



# EFFECT OF INNOVATION STRATEGY ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN KADUNA STATE, NIGERIA

Matthew Ayodele Olatunle, Ph.D<sup>1</sup>, Micah Adamu Gumus, Ph.D<sup>2\*</sup>  
<sup>1&2</sup> Department of Management Studies, Kaduna Polytechnic, Kaduna State.

\*Corresponding Author

## ABSTRACT

DOI No: 10.36713/epra13650

Article DOI: <https://doi.org/10.36713/epra13650>

*The aim of the study is to determine the effect of innovation strategies on the performance of SMEs in Kaduna State. The study employs the survey research design and uses cross-sectional approach of data collection. Krejcie and Morgan (1970) table for determining sample size was used to obtain a sample size of three hundred and thirty-eight (338) owners of SMEs in Kaduna State. Proportional sampling technique was used in selecting the sample size based on the nature of the population. A total of 338 copies of the questionnaire were distributed for data collection, only 305 copies were retrieved for analysis. Data collected were subsequently analysed using multiple regression analysis. Findings from the study established that innovation strategies have a significant and positive effect on SMEs performance in Kaduna State. Process and product innovations exerted the highest effect while organisational innovation have the lowest effect on SMEs performance however, technological innovation shows negative and inconsequential effect on SMEs performance. It was therefore recommended among others that, SMEs owners should overhaul their technological innovation strategy, as the one currently in used are not yielding the desired result hence, they should deploy recent technological equipment that are easy to use, faster and effective in serving their customers.*

**KEYWORDS:** SMEs performance, process innovation, product innovation, organisational innovation.

## 1. INTRODUCTION

It is a known fact that small and medium scale Enterprises (SMEs) performance plays significant roles as it contributes to economic growth globally hence, its importance cannot be over emphasised. The growth and development of SMEs in any nation is the bedrock for social and economic growth of such nation. This justifies why nations across the world pays more attention to the performance of SMEs. In a study conducted by Martin and Namusonge, (2014) shows empirical evidence that, 99.7% of business

ventures globally are SMEs, the implication of this is that if the performances of these SMEs are improved upon, it will certainly stimulate economic growth through job creation and addition of value to the gross domestic product. Again, study conducted by OECD (2004) confirmed that SMEs contributes more than 55% of GDP and 65% of total employment in high income countries while in middle-income countries, it contributes over 70% of GDP and about 95% of total employment. Similarly, the contribution of SMEs performance in low-income countries was reported in the study conducted by Godswill, Oyedepo and Willie

(2018) which shows that, SMEs performance especially in employment and GDP appears to be less than the informal sector, where majority of the poorest of the poor lives. In Nigeria, SMEs constitutes about 96% of businesses and contributes 75% employment opportunity (Umar, 2014)

Looking at the economy of Nigeria today, there are clear indication that Small and Medium Enterprise (SMEs) dominate most forms of businesses and for any economy to succeed (either industrialized or non-industrialized) will largely depend on how well SMEs are organized to perform ultimately as compared to other business (SMEDAN, 2003). Some small businesses in Nigeria started small but with innovation management have improved their performance, today they have grown to big companies and conglomerates. There are certain factors that could enhance the performance of SMEs globally among them is innovation.

Today, innovation in business serves as catalyst that stimulates performances depending on how well it is being applied. Innovation simply means novelty, new way of doing things or old things being done in a new way to enhance performance in terms of new product, process, organization, marketing (Abdilahe, Hassan & Muhammad, 2017). In addition, adoption of innovation by any firm can provide the firm with the right platform to build a strong competitive advantage in view of its ability to design, produce and market products that are of better quality when compare with that of the competitors. Since, firm survival and growth is a paramount objective for every firm, adoption of innovation becomes a priority for all firms without the exception of SMEs.

For an organization that aimed to improve its performance in the area of high sales, profitability and larger market share requires the application of innovation as a strategy to achieve its goal. Innovation as a business strategy can be in the form of product, process, organization, information technology and marketing innovation adopted by an organization to boost their organizational performance. Therefore, the need for SMEs to adopt innovation as a business strategy that will enhance their operational performance has become very important.

Focusing on the Nigerian economy of today, the Small and Medium Scale Enterprises (SMEs) are the most common form of business. The success of any economy (either industrialized or non-industrialized) depends largely on how well organised the small and medium scale enterprises are in comparison to the developed world. (SMEDAN, 2003). These SMEs play critical roles in providing job opportunities, nurturing a culture of entrepreneurship, and opening up new business opportunities. They are recognised

and acknowledged worldwide as vital and significant contributors to the economic development, ability in generating potential entrepreneurs and skilled workers for the industrialization process both nationally and internationally (Chang, 1986).

Despite the abilities of these SMEs in accelerating the achievement of wider economic objectives, including poverty alleviation according to Cook and Nixon, (2000), they lack the innovative ability to design products, develop products, market the products, and manage the entire activities of SME with the required technological facilities. These makes most small and medium scale businesses become practically constrained in managing their cash flow very well hence, there performances have taken a downward movement particularly during the covid-19 era where most business activities relied heavily on ICT. Similarly, a survey report published on the website of Price Waterhouse CooperNigeria (pwc. ng) indicates a dropped in SMEs performance in Nigeria from 2.2% in 2019 to -3.4% in 2020. To reaffirm this ugly situation, a study revealed that about 90% of SMEs in Nigeria are not performing well particularly during the covid-19 era (Sme. 360).

In view of these lingering problems, there is the need to conduct a study to examine the extent to which Nigerian SMEs effectively utilizes innovation strategies particularly, in the area of product innovation, process innovation, technological innovation, organizational innovation and marketing innovation. Hence, the major question on the lips of most Nigerian entrepreneurs is that, how well has SMEs in Nigeria use innovative strategies to enhance their overall performance? This question remained unresolved and requires further investigation. Thus, few studies (Lin & Chen, 2007; Bakar & Ahmad, 2010; Mohd & Syamsuriana, 2013; Njogu, 2014; Olughor, 2015; Gu & Shao, 2015; Audrey & Jaraji, 2016; Godwill, Oyedepo & Willie, 2017) used two to three dimensions for innovation strategies while for this study five dimensions of innovation strategies shall be used. Even though few of these studies were conducted in Nigeria, to the best of the researcher's knowledge none was conducted in Kaduna State. Therefore, the objective of this study is to examine the impact of innovation strategies on the performance of SMEs in Kaduna State.

## 2. LITERATURE REVIEW

In order to shed light and to guide the readers of this study towards understanding the major variables and proxies used in this study, the need for conceptual clarification of these concepts becomes necessary.

### SMEs Performance

Various definitions of SMEs performance have been proposed by several authors to align with their own

interpretations. Owen (2011) offers a straightforward definition, stating that performance refers to the outcomes achieved by an organization in relation to meeting its objectives. On the other hand, Wu (2009) presents a broader definition, which defines performance as the extent to which predetermined targets are successfully attained while utilizing resources efficiently within both internal and external contexts (including stakeholders, competitors, and society). This definition encompasses the notions of effectiveness, productivity, efficiency, and excellence, where these factors are evaluated against the intended output (Zorooshian, Norman & Rosnah, 2011).

Similarly, firm performance has been linked to a company's ability to capitalize on existing opportunities, generating profits, and accomplishing overall objectives (Haghighinasab, Sattari, Ebrahimi, & Roghanian, 2015). Another related study conducted by Al-Ansari, Pervan, and Xu (2013) considers firm performance as an increase in sales, a larger market share, customer satisfaction, return on investment, and overall profitability of the firm.

### **Innovation Strategy**

Various definitions of SMEs performance have been proposed by several authors to align with their own interpretations. Owen (2011) offers a straightforward definition, stating that performance refers to the outcomes achieved by an organization in relation to meeting its objectives. On the other hand, Wu (2009) presents a broader definition, which defines performance as the extent to which predetermined targets are successfully attained while utilizing resources efficiently within both internal and external contexts (including stakeholders, competitors, and society). This definition encompasses the notions of effectiveness, productivity, efficiency, and excellence, where these factors are evaluated against the intended output (Zorooshian, Norman & Rosnah, 2011).

Similarly, firm performance has been linked to a company's ability to capitalize on existing opportunities, generating profits, and accomplishing overall objectives (Haghighinasab, Sattari, Ebrahimi, & Roghanian, 2015). Another related study conducted by Al-Ansari, Pervan, and Xu (2013) considers firm performance as an increase in sales, a larger market share, customer satisfaction, return on investment, and overall profitability of the firm.

### **Innovation Strategy**

The term "innovation" refers to the practices undertaken by organizations to generate ideas that bring about a tangible difference in their business operations. According to Davila, Epstein, and Shelton (2006), innovation involves successfully implementing creative ideas to enhance an

organization's performance. On the other hand, a "strategy" is a plan of action designed to achieve specific goals set by an organization. Therefore, an "innovation strategy" is a plan of action that enables an organization to enter new markets and create value for customers by improving the quality of their goods and services (Gebauer, Worch & Truffer, 2012).

In this study, the concept of innovation strategy is examined across five dimensions: product innovation, process innovation, organizational innovation, technological innovation, and marketing innovation. These dimensions encompass different aspects of innovation that organizations can focus on to drive their growth and success.

### **Product Innovation**

Baker (2002) identifies product innovation as a type of innovation that can be categorized into two orientations. Incremental product innovation focuses on enhancing the features and functionality of existing products and services. On the other hand, radical product/service innovation aims to create completely new products and/or services. Product innovation involves the implementation of diverse organizational strategies and the utilization of unique inputs, ultimately resulting in the development of novel outputs (Martinez, Ros & Labeaga, 2016).

### **Process Innovation**

Process innovation plays a vital role in the manufacturing process of a firm, providing it with a competitive advantage over its rivals. Interestingly, research has shown that there is a positive relationship between process innovation and firm performance (Vivero, 2002). Cumming (1998) explains that process innovation involves reengineering the business processes, leading to improvements in internal operations and capabilities. Furthermore, Cumming emphasizes that the significance of process innovation is particularly well recognized in companies facing challenges, as it can contribute to enhancing productivity within the organization.

### **Organizational Innovation**

Organization innovation encompasses alterations in the methods of organizing and managing a firm, which includes aspects such as human resource management and enhancing the firm's market reach, such as expanding into new markets (Avermaete et al., 2003). It involves the implementation of new organizational methods within the firm's business practices, workplace organization, or external relationships (OECD & Eurostat, 2005). In other words, organizational innovation entails introducing novel approaches to how the firm operates internally and externally, aiming to improve its overall effectiveness and competitiveness.

**Technological Innovation**

Technological innovation has been defined by various authors in different forms. According to Sobanke, Ilori, and Adegbite (2012), technological innovation encompasses the collective efforts and strategies of a firm in terms of selecting, establishing, understanding, aligning, enhancing, and improving technology. Cerulli (2014) views technological innovation as the acquisition, integration, and improvement of information and capabilities, enabling firms to sustain their innovative capacity and achieve market success. Additionally, Terece, Pisano, and Shuen (1997) define technological innovation as the capability of an enterprise to effectively engage in technical activities and business operations, including efficient development of new products or processes, among other related activities. Both the presence of technology and the ability to compete with technology-driven capabilities are crucial factors that determine a firm's success and continuity.

**Marketing Innovation**

Marketing innovations aim to better address customer needs, explore new markets, or reposition a firm's product in the market, all with the objective of increasing sales. According to OECD and Eurostat (2005), implementing a new marketing method involves significant changes in product design, packaging, placement, promotion, or pricing. Marketing innovation revolves around the market mix and market selection to meet consumers' expectations (Mohd & Syamsuriana, 2013). It plays a crucial role in meeting market demands and capitalizing on market opportunities (Rodriguez-Cano et al., 2004). Marketing innovation entails developing improved approaches to meet customer needs, entering new markets, or strategically positioning a firm's product to enhance sales (Gunday et al., 2011).

**2.1 Theoretical Framework**

In the 20<sup>th</sup> century, Mckinsey developed a model called three horizon model sometimes called disruptive innovation model, which was used to explain how firm can invest in current products, process, technology, organization and marketing to

attain incremental innovation and breakthrough innovation to enhances its performances within a period of time. However, with the advent of technology, innovation is achieved within a short period of time unlike in the 20<sup>th</sup> century. This means that firm can now achieve set innovation and high performance in a quick period. This period according to Mckinsey happens in three phases. These are as follows:

Horizon 1, it suggests that, firm's ideas provide continuous innovation to its existing strategy and potential of higher performance in a short period.

Horizon 2, suggests that, firm's existing ideas expand its business strategy and potentials to new customers / target audience.

Horizon 3, it suggests a firm's ability to create a new business potential that will respond to existing disruptive opportunities and enhance business performance.

Mckinsey suggested that, for firm to achieve the activities for each horizon, such firm requires different focus, management skills and achievable goals. According to (Bunswick & Vanhaverbek 2014, Drucker, 2014) both small and big firm can use innovation strategies directly to influence their ability to develop their products and enhance their performance by satisfying customers and market needs. Hence this theory will be adopted because, its theoretical interpretation relates to the research problem under investigation.

**2.2 Conceptual Framework**

Hennink, Hutter, and Bailey (2020) define conceptual frameworks as visual maps that depict the relationships between variables in a graphical and diagrammatic manner, often derived from specific examples or situations. In the present study, the focus was on five variables that represent key actions associated with innovation: product innovation, process innovation, technological innovation, organizational innovation, and marketing innovation. Figure 1 provides an illustrative representation of these variables explored in the study. The figure visually demonstrates the interplay and connections between these variables.

**Fig. 1** Independent Variables



Sources: Researchers

The study conceptualized that, the independent variables product innovation, process innovation, technological innovation, organizational innovation and marketing innovation will predict on the dependent variable SMEs performance hence, this prediction shall be subjected to empirical testing.

### 3. RESEARCH METHODOLOGY

The research design employed for this study is a survey research design, utilizing a cross-sectional survey method. Data was collected once during the entire study period, which spanned from January to March 2023. The target population for the study consisted of small and medium-sized enterprise (SME) owners in two major Local Government Areas

(LGAs), namely Kaduna North and Kaduna South. These LGAs were selected due to their proximity to the state capitals and the concentration of a large number of SMEs within each LGA. The total population for the study was 2,721 SME owners, with the number of SMEs in each LGA obtained from the Kaduna State Ministry of Commerce and Industry. The estimated sample size for the study was 338 SME owners, as shown in Table 3.1, it was determined using Krejcie and Morgan (1970) sample size determination table. Proportional sampling was utilized to ensure fair representation of all SMEs within the two LGAs, while a convenience sampling technique was employed to select the specific number of SMEs from each LGA.

**Table 3.1 Sample Size of the Study**

S/N	State	LGAs	Popln of SMEs	Sample Size	Percentage
3.	Kaduna	Kaduna North	1881	234	69.3
4.	Kaduna	Kaduna South	840	104	30.7
<b>Total</b>			<b>2,721</b>	<b>338</b>	<b>100</b>

Source: Researcher’s Field Survey 2023

For data collection, a self-administered questionnaire was utilized as the instrument. The questionnaire was divided into two parts. The first part aimed to gather demographic information about the respondents. The second part comprised thirty items that assessed the variables of product innovation, process innovation, technological innovation, organizational innovation, and marketing innovation (PIS, MPIS, TIS, OIS, MIS, SMEP).

To develop the items, the measurement scale used by Alyahyaei, Husin, and Supian (2020) and Odoro (2019) was adapted. Specifically, five items were utilized to measure each of the variables. Additionally, the reliability of the instrument was tested, and the results of the reliability test are presented in Table 3.2.

**Table 3.2 Reliability Test for Brand Equity and Consumer Purchase Behaviour**

Scale	Dimension	No of Items	Cronbach’s Alpha
SMEP	Small Medium Ent. Per.	5	0.767
PIS	Product Innovation	5	0.775
MPIS	Process Innovation	5	0.794
TIS	Technological Innovation	5	0.716
OIS	Organisational Innovation	5	0.722
MIS	Marketing Innovation	5	0.807
Overall Reliability Scale		30	0.781

Source: SPSS Output, 2023

Table 3.2 presents the reliability results for the innovation strategy and SMEs performance variables, including the individual item reliability tests. It is noteworthy that all the items demonstrate high reliability and were utilized to examine the dimensions of innovation strategies and SMEs performance in

Kaduna State, Nigeria. The reliability coefficients for the relationship between innovation strategy and SMEs performance exceed the threshold of 0.70. As stated by Ghazali (2013), indicators are considered reliable representatives of the variables when the Cronbach's Alpha value surpasses 0.70.

**Table 3.3**  
**Reliability Test for Innovation Strategies and SMEs Performance**

Variable	Min	Max	Mean	SD	Skewness	Kurtosis
SMEP	2.40	5.00	4.2736	.59155	-1.215	0.848
PIS	2.80	5.00	4.2992	.54116	-0.699	0.060
MPIS	2.20	5.00	4.2725	.52395	-1.847	0.330
TIS	2.00	5.00	4.2846	.65589	1.990	0.242
OIS	2.20	5.00	4.3270	.56229	-1.756	0.444
MIS	3.00	5.00	4.2453	.47732	-1.480	-0.162

Source: SPSS Output, 2023

Table 3.3 presents the descriptive statistics for the innovation strategy variables and SMEs performance. Among the innovation strategy variables, organizational innovation obtained the highest mean score of 4.3270, followed by product innovation (mean = 4.2992), process innovation (mean = 4.2725), technological innovation (mean = 4.2846), and market innovation (mean = 4.2453). This indicates that organizational innovation is rated higher than the other innovation variables, while marketing innovation is rated the lowest. The standard deviations for SMEs performance, product innovation, process innovation, technological innovation, organizational innovation, and market innovation were calculated as .59155, .54116, .52395, .65589, .56229, and .47732, respectively.

The skewness values for all variables, except for technological innovation (skewness = 1.990), were negative. This indicates that the scores are more concentrated on the higher end of the scale, except for organizational innovation. Furthermore, the kurtosis values were all less than 1, indicating a platykurtic distribution.

Out of the 338 questionnaires administered to SME owners in Kaduna North and South, a total of 305 questionnaires (representing 90.23%) were returned and considered valid for analysis. The data was analyzed using regression analysis as the statistical tool. The analysis and discussion of the results are presented below.

#### 4. RESULT ANALYSIS AND DISCUSSION

**Table 4.1: Model Summary of the Predictors and Criterion**

Model	R	R. Square	Adjusted R-Square	Standard error of the estimate	Durbin Watson
1	.561	.315	.306	.49275	2.232

Source: SPSS Output, 2023

The regression coefficient, denoted as 'R' in Table 4.1, indicates a relationship of 0.561 or 56 percent between the independent variables (innovation strategy dimensions) and the dependent variable (SMEs Performance). This means that the innovation strategy dimensions collectively account for 56 percent of the variability in SMEs performance. The coefficient of determination, represented by 'R<sup>2</sup>,' is 0.315, indicating that the independent variables can predict 31.5 percent of the changes observed in SMEs performance in Kaduna. However, it is important to note that other

factors not included in the model account for the remaining 68.5 percent of the changes in SMEs performance.

The Durbin Watson value of 2.232 suggests that there is no evidence of autocorrelation. According to Field (2009), a Durbin Watson value between 1 and 3 indicates no substantial correlation in the error terms. In this case, the Durbin Watson value of 2.232 falls within this range, implying that the error terms are not correlated.

**Table 4.2 ANOVA of the Predictors and Criterion**

Model	Sum of Square	Df	Mean Square	F-cal	P-val	F-crit
1 Regression	43.637	5	8.727	35.945	0.000	6.312
Residual	94.935	300	.243			
Total	138.572	305				

Source: SPSS Output, 2023

The regression equation in Table 4.2 consists of a set of regression coefficients that are statistically significant from zero. The F-calculation value of 35.945 is greater than the F-critical value at the 0.05 level of significance, indicating a significant relationship between the independent variables and the dependent variable. Additionally, the P-val value of 0.000 ( $p < 0.05$ ) indicates the fitness of the model. This

implies that the overall regression model is statistically significant, valid, and suitable for prediction purposes.

The independent variables have a strong predictive influence on SMEs performance based on the results obtained.

**Table 4.3 Coefficient of the Predictors Variables**

Variables	Standard Beta	Standard Error	Standardised Coefficient	T- Stat	P-Value	Decision
Constant	1.669	0.304		5.485	0.000	
Product Innovation	0.235	0.055	0.215	4.280	0.000	Reject
Process Innovation	0.496	0.076	0.439	6.559	0.000	Reject
Tech Innovation	0.084	0.054	0.094	1.553	0.121	Accept
Org. Innovation	0.141	0.068	0.134	2.083	0.038	Reject
Market Innovation	0.125	0.058	0.101	2.141	0.033	Reject

Source: SPSS Output, 2021

**Test of Hypothesis One**

H<sub>01</sub>: Product innovation does not significantly affect Small and Medium Enterprises (SMEs) performance in Kaduna State.

In Table 4.3 the result shows the contribution of product innovation on SMEs performance in Kaduna State as follow, ( $\beta = 0.235$ ,  $t = 4.280$ ,  $P = 0.000$ ,  $P < 0.05$ ).

The standardized beta coefficient of 0.235 indicates that for every 1-unit improvement in product innovation, SMEs performance will improve by 0.235 while the t-calculated coefficient of 4.280 with p-value of 0.000 indicates that there is a significant positive relationship between product innovation and SMEs performance. This result suggests that, product innovation contributes in influencing SMEs performance in Kaduna State. Thus, the null hypothesis which stated that product innovation does not significantly affect SMEs performance in Kaduna State is rejected while the alternative hypothesis accepted.

**Test of Hypothesis Two**

H<sub>02</sub>: Process innovation does not significantly affect Small and Medium Enterprises (SMEs) performance in Kaduna State.

As shown in table 4.3 the result reveals as follow, ( $\beta = 0.496$ ,  $t = 6.559$ ,  $P = 0.000$ ,  $P < 0.05$ ). The standardized beta coefficient of 0.496 indicates that for every 1-unit improvement in process innovation, SMEs performance will improve by 0.496 while, the t-calculated coefficient of 6.559 with p-value of 0.000 indicates that there is a significant positive relationship between process innovation and SMEs

performance. The result implies that, process innovation contributes to influencing SMEs performance in Kaduna State. Thus, the null hypothesis which stated that process innovation does not significantly affect SMEs performance in Kaduna State is rejected while the alternative hypothesis accepted.

**Test of Hypothesis Three**

H<sub>03</sub>: Technological innovation does not significantly affect Small and Medium Enterprises (SMEs) performance in Kaduna State.

Also, in the regression result in table 4.3, the result reveals as follow ( $\beta = 0.084$ ,  $t = 1.553$ ,  $P = 0.121$ ,  $P > 0.05$ ). The standardized beta coefficient of 0.084 indicates that for every 1-unit improvement in technological innovation, SMEs performance will improve by 0.084 while, the t-calculated coefficient of 1.553 with p-value of 0.121 indicates that there is no significant relationship between technological innovation and SMEs performance. Thus, the result indicates that, technological innovation does not contribute to influencing SMEs performance in Kaduna State. Thus, the null hypothesis which stated that process innovation does not significantly affect SMEs performance in Kaduna State is accepted while the alternative hypothesis rejected.

**Test of Hypothesis Four**

H<sub>04</sub>: Organisational innovation does not significantly affect Small and Medium Enterprises (SMEs) performance in Kaduna State

Similarly, in table 4.3 the contribution of organizational innovation as it relates to SMEs performance is expressed as follows ( $\beta = 0.141$ ,  $t = 2.083$ ,  $P = 0.038$ ,  $P < 0.05$ ). The standardized beta coefficient of 0.141 indicates that for every 1-unit improvement in process innovation, SMEs performance will improve by 0.141 while, the t-calculated coefficient of 2.083 with p-value of 0.038 indicates that there is a significant positive relationship between organisational innovation and SMEs performance. The implication of the result is that; organizational innovation contributes to influencing SMEs performance in Kaduna State. Thus, the null hypothesis which stated that process innovation does not significantly affect SMEs performance in Kaduna State is rejected while the alternative hypothesis accepted.

#### Test of Hypothesis Five

$H_{05}$ : Marketing innovation does not significantly affect Small and Medium Enterprises (SMEs) performance in Kaduna State.

Finally, to determine the contribution of market innovation on SMEs performance in Kaduna State, the result is revealed in table 4.3 as follows ( $\beta = 0.125$ ,  $t = 2.141$ ,  $P = 0.033$ ,  $P < 0.05$ ). The standardized beta coefficient of 0.125 indicates that for every 1-unit improvement in process innovation, SMEs performance will improve by 0.125 while, the t-calculated coefficient of 2.141 with p-value of 0.033 indicates that there is a significant positive relationship between market innovation and SMEs performance. The result implies that, marketing innovation contributes to influencing SMEs performance in Kaduna State. Thus, the null hypothesis which stated that market innovation does not significantly affect SMEs performance in Kaduna State is rejected while the alternative hypothesis accepted.

### DISCUSSION OF FINDINGS

Based on the results of the analysis particularly, the results of the test of hypotheses. The study uncovered that product innovation has a significant impact on SMEs performance in Kaduna State. This implies that, SMEs performance in Kaduna North and Kaduna South is influenced by product innovation strategy carried out by SMEs in Kaduna North and Kaduna South. This finding is similar to the study conducted by (Anderson, & Eshima, 2013; Ates, Garengo, Cocca, & Bititci, 2013) who found that product innovation has significant effect on SMEs performance. However, the study contradicted the results of (Bititci, Garengo, Ates, & Nudurupati, 2015; Busco, & Quattrone, 2015) who in their studies concluded that, product innovation has an inconsequential effect on SMEs performance.

The study also discovered that process innovation has no significant effect on SMEs performance in Kaduna State. This suggests that process innovation is an innovation dimension that influences SMEs performance in Kaduna North and Kaduna South. However, this result corroborates with the works of (Busco, & Quattrone, 2015; Chang, & Hughes, 2012). This finding is contrary to the findings of (Cosh, Fu, & Hughes, 2012; Cuerva, Triguero-Cano, & Córcoles, 2014) who found that brand loyalty does not influence consumer purchase behaviour.

The study also found that, technological innovation has no significant effect on SMEs performance in Kaduna State. This indicates that technological innovation is not an innovation strategy that affects SMEs performance in Kaduna North and Kaduna South. This result is consistent with the findings of (Eggers, Kraus, & Covin, 2014; Gong, & Ferreira, 2014) who found that technological innovation has no significant effect on SMEs performance. In contrast, the study conducted by (Koufteros, Verghese, & Lucianetti, 2014; López, & Hiebl, 2015) found that, technological innovation has significant effect on SMEs performance.

The study also uncovered that organizational innovation has significant effect on SMEs performance in Kaduna North and Kaduna South. This suggests that organizational innovation is an innovation dimension that influences SMEs performance in Kaduna North and Kaduna South. However, this result corroborates with the works of (Schjoedt, & Bird, 2014; Srećković, 2017). Thus, the finding is contrary to the findings of (Venturini, 2015; Volery, Mueller & Vonsiemens, 2015) who found that organizational innovation does not influence SMEs performance.

Finally, outcome of the study shows that, market innovation has significant effect on SMEs performance in Kaduna North and Kaduna South. This result indicates that market innovation being an element of innovation strategy plays an important role in influencing SMEs performance in Kaduna North and Kaduna South. This finding concurs with the works of (Volery, Mueller, & Vonsiemens, 2015; Abdolmaleki, & Ahmadian, 2016). However, it disagrees with the findings of (Ioanid, Deselnicu, & Militaru, 2018; Elrehail, 2018) who found that market innovation has insignificant effect on SMEs performance.



## 5. CONCLUSION AND RECOMMENDATIONS

In conclusion, this study aimed at identifying the effect of innovation strategy on SMEs performance in Kaduna North and Kaduna South. The study considered five dimensions of innovation strategies: product innovation, process innovation, technological innovation, organizational innovation and marketing innovation (independent variable) and SMEs performance (dependent variable).

Based on the multiple regression test, innovation strategies concurrently have significant influence on SMEs performance. Moreover, product innovation and process innovation have the most critical influence on SMEs performance. This is followed by marketing innovation and organizational strategy. However, technological innovation was found to be inconsequential in influencing SMEs performance. The study, therefore, concludes that innovation strategy dimensions adopted by SMEs in Kaduna North and South has significant influence on SMEs performance in Kaduna State.

Based on the findings of the results, the study recommends that:

- i. Owners of SMEs in Kaduna State should intensify more effort on enhancing and sustaining their product innovation strategy, that will increase the level of SMEs performance in Kaduna State.
- ii. Managers of SMEs in Kaduna State should ensure that process innovation strategy is embedded in the planning, development and implementation stages of their Business, as this will lead to appreciable growth in SMEs performance.
- iii. SMEs owners should thoroughly overhaul their technological innovation strategy, as the one currently in used are not yielding the desired result hence, they should deploy recent technological equipment that are easy to use, faster and effective in serving their customers.
- iv. Deliberate effort should be made by owners of SMEs to re-design the structure of their organization in a manner that it will facilitate teamwork, coordination between functional areas and effective customer service.
- v. Owner of SMEs should at time-to-time scan through the market environment to ensure that the promotional tools deploy, the distribution channel put in place, pricing techniques deploy, and the quality of their product meets the yearning and aspiration of prospective customers.

## REFERENCE

1. Abdilah, M. H., Hassan, A.A. & Muhumed (2017). *The impact of innovation on small and medium enterprises performance: empirical evidence from Hargeisa,*

- Somaliland. *International Journal of Academic Research in Business and social science.* 7(8), 14-28.
2. Audrey P. N and Jaraji, K, (2016). *The impact of innovation on performance of small and medium enterprises (SMEs) in Tanzania: A review of empirical evidence.* *Journal of Business and Management Sciences,* 4(1), 1-6.
3. Bakar, L. J. A. & Ahmad, H. (2010). "Assessing the relationship between firm resources and product innovation performance," *Business Process Management Journal,* 16(3),420-435.
4. Brunswicker, S., & Vanhaverbeke, W. (2015). *Open innovation in small and medium-sized enterprises (SMEs): External knowledge sourcing strategies and internal organizational facilitators.* *Journal of Small Business Management,* 53(4), 1241-1263.
5. Chang, S. D. (1986). *The relationship between innovation and firm performance.* *Advances in Computer Science Research.* 82(1), 648-652.
6. Cook, D.H. & Nixon, G. (2000). *The financial rewards of new product introductions,"* *Management Science,* 49 (2), 197-210.
7. Davila, T., Epstein, M. J., & Shelton, R. (2006). *Making innovation work: How to manage it, Measure it and profit from it.* New Jersey: Warton School Publishing.
8. Drucker, P. (2014). *Innovation and entrepreneurship.* Rutledge.
9. Gebauer, H., Worch, H., & Truffer, B. (2012). *Absorptive capacity, learning processes and combinative capabilities as determinants of strategic innovation.* *European Management Journal.* (30)1, 57-73.
10. Godswill, U.M., Oyedepo, O.T. & Willie, S.O. (2018). *Effect of innovation on performance of SMEs in Nigeria: an empirical study.* *Research Journal of Business and Management.* 2(3), 341-358.
11. Gu, L. Z., & Shao, Y. F. (2015). *The Empirical Study of SMEs Innovation and Performance Factors in Sichuan.* *Studies in Sociology of Science,* 6 (1), 40-47.
12. Haghghinasab, M., Sattari, B., Ebrahimi, M., & Roghanian, P. (2015). *Identification of Innovative Marketing Strategies to Increase the Performance of SMEs in Iran,* (February). <https://doi.org/10.14331/ijfpss.2013.330033>
13. Lin, Y. Y. & Chen, M. Y. (2007). "Does innovation lead to performance? An empirical study of SMEs in Taiwan," *Management Research News,* 30 (2), 115-132.
14. Martin, M. S., & Namusonge, M. J. (2014). *Influence of innovation on small and medium enterprises (SME) growth.* *International Journal for Innovation Education and Research,* 2(5), 31-41.
15. Mohd, M. R & Syamsuriana S. (2013). *The impact of innovation on the performance of small and medium manufacturing enterprises: Evidence from Malaysia.* *Journal of Innovation Management in Small & Medium Enterprise,* 1(16), 1-16.
16. Njogu, T.W (2014). *The effect of innovation on the financial performance of small and medium enterprises in Nairobi County, Kenya. A Research Project Submitted in Partial Fulfillment of Requirement for the Award of the Degree of Master of Business Administration, School of Business, University of Nairobi.*

17. Olughor, R. J. (2015). *Effect of innovation on the performance of SMEs organizations in Nigeria. Management* 2015, 5(3): 90-95.
18. Owem, S.D. (2011). *The determinants of growth performance of small services enterprises in Yemen. Journal Economic Malaysia*, 48(1), 35-48.
19. Wu, H. G. (2009). *Implementing innovative ideas in a city: good solutions on paper but not in practice? International Journal of Public Sector Management*, 28(3), 166-180.