IMPACT OF INNOVATION ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NORTH CENTRAL NIGERIA

BY

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BEING A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF POST GRADUATE STUDIES, NASARAWA STATE UNIVERSITY KEFFI, IN PARTIAL FULFILMENT OF THE REQUIRMENT FOR THE AWARD OF DEGREE OF MASTER IN BUSINESS ADMINISTRATION (MBA)

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DECLARATION

I hereby declare that this research project was written by me and it is a report of my research work. This work has not been presented elsewhere for the award of any academic degree in any institution. All quotations are indicated and sources of information specifically acknowledged by means of bibliography.

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CERTIFICATION

This research work titled "Effect of advertising on Customer Satisfaction: A study of GSM Subscribers in Abuja meets the regulation governing the award of Degree of Master in Business Administration (MBA), Nasarawa State University, Keffi for its contribution to knowledge and literary presentation.

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ABSTRACT

Overtime, the competitive environment in most countries and for most firms irrespective of size and sector, has changed as production has become more technology-driven and knowledge-based, and competition has globalized and developed into innovation based. To survive today's global market economy, and achieve long-term success, firms have recognized the importance of being able to adapt and keep innovating to overcome intense competition and to match changing market demands. SMEs have not performed credibly well in Nigeria and the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) reported that SMEs in Nigeria usually collapse before their fifth anniversary. The study thus examined the role innovation plays towards the performance of SMEs in North Central Nigeria using ordinary least square (OLS) regression method. Findings from the study revealed that Process Innovation has had no significant effect on SMEs sale growth. The limited resource base of small firms compared to large firms, such as management, funding and technology can affect their ability to scan, analyze and respond to major environmental challenges. However, innovation effects were felt in terms of both product-oriented results such as improvement in quality of goods and services and secondly, increased range on goods and services and process-oriented results like increased production capacity and improved production flexibility. Finally, the analysis revealed that marketing innovation has significant impact at creating employment opportunities for SMEs growth. The study thus recommends that SMEs in North Central Nigeria can achieve a higher business growth performance by carefully selecting their operating markets activities, trying to avoid markets dominated by large firms, and considering economic situations in introducing innovations.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Small and Medium-sized Enterprises (SMEs) play significant roles in the World Economy and contribute substantially to income, output and employment generation. Henderson (2002) stated that Small and Medium Enterprises connect the community to the larger global economy, and they are the vital link to the economic development of any nation. Indeed, they serve as a source of innovation, technological growth, and creation of new job (Wiklund, 2009).

Innovation plays an important role not only for large firms, but also for Small and Medium Enterprises (SMEs) (Jong and Vermeulen, 2006; Anderson. 2009). Sandvik (2003) argues that, innovation is one of the most important competitive weapons and generally seen as a firm's core value capability. Innovation is also considered as an effective way to improve firm's productivity due to the resource constraint issue facing a firm (Lumpkin and Dess, 1996). Bakar and Ahmad (2010) add that the capability in product and business innovation is crucial for a firm to exploit new opportunities and to gain competitive advantage.

Entrepreneurial innovativeness thus portrays organizational willingness and a tendency to achieve the desired innovation demonstrated in terms of behaviors, strategies, activities and processes. As a consequence, innovativeness usually result in new products/services or changes in service/product lines, developing new Research and Development processes, new methods of production, developing new systems/applications or introducing as well as implementing new procedures. Accordingly, the impact of entrepreneurial innovativeness on its performance depends on the degree of innovation that is being pursued. It has been argued that

more substantial and radical types of innovation tend to have a significant impact on organizational overall performance, while incremental innovation seems to have a low and short term impacts because such innovation usually concentrate on minor or process improvement initiatives or activities. Given this, when there is a major disruption, organizations concentrating too much on incremental innovation initiatives may find themselves less competitive and lack of sustainability.

In the Nigerian environment, Small and Medium Enterprises (SMEs) have compelling growth potential and like other emerging economies are likely to constitute a significant portion of Gross Domestic Product (GDP) in the near future, (Oyelaran-Oyevinka, 2007). According to Nwankwo et al. (2012), Small Medium Enterprises (SMEs) sector provide, on average, 50% of Nigeria's employment and 50% of its industrial output. Thus, Small and Medium Enterprises (SMEs) are very important part of the Nigerian Economy.

However, Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) reported in 2008 that. Small and Medium Enterprises (SMEs) in Nigeria have not performed creditably well and that they usually collapse before their fifth anniversary. Basil (2005) and Nwankwo et- al. (2012) further identified some of the main causes of poor performance of these Small and Medium Enterprises (SMEs) to include lack of innovation.

This argument is consistent with what is taking place in other parts of the world. Several experts have argued that, across the globe, competition amongst firms of all sizes has not only taken a global dimension, it has also become more technologically driven (Mvtelka 2000; Szinuai, Naude & Goedhuys 2011). To survive today's global market economy and achieve long-term success, firms have recognized the importance of being able to adapt through innovation. The success of small firm and

survival is often dependent on the degree to which they incorporate innovation into their strategies.

For instance, product innovation is important to maintain market share, and business expansion (Heunks, 1998). Process innovation also helps increase efficiency and consequently sales growth. On its part, because more hands may be required to operate new market, market innovation may be reasonably linked to growth of employment.

Thus, the main focus of the present study is to explain the impact of the three dimensions of innovation (product, process and market) on the identified three manifestations of Small and Medium Enterprises (SMEs) performances (business expansion, sales growth and employment generation) in North Central Nigeria.

1.2 Statement of Problem

The background information of the study indicates that Small and Medium Enterprises (SMEs) are faced by constant threat of failure and most do not graduate into large enterprises. Previous indices indicate that the Small and Medium Enterprises (SMEs) sector in Nigeria is characterized by high mortality rate, three out of five fail within the first few months of operation, over 60% fail each year: and most do not survive to their third anniversary (World Bank. 2014). It is however noted that many countries are not making full use of their entrepreneurial potential and in Nigeria likewise, lack of ability among Nigerian entrepreneurs hinders them from identifying and seizing business opportunities that abound. Many Small and Medium Enterprises (SMEs) are generally operating at low margins, have very little differentiation and are lacking survival or necessity driven, thus implying that Small and Medium Enterprises (SMEs) in North Central Nigeria may be lacking innovativeness.

1.3 Research Questions

The following were the research questions were developed to guide this research work:

i. To what extent has product innovation significantly influenced business expansion of Small and Medium Enterprises (SMEs) in North Central Nigeria?

ii. What relationship exists between process innovation and Small and Medium Enterprises (SMEs) sales growth in North Central Nigeria?

iii. What impact does market innovation lias on Small and Medium Enterprises (SMEs) employment generation in North Central Nigeria?

1.4 Objectives of the study

The main focus of the study is to assess the impact of innovation on the growth of Small and

Medium Enterprises (SMEs) in North Central Nigeria. This research study was poised towards

achieving the following objectives which are to:

i. Examine the extent to which product innovation has significantly influenced business expansion of Small and Medium Enterprises (SMEs) in North Central Nigeria.

ii. Examine the relationship that exists between process innovation and Small and Medium Enterprises (SMEs) sales growth in North Central Nigeria.

iii. Analyze the extent to which market innovation has significantly impacted on Small and Medium Enterprises (SMEs) employment generation in North Central Nigeria.

1.5 Statement of Hypotheses

Hypotheses for this research are stated in a null form as shown below:

Hypothesis One:

H_{01}: Product innovation has not significantly influenced business expansion of Small and Medium Enterprises (SMEs) in North Central Nigeria.

Hypothesis Two:

H_{02}: There is no significant relationship between process innovation and Small and Medium Enterprises (SMEs) sales growth in North Central Nigeria.

Hypothesis Three:

H_{03}: Market innovation has no significant impact on Small and Medium Enterprises (SMEs) employment generation in North Central Nigeria.

1.6 Significance of the Study

This study will be of a great significance to Entrepreneurs, Policy Makers, Government Institutions, Academia and the General Public. It will assist the Entrepreneurs to adopt innovation strategy that will enable them compete favourably and succeed in their business ventures. The findings of this study will help Government Institutions such as the Ministries of Science and Technology, Industry, Trade and investment, Works and Housing, Nigerian Investment Commission, Small and Medium Enterprises Agency of Nigerian (SMEDAN), Central Bank of Nigeria (CBN), etc to formulate policies or make laws regarding effectiveness of innovation in the management of the Nigerian economy in terms of Small and Medium Enterprises (SMEs) growth which have a spillover effect on Nigeria economic growth.

This research work further serves as a guide and provides insight for future research on the topic or related field for academia who are willing to improve on it.

The study will also contribute to knowledge by appraising the impacts of

technological knowhow and government policy on the growth of Small and Medium Enterprises (SMEs) in North Central Nigeria.

1.7 Scope and Limitations of the Study

This study is limited to the impact of innovation on the growth of Small and Medium Enterprises (SMEs) in North Central Nigeria and it was conducted to investigate the three dimensions of innovation (product, process and market) on the identified three manifestations of Small and Medium Enterprises (SMEs) performances (business expansion, sales growth and employment generation) in North Central Nigeria.

There was a little difficulty in the process of data collection since the intention was to carry out a self-administered questionnaire. The Researcher has to visit a particular institution severally before been able to meet the target person. This has imposed a little restriction in one way or the other in carrying out this research work. Another plausible limitation is the time limit given for the completion of this research work and finally, financial constraints cannot be ruled out.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section reviews the concept of innovation, concept of Small and Medium Enterprises, factors affecting Small and Medium Enterprises performance, and historical background of Small and Medium Enterprises in Nigeria. It also captured the theoretical and empirical literatures.

2.2 Concept of Innovation

The early concept of innovation in economic development and entrepreneurship was popularized by Joseph Schumpeter, a German economist. Innovation, in his view, comprises the elements of creativity. Research and Development (R&D), new processes, new products or services and advance in technologies (Lumpkin and Dess. 2001).

The Organization Researchers are of the view that adoption of innovation is a main vehicle for organization adaptation and change to improve firm performance especially under the conditions like, scarce resources, dynamic business environment, intense competition and changing customers demand, for better quality (Jansen et al, 2006. and Oscar et al. 2013). Schumpeter (1934, 1942) emphasized the role of innovation in the entrepreneurial process. He stated that this was a process of

“creative destruction” where wealth was created when existing market structures were disrupted by the introduction of new goods or service that shifted resources away from existing firms and caused new firms to grow. Innovativeness has become an important factor used to identify entrepreneurship. Drucker (1985), Oscar. (2013) believe that innovation is the specific tool for entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service. The scholars further believe that innovation is better

practiced in phases. Innovation involves the exploitation of new ideas. Oscar, et al (2013). claimed that innovation is the ability to take quick advantage of scientific or technological discoveries, commercializing them in ways that translate the new discoveries into added- value goods and services and processes for their customers/clientele.

In its original sense, innovativeness can be defined as the degree to which an individual or other entity is relatively earlier in adopting new ideas than the other members of a system (Rogers, 2003. Oscar, and Hassan, 2013). Similarly it is the tendency to support new ideas, experimentation and creative processes (Lumpkin and Dess. 1996). Oscar and Mashood Ul- Hassan. 2013) also associate innovation closely with creativity, they however suggest that it must be linked to entrepreneurship if the innovation is to become a commercial opportunity to be exploited.

To Kuratko and Hodgctts (2004), innovation is the creation of new wealth or the alteration and enhancement of existing resources to create new wealth. Innovation is also seen as a process of idea creation, a development of an invention and ultimately the introduction of a new product, orocess or service to the market (Thornhill. 2006). At present, this concept is applied in every facet of social lives

and activities. This makes the innovation concept become more multidimensional and intricate.

Beaver (2002) believes that innovation is an essential element for economic progress of a country and competitiveness of an industry.

innovation plays an important role not only lor large firms, but also lor SMEs (Jong and Yermeulen, 2006; Anderson, 2009). Sandvik (2003) argues that innovation is one of the most Important competitive weapons and generally seen as a firm s core value capability[7]. Innovation is also considered as an effective way to improve firm's productivity due to the resource constraint issue facing a firm (Lumpkin and Dess, 1996). Bakar and Ahmad (2010) add that the capability in product and business innovation is crucial for a firm to exploit new opportunities and to gain competitive advantage.

Milling and Stumpfe (2000) classified innovations into three: product, process and technological. According to them, product innovation involves shortening the product life cycle, expand commercial production process, generate sales and revenue and recoup development investments. This also connotes the number of implemented innovations in the product line. Firms' ability to launch new and sophisticated products in increasingly fast cycle is essential to success in the currently dynamic business environment. Process innovation entails the number of innovations implemented in the manufacturing or service process. Product and Process innovations are inter-connected and interwoven in an effort to meet certain production targets. And. according to Kim, et al (1992) technological innovation involves acquisition of more and flexible process equipment, in combination with more flexible organization and administrative processes that facilitates or enables frequent changes in the production line.

2.2.1 Product Innovation

Product innovation can be defined as the creation of a new product from new materials (totally new product) or the alteration of existing products to meet customer satisfaction (improved version of existing products) (Gopalakrishnan and Damanpour, 1997; Langley et al., 2005). It also refers to the introduction of new products or services in order to create new markets or customers, or satisfy current markets or customers (Wang and Ahmed, 2004; Wan et al., 2005). Myers and Marquis (1969) contend that product innovation can be made by exploiting new ideas. Product innovation provides a variety of choice for products (Craig and Hart, 1992).

Product innovation is one of the important sources of competitive advantage to the firm (Camison and Lopez. 2010). With innovation, quality of products could be enhanced, which in turn, contributes to firm performance and ultimately to a firm's competitive advantage (Garvin. 1987; Porker el al. 1996).

According to Hult et al. (2004), product innovation offers a potential protection to a firm from market threats and competitors. Bayus el al. (2003) proved that product innovation had positive and significant link with organizational performance. Using a total number of 744 Spanish-firm samples. Espallardo and Ballester (2009) confirmed a positive impact of innovation on firm performance. Similarly, Alegre el al. (2006) found that both product innovation dimensions (efficacy and efficiency) were strongly and positively related to firm performance. The introduction of novel product is positively associated with firm performance was also confirmed by Varisand Littuncn (2010).

2.2.2 Process Innovation

In general, process innovation is the method of re-engineering and improving

internal operation of business process (Cumming, 1998). This method involves many aspects of a firm's functions, including technical design, Research and Development. Manufacturing. Management and commercial activities (Freeman, 1982). To Oke et al. (2007), process innovation concerns with the creation of or improvement in techniques and the development in process or system. For instance, innovation in technology, skill, techniques, system and procedure, which is used in the process of transforming input into output (Zhuang et al.. 1999). In a production activity, process innovation can be referred to as new or improved techniques, tools, devices, and knowledge in making a product (Gopalakrishnan and Damanpour, 1997; Langley et ah. 2005; Wan et al.. 2005; Oke et al, 2007).

Crucial to the manufacturing industry, process innovation should be emphasized by a firm as its primary distinctive competence for competitive advantage (Nemetz and Fry, 1988). More specifically, such an innovation is positively associated with firm growth (Morone and Testa, 2008). Consistent with this argument, Varis and Littunen's (2010) study on Small and Medium Enterprises in Finland found that process innovation is positively related with firm performance. Using new technology as a proxy for process innovation, Anderson (2009) found a significant relationship between new technology and firm performance. Recent evidence by Ar and Baki (2011) reconfirmed the positive and significant influence of product and process innovation on firm performance.

2.2.3 Market Innovation

According to Johne (1999), market innovation deals with the market mix and market selection in order to meet a customer's buying preference. Continual market innovation needs to be done by a firm because, state-of-the-art marketing tools, particularly through the Internet, make it possible for other competitors to reach

potential customers across the globe at a light speed. Rodriguez-Cano et al. (2004) assert that, market innovation plays a crucial role in fulfilling market needs and responding to market opportunities. In this respect, any market innovation has to be directed at meeting customers' demand and satisfaction (Appiah-Adu and Satyendra, 1998). Sandvik (2003) discovered that market innovation has a positive effect on sales growth of a firm. To Johne and Davies (2000), market innovation would augment sales through the increasing demand for products, which in turn yields additional profit to innovative firms.

Similarly, Otero-Neira et al. (2009) found strong evidence that market innovation positively influenced business performance. Adding to this finding, Varis and Littunen (2010) using an estimated model confirmed a highly significant relationship between a market-related innovative activity and firm performance.

2.3 The Concept of Small and Medium Enterprises

For decades, the Small and Medium business have been found to constitute the very foundation upon which the large businesses were built. However, Small and Medium businesses have been identified differently by various individuals and organization such that an enterprise that is considered small and medium in one place is seen differently in another. Even within a country, the definition changes over time. Some common indicators employed in the various definitions include total assets, size of labour employed, values of annual turnover and capital investment Baenoh 1994).

The small scale industries department of Federal Ministry of Industries, (Now Federal Ministry f Industry, Trade and Investment) in 1979 defined small business as "enterprises having capital investment (in land, building, machinery and equipment and working capital) up to N60,000.00 and employing not more than 50 person". The

Central Bank's monetary and credit guidelines, stated that small-scale industries were regarded as establishment whose annual turnover is less than N6 million and capital not exceeding N10 million. According to Brwon. Medott and Hamitton (1990). Many Small firms are created as a last resort rather than as first choice and have therefore invited growth potential.

Ayaggari et.al (2003) and Beckley (1988) contends that the “definition of Small and Medium scale Enterprises varies according to context, author and countries”. In country such as USA,

Britain and Canada Small scale Business is defined in terms of annual turnover and the number of paid employees. (Ekpeyong and Nyang, 1992). In Britain for example Small scale Business is conceive as that industry with annual turnover of 2 million pound or less with fewer than 200 paid employees.(Ibid: 4). In the case of Japan, it is conceptualized as type of industry, paid up capital and number of employee. Consequently Small and Medium scale Enterprises are defined as those manufacturing with 100 million yen paid up capital and 300 employees. Those in wholesale trade with 300 million paid up capital with 100 employees while those in retail trade with 100 million paid up capital with 50 employees (Fatai. 2012).

In the case of Nigeria, hardly do you see a clear-cut definition that distinguishes between small and medium scale enterprises. However, the Central Bank of Nigeria in its monetary policies circular No. 22 of 1988 view Small scale Industry as those enterprises which has annual turnover not exceeding 500.000 naira (CBN, 2011). Similarly in 1990. the Federal Government of Nigeria defined small scale enterprises for the purpose of commercial bank loans as those enterprises whose annual turnover does not exceed 500,000 thousand naira and for merchant bank loan those enterprises with capital investment not exceeding 2 million naira (excluding

the cost of land) or a minimum of 5 million naira.

In a more general and comprehensive term, Ogechukwu (2006) chronicled a general criteria for defining Small and Medium scale Enterprises in different countries. These includes number of employees, annual turnover, local operations, sales volumes, financial strength, managers and owners autonomy, relatively small markets compared to their industries and capital usually supplied by individual or shareholders etc. As a result of this definitional differences and lack of universal definition, the European Union in 2003 adopted a universally accepted definition of Small and Medium scale Enterprises and micro business as companies with less than 250 employees, with respect to financial criteria, revenues must not exceed 50 million Euro (measure as turn over) or 43miliion euro (measure as balance sheet). In addition, the European Commission specifies term of ownership stating Small and Medium Enterprises must be independent with less than 25% being owned by outside interest. (European Commission, 2007). In a report of enterprises association. Macqueen (2004) conceive Small and Medium Enterprises as enterprises employing 10-99 full time employees or with a fixed capital investment of US$1000-500,000.

Small and Medium scale Enterprises are certainly not transnational company, multinational cooperation, publicly owned enterprises or large facility of any kind. However they can depend on business and ownership structure to become a large business unit (Macqueen 2006) while it can be argued that 80% of the financing of SMEs come from owners, friends and families, business form can take different form including private ownership, limited partnership, contract and sub-contracts, cooperatives or associations. (Kozak. 2007). Small and Medium scale Enterprises have a narrow context within which its operation is carried out. However, where it is

effectively operated it has capacity to sprout the economic growth and development.

2.4 Historical Background of SMEs in Nigeria

In Nigeria, Small and Medium Enterprises has a long history like every other part of the world. Historically, Small and Medium Enterprises has it origin in the eastern and Mediterranean. Small and Medium Enterprises, all over the world is divergent arrays of business concerns involve in economic activities spanning from micro and rural enterprises to contemporary industrial organizations that uses sophisticated technologies. As a result of their relevance and contribution to national economies, policy planners, academic and national government have shown interest in issues pertaining to Small and Medium scale Enterprises (SMEs) all over the world.

It was the means of survival for the people since ages, it has managed to save many poor homes that have the innovation to start a unique business but with different problems with establishment or survival. In Nigeria, there is no generally acceptable definition of Small and Medium Enterprises but it varies over time from organization to organization. The National Council of Industry (NCI)) in 2001 include the capital investment band of Small and Medium Enterprises at between NGN 150 to 200 million, excluding land, but including working capital and also the working force band between 11 and 300 inclusive. But on the other hand, the National Association of Small and Medium scale Enterprises (NASME) also defines a small scale enterprise as a business with less than fifty employed people by the enterprise and with an annual turnover of NGN 100 million. National Association of Small and Medium scale Enterprises came up with another definition, which states that Small and Medium scale Enterprises is a business with less than 100 employees and an annual turnover of NGN 500 million.

The Central Bank of Nigeria (CBN) defines Small and Medium Enterprise as an

enterprise with a maxi-mum asset base of NGN 200 million, without land and working capital, also the number of employees not less than 10 and not more than 300.

Due to the flexible nature, Small and Medium Enterprises are quite able to withstand economically diverse situations. In Nigeria Small and Medium Enterprises are more likely able to survive in smaller urban and rural areas where they can effectively contribute to the distribution of economic activity in any region and that has helped the reduction in the migration to the larger cities like Abuja, Lagos and Kano.

Small and Medium Enterprises in Nigeria can be categorized into urban and rural enterprises, but in a more formal way they can be called Organized and Unorganized enterprises. The organized enterprises have paid employees with a registered office while the unorganized enterprises are mainly made up of artisans who work in open spaces, operating in temporary wooden workshop or structures. The unorganized enterprises rely mostly on apprentices or family members and mostly low rate or no salary paid workers. Rural enterprises are made up of family groups, women that are engaged in food production from local farm crops, and individual artisans. The major activity involved in this sector include; soap and detergents, fabrics, textile and leather, local blacksmith, tinsmith, ceramic, clothing and tailoring, timber and winning, bricks and cement, food processing, wood furniture, beverages, bakeries, electronic assembly, agro- processing. chemical based products and mechanics. (CBN, 2009).

According to history, Small and Medium Enterprises in Nigeria have existed since the country's independence in 1960, probably before independence but since independence Nigeria has had series of seminars, studies and workshops, each of which appraise the excellence, importance and need to facilitate the establishment

and sustainability of Small and Medium Enterprises Small and Medium Enterprises. All the four year National Development Plans from 1962-63 to 1984-85 have laid strong emphasis on strategies of government-led industrialization mount on import as substitution. In addition, the Structural Adjustment Program (SAP) initiation in 1986, the state did not appreciate the Structural Adjustment Program active involvement in industrialization by a process of commercialization and privatization. Special attention was then shifted from large scale industries to Small and Medium Scale Enterprises, which has a prominent potential for developing domestic linkages for effective growth, sustainable industrial development. Bigger and greater leaning were then placed on the Organized Private Sector (OPS) to head previous industrialization programmes.

The sector was further actively encouraged by more incentives and these were directed at solving or at least alleviating the huge problems that were encountered by the industrialists in the country and therefore enabling them greater leeway towards increasing their contribution to the national economy. (World Bank. 2014).

2.5 An overview of Small and Medium Enterprises in Nigeria

Nigeria remains a country with very high potential but an equally high inertia to develop. The country is blessed with abundant supply of enormous human, agricultural, petroleum, gas, and large untapped solid mineral resources (Obadan. 2003). Since her independence from British rule in 1960. the country has gone through decades of political instability and this has brought with it a climate of social tension and an unpredictable market for business. The successive forceful takeover of government by the use of military coup and the indigenization policy of the late 70's has put off investors who hitherto saw the country as a large and growing market. Due to the nature of these governments, there is perceived

corruption, policy instability, poor infrastructural development and lack of accountability of public funds. For these reasons, the World Bank described Nigeria as a paradox (World Bank. 1996). This is also true for most Sub-Saharan African countries as industrial production has declined or stagnated over the past decades (Ball, 1992).

According to Mambula (1997), since its independence, the Nigerian government has been spending an immense amount of money obtained from external funding institutions for entrepreneurial and small business development programs, which have generally yielded poor results. Unfortunately these funds hardly reach the desired business because they may be lost to bureaucratic bottle necks and end up in accounts of public office holders. Despite these setbacks, the role of small business owned by middle class Nigerians, set up by individual savings, gifts and loans and sometimes sustained by profit cannot be ignored. According to Asmelash (2002). countries that have made economic breakthroughs in the last two decades demonstrated beyond doubt that the development of entrepreneurship has been the sine-qua-non of economic growth and development. According to Asmelash (2002), the significant role Small and Medium Enterprises play in development is acknowledged world over. He cited the work of Schell, 11996). who noted that in developed countries such as the USA, where big corporations are dominant. Small and Medium Enterprises still play enormous role in the country's economy. Also, according to the report of the Indian working group on science and technology for Small- and Medium-scale Enterprises. Small and Medium Enterprises occupy an important and strategic place in economic growth and equitable development in all countries. Constituting as high as 90% of enterprises in most countries worldwide, Small and Medium Enterprises are the driving force behind a large number of

innovations and contribute to the growth of the national economy through employment creation, investments and exports. Owing to the success of the Asian tigers, interest is running high globally particularly in developing countries that are in the rat race to meet up and reduce the economic and development gap. Chinese and foreign experts estimated that Small and Medium Enterprises are now responsible for about 60% of China's industrial output and employ about 75% of the workforce in China's cities and towns (Schell, 1996). These Small and Medium Enterprises creates jobs for workers who have been laid off from state-owned enterprises due to the steady transition from communism to a market based economy. According to Cook and Nisxon (2000), interest in the role of Small and Medium-sized Enterprises (SMEs) in the development process continues to be in the forefront of policy debates in developing countries. Owing to the relevance of SME's, in 2006. the government of Taiwan launched a $61 million "branding" initiative, which was aimed to push the economy from being production-based to knowledge-based. According to the report in EE Times Asia in August 2006. the so-called "Branding Taiwan Plan" is a seven-year program designed to help promising Small-to-Medium Enterprises (SMEs) in developing their own brand, according to the Taiwanese government. This was initiated with the full consciousness of the ability of Small and Medium Enterprises to drive the economy particularly in the medium term. Small businesses employ 72.000,000 people (Asmelash. 2002). More than 90 per cent of the industries in Indonesia, Philippines. Thailand, Hong Kong, Japan, Korea, India and Sri Lanka are small enterprises (Fadahunsi and Daodu 1997).

A 2004 survey conducted by the Manufacturers Association of Nigeria (MAN) revealed that only about ten percent (10%) of industries run by its members are fully operational. Essentially, this means that 90 percent of the industries are either ailing

or have closed down. Given the fact that manufacturing industries are well-known catalysts for real growth and development of any nation, this reality clearly portends a great danger for the Nigerian economy. The Acting Director-General of the association, Mr. Jide Mike, who disclosed this fact, attributed the cause of this sorry state to such factors as poor infrastructure, multiple taxes imposed on manufacturers in Lagos state by all tiers of government and the difficulty in accessing finance. He noted. “The debris of dilapidated manufacturing concerns across the country is the outcome of years of harsh operating conditions”. Jide (2012), also remarked, “In addition to policy somersault, funding remains a challenge to all stakeholders in the manufacturing sector, the several palliatives, including the Small and Medium Industries Equity Investment Scheme (SMIEIS) and other sector-specific incentives notwithstanding”. He added. “In summary. 30 percent of industries in Nigeria have closed down. About 60 percent are ailing companies and only 10 percent operate at sustainable level”. The Acting Director-General of Manufacturing Association of Nigeria (MAN) emphasized that low capacity utilization has undermined the competitiveness of manufacturing industries, whose fortunes have been worsened by the impact of globalization. He recalled that at Nigeria's independence in 1960. the manufacturing sector's contribution to national Gross Domestic Product (GDP) was 3.8 percent and that despite the discovery of oil, manufacturing contributed as much as 9.9 percent to the GDP from 1975 to 1981 when capacity building was above 70 percent. Jide (2012), however regretted that the story is different today as the manufacturing sector is back at the independence level as it contributed a mere 4.7 percent to GDP in 2003 while industrial capacity utilization dropped to a paltry 48.8 percent in 2003.

The above is indeed not encouraging as it represents the fate of the manufacturing

sub-sector of the Small and Medium Enterprises. It was said that the large manufacturing companies are even better off given that those of them, which have international affiliation do get succor and support from their parent companies or technical partners overseas. The support and services the multinationals get from their parent companies could be driven by the profit repatriation, expansion of their overseas market and other motivations but overall, the Nigerian economy benefits even if it is only through employment generation. President Olusegun Obasaujo in his address on March 01, 2002 at the commissioning of the headquarters of the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) in Abuja also noted that there was a great disconnection between the Small and Medium Enterprises and the large companies in Nigeria, pointing out that the multinational companies dominated business in the country even in

e area of finished products. Because of these and other debilitating problems, only about 10 percent of Small and Medium Enterprises in Nigeria are into manufacturing.

2.6 Problems Impeding the Development of Small and Medium Enterprises in Nigeria

Small and Medium Enterprises are known worldwide to encounter some structural difficulties, problems or limitations, which if confronted can drive them to promote economic growth and development. Some of the principal problems Small and Medium Enterprises face in Nigeria include the following:

2.6.1 Inadequate Funding

It is a known fact internationally that Small and Medium Enterprises are funded by their owners' personal or family savings. Nonetheless, the high level of poverty and consequently low level of savings in Nigeria and other Less Developed Countries

have made this source of funding for the establishment, growth and development of new and existing Small and Medium Enterprises inactively low. This perhaps explains why most Small and Medium Enterprises in Nigeria more often than not, start off with inadequate funding and afterward start warming up for shut down if external funds from either the government or financial institution do not come.

According to Ezeh (2012), ‘the unpreparedness of small business owners in terms of capital prior to going .into business is said to be accountable for their untimely failure' (Ezeh, 2012). Therefore, most Small and Medium Enterprises in Nigeria are not adequately capitalized and as such are not capable to raise funds in the capital market owing to their inability to meet the stipulated strict conditions (i.e. registering as limited liability company) which is regarded as somewhat on the high side (Ireghan, 2009). Inadequate collateral is a key restraint for access to credit in Small and Medium Enterprises from banks and other financial institutions. Other factors that hinders Small and Medium Enterprises front accessing credits from banks and other established schemes like the Small and Medium Industries Equity Investment Scheme (SMIEIS), 'evv Partnership for Africa Development (NEPAD), African Growth and Opportunity Act (AGOA) etc. include their incapability to raise the necessary equity contribution (a maximum of N500 million exclusive of land and working capital), which is very high.

Others include scantily prepared project proposal as well as feasibility study of the project, incomplete and inaccurate financial records and lack of succession plan in event of the entrepreneur's exit (Aremu. 2010).

Funding is seen by this paper as the most hindering factor to the development and sustenance of Small and Medium Enterprises towards contributing to Nigeria's economic growth in terms of output of goods and services.

2.6.2 Inadequate Infrastructural Facilities

The problem of unstable and unreliable supply of electricity, dilapidated roads, inadequate supply of water for both home and industrial use, inefficient and costly communication system, among others, have for long hindered the growth and development of Small and Medium Enterprises in Nigeria. Nearly all Small and Medium Enterprises operating in Nigeria have one or more power generating plants as an alternative source of power supply. The cost of obtaining, maintaining, sustaining and managing such generating plants are more often than not very expensive and this has made cost of production as well as prices of product very expensive, with the later turning out to be more and more uncompetitive in comparison with the imported equivalent. It is estimated that the cost of providing basic infrastructural amenities is between 5% and 20% of the total cost of setting up a manufacturing and processing industry in Nigeria (Osoba. 2013). This cost will be significantly higher today taking into account the rapid rate of inflation in the economy.

2.5.3 Low Capacity Utilization

This is perpetually gotten from the low demand for Small and Medium Enterprises products owing to their poor quality as well as exorbitant prices. Therefore, sales as well as profits have remained relatively low leading to poor returns on investment. A study of about 39 Small and Medium Enterprises' performance in Nigeria illustrated that a majority of them operated at between 30%-35% of their established capacity between 1995-1996 with sales and profit volume showing little increase (NCI, 2011). Erratic power supply as well as inadequate infrastructural amenities has contributed directly to low capacity utilization of the Small and Medium Enterprises in the manufacturing sector in the country.

2.6.4 Poor Planning and Management

Management involves planning, coordination, organization and control of both human and natural resources in an organization to attain its set aims and objectives (Basil. 2015). Therefore, it involves getting things done appropriately and efficiently through people. Nonetheless, a survey of Small and Medium Enterprises operating in LDCs showed that owners practically get everything done by themselves without seeking consultation from professionals or experts.

This has resulted to incompetence, inefficiency, wastage and under-utilization of resources available to the organization. In actual fact, planning is the essential function of management (Gold. 2005). Most Small and Medium Enterprises operators venture into business on impulse thout adequate feasibility study on the project or business (Mogano, 2011). e problem of poor planning and management in Nigeria's real sector has been traced to dequate relevant and appropriate information or data relating to the proposed business ventures.

2.6.5 Poor Awareness and Experience

Closely associated to the problem of planning and management is the low level of education and inadequate business experience among Small and Medium Enterprises' operators in Nigeria Alasan &Yakubu. 2011). These have given an explanation for the lack of pioneering, inventive, tnovative. dynamic, vibrant and entrepreneurial skills and abilities necessary to effectively nfront and tackle issues as they emerge. Human resources therefore, constitute the foundation (for wealth of nations (Cosson. 2013). According to him, “human resources make up the fundamental basis for the wealth of a nation'[5]. Capital and natural resources are inert factors of production, human beings are the active agents who accrue and amass capital, exploit natural and

material resources, put up social, economic and political organization and carry forward national development. Without a doubt, a country which is incapable to build and develop the skills and knowledge of its citizens and utilizes them effectively in the economy will not be able to develop anything else. In the view of Essien & Udofia (2006), effective and successful formal education :s the only way to build as well as develop the human skills, expertise and competence required for the growth and development of Small and Medium Enterprises in Nigeria and other LDCs.

2.6.6 Raw Material Mismanagement and wrong Choice of Technology

These are fundamental for growing and developing any business, be it large or small. The difficulty relating to small enterprises is the unavailability of quality and superior raw materials as well as its organization at the suitable price and time (Nigerian Economic Summit Group, 2012). In Nigeria, the majority of these raw materials are not produced in the country but imported. In addition, a general assessment made about domestic or locally made goods is the non-existence of uniformity and standardization in them. Classification, categorization, cataloging as well as comparison is not feasible or impossible when the quality of the raw materials employed changes from article to article.

The Small and Medium Enterprises in agro-allied industries encounter the peculiar difficulty of procurement, maintenance, conservation and storage of materials. Furthermore, the selection of suitable technical knowledge and expertise that would produce superior, quality and standard goods capable of challenging with their international equivalent, as well as meeting both domestic and foreign needs has to be appropriately addressed (Onyinlade. 2015). Most Small and Medium Enterprises are confronted with the difficulty of marketing, advertising and selling. Their

expansion relies by and large on the size and accessibility of markets for their output. The lack of ability to locate such multi outlets both in the local and international markets is a major setback. The cause for this consist of low standard and poor quality of their output, inadequate marketing skills and techniques resulting from high cost of advertising, promotion, branding, canvassing etc.

2.6.7 Un-conducive Environment

The Federal Government fiscal and monetary policies in Nigeria as it relates to business issues have been unpredictable, contradictory, inconsistent and from time to time conflicting (Adebavo. 2003). This has generated a lot of problems for domestic investors as against their foreign participants who have the alternative of making Nigeria a dumping ground for their output. Associated to this is the problem of unlawful taxes (business development tax, business registration tax, business premise tax, sanitation fees, signboard fees, stickers etc) most often than not by state and local government agencies (tax force on this or that). As a result of this. Small and Medium Enterprises in Nigeria carry out their operations under high cost and unfavourable business environment.

2.7 Small and Medium Enterprises Strategy for Sustainability

Sustainable development is recognized as an essential requirement for achieving economic goals without degrading the environment. Major problems arise in implementing the concept of sustainability. At the most basic level, researchers dealing with sustainable development have suggested that the achievement of sustainability requires ecologically sustainable political and economic systems, organizations, and individuals (Starik and Rands 1995; Costanza and Daly 1992; Gallup International Institute 1992). Specifically, governments, consumers, and

enterprises contribute and play crucial roles in reaching sustainable development.

As a result, if goals of sustainability are to be achieved, small and medium-sized enterprises must be reformed to minimize their negative ecological and social impacts (Gladwin, 1992).

Generally, Small and Medium Enterprises will have to assist and facilitate growth, multiply and replicate into sufficient mass across industries and sectors. The Small and Medium Enterprises sector is considered to be the backbone of the modern day economy. The importance of this segment is undisputed. However, the yawning gap between the needs, demands and policy response in this unorganized sector has always dampened the sector's prospects. The recent economic turbulence has only added to the sector's problems. Hence, it becomes imperative for us to ensure that Small and Medium Enterprises sector, which is facing one of the toughest times in the industrial history, should be strongly supported by the relevant stakeholders - government, financial institutions, associations, etc. This is to enable the sector to play its sustainability roles :n the economy.

Small and Medium Enterprises contribution towards sustainable development is small, taken together Small and Medium Enterprises have a very large impact on the development quality of a specific geographic area. The more presence of Small and Medium Enterprises in the economy of a particular area, the more important is the Small and Medium Enterprises role for achieving sustainability (Welford and Gouldson, 2013).

In comparison with large companies, Small and Medium Enterprises show particular benefits for a geographic area interested in achieving a sustainable development, which can be grouped in the following categories: economic, socio-cultural, environmental, and collaboration contributions. Major economic contributions to

sustainability come from the fact that residents and indigenous are more probably to own and run Small and Medium Enterprises than larger companies, which frequently are multinational companies.

Specifically, in the Small and Medium Enterprises, the management process is characterized by the highly personalized preferences, prejudices, and attitudes of the firms' entrepreneur, owner and/or owner-manager (Jennings and Beaver. 1995). As a result, Small and Medium Enterprises allow residents and indigenous to participate in the economic development and. consequently, to obtain the economic benefits generated by the community (Howard and Mine. 1995).

Furthermore, Small and Medium Enterprises which are owned and run by residents who are expected to reinvest their benefits in the community itself, while large companies usually act internationally. Finally, Small and Medium Enterprises draw out capital that would otherwise remain underexploited by the economy, and help develop new markets by improving forward and backward linkages between economically, socially, and geographically diverse sectors of the economy (Howard and Hine, 1995). These Small and Medium Enterprises potential economic contributions to sustainability might be balanced against overall economic efficiency of Small and Medium Enterprises in comparison with larger companies; meaning that Small and Medium Enterprises operating in a particular community must be internationally competitive in order to make significant contributions to sustainability (Diego and Juan 1998).

2.8 Innovative Indicators and Performance

Innovation and business growth or performance of the firm can be evaluated using indicators that include sales growth, return on investment, return on assets, and

market capitalization (Yahya, 2014). Other business performance potential indicators that measure the effect, process, product, and service innovations on the operations of the firm include sales, efficiency, employment generation, business expansion, speed, and market share (Allocca & Kessler 2006; O'Sullivan & Dooley 2009). Firms can choose some indicators that measure the way innovation is managed and ^executed. Mole and Worrall (2001) describe different innovation measures as being incremental (percentage of modifying existing products and services to the market), diffusion (percentage of introducing new products and services to the firm), and radical (percentage of introducing new products and services to the market). Kim and Mauborgne (2001) further introduce three tools to evaluate the commercial readiness of new business ideas: buyer utility map. price corridor of mass, and business model. These tools guide and investigate the roots of profitable growth and find out that innovation is a key driver. The next phase of innovation performance and business growth improvement can be evaluated by intelligent innovation in a comprehensive approach.

Successful innovation demands an equally deft balance among analytical rigour of control- system and the softer-side encompassing creativity, leadership, agility, learning culture, and teamwork (BAH, 2006). The business growth performance indicators that the firm now adopts i be nonfinancial and focus on measuring issues such as customer satisfaction, internal siness process efficiency, idea generation rate, lead-time for new product and service veiopment. and staff satisfaction and retention (O'Sullivan & Dooley 2009; Avci, Madanoglu Okumus 2011)

The dynamic of the innovation model, by William Abernathy in 1999, display the dynamic links tween changes in the process innovation and product innovation and in the organisational itructure which occurs in patterns that are observable across

industry and market. Hargadon and Sutton (2001) describe the product innovators as ones who use old ideas as raw materials for new ideas in a system that is called the "knowleclge-brokering cycle". Mosey (2005) suggests that product innovation is the cornerstone of better-performed firms seeking future aggressive growth.

Process innovators according to Curran & Blackburn (1994) are best seen as agents who bring change to the local economy by introducing new processes, products, and services and more efficient ways of working.

An emerging market innovation based model is proposed as a guide for scholars, policymakers, and managers to promote and implement innovation practices within Small and Medium Enterprises. O'Regan. Ghobadian, and Sims (2006) argued that Small and Medium Enterprises sometimes fail to recognize the opportunities (i.e. flexibility of customizing products and services) that are available in the market. Market Innovation is increasingly realized as a contributory factor to higher business growth performance in various industries and strengthening the competitive advantage of the firm to survive in the market, similar to Small and Medium Enterprises in the Dubai market (Sanz-Valle & Jimenez-Jimenez 2011). It supports the relationship between market innovation practices and business growth performance (similar pi' the theory of the growth of the firm).

2.9 Empirical Review on the Impact of Innovation on SMEs Performance

Various studies that have examined the relationship between innovation and organizational performance largely found evidence in support of expectation, which is, innovation impacts positively on firm performance. For example, Bigliardi (2013) found that increase in the innovation level increased financial performance of firms. However, Koellinger, (2008) discovered that innovative activity is not necessarily associated with higher profitability. On their went Egbetokun and his

collaborators revealed evidence that incremental innovation as captured my quality improvement is positively related to firm performance (Egbetokun, et-al., 2008). Zerenler. (2008) undertook a research in the Turkish automotive supplier industry in order to investigate the influence of innovativeness on Small and Medium Enterprises (SMEs) performance. 117 questionnaires were sent to Managers of Marketing Department, Research and Development (R&D) Department and Production Department. The response rate of this study is high (78% or 92 respondents). Small and Medium Enterprises (SMEs) growth had significantly positive relationships with innovation performance.

In the study of Wu et al. (2008), they attempted to explore the mediating effect of innovation on Small and Medium Enterprises (SMEs) growth. The research was made in Taiwanese manufacture and non-manufacture industries. Seven hundred (700) survey questionnaires were mailed to firms. The response rate of the study is 22.71%. They found that effects of innovation exist at significant levels, suggesting a mediating effect of innovation on growth.

Lehtimaki (1991) observed in the context of Finnish Small and Medium Enterprises (SMEs) that on average, the contribution of new products was more to total sales than to profits. Roper (1997) whose study focused exclusively on product innovations in German, UK. and Irish Small and Medium Enterprises (SMEs), ascertained that the output of innovative Small and Medium Enterprises (SMEs) grew significantly faster than those of non-innovators. Engel et al. (2004). similar to Roper, found that sales turnover of innovative firms grew faster than that of non-innovative firms.

Cainelli et al. (2006) and Regev (1998) found that innovating firms had higher labour productivity and sales growth than non-innovating firms. A study on British

Small and Medium Enterprises (SMEs) by the Cambridge Small Business Research Centre (1999) showed that 80% of the companies that developed innovation activities improved profits, market share, and new Markets penetration. Hughes (2001) found that highly innovative British Small and Medium Enterprises (SMEs) increased then profit margin. Hsu eh and Yu (2004) showed that innovation positively affected earnings among Taiwanese Small and Medium Enterprises (SMEs). Bhaskaran (2006) found that Australian Small and Medium Enterprises (SMEs) that focused on sales and marketing innovations were able to successfully compete with large companies.

Auken, Antonia and Domingo (2008), wrote on Innovation and performance in Spanish manufacturing Small and Medium Enterprises (SMEs). Their results revealed that process innovation influences efficiency of companies. Their study demonstrated that innovation is positively related to firm performance and they discovered that investments in technology that reduce fix costs lead to higher profits and improve the productivity of the firm.

Geroski and Machin (1992) did not find permanent growth differences between innovators and non-innovators. Olav and Leppalahti (1997) found that innovating Norwegian firms with more than 50 employees experienced higher profits than non-innovators firms. Yamin et al. (1999) examined relationships between organizational innovation and performance among Australiancompanies and found lhat innovative companies are more profitable, though highly innovative companies may not outperform average innovators. Kemp et al. (2003) found that innovation was associated with turnover and employment growth, but not profit and productivity among Dutch firms.

Albors-Garrigos (2002) found that only 47% of Spanish firms believed that

innovative activities significantly improved sales. Bhaskaran (2006) found that Australian Small and Medium Enterprises (SMEs) that focused on sales and marketing innovations were able to successfully compete with large companies. Hsueh and Tu (2004) showed that innovation positively affected earnings among Taiwanese SMEs.

Based on evidence above, there is an overwhelming suggestion that innovation impacts positively on Small and Medium Enterprises (SMEs) performances. Our departure in this study is to add to the limited evidence available on the Nigerian economy by conducting the investigation on Small and Medium Enterprises (SMEs) operating in North Central part of the Nigeria. The novelty of our exercise is further underscored by the fact that innovation was decomposed into its three-dimensional form and each was used to investigate how different manifestations of firm performance respond to variations in their (innovation) values.

2.10 Theoretical Framework

2.10.1 Theory of Innovative Enterprise

The theory of the firm is still a “black box” in understanding the innovation process of creating new products and services and their profitable commercialization (Teece, 2010). Teece (2010) further argues that “economics may have had success with developing an understanding of the consequences of technological change, but the firm-level and market determinants ate still enigmatic’’. Innovation economics focus on the theory of economic development that impact on e theory of the firm and its decision-making where the continual increase of outputs can no longer only be explained by the increase of inputs used in the production process; however, the innovation process is the key to understanding the economic development with the firm playing the central role (Lazonick & O’Sullivan 2000; Lazonick 2006).

Innovation can be explored in a systems model inspired by the theories of the firm. Slater (1997) explains that “innovation may be concerned with the creation of new businesses within the existing business or the renewal of ongoing businesses that have become stagnant or in need of transformation’’. The firm can survive the competitive struggle, not by varying its price and quantity, but by innovating (Porter 1990). The firm must also understand the interaction of organizational conditions (i.e. cognitive, behavioural, and strategic), which play no substantive role in the neoclassical theory, or in the transformation of industrial conditions (i.e. technological and market) as being described in the theory of innovative enterprise (Lazonick & O’Sullivan, 2000). Lazonick and O'Sullivan (2000) describe the innovative firm that undertakes the transformation of industrial conditions through productive input resources to generate useful (i.e. high quality) and affordable (i.e. low cost) output products and services (i.e. innovative products and services) compared to the adaptive firm that optimizes conditions to technological and market constraints. The transformation of industrial conditions, the firm faces, requires the transformation of organizational conditions of individuals’ cognitive condition (knowledge), behavioural condition (motivation and incentive), and strategic condition in the firm which in turn depends on the control of the individuals with decision-making power to exploit financial commitments and organizational integrations. Integrating organizational learning within the firm can further transform cognitive (individual and collective rationality), behavioural (opportunism), and strategic characteristics of individuals in the firm to develop and utilize productive resources and capabilities and contribute successfully to innovation.

The innovating firm is not concerned with cost increases and is constrained by the

market to minimize profit outputs in cases where marginal cost is equal to marginal revenue in the long term (Lazonick & O'Sullivan 2000). In the short-term, costs may increase due to the transformation of technological and market conditions but rather than accepting these conditions as constraints on the firm's activities (i.e. similar to the adaptive firm), the innovating firm produces high quality product and service outputs and declines unit costs as its market share increases. The innovating firm becomes dominant by transforming industry cost and by competing for market share and prices that are related to the generation of surplus revenues and investment in new technologies. It can enable the innovative firm to outperform the optimizing firm (i.e. produces at smaller volumes and at higher prices) in terms of producing outputs and costs, transferring productive capabilities to produce outputs for other markets, differentiating from competitors, and gaining sustainable competitive advantage that shows differences from the neoclassical theory of marginal cost equals marginal revenue and its output and pricing decision mechanism (Lazonick & O'Sullivan 2000).

However, the innovating firm can face fundamental challenges, which include the design and implementation of opportunities and customer-value-and-captured strategies and mechanisms and not just the coordination to overcome transaction costs (Teece 2010). The firm's strategies and mechanisms substantially influence its organisational structure, behavioural activity, relationship to market, and business growth performance difference in which it engages in (Tucker 2002; Drucker 2003; Vanhaverbeke & Peeters 2005; Laforet & Tann 2006). Normann and Ramirez (1993) and Teece (2010) recognized which strategies and mechanisms are keys that the innovating firm utilizes to solve problems, create new organizational capabilities and values, and improve business performances through providing the framework

that permit managers to assemble particular complementary and co-specialized assets and identify opportunities for producing values of innovative products and services to customers and delivering those values at higher profits in the marketplace. These actions are the fundamental function and nature of the innovating firm that is different from the Coasian firm in the transaction costs theory (Teece 2010).

2.10.2 Resource Based Theory

Overtime, the resource-based view has grew to become one of the most influential and cited theory in the history of management theories. It aspires to explain the internal sources of a firm's sustained competitive advantage (Kraaijenbrink, Spender &Groen, 2010). It was Penrose who established the foundations of the resourced-based view as a theory (Roos & Roos. 1997). Penrose first provides a logical explanation to the growth rate of the firm by clarifying the causal relationships among firm resources, production capability and performance. Her concern was mainly on efficient and innovative use of resources. She claimed that bundles of productive resources controlled by firms could vary significantly by firm, that firms in this sense are fundamentally heterogeneous even if they are in the same industry (Barney & Clark, 2007). Wernerfelt (1984) took on a resource perspective to analyze antecedents of products and ultimately organizational performance and believed that "resources and products are two sides of the same coin'' and firms diversify based on available resources and continue to accumulate through acquisition behaviors. The knowledge based literature of the firm fosters and develops the resource based theory in that it considers knowledge to be the most complex of an organization's resources (Alavi & Leidner, 2001). According to resource-based theory, the intellectual capital (IC) is a main source to improve

enterprise growth. Therefore, intellectual capital has been studied by many past researchers who investigate the influence of intellectual capital on business performance. However, most past researchers focused on the impact of individual intellectual capital on performance while neglecting the effects of specific elements of intellectual capital.

The currently dominant view of business strategy - Resource-Based Theory (RBT) or Resource- Based View (RBV) of firms — is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making. Ganotakis & Love (2010) used the Resource Based Theory (RBT) to explain the importance of human capital to entrepreneurship. According to RBT, human capital is considered to be a source of competitive advantage for entrepreneurial firms. Ownership of firm-specific assets enables a company to develop a competitive advantage. This leads to idiosyncratic endowments of proprietary resources (Barney, 1991). According to RBT, sustainable competitive advantage results from resources that are inimitable, not substitutable, tacit in nature, and synergistic (Barney. 1991). Therefore, managers need to be able to identify the key resources and drivers of performance and value in their organizations. T he RBT also states that a company's competitive advantage is derived from the company's ability to assemble and exploit an appropriate combination of resources. Such resources can be tangible or intangible, and represent the inputs into a firm's production process; such as capital, equipment, the skills of individual employees, patents, financing, and talented managers. As a company's effectiveness and capabilities increase, the set of available resources tends to become larger. Through continued use, these "capabilities”, defined as the

capacity for a sei of resources to interactively perform a stretch task or an activity, become stronger and more difficult for competitors to understand and imitate ' R&D expenditures) and can be used to augment future production possibilities (Rylander, 2001)

2.10.3 Passive Learning Model

Under this model, a firm enters a market without knowing its own growth potential. That is the firm begins to learn about the distribution of its own profitability based on information from realized profits after it had entered the market. By continually updating such learning, the firm may decide to expand, contract, or exit the market altogether. This learning model states that firms learn about their efficiency or growth potentials once they are established in the industry. Firms expand their activities when managers observe that their estimation of managerial efficiency had understated actual levels of efficiency. As the firm ages, the owner's estimation of efficiency becomes more accurate, decreasing the probability that the output will widely differ from one year to another. The implication of this model is that younger firms (mainly SMEs) should have higher and more viable growth rates (Cunningham and Maloney. 2001).

2.10.4 Stochastic and Deterministic Approaches

The stochastic growth model, which is also known as the Gibrat's Law, argues that all changes in the size of an enterprise are due to chance. Thus, the size and age of firms have no effect on the growth of SMEs. The deterministic approach assumes, on the contrary, that differences in the rates of growth across firms depend on a set of observable industry and firm specific characteristics (Pier Giovanni et al, 2002).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter describes the methodology and procedures adopted in carrying out this study. The type of research design used is described and justified as well as the target population of the study. The sampling design, sampling frame, sampling technique, and research procedures used were also described. Lastly, the data collection and data analysis techniques used in this study are then explained.

3.2 Research design

For the purpose of this study, descriptive research design is used. This is because, the descriptive design describes phenomena as they exist. It is used to identify and obtain information on the characteristics of a particular problem or issue. Descriptive research design was selected because it has the advantage of producing good amount of responses from a wide range of people. Also, this design provides a meaningful and accurate picture of events and seeks to explain people's perception and behavior on the basis of the data to be collected. The advantage with this design is that it helps to find views as they are in their natural setting.

3.3 Population and SampleTechniques

The population of the study comprises of some selected Small and Medium Enterprises (SMEs)'s operators in North Central Nigeria. The research utilized the content analysis technique which is a research method tor making replicable and valid inferences from data, to operationalize the Innovative variables. The study used primary sources of data in eliciting the

required information needed for this research. The Researcher adopted purposive sampling method. The Smith (1984) formula was used in the determination of the sample size for the study.

The sample was collected based on the following formula:

$$n = \frac{N}{3 + N(e)}$$

Where;

n = sample size;

N = population size;

e= Level of precision

required;

3 = constant

Confidence interval =

95 % e = Margin of

error = 0.05

Substituting into the

formula,

Sample size for the total number of respondents in all the states under study is determine as follows:

$$n = \frac{N}{3 + N(e)^2}$$

Table 3.1: Selected SMEs in North Central Nigeria

S/N	North Central States	Population
1	Nasarawa State	1027
2	Plateau State	1253

3	Kwara State	1156
4	Kogi State	1034
5	Niger State	1132
6	Benue State	1154
	Total	**6756**

Source: Field Survey 2016

$$n = \frac{N}{3 + N(e)^2}$$

Substituting into the formula,

$$n = \frac{6756}{3 + 6756(0.05)^2}$$

$$n = \frac{6756}{3 + 6756(0.0025)}$$

$$n = \frac{6756}{3 + 16.89}$$

$$n = 339$$

The total sample size for each state is determined using the formula below:

$$S = \frac{n \times N}{N}$$

Where S = Sample size for each state; n = total number of Respondents; N = Population of each state

Table 3.2: Selected State SMEs in North Central Nigeria

S/N	North Central Nigeria	Population	Sample
1	Nasarawa Stale	1027	339*1027/6756 = 51
2	Plateau State	1253	339*1253/ 6756 = 63
o	Kwara State	1 156	339*1156/6756 = 59
4	Kogi State	1034	339*1034/6756 = 52

5	Niger State	1132	339*1132/6756 = 56
6	Benue State	1154	339*1154/6756 = 58
	Total	**6756**	**339**

Source: Field Survey, 2010

3.4 Data Collection Methods

A self-administered Questionnaire was adopted in gathering the data. This is a useful method for collection of primary data and has the advantage of being a low cost option and allows respondents to think about questions (Cooper and Schindler. 2000). 1 he Questionnaire was developed by the Researcher on the basis of the research questions and it was divided into two parts. Part one comprises of general information relating to the Respondent, while part two deals with Small and Medium Enterprises (SMEs) performance. As much as possible, questions in the survey instrument are worded in a closed-ended manner to provide quantitative data as per the researcher's response category. In the questionnaire, the following traits underpinning its measurements were used: product innovation, process innovation, and market innovation (Gopalakrishnan and Damanpour. 1997. Cumming.1998. and Johne . 1999). A Likert scale of 1 to 5 was used to measure the extent to which the various respondents agreed or disagreed with the issues raised. In addition, the results were used to rank the three measures of performance which are sales growth, business expansion and employment generation.

3.5 Validity and Reliability Test of Research Instrument

The research instrument (questionnaire) was subjected to a pilot test so as to ensure its validity and reliability as well as internal consistency of the measures used. Validity test is a test of the extent to which a research instrument is capable of measuring what is intended to measure. For the purpose of this study, the

questionnaire was tested for face to face validity, context validity, content validity, construct validity to ensure all four counts are found to be valid. Reliability test is a test or measure of the extent to which a research instrument yields the same results under the same condition, that is. consistency.

In doing this, we used the Cronbach's Alpha, w hich is computed with the model below:

$$\alpha = \frac{Nr}{1 + r(N - 1)}$$

Where:

a = Cronbach Alpha

N = the number of items in the scale

r= the mean inter-item correlation

The preliminary analysis of this study shows that the research instrument is valid and reliable for further analysis. The table below shows the overall result of the reliability test.

Table 3.3: Result of Reliability Test

Reliability and Validity Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.844	0.965	19

Source: Computed result using SPSS version 23

The result of the reliability test of the research instrument shows that the Cronbach Alpha value for the questionnaire is 0.844. This means that the Questionnaire is reliable enough to conduct this research as it has Cronbach Alpha statistic of above 0.7 as opined by Pallant (2007) and Ritter (2010), that a Cronbach alpha of 0.7 percent and above imply that the data is reliable and can be used for analysis. It thus

showed that 84.4% of the variance in the score is internally consistence reliable variance.

3.6 Method of Data Analysis

Descriptive statistics, correlation coefficient matrix and ordinary least square (OLS) regression analysis were used for this estimation. The correlation coefficient shows the degree or extent to which one variable influences the other. The regression analysis examines the relationships that exist between two or more variables. The descriptive statistics, correlation coefficient and regression are easy to measure and estimate, and does not give bias results (Gujarati, 2004)

3.6 Model Specification

The study adopts the theory of innovative enterprise and followed the model as well as the variables proposed by Auken, Antonia and Domingo (2008).

From the forgoing, innovations were thus proxied by process innovation, product innovation and market innovation; while the dependent variable which is Small and Medium Enterprises (SMEs) growth was proxied by sales growth, business expansion and employment generation/creation. The model specification here was formulated as follows:

$$SG = \beta_0 + \beta_1 PI + \mu_1 \quad (1)$$

$$BE = \beta_0 + \beta_1 PDI + \mu_1 \quad (2)$$

$$EG = \beta_0 + \beta_1 MKI + \mu_1 \quad (3)$$

Where;

SG = Sales Growth

BE = Business expansion

EG = Employment Generation or creation

PI = Process Innovation

PDI = Product innovation

MKI = Market Innovation

3.7 Justification of Methods

The justification for the use of Pearson product moment correlation coefficient(r) is because it measures the relationships existing between two or more variables. It is simple to compute without errors and it helps to illustrate the directional outcome and strength of the variable. It further shows a precise quantitative measurement of the degree of correlation between dependent and independent variables. As a rule of thumb, the usefulness of Correlation is further to assess the level, nature, and significance of the relationships among the variables, as well as to test the existence of multicollinearity among the variables.

The Ordinary Least Square (OLS) method or the classical linear regression model is the econometric technique adopted in this study which covers the period of (2004-2016). The preference of the use of the ordinary least square (OLS) estimation method is because the computational procedure is simple compared to other econometric techniques. 'The Ordinary Least Square estimator has smaller variance than any other linear unbiased estimator; they are linear and normally distributed, they are efficient, consistent and are symmetrically unbiased (Koutsoyiannis, 1978). Therefore, the Ordinary Least Square (OLS) is said to be the Best Linear Unbiased Estimator (BLUE).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

In this Chapter, the data collected through administration of questionnaires are presented and analyzed using descriptive statistics, correlation matrix and OLS regression. Micro-soft Excel software helped us to transform the variables into a format suitable for analysis after generating the raw results from SPSS. The E-Views was lastly utilized for data analysis.

4.2 Data Presentation

Table 4.1: Process innovation and SMEs sales grow th in Nigeria

Variables	**Items**		**Agreement scale**			
		SD(%)	**D(%**	**U(%**	**A(%**	**SA(%)**
Process Innovation	Over the past three years the enterprise has undertaken research and development activities for creation or significant modification of products or processes.	**14.3**	**21.4**	**12.9**	**38.6**	**12.9**
	The enterprise has significantly improved the existing products or introduced new ones.	**4.3**	**14.3**	**35.7**	**22.9**	**22 9**
sales growth	We were one of the leading enterprises in the industry in introducing new product m the last few years.	**1.4**	**17.1**	**34.3**	**22.9**	**24.3**
	On average, we were as successful as our competitors in introducing new products in the I .ast three years.	10.0	**30.0**	**4.3**	**51.4**	**4.3**
	The enterprise has significantly improved the logistic delivery, distribution of inputs and outputs over the past years.	**7.1**	92 9	**12.9**	**50.0**	**7.1**
	The enterprise has significantly improved support services like maintenance, sales. **If.** accounting and other processes over the past years.	**7.1**	**1 1.4**	**4.3**	**37.1**	**40.0**

Source: Field Survey, 2016

From 4.1 table, those that agreed that over the past three years the enterprise has undertaken research and development activities for creation or significant modification oi products or processes were the highest and represent 38.6%. Those

that Agreed and strongly agreed that the enterprise has significantly improved the existing products or introduced new ones have same percentage of 22.9% each while those yet to decide represent 35.7%. On whether they were one of the leading enterprises in the industry in introducing new product m the last few years, 24.3% of the respondent strongly agreed. 5 1.4% agreed that they were as successful as their competitors in introducing new products in the Last three years. Those that agreed that their enterprises have significantly improved the logistic delivery, distribution of inputs and outputs over the past Years represent 50.0%, while 40.0% strongly agreed that their enterprises have significantly improved support services like maintenance, sales. Information Technology, accounting and other processes over the past years.

Table 4.2: Product innovation and business expansion of SMEs in Nigeria

Variables **Items**		**Agreement scale**				
		SD(%)	D(%)	U(%)	**A(%**	**SA(%j|i**
product innovation	The majority of those products were not new only for the enterprise, but were new also to the market we work in.	**2.0**	18.0	18.0	18.0	443®
	The enterprise introduced a significant number of new products in our relevant market in die past three years.	14.0	16.0	**2.0**	48.0	?!§_;§) 1
	In this period of time we introduced a lot of product that were novelty in the global market as well	8.0	12.0	10.0	54.0	16M
business expansion	The SMEs enterprise has significantly improved the existing processes or introduced new ones.	10.0	16.0	6.0	42.0	2®d®
	The enterprise has modified or made a total change of the organizational structure over the past few years.	6.0	16.0	54.0	2.0	^7 ill
	The enterprise has modified means of the organizational process for efficiency and global recognition.	2.0	14.0	o o	22.0	-

Source: Field Survey, 2016

From Table 4.2, it is clear by 44.0% that the majority of products were not new only for the enterprise, but also new to the market. 48.0% agreed that their enterprises introduced a significant number of new products in relevant market in the past three

years.54.0% agreed to have introduced a lot of product that were novelty in the global market as well. The SMlis enterprise has significantly improved the existing processes or introduced new ones since 42.0% agreed. Though. 54.0% were yet to decide, while 22.0% strongly agreed that the enterprise has modified or made a total change of the organizational structure over the past lew years. It was strongly agreed by 32.0% that the enterprise has modified or made a total change of the organizational structure over the past few years.

T able 4.3: Market innovation and SMEs employment generation in Nigeria

V ariables	**Item**	**Agreement Scale**				
		SD(%)	D(%	U(%	A(%)	SA(%)
	On average, we were more successful than our competitors in introducing new products in the last few years	14.0	36.0	20.0	10.0	20.0
Market innovation	The enterprise has implemented a new-marketing method that has brought significant changes of product design or packaging over the past few years	8.0	14.0	6.0	48.0	24.0
	The enterprise has implemented a new or significantly improved production methods such as techniques, equipment or software used to produce goods or sen ices over the	10.0	8.0	16.0	42.0	24.0
	Marketing innovations introduced by the - enterprise are new not only to the domestic market but to the global market as well	4.0	14.0	10.0	44.0	28.0
	More jobs are created regular!} as the business grows.	6.0	34.0	16.0	22.0	22.0
Employment generation	There are opportunities for enhanced career growth in our enterprise due to innovative	2.0	14.0	10.0	30.0	44.0
	IT personnel are employed or consulted to enhance the sale of products.	14.0	16.0	2.0	48.0	20.0

Source: Field Survey, 2016

Table 4.3 explains that 36.0% disagreed that the} were more successful than our competitors in introducing new products in the last few years.48.0% Agreed that their enterprises have implemented a new marketing method that has brought significant changes of product design or packaging over the past few years. Furthermore, 42.0%

agreed that the enterprises have implemented a new or significantly improved production methods such as techniques, equipment or software used to produce goods or services over the past few years. 44.0% Agreed that Marketing innovations introduced by the enterprise are new not only to the domestic market but to the global market as well. 34% disagreed that more jobs are created regularly as the business grows. 44.0% strongly agreed that there are opportunities for enhanced career growth in their enterprises due to innovative ideas and lastly 48.0% accepted that Information Technology personnel are employed or consulted to enhance the sale of products in their enterprises.

4.3 Correlation Analysis

The results from the correlation analysis were examined and interpreted in-line with the model specified, and was thus discussed accordingly.

Table 4.4: Basic Correlation Matrix Relating to Sales Growth, Business Expansion, Process Innovations, Product Innovation**,** Employ**m**ent Generation and Market Innovation.

Variable	Sales Growth (SG)	Business Expansion (BE)	Process Innovation (PI)	Product Innovation (PI)	Employment Generation (EG)	Market Innovation (MKI)
Sales Growth (SG)	1					
Business Expansion (BE)	0.57392	1				
Process Innovation (PI)	0.42701	0.074926	1			

Product Innovation (PI)	0.66875	0.103413	0.669275	1		
Employment Generation (EG)	0.11313	0.195776	0.296543	0.830721	1	
Market Innovation (MKI)	0.207155	0.09997	0.23481	0.320564	0.768189	1

Source: Computed by the Author. (E-views)

The results in Table 4.4 indicate that a positive correlation exists between SG and PI. This relationship is however found to be poor as indicated by the weak correlation coefficient value of 0.42701.

Furthermore, positive and weak correlation was found to exist between BE and PDI. This was captured by the correlation coefficient value of 0.103413 among the two variables of interest.

Lastly, the correlation between EG and MKI was found to be strong but positive as indicated by the correlation coefficient value of 0.768189.

Among the three correlations of interest based on the model specification, the correlation between EG and MKI was found to be the strongest, thus showing that innovation through Market inventions and innovations has strong correlation with SMEs growth via employment creation.

4.4 Statistical Test of Hypothesis

The results obtained under this section were generated using OLS regression analysis. The level of significance for the study is 5% for a two tailed test. The decision rule is that we shall accept the null hypothesis if the critical t-value (±1.96) is greater than the calculated value, otherwise, reject the null hypothesis. That is,

using the student t-test (t-statistic), we say that a variable is statistically significant if t*(t-calculated) is greater than the critical t-value of ±1.96 under 95% (or 5%) confidence levels and it is statistically insignificant if the t* (t-calculated) is less than the tabulated value of ±1.96 under 95% (or 5%) confidence levels.

Nijsse (1988) contains the justification and use of t-test application to the product moment.

Pearson Rho (p), according, the t-test is defined as:

$t = \rho/(1 - \rho 2/ n - 2)^{½}$

4.4.1 Hypothesis One:Hoi: Product innovation has not significantly influenced business expansion of SMEs in North Central Nigeria.

Table 4.5: Product innovation and business expansion Least Square Regression results

Least Square Regression Analyses of Product innovation on Outcome Variables

Dependent Variable: business expansion R^2 =0.8729; F= 11.33; Sig = 0.0041				
Independent Variable	Beta coefficient	t-value	Pearson Correlation(r)	Probability value
Product innovation	4.34	2.14	0.830721	0.0036

Source: Computed by the Author

Test of Hypothesis One:

The calculated t-value for Product innovation (PDI) as found in table 4.5 was found to be 2.14 and also by rule of thumb, the critical value is 1.96 under 95% confidence interval levels. The calculated value of **PDI** is found to be greater than the tabulated value (that is: 2.14 > 1.96) and as such we reject the first hypothesis

and conclude that product innovation has significant relationship with business expansion. More so, by examining the overall fit and significance of the **business expansion** model, it was found to have a good fit, as indicated by the high /^-statistic value of 1 1.33 and it is significant at the 5.0 per cent level. That is, the F-statistic value of 0.0041 is less than 0.05.

The R^2 (R-square) value of 0.8729 shows that the model has a very good impact and fit also. It showed that about 87.29 percent of the variation in **business expansion** is explained by Product innovation, while the remaining 12.71 percentage unaccounted variation is captured by the error term.

4.4.2 Hypothesis Two:H_{02}: There is no significant relationship between process innovation and SMEs sales growth in North Central Nigeria.

Table 4.6: Process Innovation and Sales Growth Least Square Regression Results

Least Square Regression Analyses of Process Innovation on outcome variables				
	Dependent Variable: Sales			
Independent	Beta	t-value	Pearson Correlation	Probability value
Process	14.	1.83	0.42701	0.7621

Source: Computed by the Author

Test of Hypothesis Two

From Table 4.6, the calculated t-value for Process Innovation is 1.83 and the critical value is given as 1.96, under 95% confidence levels. Since the calculated t-value is less than the critical value (1.83 < 1.96). we accept the second null hypothesis and conclude that Process Innovation has no significant effect on SMEs sales growth.

Also, by examining the overall lit and significance of the sales growth model, it can be observed however that the model has a poor fit, as indicated by the relatively low

value of the F-statistic. 3.09 and it is insignificant at the 5.0 per cent level. That is, the F-statistic value of 0.4512 is greater than 0.05 probability levels.

More so, the R^2 (R-square) value of 0.4245 shows that the model do not have a good fit also. It indicates that about 42.45 percent of the variation SG is explained by process innovation, while the remaining 57.55percent is captured by the error term.

4.4.3 Hypothesis Three:Ilo_3: Market innovation has no significant impact on SMEs employment generation in North Central Nigeria.

Tabic 4.7: Market Innovation and Employment creation/generation Least Square Regression Results

Least Square Regression Analyses of Market innovation on Outcome Variables

Dependent Variable: Employment Generation(EG)

R^2 =0.7936; F = 16.86; Sig = 0.0032

Independent	Beta	t-	Pearson	Probability value
Market Innovation(MKI)	3.11	3.28	0.768189	0.0043

Source: Computed by the Author

Test of Hypothesis Three:

Finally, from the regression result in Table 4.7, the calculated t-value for Market Innovation is 3.28 and the tabulated value is 1.96. Since the t-calculated is greater than the critical t-value (that is. 3.28 > 1.96) it also falls in the rejection region and hence we reject the third hypothesis. The conclusion here is that marketing innovation has had a significant impact at creating employment opportunities for SMEs growth.

The F-statistics equally showed that the overall result is significant, as indicated by the value of the F-statistic, 16.86 and it is significant at the 5.0 per cent level. That

is, the F-statistic value of 0.0032 is less than 0.05.

Furthermore, the coefficient of determination (R-square), used to measure the goodness of fit of the estimated model, indicates that the model is also reasonably lit in prediction. The R^2 (R- square) value of 0.7936 shows that the market innovation has a very good impact on employment creation. It indicates that about 79.36 per cent of the variation in employment generation is explained by market innovation, while the remaining unaccounted variation of 20.64 percent is captured by the white noise error term.

4.5 Discussion of Findings

The study however showed that Product Innovation has a significant relationship with SMEs Business Expansion. Product Innovation impacts improvement of the performance related to the relationship with the customer and the adaptation of I he company to the market. The innovation in processes influences in an important way in the economic efficiency of the high technology companies. This is in agreement with the results of Lehtimaki (1991) whose findings showed that on average, the contribution of innovated new products was more to total sales than to profits. More so, Lumiste et al. (2004) found that innovation effects were fell in terms of both product-oriented results such as: improvement in quality of goods and services, and secondly, increased range on goods and services, and process-oriented results like increased production capacity and improved production flexibility. Miller and Floricel (2004) argue that a firm is able to achieve a high level of business performance by adapting capabilities and practices to the different requirements of value creation and innovation (i.e. competitive and technological contexts) in which it has selected to compete.

Secondly, it could be observed from the analysis that Process Innovation has had no significant effect on SMEs sales growth. The limited resource base of small firms compared to larger firms, such as management, funding, and technology, can affect their ability to scan, analyze, and respond to major environmental challenges (Gill & Biger 2012). The results however contradicts the findings of Cainelli et al. (2004) and Regev (1998) whose results revealed that innovating firms had higher labour productivity and sales growth than non-innovating firms. Engel et al. (2004). similarly found that sales turnover of innovative firms grew faster than that of non-innovative firms. They detected a significant relationship between the share of innovative sales and sales turnover change of firms. Auken, Antonia and Domingo (2008), believed that process innovation which involves investments in technology that reduce fixed costs lead to higher profits and improve the productivity of the firm.

Finally, the analysis revealed that Marketing Innovation has significant impact at creating employment opportunities for SMEs growth. This is in-line with a study on British SMEs by the Cambridge Small Business Research Centre (1999) which showed that 80% of the companies that developed innovation activities improved profits, market share, and new markets penetration. Hughes (2001) found that highly innovative British SMEs increased their profit margin. Msueh and Tu (2004) showed that innovation positively affected earnings among

Taiwanese SMEs and has greatly expanded employment opportunities. Bhaskaran (2006) also found that Australian SMEs that focused on sales and marketing innovations were able to successfully compete with large companies.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Summary

The study examined the effect of innovation on the performance of selected SMEs in North central Nigeria using Ordinary Least Square (OLS) regression method. The ability of the Firm to better perform and obtain growth within a determined time period can be established by its innovative capabilities and therefore, open mind, open learning, open innovation to enhance the capability of independent innovation, is the key to open innovation for SMEs. Our results highlight the need to support innovation in SMEs.

An important contribution of the study is the empirical evidence on the relationship between three types of innovation (product, process, and market) and three measures of SMEs performance (sales growth, business expansion and employment generation/ creation). The result thus shows that there is a link between innovation and SMEs performance and as such, has important implications for policy makers. It confirms the importance of innovation and provides support for the encouragement of innovation in SMEs by policy makers.

Innovation is important for firms to remain competitive. Innovation is highlighted as an important success factor that provides competitive advantage and has a positive impact on sustainable economic development and business growth performance. Then lack of innovation at the firm level will result in firms losing market opportunities, market share, and earnings potential. Innovation therefore contributes to firm growth, market opportunities, and profitability (Shefer and Frenkel, 2005; Cainelli et al., 2004; Keizer et al., 2002; Zahra et al., 2000). Our results highlight the need to support innovation in traditional sectors as well as the high technology

sector.

5.2 Conclusions

In the iast decade, the evolution of technology has changed the innovation landscape. The world is becoming more competitive every single day, leaving behind anyone who is not able to keep up with the pace. Since the arrival of the internet, the power of innovation has been partly transferred from production to demand, i.e. to customers. Also, the convergence of different technologies and distinct knowledge-bases is disrupting many industries behaviors. Thus, an effort must be made in Nigeria to enhance and spread the culture of innovation among companies and SMEs in particular. Innovation is not a question of company dimensions. The discriminating factor for innovation is not whether the company is small or large, but whether it is open or closed to innovation and innovative practices, and, through innovation, to being connected to the word ‘innovate’. Thus, SMEs in Nigeria have a great potential for exploiting innovation and the Nigerian Government will support them also through the National Innovation Strategy.

5.3 Recommendations

It is however recommended that Small and Medium Firms need to evaluate their competitive strategies and incorporate innovation at both their organizational levels and in their activities. This is to enable the SMEs be a strong competitor and a smart evolver being innovative ahead of the market and/or adopt innovation into its strategy.

SMEs can also achieve a higher business growth performance by carefully selecting their operating markets, focusing on particular product groups and innovation types, avoiding spread of marketing activities, trying to avoid markets dominated by large

firms, and considering economic situations in introducing innovations.

SMEs must prioritize innovation, change their business models, and adapt to a changing environment, but to favor this process, they must become more internationalized, upgrade the quality of their human capital, and adopt more Information Technology solutions so as to improve their sales and business expansion.

5.4 Suggestions for further studies

In every human endeavour, cost is always attached, likewise the benefit. Business organization are generally interested in both in order to earn benefits (profit) and at the same-time avoid venturing into huge loses. It is therefore suggested that further studies should look into how Small and Medium Enterprises could calculate cost-benefit ratio of innovation and how they could opt for internal or external sources of innovation before actual innovation is undertaken.

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APENDIX 1

QUESTIONNAIRE

Part 1

Personal information of the Respondents

Kindly fill this portion as it will enable us evaluate the accuracy of your response to this questionnaire.

0. Surname: _____ Other names: _____
1. Gender: _____ Date of Birth: _____ Age: _____
2. Highest Educational Qualification: _____
3. Are you an Entrepreneur? _____ (a) Yes (b)No
4. Which type of organization do you work: (a)Public (b) Private
5. Employer's Name: _____
6. Employer's Address: _____ _____ _____
7. What is your working experience: _____

Part 2

Examining Impact of Innovation on the Performance of Small and Medium Enterprises in North Central Nigeria: A Study of Selected SMEs in North Central Nigeria

After reading each of the items, evaluate them in relation to your knowledge on impact of Innovation on SMEs performance in North Central Nigeria and then tick against the choices below:

Keys: 5=strongly agree; 4=agree; 3=undecided; 2=disagree; 1=strongly disagree

Table1: Process innovation and SMEs sales growth in Nigeria

Variables	**Items**	**Agreement scale**				
		1	**2**	**3**	**4**	**5**
Process Innovation	Over the past three years the enterprise has undertaken research and development activities for creation or significant modification of products or processes.					
	The enterprise has significantly improved the existing products or introduced new ones.					
	We were one of the leading enterprises in the industry in introducing new product the last few years.					
Sales growth	On average, we were as successful as our competitors in introducing new products in the Last few years.					
	The enterprise has significantly improved the logistic delivery, distribution of inputs and outputs over the past three years.					
	The enterprise has significantly improved support services like maintenance, sales, **IT.** Accounting and other processes over the past three years.					

Table 2: Product innovation and business expansion of SMEs in Nigeria

Variables	Items	Agreement scale				
		1	2	3	4	5
Product innovation	The majority of those products were not new only for the enterprise, but were new also to the market we work in.					
	The enterprise introduced a significant number of new products in our relevant market in the past few years.					
	In this period of time, we introduced a lot of products that were novelty in the global market as well.					
Business expansion	The SMEs enterprise has significantly improved the existing processes or introduced new ones.					
	The enterprise has modified or made a total change of the organizational structure over the past few years.					
	The enterprise has modified means of the organizational process for efficiency and global recognition.					

Table 3: Market innovation and SMEs employment generation in Nigeria

Variables	Items	Agreement scale				
		1	2	3	4	5
Market innovation	On average, we were more successful than our competitors in introducing new products in the last few years.					
	The enterprise has implemented a new marketing method that has brought significant changes of product design or packaging over the past few years.					
	The enterprise has implemented a new or significantly improved production methods such as techniques, equipment or software used to produce goods or services over the past few years					
	Marketing innovations introduced by the enterprise are new not only to the domestic market but to the global market as well.					
Employment generation	More jobs are created regularly as the business grows.					
	There are opportunities for enhanced career growth in our enterprise due to innovative ideas.					
	Information Technology personnel are engaged or consulted to enhance the sale of					

APENDIX II

RESULTS OF SUMMARY STATISTICS

Table 2: Basie Descriptive Statistics Relating to Sales Growth, Market share, Market innovation, Product innovation, Employment generation and Process Innovations

Descriptive Statistics	Sales Growth(SG)	Business expansion (BE)	Process Innovation (PI)	Product Innovation (PDI)	Employment generation/creation(EG)	Market Innovation (MK1)
Mean	0.340284	19257648	3.658605	0.074321	0.243484	0.435267
Median	0.276200	4633774.	2.620000	0.088400	0.207600	0.419700
Maximum	0.693100	1.47E+08	30.88000	0.210800	2.442100	0.829300
Minimum	0.024500	562.0000	0.440000	-0.2955	-2.1025	0.062900
Std. Dev.	0.1751 14	31.443523	5.505703	0.079526	0.564419	0.200950
Skewness	0.550323	2.124084	3.32438	-2.26622	-0,2367	0.991518
Kurtosis	2.185666	8.527360	18.56357	12.18576	13.49027	2.071814
Jarque-	2.018167	92.45538	503.7539	187.9956	198.4096	1.562594
Probabilit	0.351653	0.000898	0.005612	0.001655	0.007685	0.481812
Sum	14.63220	8.28E+08	157.3200	3.195800	10.46980	18.71650
Sum Sq.	1.287925	4.15E+16	1273.136	0.265627	13.37988	1.695995
Observati	54	54	54	54	54	54

Source: Computed by the Author. (E-views)

From the results in Table 2, the analysis of the means(M)and standard deviations(SD) shows the following descriptive statistics: Sales Growth (M= 0.340284, SD = 0.175114); business expansion (BE)(M = 19257648, SD = 31.1443523); Process Innovation (M = 3.658605. SD = 5.505703): Product Innovation (M = 0.074321, SD = 0.079526); Employment creation (M = 0.243484. SD = 0.564419); and Market Innovation (M= 0.435267, SD = 0.200950). The analysis indicates that the Business expansion has the highest means (M= 19257648) with the deviation from the mean at 3 1.1443523%.

The standard deviation shows that business expansion (BE) is the most volatile

variable while Product innovation (PDI) is the least volatile among the variables.

Skewness which measures the shape of the distribution shows that variables SG, MS, PI and MKI have positive values, which suggests the distribution tails to the right ot the mean. The skewness statistic reveals that PDI and EG and negatively skewed, suggesting that the distribution are tailed to the left.

The kurtosis statistics reveals that Process Innovation (PI) is leptokurtic implying that the distribution is peaked relative to the normal distribution, while the other variables (SG, BE, PDI, EG and MKI) are platykurtic, suggesting that their distributions are flat relative to normal distribution.

Jarque-Bera is a statistical test that determines whether the series is normally distributed. The null hypothesis here is that the series is normally distributed (i.e skewness =0) so as to be consistent with skewness test. The Jarque-Bera statistics here rejects the null hypothesis for BE, PI, PDI and EG since their probability values are less than 0.05. It was however found that SG and MKI are not normally distributed at 5%. Since most of' the variables are normally distributed, we conclude that Innovation and SMEs growth variables are normally distributed during the period under study.