Assessment of Basic Infrastructural Development and Survival of Small and Medium Enterprises in North-Central, Nigeria

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Abstract: The study examined Basic Infrastructural Development on the Survival of Small and Medium Enterprises in North-Central, Nigeria. The study specifically examined the effect of electricity and transportation infrastructure on the survival of SMEs in North-Central, Nigeria. Cross-Sectional survey design was used for the study. A simple random sampling technique was used for sample selection and a structured questionnaire was administered on a sample size of 399 respondents. The data collected for the study were analyzed using computer based Statistical Package for Social Sciences (SPSS) version 23, descriptive statistical tools such as tables, charts, simple percentages, and frequencies were also used while multiple regression analysis was used for further analysis and test of hypotheses The study revealed that Infrastructural Development has a positive significant effect on the survival of SMEs in North-Central, Nigeria. It was recommended among others that SMEs owners/managers should work towards greater diversification of energy sources by adopting energy decisions and practices that encourage partnership through joint ventures/investment in renewable energy sources. Leveraging on private capital and expertise to create partnership in the development of renewable energy sources which are very strategic to their survival. This will give SMEs access to affordable and reliable electricity services thus overcoming system failures such as blackouts, voltage fluctuations, and many more.

Keyword: Infrastructural development, electricity, transportation, survival of SMEs.

1.0   INTRODUCTION

1.1 Background to the Study

Globally, it has been recognized that an adequate supply of infrastructural facilities is an essential ingredient for survival and growth of businesses. The realization of the importance of infrastructure was acknowledged in the global circle as it constitutes one of the cardinal agenda of the sustainable development goal (SDGs). The United Nations (UN) has stipulated 17 cardinal goals to be achieved within a specific time frame by developing nations. They include; poverty eradication, good health care and wellbeing, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and

infrastructure, and reduction of inequality. It might be difficult and unsustainable to achieve all these goals without vigorous and sustained infrastructural development in all the countries in the world, especially in developing countries where the attempt to achieve national development has been a mirage (Asaju, 2023).

Nigeria like many other Sub-Saharan African countries has been plagued with the lack of functional infrastructure in order to grow their economies. This poor state of infrastructure has now engaged the attention of many African governments as the development of infrastructural facilities is one of the determinants of growth in any economy (Edun *et al.,* 2013). However, the deplorable situation of most of the infrastructural facilities in Nigeria (as well as their lack of maintenance) especially of electricity and transportation tend to go against these values of infrastructure, mostly due to inadequate funding from government for maintenance of these facilities, careless use, vandalization, corruption, and delays in construction (Orji *et al*., 2017). This implies that for developing countries, like Nigeria to compete with developed nations, the country needs to invest in and develop modern infrastructure that cut across every segment of the nation that is, transport, power, health, communication, education, industry and governance among others.

The survival of small and medium enterprises largely determines the economic development of nations; this is due to the fact that a critical mass of people in such countries is captured within this net. Therefore, for these small and medium enterprises (SMEs) to thrive, certain infrastructures must be in place to promote and encourage the activities of such businesses (Kyunga, 2017). As stated by Olanrewaju (2011) in the speech he delivered on infrastructure-key challenge for SMEs says that, you cannot separate infrastructure from Small and Medium Enterprises (SMEs) because without infrastructure, SMEs will find it hard to survive.

Infrastructural development as used in this study is the continuous provision and improvement of basic facilities and services such as electricity, transportation and so on needed for business activities (Oyedele, 2012). The dimension of Infrastructural development employed in this study was advanced by Akinyele *et al.,* (2016) and they include Electricity and Transportation infrastructure. Electricity is very important to the effective performance and continued operation of SMEs. The presence of an adequate, reliable, and efficient transport system is a critical factor in local economic development. A well-developed transportation infrastructure provides adequate access to local communities, which in turn is a necessary condition for the efficient operation of manufacturing, retail, labour and housing markets.

Survival as used in this study is a state of continuing existence of an organization despite difficulty, challenges, or dangers (Obiekwe, 2018). For SMEs to thrive in a competitive world of business, they need to progressively innovate to ensure that their goods and services reach untapped customer needs. SMEs that adopt radical innovation are more likely to survive because of higher returns from adoption as a result of gaining a larger market share (Omoankhanlen and Ohiria, 2017). The survival construct employed in this study were advanced by Williams and Shaibu (2020); Obiekwe, (2018) and they include business growth and innovation. Business growth is critical to firms' success. Growth decreases the possibility of closing down SMEs. The potentials for growth are one of the factors which distinguish successful from non-successful business operations. Business growth is one of the objectives of SMEs. Innovation captures the idea of applying creativity in the technical, marketing, and organizational functions of a firm to develop new goods and services for wealth creation. The innovative behaviour of an entrepreneur can also

be said to be the ability possessed by an entrepreneur to generate new ideas that are very industrious and profitable to the business and society at large.

Small businesses are defined as those enterprises with a labor size of between ten to forty-nine workers with a total of five million naira but not exceeding fifty million naira excluding cost of land but including working capital. Medium businesses are those enterprises with a labor size between fifty and one hundred and ninety-nine, with a total of fifty million but not exceeding five hundred million naira excluding land but including working capital (SMEDAN, 2021). Small and medium enterprises were chosen since they are the business parlance. They provide the logical starting point for big businesses. The interest of this study is in all registered SMEs in North-Central, Nigeria because they are potential instruments of modernization and job creation. It is also a key element in the successful transformation of most economies that have sustained rises in their per-capital income and contributes 96% of the businesses (SMEDAN, 2021.) The choice of selecting this sector is due to its relevance to the economy.

1.2 Statement of the problem

Infrastructure is a key factor in SMEs survival. From my casual observation, it seems infrastructure plays a major role in the economy of a country whether developing or developed. The need for good infrastructure is of great importance to businesses and their owners all over the world as well as the various sectors of the economy (Adenipekun, 2013). It may be argued that infrastructural development may not have been given desired attention by successive governments in Nigeria. It was evidenced from the most recent 2021 MSME survey report that weak infrastructure contributes 20.9% of the challenges facing business survival in Nigeria (SMEDAN, 2021). It has also been observed that most of the public infrastructures across Nigeria are decaying and malfunctioning and in recent times, private organizations have opted in providing alternative sources of infrastructure needed but despite that there is still challenge of survival. These have made SMEs burdened by high costs of operations which may reduce the profitability of their businesses. The current state of infrastructure has not done enough to create the desired conducive environment that will encourage SMEs' survival.

It was observed by the researcher that many businesses have relocated from Nigeria to other countries due to the continued drop in electricity supply. Voltage fluctuations and power outages can halt production, damage equipment and affects product quality. Lack of electricity supply may lead to over-reliance on alternative sources of energy which may be more expensive, like solar, coal, and generator. When a firm depends mainly on alternative sources of energy, it may have a significant effect on the cost of production. Furthermore, the quality of transport infrastructure currently in Nigeria is characterized by the problems of bad roads, lack of fleets of vehicles for the distribution of goods and raw materials, and poor maintenance culture. The lack of quality transportation infrastructure may affect businesses especially SMEs as it will be difficult to perform operations as the purchased raw materials and goods cannot be delivered at the time they are needed.

Previous studies by Abakpa *et al*. (2021); Akyuzt and Opusunju, (2020); Akinlemi, (2018); Gaal and Afrah (2017); Akinyele *et al*. (2016) conducted on infrastructural development and SMEs performance and growth were carried out years ago both in the Western world and Nigeria. Very few have been done on the survival of SMEs and none specifically in North-Central Nigeria using the same objectives and analytical/methodological approaches to date as such a gap exists. This

study therefore, intends to fill these knowledge gaps in the literature by studying infrastructural development (electricity and transportation infrastructure) and survival (business growth and innovation) of SMEs in North-Central, Nigeria.

1.3 Objectives of the Study

The main objective of this study is to examine the effect of economic infrastructural development on the survival of SMEs in North-Central, Nigeria. Specifically, the objective is to;

   i.   determine the extent to which electricity infrastructure affects the survival SMEs in North-Central, Nigeria

  ii.   examine the extent to which transportation infrastructure affects the survival of SMEs in North Central, Nigeria.

1.4 Research Questions

1. What is the extent to which electricity infrastructure affects the survival SMEs in North-Central, Nigeria?
2. What is the extent to which transportation infrastructure affects the survival of SMEs in North Central, Nigeria?

1.5 Statement of Hypothesis

H_{O1}: Electricity infrastructure has no significant effect on the survival of SMEs in North-Central, Nigeria.

H_{O2}: Transportation infrastructure has no significant effect on the survival of SMEs in North-Central, Nigeria.

2.0   LITERATURE REVIEW

Related literatures by different authorities on the concept of infrastructural development and SMEs survival along with its dimension were reviewed.

2.1 Theoretical Framework

The study is anchored on theory of unbalanced development and residential location theory

i.   Theory of unbalance development

Hirschman (1958) propounded the theory of unbalanced growth as a strategy of development to be used by underdeveloped countries. This theory stresses the need for investment in strategic sectors of the economy instead of all the sectors simultaneously. According to this theory, the other sectors would automatically develop themselves through what is known as the "linkages effect". Hirschman theory of unbalanced development nevertheless suffers some criticism. The critics are of the opinion that deliberately introducing unbalances in the system is not so much needed in the less develop countries. Despite the criticism, the theory is still appropriate for the study. In Hirschman's view, since developing countries do not possess sufficient resources for

investing simultaneously in all sectors of the economy, investments in strategically selected industries or sectors of the economy will lead to new investment opportunities and so pave the way to further economic development Hirschman (1958).

ii. Residential location theory

Residential location theory was advanced by Von Thunen in (1826). This theory assumes that people always prefer to stay in different places due to different reasons. The location that is chosen is mainly dependent on the level of accessibility to workplaces, power supply, and Transportation (Aleke, 2003). Location theory celebrates the selection of a single best location. There are three approaches to this location decision-making; cost minimization, revenue or benefit maximization, and profit or net benefit maximization. This theory is used in this study to explain how infrastructure development may lead to people choosing to live in a specific place where they have access to the necessary infrastructure needed for their business operations which will eventually lead to the survival and growth of SMEs.

2.2 Conceptual framework

Related literatures by different authorities on the concept of infrastructural development and SMEs survival along with its dimension were reviewed.

2.2.1 Concept of infrastructural Development

Akinyele *et al.* (2016) defined infrastructure as the basic physical and organizational structures needed for business to perform effectively. Avinash and Rajinder (2018) say that infrastructure is broadly classified into Social and Economic infrastructure. Social Infrastructure is that infrastructure that assists in stimulating the educational, health-related, and culture-related standards of the people, like we can say schools, colleges, universities, hospitals, museums, etc. while Economic infrastructure is that infrastructure that contributes to encouraging economic activities, such as roads, highways, railroads, electricity, telecommunications, water supply etc. Asaju (2023) asserted that infrastructural development refers to the availability of those physical facilities that facilitate and enhance the provision of essential services required for the viability and sustainability of the economy and for improving the general wellbeing of the people. Oyedele, (2012) sees infrastructural development as the continuous provision and improvement on the basic facilities and services such as electricity, transportation, and so on for business activities. The basic physical development mentioned is considered important as it serves as an indicator of the progress and developmental process of a particular country. The lack of basic facilities shows that the country or region can be categorized as underdeveloped and left behind by progress and modernization.

Infrastructural development is the process of improving certain infrastructural components vital to a country's growth. It's the development of foundational products and services to increases the quality of life and stimulates long term economic growth. In addition, it covers the set of plans to improve existing facilities, systems, and services in the country. When a country properly manages and develops its infrastructure, it increases efficiency and drive economic growth. It also gives residents and citizens access to basic services like communication, heath care and electricity. While core structural infrastructure development falls under the government purview, private companies may take on some infrastructural projects. These companies may take on these projects

independently as part of their business strategy or in collaboration with the government as a contract (Indeed Editorial Team, 2023).

2.2.2   Dimensions of Infrastructural Development

The dimension of infrastructural development employed in this study was advanced by Akinyele *et al.* (2016) which include Electricity and Transportation infrastructure. This dimension was adopted because of the peculiarity of the North-Central, Nigeria and they agree with the focus of the study which is on economic infrastructure.

i.   Electricity Infrastructure

According to Modi and Adamu (2016) Electricity is part of the infrastructure which is a basic physical facility on which all other activities in the system significantly depend. It is a secondary energy source which means that we get it from the conversion of other sources of energy, like coal, natural gas, oil, nuclear power, and other natural sources, which are called primary sources. Electricity is today's most important energy form for SMEs. Virtually all business activities especially manufacturing units require a constant and effective flow of electricity. In many cases, the availability of power supply plays an important role in storing finished goods ahead of demand and therefore enhances consumers' satisfaction by assisting in making the goods available to consumers when needed. This also helps in building the firm's image and protects the firm's reputation as a result of customer's trust being sustained in having their demand met (Nyanzu and Adarkwah, 2016).

Attgah and Mayer-Tasch (2013) asserted that the most dominant use of electricity among SMEs is for lighting and communication purposes. However, SMEs especially manufacturing ones have other major uses of electricity ranging from production and storage to powering machines and office equipment. Sachet water producers use electricity to power machines that fill polythene bags with water, cut and then seal them. Food processing firms also use various machines that require electricity to power them for the production of their product. The primary use of electricity within manufacturing SMEs is thus to power machines that are usually critical to their respective production process. There is a symbiotic relationship between electricity and business. Energy supplies have a significant impact on economic activities. Poor power supply therefore can be said to have the potency for affecting business activities in many ways. It affects a firm's productivity such as causing many inputs to be idle when there is a power outage. Adding up to this problem is that power outages result in huge, poor electricity supply or lack of quality and available power supply to the public and the business enterprises is a hindrance to economic development, business loss, and retard SMEs activities (Adebayo *et al.,* 2020). However, Nigeria as a developing country has been experiencing poor access to electricity which has been a major impediment to its economic growth. Lack of electricity supply will lead to over-reliance on alternative sources of energy which can be more expensive, like solar, coal, and generator. When a firm depends mainly on alternative sources of energy, this will have a significant effect on its profit decline.

ii.   Transportation Infrastructure

Transportation according to Adesugba (2009) involves the physical movement of goods from the point of production to the point where they are needed. Transportation is a means of movement connecting two or more locations. After production, there is the need to convey products, services, and goods to wherever they are needed. The economic transaction ends at the point of getting to

the final consumer. Consequently, transport facilities must be effective and available to aid and ensure a smooth business operation. Transportation infrastructure refers to the major structure of parts of the transportation system offering the provision of transport services and operations (Oni and Okanlawon, 2006). It involves a group of industries including seaports, railways, roads & highways, and airports. However, in Nigeria, the level of decay in the transport system poses a serious challenge to economic growth and development. The system is characterized by the problems of bad roads, congested ports, inadequate fleets of vehicles, few and crowded trains, and poor maintenance.

The presence of an adequate, reliable, and efficient transport system is a critical factor in local economic development. A well-developed transportation infrastructure provides adequate access to local communities, which in turn is a necessary condition for the efficient operation of manufacturing, retail, labour, and housing markets. In particular, transport infrastructure development could cut travel costs, encourage international investors and broaden the trade between common resources. An inefficient transport facilitation system, characterized by high costs and poor quality, negatively affects SMEs in many ways as they struggle to minimize logistic costs because they are limited in the possible tradeoffs between different activities in the logistics chain. In other words, they rarely have the luxury of being able to change supplier or shipment size due to limited or no alternatives in the mode of transport (Tonelli *et al*., 2012).. Transportation infrastructure encourages economic growth, cuts commodity prices, offers access to global producers and customer markets, and makes global manufacturing more cost-effective by decreasing costs of transport and increasing accessibility (Meersman and Nazemzadeh, 2019).

2.2.3 Survival of SMEs

Survival can be defined as an organizational ability or state of continuing to live or exist, often despite the difficulty, challenges, or dangers. Survival has many connotations-both subjective and objective. The most objective way to measure survival in organizations is to observe their continuing existence (Obiekwe, 2018). A business organization that wants to succeed must develop a clear understanding of the trends of the business environment and the forces that shape competition. Survival is of high importance for the enterprise to attain its goal. For an organization to strive to survive in a vibrant and competitive business environment, it wholly depends on how effectively the organization learns to innovate and adapt in the environment it finds itself and how the organization exercise dynamic capability on its resources efficiently used to the fullest (Omoankhanlen and Ohiria 2017).

2.2.4 Dimensions of Business Survival

The survival construct employed in this study was advanced by Williams and Shaibu (2020) and Obiekwe (2018) which are business growth and innovation. These dimensions were chosen because it conforms to the researcher's intension.

i. Business Growth

According to Penrose (1956) as cited in Machado (2016) business growth is the product of an internal process in the development of an enterprise and an increase in quality and/or expansion.. Business growth is essentially the result of the expansion of demands for products or services. It first results in a growth in sales and consequently in investments in additional production factors to adapt itself to new demands. Business Growth is also seen as an increase in the size or scale of operations of a firm usually accompanied by an increase in its resources and output. Achtenhagen

et al., (2010) researched entrepreneurs´ ideas on growth and listed the following; increase in sales, increase in the number of employees, increase in profit, increase in assets, increase in the firm´s value and internal development. Internal development comprises the development of competencies, organizational practices in efficiency, and the establishment of a professional sales process. This was the most important index for entrepreneurs that participated in the research. Many companies want to expand to succeed and not only to survive. The primary aim of most corporations is income, net profit, sales, and other financial measures which are sometimes viewed as a "bottom-line" indicator of success (Crosby, 1999).

ii. Innovation

Innovation is described as the introduction of new or improved processes, products, or services based on new scientific or technological knowledge and/or organizational know-how. Innovation may also involve technology, intellectual property, business, or physical activity (Ndesaulwa and Kikula, 2016). The underlying rationale is that encouraging firms to innovate will lead to better economic performance, higher growth, more jobs, and higher wages (Duran *et al.,* 2016). Innovation captures the idea of applying creativity in the technical, marketing, and organizational functions of a firm to develop new goods and services for wealth creation. The innovative behaviour of an entrepreneur can also be said to be the ability possessed by an entrepreneur to generate new ideas that are very industrious and profitable to the business and society at large. The introduction of innovative products, services, and processes of business models tailored to attractive niches is an additional opportunity for SMEs to stand out from the competition. In so doing, SMEs can benefit from the high brand loyalty of buyers and reduced-price sensitivity of demand as a consequence of customers valuing the uniqueness of the innovation (Abdul, 2019).

2.2.5 Small and Medium Enterprises (SMEs)

There is no universally accepted definition of what constitutes SMEs. Instead, countries use different definitions for classifying their SME sector. The definition in use at any point in time depends on the purpose those definitions are required to serve and the policies which govern the SMEs at that time. However, the three parameters generally applied by most countries singly or in combination are capital investment in plant and machinery, number of workers employed, and volume of production. SMEs Equity Investment Scheme (SMEEIS, 2003) sees SMEs as any enterprise with a maximum asset base of N200 million excluding land and working capital, and with the number of employees not less than 10 or more than 300. An SME is an independent business, having a small market share, and is managed by its owner or part-owners.

In 2021, the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) came up with different and current definitions of SMEs in Nigeria. It defined small businesses as those enterprises with a labor size of between ten to forty-nine workers with a turnover of twenty-five million naira but less than one hundred million. Medium businesses are those enterprises with a labor size between fifty and one hundred and ninety-nine, with a turnover of 100 million naira but less than one billion. This is therefore the adopted definition for this study.

2.2.6 Relationship between Infrastructural Development and SMEs Survival

i.   Electricity Infrastructure and SMEs Survival

According to Doe and Asamoah (2014) Electricity is very important to the effective performance and continued operation of SMEs. Lack of electricity infrastructure negatively affects the

productivity and profitability of SMEs. The poor quality of electricity supplies in the country is perceived by SMEs to impact their operations negatively. High-quality and accessible electricity infrastructure encourages productivity, business growth, and investment, but when it is poor and unreliable, businesses' productivity and growth suffers (Akyuz and Opusunju, 2020). The cost of obtaining, maintaining, sustaining, and managing such generating plants are more often very expensive and this has made the cost of production as well as the prices of product very expensive, with the latter turning out to be more and more uncompetitive in comparison with the imported equivalent. Olatunji (2019) noted that SMEs have been identified as the engine of growth for a developing economy. This stems from the fact that SMEs play a central role in the economic development of a nation in terms of employment generation, income distribution, innovation, and supply chain management. Epileptic electricity supply is the greatest obstacle to the achievement of efficient operation in this sector.

ii. Transportation Infrastructure and SMEs Survival

According to Akinyele *et al.* (2016) transport infrastructure plays a major role as a capital output in production and wealth generation. In Nigeria, the level of decay in the transport system poses a serious challenge to economic growth and development. It was noted by Ejiogu *et al.* (2020) that transport infrastructure is the driving force behind economic development and social well-being through excellent production and private sector investment efficiency. In particular, transport infrastructure development could cut travel costs, encourage international investors and broaden the trade between common resources. Transport infrastructure encourages economic growth, cuts commodity prices, offers access to global producers and customer markets, and makes global manufacturing more cost-effective by decreasing costs of transport and increasing accessibility. A well-developed transportation infrastructure provides adequate access to local communities, which in turn is a necessary condition for the efficient operation of manufacturing, retail, labour, and housing markets. Transportation is a wealth-creating industry on its own as well as the lifeline of an economy. By lifeline, it means that transportation is extremely important for the survival of the economy (Olubomehin, 2012).

2.2.7 Review of Related Empirical Studies

Ojiba (2023), examined the effect of infrastructural development and survival of SMEs in North-Central, Nigeria. The specific objectives were to determine the extent to which ICT, electricity, transportation, education and health infrastructures affects the survival of SMEs in North-Central, Nigeria. A Cross-Sectional survey design was used for the study. A simple random sampling technique was used for sample selection and a structured questionnaire was administered on a sample size of 399 respondents which serves as the instrument of primary data collection. The data collected for the study were analyzed using computer based Statistical Package for Social Sciences (SPSS) version 23, descriptive statistical tools such as tables, charts, simple percentages, and frequencies were also used while multiple regression analysis was used for further analysis and test of hypotheses. The study revealed that the dimensions of infrastructural development mentioned above has a positive significant effect on the survival of SMEs in North-Central, Nigeria. The issue here is that this study made use of variables like ICT, electricity, transportation, education and health infrastructures and it's an unpublished thesis while this present study made use of only electricity and transportation infrastructure which is published.

Abakpa *et al*. (2021), investigated the effect of basic infrastructure on the performance of SMEs in Benue State Nigeria. The study specifically examined how electricity infrastructure, transportation infrastructure, and technology infrastructure affect the performance of SMEs in Benue State, Nigeria. The study adopted a survey resign design and a structured questionnaire was used as the instrument of data collection. A sample of 250 SMEs was drawn from a population of 750 SMEs in the Makurdi metropolis. The data collection instrument was tested to ensure validity and reliability. Data were collected with the help of a structured questionnaire. Data were analyzed using the Statistical Package for Social Sciences (SPPS) version 23 and presented in the form of tables. Descriptive statistics in the form of mean and standard deviation were used for data presentation and analysis. Multiple regressions were used for data analysis and test of formulated hypotheses at 0.05 level of significance. The findings of the study established a significant relationship between electricity infrastructure, transportation infrastructure, and technology infrastructure and the performance of SMEs. The critic of the above study is that it was conducted in SMEs in Benue State while this present study was conducted in SMEs in all the North-Central States, Nigeria.

Akyuzt and Opusunju (2020), examined the effect of infrastructure on the performance of SMEs in the federal capital territory (FCT), Abuja, Nigeria. The specific objective of this study is to determine the effect of infrastructure such as roads, and power supply on the growth of SMEs in Abuja, FCT. The study adopted a survey research design. The population is 5690 SMEs in Abuja and the sample size is 374 SMEs in Abuja using a sample random sampling method to select owners or owner-managers. The study used a questionnaire that was administered to the respondents. The statistical tool adopted was a regression. The findings revealed that there is a negative and significant effect of infrastructure on the performance of small and medium-scale enterprises in Abuja, Nigeria. The critic of the above review is that it was conducted only in the Federal Capital Territory (FCT), Abuja while this present study will close the gap by investigating more aspects of infrastructure (Electricity, Transportation) and Survival of SMEs in North-Central, Nigeria.

Hardianti *et al.* (2020), analyzed the effect of economic and social infrastructure on economic growth in Indonesia. The independent variables used in this study are road, electricity, health, and education infrastructure. The study used a quantitative approach and data was processed using panel data analysis and regression model. The data is in the form of panels with a period of 5 years namely 2014-2018 in each province in Indonesia. The results showed that economic and social infrastructure simultaneously had a significant effect on economic growth. Partially road infrastructure, electricity infrastructure, and health infrastructure have a positive and significant effect on economic growth while education infrastructure has a positive but not significant effect on economic growth in Indonesia. The critic of the above review is that it was conducted in Indonesia which is outside the shores of Nigeria while this present study was domiciled in North-Central States, Nigeria.

Abubakar and Olusegun (2019), examined the Electricity Supply and Performance of SMEs in Nigeria: Assessing Selected Firms in North-Western States. The paper also employed a quantitative methodology. Data were collected through a self-administered survey questionnaire. The questionnaire was adopted from a previously validated survey measuring electricity supply in Nigerian SMEs. The target population consisted of SMEs operating in the city of Kano, Katsina,

and Jigawa state, Nigeria. Multi-stage sampling was applied to collect data from three strata i.e. manufacturing, hotel & restaurant, and wholesale & retail sector SMEs. A total of 322 sampled SMEs were invited to participate in the survey. Of these firms, 197 SMEs (61 percent response rate) accepted the invitation to fill out the survey questionnaire. The study found that a relationship exists between SMEs' growth, electricity supply, and firm characteristics (firm age, size, and leverage). The critic of this study is that it was conducted in North-Western states while this present study was carried out in North-Central states, Nigeria.

Akinlemi (2018), examined the effect of infrastructural facilities on the performance of SMEs in Nigeria. The study focused on how road and rail networks, telecommunication, power supply, and water supply, affect SMEs' growth. The research methodology adopted is the quantitative research methodology. A survey research design was used and a judgmental and convenience sampling procedure was applied in collecting data from 200 respondents selected from four major SME clusters in Lagos. The data collected with the use of questionnaires were analyzed with percentages and chi-square for testing the hypothesis formulated for the study. The results obtained show that many small and medium-scale operators in Nigeria provide for the basic infrastructure themselves. The huge cost involved in providing this basic amenity has put many small and medium-scale business operators out of business. Infrastructure like power and water are the life wire of any business enterprise. Therefore, small and medium-scale business enterprises need infrastructural facilities to grow. The study above was conducted only in Lagos state and data was analyzed with Chi-square while this present study was conducted in North-Central States, Nigeria and data was analyzed using Regression analysis.

Gaal and Afrah (2017), investigated the lack of infrastructure: and the impact on economic development in the case of the Benadir region and Hir-Shabelle in Somalia. The study proxied Roads, Education, Healthcare, and Telecommunication. A survey research method was adopted to examine the impact of a lack of infrastructure on economic development. The sample size of this study consisted of 90 respondents respectively. The data were collected through questionnaires filled out by the respondents equally. The results of the questionnaire were analyzed by using SPSS version 16.0. The results showed that lack of infrastructure brings a poor standard of living and economic deficit and improves poverty. The underlining issue here is that the study it made use of 90 respondents only and it was conducted in Somalia which is outside the shores of Nigeria while this study intends to bridge the gap by studying 399 entrepreneurs who will be domiciled in North-Central, Nigeria.

Akinyele *et al*. (2016), examined Infrastructural development as a predictor of small & medium enterprises' performance in Nigeria. The main objective of the study was to critically examine the effects education, power/electricity; technology and transportation have on SMEs. The research design utilized for this study was the quantitative research design while the population includes all the 593 registered SMEs in Ogun State (According to SMEDAN). A total of 239 questionnaires were administered to the target sample to find out the effects of the mentioned infrastructures on the performance of SMEs. Both the stratified and the simple random sampling techniques were utilized during the study Furthermore, ANOVA was used in testing these hypotheses with the help of SPSS. The findings showed that there is a significant positive correlation between infrastructures and SME performance; this implies that infrastructures play a huge role in ensuring the successful business operation of SMEs. This underlining issue in the review above is that it was conducted in SMEs in Ogun State alone while this present study concentrated in SMES of all

the states in North-Central, Nigeria with a larger sample size of 399. In addition to the four variables in the above study included health infrastructure to bridge the gap.

3.0   **METHODOLOGY**

A Cross-Sectional survey design was used for the study. The target population of the study comprised 218,441 registered SMEs in the six states and FCT of North-Central Nigeria that was registered with SMEDAN with a sample size of 399 SMEs owners/managers determined using Taro Yamane (1974) formula. A simple random sampling technique was used for sample selection and a structured questionnaire was administered by the researcher and research assistants on a sample size of 399 respondents which serves as the instrument of primary data collection. 1/3 of the sample size was used to carry out a pilot study while Cronbach Alpha and Factor Analysis were equally used to ensure reliability and validity of the instrument respectively. The data collected for the study were analyzed using computer based Statistical Package for Social Sciences (SPSS) version 23, descriptive statistical tools such as tables, charts, simple percentages, and frequencies were also used while multiple regression analysis was used for further analysis and test of hypotheses at 0.05% level of significance.

The dependent variable which infrastructural development is a function of survival and the implicit form of the model is given below;

$$S = f(ID)\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(1)$$
Where:

S = Survival (dependent variable)

ID = Infrastructural Development (independent variable)

The implicit form of the model is given below;

$$S = f(ET, TP) \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (2)$$

Where:

S = Survival

ET = Electricity

TP = Transportation

Explicitly, the models are depicted below:

$$\text{Survival} = \beta_0 + \beta_1 ET + \beta_2 TP + e \dots\dots\dots\dots\dots\dots\dots\dots (3)$$
Where:

β_0 = Y intercept value of the dependent variable

e = the random error,

β_1, β_2 = the regression coefficients of the independent variables… a prior expectation are $\beta_1, \beta_2 > 0$.

The following decision rules were adopted for accepting or rejecting hypotheses (Koutsoyannis, 2003).

If the standard error of $b_i[S(b_i)>1/2b_i]$ we accept the null hypothesis, that is we accept that the estimate b_i is not statistically significant at the 5% (0.05) level of significance.

If the standard error of $b_i[S(b_i)<1/2b_i]$ we reject the null hypothesis, in other words, we accept that the estimate b_i is statistically significant at the 5% (0.05) level of significance.

4.0   RESULT AND DISCUSSION

The data obtained during the field survey was presented and analyzed using both descriptive and inferential analysis.

4.2   Presentation of Responses on Research Variable

The study collected data from the respondents on the research variable on Electricity, transportation infrastructure and business growth, innovation. The results were presented responses on a five-point likert scale of strongly agree, agree, uncertain, disagree and strongly disagree and means and standard deviations.

Table 1: Responses on Electricity Infrastructure

Questions	Responses						
	SA	A	N	D	SD	M	Std. Dev
Your business is affected by frequent Power outages which cause disruptions in production process and damage equipment.	133	177	49	19	21	3.96	1.059
Your company relies heavily on alternative source of energy like generators, thereby increasing operational cost for long periods.	133	186	43	27	10	4.02	.969
Smart meters help my business to record electricity consumption.	136	164	63	24	2	3.97	1.006
Your business is heavily affected as a result of new electricity tariff approved recently.	118	190	54	33	4	3.96	.924
Poor maintenance of existing electricity facilities like transformers, service lines and so on affects your business operations.	152	152	60	24	11	4.03	1.011

Source: Filed Work (2023)

The result in table 1 showed respondents' views on the effect of electricity infrastructure on survival of SMEs in North-Central, Nigeria. To find out if your business is affected by frequent Power outages which causes disruptions in production process and damage equipment, majority of the respondents 77.7% (33.3%+44.4%) agreed with the statement as indicated by a mean response of 3.96 and a standard deviation of 1.059. In finding out if your company relies heavily on alternative source of energy like generators, thereby increasing operational cost for long periods, majority of the respondents 79.9% (33.3%+46.6%) agreed with the statement. The result

had a mean response of 4.02 with a standard deviation of 0.969. Finding out if smart meters help my business to record electricity consumption, 75.2% of the respondents agreed while only 9 % disagreed. The result has a mean response of 3.97and a standard deviation of 1.006. This means that smart meters helped SMEs surveyed in North-Central Nigeria in recording electricity consumption. The result further revealed that majority 77.2% (29.6%+47.6%) agreed to the statement that your business is heavily affected as a result of new electricity tariff approved recently. The results had a mean response of 3.97 with a standard deviation of 0.924.Also, to find out if Poor maintenance of existing electricity facilities like transformers, service lines and so on affects your business operations, majority of the respondents 76.2% (38.1%+38.1%) agreed with the statement. The result had a mean response of 4.03 with a standard deviation of 1.011.

Table 2: Responses on Transportation Infrastructure

Questions	Responses						
	SA	A	N	D	SD	Mean	Std. Dev
Your business experience difficulty in distribution of goods from the point of production to the appropriate target market as a result of bad road.	152	67	46	26	8	4.08	.966
Your business outsources distribution of goods to marketing or transportation companies.	165	134	60	35	5	4.05	.1.014
The huge cost of transportation incurred affects my profit margin adversely.	159	160	40	36	4	4.09	.972
The bad nature of our road network increased delivery time of both raw materials and finished goods.	140	156	63	28	12	3.96	1.030
Loss of customers has been experienced by my business as a result of delayed delivery to target market.	166	150	49	32	2	4.12	.945

Source: Field Work (2023)

The result in Table 2 revealed the responses on the effect of transportation infrastructure on survival of SMEs in North-Central, Nigeria. Finding out if your business experience difficulty in distribution of goods from the point of production to the appropriate target market as a result of bad road, 80% (38.1%+41.9%) agreed with the statement. The result had a mean response of 4.08 with a standard deviation of 0.966.Finding out if your business outsources distribution of goods to marketing or transportation companies, majority of the respondents 80% (41.4%+33.6%) agreed with the statement and the result had a mean response of 4.05 with a standard deviation of 1.014. In addition, 79.9% (39.8 %+ 40.1%) of the respondents agreed that the huge cost of transportation incurred affects my profit margin adversely. The result had a mean response of 4.09 with a standard deviation of 0.972. The result further revealed that majority of the respondents 74.2% (35.1%+39.1%) agreed to the statement that the bad nature of our road network increased delivery time of both raw materials and finished goods. The results had a mean response of 3.96 with a standard deviation of 1.030.In addition, the result revealed that majority of the respondents 83.7% (41.6%+37.6%) agreed to the statement that loss of customers has been experienced by

my business as a result of delayed delivery to target market. The results had a mean response of 4.12 with a standard deviation of 0.945.

Table 3: Responses on Business Growth

Questions	Responses					Mean	Std. Dev
	SA	A	N	D	SD		
Your business enhances its capacity in terms of employee's size which helps in properly serving our business clients.	109	134	66	72	18	3.61	1.191
Your business has experienced an increase in sales volume and profit over time.	103	197	40	45	14	3.83	1.048
Your business has experienced increase in the number of outlets/branches.	184	102	40	36	37	3.90	1.324
Your customer base has increased reasonably as you have also experienced corresponding increase in sales revenue.	153	119	28	65	34	3.73	1.343
Your business has experienced progressive and increased output over the years.	145	120	30	64	40	3.67	1.370

Source: Field Work (2023)

Table 3 shows responses collected from respondents on business growth. Finding out if the businesses enhance its capacity in terms of employees' size which helps in properly serving our business clients, 27.3% of the respondents strongly agreed, 33.6% agreed, 16.5% were uncertain, 18% disagreed and only 4.5% strongly disagreed. The result has a mean of 3.61 and a standard deviation of 1.191. Finding out if the businesses has experienced an increase in sales volume and profit over time, 25.8 % of the respondents strongly agreed and 49.4% agreed while 11.3% disagreed and 3.5% strongly disagreed. The result has a mean of 3.83 and a standard deviation of 1.048. Finding out if the businesses have experienced increase in the number of outlets/branches. The majority of the respondents 46.1% agreed, 25.6% strongly agreed while 9% disagreed and 9.3% strongly disagreed with a mean score of 3.90 and standard deviation of 1.324. Finding out if the customer base has increased reasonably as you have also experienced corresponding increase in sales revenue, 38.3% strongly agreed, 29.8% agreed, 7% uncertain while 16.3% disagreed and 8.5% strongly disagreed. The result has a mean of 3.73 and a standard deviation of 1.343. In finding out if the businesses have experienced progressive and increased output over the years, 36.3% of the respondents strongly agreed, 30.1% agreed, and 7.5% neutral while 16.0% disagreed and 10 % strongly disagreed. The result has a mean of 3.67 and a standard deviation of 1.370

Table 4: Responses on Innovation

Questions	Responses						
	SA	A	N	D	SD	Mean	Std. Dev
Your business often designs and deliver new products to meet current changes with the help of modern ICT facilities.	175	119	56	29	20	4.00	1.151
Your business has improved in creativity with the aid of research and development units.	178	132	40	37	12	4.07	1.089
Innovation Programs and processes give my business the competitive edge over other competitors in the industry.	189	104	49	41	16	4.03	1.171
Your business imbibes the innovation culture of having regular meetings with employees, collective decision making and reward for excellence and hard work.	193	140	31	23	12	4.20	1.012
Your business often introduces new marketing strategies involving changes in product packaging, product placement and promotional activities.	198	105	40	34	22	4.06	1.197

Source: Field Work (2023)

Table 4 shows responses collected from respondents on innovation. Finding out if your business often designs and deliver new products to meet current changes with the help of modern ICT facilities, 43.9% of the respondents strongly agreed, 29.8% agreed, 14.0% were uncertain, 7.3% disagreed while only 5.0% strongly disagreed. The result has a mean of 4.00 and standard deviation of 1.151. Finding out if your business has improved in creativity with the aid of research and development units, 44.6% of the respondents strongly agreed and 33.1% agreed while 9.3% disagreed and 3.0 % strongly disagreed. The result has a mean of 4.07 and standard deviation of 1.089. Finding out if innovation programs and processes give my business the competitive edge over other competitors in the industry, majority of the respondents 47.4% agreed, 26.1% strongly agreed while 10.3% disagreed and 4.0% strongly disagreed with a mean score of 4.03 and standard deviation of 1.171. Finding out if the businesses imbibes the innovation culture of having regular meetings with employees, collective decision making and reward for excellence and hard work, 48.4% strongly agreed, 35.1% agreed, 7.8% uncertain while 5.8% disagreed and 3.0% strongly disagreed. The result has a mean of 4.20 and standard deviation of 1.012. In finding out if your business often introduces new marketing strategies involving changes in product packaging, product placement and promotional activities, 49.6% of the respondents strongly agreed, 26.3% agreed, and 10% neutral while 8.5% disagreed and 5.5% strongly disagreed. The result has a mean of 4.06 and standard deviation of 1.197.

4.2   Diagnostic

Before carrying out a regression test, certain assumptions must be met to ensure that the results are not spurious. The normality and multicollinearity tests are conducted in this section.

i.   Normality Tests

The descriptive measures used in this study included the minimum, maximum, mean and standard deviation. To test for the normality of data, skewness, and kurtosis were used.

Table 5: Test for Normality using Skewness/Kurtosis

Variable	N	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis
Electricity	399	1	5	4.01	1.124	-1.241	2.941
Transportation	399	1	5	4.11	.956	-1.354	3.995
Business Survival	399	1	5	3.96	1.059	-1.229	3.204

Source: Researcher's Computation using SPSS Output, 2023

Table 5 displays the descriptive statistics highlighting the means, minimum, maximum, and standard deviation of the data. The descriptive statistics of the variables as provided indicates that business survival is the dependent variable and other variables, electricity and transportation infrastructure, are the predictor variables. The means and standard deviation scores for the variables were as follows: electricity infrastructure (M=4.01, SD=1.124) and transportation infrastructure (M=4.11, SD=0.956). The mean and standard deviations score for business survival are (M=3.96, SD=1.059). The mean scores and standard deviation indicate the level of agreement of respondents with the questions.

Meanwhile, the minimum and maximum values are consistently 1 and 5 for all the variables considered in this study. It also shows very low dispersion among the responses as shown in the low standard deviations of all the variables under consideration. This supports the agreement of the respondents in giving responses to all the questions raised in this research work.

The result in Table 5 also shows the test of normality based on the Skewness Statistic and Kurtosis Statistic. To check the level of skewness and kurtosis for the variables, if skewness is less than -1 or greater than 1, the distribution is skewed. If skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed. If skewness is between -0.5 and 0.5, the distribution is approximately symmetric. In Table 5 the electricity infrastructure is -1.241; and for transportation infrastructure, the skewness value is -1.354. From the result in Table 5, the distributions of the variables are negatively skewed. However, as a result of the large sample size, we make an assumption of normality for the use of multiple regressions. The assumption is that kurtosis values should be within range of ±7and therefore failed to display excessive kurtosis. According to Baltangi (2005) the data is normally distributed if the p value is greater than 0.05 otherwise there is some departure from normality.

i.   Test for Multicollinearity

Variance Inflation Factor (VIF) was used to analyze for multicollinearity among the independent variables used in the study. The outcomes are shown in Table 4 below

Table 6: Test for Multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
Electricity Infrastructure	.659	1.517
Transportation Infrastructure	.534	1.872

Source: Researcher's Computation using SPSS output, 2023

This VIF result further confirms the result of the correlation matrix that there are no problems of multicollinearity amongst the independent variables (electricity infrastructure and transportation infrastructure) used in the models because the values are less than 5.

4.3   Regression Analysis

This sub-section presents the results of regression analysis of the model used in the study. The regression model explains the degree of effect of the predictor variables (electricity and transportation infrastructure) on the dependent variable (survival). The result is presented in the model summary, analysis of variance and coefficients tables.

Table 7: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	.901	.791	.785	.760	1.728

a.   Predictors: (Constant), Electricity, Transportation
b.   Dependent Variable: Survival
Source: Researcher's Computation using SPSS Output, 2023.

The result in Table 7 shows the regression model summary. The model summary shows that the R Square = 0.791 which indicates that infrastructural development dimensions (electricity and transportation infrastructure) explained 79.1% of the variation in survival of SMEs. The remaining 20.9% is explained by other variables outside the model. The result implies that infrastructural development dimensions are significant predictors of survival. The value of R= .901 also indicates that there is a strong positive correlation between the variables of the study.

Table 8: Analysis of Variance (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	219.264	5	43.853	75.917	.000
Residual	227.012	393	.578		
Total	446.276	398			

a.   Dependent Variable: Survival
b.   Predictors: (Constant), Electricity, Transportation
Source: Researcher's Computation using SPSS Output, 2023.

Table 8 shows the result of the Analysis of Variance (ANOVA) which indicates that F (5, 393) = 43.853 (which is greater than the critical F value of 2.42) and p-value = 0.000 (which was less

than 0.05.) The study therefore shows that the model had goodness of fit. The result further implies that infrastructural development dimensions (electricity and transportation infrastructure) significantly explained changes in survival of SMEs and the model was statistically significant and adequate.

Table 9: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.770	.216		3.561	.000
Electricity	.273	.042	.290	6.548	.000
Transportation	.226	.055	.114	2.316	.021

a. Dependent Variable: Survival

Source: Researcher's Computation using SPSS Output, 2023.

Regression coefficients in table 9, revealed that there was a positive and significant effect of electricity infrastructure on the survival of SMEs ($\beta=0.290$, p=0.000). The coefficient for electricity infrastructure (0.273) denotes that a unit increase in electricity infrastructure would lead to 27.3 % increase in survival of SMEs. The effect is statistically significant (P-value = 0.000<0.05). This is supported by a calculated t-statistic of 6.548 which is larger than the critical t-statistic of 1.96. Also, the result found a positive and significant effect of transportation infrastructure on survival ($\beta=0.114$, p=0.021). The coefficient for transportation infrastructure (0.226) indicates that a unit increase in transportation infrastructure would lead to a 22.6 % increase in survival of SMEs. The effect is statistically significant (P-value = 0.021 <0.05). This is supported by the calculated t-statistic (2.316) which is greater than the critical t-statistic of 1.96.

4.4 Test of Hypotheses and Discussion of Findings

H$_{01}$: Electricity infrastructure has no significant effect on the survival of SMEs in North-Central, Nigeria.

To test the effect of electricity infrastructure on survival, the result in table 9 showed that $\beta = 0.290$, t= 6.548 and sig = 0.000. Since the p-value is less than 0.05 and t statistic is greater than 2 at significance level of 0.05 it implies that survival of SMEs is significantly affected by electricity infrastructure. The null hypothesis is rejected by the study and we conclude that electricity infrastructure has a significant effect on the survival of SMEs in North-Central, Nigeria. Findings obtained from the test of hypothesis one revealed that Electricity infrastructure had a positive significant effect on the survival of SMEs in North Central, Nigeria. Thus, it was revealed that voltage fluctuation and power outages, an alternative source of energy, smart meters new tariff and poor maintenance culture of transformers affects the survival of SMEs in North-Central, Nigeria. This is in agreement with Abubakar and Olusegun (2019) they examined Electricity Supply and Performance of SMEs in Nigeria: Assessing Selected Firms in North-Western States. The study found that, relationship exists between SMEs growth, electricity supply and firm characteristics. Akinlemi (2018) also examined the effect of infrastructural facilities on the performance of SMEs in Nigeria. It was revealed that Infrastructure like power is the life wire of any business enterprise.

HO2: Transportation infrastructure has no significant effect on the survival of SMEs in North-Central, Nigeria.

To test the effect of transportation infrastructure on survival, the result in table 9 revealed that β = 0.114, t = 2.316 and sig = 0.021. Since the p-value is less than 0.05 and t statistic is greater than 2 at significance level of 0.05, it implies that survival is significantly affected by transportation infrastructure. The null hypothesis is rejected by the study and we conclude that transportation infrastructure has a significant effect on the survival of SMEs in North-Central, Nigeria. Findings obtained from the test of hypothesis two revealed that the huge cost of transportation, delayed delivery, bad nature of our roads, and difficulty in distribution of goods affects the survival of SMEs in North- Central, Nigeria. This is in agreement with Abakpa *et al*. (2021) they investigated the effect of basic infrastructure such as Transportation infrastructure on the performance of SMEs in Benue State Nigeria. The findings revealed that a significant relationship between transportation infrastructure and performance of SMEs. The study concludes that the level of infrastructure in Nigeria determines the success or otherwise of SMEs' growth. This is supported by Akinyele *et al*. (2016) they examined Infrastructural development as predictor to small and medium enterprises performance in Nigeria and they uncovered that transportation has a significant positive effect on SMEs performance. This implies that infrastructures play a huge role in ensuring the successful business operation of SMEs.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Based on the findings of the analysis of the study, the researcher concluded that Basic Infrastructural development plays a significant and positive role in the survival of SMEs in North-Central, Nigeria. Infrastructure is one of the most important factors in any organization be it small or medium. Only when the relevant infrastructures are adequately provided can the goals and the objectives of the Organizations be achieved. The findings presented above reveal that Electricity infrastructure investigated has a positive significant effect on the survival of SMEs in North-Central, Nigeria. As seen from the study, it was revealed that power outages, an alternative source of energy, smart meters, new tariff, and poor maintenance culture of transformers affect the survival of SMEs in North Central, Nigeria. Also, transportation infrastructure which was equally investigated has a positive significant effect on the survival of SMEs in North-Central, Nigeria. It was revealed in the study that the huge cost of transportation, delayed delivery, bad nature of our roads, and difficulty in distribution of goods affects the survival of SMEs in North-Central, Nigeria. Considering also, the good percentage in favor of the two hypotheses, it was therefore concluded that Infrastructural development has a positive significant effect on the survival of SMEs in North-Central, Nigeria.

5.2 Recommendations
    i.   SMEs owners/managers should work towards greater diversification of energy sources by adopting energy decisions and practices that encourage partnership through joint ventures/investment in renewable energy sources. Leveraging on private capital and expertise to create partnership in the development of renewable energy sources which are strategic to their survival. This will give SMEs access to affordable and reliable electricity services thus overcoming system failures such as blackouts, voltage fluctuations, and many more. Government should also create Free Economic Trade Zones for SMEs in North-

Central regions to be exempted from taxes, levies, and preferential tariff billing for made-in-Nigeria goods as this will help in maximizing SMEs survival in North-Central, Nigeria.

ii. SMEs promoters should adopt a framework agreement for accessing services such as leasing, cargo, and transport companies which will be more cost-effective. The government should also put in place proactive policies aimed at enhancing a fully functional modern rail transportation network in Nigeria that will provide a cheaper option for SMEs to transport their goods.

5.3 Implications and contribution of the study

This study contributes to our understanding of the theory infrastructural development and survival of SMEs as well as the general theoretical discourse on infrastructural development that support their survival and success. The study has also established the powerful role that infrastructural development has in the effective management of organizations most especially, manufacturing SMEs. The study was able established that electricity as an aspect of infrastructural development has the most contribution (27.3%), as against transportation as an aspect of infrastructural development (22.6%), indeed, infrastructural development has the capacity to help SMEs survivability as the results of this study depicts. Lastly, the study was able to show which aspects of infrastructural development that has the most effect on the survival of SMEs. This would help policy makers to focus on strengthening such aspect of infrastructural development in order to help improve the level of survivability in their firms. This study is timely and relevant to scholars who are desirous of pursuing future research studies on the effect and/or relationship between infrastructural development and SMEs survival.

5.4 Limitations and Suggestions for Further Studies

This study is without its limitations. The most noticeable limitation is the cross-sectional nature of the research design. Cross-sectional research design does not have the capacity to explore longitudinal relationships between variables; that is establishing the causal effect of the variables. This study therefore, suggests that future studies could explore this relationship using a longitudinal research design. Other dimensions of infrastructural development could be used in future studies and moderators and mediators could also be introduced in future studies to enable a nuanced understanding of the phenomenon of infrastructural development and SMEs survival among others.

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