impact of the provision of infrastructure on profit and sales growth.

Table 3: Description of variables

Business Performance Indicators	Entrepreneurship Development Indicators
y_1 - Profitability	x- Provision of Infrastructure
y_2 - Sales growth	

Source: Authors Compilation 2024

5 RESULTS AND DISCUSSION

The study is based on the analytical exploration of the impact of infrastructural development on sales growth and profit among Small and Medium-sized Enterprises (SMEs) in Lagos State, Nigeria. Out of the 500 sample copies of the questionnaire that were distributed, 425 were retrieved from the field, indicating 85% of the overall sampled population. The others (15%) could not be retrieved due to logistics and respondents' inability to complete the questionnaire. The main reason is fear of espionage, as respondents sometimes viewed the researcher as a government agent, tax officer, or a spy of their competitors.

Electricity accounts for the biggest costs of daily operations. Nigeria's power sector is overwhelmed by myriad challenges ranging from operational inefficiencies to infrastructure deficiencies. Table 4. presents the number of hours of usage of alternative sources of power as indicated by the respondents' number of hours of usage of alternative sources of power as indicated by the respondents by respondents is presented in Table 4. The problems of epileptic supply of electricity-by-Electricity Distribution Company made SME owners and managers resort to alternative power sources. A total of 64.9 percent of the survey respondents accepted that the hour of operations or usage of an alternative power source was between 1 and 9 hours, those who indicated 10-19 hours were 24.4 percent; while those who chose above

18 hours were 10.7 percent. According to the SMEDAN/NBS (2019) MSME survey, revealed that majority of SMEs' daily usage of an alternative power source between 1-5 hours was 52.1 percent, while that of between 6 and 10 hours was 29.3 percent. Moreover, SMEDAN/NBS survey of 2023 shows that alternative power usage remains widespread, with 48.7 percent of SMEs reporting between 1-5 hours of alternative power daily usage, while 6-10 hours of daily usage was 32.4 percent. On the other hand, 5.1 percent reported greater than 20 hours of daily usage, which suggests complete dependence on alternative power usage.

Table 4: Distribution of the Respondents by Hour of Operation of Alternative Sources of Power in Their Establishments

Respondents Characteristics	Frequency	Percentage (%)
1-9 Hours	266	64.9
10-18 Hours	100	24.4
Above 18 hours	44	10.7

Source: Field Survey, 2024

Furthermore, Table 5 below indicates that 43.7 percent of the respondents spent less than ₦50,000 per month on alternative power generation for their business activities in order to sustain the business; 35.6 percent of the respondents spent an average of between ₦50,000 and ₦250,000 monthly on alternative source of power; 9.5 percent of them expended ₦150,000- ₦250,000; 6.3 percent spent ₦250,000-₦350,000; while only 4.9 percent usually incurred expenses above ₦350,000 monthly on alternative source of power. The huge amount of money spent on the alternative source of power usually pushes downward the profit. This and other factors have forced many SMEs to be forced out of business. The problem of epileptic power supply in Lagos State and the majority of the states in Nigeria calls for immediate action by the Federal Government. Without an electricity supply, production and manufacturing activities cannot thrive. The huge money spent by the firms in Lagos to be able to meet the corporate goals is based on the annual profit after tax of most of the companies there.

Table 5: Distribution of the Respondents by Average Expenses on Alternative Sources of Power

Respondents Characteristics	Frequency	Percentage (%)
Less than ₦50,000	179	43.7
₦50,001-₦150,000	146	35.6
₦150,001-₦250,000	39	9.5
₦250,001-₦350,000	26	6.3
Above ₦500,000	20	4.9

Source: Field Survey, 2024

5.1 Distribution of the Respondents by Profitability

Table 6 below presents the distribution of the respondents by profitability. Satisfaction with the level of profitability in the last five years was ranked highest among the respondents (WMS = 3.74). Other opinions about the performance of SMEs as regards profit in the rank order included "present economic situation affects our company's profit" (WMS = 2.68); and "the establishments have regular financial/ profit statement every year" (WMS = 2.60). This implies that the financial performance of SMEs does not happen in isolation. It depends on yearly improvement in the company's net profit. Also, firms must maintain a competitive advantage even when the macroeconomic situation is not favorable.

Table 6: Distribution of the Respondents by Profitability

Statements	Weighted Mean Score (WMS)	Rank
I am satisfied with the level of profitability in the last five (5) years	3.74	1 st
Our establishment has regular financial/profit Statements every year	2.60	3 rd
The current economic situation affects our company's profit	2.68	2 nd

Source: Field Survey, 2024

5.2 Distribution of the Respondents by Sales Growth

Table 7 below reveals that sales team efficiency and productivity were ranked highest among the respondents (WMS = 3.94); followed by “satisfaction with company’s annual turnover” (WMS = 3.60); and “satisfaction with sales growth percentage in the last 3 years” (WMS = 3.56). The results revealed that the firm’s sales team is efficient and productive, which invariably could lead to sales growth and an increase in the company’s annual turnover.

Table 7: Distribution of the Respondents by Sales Growth

Statements	Weighted Mean Score (WMS)	Rank
I am satisfied with sales growth percentage of my firm in the last 3 years	3.56	3 rd
I am satisfied with our company’s annual sales turnover	3.60	2 nd
My sales team is efficient and productive	3.94	1 st

Source: Field Survey, 2024

5.3 Distribution of the Respondents by Entrepreneurship Development Infrastructure

Table 8 below reveals that most of the SME operators agreed that unstable electricity supply affects business regarding achieving a high result, which was ranked highest (WMS = 4.43). Others in the rank order included; “existing market structure is a condition to favorable performance of the business” (WMS = 3.06); “water is a challenge to business operation” (WMS = 2.72); “transportation system in the country is an obstacle to business operation” (WMS = 2.41); “telecommunication facilities are available for successful business operation” (WMS = 2.21); and “access to market is a condition to favorable business performance” (WMS = 2.15). Also included are “adequate infrastructure has an effect on business operation” (WMS = 2.13); “alternative source of electricity supply is provided to support business operation” (WMS = 2.02); and “alternative source of power supply is very expensive and have an effect on business profitability” (WMS = 1.74).

Table 8: Distribution of the Respondents by Entrepreneurship Development Infrastructure

Statements	Weighted Mean Score (WMS)	Rank
Unstable electricity supply affects my business to achieve high result	4.43	1 st
Alternative source of electricity supply is provided to support my business	2.02	8 th
Alternative source of power supply is very expensive and have effect on my business profitability	1.74	9 th
Water supply is a challenge I face in operating my business	2.72	3 rd
Telecommunication facilities are available for the successful operation of my business	2.21	5 th
Transportation system in the country is not effective which bring obstacles to my business operation	2.41	4 th
Existing market structure is favourable to my business	3.06	2 nd
Access to market is a condition to favourable performance in my business	2.15	6 th
Adequate infrastructural development has effect on my business performance	2.13	7 th

Source: Field Survey, 2024

Summary of Data Analysis Result on the Relationship between Provision of Infrastructure, and SMEs Performance with Pearson Correlation Coefficient (r)

Table 9 below shows the extracted result of the Pearson Correlation coefficient is presented in a matrix table showing where correlation (r) is significant at a 1 percent level of significance in a two-tailed test. The relationship between the dependent and independent variables is shown with the arrow sign (←) in the second column. The dependent variable could be identified by the left side indicators, while the independent variable indicators are represented on the right side of the individual activity. The level of significance for each result activity, which is 3 in totality, is indicated at the bottom of the table. But it should be noted here that Pearson Correlation does not emphasize dependent and independent as it is done in the computer-based computation of regression analysis. Column three (3) displays Pearson

Correlation (r) results; column four (4) shows the probability value; column five (5) remarks whether a Pearson Correlation (r) activity is significant or not significant; column six (6) shows the Cohen's Effect Size; and the last column displays the direction or relationship. It is either a positive relationship, a negative relationship, or a null (no relationship).

Pearson Correlation Coefficient (r) measures the strength and direction of the linear relationship between pairs of continuous variables. By extension, the Pearson Correlation evaluates whether there is statistical evidence for the linear relationship among the pair of variables in the population. Table 9 reveals that all 3 activities were positive and had a significant relationship. Therefore, it could be deduced from the result on the correlation matrix table that there are relationships between the variables of interest either jointly or relatively.

Table 9: Summary of Data Analysis Result on the Relationships between Provision of Infrastructure, and SMEs Performance with Pearson Correlation Coefficient (r)

S/No	Dependent←Independent	Pearson's Correlation (r)	Probability (P-Value)	Remark	Direction or Relationship
1	Profit ← Infrastructure	0.189**	0.000	Sig	Positive
2	Sales ← Infrastructure	0.197**	0.000	Sig	Positive
3	Profit ← Sales	0.533**	0.000	Sig	Positive
4	Infrastructure← Finance	0.407**	0.000	Sig	Positive

**Correlation is significant at the 0.01 level (2-tailed). Sig-Significant; Source: Field Survey, 2024

5.4 Testing of Hypotheses

H₀₁: There is no significant relationship between the provision of infrastructure and the profitability of SMEs in Lagos State.

Table 9 reveals that there was a relationship between entrepreneurship development indicator (infrastructure) and business performance. It was observed that infrastructure ($r = 0.189$, $P < 0.01$) was positively affected and significantly related to profitability. This implies that the provisions of infrastructure had a significant relationship with SMEs' profit performance in Lagos State.

Therefore, the hypothesis that says there is no significant relationship between entrepreneurial development indicators and SMEs' profit performance in Lagos State was rejected in favor of the alternative hypothesis.

H₀₂: There is no significant relationship between the provision of infrastructure and the sales growth of SMEs in Lagos State.

Table 9 indicates that there was a relationship between entrepreneurship development indicators (Infrastructure) and business sales growth. It was observed that infrastructure ($r = 0.197$, $P < 0.01$), was positively affected and significantly related to sales growth. This implies that the provision of infrastructure has a significant positive relationship with SME business growth in Lagos State.

Therefore, the hypothesis that says there is no significant relationship between entrepreneurial development indicators and SMEs' business sales growth in Lagos State was rejected in favor of the alternative hypothesis.

6 CONCLUSION

The findings revealed that the major type of business identified among SMEs in the study area was a sole proprietorship with an average annual turnover for SMEs below ₦30 million and average operating capital in the range of ₦250,000 and ₦500,000. Furthermore, the findings showed that there was a positive effect and significant relationship between infrastructure ($r = 0.189$, $P < 0.01$) and the profit performance of SMEs. Furthermore, there was a positive effect and significant relationship between infrastructure ($r = 0.197$, $P < 0.01$), and the sales growth of SMEs. The study concluded that to improve the efficiency and performance of SMEs in Nigeria, an enabling environment that will provide infrastructural facilities is needed. Hence, the government needs to adopt and implement clear enterprise-friendly policies to improve entrepreneurship development via SMEs, given their importance in the nation's development.

Recommendations

Based on the findings arising from this study, the following recommendations are made:

- There should be the provision of good infrastructural facilities and maintenance and resuscitation of the weak infrastructure of the public institutions by the federal, state, and local government authorities as part of their social responsibility functions. The issue of power outages and Federal, state, and local government authorities should provide good infrastructural facilities and maintain and resuscitate the weak infrastructure of public institutions as part of their social responsibility functions. The issue of power outages and the inadequacy of other basic infrastructure, such as access roads and transportation, should be addressed expeditiously.
- There should be an expansion of the power transmission network to drive better efficiencies and scale up efficient power distribution capabilities.
- The existing power generated must be effectively monetized through the value chain. In essence, power generated and delivered through the value chain must be recovered at full monetary value.
- Electricity access remains inadequate as Nigeria's power sector struggles to increase reliable supply to households and businesses. Recent data show that only about 61.2% of Nigeria's population had access to electricity as of 2023. Nigeria continues to face limitations in generation, transmission, and distribution capacity which constrain its ability to fully utilize existing generation capacity. Increasing investment in generation capacity, transmission and distribution infrastructure, and decentralized renewable- energy based systems will be critical to expanding access to electricity and fostering economic and SME growth (World Bank, 2025).

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