

THE EFFECT OF PROCESS INNOVATION ON GROWTH OF MEDIUM ENTERPRISES IN NORTH CENTRAL NIGERIA

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Abstract

The study investigated the effect of process innovation on growth of medium enterprises in North Central Nigeria. The population of the study comprised of 243 medium enterprises in North Central Nigeria. The study adopted the census approach the entire population of 243 owner/managers of these medium enterprises in North-Central Nigeria served as the sample size of the study. Questionnaires were therefore, administered on this sample but only 223 were usable for analysis. The regression results revealed that process innovation had significant positive effect on the growth of medium enterprises in North-Central Nigeria. The study concluded that process innovation practice had significant positive effect on growth of medium enterprises in North Central Nigeria. The study recommended among others, that medium enterprises in Nigeria should focus on developing unique innovation process through extensive research and development via teamwork as this has the most potential to improving the medium enterprises growth in Nigeria.

Key words: Process Innovation, Growth, Medium Enterprises, North Central Nigeria

1.0

INTRODUCTION

1.1 Background to the Study

Process innovation has become a key tool for small and medium enterprises which strive to cope with today's highly competitive environment (Al-Battaineh, 2018). The importance of process innovativeness of MEs to their growth is widely acknowledged and established in literature (Masood *et al.*, 2013; Njogu, 2014; Ibidunni *et al.*, 2014; Zwingina *et al.*, 2017; Akimwale *et al.*, 2017; Okumu *et al.*, 2019). Innovate or die' is a popular slogan used today by many successful companies such as Gillette, Proctor and Gamble, and Microsoft, among others (Bamidele *et al.*, 2018; Choi, 2019; Nguyen *et al.*, 2019), but what does it really mean? One way of understanding this saying is by reflecting upon reports from industry and academia which argue that a lack of innovation will lead to products obsolescence and customer disintegration (Akimwale *et al.*, 2017; Suhaq *et al.*, 2017; Okumu *et al.*, 2019). On a macro level, process innovation has been proven to

be a vital injection for economic wealth (OECD, 2005). Simultaneously, innovation catalyzes the micro level, where it is considered a continuum for the establishment of new or updated products (i.e. incremental change). Thus, the level of MEs concern inter/intra-relationships crossing organizational boundaries to boost performance and enhance growth, strengthen competitive advantage, and enable market flexibility (Akimwale *et al.*, 2017; Suhaq *et al.*, 2017; Okumu *et al.*, 2019).

The need for research in innovation practice and growth of medium enterprises in Nigeria is particularly crucial because medium enterprises have been widely recognized as a cornerstone for economic growth and development. It was observed that at present, medium enterprises (MEs) in Nigeria are bedeviled with growth challenges. This can be clearly seen in their constant low growth as well as mortality rates. Besides, it is regrettable that relatively little research exist on the effect of innovation practices on growth of MEs in the study area; most of the studies conducted on this phenomenon of interest were not conducted in the study area, and some of these studies were not even undertaken in Nigeria (e.g. Salavou *et al.*, 2004; Masood *et al.*, 2013; Karabute, 2015; Subhan, 2016; Jin and Choi, 2019; Nguyen *et al.*, 2019; Kijkasiwat and Phuensane, 2020; Tjahjana *et al.*, 2020). It is in view of the foregoing research gaps that this study was conducted to examine the effect of innovation practice (product, process, technology, organizational and market innovations) on growth of Medium Enterprises (MEs) in North Central Nigeria. This study sought to provide some significant insights that suggest process innovation contributes to growth of medium enterprises (MEs) in North Central Nigeria.

1.2 Objectives of the Study

- i. determine the effect of process innovation on growth of medium enterprises in North Central Nigeria.

1.3 Research Questions

The following research questions were formulated in line with the objectives of the study:

- i. What is the effect of process innovation on growth of medium enterprises in North Central Nigeria?

1.4 Statement of Hypotheses

H₀₂: Process innovation has no significant effect on growth of medium enterprises in North Central Nigeria.

2.0 LITERATURE REVIEW

This section presents the theoretical framework, conceptual framework and review of related empirical studies as well as summary of literature reviewed.

2.1 Theoretical Framework

The theoretical underpinning of this study hinges on the Schumpeter's Theory of Innovation, which is supported by the Resource-Based View Theory, the Diffusion Theory of Innovation.

2.1.1 Schumpeterian theory of innovation

The theory of innovation was propounded by Schumpeter in 1934. Schumpeter was an economist who coined the term “creative destruction” to describe the outcome of the process of innovation by competing firms interacting in a given market place. 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. They achieved this through creating new market, introducing a new way to make products, discovering new markets for a product, finding new sources of raw material and establishing new ways of making things or organization.

With the process of creative destruction, Schumpeter (1934) was one of the earliest scholars in highlighting the importance of innovation in entrepreneurial activity. He argued that the creative destruction was a process that disrupts current market structures by means of new goods or services, new markets, new production process, sources of supply and organization structures. Innovation mainly refers to an iterative process initiated by the perception of a new market and/or new service opportunity which leads to development, production, and marketing tasks striving for its commercial success. Accordingly, Schumpeter calls innovation the specific tool of entrepreneurs, the means by which entrepreneurs exploit change as an opportunity for a different business or a different service. Schumpeter (1934) stressed the role of entrepreneurs as primary agents effecting creative destruction and emphasized to the entrepreneurs the need to search purposefully for the sources of innovation, the changes and their symptoms that indicate opportunities for successful innovation as well as their need to know and to apply the principles of successful innovation.

The Schumpeterian articulation of innovation has been carried forward by successive scholars and researchers. On his part, Drucker (1985) held that entrepreneurs are always searching for change, responding to it, and exploiting it as an opportunity, and engaging in purposeful innovation. Furthermore, the link between innovation and business growth in SMEs is supported by the results of Covin and Wales (2012) who found that innovation is among the key factors that stimulate business growth in SMEs. Schumpeterian theory supposes that firms’ progress comes from innovations they carry out motivated by the pursuit of profit. That is, each innovation is aimed at creating some new process or product/service and new market that give its creator a competitive advantage over its business rivals by rendering obsolete some previous innovation (Mwangi and Ngugi, 2014).

Therefore, in SMEs, innovation provides a holistic, vibrant and complementary base to SMEs growth resulting to SMEs’ sustainability and superior performance (Afriyie and Musah, 2019). Thus, this theory is relevant to the present study because it provides a deeper understanding of innovation and its dimensions (product, process, technological, organizational and market innovations) in relation to MEs’ growth.

Innovativeness is paramount to the survival and growth of small enterprises (Ibidumi *et al.*, 2014). A study by Rosenbusch *et al.* (2011) identified that innovativeness has strong positive effect on financial growth measures such as return on sales, returns on assets and profitability. Moreover, Rosli and Sidek (2013) recorded a strong positive relationship between innovativeness and non-

financial performance measures. Ngugi *et al.* (2013) examined the influence of innovativeness on the growth of small and medium-sized enterprises. They based their research on the RBV and operationalised innovativeness to include new goods and services, new processes and technological advancement, while enterprise growth was operationalised as sales growth, employment growth, profit, market share growth, customer satisfaction and owner's/manager's satisfaction. They found that both the individual and composite dimensions of innovativeness had significant positive relationships with growth of SMEs in Kenya. Similarly, Salavou and Avlonitis (2008) investigated the influence of product innovativeness on the performance of small and medium-sized manufacturing, food and beverages, and textile enterprises in Greece and concluded that product innovativeness influenced performance. In another related study, Alpayet *et al.* (2012) examined the innovativeness-SME growth relationship. The results indicated that there was a strong linear relationship between innovativeness and performance of SMEs in Turkey.

2.1.2 Diffusion of innovation theory

The diffusion theory was developed by Evereth Rogers in 1962 and is now in its fifth edition (as cited in Akosile, 2017). This theory explains how, why and at what rate new ideas and technology spread. He argues that diffusion is the process by which an innovation is communicated over time among the participants in a social system. The origins of the diffusion of innovation theory are varied and span multiple disciplines. Rogers proposes that four main elements influence the spread of a new idea: the innovation itself, communication channels, time and a social system. This process relies heavily on human capital. The innovation must be widely adopted in order to self sustain. Within the rate of adoption, there is a point at which an innovation reaches critical mass.

From the perspective of innovation and technology orientation, Rogers (1995) proposed the Diffusion of Innovations (DOI) theory in order to explain the concept by which innovation could be transferred between different people over certain periods of time by different means. The process of introducing a new innovation has been investigated for more than 30 years (Rogers, 2003; Rogers, 1983). Rogers' theory as noted by (Al Mamun, 2018) describes, among the most popular models of adoption in his book "Diffusion of Innovations" and has used the model as a framework for many studies from a wide range of subjects.

The diffusion of innovation theory has been used in several fields, such as strategic management, political science, management, public health, communications, accounting, history, economics, technology, innovation and entrepreneurship, etc. (Johnson, 2015; Stuart, 2000). In addition, Rogers' theory has been widely used in the theoretical framework in the field of technology adoption and innovation diffusion. Rogers' growth in innovation theory is perhaps best suited to exploring the technology orientation in small and medium enterprises and insightful ecosystems (Li and Asim, 2019; Parisot, 1995; Medlin, 2001).

Diffusion of innovation research usually involves technological innovation and Rogers (2003) typically used the word "technology" or "innovation" as synonyms. Rogers refers to the diffusion as "a process in which innovation is thoroughly communicated between members of the social system through certain channels over time". Innovation, communication channels, time and social structure are the four basic elements of diffusion of innovation (Chege and Wang, 2020). Previous research has revealed that organisational culture encourages innovation (Do *et al.*, 2018; Pedersen *et al.*, 2018). Indeed, a culture that promotes and embraces innovation can be linked and defined

by conduct that demonstrates an affection and incentive for advancement, risk-taking, free expression, focus on teamwork, communication, respect and trust, together with the promotion of group meetings and staff relations, empowering staff to improve their effectiveness, and working regularly on current model (Lijauco *et al.*, 2020; Tang *et al.*, 2020; Rogers, 2003, 1995).

The primary drivers of sustainability, competitive advantage and efficiency for small and medium-sized enterprises are the introduction of new technology and non-technology innovation (Price *et al.*; 2013). According to Fagerberg *et al.* (2004) MEs with higher innovations have significantly better ratios of income and employment than MEs that are less innovative and creative. As a result, innovation research, particularly in the field of small and medium-sized enterprises, is vital due to the newness array of processes and activities undertaken by enterprises and their innovation responsibilities, which lead to sustainability, success in the enterprise and inclusive growth (International Labour Office, 2015; Anderson and Eshima, 2011; Jia *et al.*, 2020). Rogers (2003) defined innovation as an idea, practise or project considered to be specific to an entity or to a number of other adoption components. The diffusion of innovation involves establishing the capabilities of innovation cultures that promote the effectiveness of innovation and competitive advantages that support sustainable growth of small and medium enterprises in a new market dynamics.

2.2 Conceptual Framework

The concepts relevant to this study are carefully clarified as presented below.

2.2.1 Concept of Innovation

The term innovation comes from the Latin – innovare – meaning to make something new; that is turning opportunity into new ideas and putting these new ideas into widely use practice. Firstly, it is important to understand what innovation entails from a conceptual perspective. Innovation relates to the doing of new or novel things or the doing of old things through new strategies so as to enhance sales, cost, and profit or market performance (Abdilahi *et al.*, 2017). Innovation has also been suggested to be the use of institutional, technological or human resources in ways that achieve new products, markets and practices (Abdilahi *et al.*, 2017). Innovations can manifest as a new service or product, a new technological process in production, a new organizational administration structure or system, a new program or plan. Product and process innovation types are the major focus of academic literature on innovation, although organizational innovation is also a newer type of innovation dimension being focused on by researchers (Braunerhjelm *et al.*, 2016). The innovative capability of the firm has been tied to the process of research and development (R&D) within the SME. R&D leads to the generation of newer knowledge which informs new innovations (Zimmerman, 2017). As such, SMEs which regularly do R&D activities are more likely to have newer knowledge and thus will be able to come up with new services or products or newer processes of production.

In the third edition of the Oslo Manual, innovation is defined as the implementation of a new or significantly improved product (goods or services), a process, a new marketing techniques or a new organizational method in business practices, workplace organizations or external relation (OECD and Eurostat, 2005). Here, innovation was classified into four different types which are product innovation, process innovation, marketing innovation and organizational innovation.

Here, the product and process innovation were grouped into technological innovation while marketing and organizational innovation were grouped as non technological innovation.

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). 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 (Trott, 2008); 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).

Innovativeness is paramount to the survival and growth of small and medium scale enterprises. A study by Rosenbusch *et al.* (2011) identified that innovativeness has strong positive effect on financial growth measures such as return on sales, returns on assets and profitability. Moreover, Rosli and Sidek (2013) recorded a strong positive relationship between innovativeness and non-financial performance measures. Ngugi *et al.* (2013) examined the influence of innovativeness on the growth of small and medium-sized enterprises. They based their research on the RBV and operationalised innovativeness to include new goods and services, new processes and technological advancement, while enterprise growth was operationalised as sales growth, employment growth, profit, market share growth, customer satisfaction and owner’s/manager’s satisfaction. They found that both the individual and composite dimensions of innovativeness had significant positive relationships with growth of SMEs in Kenya. Similarly, Salavou and Avlonitis (2008) investigated the influence of product innovativeness on the performance of small and medium-sized manufacturing, food and beverages, and textile enterprises in Greece and concluded that product innovativeness influenced performance. In another related study, Alpaya *et al.* (2012) examined the innovativeness-SME growth relationship. The results indicated that there was a strong linear relationship between innovativeness and performance of SMEs in Turkey.

Various types of innovative developments are associated with different aspects of growth and performance. Previous studies mention a positive relationship between the innovation and performance (Centobelli *et al.*, 2019; Chege and Wang, 2020). The impacts of innovation on the performance of a firm can be demonstrated by both financial and non-financial indicators (Mashal, 2018). The positive impacts of innovation include the ability to compete with others (Anwar, 2018; Conto *et al.*, 2016), financial accessibility (Abdu and Jibir, 2018), connection and communication (Radzi *et al.*, 2017), marketing (Adam *et al.*, 2017), and export performance (Azar and Ciabuschi, 2017; Love *et al.*, 2016; Prange and Pinho, 2017). However, some critics have a different perspective. For example, Karabulut (2015) found that innovation has negative impacts on firm growth. It has also been suggested that a failure to consider the potential negative effects of innovation could eventually impact on the environment and lead to uncontrollable business growth ((Laforet, 2011). In spite of reservations like these about potential negative impacts, there is strong support in the literature for the positive effects of innovation on firm growth (Kijkasiwat and Phuensane, 2020).

2.2.2 Concept of innovation practice

Innovation practice is usually understood as the act of introducing something new and useful, like introduction of new methods, techniques, or practices or new or altered products and services (Masood *et al.*; 2013; Njogu, 2014; Olugbor, 2015; Zwingina *et al.*; 2017). It is a practice with the new mindset or new way with value in it. In MEs' context, it is referred to creative and innovative activities that are carried out within the enterprise to achieve growth and remain relevant in the global competitive environment (Centobelliet *al.*, 2019; Kijkasiwat and Phuensane, 2020; Chege and Wang, 2020). In this study, innovation practice is conceptualized to mean creative and innovative activities such as product innovation, process innovation, technology innovation, organizational innovation and marketing innovation that are executed by MEs in order to achieve a reasonable level of growth that is sustainable.

2.2.3 Concept of Process innovation

This can be defined as changes in the ways of producing or developing products, including new logistics, new raw material, new production lines, new production processes/methods, and new technology. This type of innovation does not stand on its own. In many cases, process innovation may be the consequence of product innovation or/and organizational innovation. New processes basically rest on the use of new technologies to increase the efficiency and quality of production. This view on innovation was reflected by the first and second edition of the "Oslo Manual" the OECD's handbook for innovation surveys (OECD, 1997; OECD and Eurostat, 1997). Process innovation entails the implementation of new or improved production process or adoption of new tools, technology, or knowledge in producing a product (Langley *et al.*, 2005; Oke *et al.*, 2007).

Process innovation is very essential in the manufacturing process of a firm as it gives a firm an advantage over its competitors. Interestingly, studies have revealed that process innovation is positively related to performance of firms (Vivero, 2002; Mohd and Syamsuriana, 2013; Nham *et al.*, 2016). Also, Dada (2016) in his study noted that there is a relationship between new technology (used as a proxy for process innovation) and performance of a firm. Recent evidence by Gunday *et al.* (2011) reaffirmed that process innovation is significantly correlated to innovative performance.

Process innovation is explained as new or enhanced tools, equipments, materials, and other technologies that directly affect the firms that are practicing innovations; those firms' produces the goods that are further sold in the market. There is big difference between process innovations and product innovations, which is; new or improved product technologies that the organization sells for the satisfaction of customers or its clients (Bogers, 2009). Process innovation means the implementation of a fresh or partially enhanced manufacturing/production or deliverance system. It enables the production of a given amount of output that is goods and services with less input. The later can be interpreted in terms of the eco-efficiency (Raymond, Aaron and Bertha, 2006).

A type of innovation which has received minor attention in the literature but it has become pretty important in current years. A process innovation is the adoption of new or considerably better production methods, having methods of final product delivery (Rogers, 1998). Process innovation ranges from incremental changes to more radical change. Process innovation brings important amendments in equipment, techniques or software. Process innovations strive to reduce unit cost of manufacturing or delivery, to increase value and worth, or to manufacture or deliver new or

more improved products (Brown and Frame, 2004). Process innovation can play a very important strategic role. It enables to manufacture something that others cannot, or to formulate in a way better than other competitor firms. By process innovation companies can create a very helpful competitive advantage (Hall and Andriani, 2002).

Process-oriented innovativeness is a set of activities involving novel production methods or techniques in production operations that lead to the introduction of new or modified products. It involves creativity and ideas management. Lendel *et al.* (2015) define it as a process of recognizing customer needs and innovation opportunities, generating innovative ideas and their elaboration, working with information and knowledge regarding innovation, realization of innovation activities and ensuring successful extension of innovation among customers. It involves the process of carrying out sequential activities or task of transforming creative ideas to products/services (Mashal, 2018).

The process-oriented innovativeness takes the form of material replacement, application of new technology, R&D and new combination of materials in production, redesign core operating processes, and change in technical process of manufacturing, imitating the methods of production/processes used by other firms, etc. to achieve cost reduction or quality improvement (Obunike and Udu, 2018). Process-oriented innovativeness involves reengineering and improving internal operations of firms (Akosile, 2017).

Process-oriented innovativeness is concerned with the creation of or improvement in techniques and the development in process or system. Its dimensions involve innovativeness in technology, skill, techniques, systems and procedures, which are used in the process of transforming inputs into outputs. It reduces the cost of labor and capital, determines productivity growth. Process failure may be due to lack of innovative expertise, failure to secure the flow of information in a firm, insufficient training and motivation of employees, etc. (Lendel *et al.*, 2015). Process-oriented innovativeness can only be protected by intellectual property rights (Mashal, 2018). Researchers conclude that SMEs are more likely to use process-oriented innovativeness than product-oriented innovativeness due to financial constraint Rahman *et al.*, 2016).

3.0 METHODOLOGY

This section discusses the research design, the study area, population of the study, sample and sampling techniques, instruments of data collection, validation of the instrument, reliability of the instrument, method of data collection, variables specification, model specification, and data analysis techniques.

3.1 Research Design

This study utilized the survey research design. Quantitative data were gathered in order to establish the effect of the independent variable (innovation practice) on the dependent variable (growth of MEs). The reason for the choice of survey research design is grounded on the fact that it helps researchers to collect data from respondents regarding their views and knowledge concerning the study variables in order to achieve the study objectives. The justification for the choice of survey research design is because it would help to elicit opinions of respondents on the effect of innovation practices on growth of MEs in North Central Nigeria.

3.2 The Study Area

The study focuses on the effect of innovation practices on growth of MEs in North Central Nigeria. The geographical location covered by the study is the North Central Region of Nigeria. The study was limited to only the MEs that are located and operational in the six states in North Central – Nigeria (Benue State, Kogi State, Kwara State, Nasarawa State, Niger State, and Plateau State) including the Federal Capital Territory. There are 243 MEs in North Central Nigeria (NBS/SMEDAN, 2017). 28 of these MEs are in Benue State, 16 of them are in Kogi State, 18 of them are in Kwara State, another 18 of these MEs are in Nasarawa State, 47 of them are in Niger State, and 41 of the MEs are in Plateau State, while 75 of these MEs are in Federal Capital Territory (FCT). Appendix 4 captured this information.

The study area is the central part of Nigeria and is regarded as part of northern Nigeria. The region has arable land for agriculture; hence it is an agrarian region, and rich in farming with common crops such as: yam, rice, soya beans, guinea corn, maize, millet, amongst others; which serves as rich sources of raw materials for manufacturing firms. The region also houses the two major rivers in Nigeria, namely river Niger and river Benue, thus supporting even dry season farming and fish/aquaculture businesses. The region is rich in solid minerals such as having high deposits of limestone for cement production, thus making the region a viable zone for primary raw materials for industries to thrive.

The economy of North Central Nigeria comprised the private and public sectors. With respect to industrial development, the private initiative is mainly confined to micro, small and medium enterprises. Vast investment opportunities exist in large, medium and small enterprises in the region. There are good prospects for innovation practice in terms of product innovation, process innovation, marketing innovation, technology innovation and organizational innovation in the medium enterprises sector in the region.

3.3 Population of the Study

The population of this study comprised 243 MEs in North Central Nigeria (NBS/SMEDAN, 2017). The study focused on only owners/managers of MEs in the study area. The decision to focus on only the owner/managers of these MEs was informed by the fact that they are presumed to be more knowledgeable and are also in a better position to provide relevant information on how innovation practice affects the growth of their enterprises in terms of sales growth, employment growth, market share growth, and firm size growth. The population of the study is shown on Table 1. From Table 1, it can be seen that 28 of these MEs are in Benue State, 16 of them are in Kogi State, 18 of them are in Kwara State, another 18 of these MEs are in Nasarawa State, 47 of them are in Niger State, and 41 of the MEs are in Plateau State, while 75 of these MEs are in Federal Capital Territory (FCT).

Table 1: Population of the Study

State	Number of MEs in North Central Nigeria	Percent
Benue	28	11.4
Kogi	16	6.5
Kwara	18	7.4
Nasarawa	18	7.4
Niger	47	20.0
Plateau	41	16.7
FCT	75	30.6
TOTAL	243	100

Source: NBS/SMEDAN (2017)

3.4 Sample and Sampling Techniques

The nature of the present study called for the adoption of a census approach. As a result of the small size of the population, the census approach was used in selecting the sample size; hence the sample size of the study was the same with the population. Consequently, the researcher adopted a census approach and the entire population of 243 owner/managers of MEs in North Central Nigeria was used as the sample to achieve a desired level of precision. The list of MEs sampled in North Central Nigeria by state can be found in Appendix 5.

The owners/managers of MEs from North Central Nigeria were considered for the study based on the criteria: Owners/Managers who are chief executive officers of MEs, and who operate these MEs based on NBS/SMEDAN (2017) definition of MEs; the Owners/Managers who operate MEs in North Central Nigeria for at least a period of 5 years (i.e. 2016 to 2020 and beyond). The study focused on only owners/ managers of MEs in the study area because as CEOs of their respective enterprises, they are presumed to be more knowledgeable and are also in a better position to provide information on how innovation practices affect the growth of their enterprises in terms of sales growth, employment growth, market share growth, and firm size growth.

4.0 RESULTS AND DISCUSSION

This section presents and discusses the results based on the objectives and hypotheses of the study as formulated in section one. The discussion is organized based on the objectives of the study.

4.1 Questionnaire Response Rate

Two hundred and forty three (243) questionnaires were distributed to MEs owners/managers in North Central Nigeria, 233 were retrieved implying that 10 questionnaires were not retrieved. Because some of the retrieved questionnaires were not properly filled or contained some errors, only 223 were finally used for the data analysis, which indicates a response rate of 91.8 %. This response rate is therefore, adequate thereby implying that the data could be relied upon to draw

reliable inferences about the population. Table 9 indicates the distribution and retrieval of questionnaires from each of the states where the MEs in North Central Nigeria are located. The FCT had the highest number of retrieved questionnaires of 70, following by Niger State, 44; Plateau State, 38; Benue State, 26; Nasarawa State, 16; Kwara State, 15; and Kogi State, 14.

Table 9: Questionnaire Response Rate

State	Sample Size Distributed		Sample Size Discarded		Sample Size Utilized	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Benue	28	11.5	2	0.82	26	10.7
Kogi	16	6.6	2	0.82	14	5.8
Kwara	18	7.4	3	1.2	15	6.2
Nasarawa	18	7.4	2	0.82	16	6.6
Niger	47	19.3	3	1.2	44	18.1
Plateau	41	16.9	3	1.2	38	15.6
FCT	75	30.9	5	2.1	70	28.8
TOTAL	243	100.0	20	8.2	223	91.8

Source: Author's Computations, 2022

4.2 Descriptive Analysis

4.2.1 Process innovation

Owners/managers of MEs in North Central Nigeria were asked to respond to a number of statements or items regarding *process innovation* in their enterprises and the responses are summarized and presented in Table 12. To analyze the responses, respondents that strongly agreed and those who agreed were combined in one category of those who *concurred or agreed with* the items. In addition, respondents who strongly disagreed and those who disagreed were combined in one category of those who opposed the items. Another category of respondents were those who neither agree nor disagree- undecided about the items. Thus the three categories of responses were compared. Interpretation was then drawn from the comparison of the three categories accordingly. Comparison of responses to these items shows that the percentage of those who concurred ranged from 17.6 % to 57.2 %, while those who are undecided ranged from 10.3 % to 16.7 % and those who opposed ranged from 0.5 % to 10.4 %.

From those comparisons it is evident that the range of percentages of those who concurred is higher than those that were opposed and those that were undecided. This implies that majority of the respondents agreed or strongly agreed that their organization continuously improves on techniques of transforming inputs to outputs; that the introduction of new methods of production that bring

operational effectiveness is an on-going process in their organization; that process-oriented innovativeness has increased production capacity in their organization; that process oriented-innovativeness has also enhanced products quality in their organization; that their company conducts internal training for its employees upon introduction of new processes; and that employees attend seminars, workshops, conferences with intention to acquire or improve their skills in producing new products. The implication of the findings revealed that owners/ managers of MEs in North Central Nigeria agreed that there is process innovation existing in their enterprises.

Table 12: Respondents' Views on Process Innovation

Item	SA		A		UD		D		SD		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
My organization continuously improves on techniques of transforming inputs to outputs.	52	23.5	108	48.9	37	16.7	23	10.4	1	0.5	221**	100.0
The introduction of new methods of production that bring operational effectiveness is an on-going process.	39	17.6	127	57.2	31	14.0	18	8.1	7	3.2	222*	100.0
Process-oriented innovativeness has increased production capacity in my organization.	77	34.5	106	47.5	28	12.6	8	3.6	4	1.8	223	100.0
Process oriented-innovativeness has also enhanced products quality in my organization.	55	28.8	115	51.8	37	16.7	13	5.9	2	0.9	222*	100.0
My company conducts internal training for its employees upon introduction of new processes.	81	36.3	93	41.7	23	10.3	17	7.6	9	4.0	223	100.0
Employees attend seminars, workshops, conferences with intention to acquire or improve their skills in producing new products.	65	29.4	112	50.7	26	11.8	12	5.4	6	2.7	221**	100.0

Source: Author's Computations, 2022

Note: SD = strongly disagree; D = disagree; UD = Undecided; A = agree; SA = strongly agree;
F = frequency; *1 missing value; **2 missing values.

4.6 Test of Hypothesis

4.6.2 Hypothesis two

Process innovation has no significant effect on growth of medium enterprises in North Central Nigeria

The result of the regression analysis fails to provide enough evidence to accept this hypothesis and was therefore, rejected in favour of the alternate hypothesis that process innovation has a significant positive effect on the growth of medium enterprises in North Central Nigeria. This is based on the following evidence: $B = 0.136$, $t = 2.037$, $p = 0.043$. By holding other variables constant, the following regression equation is presented thus: $MEG = 0.299 + 0.136PCI + 0.067$.

Table 21: Regression Results and Findings

Hyp	Variable	B	SE	t-value	p-value	Decision
	Constant	0.299	0.270	1.107	0.270	
H_{02}	Process Innovation	0.136	0.067	2.037	0.043	Reject
H_{03}	Technological Innovation	0.164	0.076	2.145	0.033	Reject
H_{04}	Organizational Innovation	0.148	0.064	2.304	0.022	Reject
H_{05}	Market Innovation	0.204	0.062	3.296	0.001	Reject

Dependent Variable: Growth of medium enterprises (MEs)

Independent Variables: (Constant), Product Innovation, Process Innovation, Technological Innovation, Organizational Innovation, Market Innovation

Source: Authors computation, 2022

4.7 Discussions of Findings

Process innovation has no significant effect on growth of medium enterprises in North Central Nigeria.

As the results indicate, process innovation was found to be significantly related to growth of medium enterprises. This indicates that hypothesis two is also rejected in favour of the alternate that process innovation has a significant positive effect on the growth of medium enterprises in North Central Nigeria. Process innovation contributes about 13.6 % in the growth of medium enterprises in North Central Nigeria. Scholars such as Njogu (2014), Olughor (2015), Zwingina *et al.* (2017), Ukpabio, *et al.* (2018) and Bamidele *et al.* (2018) were also able to establish a positive effect of process innovation on firm performance in selected manufacturing companies in Nigeria. The positive effect of process innovation on firm performance has also been found to be significant in other countries other than Nigeria. Scholars who have reported such findings include Masood *et al.* (2013), Subhan (2016), Al-Battaineh (2018), Jin and Choi (2019), Nguyen *et al.* (2019), Laban and Deya (2019) and Kijkasiwat and Phuensane (2020).

Conclusion

The implication of this finding shows that MEs in North Central Nigeria that are able to change the way of producing or developing products including new logistics, new raw material, new production lines, new production processes/methods, and new technology will improve positively the growth of their MEs. Such growth could be in the form of revenue, number of staff employed, market share and firm size.

5.3 Recommendations

The following are the recommendations of this study:

- a) Medium enterprises should focus on developing unique products through extensive research and development via teamwork as this has the most potential to improving the MEs growth in Nigeria. They should also be the first to market their unique products into the market and should also ensure that customers perceive their products as the best as all these strategies contribute positively to the growth of MEs in North-Central Nigeria.
- b) For MEs in Nigeria to improve their growth potentials, the owners/managers should focus on developing their market innovation capabilities. They can achieve this by way of new marketing tools and strategies, modifying their marketing strategies, responding to market opportunities and customer suggestions. When MEs implement these market innovation strategies, then this will contribute positively to their growth.
- c) Technological innovation as a tool of innovation practice should be encouraged, developed and implemented by MEs if they are desirous of achieving sustained growth. MEs can achieve this via development of their technological capabilities and the technical knowhow of their employees. MEs can also achieve this through the development and deployment of advanced production and manufacturing technologies and systems that are efficient and effective in offering products and services that outperform their competitors. By so doing, MEs in Nigeria in general and North-Central in particular will be able to achieve sustained growth levels.
- d) As the results indicated, organizational innovation as an aspect of innovation practice was also significantly related to growth of MEs in North-Central Nigeria. It ranks fourth in its

impact on the growth of MEs in Nigeria; hence MEs should not neglect in developing and implementing organizational innovation practice. Ways they can ensure organizational innovation is through constant introduction of new business practices, new ways of managing their external relations and mechanisms, routines, procedures and processes that are daily reviewed, updated and creatively deployed across the organizations. In that way, MEs in Nigeria will be able to achieve sustained growth.

REFERENCES

- Abdilahi, M.H. and Hassan, A.A. (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 Sciences*, 7(8):14-28.
- Abdu, M. and Jibir, A. (2018). Determinants of firms' innovation in Nigeria. *Kasetstart Journal of Social Science*, 39: 448-456
- Adamu, U.G; Hussin, S.R; and Ismail, N.A.(2020).Effect of Marketing Innovation on Performance of Small and Medium Enterprises in Nigeria.International Journal of Innovation, Creativity and Change, 11(12): 353-370.
- Adeyeyetolulope, C. (2014). The Impact of Technological Innovation on Organizational Performance. *Industrial Engineering Letters*, 4(3): 21-32.
- Adeyeye, A. D., Jegede, O.O., Oluwadare, A. J., and Aremu, F.S. (2016). Micro-level determinants of innovation: Analysis of the Nigerian manufacturing sector. *Innovationand Development*, 6(1): 1-14
- Afenya, M.S., Aphu, E.S., Abdul-Rahaman, A., Asime, D.C., Amezado, S. and Gyan-Acquah, E. (2019).Impact of Technology Adoption and Its Utilization on SMEs in Ghana. *International Journal of Small and Medium Enterprises*, 2(2): 1-13.
- Afriyie, S., Du, J. and Musah, A. A. I. (2019). Innovation and Knowledge Sharing of SME in an emerging Economy; The Moderating Effect of Transformational Leadership Style. *International Journal of Innovation Management*, 3. 1-12
- Ahiauzu, A.I. and Asawo, S.P. (2011). *Advanced Social Research Methods*, CIMRAT Publications, International Centre for Management Research and Training (CIMRAT).
- Akande, O. O., Inegbedion, D. O., Ighodalo, D. E., Ojelade, M. O. and Nwaogu, H. O. (2019). Evaluation of innovation strategy and performance of paint manufacturing firms in Nigeria. *Journal of Business and Management*, 21 (11), 54-60.
- Akande, O.O. (2012). Accounting Skill as a Performance Factor for Small Businesses in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences*, 2(5): 372-378.
- Akande, O.O. and Oladejo, M.O. (2013). An Appraisal of Technological Entrepreneurship Development Programmes on the Performance of selected SMEs in Lagos- Nigeria. *Issues*

- in Business Management and Economics*,1 (8): 208-217. Available online at <http://www.journalissues.org/IBME/>
- Akingunola, R.O. (2013). Small and Medium Scale Enterprise and Economic Growth in Nigeria: An Assessment of Financial Option. *Pakistan Journal of Business and Economic Review*, 2, (1). 78-97.
- Akinwale, Y.O., Adepoju, A. O. and Olomu, M.O. (2017). The Impact of Technological Innovation on SMEs Profitability in Nigeria. *International Journal of Research, Innovation and Commercialisation*, 1(1):74- 92.
- Aksoy, H. (2017). How do Innovation Culture, Marketing Innovation and Product Innovation affect the Market Performance of Small and Medium-sized Enterprises (SMEs)? *Technology in Society*, 51: 133–141.
- Al-Battaineh, M.T. (2018).Effect of Innovation Strategies on the Functional Performance of SMEs Organizations in Hassan Industrial City. *International Journal of Business and Management Invention* 7(5):12-18.
- Aldrich, H. E. (1999). *Organizations evolving*. London: Sage.
- Alegre, J., Lapiedra, R. And Chiva, R. (2006). A Measurement Scale for Product Innovation Performance. *European Journal of Innovation Management*, 9 (4): 333-346.
- Al Mamun, A. (2018). Diffusion of Innovation among Malaysian Manufacturing SMEs. *European Journal of Innovation Management*, 21(1): 113-141.
- Alpay, G., Bodur, M., Yilmaz, C. and Buyukbalci, P. (2012). How does Innovativeness yield Superior Firm Performance? The Role of Marketing Effectiveness. *Innovation, Management, Policy and Practice*, 14:107-128.
- Alvarez, S. A. and Busenitz, L. W. (2001). The Entrepreneurship of Resource-Based Theory. *Journal of Management*, 27, 755–775.
- Amaefule, E. (2012). Federal Government Approves 9,555 Industrial Clusters. The Punch Newspaper, November 11 Edition. Available: <http://www.punchng.com/business/fg-approves-9555-industrial-clusters/> (Accessed: November 4, 2021).
- Anderson, B. S., and Eshima, Y. (2011). The Influence of Firm Age and Intangible Resources on the relationship between Entrepreneurial Orientation and Firm Growth among Japanese SMEs. *Journal of Business Venturing*, 28(3): 413-429.
- Angel, L., Meroño-Cerdan, and López-Nicolas, C. (2013). Understanding the drivers of Organization Innovation. *The Service Industries Journal*, 33 (13): 1312-1325.
- Anwar, M. (2018). Business Model Innovation and SMEs Performance: Does Competitive Advantage Mediates? *International Journal of Innovation Management*, 22:24-32

- 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.
- Azar, G. and Ciabuschi, F(2017). Organizational Innovation, Technological Innovation, and Export Performance: The Effects of Innovation Radicalness and Extensiveness. *International Business Review*,26: 324–36.
- Bakar, L.J.A. and Ahmad, H. (2010). Assessing the relationship between Firm Resources and Product Innovation Performance: A Resource-Based View. *Business Process Management Journal*, 16(3):420-435.
- Bakare, A. A. and Babatunde, O.M. (2014). Prospects and Challenges Facing Small and Medium Scale Enterprises in Oyun local government, Kwara State. *Fountain Journal of Management and Social Sciences*, 3(1): 59-66.
- Bamidele, A. G., Abdulraheem, I. and Brimah, A.N. (2018).Exploring the Nexus between Innovation and Employee Performance – Empirical Evidence from Nigerian Manufacturing Industry. *Journal of Technology Management and Innovation*, 8 (3): 15-28.
- Bandara, K.B., Kodithuwakku, K.A. and Jayaweera, V. W. (2019).Entrepreneurial Marketing of Small and Medium Scale Enterprises in a Selected Divisional Secretariat Division of Sri Lanka. *Proceeding of the 3rd International Conference on Economic and Development*, 3(2019):25-46.
- Barney, J.B. (1991). Firms Resources and sustained Competitive Advantage. *Journal of Management*, 17:99-120.
- Barney, J.B. (2001). Is the Resource-Based View a useful perspective for Strategic Management Research? Yes. *The Academic of Management Review*, 26(1):41- 56.
- Barney, J.B., Ketchen, D.J. Jr. and Wright, M. (2011). The Future of Resource-Based Theory: Revitalization or Decline? *Journal of Management*, 37:1299-1315.
- Bayus, B. L., Erickson, G. and Jacobson, R. (2003). The Financial Rewards of New Product Introductions. *Management Science*, 49 (2):197-210.
- Becker, S. O., and Egger, P. H. (2013). Endogenous product versus process innovation. *Empir Eccon*, 44 (10): 329-354.
- Bell, G. (2005). Clusters, Networks, and Firm Innovativeness. *Strategic Management Journal*, 26(3): 287-295.Available at <http://dx.doi.org/10.1002/smj.448>
- Bessant, J. and Tidd, J. 2007. *Innovation and Entrepreneurship*. West Sussex, England: John Wiley and Sons, Ltd. 3-21

- Bogers, M. (2009). The Sources of Process Innovation in User Firms. *Journal of Management*, 2(2): 20-24.
- Braunerhjelm, P., Ding, D. and Thulin, P. (2016). Does Innovation lead to Firm Growth? Explorative versus Exploitative Innovations (Working papers series from Swedish Entrepreneurship Forum).
- Brem, A. and Voigt, K. (2007). Innovation Management in Emerging Technology Ventures – The concept of an integrated idea Management. *International Journal Technology Policy Management* 7(3):304-321.
- Brown, C. J. and Frame, P. (2004). Small Business Innovation Management. *International Journal of Innovation and Learning*, 2 (3): 209-224.
- Bruderl, J., Preisendorfer, P. and Ziegler, R. (1992). Survival Chances of newly founded Business Organizations. *American Sociological Review*, 57(2): 227-242.
- Brush, C. G. and Vanderwerf, P. A. (1992). A Comparison of Methods and Sources for obtaining estimates of New Venture Performance. *Journal of Business Venturing*, 7(2): 157-170.
- Budiarto, D. S. and Pramudiati, N. (2018). Does Technology Improve SMEs Business Success? Empirical Research on Indonesian SMEs. *Journal of Economics and Management Sciences*, 1: 115–21.
- Burgelman, R. A. (1983). Corporate Entrepreneurship and Strategic Management: Insights from a process study. *Management Science*, 29(12): 1349–1364.
- Cegarra-Navarro, J.G., Reverte, C., Gómez-Melero, E. And Wensley, A.K.(2016). Linking Social and Economic Responsibilities with Financial Performance: The Role of Innovation. *European Management Journal*, 34(5):530-539.
- Centobelli, P., Roberto, C. and Singh, R. (2019). The Impact of Leanness and Innovativeness Challenges of Measuring Non-technical Innovation in Large Scale Survey, *Technovation*, 28: 644-657.
- Chege, S. M. and Wang, D. (2020). The Influence of Technology Innovation on SME Performance through Environmental Sustainability Practices in Kenya. *Technology in Society*, 60: 67-77
- Chandler, G. N. and Hanks, S. H., (1993). Measuring the Performance of Emerging Businesses: A Validation Study. *Journal of Business Venturing*, 8(5): 391-408.
- Chege, S.M; Wang, D. and Suntu, S.L. (2019):Impact of Information Technology Innovation on Firm Performance in Kenya. *Information Technology for Development*. 31pp.

- Chiang, C. and Yan, H.D. (2011). Entrepreneurship, Competitive Advantages and the Growth of the Firm: The Case of Taiwan's Radio Control Model Corporation-Thunder Tiger. *Journal of Small Business and Entrepreneurship*, 24(4):513-530.
- Cohen, W. M., and Levinthal, D.A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 128-152.
- Conto, S., Martimde, A., Júnior J.A. and Guilherme L. R. (2016). Innovation as a Competitive Advantage Issue: A Comparative Study on an Organic Juice and Wine Producer. *Gestão Produção* 23: 397–407.
- Corradini, C., Demirel, P. and Battisti G. (2016). Technological Diversification within UK's Small Serial Innovators. *Small Business Economics*, 47(1):163-177.
- Covin, J.G. and Wales, W.J. (2012). The Measurement of Entrepreneurial Orientation. *Entrepreneurship Theory and Practice Journal*, 36(4): 677-702.
- Creswell J. W. (2003). *Educational Research: Planning, Conducting, and Evaluating Qualitative and Quantitative Research*. Upper Saddle River: Merrill.
- Dada, A.D. (2016). Analysis of Technological Innovation and Competitions among Small and Medium Sized Food and Beverage Enterprise in South-West of Nigeria. *Journal of Management and Technology*, 1(2): 23-33
- Damanpour, F. and Gopalakrishnan, S. (2001). The Dynamics of the Adoption of Product and Process Innovations in Organizations. *Journal of Management Science*, 36(1): 45-66.
- Darcy, C., Hill, J., McCabe, T. J; and McGovern, P. (2014). A Consideration of Organisational Sustainability in the SME Context: A Resource-Based View and Composite Model. *European Journal of Training and Development*, 38(5): 398-414.
- Davidsson, P. and, Honig B. (2003) The Role of Social and Human Capital among Nascent Effective Corporate Entrepreneurship. *Academy of Management Executive*. 19 (1): 147-156
- Davis, P. E., and Bendickson, J. S. (2020). Strategic Antecedents of Innovation: Variance between Small and Large Firms. *Journal of Small Business Management*, 59(1): 47-72.
- Della, T. E. and Solari, L. (2008). Organizational Innovations and Firm Performance. Evidences From the Case of Medium-Sized Milanese Firms. Paper prepared for the XXIII National Conference of Labour Economics, Facoltà di Economia – Università degli studi di Brescia, Brescia, 11-12 September 2008.
- Do, H., Mazzarol, T., Soutar, G. N., Volery, T. and Reboud, S. (2018). Organisational Factors, anticipated rents and commercialisation in SMEs. *International Journal of Innovation Management*, 22(2): 18-42.

- Doran, J., and Ryan, G. (2014). Eco-Innovation – does additional engagement lead to additional rewards? *International Journal of Social Economics*, 41 (11): 1110-1130.
- Dotun, F.O. (2015). The key determinants of innovation in SMEs in South Western Nigeria. *European Scientific Journal*, 11(13): 438-441
- Drucker, P. F. (1985). *Innovation and Entrepreneurship: Practice and Principles*. New York: Harper & Row. 457pp.
- Easterby-Smith, M., Lyles, M. A., and Peteraf, M. A. (2009). Dynamic Capabilities: Current Debates and Future Directions. *British Journal of Management*, 20:S1-S8.
- Egbetokun, A.A., Siyanbola, W.O., Olamide, O.O. Adeniyi, A.A. and Irefin, I.A. (2008). Innovation in Nigeria SMEs: Types and Impact. A Paper presented in the IV *Globelics conference*, Mexico City, September 22-24.
- Egwakhe, J. A; Akoma, L. O; Egbuta, O. U; and Akinlabi, B. H. (2021). Small and Medium Enterprises Innovation and Sales Volume in Selected Manufacturing SMEs in Ogun State, Nigeria. *International Journal of Managerial Studies and Research*, 9(4): 127-136. Available Online at www.arcjournals.org.
- Ejiroghene, P.A. and Ayodele, A.A. (2020). Entrepreneurial Marketing Dimensions and Market Performance of Small and Medium-Scaled Enterprises in Niger Delta, Nigeria. *International Journal of Small Business and Entrepreneurship Research*, 8(2): 43-58.
- Ellison, G., and Glaser, E. L. (1999) .The Geographic Concentration of Industry: Does Natural Employees' Performance: Qualitative Assessment of Small & Medium Scale Business Era of Globalization. *American Journal of Social and Management Sciences*, 5(1): 27-41
- Espallardo, M. H. and Ballester, E. D. (2009). Product Innovation in Small Manufacturers, Market Orientation and the Industry's Five Competitive Forces: Empirical Evidence from Spain," *European Journal of Innovation Management*, 12 (4), 470-491.
- Etuk, R.U., Etuk, G.R. and Baghebo, M. (2014). Small and Medium Scale Enterprises (SMEs) and Nigeria's Economic Development. *Mediterranean Journal of Social Sciences*, 5(7): 21- 42.
- Ezenwakwelu, C.A. and Ikon, M.A. (2014). Empirical Analysis on Innovation and Implication for Entrepreneurship Development in Nigeria. *European Journal of Business and Management*, 6 (36): 141 – 148
- Fagerberg, J., Mowery, D. C. and Nelson, R. R. (2004). *The Oxford Handbook of Innovation*. New York, NY: Oxford University Press.

- Fagerberg, J. (2005). *Innovation: A Guide to the Literature*. In Fagerberg, J., Mowery, D., and Nelson, R. (eds.). *Oxford Handbook of Innovation*. Oxford: Oxford University Press. 1-27.
- Ferreira, J. J., Garrido, A. S. and Fernández, O. R. (2011). Contribution of Resource Based View and Entrepreneurial Orientation on Small Firm Growth. *Cuadernos de Gestión*, 11(1): 95-116.
- Fombrun, C. J., and Wally, S., (1989). Structuring Small Firms for rapid Growth. *Journal of Business Venturing*, 4(2): 107-122.
- Forker, L. B., Vickery, S. K. And Droge, C. L. M. (1996). The Contribution of Quality to Business Performance. *International Journal of Operations and Production Management*, 16 (8): 44-62.
- Foss, N.J. (1998). The Resource-Based Perspective: An Assessment and Diagnosis of Problems. *Scandinavian Journal of Management*, 14:113-149.
- Foster C, and Heeks, R. (2013). Conceptualising Inclusive Innovation: Modifying Systems of Innovation Frameworks to understand Diffusion of new Technology to Low-income Consumers. *European Journal of Development Research*, 25(3):333-355.
- Fowowe, B. (2017). Access to Finance and firm Performance: Evidence from African Countries. *Review of Development Finance*, 7: 6–17.
- Gadenne, D. and Sharma, B. (2009). An Investigation of Hard and Soft Quality Management Factors of Australian SMEs and their association with Firm Performance. *International Journal of Quality and Reliability Management*, 26(9): 865-880.
- Galende, J and Fuente J.M (2003), Internal Factors Determining a Firm's Innovative Behaviour. *Research Policy*, 32: 715-736.
- Garnsey, E., Stam, E., and Heffernan, P. (2006). New Firm Growth: Exploring Processes and Paths. *Industry and Innovation*, 13(1): 1-20.
- Gay, M. J. And Airasian, W. (2006) *Educational Research: An Introduction*. Boston: Allyn and Bacon.
- Greene, P. G., and Brown, T. E. (1997). Resource needs and the Dynamic Capitalism Typology. *Journal of Business Venturing*, 12(3): 161-173.
- Grigoriou, K. and Rothaermel, F.T. (2014). Structural Micro Foundations of Innovation: The Role of Relational Stars. *Journal of Management*, 40:586-615.
- Gunday, G., Ulusoy, G., Kilic, K. and Alpkan, L. (2011). Effects of Innovation Types on Firm Performance. *International Journal of Production Economics*, 133(2): 662-676. Available at <http://dx.doi.org/10.1016/j.iipe>.

- Gyeke-Dako, A., Oduru, A.D., Turkson, F.E., Baffour, P.T. and Abbey, E. (2016). The Effect of Technological Innovation on the Quantity and Quality of Employment in Ghana. *Swiss Programme for Research on Global Issues for Development*. R4D Paper 2016/9. Pp. 1-36.
- Hadiyati, E. and Lukiyanto, K. (2019). The Effect Of Entrepreneurial Marketing Dimensions on Micro, Small And Medium Enterprise Performance In Indonesia. *International Journal of Scientific and Technology Research*, 8(10): 106- 112.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) *Multivariate Data Analysis: A Global Perspective* (7th ed.). New Jersey, NJ: Pearson Education Inc.
- Halila, F. and Rundquist, J. (2011). The Development and Market success of Eco-innovations. *European Journal of Innovation Management*, 14 (3): 278-302.
- Hall, R.. and Andriani, P. (2002). Managing Knowledge for Innovation. *Long Range Planning*, 35:29-48.
- Haneda, N., Motheb, C. and Thic, T. U. (2014). Firm Persistence in Technological Innovation: The Relevance of Organizational Innovation. *Economics of Innovation and New Technology*, 23 (5): 490–516.
- Hanmaikyur, J.T. (2016). Effect of Entrepreneurial Marketing Practices on the Performance of Small and Medium Scale Enterprises in Makurdi Metropolis of Benue State, Nigeria. Ph.D. Thesis. Department of Business Administration, Faculty of Administration, Ahmadu Bello University, Zaria. 347pp.
- Hemsley, J. and Mason, R. (2013). Knowledge and Knowledge Management in the Social Media Age. *Journal of Organizational Computer Electronic Commerce*, 23(1-2):138-167
- Henrik, B. (2007). Risk Conception and Risk Management in Corporate Innovation: Lessons from two Swedish Cases. *International Journal Innovation Management*, 11(4):497-513.
- Hisrich, R. D., Peters, M. P. and Shepherd, D. A. (2008). *Entrepreneurship*. Boston: McGraw- Hills.
- Hoopes, D.G. Madsen, T.L. and Walker, G. (2003). Guest Editors' Introduction to the Special Issue: Why is there a Resource-Based View? Towards a Theory of Competitive Heterogeneity. *Strategic Management Journal*, 24(10):559-902.
- Hsieh, J.K. (2016). The Effect of Frontline Employee Co-creation on Service Innovation: Comparison of Manufacturing and Service Industries. *Procedia - Social and Behavioral Sciences*, 224:292-300.
- Hui, K.H. and Chuan, T. K. (2002). Nine Approaches to Organizational Excellence. *Global Business Organization Excellence*, 22(1): 53-65.

- Hult, H. and Knight, N. (2004). Innovativeness: Its Antecedents and Impact on Business. *Industrial Marketing Management*, 33(5); 429-438
- Iakovleva, T. (2004). Entrepreneurial Performance in Russia. (University of Twente). Retrieved from <http://www.utwente.nl/nikos/esu/papers/iakovleva.pdf>. Date Accessed: 26/07/2021.
- Ibidunmi, O. S., Iyiola, O., and Ibidunni, S. S. (2014). Production Innovation, a survival strategy for Small and Medium Enterprises in Nigeria. *European Scientific Journal*, 10(1): 194-209.
- International Labour Office (2015). Small and Medium-sized Enterprises and Decent and Productive Employment Creation: Resource Document. *International Labour Office*, Geneva, www.ilo.org/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_358294.pdf (accessed September 21, 2021).
- Iorun, J. I. (2014). Evaluation of Survival Strategies of Small and Medium Enterprises in Benue State, Nigeria. *International Journal of Economics of Development*, 17 (4):76-83
- Irava, W. and Moores, K. (2010). Resources Supporting Entrepreneurial Orientation in Multigenerational Family Firms. *International Journal of Entrepreneurial Venturing*, 2(3):222 – 245.
- Janet, M. and Ngugi, K. (2014). Influence of Entrepreneurial Marketing on the Growth of SMEs in Kiambu Town-CBD, Kenya. *European Journal of Business Management*, 1(11):361-377.
- Jia, C., Tang, X., and Kan, Z. (2020). Does the Nation Innovation System in China Support the Sustainability of Small and Medium Enterprises (SMEs) Innovation? *Sustainability*, 12(6): 25-42.
- Jimenez, J.D. and Sanz-Valle, R. (2011). Innovation, Organizational Learning and Performance. *Journal of Business research*, 64(4): 408-417.
- Jin, S.H. and Choi, S.O. (2019). The Effect of Innovation Capability on Business Performance: A Focus on IT and Business Service Companies. *Sustainability*, 11(5246): 1-15.
- Johannessen, J.A. (2008). Organizational Innovation as part of Knowledge Management. *International Journal of Information Management*, 28(5): 403-412. <http://dx.doi.org/10.1016/j.ijinfomgt>.
- Johne, A. and Davies, R. (2000). Innovation in Medium Sized Insurance Companies: How Marketing adds Value. *International Journal of Bank Marketing*, 18(1): 6-14.

- Johnson, M. P. (2015). Sustainability Management and Small and Medium-sized Enterprises: Managers' awareness and Implementation of Innovative Tools. *Corporate Social Responsibility and Environmental Management*, 22(5): 271-285.
- Jones, A.D.(2016).Profitability Analysis of Small-Scale Catfish Enterprise in Akure South Local Government Area, Akure, Ondo state. A. B.sc. Project submitted to the Department of Entrepreneurship Management Technology the Federal University of technology Akure (FUTA), Ondo State.
- Jurado, J. V., Gracia, A. G., and Fernández-de-Lucio, I. (2009). Does External Knowledge Sourcing Matter for Innovation? Evidence from the Spanish Manufacturing Industry. *Industrial and Corporate Change*, 180 (4): 637–670.
- Kaplan, M. J. And Warren, A. C. (2007). *Patterns of Entrepreneurship*. Second Edition, USA: John Wiley and Sons Inc.
- Karabulut, A. (2015). Effects of Innovation types on Performance of Manufacturing Firms in Turkey. *Procedia-Social and Behavioral Sciences*, 195: 1355–64.
- Kesinro, O.R; Ogunlusi, G; and Adu, C.A. (2016).Entrepreneurial Marketing and SMEs Performance in Lagos State, Nigeria. *Imperial Journal of Interdisciplinary Research (IJIR)*,2(1): 98-101.
- Khalil, T. (2000). Management of Technology. The Key to competitiveness and Wealth Creation. McGraw-Hill.
- Kijkasiwat, P. and Phuensane, P. (2020).Innovation and Firm Performance: The Moderating and Mediating Roles of Firm Size and Small and Medium Enterprise Finance. *Journal of Risk Financial Management*, 13 (97): 1-15.
- Kimathi, D.K. (2020).Effect of Entrepreneurial Marketing on the Performance of Micro, Small and Medium Enterprises in Kenya. Ph.D. Thesis. Jomo Kenyatta University of Agriculture and Technology. 177 pp.
- Kraaijenbrink, J., Spender, J. and Groen, J. A. (2010). The Resource-Based View: A Review and Assessment of its Critiques. *Journal of Management*, 10(36):349- 362.
- Kuratko, D. F., Hornsby, J. S. and Covin, J. G. (2004). Diagnosing a firm's internal environment for corporate entrepreneurship, *Business Horizons*, 57(1): 37-47.
- Kuratko, D.F., and Hodgetts, R.M. (2001). *Entrepreneurship: A contemporary approach*. Fort Worth: Harcourt College Publishers.
- Kwahar, N. and Onov, P. (2017). Design and Analysis of Social and Management Research Studies: A Practical Guide. Makurdi: BadensPublishers.128pp.

- Laban, O. M., and Deya, J. (2019). Strategic Innovations and the Performance of Information Communication Technology Firms in Nairobi Kenya. *International Journal of Academic Research in Progressive Education and Development*, 8(2): 1–24.
- Laforet, S. (2011). A Framework of Organisational Innovation and Outcomes in SMEs. *International Journal of Entrepreneurial Behaviour and Research*, 17: 380–408.
- Langley, D. J., Pals, N. and Ort, J. R. (2005). Adoption of Behaviour: Predicting Success for Major Innovations. *European Journal of Innovation Management*, 8 (1): 56–78.
- Lawal, W.A. and Ijaiya, M.A. (2007). Small and Medium Scale Enterprise access to Commercial Banks' Credits and their contribution to GDP in Nigeria-*Asian Economic Review, Journal of the Indian institute of economics*. 49(3): 360-368.
- Lee, D. Y., and Tsang, E. W. (2001). The Effects of Entrepreneurial Personality, Background and Network Activities on Venture Growth. *Journal of Management Studies*, 38(4): 583-602.
- Lendel, V., Hittmara, S., and Siantova, E. (2015). Management of Innovation Processes in Company. *Procedia Economics and Finance*, 23: 861-866.
- Li, C., and Asim, S. (2019). Diffusion of Innovation through Individual and Collective Entrepreneurship. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(1): 89-107.
- Lia O. Zhan (2001), Technology Innovation Concepts, Strategies and Research Methods. Yunnan Materials.
- Lijauco, F., Gajendran, T., Brewer, G., and Rasoolimanesh, S. M. (2020). Impacts of Culture on Innovation Propensity in Small to Medium Enterprises in Construction. *Journal of construction engineering and management*, 146(3): 1-19.
- Lin, H.F. (2007). Knowledge Sharing and Firm Innovation Capability: An Empirical Study. *International Journal of Manpower*, 28:315-332.
- Lin, C. H., Peng, C. H., and Kao, D.T. (2008). The Innovativeness Effect of Market Orientation and Learning Orientation on Business Performance. *International Journal of Manpower*, 29(8): 752-772.
- Longenecker, J G, C W Moore, J W Petty and L E Palich (2006). Small Business Management: An Entrepreneurial Emphasis. International edition. Mason, OH: Thompson.
- Love, J. H., Stephen R., and Zhou, Y.(2016). Experience, Age and Exporting Performance in UK SMEs. *International Business Review*, 25: 806–819.

- Maldonado-Guzmán, G., Garza-Reyes, J. A., Pinzón-Castro, S. Y., and Kumar, V. (2018). Innovation Capabilities and Performance: Are they truly linked in SMEs? *International Journal of Innovation Science*, 2(4): 23-32
- Malerba, F. and Nelson R. (2011): Learning and Catching up in different Sectoral System: Evidence from six National Industries. *Industrial and Cooperation change*, 6: 1645-1676.
- Maliki, O.T. and Amusa, O.M. (2019). Impacts of Technology Innovations and Entrepreneurship Training on SMEs Performance in Nigeria. *1st National Conference of WITED, Ilaro Chapter. The Federal Polytechnic, Ilaro August 13-16, 2019*. Pp. 415-421.
- Mallinguh, E; Wasike, C; and Zoltan, Z. (2020). Technology Acquisition and SMEs Performance, the Role of Innovation, Export and the Perception of Owner-Managers. *Journal of Risk and Financial Management*, 13(258): 1-19.
- Mashal, A. (2018). Do Non-Financial Factors Matter for SME's Performance? Case from Jordan. *International Journal of Business and Social Science*, 9: 156-67.
- Masood, U. H., Sadia, S., Mohammad, S. N., Saman, N. (2013). Effects of Innovation types on Firm Performance: An Empirical Study on Pakistan's Manufacturing Sector. *Pakistan Journal of Commerce and Social Sciences*, 7(2): 243-262.
- Masood, U.H., Ayaz, A.M., Amna, H., Muhammad, F. F., and Javaria, A. (2013). Measuring Employee Creativity and its Impact on Organization Innovation Capability and Performance in the Banking Sector of Pakistan. *World Applied Sciences Journal*, 24(7): 949-959.
- Medlin, B. D. (2001). The Factors that may Influence a Faculty Member's Decision to Adopt Electronic Technologies in Instruction (*Doctoral Dissertation, Virginia Polytechnic Institute and State University*). 347pp.
- Mohd, R.M. and 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 and medium Enterprise*, 5(2): 45-56.
- Mothe, C., and Nguyen-Van, P. (2015). Organizational Innovations for Technological Innovation: The Role of Knowledge Management Practices. *Applied Economics*.
- Musso, F. (2012). Technology in Marketing Channels. *International Journal of Applied Behavioral Economics*, 1(2): 41-51.
- Mwangi, M. M. A., and Ngugi, K. (2014). Influence of Entrepreneurial Orientation on Growth of Micro and Small Enterprises in Kerugoya, Kenya. *European Journal of Business Management* 1(11): 417-438.

- National Bureau of Statistics / Small and Medium Enterprises Development Agency of Nigeria (NBS/SMEDAN) (2017). National Survey of Micro Small and Medium Enterprises (MSMEs). Federal Republic of Nigeria, NBS/SMEDAN, Abuja, Nigeria, January, 2017.167pp.
- Ngugi, J.K., McOrege, M.O. and Muiru, J.M. (2013). The Influence of Innovativeness on the Growth of SMEs in Kenya. *International Journal of Business and Social Research*, 3: 25-31.
- Nguyen, T.C; Nguyen, T.L; Phung, A.T; and Nguyen, V.K.(2019).The Impact of Innovation on the Firm Performance and Corporate Social Responsibility of Vietnamese Manufacturing Firms. *Sustainability*, 11(3666): 1-14.
- Njogu, T.W. (2014).The Effect of Innovation on the Financial Performance of Small and Medium Enterprises in Nairobi County, Kenya. MBA Project. School of Business, university of Nairobi. 59pp.
- Nnodim, I. O., Onuoha, B. C. and Needorn, R.S. (2019). The Effects of Product and Process Innovation Capabilities on Competitiveness of Nigerian Quoted Banks. *International Journal of Management, Marketing and Entrepreneurial Studies*, 8(1): 1-10.
- Nybakk E, Jenssen, J.I. (2012). Innovation Strategy, Working Climate, and Financial Performance in Traditional Manufacturing Firms: An Empirical Analysis. *International Journal of Innovation Management*, 16(2):441-466.
- Nzeribe, C. G. and Ilogu, G. U. (1999). *Fundamentals of Research Methods*. 3rd edition, Onitsha: West and Solomon Publishing Company Ltd. 194pp.
- Obeng, R. H. (2009). Entrepreneurship and Innovation in Ghana: Enterprising Africa. *Small Business Economics*, 32(3): 20- 40.
- Obunike, C.F. and Udu, A.A. (2018).Technological Innovativeness and Growth: A Study of Small Scale Manufacturing Firms in Lagos State .*Economics of Development*, 17: 39-53.
- O'Dwyer, M; Gilmore, A; and Carson, D. (2009). Innovative Marketing in SMEs: An Empirical Study. *Journal of Strategic Marketing*, 17(5): 383–396
- OECD. (2015). Innovation in Science Technology and Industry. *International Conference on Innovation for Inclusive Growth*. 52pp.
- OECD and Eurostat (2005). *Oslo Manual: Guidelines for collecting and interpreting Innovation Data*. 3rd ed. Paris: OECD Publishing.

- OECD, (2005). *Oslo manual: Proposed Guidelines for collecting and interpreting Technological Innovation Data*. 2nd ed. Paris OECD Publishing. Available at <http://dx.doi.org/10.1787/9789264013100.en>
- Ogbo and Nwachuckwu (2012). The Role of Entrepreneurship in Economic Development: The Nigeria Perspective. *European Journal of Business and Management*, 4(8): 12-22.
- Oke, A., Burke, G. and Myers, A. (2007). Innovation Types and Performance in Growing UK SMEs. *International Journal of Operations and Production Management*, 27 (7): 735-753.
- Okpara, F.O. (2007). The Value of Creativity and Innovation in Entrepreneurship. *Journal of Asia Entrepreneurship and Sustainability*, III (2): 1- 14
- Okumu, I. M., Bbaale, E. and Guloba, M. M. (2019). Innovation and Employment Growth: Evidence from Manufacturing Firms in Africa. *Journal of Innovation and Entrepreneurship*, 18(7):1-27.
- Oladejo, M; Akande, O.O; and Yinus, O. (2014). Impact of ICT Adoption on the Performance of Small and Medium Scale Food and Beverages Firms in Nigeria. *International Journal of Advances in Management and Economics*, 3(3): 45-52. Available online at www.managementjournal.info
- Olughor, R.J. (2015). Effect of Innovation on the Performance of SMEs Organization in Nigeria. *Journal of scientific and Academic publishing*, 5(3): 90-95
- Oluwadare, A.A. (2015). Creativity and Innovation: A Viable Tool for Entrepreneurial Development. *Global Advanced Research Journal of Educational Research and Review*, 4(11): 225-231
- Oman M (2008). Measuring Innovation in Developing Countries. Regional Workshop on Science and Technology Statistics by Institute of Statistic.
- Omodafe, U.P. and Nwaizugbo, I.C. (2017). Innovative Marketing and Performance of selected SMEs in Delta State Nigeria. *International Journal of Small Business and Entrepreneurship Research*, 5(3):1-18.
- Onugu, B.A.N. (2005). Small and Medium Enterprises (SMEs) in Nigeria: Problems and Prospects. Unpublished PhD Dissertation. St. Clements University, Nigeria.
- Organization for Economic Cooperation and Development (OECD) (1997). *Oslo Manual Guidelines for Collecting and Interpreting Innovation Data*, 23rded, Paris, France.

- Osei, A., Yunfei, S., Appienti, W., and Forkuoh, S. (2016). Product Innovation and SMEs Performance in the Manufacturing Sector of Ghana. *British Journal of Economics, Management & Trade*. 7(8):54-65
- Otero-Neira, C., Lindman, M. T; and Fernández, M. J. (2009). Innovation and Performance in SME Furniture Industries: An International Comparative Case Study. *Marketing Intelligence and Planning*, 27 (2): 216-232.
- Oyeku, O. M., Oduyoye, O., Asikhia, O., Kabuoh, M. and Elemo, G. N. (2014). On Entrepreneurial success of Small and Medium enterprises (SMEs): A Conceptual and Theoretical Framework. *Journal of Economics and Sustainable Development*, 5(16): 14-23.
- Oyelaran –oyeyinka, B. (2007) Inter-firm Collaboration and Competitive Pressures: SME Footwear Clusters in Nigeria. *International Journal of Technology and Globalization*, 1(2/4):343-360.
- Oyewale, I.O; Adeyemo, S.A; and Ogunleye, P.O. (2013). Technological Innovation: An Imperative Tool for Entrepreneurship Development in Nigeria. *Australian Journal of Business and Management Research*, 3(08):41-47
- Pallant, J. (2007). Survival Manual: A Step by Step Guide for Data Analysis Using SPSS for Windows. England: McGraw-Hill.
- Parisot, A. H. (1995). Technology and Teaching: The Adoption and Diffusion of Technological Innovations by a Community College Faculty (Doctoral Dissertation, Montana State University).356pp.
- Paunov C (2013). Innovation and Inclusive Development: A Discussion of the Main Policy Issues (No. 2013/1). OECD Publishing.
- Pedersen, E. R. G., Gwozdz, W. and Hvass, K. K. (2018). Exploring the Relationship between Business Model Innovation, Corporate Sustainability, and Organisational Values within the Fashion Industry. *Journal of Business Ethics*, 149 (2):267-284.
- Penalba, J.E; Guzman, G.M; and Mojica, E.G. (2015).The Effect of Information and Communication Technology in Innovation Level: The Panama SMEs Case. *Journal of Business & Economic Policy*, 2(2): 124-131.
- Penrose, E. (1959). The Theory of the Growth of the Firm. Oxford University Press.
- Peteraf, M. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal*, 14(3):179-191.

- Peter, O.N.(2011) Innovation: SMEs sharpen their focus on Growth. *Business and Finance*. Available at <http://www.businessandfinance.ie/bf/2011/4/commanalysisapril2011/innovationsmessharpentheirfocu> (access on 21/03/2021).
- Piening, E. P. and Salge, T. O. (2015). Understanding the Antecedents, Contingencies, and Performance Implications of Process Innovation: A Dynamic Capabilities Perspective. *The Journal of Product Innovation Management*, 32(1):80-97.
- Polder, M., Leeuwen, G.V., Mohnen, P., and Raymond, W. (2010). Product, Process and Organizational Innovation: Drivers, Complementarity and Productivity Effects: UNU-MERIT, *Maastricht Economic and Social Research and Training centre on Innovation and Technology*.
- Porter, M. E. (1998) Clusters and the New Economics of Competition. *Harvard Business Review*.
- Prange, C. and Pinho, C. (2017). How Personal and Organizational Drivers Impact on SME International Performance: The Mediating Role of Organizational Innovation. *International Business Review*, 26: 1114–23.
- Preeti, B. (2015). Emotional Intelligence and Job Performance in Service Industry. *International Journal of Research in Contemporary Management*, 5(2): 1-7.
- Price, D. P., Stoica, M., and Boncella, R. J. (2013). The Relationship between Innovation, Knowledge, and Performance in Family and Non-family Firms: An Analysis of SMEs. *Journal of Innovation and Entrepreneurship*, 2(14):1-20.
- Priem, R. L., and Butler, J. E. (2001). Is the Resource-Based View a useful perspective for Strategic Management Research? *Academy of Management Review*, 26(1): 22- 40.
- Radzi, N. Alina, S. and Wahab, E. (2017). Enhancing the competitiveness of Malaysian SMES through technological capability: A perspective. *The Social Sciences* 12: 719–24.
- Rahman, N. A., Yaacob, Z., and Radzi, R. M. (2016). An Overview of Technological Innovation on SMEs Survival: A Conceptual Paper. *Procedia – Social and Behavioral Sciences*, 224: 508-515.
- Raji, A. A. (2014). Impact of Product Innovation on the Performance of Manufacturing Company. A Case study of Nigerian Bottling Company Plc. Kaduna. Masters theses, Usman Danfodiyo University Sokoto. 257pp.
- Rasmussen, C.C. (2014). Intangible Resources as Drivers of High Growth. *International Journal of Innovation Management*, 18(4):1-20.
- Raymond, C., Aaron, B., and Bertha, L. (2006). Eco-efficiency and SMEs in Nova Scotia, Canada. *Journal of Cleaner Production*, 14 (6-7): 542-550.

- Rebound, M. A. (2008). Innovation Management of SMEs in the Creative Sector. *International Journal of Innovation*, 3 (2):31- 52.
- Rennings, K., Andreas, Z., Kathrine, A., and Esther, H. (2006). The Influence of Different Characteristics of the EU Environmental Management and Auditing Scheme On Technical Environmental Innovations And Economic Performance. *Ecological*
- Rezaee, Z., Tsui, J., Cheng, P., and Zhou, G. (2019). Business Sustainability in Asia: Compliance, Performance, and Integrated Reporting and Assurance. *John Wiley & Sons*.
- Robson, P.J.A., Haugh, H.M. and Obeng, B. A. (2009). Entrepreneurship and Innovation in Ghana: Enterprising Africa. *Small Business Economics*, 32(3): 331-350.
- Rogers E. M. (1995). *Diffusion of innovations*. 4th edition , New York: Free Press.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: The Free Press.
- Rogers, E.M. (1983). *The Diffusion of Innovations*. New York: Free Press.
- Rogers, E.M. (1971). *Communication of innovation*. New York, NY: free press
- Romer; P.M (1990). Endogenous Technological Change. *Journal of Political Economy*, 78: 71 -102.
- Rosenbusch, N., Brinckmann, J. and Bausch, A. (2011). Is Innovation always Beneficial? A Meta-analysis of the relationship between Innovation and Performance in SMEs. *Journal of Business Venturing*, 26(4): 441-457.
- Rosli, N. F., and Abdullah, N. (2015). Comparative Study on the Determinants on SMEs Performances in Selangor and Sabah, Malaysia. *Handbook on the Emerging Trends in Scientific Research*, 3: 107-111.
- Rosli, M.M. and Sidek, S. (2013). Innovation and Firm Performance: Evidence from Malaysian Small and Medium Enterprises. Paper presented at the (20th International Business Information Management Conference, Kuala Lumpur, Malaysia, 25-26th March 2013).
- Rugman, A.M. and Verbeke, A. (2002). Edith Penrose's Contribution to the Resource-based View of Strategic Management. *Strategic Management Journal*, 23(8):769-780.
- Salavou, H; Baltas, G; and Lioukas, S. (2004). Organizational Innovation in SMEs: The Importance of Strategic Orientation and Competitive Structure. *European Journal of Marketing*, 38 (9/10): 1091-1112.
- Salavou, H., and Avlonitis, G. (2008). Product Innovativeness and Performance: A focus on SMEs. *Management Decision*, 46(7): 969-985.

- Sandvick, L.L. and Sandvik, K. (2003). The Impact of Market Orientation on Product Innovation and Business Performance. *International Journal of Research in Marketing*, 20(4): 255-376.
- Schumpeter, J.A. (1934). *Theory of Economic Development*. Cambridge, MA: Harvard University press.
- Solapex, A. (2013). Examining Lagos State GDP Figures in 2012. Washington DC: World.
- Standing, C. and Kniti, S. (2011). How can Organizations as Wikis for Innovation? *Technovation*, 31(7), 287-295. Available at <http://dx.doi.org/10.1016/j.technovation>
- Stopford, J. M. and Baden-Fuller (1994). Entrepreneurs entering the Higher Education Market to make a Difference. *Journal of Business Case Studies*, 4(1): 99-112
- Stuart, W. D. (2000). Influence of Sources of Communication, User Characteristics and Innovation Characteristics on Adoption of a Communication Technology (Doctoral Dissertation, The University of Kansas, 2000). *Pro- Quest Digital Dissertations*. (UMI No. AAT 9998115).
- Subhan, Q. A. (2016). Impact of Innovation on Firm Performance: A Case of Small and Medium Enterprises (SMEs) in Pakistan. PhD Thesis. Department of Management Sciences, Bahria University, Islamabad Campus, Islamabad, Pakistan. 165 pp.
- Sundbo, J. (2003). *Innovation and Strategic Reflexivity: An Evolutionary Approach applied to Services*. Oxford: Elsevier.
- Tang, G., Park, K., Agarwal, A., and Liu, F. (2020). Impact of Innovation Culture, Organization Size and Technological Capability on the Performance of SMEs: The Case of China. *Sustainability*, 12(4): 13-55.
- Teece, D.J. (2007). Explicating Dynamic Capabilities: The Nature and Micro Foundations of Sustainable Enterprise Performance. *Strategic Management Journal*, 28(10): 1319-1350.
- Tedla, T. B. (2016). The Impact of Organizational Culture on Corporate Performance. Walden Dissertation and Doctoral studies. 157pp.
- Tejada, P., and Moreno, P. (2013). Patterns of Innovation in Tourism and Medium-size Enterprises. *The Service Industries Journal*, 8 (7): 749-758.
- Thornhill, S. (2006). Knowledge, Innovation and Firm Performance in High and Low Technology Regimes. *Journal of Business Venturing*, 21: 687-703.
- Tjahjana, D; Manurung, A.H; Setiadi, N.J; and Kosasih, W. (2020). Innovation, Digital Business and Frugal Innovation Type. *European Journal of Molecular and Clinical Medicine*, 07(08):515-526.

- Trott, P. (2008). *Innovation Management and New Product Development* (4th ed.): Financial Times/ Prentice Hall.
- Tuan, N., Nhan, N., Giang, P. and Ngoc, N. (2016). The Effects of Innovation on Firm Performance of Supporting Industries in Hanoi-Vietnam. *Journal of Industrial Engineering and Management*, 9(2): 413-431
- Ukpabio, M.G., Oyeibisi, T.O., and Siyembola, O.W. (2018). Effect of Innovation on Performance of Manufacturing SMEs in Nigeria. An Empirical Study. *European Journal of Innovation Management*, 12 (4): 470-491.
- Ussahawanitchakit, P. (2012). Administrative Innovation, Technical Innovation, Competitive Advantage, Competitive Environment, and Firm Performance of Electronics Businesses in Thailand. *International Academy of Business and Economic*. 12(1): 23-32.
- Van Dijk, B., Den Hertog, R., Menkveld, B. and Thurik, D. (1997). Some New Evidence on the Determinants Large and Small Business Economics, 9(4): 335-343.
- Varis, M. and Littunen, H. (2010). Types of Innovation, Sources of Information and Performance in Entrepreneurial SMEs. *European Journal of Innovation Management*, 13 (2): 128-154.
- Vicente, M., Abrantes J.L., Seabra, C. and Teixeira, M.S. (2015). Innovation, Dynamic Capabilities and Performance in Export Markets. *The Macro-theme Review*, 4(6):136-158.
- Vivero, R.L. (2002). The Impact of Process Innovations on Firm's Productivity Growth: The Case of Spain. *Journal of Applied Economics*, 34 (8): 1007-1016.
- Vyas, V. (2009). *Innovation and new Product Development by SMEs: An Investigation of Scottish Food and Drinks industry* (Doctoral dissertation Napier University)
- Wahab, N. A. and Jabar, J. (2017). Organizational Innovation Strategy towards Small Medium Enterprise Performance in Malaysia. *International Journal of Arts Humanities and Social Sciences*, 2(17):1-9.
- Wan, D., Ong, C. H. and Lee, F. (2005). Determinants of Firm Innovation in Singapore. *Technovation*, 25 (3), 261-268.

- Wang C.L. and Ahmed P.K (2004). The Development and Validation of the Organizational Innovation Construct using Confirmatory Factors Analysis. *European Journal of innovation management*, 7 (4): 303-13.
- Wang Z, Wang N (2012). Knowledge Sharing, Innovation and Firm Performance. *Expert Systems Applications*. 39:8899-8908.
- Wheel-Wright, S. C., and Clark, K. B. (1992). *Revolutionizing Product Development – Quantum Leaps in Speed, Efficiency, and Quality*. New York, NY: The Free Press.
- Wiklund, J. (1999). The Sustainability of the TQ; Entrepreneurial Orientation-Performance Relationship. *Theory and Practice*, 24(1): 37–49.
- Williamson, O.E. (1999). Strategic Research: Governance and Competence Perspectives. *Strategic Management Journal*, 20: 1087-1108.
- Wirtz, H. (2010). Innovation Networks in Logistics- Management and Competitive Advantage. *International Journal of Innovation Science*, 3(4): 177-191.
- Wolff, J.A., and Pett, T.L. (2006). Small Firm Performance: Modeling the Role of the Product and Process Improvements. *Journal of Small Business Management*, 44(2): 268-284. Available at <http://dx.doi.org/10.101111/j.1540-627X>.
- Wood, E. H. (2006). The Internal Predictor of Business Performance in Small Firms. *Journal of Small Business and Enterprise Development*, 13(3): 441-453.
- Wyk, R.V. and Adonisi, M., (2012). Antecedents of Corporate Entrepreneurship. *South African Journal of Small Business and Enterprise Development*, 10(1): 2-24.
- Zakaria, N; Azimah, N; Abdullah, C; and Yusoff, R.Z. (2016).The Innovation-Performance Linkage: Empirical Evidence of Malaysian Manufacturing SMEs. The European Proceedings of Social and Behavioral Sciences. International Soft Science Conference. 1-6.
- Zwingina, C.T., and Opusunju, M.I. (2017). Impact of Innovation on the Performance of Small and Medium Scale Enterprises in Gwagwalada, Abuja. *International Journal of Entrepreneurial Development, Education and Science Research*, 4(1): 31-45.
- Zimmerman, V. (2017) Research and Development (R&D) in SMEs: Internal Funding Capacity determines Scope of R&D Expenditure. KFW Research- Denmark.