



An Empirical Investigation into Innovation and Business Performance in a Selected Nigerian organization

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ABSTRACT

Innovation, including product, process, marketing, and organizational innovation within a firm, is considered as one of essential component for surviving and growing. These innovation activities create value and competitive advantages for successful organizations; therefore, understanding the organization's overall innovation is the first and foremost to understand the role of innovation on firm performance. The objective of this research was to determine the impacts of innovation which includes product, process, marketing and organizational innovation on business performance (financial performance). This study used primary data from questionnaire survey. The questionnaire involved 3 parts including general information, innovation activities; and business performance. This research focused on West African Ventures Limited (WAV). There are 198 employees of WAV. The questionnaire survey was administered to employees of WAV. Out of the 100 questionnaires sent out, 85 were valid, accounting for 85% of the true response rate. Analysis methodologies of reliability, factor analysis and regression are utilized in this study. Results showed that product innovation, process innovation marketing and organizational innovation has a significant impact on business performance. Using the regression analysis and the Chi Square analysis to test the combination of all innovation types on business performance and also test independently the hypotheses, the study revealed that process and marketing innovation had a positive impact on business performance while product innovation had a negative impact on innovation. Organizational innovation had a partial effect on positively influencing financial performance. Also, all four innovation types had a significant impact on business performance. To sum up, in order to improve the innovative and firm performance, WAV should highly concentrate on process, marketing, and organizational innovation activities, rather than product innovation activities.

Keywords: Firm, Innovations, Business Performance, Management, Growth, Development

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1. INTRODUCTION

In a rapidly changing world, the imperative for innovation increases. Innovation is common to all organizations' technology development and management, no matter how large a company is. "Innovation is the implementation of a new or significantly improved product or process, a new



marketing, or organizational method in business practices” (OECD, 2005:46). Innovation is widely regarded as the most important competitive advantage that enables a company to thrive in today's dynamic business environment. It is undutiful that innovation derives prosperity for organizations and nations. Nowadays, it is commonly agreed that innovation is the critical path towards growth and prosperity for countries as well as for individual firms. It is the key to technology adoption, creation and explains the vast difference in productivity across and within countries. (Sileshi, 2014). The interest in innovation spans from the firm level to the national level. It is argued that countries can achieve higher rates of growth and favourable terms of trade by specializing in knowledge intensive products containing higher added value (OECD/Eurostat 1997).

This is the reason why policy makers across the globe have been struggling to develop policies which would stimulate spending on R&D activities and increase the efficiency of the innovation process (Iraj, 2010). With increasing global competition and quickly spreading of knowledge, the future of many businesses depends upon their ability to innovate. In this regard Castells (2010) and Huang and Tsai (2011) argued that most modern economies pursue progressive strategies and policies to develop a responsive and dynamic small and medium enterprises (SME) sector. This is done with potential to innovate, capability to respond rapidly to evolving economic environments. Emerging opportunities and threats forced companies to investigate and invest more on innovation to decrease risk of becoming uncompetitive. In this regard, innovation is about new solution that offers better value to customers. Organization use innovation to confirm critical decision in responding to technological or market challenges (Gomes, et. Al 1996).

The studies conducted by Freel (2005), Allocca and Kessler (2006), and Dibrell et al. (2008) as cited in Ilker and Baki (2011) show the increasing importance role of innovation and business in the world. Economic growth and development being one of the many importance of innovation. Having specific objectives to “facilitate economic growth, bring equitable development, create long term jobs, strengthen cooperation between businesses, provide the basis for medium and large-scale enterprises, promote export, balance preferential treatment between MSEs and bigger enterprises” (CSAE, 2004). Hence, the role of innovation as a crucial driving force of economic development is widely acknowledged. In particular within the business setting, innovation is often considered to be a vital source of strategic change, by which firm generates positive outcomes including sustained competitive advantage. (Sileshi Talegeta, 2014).

Research on the impact of innovation and performance has produced mixed results. In some studies, the outcome was unsatisfactory despite investments in innovation (Adegbesan & Ricart, 2007). Several policies carried out by the Brazilian government to improve research and development (R&D) did not produce results that contributed to innovation (Rocha, 2015; Veiga, Veiga, Del Corso, & Silva, 2012). The effects of innovation may differ across sectors and countries, and some are more intense in the technology sector. These effects contribute to the dissemination of innovations and economic growth (Powell & Snellman, 2004), suggesting that it is necessary to better understand the effect of innovation (Roach, Ryman, & Makani, 2016). In addition, Greco, Grimaldi, and Cricelli (2017) point out that in Europe, local, national and European public subsidies for company R & D activities contribute to promoting open innovation, increasing the efficiency of innovation.



As the global competitiveness continues to follow significant trends, the urgency to embrace innovation adoption as a strategy to gain competitive advantage and stimulate performance of businesses even in Nigeria has begun to grow (Olughor, 2015). Despite this assertion, very few SMEs in Nigeria have embraced innovation in order to reap its benefits (Taiwo, Falohun, & Agwu, 2016). The purpose of this study is to draw on issues related to innovation practices and their antecedents (external-driven and internal-driven determinants) and study the impact on business performance in small and medium firms in West African Ventures Limited. (Yahya Darwish Yahya Al- Ansari, 2014)

1.1 Statement of the Problem

The recent advancement in information technology has impacted heavily on organization's ability to innovate hence impacting on their financial performance. Emphasis on the impact of innovation on the financial performance of SMEs can be considered a very key issue to entrepreneurs, scholars, practitioners and policy developers in Nigeria. SMEs face several challenges towards optimizing their financial performances which include changing consumer behavior and needs, globalization, and disintermediation. Information technology is also having its impact (Chorafas, 2007) In the globalized world, the use innovations as a way of maintaining a competitive edge is one of the greatest challenges faced by SMEs currently in the developing countries. This is due to the lack of knowledge on the benefit of innovations to their businesses. SMEs therefore need to embrace technology and innovations in their operation so as to overcome this global challenge. The ability to upgrade functions, processes and products by SMEs has become an ultimate matter for their long term survival. The sheer neglect for the use of innovation in Nigeria has limited the

1.2 Research Objective of the Study

The main aim of this research is to investigate the impact of innovation on business performance using West African Ventures Limited as a case study.

Specific Objectives

The specific objectives are to:

- Establish the role product innovation has on business performance;
- Determine the impact of process innovation on business performance;
- Analyze the effect of organizational innovation on business performance;
- Investigate the effects of marketing innovation on business performance;

1.3 Research Questions

In order to achieve the objectives of these research work, the following questions were raised

- To what extent does product innovation have an impact on business performance?
- To what extent does process innovation have an impact on business performance?
- To what extent does organizational innovation have an effect on business performance?
- To what extent does marketing innovation have an impact on business performance?

1.4 Research Hypotheses

The essence of formulating these hypotheses is to either validate or refute the findings of the study. Based on the objectives of this study, the following hypothesis are formulated:



Hypothesis One

H0: Product innovation has no significant impact on business performance H1: Product innovation has a significant impact on business performance

Hypothesis Two

H0: Process innovation has no significant impact on business performance H1: Process innovation has a significant impact on business performance

Hypothesis Three

H0: Marketing innovation has no significant impact on business performance
H1: Marketing innovation has a significant impact on business performance

Hypothesis Four

H0: Organizational innovation has no significant impact on business performance H1: Organizational innovation has a significant impact on business performance

2. RELATED LITERATURE

The term innovation comes from Latin's innovare, which means "to make something new" (Amidon, 2003, Tidd et al., 2005). The definition, however, has developed over time and been interpreted very differently (Sauber & Tschirky, 2006). Innovation has continued to be a subject of interest to scholars from a number of different disciplines, including economics, business, engineering, science, and sociology. Arising from this, the concept has hence been viewed differently to the extent of introducing a debate as to what constitutes innovation (Cooper, 1998). Innovation is described as "the introduction of new or improved processes, products or services based on new scientific or technology knowledge and/or organizational know-how" (OECD 2015). According to Trott, (2008), an invention is the first occurrence of an idea for a new product or process whereas innovation is the act of putting it into practice. There are different types of innovation in business however it can be related to new products or services, new production processes, new marketing techniques, and new organisational or managerial structures (Rebound, 2008). Innovation may also involve technology, intellectual property, business, or physical activity (Sundbo, 2003).

2.1 Product Innovation

Most studies speak of product innovation and process innovation and all these are important towards development being at country or organizational level. Product innovation is the introduction of a good or service that is new or significantly improved regarding its characteristics or intended uses; including significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics (OECD 2015). Rouse, W. B. (2013), contend that product innovation generally means the organisation's process for introducing new ideas, new products/commodities, new technology, workflows, new manufacturing methods, new services and new distribution and delivery. It is generally posited that the product innovation becomes the most important source of structural change in an economy because it alerts the mix of products, industry and jobs, which make up an economy (Bail, 1988).



2.2 Process Innovation

A process innovation on the other hand refers to the new procedures, policies, organisational forms and knowledge embodied in the distribution channels, products, applications, as well as customer expectations, preferences, and needs (Gupta 2013). It is coupled with the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software. It can substantially lead to a decreased unit costs of production or delivery, to increase quality, or to produce or deliver new or significantly improved products (OECD 2015). Fagerberg stressed that while the introduction of new products is commonly assumed to have a clear, positive effect on the growth of income and employment, process innovation, due to its cost-cutting nature, can have a hazier effect on performance (Audrey et al. 2016)

2.3 Marketing 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. 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).

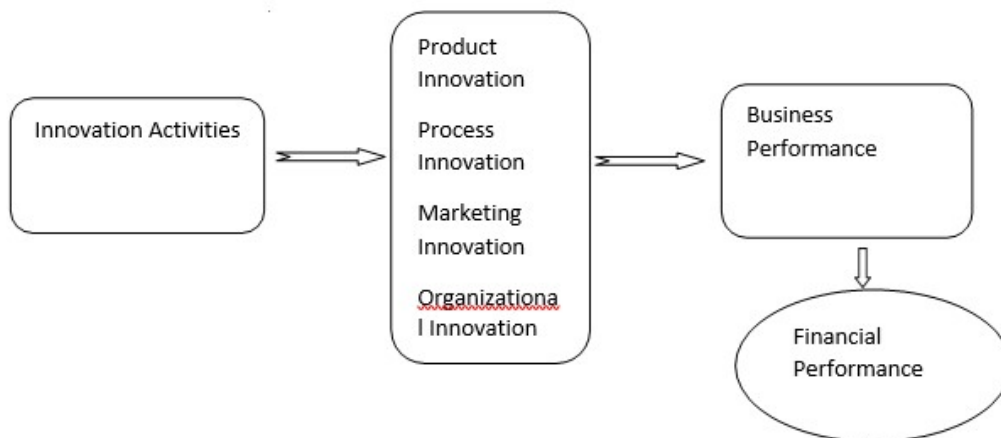


Figure 1: The conceptual framework of innovation and firm performance Source: (The Author)

3. RESEARCH METHODOLOGY

3.1 Research Design

The research design according to Mugenda and Mugenda (2003) provides answers for questions such as; what techniques were used to gather data, what kind of sampling strategies and tools were used and how were time and cost constraints dealt with. In other words, it is an arrangement of conditions for collection and analysis of data in a way that combines their relationship with the purpose of the research.



It is a means to achieve the research objectives through empirical evidence that is required economically. Descriptive studies portray the variables by answering who, what, and how questions. According to Mugenda and Mugenda (2003), descriptive design is a process of collecting data in order to test hypothesis or to answer the questions of the current status of the subject under study. For the purpose of this study descriptive survey research design was used. This design enabled the researcher to establish the impacts of innovations on business performance using a case study of West African Ventures Limited.

3.2 Target Population

Cooper and Emory (2003) defined population as the total collection of elements about which the researcher wishes to make some inferences. The target population in a research study comprises all those potential participants that could make up a study. The study population were the employees of the WAV. The said target population was critical to this study because it gave first-hand information to the researcher. The total number of staff within the organization is 198 and the target population was 100 employees.

3.3 Sample Design

The sampling plan describes the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame describes the list of all population units from which the sample will be selected (Cooper and Schindler, 2003). Purposive sampling technique is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their study. A sample of respondents was drawn from all the employees at WAV. For the purposes of the research, the purposive sampling technique was used to select the target group. The population was chosen from the various departments of the company.

The research applied 10% sampling across the strata. According to Mugenda and Mugenda (2003) a good sample should be the one of 10% to 30% of the entire population. The actual employees sampled were arrived at by using stratified random procedures to draw the sample from each stratum. The staff were chosen based on the different level of experience and longevity with the company. A total of 100 questionnaires were given to employees which represent 50% of the population planned out of which 85 responded.

3.4 Research Instrument

With respect to innovations and business performance, this study utilized a questionnaire to collect primary data as used in various previous research projects (Lumpkin, 2001). The questionnaire designed in this study comprised of two sections. The first part included the demographic and operational characteristics designed to determine fundamental issues including the demographic characteristics of the respondent. The second part was devoted to the identification of the innovations by WAV where the four variables of the study were put into focus. The questionnaire was designed to include only structured questions. The structured questions were used in an effort to conserve time and money as well as to facilitate an easier analysis as they were in immediate usable form.



3.5 Data Collection Method

This study collected quantitative data using a self-administered questionnaire. The questionnaires were sent by email to ensure objective response and reduce non-response rate. The results of the pilot study were not included in the actual study. A cover letter was taken along to enable the administering of the questionnaire. The respondents were assured of confidentiality of their names and responses and that the responses were not handled by any other person but rather to be used purely for academic purposes. Each questionnaire was coded and only the researcher had the knowledge on which person responded.

3.6 Pilot Test

The researcher carried out a pilot study to pre-test and validates the questionnaire. According to Cooper and Schindler (2003), the pilot group can range from 25 to 100 subjects depending on the method to be tested but it does not need to be statistically selected. This pilot study involved 28 respondents working with a sister company of WAV. The respondents were conveniently selected since statistical conditions are not necessary in the pilot study (Cooper and Schindler, 2003). The purpose was to refine the questionnaire so that respondents in the major study would have no problem in answering the questions. Expert opinion was also requested on the representativeness and suitability of questions. This helped to improve the content validity and reliability of the data that was collected.

3.7 Validity & Reliability

Validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which was employed by this study is a measure of the degree to which data collected using a particular instrument represented a specific domain or content of a particular concept. Mugenda and Mugenda (1999) contend that the usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field. Reliability refers to the consistency of measurement and is frequently assessed using the test-retest reliability method. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The researcher computed a Cronbach alpha score of the instrument used to obtain the primary data. Cronbach alpha ranges between 0-1 scores between 0-0.6 indicate that the instrument has a low reliability while scores of 0.7 and above indicate that the instrument has a high level of internal consistency and reliability. Reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency Cooper & Schindler (2008). Cronbach's alpha was calculated by application of SPSS for reliability analysis. We achieved a Cronbach alpha coefficient for the 28 items at 0.910, suggesting that the items have relatively high internal consistency. That is, a reliability of 0.70 or higher is considered "acceptable"

3.8 Conceptual model

The study examined the impact of innovations on business performance. The variables in the study were classified into dependent and independent variables. The independent variables were unique innovations to the organization. The relationship between the variables is stated using a mathematical function. $Y=f(x_1, x_2, x_3, x_4)$ Where Y is the dependent variable x_1, x_2, x_3, x_4 are independent variables.



Whereby:

- Y = business (Financial) Performance
- X1 = Product Innovation were measured by the extent to which new products are developed and how it has contributed to increase in revenue for the organization.
- X2 = Marketing Innovation were measured by the level of new customer outreach and how it has contributed to increase in customer number hence more revenue of the organization.
- X3 = Process Innovation were measured by the extent of adoption of office automation, procurement and accounting software solutions leading to cost reduction of the organization.
- X4 = Organizational Innovation were measured by the extent of the implementation of new organizational methods in the firm's business practices, external relations, first-time introduction of management systems for general production or supply operations.

3.9 Analytical Model

This is the algebraic expression of the conceptual model. An analytical model of a linear multiple regression equation of the form shown below was developed. The regression equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$): Linear regression analysis was used to estimate the coefficients of a linear equation and the Independent variables that best predict the value of the dependent variable. From this model, the test of significance at 5% significant level was conducted on the various variables of this study using coefficient of determination (R^2), correlation coefficient (R), F-test and ANOVA table in order to check the significance of the data analyzed.

4. PRESENTATION OF DATA AND ANALYSIS OF RESULTS

4.1 Section Overview

This section analyses the impact of innovation on business performance using the case study of West African Ventures Limited in Lagos, Nigeria. This is an attempt to achieve the research objectives stated and test of the hypotheses in order to arrive at a conclusion. It also explores the procedures used in data analysis and goes further to discuss the major findings. 100 copies of the questionnaires were administered while 85 questionnaires were completed and successfully retrieved from the respondents, which gives 85% responses. The study was also analysed using various statistical methods.

4.2 Product Innovation

This section empirically analyses the data in an attempt to achieve the research objectives earlier stated in chapter one. This sub-section made use of tables, frequency, percentages and means to clearly show the respondent's responses on this research question as earlier specified in chapter one. Items 6- 10 of section B of the questionnaire were used in providing answer to this research question. In order to generate valid response to the relevant research question, analyses were carried out by using the responses from the questionnaire distributed.



Table 4.2.1: Increasing manufacturing quality in components and materials of current products

| Scale | Frequency | Percent | Valid Percent | Cum. Percent | Mean |
|---|-----------|---------|---------------|--------------|-------|
| Imitated from Int'l markets | 14 | 16.5 | 16.5 | 16.5 | 4.176 |
| Current products were improved | 42 | 49.4 | 49.4 | 65.9 | |
| original product innovations were implemented | 29 | 34.1 | 34.1 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)

Table 4.2.1 shows that 16.5% of the respondents agreed to imitating from international markets, 49.4% of the respondents agreed to current products being improved while 34.1% of the respondents agreed to original product innovations being implemented when increasing manufacturing quality in components and materials of current products. The result of the mean is 4.176. This shows that on average, majority of the respondents agreed on the statement that current products were improved.

Table 4.2.2: Decreasing manufacturing cost in components and materials of current products

| Scale | Frequency | Percent | Valid Percent | Cum. Percent | Mean |
|---|-----------|---------|---------------|--------------|-------|
| Imitated from Int'l markets | 12 | 14.1 | 14.1 | 14.1 | 4.411 |
| Current products were improved | 26 | 30.6 | 30.6 | 44.7 | |
| original product innovations were implemented | 47 | 55.3 | 55.3 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)

Table 4.2.2 shows that 14.1% of the respondents agreed to imitating from international markets, 30.6% of the respondents agreed to current products being improved while 55.3% of the respondents agreed to original product innovations being implemented when decreasing manufacturing cost in components and materials of current products. The result of the mean is 4.411. This shows that on average, majority of the respondents agreed on the statement that original products innovations were improved.



Table 4.2.3: Developing newness for current products leading to improved ease of use for customers and to improved customer satisfaction

| Scale | Frequency | Percent | Valid Percent | Cum. Percent | Mean |
|---|-----------|---------|---------------|--------------|-------|
| Imitated from national markets | 5 | 5.9 | 5.9 | 5.9 | 4.176 |
| Imitated from Int'l markets | 13 | 15.3 | 15.3 | 21.2 | |
| Current products were improved | 29 | 34.1 | 34.1 | 55.3 | |
| original product innovations were implemented | 38 | 44.7 | 44.7 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)

Table 4.2.3 reveals 5.9% of the respondents agreed to imitating from national markets, 15.3% of the respondents agreed to imitating from international markets, 34.1% of the respondents agreed to current products being improved while 44.7% of the respondents agreed to original product innovations being implemented when developing newness for current products leading to improved ease of use for customers and to improved customer satisfaction. The result of the mean is 4.176. This shows that on average, majority of the respondents agreed on the statement that original products innovations were improved.

Table 4.2.4: Developing new products with technical specifications and functionalities totally differing from the current ones

| | Frequency | Percent | Valid Percent | Cum. Percent | Mean |
|---|-----------|---------|---------------|--------------|-------|
| Imitated from Int'l markets | 12 | 14.1 | 14.1 | 14.1 | 4.458 |
| Current products were improved | 22 | 25.9 | 25.9 | 40.0 | |
| original product innovations were implemented | 51 | 60.0 | 60.0 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)

Table 4.2.4 shows that 14.1% of the respondents agreed to imitating from international markets, 25.9% of the respondents agreed to current products being improved while 60.0% of the respondents agreed to original product innovations being implemented when developing new products with technical specifications and functionalities totally differing from the current ones. The result of the mean is 4.458. This indicates that on average, majority of the respondents agreed on the statement that original products innovations were improved.



Table 4.2.5: Developing new products with components and materials totally differing the current ones

| Scale | Frequency | Percent | Valid Percent | Cum. Percent | Mean |
|---|-----------|---------|---------------|--------------|-------|
| Imitated from Int'l markets | 9 | 10.6 | 10.6 | 10.6 | 4.717 |
| Current products were improved | 6 | 7.1 | 7.1 | 17.6 | |
| original product innovations were implemented | 70 | 82.4 | 82.4 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)

Table 4.2.4 shows that 10.6% of the respondents agreed to imitating from international markets, 7.1% of the respondents agreed to current products being improved while 82.4% of the respondents agreed to original product innovations being implemented when developing new products with components and materials totally differing the current ones. The result of the mean is 4.717. This indicates that on average, majority of the respondents agreed on the statement that original products innovations were improved.

4.3 Marketing Innovation

This section empirically analyses the data in an attempt to achieve the research objectives earlier stated in chapter one. This sub-section made use of tables, frequency, percentages and means to clearly show the respondent's responses on this research question as earlier specified in chapter one. Items 11- 15 of section C of the questionnaire were used in providing answer to this research question. In order to generate valid response to the relevant research question, analyses were carried out by using the responses from the questionnaire distributed.

Table 4.3.1: Renewing the design of the current and/or new products through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features

| Scale | Frequency | Percent | Valid Percent | Cum. Percent | Mean |
|---|-----------|---------|---------------|--------------|-------|
| Imitated from Int'l markets | 15 | 17.6 | 17.6 | 17.6 | 4.329 |
| Current marketing practices were improved | 27 | 31.8 | 31.8 | 49.4 | |
| original marketing innovations were implemented | 43 | 50.6 | 50.6 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)



Table 4.3.1 shows that 17.6% of the respondents agreed to imitating from international markets, 31.8% of the respondents agreed to current marketing practices being improved while 50.6% of the respondents agreed to original marketing innovations being implemented when renewing the design of the current and/or new products through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features. The result of the mean is 4.329. This indicates that on average, majority of the respondents agreed on the statement that original marketing innovations were implemented.

Table 4.3.2: Renewing the distribution channels without changing the logistics processes related to the delivery of the product

| Scale | Frequency | Percent | Valid Percent | Cum. Percent | Mean |
|---|-----------|---------|---------------|--------------|-------|
| Imitated from Int'l markets | 7 | 8.2 | 8.2 | 8.2 | 4.200 |
| Current marketing practices were improved | 54 | 63.5 | 63.5 | 71.8 | |
| original marketing innovations were implemented | 24 | 28.2 | 28.2 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)

Table 4.3.2 shows that 8.2% of the respondents agreed to imitating from international markets, 63.5% of the respondents agreed to current marketing practices being improved while 28.2% of the respondents agreed to original marketing innovations being implemented when renewing the distribution channels without changing the logistics processes related to the delivery of the product. The result of the mean is 4.2. This suggests that on average, majority of the respondents agreed on the statement that current marketing practices innovations were improved.

Table 4.3.3: Renewing the product promotion techniques employed for the promotion of the current and/or new products

| Scale | Frequency | Percent | Valid Percent | Cumm. Percent | Mean |
|---|-----------|---------|---------------|---------------|-------|
| Imitated from Int'l markets | 17 | 20.0 | 20.0 | 20.0 | 4.200 |
| Current marketing practices were improved | 34 | 40.0 | 40.0 | 60.0 | |
| Original marketing innovations were implemented | 34 | 40.0 | 40.0 | 100.0 | |
| Total | 85 | 100.0 | 100.0 | | |

Source: Field Survey (2020)



4.4 Discussion of Results

From the tables given that in our SPSS coding, 1 was assigned to not implemented, 2 was assigned to imitated from national markets, 3 was assigned to imitated from international markets, 4 was assigned to current products were improved and 5 was assigned to original products innovations were implemented. The result of the mean is approximately 4. This shows that on average, majority of the respondents agreed on the statement that current products were improved, the mean for increasing manufacturing quality in components and materials of current products is approximately is 4 and this implies that on the average, and majority of the 85 respondents agreed to current products were improved that role of product innovation can lead to business performance in West African Ventures Limited in Lagos, Nigeria.

Also, the mean for marketing innovation is 4 and this implies that on the average, the 85 respondents to current marketing practices were improved, which equally suggests that marketing innovation has great effect on business performance in West African Limited. Furthermore, the mean for process innovation is 5 and this implies that on the average, the 85 respondents agreed to current processes were improved drastically and that process innovation is a pull factor that determines business performance in West African Limited. More so, the mean for organizational innovation is 5 and this implies beyond average, the 85 respondents agreed to current structures were improved. This also indicates that organizational innovation play a very vital role on business performance in West African Limited, Lagos, Nigeria.

From table 4.7.3, it can be seen from regression result, R square shows that only 15.9% variations in innovation on business performance is determined by product innovation, marketing innovation, process innovation, organizational innovation and financial performance measures. The result from the coefficients shows that there a negative impact of product innovation. The implication of this is that product innovation is not a pull factor that determines business financial performance in West African Limited in Lagos, Nigeria. The result from the coefficients shows that there a positive impact of marketing innovation, this equally suggests that marketing innovation is a strong pull factor that determines business financial performance in West African Limited. The result from the coefficients shows that there a positive impact of process innovation. This indicates that process innovation has strong effect on business financial performance in West African Limited. The result from the coefficients shows that there a negative impact of organizational innovation, but statistically significant at 5%. This shows, organizational innovation has a strong effect on business performance in West African Limited.

4.5 Discussion of Research hypothesis testing

From Chi-Square table 4.8.1 above calculated value (χ^2) is 82.012^a and degree of freedom is 11 while the chi square Asymp. Sig (2-Sided) is 0.000 which is less than the level of significance of 0.05 so therefore we fail to accept the null hypothesis and we do accept the alternative and we conclude that product innovation has significant impact on business performance in West African Limited in Lagos, Nigeria. From Chi-Square table 4.8.2 above calculated value (χ^2) is 105.235^a and degree of freedom is 9 while the chi square Asymp. Sig (2-Sided) is 0.000 which is less than the level of significance of 0.05 so therefore we fail to accept the null hypothesis and we do accept the alternative and we conclude that process innovation has significant impact on business performance in West African Limited in Lagos, Nigeria.



From Chi-Square table 4.8.3 above calculated value (χ^2) is 111.576^a and degree of freedom is 10 while the chi square Asymp. Sig (2-Sided) is 0.000 which is less than the level of significance of 0.05 so therefore we fail to accept the null hypothesis and we do accept the alternative and we conclude that marketing innovation has significant impact on business performance in West African Limited in Lagos, Nigeria. From Chi-Square table 4.8.4 above calculated value (χ^2) is 48.129^a and degree of freedom is 11 while the chi square Asymp. Sig (2-Sided) is 0.000 which is less than the level of significance of 0.05 so therefore we fail to accept the null hypothesis and we do accept the alternative and we conclude that organizational innovation has significant impact on business performance in West African Limited in Lagos, Nigeria

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Key Findings

The study targeted 100 respondents in collecting data with regard to innovations as a determinant of business (financial) performance of WAV. The response rate was 85% hence adequate data for analysis was obtained. Quantitative data was analyzed using the Statistical Packages for Social Scientists (SPSS) which is all-inclusive and offers wide-range data handling capability. The study also used Likert scale which enables easier analysis as it removes doubt on the type of response given. A simple regression model was used to assess the combined effect of the four Independent variables namely Product innovation, Process innovation, marketing innovation and organizational innovation on the dependent variable which is business performance of WAV. The result from the coefficients shows that product innovation does not impact positively on business performance at WAV as it gave a negative relationship. The implication of this is that product innovation is not a pull factor that determines business financial performance in West African Limited in Lagos, Nigeria.

On whether process innovation influences business performance, the result from the coefficients shows that there a positive impact of process innovation. This indicates that process innovation has strong effect on business financial performance in West African Limited. From the regression results, it revealed that a unit rise in process Innovation will lead to a 0.085 rise in Financial Performance. The result from the coefficients shows that there a positive impact of marketing innovation, this equally suggests that marketing innovation is a strong pull factor that determines business financial performance in West African Limited. The result from the coefficients shows that there a negative impact of organizational innovation, but statistically significant at 5%. This shows, organizational innovation has a strong effect on business financial performance in West African Limited.

Table 5.1: Summary of research hypothesis outcomes

| Research Hypothesis | Outcome |
|--|----------|
| H10: Product innovation has no significant impact on business performance | Rejected |
| H20: Process innovation has no significant impact on business performance | Rejected |
| H30: Marketing innovation has no significant impact on business performance | Rejected |
| H40: Organizational innovation has no significant impact on business performance | Rejected |



5.2 Conclusion

The primary objective of this study was to determine the relationship between innovations and business performance. The second objective was to examine the direct effects between the four types of innovation and business performance. According to the study, the relationship between innovation and performance produced mixed results. Process and marketing innovation showed a positive effect and influence on business performance, more specifically, the higher the level of process and marketing innovation, the higher the level of financial performance. Meanwhile product innovation have no statistical impact on business performance at WAV. Organizational innovation showed potentials of influencing performance. To sum up, in order to improve the organization's financial performance, WAV should highly concentrate on process, marketing, and organizational innovation activities, rather than product innovation activities. However, the outcome of the hypothesis testing for product, process, marketing and organizational innovation all show that they had significant impact on business performance.

5.3 Recommendations

Product innovation is very vital for any organization who wants to evolve. It is important for WAV to be involved in continuous research and development to look for ways to improve their product offering. Continuous innovation will provide an ideal platform upon which they can grow their revenues and growth ultimately. Process innovation is vital to business organization as it provides a good policy towards efficiency in day to day operations. Process innovations entail the entire operations of WAV and can be enhanced through best practices in line with industry standards. This study recommends that measures be put in place in order for WAV to improve efficiency through process innovations.

On marketing innovation, this study recommends that more measures must be put in place to allow WAV create and provide excellent product and service towards their target customers. Marketing innovation is an indispensable factor that is based in innovative capabilities of a company which can generate growth and profit. WAV should pay more attention to organizational innovation as it not only significantly relates with other innovation types but also has the potential to have a stronger positive impact on business performance. WAV should allocate more resources to innovation in line with its process, marketing, and organizational activities. Product innovation resource allocation can be done on a case by case basis and create the environment to encourage the adaptation of these innovation types. WAV should also periodically assess its strength and weakness from time to time and appraise innovative capabilities when seeking to achieve different performance objectives. The Internal as well as external environment must be studied as they go hand in hand in business survival and growth

With regard to the connection between innovation and firm performance, Innovation can benefit firms with significant improvement in profits and may result in higher expected sales and improvement in productivity. Despite the positive impact of innovation, it comes with certain amount of costs. Innovation is considered useful only when the benefits acquired are more than the cost borne by the firms. In reality, innovation development requires high capital, skills (Darroch and McNaughton, 2002; Long, 2006) and risk (Simpson et al., 2006). Irrespective of the unit of analysis (firm, industry or country), innovation can be done only when resources (especially capital) are sufficient for doing R&D (Kemp et al., 2003).



5.4 Areas for Future Studies

This study is limited to just four types of innovations; process innovation, product innovation, marketing and organizational innovation as independent variables and business financial performance as dependent variable. Further study can be done on green innovation, environmental innovation or sustainable innovation vis-à-vis relationship with productivity level, growth as well. Also, this study was unable to uncover the long-term impact of innovation on firm performance due to data limitations (only 3 years). It would be of interest to see how depth and breadth of open innovation come into play with firm performance in the long run (3– 5 years). Further research should be carried out on the relationship between innovation and SMEs in Nigeria. The literature on this topic is grossly inadequate.

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