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ENTREPRENEURIAL INNOVATION AND THE SUCCESS OF MANUFACTURING FIRMS IN ANAMBRA STATE

Adani Nnenne Ifechi
ni.adani@unizik.edu.ng

Okoli Ifeanyi
ie.okoli@unizik.edu.ng

[1&2] Department of Entrepreneurship, Nnamdi Azikiwe University, Awka

Abstract

This study examined the influence of entrepreneurial innovation on the success of manufacturing SMEs in Anambra State. Two specific objectives, research questions, and hypotheses were formulated with the decomposed variables of the study. The study was anchored on Schumpeter's creative destruction theory. This study used a descriptive survey design. The study population was 2654, while the sample size was 336, arrived at using Krejcie and Morgan's (1970) formula. Data were collected using a self-administered questionnaire from the random sample of workers at the selected manufacturing SMEs in Anambra State. The simple random and stratified sampling techniques were used for the study. Descriptive statistics (frequency tables and percentages) were adopted for data presentation; however, the Pearson correlation coefficient was applied for hypothesis testing. The study found that entrepreneurial innovation has a significant and positive relationship with a firm's success. This study concluded that to remain competitive as well as become profitable, manufacturing SMEs operating in Anambra State must embrace innovation and continuously seek ways to be innovate. Hence, manufacturing SMEs can leverage their success by continuously implementing product innovation and process innovation. The study recommended that manufacturing firms need to constantly endeavor

to invest in different new product designs and improve on the existing products so as to attain a competitive advantage against competitors.

Keywords: Entrepreneurial Innovation, Success, Manufacturing Firms, and Anambra State

Introduction

Small and medium-sized enterprises (SMEs) are promoters of growth and economic development because they play a critical role in reducing poverty, increasing gross domestic product (GDP), diversifying, and creating jobs in both developed and developing countries (Okoli & Anugwu, 2022). In Nigeria, there are more than 39.65 million registered SMEs, which account for about 87.9% of the total work force, 46.31% for national GDP growth and 6.2% for international gross exports (National Bureau of Statistics, 2021). It is worth noting that small and medium enterprises are an important sector for achieving more innovation, competition and trade in the country, and the government can work hard in supporting them in the sector to establish a good and innovative system for development. Shodiya (2021) asserts that manufacturing SMEs are highly regarded in business by academics and professionals; as this sector employs 22.5 percent of the Nigerian workforce and accounts for 66 percent of the total expenditure. Thus, the manufacturing sector plays a critical role in not only improving the overall performance of the global economy, but also in driving innovation for long-term sustainable economic growth.

The survival of SMEs in any economy is dependent on the extent to which the economy maximizes them. Their inputs largely depend on the enabling and prevailing environment generated through the availability of necessary infrastructural facilities, tax incentives, business friendly regulatory measures and essential structural services such as the provisions of the legal system (Ogundele, 2007;Okeke, 2013; Schlaeppi, 2014) and with hundreds of registered SMEs in Anambra State and more springing up almost every day. SMEs stand as one of the major sources of the wealth Anambra state generates (Anekwe

& Nwokediba, 2019). Nonetheless, manufacturing SMEs in Anambra State suffer from high labour turnover and decline in production of competitive products which seems to be connected to lack of innovation. This may not be unconnected to their seeming poor innovative practices where little seems to be done in sharpening the creativity of their workforce and so affects their performance.

Manufacturing SMEs' primary competitive advantage has been attributed to their potential to innovate and the flexibility to promptly adjust to meet market needs (Delbridge, Edwards and Munday, 2005). Innovation is considered vital to the existence of a typical SME. Innovation represents an opportunity for small entrepreneurs to improve their business performance through a better market positioning (Expósito, Fernández-Serrano and Liñán (2019). A study by UNIDO (2015) revealed that the world manufacturing sector has continued to struggle in its growth as a result of the global crisis of the year 2009. The pace of growth of the manufacturing sector has over the past few years decelerated. Small and medium enterprises (SMEs) in the sector may need to constantly innovate in order to ensure improved performance and success of their enterprises. Innovation is one of the most effective drivers of success in a firm (Inuwa & Usman, 2022). The most innovative firms realize higher turnover of products and services introduced within a period of time; whereas firms that chooses to be non-innovative is to choose death of an organization.

Several factors contribute to low success rate in manufacturing SMEs and they include the use of obsolete and inefficient technologies, machine and systems (Nwosu, Awurum, and Okoli, 2015). There is urgent need for the SMEs to upgrade and modernize their machinery, technology and processes to become competitive. Additionally, most manufacturing SMEs, depict poor performance and high failure rate in managing their firms. Noor & Seet (2009) states that one of the major factors that influenced the success of SMEs in Nigeria is the implementation of innovation which could be a critical success driver as well as provide significant impact on productivity. Therefore, the study aims at examining the

influence of entrepreneurial innovation on the success of manufacturing SMEs in Anambra State.

The success of SMEs in the manufacturing sector is affected by several challenges that hinder them from maximizing their potential, consequently limiting their contribution to socio-economic development. The challenges include declining trend in innovative activities, stiff competition from large enterprises and multinationals; limited access to resources, information and markets; overcrowded saturated markets; limited technology and unfavourable legal regulation among others. These have been compounded by globalization, shortened product lifecycles, advancement in technology, increased standards requirements and changing consumer needs. Hence for the manufacturing SMEs to remain relevant in national development, they need to innovate and create strategies that will help them sustain success and develop competitive advantage.

Innovation is widely acknowledged as a core factor in firm competitiveness, survival and growth, thus within the business context, innovation is often considered a key source of strategic change through which firms can gain competitiveness. Consequently, pressure on all manufacturing SMEs to continually innovate by developing and launching new products and services is greater than ever. It has been emphasized that manufacturing SMEs require greater product, process and technological innovation to establish and sustain competitiveness given that they lack the resource advantage of their larger enterprises. SMEs' innovation is thus purposely at the heart of their success, growth, survival and competitive; thus the development of manufacturing SMEs form the foundation of successful manufacturing industry. This study therefore intends to establish the extent to which the success of SMEs in manufacturing sector is affected by entrepreneurial innovation.

Objectives of the Study

The broad objective of this study is to examine the influence of entrepreneurial innovation on the success of manufacturing firms in Anambra State. The specific objectives are:

1. To determine the influence of product innovation on customers satisfaction of manufacturing firms in Anambra State.
2. To examine the influence of process innovation on market share of manufacturing firms in Anambra State.

REVIEW OF RELATED LITERATURE

Innovation

The term innovation has a wide range of definitions coming from scholars across various disciplines (Laeeque, & Babar, 2017). Wang (2018) defines innovation as new forms of organisation, markets, processes, products, services, and skills. Innovation refers to the series of actions involved in causing creative development or implementing new ideas to increase the elements and usefulness of certain products and services towards delivering additional benefits to target customers (Fichman, 2001). Innovation is considered vital to the existence of a typical SME. Innovation represents an opportunity for small entrepreneurs to improve their business performance through a better market positioning (Expósito, Fernández-Serrano, & Liñán (2019). Bhatti, Santoro, Khan and Rizzato (2021) argue that innovation is the knowledge implemented in processes, products and services. Innovation encompasses a broad range of activities to improve business performance, such as introducing a new or substantially improved good or service, delivery process, production process, business model, or management structure (Reguia, 2014). Innovation is measured as a vital instrument of growth strategies that business need to venture into new marketplaces, raise the existing market share and ensure that the company continues to enjoy increased profitability. Innovation not only contributes to profitability, but also to more industrious manufacturing practices, improved performance in the market and seeks

to maintain positive status in customers' opinion (Al-Shorman, Alqudah, Al-Qatawneh, Alzoughool, & Mousavi, 2020).

Innovation is the means by which a firm or individual profits from inventiveness (Altman, Nagle, & Tushman, 2015). Al-Shorman et al., (2020) aver that accelerating rates of change, globalization, rapidly advancing technology, more innovative solutions, and a change from an industrial to a knowledge-based economy all required innovative solutions. Utilizing course reading answers for these or other market-situated difficulties, a firm turns out to be dangerously unsurprising and best ends up in the same relative position from its opposition. The more probable outcome is firm's success. Innovation is the way to competitive advantage in a strongly turbulent environment. It is a main driving force for the economic growth of nation-states. Innovation could be a sustainable and disruptive innovation. Sustainable innovation is defined as the minor or major changes in the existing products to improve their quality according to consumers' demands (Kuokkanen, 2019). The manufacturing of completely new products is named disruptive innovation (Howells, Gagliardi & Malik, 2008). Disruptive and sustainable innovation both are used to manufacture new products according to customers' demands and to improve the process methodologies adapted to manufacture goods and services (Hauser, Tellis & Griffin, 2006). Gupta, Smith & Shalley (2006) identified other forms of innovation, specifically administrative and technological, radical and incremental, and product and process. Most researchers agree to break innovation into four main dimensions: process or technology innovation, product or service innovation, organisational innovation, and market innovation (Alexe and Alexe, 2016).

Product Innovation

Product innovation refers to the launch of new products or services into the market, or the modification of existing ones so as to add value in order to satisfy new market needs and

introduce new intended uses (Waliuddin and Umar, 2021). Gunday (2011) argue that this innovation type is based on the utilization of new knowledge and technology, taking into account changing customer needs as well as fierce competition leading to shortening product life cycles. Product innovation is one of the key factors that contribute to success of an organization. New product development and product innovation is an important strategy for increasing the market share and performance of business (Nwosu, Awurum & Okoli, 2015). Product innovation focuses on increasing efficiency or reducing costs so as to attract customers to buy these products (Al-Sa'di, Abdallah and Dahiyat, 2017).

Firms bring product innovation to satisfy their customers, to earn higher profit, to compete with other firms in the markets, to bring efficiency in the manufacturing process, to fight competition (Obunike & Udu, 2018). It has been suggested that product innovation leads to increased firm performance in terms of different financial and competitiveness measures (Gunday et al, 2011). Artz, Norman, Hatfield, & Cardinal (2011) provides evidence that firms' expenditures on R&D and patents required for the development of new products of added value is positively related with improved firm performance in the manufacturing sector, while Tung (2012) proves that product innovation has a positive impact on firm performance either as a new product development mode or as a process of modifying existing products. Notably, product innovation also increases a firm's ability to survive with shorter product life cycles, demand instability, and rapid technological changes (Rajapathirana & Hui, 2018).

Process Innovation

Process innovation is the introduction of new and enhanced method of production or service delivery (Expósito, Fernández-Serrano, & Liñán, 2019) by an enterprise that includes significant changes in techniques, equipment, and tool and machine (Obeng & Boachie, 2018). Process innovation means improving the production and logistic methods

significantly or bringing significant improvements in the supporting activities such as purchasing, accounting, maintenance and computing (Polder, Leeuwen, Mohnen, & Raymond, 2010). Process innovation represents changes in the way firms produce the end product for the benefit of its customers. It is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software (Seng, Yusof, and Abidin, 2011).

Process innovation is the application or introduction of a new technology or method for doing something that helps an organization remain competitive and meet customer demands. This happens when an organization solves an existing problem or performs an existing business process in a radically different way that generates something highly beneficial to those who perform the process, those who rely on the process or both (Becheikh, Landry & Amara, 2006). Vásquez, Aguirre, Fuquene-Retamoso, Bruno, Priarone, & Settineri, (2019) argues that process innovation involves improving methods to manufacture products; and results in a reduction of production cost of a product, reduction in time taken to deliver the product to the customers, and functionality of the finished goods (Saide & Sheng, 2020).

Firm Success

Yahya, Marwan & Muna (2013) emphasize that the firm's success depends on the opportunities provided by their external environment. This implies that SMEs becomes very competitive in an emerging market when they give importance to innovative activities that build their reputation in the market environment. For firm's success to be attained there must be a good strategic intent, a philosophy and a series of programs and objectives focused on the skills and talents of its employees (Okoli, Nnabuife, Adani, & Ugbo, 2021). Firm success is about the achievement of goals and objectives, which is not explicitly

defined (Nhwangwama, Ungerer & Morrison, 2013). It can also be characterized as a firm's ability to create acceptable outcome and actions (Marom & Lussier, 2014). Success is measured by analyzing the position of the organization in relation to its objectives and mission. Gozukara (2016) posits that business success is based on several factors such as financial and technical resources, logistics, technology and human resources.

Eltahir (2018) reiterates some other factors that affect business success of SMEs are an entrepreneur characteristics, characteristic of SME, management and know-how, products and services, customers and markets, the way of doing business and cooperation, resources and finance, strategy, external environment; and technology. Radazi, Nor, & Ali (2017) found that success of SMEs is shaped by technology usage, so business owners who able to integrate information technology (IT) into their business processes and activities could enhance their business growth. Firm success can be evaluated by quality service and products, satisfying customers, market performance, service innovations, and employee relationships (Dess & Robinson, 2014). Methods for measuring firm success can be categorized into four groups: financial measures, intellectual capital, tangible and intangible benefits, and a balanced scorecard (Lee & Choi, 2003). Richard, Devinney, Yip & Johnson (2009) identified that return on investment, sales and market growth, and profit are important factors that measures by firm success.

Customer Satisfaction

Customer satisfaction is a measure of the degree to which a company's product or service meets or exceed the customer's expectation (Nadube & Ngbaawii, 2020). Hakim & Maamari (2017) defines satisfaction as the consumer's fulfillment response and the judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment. According to Lien (2017) customer satisfaction refers to a person's feeling when they compare the perception

of the product to their expectations. Customer's satisfaction is capable of stimulating repeat purchases as well as word of mouth advertising, which leads marketing professionals to seek not just to satisfy, but moreover to delight the customer, by offering attributes or qualities that not even the customer would have hoped to find in the product or service (Souki & Filho, 2008).

Customer satisfaction is strongly influenced by the interactions between customers and employees (Boshoff & Tait 2006). Homburg, Koschate, and Hoyer, (2005) opines that customer satisfaction as an assessment of previously held expectations with perceived product or service performance. The success of the organization is dependent on the customers' satisfaction; this is because the ability to produce a given product depends on the customers who will consume the produced products; hence without customers no organization will exist (Evwierhurhoma & Onouha, 2020). Organizations have come to realized that the satisfactions of customers play major roles in expanding the market share as well improving the performance of the organization. This is as a result that satisfied customers habitually return to buy more and work as a network to luring other prospective customers in purchasing the organization's product by sharing their experiences. If organizations are able to satisfy their customers, then it is certain that customers will be loyal to the organization (Hague & Hague, 2016).

Market Share

Market share refers to the company's percentage of the entire sales of the market or industry in which it operates. In other words, it refers to the company's sales amount compared to that of the overall industry (Gordon 2022). (Rathburn, 2022) defined market share as the percentage of total sales in an industry generated by a company. A large market share in an industry is good evidence of revenue and profitability levels. Amah (2014) found that there is a significant and strong relationship between sustained innovation and

market share. Organizations can only grow and develop through its position and place in its market affairs. Market share spells out the prominence and recognition placed on the organization; an advantage which undoubtedly would be most beneficial to the organization and which adequately signifies its performance and effectiveness (McShane & Von Glinow, 2003; Amah, 2009). Market share has to do with the proportion of a given market an organization have control of which serves as a major sign of competitive advantage enjoyed by an organization (Slack, Johnston & Chambers, 2004). Market share helps manager to evaluate total market growth or decline as well as trends in customers' purchase behaviour. A decline in an organization's market share can be a sign of serious long-term problems that might affects the general performance of the organization which needs urgent strategic modification from managers.

Theoretical Framework

This study is anchored on Schumpeter's creative destruction theory (1934). Creative destruction refers to the portable opportunities seized by innovators, which ultimately benefit not just them but the whole society. The theory holds the assumption that an entrepreneur is one having three major characteristics: innovativeness, foresight and creativity. Creative destruction implies that the entrepreneurs destroy the prevailing equilibrium in the market thereby disrupting existing goals and changing the direction of the economy. This was achieved through creating a new market, introducing a new way to make products, discovering a new market for a product, finds new sources of raw material and establishing new ways of making things or organization.

Firms should obtain new resources and combine existing ones in special ways to invest and innovate. The capability to take advantage of opportunity in the harsh environment should prompt large enterprises to endeavor to adopt innovation and enhance the totality of an

organizations learning, innovation, and renewal and venture activities. The entrepreneurial mindset facilitates the championing of new valuable ideas, which are resourced and developed in an encouraging, enabling culture. The entrepreneurial ability to convert creative insights and often homogenous inputs into heterogeneous outputs makes the firm a superior choice over the market.

Empirical Review

Kijkasiwat and Phuensane (2020) examined the moderating effect of firm size on the relationship between innovation and firm performance of small and medium enterprises in 29 countries in Eastern European and Central Asia. The study also investigates whether the impact of innovation in products and processes on firm performance is affected by financial capital. The method applied is partial least square structural equation modelling. The findings indicate that firm size and the financial capital both moderate and mediate the impact of innovation on firm performance, positively or negatively. The findings have implications for decision makers by highlighting the significance of firm size and financial sources when planning to introduce innovations to enhance firm performance.

Olalekan (2020) carried a study that examines the extent to which business innovation influences firm's competitiveness in Nigeria. The study covered South-South geopolitical zone in Nigeria and a sample size of 100 respondents were used for the study. Face and content validity were used in ascertaining the validity of the research instrument while Cronbach alpha was used to determine the reliability and a result of 0.7. Multiple regression was used in testing the hypotheses. The study found that both process innovation and administrative innovation had significant effect on firms' competitiveness. Furthermore, administrative innovation had a stronger effect.

Omede and Aghanenu (2021) examines the influence of innovation on the performance of entrepreneurship in Aba, Abia State, Nigeria. Survey research design was adopted, while data were obtained through structured questionnaire. Pearson's product-moment

coefficient of correlation was used to test the hypotheses. From the analysis, the result showed that there is an existing relationship between innovation and performance of entrepreneurship. Based on the findings it was concluded that for entrepreneurship to stand the test of time in the face of escalating competition, innovative culture aimed at encouraging employees to bring on board innovative ideas and strategies capable of providing innovative product and services to the customers with valued must be developed. Mwangi (2017) examines the effect of innovation on the competitive advantage in the FMCG industry. This study adopted descriptive research design. Questionnaires were used as the instrument for data collection. Data was presented in tables, graphs and charts and analyzed using inferential statistics. The study concludes that the competitive advantage of organizations in the FMCG is greatly influenced by the three types of innovation in the study that comprise of market innovation, product innovation and process innovation. Therefore, innovation activities in the organization make it possible for the organization to compete favourably with competitors, and similarly the organization innovation activities enables it to outperform its competitors on the market.

Ukpabio, Oyebisi and Siyanbola (2019) investigated the effects of innovation on performance of manufacturing SMEs in Nigeria. The study evaluated the effects of various innovation dimensions on the performance of manufacturing SMEs in Nigeria. A total of 305 samples were obtained from SMEs in the textile/leather/apparel and footwear subsector; wood/furniture and woodworks subsector; and domestic/industrial plastic and rubber subsector in Southwestern Nigeria. Data collected was analyzed using correlation analysis and hierarchical regression analysis. The correlation result shows that all dimensions of innovation (product, process, market, and organizational) had significant positive relationship with firm performance including the control variable firm size. The study confirmed that process innovation and organizational innovation influences SMEs performance significantly.

Njagi (2014) determined the effect of product innovation on the profitability of private manufacturing companies in Nairobi County. The study collected the data from 45 private manufacturing companies using convenience random sampling which was approximately 11.9% of all the private manufacturing firms in Nairobi County. The study uses Descriptive statistics such as mean, medium, and standard deviation to describe the data collected. Data presentation was done by the use of percentages and frequency tables. The study found a significant positive correlation between product innovation and return on asset (ROA). The findings also revealed that the correlation between inflation rate and ROA is negative and significant. Cost of production was also found to be negatively and significantly associated with ROA. The study concluded that product innovation has positive effects on profitability.

YuSheng and Ibrahim (2020) explored the effect of innovation adoption on performance of banks in Ghana. Data for the study were obtained from 450 respondents comprising bank employees and customers in the Kumasi metropolitan area in Ghana. An exploratory factor analysis, confirmatory factor analysis, and structural equation modeling were used to analyze the data via SmartPLS 3 and SPSS V.22. Findings from this study revealed that the innovation dimensions that contribute to bank innovation are organizational, product, process, and marketing innovations. The study further revealed a direct and positive relationship between innovation dimensions (product, marketing, and organizational innovations) and bank performance. Also, the findings revealed a significant and positive relationship between the dimensions of innovation (market, process, and product innovations) and firm performance. The practical implication is that, choosing the appropriate innovation types can enhance bank performance as well as satisfy customer needs.

Castillo-Vergara and García-Pérez-de-Lema (2020) investigated the association between product innovation and performance in 139 Chilean industrial SMEs. Data were collected using a structured questionnaire and analyzed using the Partial Least Square (PLS) method. Results revealed a positive influence of product innovation on the performance of SMEs, a crucial issue in their competitiveness. Also to establish the effect of innovation on the performance of SMEs in Oman, Alyahya'ei, Husin and Supian (2020) conducted a study using correlational research methodology. A quantitative approach was utilized to gather data from 268 respondents using self-administered questionnaires. Data were analyzed using descriptive analysis and drawn conclusions showed a positive significant relationship between product innovation and business performance of SMEs in Oman.

Oduro (2019) conducted a study on the effect of types of innovation on performance of SMEs in the Cape Coast Metropolis of Ghana. The study was built on the dynamic capabilities theory and employed a quantitative research approach via a survey questionnaire. Simple random and convenience sampling techniques were employed to choose 307 respondents for the analysis. Structural Equation Model Partial Least Square was employed to test the developed hypotheses. Results demonstrated that; product, process, organization and, marketing positively impact SMEs' performance, but organizational innovation has the most considerable effect size. More specifically, findings revealed that product innovation positively relates to performance in reference to customer satisfaction, market share, sales and, competitiveness.

In Kenya, Nduati (2020) used a literature-based critical review to assess the effect of strategic innovation on the performance of manufacturing firms. Product, process, market and, technology innovation strategies had a significantly positive impact on performance among manufacturing firms. It was exhibited that key firm performance areas had considerably and positively grown improved, attributed to a considerable extent to the

adoption of market and product innovation strategies. However, the study was based on desktop literature reviews, making it difficult to quantify the influence of strategic innovation on firm performance in Kenya presenting a methodological gap. A quantitative approach is used to examine the association between strategic innovations and performance of Uganda's printing SMEs.

Further, Kiilu and Kithae (2020) employed a descriptive research design to study entrepreneurial innovation processes and SME performance. Regression analysis results showed that product innovation, process innovation and, market innovation have a positive significant relationship with the performance of entrepreneurship businesses in Nairobi. Basing on a longitudinal study design, Machuki and Wasike (2018) conducted a case study on Haco Tiger Brands in Kenya to ascertain the impact of product innovation on performance. Secondary data was gathered from annual financial sales reports from 2009 to 2014. Time series and linear regression analyses were adopted to analyze data and results revealed that product innovation was relevant to the firm as it contributed significantly to their sales growth and helped to accelerate the total company sales revenue. Product innovation thus influenced the performance of Haco Tiger Brands positively.

Al-Battaineh (2018) investigated the impact of innovation strategies on the functional performance of SME firms in Hassan Industrial City, India. A structured questionnaire was utilized to collect data. The results showed that; product innovation, process innovation and, management innovation have a significant positive influence on increasing performance, while marketing management has no significant positive influence. Ibidunmi, Iyiola, and Ibidunni, (2014) established a positive relationship between product innovation and an increase in sales volume.

METHODS

Research Design

This study used descriptive type of survey design. This design is convenient because it was cost effective compared to other designs and it is suitable for the study.

Population of the study

The study population from which the sample was drawn for the study consists of all registered small and medium scale enterprises (SMEs) with Corporate Affair Commission (CAC) in Anambra State, Nigeria. The population of these registered SMEs is eight hundred and eighty (880) firms, while the total number of workers in those registered SMEs is two thousand six hundred and fifty four (2654).

Sample Size and Sampling Technique

The sample size of the study was determined using Krejcie and Morgan (1970) sample size determination formula. The formula is given below:

$$s = \frac{x^2 NP(1-P)}{d^2(N-1) + x^2 P(1-P)}$$

Where

s = Sample size

x^2 = Table value of chi-square for 1 degree of freedom at 0.05% confidence level (3.84)

N = population size (2654)

P = population proportion (assumed to be 0.5 since this would provide the maximum sample size)

d = Degree of accuracy expressed as a proportion

$$s = \frac{3.84 \times 2654 \times 0.5(1-0.5)}{0.05^2(2654-1) + 3.84 \times 0.5(1-0.5)}$$

$$S = \frac{2547.84}{7.5925}$$

$$S = 335.57$$

$$S \approx 336$$

However, a total of six manufacturing SMEs were selected for sampling. The six selected manufacturing SMEs were chosen because of the number of years they have existed in the industry and also the strategic nature and competitiveness of their goods and services. Simple random sampling and stratified random sampling technique were employed for this study. This is because of the nature of the population of study and the behavioural pattern of the industry.

Below is the selected manufacturing SMEs in Anambra State.

Table 1: Sample of Selected manufacturing SMEs in Anambra State

S/No	Names of Selected SMEs in Southeast Nigeria	Sample size of workers
1	Ano Plastic & Metal Industries Nigeria Ltd	44
2	Eastern Distilleries & Food Industries Limited	52
3	Chicason Group of Companies	59
4	Safreed Int'l. Nig Ltd	71
5	Ezenwa Plastic Industries Nigeria Limited.	47
6	Hardis and Dromedas Limited.	63
	Total	**336**

Sources: Anambra State Chamber of Commerce

Sources of Data

The sources of data for this study were both primary and secondary sources.

Primary data is the data which is collected a fresh and for the first time and thus happen to be original in character. Primary data was collected through questionnaires, interviews, observations and focus group discussions.

Secondary data involves the data collected using information from studies that other researchers have made of. All the information that was retrieved from already existing literature or sources for the purpose of this study was treated as secondary data.

Instrument for Data Collection

Questionnaire was used as the instrument of data collection. The Likert scale that was used in this study were categorized between 1 and 5 where 1 represents strongly disagree to 5 strongly agree. The questionnaire contained two sections, namely A and B. Section A has questions on bio-data (age, gender, education, and marital status) while section B include questions on entrepreneurial innovation and firms success.

Validity of the Instrument

Validity of a research instrument can be defined as the degree to which the research instrument measures what it purports to measure. The instrument used to collect data for the study was subjected to content and face validity by the researcher. The supervisor and other experts ensured that the items of the questionnaire capture the variables of the study. The content validity was to ensure that the instrument contains adequate and relevant items as to appropriately cover and measure the variables of the study. The variables are reflected in the objectives, research questions and the hypotheses of the study, which are well structured on the basis of the related literature awareness.

Reliability of the Instrument

To check reliability of the instrument, the questionnaires were pre-tested through pilot study to ascertain its effectiveness in soliciting information intended. The researcher used test-retest method in order to test reliability of the research instruments. Copies of the research instruments were retested on a sample of ten respondents who were representatives draw from other manufacturing SMEs in Anambra State studied. Thus, the study employed Cronbach's alpha to verify the internal consistency of each construct in order to achieve reliability. The Cronbach's Alpha results show that product innovation, process innovation customer satisfaction and market share recorded reliability coefficients of 0.869, 0.790, 0.827 and 0.810 respectively. Base on the threshold, they are found to be reliable for the study.

Method of Data Analysis

The analysis of data was performed using SPSS package. Data was presented using descriptive statistics (frequency distribution and percentage) and analyzed using inferential analysis. Correlation analysis was to test the hypotheses of the study.

Decision Rule: If the p-value obtained is less than 0.05 (p-value < 0.05), the alternate hypothesis was accepted, but if the p-value is greater than 0.05 (p-value > 0.05), the null hypothesis was accepted.

DATA PRESENTATION AND ANALYSIS

Here, the data generated from the manufacturing SMEs were presented, and analyzed. A total of three hundred and thirty six (336) copies of the questionnaire were distributed to the respondents, out of which three hundred and twenty (320) copies of the questionnaire

were properly filled and found relevant to the study, the remaining sixteen (16) copies of questionnaire were not properly filled.

Demographic Profile of Respondents

The bio-data profile of sampled respondents, showing the sample distributions in terms of gender, age, level of education and marital status of the respondents were presented in table 2.

Table 3: Background Information

Variable	Category	Frequency	Percentages
Gender	Male	140	43.07%
	Female	180	56.25%
Age[years]	18-30	57	17.8%
	31-40	124	38.8%
	41-50	83	25.9%
	Above 50	56	17.5%
Level of Education	SSCE/GCE/NECO	23	7.2%
	ND/NCE	104	32.5%
	B.Sc/HND	180	56.25%
	Masters	13	4.05%
Marital Status	Single	124	38.75%
	Married	196	61.25%

From the table 2 above, it is seen that 43.07% percent of the respondents are males while 56.25% are female, meaning that females are slightly more than males in the organizations. The marital status of respondents for this study falls into two categories namely; single and married. The sample distribution of the respondents according to marital status shows that greater proportions (61.25%) of the respondents were married. This was followed by 38.75% of the respondents who were single. In the age of respondents, most of the

respondents fell within 31 to 40 years of age (38.8%). This was followed by those between ages of 41 to 50 (25.9%); and those between ages of 18years to 30 years (17.8%); and those above 50 years (17.5%) completed the rear. With regards to level of education of respondents, those who had B.Sc./HND certificate where greater than the others as they represented 56.25% of the respondents. This was followed by those who had ND/NCE certificate (32.5%) and those that had SSCE/GCE/NECO certificate (17.5%). Respondents that had Master certificate were the least as they represented just 4.05% of the respondents.

Test of Hypothesis One

H_{O1}: Product innovation does not have significant effect on customer satisfaction of manufacturing firms in Anambra State.

Table 4: Relationship between product innovation and customer's satisfaction

Correlations

		Product Innovation	Customer Satisfaction
Product Innovation	Pearson Correlation	1	.894**
	Sig. (2-tailed)		.000
	N	320	320
Customer Satisfaction	Pearson Correlation	.894**	1
	Sig. (2-tailed)	.000	
	N	320	320

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field Survey, 2023.

The nature of relationship between product innovation and customer satisfaction was investigated using Pearson product-moment correlation coefficient. The research indicated a strong, positive statistical relationship between product innovation and customer satisfaction of manufacturing SMEs in Anambra State, $r = .894$, $n = 320$, $p < 0.01$. Thus,

the null hypothesis was rejected. This implies that product innovation tends to increase customer satisfaction of manufacturing SMEs in Anambra State.

Test of Hypotheses Two

H_{O2}: Process innovation has no significant effect on the market share of manufacturing firms in Anambra State.

Table 5: Relationship between process innovation and market share

Correlations

		Process Innovation	Market Share
Process Innovation	Pearson Correlation	1	.623**
	Sig. (2-tailed)		.000
	N	320	320
Market Share	Pearson Correlation	.623**	1
	Sig. (2-tailed)	.000	
	N	320	320

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field Survey, 2023.

The relationship between process innovation and market share was examined using Pearson's Product-Moment Correlation Coefficient. The survey ascertains a positive, statistical relationship between process innovation and market share of manufacturing SMEs in Anambra State, $r = .623$, $n = 320$, $p < 0.01$. Hence, the null hypothesis was rejected. The research specified that process innovation has a significant effect on the market share of manufacturing firms in Anambra State.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

The study made the following findings:

1. Product innovation has a significant influence on the success of manufacturing firms in Anambra State.
2. Process innovation has a significant influence on the success of manufacturing firms in Anambra State.

Conclusion

This study examined the influence of entrepreneurial innovation on the success of manufacturing SMEs in Anambra State. The two variables under study have shown valuable relationships which serve as pointers for enhanced success in the selected manufacturing firms. The study has proven that innovation has a significant and positive relationship with firm's success. Therefore, this study concludes that to remain competitive as well as become profitable, manufacturing SMEs operating in Anambra State must embrace innovation and continuously seek ways to be innovative. Hence, manufacturing SMEs can leverage on their success by continuously implementing product innovation and process innovation.

Recommendations

In view of the findings, the following recommendations are made:

1) Manufacturing firms need to constantly endeavor to invest in different new product designs and improve on the existing products to attain a competitive advantage against competitors.

2) Manufacturing firms need to endeavor to lay more emphasis on employee development as it is an indispensable factor that facilitates process innovation.

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