NIGERIAN JOURNAL OF PUBLIC SECTOR MANAGEMENT (NJPSM)

Innovation Strategies and Organizational Effectiveness among Selected Manufacturing Firms in South-South, Nigeria

[1]Edward, S O, Emerole, G.A & [2]Okebaram, S.M

[1&2]Department of Business Administration, Michael Okpara University of Agriculture, Umudike Abia State Nigeria

Corresponding Author: ikoroike@gmail.com

Abstract

This study investigated innovation strategies and organizational effectiveness in selected manufacturing firms in South-South, Nigeria. Specifically, the study sought examine the effect of aggressive innovation on the performance, evaluate the influence of proactive innovation on productivity, determine the degree to which defensive innovation enhance value creation, ascertain the extent to which analytics innovation boost competitive strength and establish the relationship between risk-taking innovation and market share of selected manufacturing firms in South-South, Nigeria. The study adopted a survey research design and primary source of data was mainly used on the course of gathering data from the respondent and supported by reviews from secondary sources for validation. The target population of one thousand, two hundred and twenty one (1,221) obtained from the twelve (12) selected manufacturing firms in South-South, Nigeria. The sample size of three hundred and one (301) respondents was derived from Israel Glenn at 5% error tolerance and 95% level of confidence. However, a total of three hundred and one (301) copies of the questionnaire were distributed to the various manufacturing firms in South-South, Nigeria. Out of this number, forty nine (49) copies of questionnaire were lost or wrongly filled with percentage ratio of 16.2% while two hundred and fifty two (252) copies of questionnaire were correctly filled and returned with percentage ratio of 83.7% and this served as the basis of the study. To test the hypotheses of this study, the study adopted simple regression model, analysis of variance (ANOVA) and Pearson Correlation Coefficient statistical tools of SPSS Version 23.0. From the result of the analysis, the findings showed that aggressive innovation has a significant effect on the performance of selected manufacturing firms in South-South, Nigeria, proactive innovation has a significant influence on the productivity of selected manufacturing firms in South-South, Nigeria, defensive innovation enhances value creation of the selected manufacturing firms in South-South, Nigeria, analytics innovation boost competitive strength of the selected manufacturing firms in South-South, Nigeria and there is a significant relationship between risk-taking innovation and market share of selected manufacturing firms in South-South, Nigeria. The study concluded that innovation strategies positively and significantly influenced the effectiveness of the selected manufacturing firms in South-South, Nigeria and recommended that management of the selected manufacturing firms should to intensify aggressive innovation and competitiveness at individual and firm's level, be more attuned towards the potentials and proactive capabilities of their subordinates, among many others

Keywords: Innovation strategies organizational effectiveness manufacturing firms

Introduction

In the modern world, the concept of innovation is comprehensive. The term has its origin in the Latin word "innovatio", which means renewal (Katarzyna & Karolina, 2020 citing Kopaliński, 2007). Innovation is also often traced from Latin word "novus", which means novelty (Borowski, 2011). In general innovation stands for the three-step process of an idea, invention and diffusion (Fadiah, 2016). Innovation in economic development and entrepreneurship was popularized by Joseph Schumpeter, a German economist and in his view, comprises the elements of creativity, research and development, new processes, new products or services and advance in technologies (Camison & López, 2010). Similarly, during the last thirty years, innovation has evolved as the synonym for the development of nations, technological progress and driver of business success. Innovation nowadays is not simply the creation of something new but also a panacea for the solution of board range of problems

Observably, Rosli and Sidek (2013) see innovation as the creation of new wealth or the alteration and enhancement of existing resources to create new wealth. It is also seen as a process of idea creation, a development of an invention and ultimately the introduction of a new product, process or service to the market (Darroch, 2005). Presently, this concept is applied in every facet of social lives and activities which makes it more multidimensional and intricate. Beaver believes that innovation is an essential element for economic progress of a country and competitiveness of an industry (Beaver, 2010). Also, Kadarusman and Siti (2022) critically believed that innovation is a vital part of a firm's strategy since it constitutes one of the principles means to seek new business opportunities (Laban & Deya, 2019). Therefore, in a business context innovation can be conceptualized as an incidence (idea) for a product or a service (invention) which has not been there before and which results in a high market acceptance (diffusion) (Dörr & Müller-Prothmann, 2014).

Innovation as a revolutionary change plays an important role for large and small firms and the capability to innovate is recognized today as one of the main aspects leading to a competitive advantage among manufacturing firms. Innovative firms seem to be less susceptible to cyclical sectarian and environmental pressures than non-innovative firms (Camison & López, 2010). Porter, (1990) argues that innovation is one of the most important competitive weapons and generally seen as a firm's core value capability because the global competition, which became particularly tough after 1980's, forced the company's focus on their business strategies, especially on innovations. Schumpeter (1934) defines innovation as the introduction of a product which is new to consumers or one of higher quality than existing products, new methods of production, the opening of new markets, the use of new sources of supply and new forms of competition, that lead to the restructuring of an industry" (Schumpeter, 1934). According to him, innovation leads to economic development through creative destruction and he further classified innovations into five types: new products; new processes (technological process innovation and organizational innovation); new sources of supply/raw materials; new markets and new ways organization. Hence, in recent times, due to the tough and increasing global competition, both individuals and manufacturing firms begin to evaluate and apply innovative strategies and entrepreneurial abilities with the purpose of gaining competitive advantage as well to advance organizational efficiency, profitability and productivity (Yebolganova, 2016).

Thus, within the business context, innovation strategy is basically a strategic flexibility approach and represents the firm's strategy in adjusting to current conditions and not showing the strategic gap in any case. That is, it is choosing from the most possible alternatives and developing the most convenient action suitable in this present condition. When something happens out of the plan, innovation strategy leads the activities so that the enterprise gets closer to the determined goal. Innovation strategy from strategic management perspective is the activity that involves the required policies and processes, determining a new location and drawing a route that will end with the same goal (Tutar, Nart & Bingöl, 2015). Innovation strategy is also seen as a plan which will enable a company to achieve its long-term goals through the use of innovation, it helps a firm decide in a cumulative and sustainable manner about the type of innovation that best match corporate objectives (Dodgson, Gann & Salter, 2008).

In the context view, Henry Mintzberg states that a strategy is a plan which has some sort of consciously intended course of action and furthermore as a guideline to deal with a situation (Victoria, Renata, Robert & Stephan, 2021 citing Mintzberg 1987).Alternatively if strategy is defined as a guide for the allocation of resources in order to achieve the company's objectives, then: an innovation strategy guides decisions on how resources are to be used to meet a firm's objectives for innovation and thereby deliver value and build competitive advantage (Dodgson et al, 2008). An innovation strategy can be described as a scope of actions for all innovative procedures in an organization which includes strategic goals and guidelines which have the vision to develop innovation (Goffin, Herstatt & Mitchell, 2012). Oke (2007) highlighted that innovation strategy designates to what degree and in what way a firm uses innovation to perform its business strategy and to enrich its performance. Hence, a planned and well communicated innovation strategy is necessary in order to achieve maximal effectiveness and efficiency.

However, a correct designed innovation strategy is an essential tool for a constant growth when the environment is dynamic, unpredictable, and competitive and especially in difficult times. In addition, to obtain a successful innovation, determination of a strategic orientation and top management team support are needed because innovation activities require the acquisition of highly specialized assets (sunk costs), the presence of highly-educated and skilled employees (knowledge-related intangible assets) and involve a significant degree of uncertainty (Talke, Salomo & Rost, 2010). Nevertheless, innovation strategies can be a simple one, where firms focus to introduce only one type of Schumpeterian innovations (i.e. product, process, market or technology) at a time, or the strategy can be a multifaceted one, where firms combine numerous types of simple strategies at a time. Whatever innovation strategy a firm chooses, the direct motivation can be a mixture of reasons, such as increased product performance, increased productivity and/or lower production costs, while the underlying motivation is probably to preserve or increase competitive advantage in the existing or new market place (Marinidarraga & Cuartas-Martin, 2019).

Notably, strategic innovation represents the redesigning capacity of a firm to create new values for customers over the existing industry model and to generate new wealth for all stakeholders. Hence, there is need for manufacturing firms globally and nationally to understand the relationship between innovation strategies and firm effectiveness. This study therefore, intends to examine innovation strategies and organizational effectiveness with special reference to selected manufacturing firms in South-South, Nigeria.

In Nigeria, though the manufacturing sector is growing at a faster pace, still it has failed to a large extent with regards to its percentage share in the total GDP. An analysis of the GDP figures based on current prices obtained from the National Bureau of Statistics showed that the manufacturing sector's contribution to the economy dropped drastically. Data obtained from the Manufacturers Association of Nigeria (MAN) affirmed that Nigeria experienced its worst situation in manufacturing as 820 companies shut down or suspended production in 2018. This menace aforementioned has be attributed to the lack of innovation and that is why Global Innovation Index 2018 ranked Nigeria 118th position behind other African countries like South Africa (58), Mauritius (75) and Kenya (78) (Ann, Origho & Ukpere, 2014).

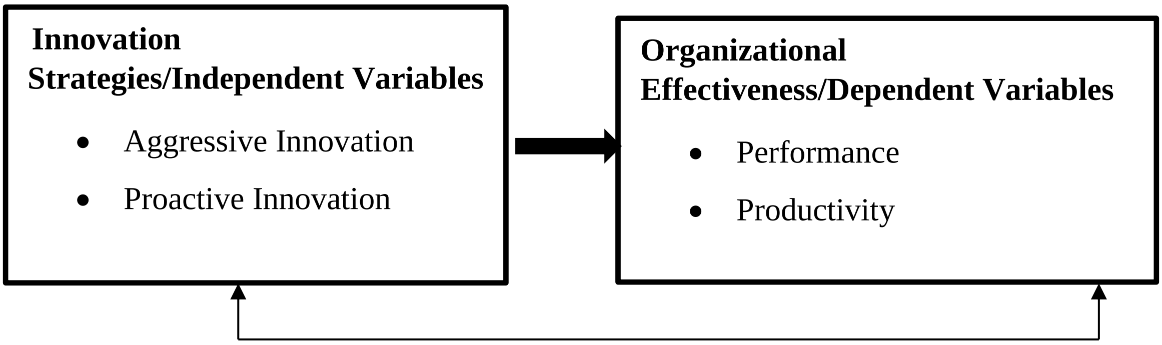
Consequent to the above challenge, the manufacturing sector in Nigeria have been experiencing cut-throat competition from both local and multinational companies as such Nigerian manufacturers found it difficult to stand against the competitors from foreign countries. The local companies cannot compete with the foreign counterparts in terms of product quality and other areas of marketing or strategic capabilities. The resultant effect is while the local industries performance is on the decline, the multinationals are booming. Nevertheless, companies competing in this fast-paced industry often fit and are effectively managing innovation ensure growth.

Similarly, technological changes have resulted to short product life cycle making it difficult for companies to maintain a sustained competitive advantage. However, firms that are constantly innovating have a higher chance of survival since a number of empirical studies have found a positive relationship between innovation and firm performance (Löfsten, 2014; Rosenbusch, Brinckmann & Bausch, 2011). This literature implies that innovations have transformational effects on operational efficiency which improves firm performance. Despite the numerous benefits, innovations have posed many challenges to manufacturing firms and blue-chip companies in South-South, Nigeria and initiatives frequently fail and successful innovators have a hard time sustaining their performance. A number of studies have also found that innovations have negative effects on performance indicators (Guisado, Guisado & Sandoval, 2013) while other researchers also argue that the influence is sector specific. These mixed results and alternative views from different countries and writers are mainly as a result of lack of comprehensive analysis of how multiple innovations influence effectiveness indicators that formed the basis of this study

Literature Review

Conceptual Framework

Fig 2.1 Innovation strategies and organizational effectiveness framework



Source: (Researcher, 2024).

Innovation

Innovations have been studied from many different dimensions such as economics, business, technology, finance and management. The prevalent discussion among practitioners of innovation has created many approaches to conceptualize innovation. Innovation can be referred to as an act of introducing something new (process of innovation); or something introduced newly (product; or object). For example, Carol and Mavis (2007) described innovation as an idea, practice or object that apparent as recent by people or the adoption unit. Organizational innovation has been a dominant factor in maintaining worldwide competitiveness. It fuels organizational growth, drives future success. There are many important competition tools that firms use to ensure competitive advantage; the factors such as product and service quality, reducing costs, creating innovation, sustainability, stabilization and innovative strategies have an important part while enterprises try to ensure competitive advantage. Innovation is also a long-termed performance indicator which is integrated with concepts like change, creativity, improvement and risks taking for the firms, competition mostly shapes around the customer. There are various definitions of innovation as a process. Wan, Ong and Lee, (2009) have defined innovation as a process that involves generation, adoption and implementation of new ideas or practices within the organization. Tidd, Bessant and Pavitt, (2007) consider innovation as a process of turning opportunity into new ideas and of putting these ideas into widely used practice. As shown by the study done by Aragón-Correa, García-Morales and Cordón-Pozo, (2007) innovation is based on multiple and simultaneous influences of individual and collective determinants.

Odumeru, (2013), posits that innovation is a strategy that is widely accepted by most organizations in contemporary economies. Robbins and Coulter (2006) defined innovation as the process of taking creative ideas and turning them into useful products or work methods. This is in contrast to invention which was defined by these authors as the process of developing new ideas. Parashar and Singh (2008) defined innovation as the ability to combine two or more knowledge. Tran (2008) on the other hand viewed innovation as the creative and commercial embodiment of organizational learning. Laudon and Laudon (2020) defined innovation as a potential new combination that results in radical breaks with the past, making a substantial part of accumulated knowledge obsolete. They viewed innovation within the context of manufacturing industries as a means of developing and sustaining core competencies through development of internal capabilities, set ups of research and development R&D departments and strategized research scopes and investments.

Odumeru, (2013) citing Wirtz, (2010), says innovation is the development and successful establishment of a technical, organizational, business related, institutional or social solution of a problem, which is perceived as groundbreaking and new, accepted by pertinent users and pursued by innovators in anticipation of an achievement. He differentiated innovation from invention using Thomas Edison's statement the real challenge in innovation was not invention coming up with good ideas but in making, they work technically and commercially. Hauser, Tellis and Griffin (2006) stated that for success in innovation, organizations must take the needs of customers as paramount, and get them satisfied through innovative products/services. They therefore defined innovation as the process of bringing new products and services to a target market. Innovative activities introduce new products, create new demand and substitute for old products (UNIDO, 2008).

Innovation Strategies

Innovation strategy is basically a strategic flexibility approach and represents the firm's strategy in adjusting to current conditions and not showing the strategic gap in any case. Strategic innovation is an important factor for organization, sustainable competitive advantage and financial performance (Nybakk & Jenssen, 2012). Strategy innovation is seen as capable of creating organizational direction by charting the course of the firm's effort, by focusing the effort through promoting coordination, by providing people with an easy way to understand the organization and by providing consistency and reducing ambiguity (Mintzberg, Ahlstrand & Lampel, 2009). Strategic innovation refers to implementation of new ideas, processes, products or services (Bitar, 2008). Jin, Hewitt and Thompson (2009) define strategic innovation as a future-focused business development framework that identifies breakthrough growth opportunities, accelerates business decisions and creates near-term, measurable impact within the context of a longer-term vision for sustainable competitive advantage. Strategic innovation challenges an organization to look beyond its established business boundaries and mental models and to participate in an open minded, creative exploration of the realm of possibilities. The significance of strategic innovation to an organization lies in its ability to supplant competition by generating more value in the long run (Jin, Hewitt & Thompson, 2009).

Strategic innovation alone is the acceptance of any idea or conduct related to a product, service, system, device, policy or program that is new to the adopting organization. It is the inclusion of any policy, program, structure, process or any market or product that a manager perceives to be true. It is also viewed as the generation, acceptance and implementation of new ideas, products, processes or services. It involves the successful implementation of creative ideas within an organization (Damanpour & Goplakrishnan, 2010).

Strategic innovation is one of the fundamental instruments of growth strategies to enter new markets, to increase the existing market share and to provide the company with a competitive edge (Nybakk & Jenssen, 2012). Motivated by the increasing competition in global markets, companies have started to grasp the importance of strategic innovation, since swiftly changing technologies and severe global competition rapidly erode the value added of existing products and services. Thus, strategic innovations constitute an indispensable component of the corporate strategies for several reasons such as to apply more productive processes, to perform better in the market, to seek positive reputation in customers" perception and as a result to gain sustainable competitive advantage. Innovations provide firms a strategic orientation to overcome the problems they encounter while striving to achieve sustainable competitive advantage (Hitt, Ireland, Camp & Sexton, 2009).

However, strategy is the direction and scope of an organization over the long term which achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholders' expectations. Innovation strategy in any business or industry involves aligning the product life cycles of the company with their various research and development activities. Oke and Goffin (2009) posited that the first stage in formulating an innovation strategy is to describe what innovation means to the institution or the focus areas in terms of innovation. By comprehending the drivers of innovation needs, a company can expand its focus areas for innovation.

Innovation strategy gives a clear direction and concentrates the effort of the whole organization on a common innovation end. The innovation strategy should specify how the significance of innovation will be communicated to all the employees to attain their buy-in and must openly reflect the significance that management places on innovation and the alignment to overall business strategy. The management of high performing institutions was tangibly and visibly committed to new product development and overtly formulated and communicated the institution's new product development strategy (Bessant & Francis, 2009). Markides (2007) referred to strategic innovation as the strategy of breaking rules, implying that strategic innovation is an extreme on surviving in a volatile market. Gebauer, Worch and Truffer (2012) extended that support by stating that strategic innovation is a fundamentally different way of competing in an existing business and it starts with the innovation in one's business model leading towards a new way of playing the game. While other academics agree that the organization's business model is at the hearth of strategic innovation, not all researchers go till the extent of strategic innovation aiming at the disruption of the industry. Strategic innovation is about creation of new markets and leaps in customer value and reshaping the existing markets to achieve value improvements for customers (Odhiambo, 2008). Strategic innovation has a clear aim of achieving competitive advantage by creating customer value and new markets.

Aggressive innovation

Aggression is a noun that is generally defined as an act of aggressive behavior (concise oxford dictionary). The term aggression and aggressive behavior are used interchangeably. Aggressive forms of behavior can be characterized by verbal or physical attack. Aggression may be either appropriate (self-protective) or alternatively, it may destructive to the self and others (Abdimahad, 2023 citing Ferris & Gurriso, 1996). Some fields the term aggression refers to a range of behaviors that can result in both physical and psychological harm to one self, others, or objects in the environment. Aggression can take a variety of forms, including: physical, verbal, mental, and emotional. While we often think of aggression as purely in physical forms such as hitting or pushing, mental aggression can also be very damaging (Cherry, 2017). Aggression has also been viewed as a heterogeneous concept encompassing a wide variety of behaviors (Bushman, DeWall & Anderson, 2011). Researchers have attempted to create more homogeneous categories in this behavioral domain by identifying subtypes of aggression based on statistical techniques such as factor analysis (Bushman et al., 2011).

Aggression is overt, often harmful, social interaction with the intention of inflicting damage or other unpleasantness upon another individual. It may occur either in retaliation or without provocation in humans, frustration due to blocked goals can cause aggression. Human aggression can be classified into direct and indirect aggression, whilst the first is characterized by physical or verbal behavior intended to cause harm to someone, the second one is characterized by a behavior intended to harm social relations of an individual or group (Veiga, Aranda, Stein, Franci, Miczek, Lucion & Almeida, 2011).

Aggression can have adaptive benefits or negative effects. Aggressive behavior is an individual or collective social interaction that is a hostile behavior with the intention of inflicting damage or harm. Two broad categories of aggression are commonly distinguished, one includes effective and hostile, reactive, or retaliatory aggression that is a response to provocation, and the other includes instrumental, goal oriented or predatory, in which aggression is used as a mean to achieve a goal (Veiga, et al., 2011). Aggressiveness measures the firm's ability to engage organizational resources in executing aggressive strategies and the pursuit of increased market share as a means of achieving business unit profitability. The aim of the firm is to possess higher market share ahead of competitors (Abiodun, 2009). Firms exhibit Aggressiveness through research and development. Resource dedication, investments and innovativeness point out Aggressiveness of a firm. Aggressiveness allows a firm to allocate its resources to improve market position at a relatively faster rate than its competitors. Aggressive firms are resolute to be market leaders (Omoruyi & Chima 2020 citing Venkatraman, 1989)

Competitive Aggressiveness, Innovation and Profitability (innovation as a mediator)

According to Organization for Economic Co-operation and Development (2009), innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. Innovation refers to creating something new and implementing it successfully at a market. Innovation in firms takes place when knowledge is commercialized, for example in the form of new products, services, processes, or business models (Baldwin & Gellatly, 2008).

Innovation can be broadly categorized as radical or incremental, where radical innovations are new technologies, processes or new products that fill needs perhaps not yet recognized while incremental innovations improves what already exists (Chetty & Stangl, 2010). The distinction here is about the degree of change associated with the innovation and the resulting impact on a firm's perceived risk and existing core competencies. The OECD (2009) identified four types of innovation as product innovation, process innovation, marketing and organizational innovation. Product innovation means introducing the new or significantly improved products or services (Polder, Leeuwen, Mohnen & Raymond, 2010).

For product innovation, the product must either be a new product or significantly improved with respect to its features, intended use, components and material. Change in design that brings significant change in the intended use or characteristics of the product is also considered as product innovation (OECD, 2009). It is also argued that the reason why firms aim product innovation is to bring efficiency in the business (Polder et al. 2010). Process innovation means improving the production and logistic methods significantly or bringing significant improvements in the supporting activities such as purchasing, accounting, maintenance and computing (Polder et al., 2010). OECD (2009) defined the process innovation as implementation of the production or delivery method that is new or significantly improved. This includes significant changes in techniques, equipment and software. Process innovations can be intended to decrease production unit costs, to increase quality, or to produce or deliver new or significantly improved products. Marketing innovation is defined as the identification of new markets and finding out how they are better served or how they may become more receptive to the available products (Shergill & Nargundkar 2015).

Innovation and Organizational Performance

Empirical evidence which connects innovation with organizational outcomes such as financial performance abounds in literature. In the study of a business operating in Istanbul, Turkey, Gokmen and Hamsioglu (2011) discovered the existence of a relationship between innovation and organizational performance. Costa and Cabrel (2010) studied the effect of differentiated knowledge source and learning process on technology capacity to innovate and competitive performance using selected Brazilian export companies. The study found the existence of a positive relationship between knowledge, innovative capabilities and competitive performance. Lim, Schultmann and Ofori, (2010) studied the effect of innovation on performance of construction firms using data statistical data across 18 Organization for Economic Cooperation and Development (OECD) countries and expert interviews in Singapore. They discovered that due to the fact that construction projects are awarded by clients based on lowest cost, innovation appears to be an unfeasible competitive strategy.

However, their study revealed that construction firms can develop their competitive advantage through manipulating innovations that consumers are willing to pay for and innovations that would reduce construction costs. They also recommended that construction firms first utilize quality improvements to exploit consumers' willingness to pay for innovative products. This initiative would enable construction firms to improve their finances for innovation and develop their "brand" in construction products. Sustainable competitive advantage could then be firmly established when construction firms engage in productivity improvements that lead to lower construction costs and/or faster completion times. Using DHL as a case study, Wirtz (2010) found the existence of a positive relationship between network innovation, competitiveness and financial performance.

Organizational Effectiveness

In the 1980s, organizational effectiveness became more prominent and switched to being a concept from the status of a construct (Henry, 2011). This concept is related to issues such as the ability of an organization to access and absorb resources and consequently achieve its aims (Federman, 2009). As Gigliotti (1987) cited by Giti and Suhaida (2012) said, a unit which is individually ineffective in terms of cooperation with the rest of the organization is doomed to failure. Cameron (1978) cited by Giti et al.,

(2012) pointed out that organizational effectiveness is the proficiency of the organization at having access to the essential resources. However, McCann (2004) cited by Giti et al., (2012) noted it as the criterion of the organization's successful fulfillment of their purposes through core strategies.

Organizational effectiveness is regularly viewed as the main factor inside business and training area, and also the way to survival in associations of every assorted type in the twenty-first century (Rieley, 1993 cited by Amin & Shila, 2015). The investigation of organizational effectiveness has turned into an extremely vital zone of exploration because of the predominant place associations possess in our lives (Ghorpade, 1970 cited by Amin et al., 2015). Zammuto (1982) cited by Amin et al., (2015) showed that there has been a distinction of thought on the best way to characterize organizational effectiveness including characterizing it as "the accomplishment of objectives, objective achievement without forcing strains on the authoritative framework, and as far as meeting criteria set by the constituencies of an association". There are three approaches that have been most normally utilized within the investigation of organizational effectiveness namely the goal approach, the systems resource approach, and the process approach. A fresher approach has also emerged called the multiple constituency approach, which is a mixture of the initial three. In the model of goal approach, the effectiveness of an association "is measured as stated by the capability of the association to attain desired objectives. In the systems approach to organizational effectiveness, which drew on the general frameworks hypothesis, effectiveness "is evaluated regarding the association's capability to secure rare resources. The process approach points out to the inside procedures and general working inside an association; for example, the work environment and worker fulfillment. A suitable elective to the objective, frameworks, and process approaches for examining and measuring organizational effectiveness is the multiple constituencies (MC) approach. This model is accepted to have been advanced in an exertion to endeavor to improve the shortcomings of the objective, methodology, and framework displays by joining the two viewpoints (Zammuto, 1982 cited by Amin et al., 2015).

Methodology

In this study, a survey design was adopted to obtain accurate data based on the opinion of the respondents and the researcher used primary data to obtain information from the respondents. Survey research design is basically used when a researcher is planning to undertake a detailed study and sample the option of the respondents that was involve in the study. This design aided the researcher to ascertain the views, ideas and feelings of those that are directly concerned with the project. The researcher mainly used primary source of data on the course of gathering data from the respondents. The primary data for this study was collected via the use of questionnaire and formal discussions. To obtain information from the respondents, copies of questionnaire were distributed to the staff of the selected manufacturing firms in South-South, Nigeria. Population is defined as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. The population of this research comprised of the staff of the twelve (12) selected manufacturing firms in South-South, Nigeria. Hence, the choice of these manufacturing firms was based on the firms' size, financial stability, informed reality of their operations and their duration in existence. The population of the study was 1221 . The researcher adopted the Israel Glenn (2003) formula who proposed for +/-3%, +/-5%, +/-7% and +/-10% precision levels where the confidence level is 95% in determining the sample size of 301.

The researcher used both inferential and descriptive statistics to analyze the data for the study. In order to realize the objectives of the study, objectives (i) and (ii) were analyzed using simple linear regression model to examine the effect of aggressive innovation on the performance of the selected manufacturing firms in South-South, Nigeria and evaluate the influence of proactive innovation on productivity of the selected manufacturing firms in South-South, Nigeria. Objectives (iii) and (iv) were analyzed using Analysis of Variance (ANOVA) to determine the degree to which defensive innovation enhance value creation of selected manufacturing firms in South-South, Nigeria and ascertain the extent to which analytics innovation boost competitive strength of selected manufacturing firms in South-South, Nigeria while objective (v) was analyzed using Pearson Correlation Coefficient to establish the relationship between risk-taking innovation and market share of selected manufacturing firms in South-South, Nigeria.

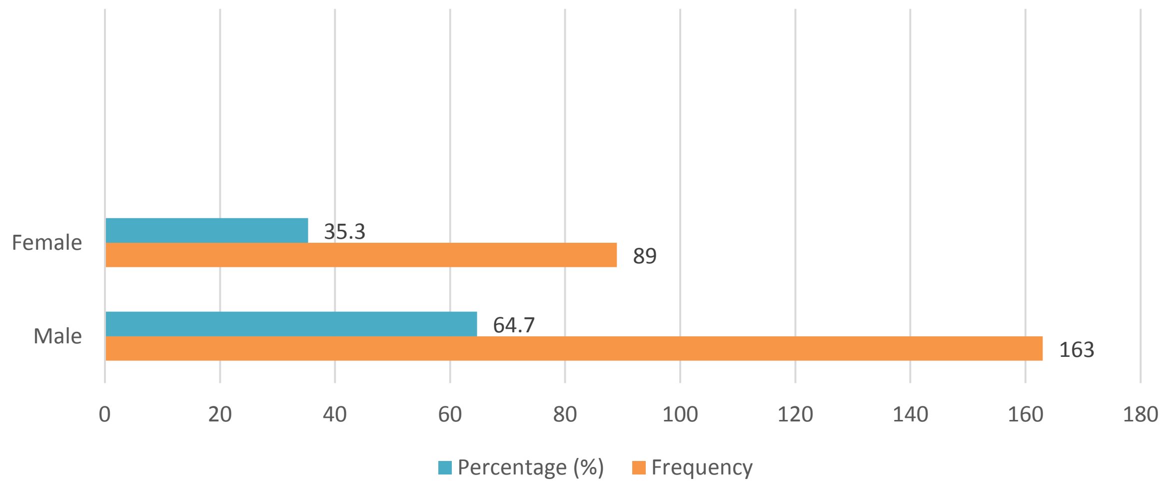
Results and Discussions

Table 1 and figure 1 revealed that a total of three hundred and one (301) copies of the questionnaire were distributed to the various manufacturing firms in South-South, Nigeria. Out of this number, forty nine (49) copies of questionnaire were lost or wrongly filled with percentage ratio of 16.2% while two hundred and fifty two (252) copies of questionnaire were correctly filled and returned with percentage ratio of 83.7% and this served as the basis of the study.

Table 1: Respondents' distribution by gender status

Gender Status	Frequency	Percentage (%)
Male	163	64.7
Female	89	35.3
Total	**252**	**100**

Source; Field Survey, 2024



Analysis of respondents' distribution by gender status

Table 4.1 indicated that majority 64.7% represent male respondents while 35.3% represents the female respondents. This shows that the difference in gender distribution is high because of the nature of job in the studied organizations. Hence, male constitute the study more than female.

Respondents' distribution by educational qualification

Educational Level	Frequency	Percentage (%)
M.Sc.	33	13.1
B.Sc./PGD/HND/ND	102	40.5
FSLC/SSCE/GCE	73	29.0
Others	44	17.5
Total	**252**	**100**

Source: Field Survey, 2024

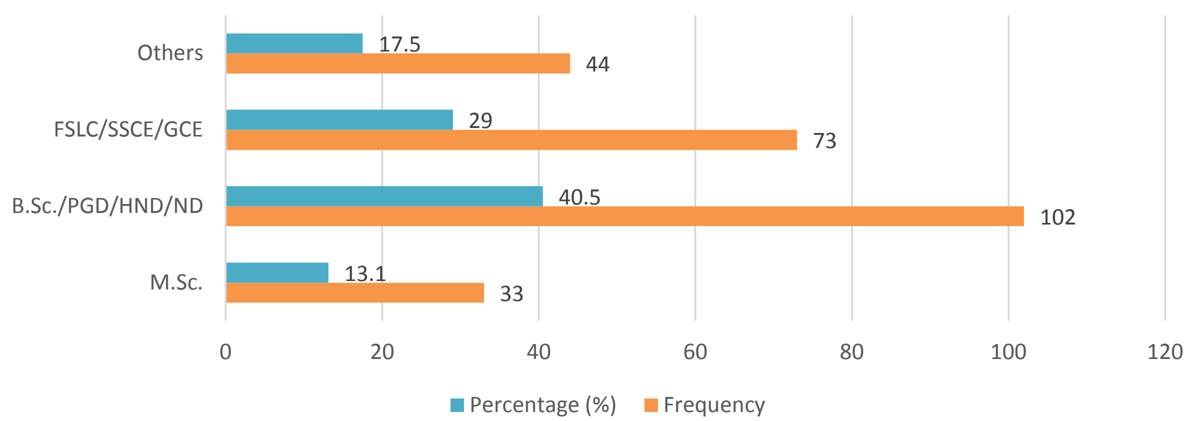


Figure 2: Analysis of respondents' distribution by educational qualification

Table 4.5 and figure 4.5 indicated that majority 40.5% were B.Sc./PGD//HND/ND holders followed by 29.0% who were FSLC/SSCE/GCE holders, 17.5% were holders of other qualifications while holders of M.Sc. represents 13.1%. This finding showed that majority of the respondents were educated.

Data Presentation

Table 3: Examine the effect of aggressive innovation on the performance of the selected manufacturing firms in South-South, Nigeria

(N = 252)

RESPONSES	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN	Std. Dev.
Firms that do things differently by reconfiguration and redefining the product and distribution channels overcome its rivals	116	87	29	11	9	1046	4.2	.057
Firms that overcome its competitors set ambitious market-share goals and also try to achieve them	112	92	21	13	14	1031	4.1	.831
Successful aggressive firms requires defined markets in terms of the number, sizes and types of their customers, as well as the breadth of their product line	122	90	22	10	8	1064	4.2	.033
Aggressive firms sacrifice profits in order to introduce a new product to the market earlier than their competitors	128	85	22	8	9	1071	4.3	.814

Source: Field Survey, 2024

Decision Rule:

- If Mean < **3.5,** the effect is not high or the respondents do not agree
- If Mean ≥ **3.5,** the effect is high or the respondents agree

Table 4.7 showed the effect of aggressive innovation on firm performance of the selected manufacturing firms in South-South, Nigeria. Majority of the respondents with the highest mean scores strongly agreed that aggressive firms sacrifice profits in order to introduce a new product to the market earlier than their competitors (x=4.3), successful aggressive firms requires defined markets in terms of the number, sizes and types of their customers, as well as the breadth of their product line (x=4.2), firms that do things differently by reconfiguration and redefining the product and distribution channels overcome its rivals s (x=4.2) and firms that overcome its competitors set ambitious market-share goals and also try to achieve them (x=4.1).

Therefore, since the means of all the responses were ≥ 3.5, this indicated that aggressive innovation improves firms' performance.

Table 4.8: Evaluate the influence of proactive innovation on productivity of the selected manufacturing firms in South-South, Nigeria

(N = 252)

Responses	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN	Std. Dev.
Proactive firms seize market opportunities and make innovation to get the advantages of them before their competitors	126	82	22	13	9	1059	4.2	.822
Proactive firms seize initiative and acting opportunistic to shape the environment to affect trends and create demand	118	99	19	-	16	1059	4.2	.803
Using new product/service approach to compete enhance firms competitive advantage	116	93	26	10	7	1057	4.2	.812
Encouraging innovation activities and continue research on new product opportunities increased productivity	122	86	24	9	11	1055	4.2	.807

Source: Field Survey, 2024

Table 4.8 showed the influence of proactive innovation on productivity of the selected manufacturing firms in South-South, Nigeria. Majority of the respondents with the highest mean scores strongly agreed that proactive firms seize market opportunities and make innovation to get the advantages of them before their competitors (x=4.2), proactive firms seize initiative and acting opportunistic to shape the environment to affect trends and create demand (x=4.2), using new product/service approach to compete enhance firms competitive advantage (x=4.2) and encouraging innovation activities and continue research on new product opportunities increased productivity (x=4.2). Therefore, since the means of all the responses were ≥ 3.5, this indicated that proactive innovation positively influenced productivity

Test of Hypotheses

$H0_1$: Aggressive innovation has no significant effect on the performance of selected manufacturing firms in South-South, Nigeria

Table 4.12: Regression analysis on aggressive innovation and organizational productivity

Variable	Parameters	Coefficient	Std error	T – value
Constant	β_0	1.298	0.105	7.343
A1 (X_1)	β_1	0.739	0.024	3.448**
R-Square		0.877		
Adjusted R – Square		0.851		
F – statistics		80.228***		

Source: Field Data, 2024

Table 4.12 showed the coefficients of aggressive innovation and organizational productivity. The coefficient of multiple determinations (R^2) was 0.851 which implies that 85.1% of the variations in dependents were explained by changes in the independent variable while 14.9% were unexplained by the stochastic variable indicating a goodness of fit of the regression model adopted in this study which is statistically significant at 1% probability level.

The coefficient of aggressive innovation was statistically significant and positively related to organizational productivity at 5 percent level (3.448**). Therefore, we reject null hypothesis and uphold the alternative hypothesis that aggressive innovation has a significant effect on the performance of selected manufacturing firms in South-South, Nigeria.

$H0_2$: Proactive innovation has no significant influence on the productivity of selected manufacturing firms in South-South, Nigeria

Table 4.13: Regression analysis on proactive innovation and organizational performance

Variable	Parameters	Coefficient	Std error	T – value
Constant	β_0	2.033	0.118	8.761
PI (X_1)	β_1	0.794	0.027	5.639**
R-Square		0.782		
Adjusted R – Square		0.766		
F – statistics		83.183***		

Source: Field Data, 2024

Table 4.13 showed the coefficients of proactive innovation and organizational performance. The coefficient of multiple determination (R^2) was 0.766 which implies that 76.6% of the variations in dependents were explained by changes in the independent variable while 23.4% were unexplained by the stochastic variable indicating a goodness of fit of the regression model adopted in this study which is statistically significant at 1% probability level.

The coefficient of proactive innovation was statistically significant and positively related to organizational performance at 5 percent level (5.639**). Therefore, we reject null hypothesis and uphold the alternative hypothesis that proactive innovation has a significant influence on the productivity of selected manufacturing firms in South-South, Nigeria.

Discussion of Findings

Hypothesis one simple linear regression analysis indicated that aggressive innovation has a significant effect on the performance of selected manufacturing firms in South-South, Nigeria.

The study further revealed that majority of the respondents with the highest mean scores strongly agreed that aggressive firms sacrifice profits in order to introduce a new product to the market earlier than their competitors (x=4.3), successful aggressive firms requires defined markets in terms of the number, sizes and types of their customers, as well as the breadth of their product line (x=4.2), firms that do things differently by reconfiguration and redefining the product and distribution channels overcome its rivals (x=4.2) and firms that overcome its competitors set ambitious market-share goals and also try to achieve them (x=4.1).

This findings are in line with the findings of Aroyeun, Adefulu and Asikhia (2018) who carried out a study on the effect of competitive aggressiveness on competitive advantage of small and medium scale enterprises (SMEs) in Ogun State, Nigeria. The findings of this study revealed that competitive aggressiveness has positive significant effect on competitive advantagrowth to enhance their competitive advantage which is critical for organizational performance, and that maintaining good relationships with clients is an important factor to be considered. The findings also aligns with the study of Patrick (2018) on the competitive aggressiveness and organizational profitability of hotels in Port Harcourt, Nigeria. The study concludes competitive aggressiveness has a significantly influences organizational profitability and recommended that hotels should build on their distinctive competitive advantage so to sharpen their competitive aggression in the industryge of SMEs and recommended that entrepreneurs should employ appropriate price control mechanisms, invest heavily in marketing, advertisement, sales promotion and aggressive

Hypothesis two simple linear regression analysis indicated that proactive innovation has a significant influence on the productivity of selected manufacturing firms in South-South, Nigeria. The study further revealed that majority of the respondents with the highest mean scores strongly agreed that proactive firms seize market opportunities and make innovation to get the advantages of them before their competitors (x=4.2), proactive firms seize initiative and acting opportunistic to shape the environment to affect trends and create demand (x=4.2), using new product/service approach to compete enhance firms competitive advantage (x=4.2) and encouraging innovation activities and continue research on new product opportunities increased productivity (x=4.2).This findings is tandem with the findings of Oni (2012) who investigated the relevance of entrepreneurial proactiveness on business performance: Nigerian Companies experience. The findings showed that the enterprise on high entrepreneurial proactiveness responded positively to performance measures with consistent increase in size and employment of qualified and competent personnel and recommended that; to attain a high level of efficiency companies should maximize the performance measures, be socially responsible by concentrating on entrepreneurial proactiveness, operations involving entrepreneurial concerns could reduce producer or service waste and companies should consider entrepreneurial strategies as part of steps for improving performance. The finding also supported the findings of LawanShamsu and Fakhrul (2015) on the relationship between vision, innovation, proactiveness and risktaking on SMEs performance in Nigeria. The study revealed a positive and significant relationship between vision, innovation, proactiveness and SMEs performance in Nigeria and recommended that empirical research need to be conducted to examine the extent of the relationship between vision, innovation, proactiveness and risk-taking on SMEs performance in Nigeria.

Conclusion and Recommendations

The study therefore concludes that:

i. Aggressive innovation has a positive significant effect on the performance of selected manufacturing firms in South-South, Nigeria.

ii. Proactive innovation has a positive significant influence on the productivity of selected manufacturing firms in South-South, Nigeria

Therefore the study recommends that:

- Management of the selected manufacturing firms should continuously intensify aggressive innovation and competitiveness at individual and firm's level. This will enhance their prompt response to rival's every move in industry. Also, there is need to improve and sustain innovative activities, be flexible to change through innovative ideas by the manufacturing firms as this will enhance firms' overall performance.
- Management of the firms should be more attuned towards the potentials and proactive capabilities of their subordinates and should be more flexible with regards to shared responsibilities and roles such that workers are offered the required opportunities and platforms to be pro-active in their roles and responsibilities. Also, management needs to be proactive in reacting to environmental changes and through their culture should allow employees to showcase their proactive skills

References

Abdimahad, A. A. (2023). The Impact of Management Aggressiveness on

Employee Performance in Mogadishu-Somalia. *IOSR Journal of Business and Management* (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 25, Issue 1. Ser. II (January. 2023), PP 20-42 www.iosrjournals.org.

Abiodun, A. J. (2009). Exploring the relationship between human personal values, strategy dimensions and performance. Annals of University of Bucharest, *Economic and Administrative Series* 3, 237-248.

Ahimbisibwe, G. M., & Abaho, E. (2013). Export entrepreneurial orientation and export performance of SMEs in Uganda. *Global Advanced Research Journal of Management and Business Studies*, 2(1), 56- 62.

Aigboje, P. O. (2018). Competitive aggressiveness and organizational profitability of hotels in Port Harcourt, Nigeria. *International Journal of Social Sciences and Management Research*, 4(5), 37-44.

Alex, G. (2020). Disruption, Self-Presentation, and Defensive Tactics at the Threshold of Learning. Review of General Psychology 1–15 © 2020 The Author(s) Article reuse guidelines: *sagepub.com/journals-permissions* DOI: 10.1177/1089268020914258 journals.sagepub.com/home/RGP.

Al-Omoush, K. S., Simón-Moya, V., & Sendra-García, J. (2020). The impact of social capital and collaborative knowledge creation on e-business pro-activeness and organizational agility in responding to the COVID-19 crisis. *Journal of Innovation & Knowledge*, 5(4), 279-288.

Alvarez-Torres, F.J., Lopez-Torres, .G.C., & Schiuma, G. (2019) Linking entrepreneurial orientation to SMEs' performance: Implications for entrepreneurship universities. *Management Decisions*, 57(12), 3364- 3386.

Amin, T. & Shila, S. (2015). Enhancing Organizational Effectiveness by Performance Appraisal, Training, Employee Participation, and Job Definition. *European Journal of Business and Management* www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.7, No.12.

Anderson, N., Potočnik, K. & Zhou, J. (2014). Innovation and Creativity in Organizations A State-of the-Science Review, Prospective Commentary, and Guiding Framework, *Journal of Management*, Vol. 40 No.5, pp.1297-1333.

Angeline, W. W., Robert, G., Kenneth, N. W. & Joseph, M. (2015). The relationship between pro-activeness and performance of small and medium agro processing enterprises in Kenya. *International Journal of Economics, Commerce and Management United Kingdom* Vol. III, Issue 12, December 2015 Licensed under Creative Common Page 58 http://ijecm.co.uk/ ISSN 2348 0386.

Ann, O., Origho, O.J., & Ukpere, W. (2014). Innovation through global collaboration: A new Source of Competitive Advantage (A Study of Nigerian Breweries PLC). *Mediterranean Journal of Social Sciences; 5(1); 209- 724.*

Antoncic, B., & Hisrich, R.D. (2004). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16(5)495-527.

Aragón-Correa, J.A., García-Morales, V.J. & Cordón-Pozo, E. (2007). Leadership and organizational learning's role on innovation and performance: Lessons from Spain. *Industrial marketing management, 2007. 36(3): p. 349-359.*

Aroyeun, T. F.I, Adefulu, A. D., & Asikhia, O. U. (2018). Effect of competitive aggressiveness on competitive advantage of selected small and medium scale enterprises in Ogun State Nigeria. *European Journal of Business and Management,* 10(35), 125-135.

Asika, O. C. & Konya, K. T., (2020). Competitive Aggressiveness and Business Performance of Event Management Firms in Port Harcourt, Nigeria. *International Journal of Business & Law Research* 8(1):99-108, Jan –Mar., 2020

Axtell, C. M., Holman, D. J., Unsworth, K. L., Wall, T. D., Waterson, P. E., & Harrington, E. (2010). Shop floor innovation: Facilitating the suggestion and implementation of ideas. *Journal of occupational and organizational psychology*, 73, 265-285.

Baader, F., Borgwardt, S., Koopmann, P., Thost, V., & Turhan, A.-Y. (2020). Semantic technologies for situation awareness. *KI-Künstliche Intelligenz,* 34(4), 543-550.

Baba, R., & Elumalai, S. (2011). Entrepreneurial orientation of SMEs in Labuan and its effects on performance. *Working Paper Series* No. 1113. Malaysia.

Baldwin, J., & Gellatly, G. (2008). Innovation strategies and performance in SMEs. UK: Edward Elgar.

Bateman, T., & Crant, J. M. (1999). Proactive behavior: Meaning, impact, recommendations. *Business Horizons*, 42(3), 63-56.

Baumeister, R. F., Dale, K., & Sommer, K. L. (1998). Freudian defense mechanisms and empirical findings in modern social psychology: Reaction formation, projection, displacement, undoing, isolation, sublimation, and denial. *Journal of Personality*, 66(6), 1081–1124.

Beaver, G. (2010). Small Business, Entrepreneurship and Enterprise Development. London, *United Kingdom: Pearson Education Ltd.*

Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of Business Venturing*, 2(1), 79–93.

Benoît, G. (2008). Innovation: the history of a category. *Project on the intellectual history of innovation working paper* No. 1.

Bentley, K. A., Omer, T. C. & Sharp, N. Y. (2013). Business Strategy, Financial Reporting Irregularities, and Audit Effort, *Concurrent Accounting Research*, Vol. 30 (2013) No.2, p.780- 817.

Bessant, J., & Francis, D. (2009). Developing strategic continuous improvement capability. *International Journal of Operations & Production Management. Vol. 19 No.11, 1106-19.*

Bettencourt, B. A., Talley, A., Benjamin, A. J., & Valentine, J. (2009). Personality and Aggressive Behavior Under Provoking and Neutral conditions. *Psychological Bulletin*, 132.

Bii J., Akuku C., Geoffrey, K. & Onyango, R. (2023). Effect of Competitive Aggressiveness On

Performance of Star Rated Hotels in North Rift Region, Kenya, *International Journal of Business and Management Review,* Vol.11, No.8, pp.1-16,

Billig, M. (1999). *Freudian repression: Conversation creating the unconscious*. Cambridge University Press.

Blackford, B. (2010). The Role of CEO Statements of Aggressiveness and the Competitive Aggressiveness of Firms: What is the Impact on Performance? Dissertations, Theses, and Student Research from the College of Business.

Blackford, B. (2014). CEO statements of aggressiveness and the competitive aggressiveness of firms: is there a relationship? *Institute of Behavioral and Applied Management*, 15 (3), 140-167.

Bledow, R., & Frese, M. (2009). A situational judgment test of personal initiative and its relationship to performance. *Personnel Psychology*, 62, 229–258.

Bleeker, I. (2011). The influence of entrepreneurial orientation on the innovation process: *An empirical research on manufacturing SMEs Master's thesis. University of Twente.*

Boohene, R., Marfo-Yiadom, E., & Yeboah, M.A. (2012). An empirical analysis of the effect of entrepreneurial orientation on firm performance of auto artisans in the Cape Coast Metropolis. *Developing County Studies*, 2(9), 77- 88.

Brzozowski, J., Cucculelli, M., & Peruzzi, V. (2018). Firms' Pro-activeness. During the Crisis: Evidence from European Data. *Entrepreneurship Research Journal*, 3(9). https://doi org/10.1515/erj-2017-0215.

Bushman, B. J., DeWall, C. N., & Anderson, C. A. (2011). The General Aggression Model: Theoretical Extensions to Violence. *Psychology of Violence*, 245-258.

Byrnes, J. (2012). *Preventing Aggressive Behavior*. New york: Pearson.

Camison, C., & López, A. V. (2010). An examination of the relationship between manufacturing flexibility and firm performance: The mediating role of innovation. *International Journal of Operations & Production Management, 30(8), 853-878.*

Carol, Y. L. & Mavis, C. C. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News, 2007. 30(2): p. 115-132.*

Chalchissa, A. K. & Bertrand, S. B. (2017). Competitive strategy orientation and innovative success: Mediating market orientation a study of small-medium enterprises. *Global Journal of Management and Business Research,* 17(3): 65-84.

Chaoran, R. (2022). Strategic Aggressiveness and Innovation. Frontiers in Business, *Economics and Management* ISSN: 2766-824X | Vol. 6, No. 1, 2022.

Charlton, G. (2016). *How technology and data has driven innovation for Graze.* https://www.clickz.com/how-technology-and-data-has-driven-innovation-forgraze/100706.

Cherry, K. (2017). *What factors lead to aggression*? Website.

Chetty, K., & Stangl, L.M. (2010). Internationalization and innovation in a network relationship context. *European Journal of Marketing,* 44(11/12), 1725-1743.

Chou, H. (2009). The effect of market orientation intention and superiority on new product performance. *The Journal of American Academy of Business*, 14(2), 93-97.

Christian, L., & Sveinn, V. (2015). Entrepreneurial orientation, firm strategy and small firm performance. Boulevard Lascrosse: Research Center for Entrepreneurship and Growth Strategies, Toulouse Business School, Université de Toulouse.

Costa, M.B & Cabral, J.O (2010). The Relationship Knowledge, Learning, Innovation and Competitive Advantages: A Conceptual Model. *International Journal on Technology, Knowledge and Society. 6(3), 21 – 34.*

Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. Entrepreneurship: *Theory and Practice*, 35(5), 855– 872.

Covin, J. G., & Miller, D. (2014). International entrepreneurial orientation: conceptual considerations, research themes, measurement issues, and future research directions. *Entrepreneurship Theory and Practice,* 38(1), 11-44.

Covin, J. G., &.,Slevin, D. P. (2013). Strategic process effect on the entrepreneurial orientation, sales growth rate relationship, *Journal of Strategic Management*, 2(3), 563-598.

Cramer, P. (2012). *The development of defense mechanisms: Theory, research, and assessment. Springer Science & Business Media.*

Cramer, P. (2015). Defense mechanisms: 40 years of empirical research. *Journal of Personality Assessment*, 97(2), 114–122.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. Los Angeles: University of Nebraska–Lincoln.

Dada, O. .L, & Watson, A. (2013). Entrepreneurial orientation and the franchise system: Organizational antecedents and performance outcomes. *European Journal of Marketing*, 47(5), 790–812.

Damanpour, F. & Gopalakrishnan, S. (2010). The dynamics of the adoption of product and process innovations in organizations. *Journal of Management Studies, 38(1), 45-65.*

Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management, 101-115.*

De vos, A., De Clippeleer, I., & Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology*, 82, 761–777.

Deakins, D. & Freel, M. (2012). Entrepreneurship and small firms. 6th European ed. Edn.

Deegan, D. D. (2012). Management theory in Global Competition and Competitive Advantage. *Social and Behavioral Sciences, 195: 1365-1370.*

Derfus, P.J., Maggitti, P.G., Grimm, C. M. & Smith, K.G. (2008). The red queen effect: competitive actions and firm performance, *Academy of Management Journal*, 51(1), 61- 69.

Dess, G. G., Lumpkin, G. T., & McGee, J., E. (2013). Linking corporate entrepreneurship to strategy structure and process: Suggested research directions. *Journal of Entrepreneurship Theory and Practice*, 23(3), 85 – 102.

DeVaney, S.A. (2015). Understanding the millennial generation. *Journal of Financial Service Professionals*, 69(6), 11-14.

Dodgson, M., Gann, D. &, Salter, A. (2008). *The management of technological innovation: strategy and practice.* 2nd Edition, Oxford University Press.

Dörr N., & Müller-Prothmann T, (2014) Innovations management: Strategien, Methoden und Werkzeuge für systematische Innovationsprozesse. (Innovation Management: Strategies, methods and tolls for systematical innovation processes), München: Hanser.

Dupre, K. E., Inness, M., Connelly, C. E., Barling, J., & Hoption, C. (2009). Workplace Aggression in Teenage Part-Time Employees. *Journal of Applied Psychology*, 91.

Eggers, F., Kraus, S., Hughes, M., Laraway, S., & Syncerski, S. (2013). Implications of customer and entrepreneurial orientations for SME growth. *Management Decision*, 51(3), 524-546.

Elliott, M., (2019). *7 things to buy instead of the new IPOD touch*. CNET. Available at: <https://www.cnet.com/news/7-things-to-buy-instead-of-the-new-ipod-touch/> [Accessed 22 May 2020].

Escrig, A. B., Segarra, M., García, B. & Beltrán, I. (2018). The impact of hard and soft quality management and proactive behaviour in determining innovation performance. *International Journal of Production Economics,* Vol. 2(4): 1-14.

Estanda, H., (2014). Investigating entrepreneurial orientation and firm performance in the Irialian Agricultural context, *Journal of Agricultural Sciences Technology*, 15(2), 203-214.

Fadiah N. (2016). Defining the concept of innovation and firm innovativeness: A Critical analysis from resource-based view perspective. *International Journal of Business and Management* 11 (6), 87-94. http://doi.org/10.5539/ijbm.v11n6p87.

Fairoz, F. M., Hirobumi, T., & Tanaka, Y. (2014). Entrepreneurial Orientation and Business Performance of Small and Medium Scale Enterprises of Hambantota District Sri Lanka. *Asian Social Science*, 6(3), 34–47.

Federman, M. (2009). Essay: Towards an effective theory of organizational effectiveness. Available: http://whatisthemessage.blogspot.com_03_01_archive.html.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford University Press.

Fisher-Blando, J. L. (2008). Aggressive behavior and its effect on job satisfaction and productivity. *Dissertation University of phoenix*, 156.

Francesco, C., Sharon K. P., & Gillian, B. Y., (2018). Does daily proactivity affect well-being? The moderating role of punitive supervision, *Journal of Organizational Behavior*, 40, 1, (59-72),

Fuller, J. B., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75, 329-345.

Fuller, J. B., Marler, L. E., & Hester, K. (2012). Bridge Building within the Province of Proactivity. *Journal Organizational. Behavior.* 8(33), 1053-1070.

Gan, Y., & Cheung, F. M. (2010). From proactive personality to organizational citizenship behavior: Mediating role of harmony. *Psychology Responds*, 3(106), 755-765. https://doi. Organization/10. 2466/pr0. 106. 3. 755-765.

García-Forero, C., Gallardo-Pujol, D., Maydeu-Olivares, A., & Andrés-Pueyo, A. (2009). Disentangling impulsiveness, aggressiveness and impulsive aggression: An empirical approach using self-report measures. *Psychiatry Research*, 40-49.

Gebauer, H., Worch, H. & Truffer, B. (2012). Absorptive capacity, learning processes and combinative capabilities as determinants of strategic innovation. *European Management Journal, 2012, 30 57-73.*

George. J. & Lin, T.M. (2017). Analytics, innovation, and organizational adaptation. *Innovation: management, policy and practice*. 19, (1), 16-22.

Gigliotti, L. (1987). An adaptation of Cameron's model of organizational effectiveness at the academic department level in two-year community colleges. *Unpublished PhD thesis*. Syracuse University.

Gillespie, A., Kadianaki, I., & O'Sullivan-Lago, R. (2012). Encountering alterity: Geographic and semantic movements. *In Journal. Valsiner* (Ed.), The Oxford handbook of culture and psychology (pp. 695–709). Oxford University Press.

Giti, A. & Suhaida bte, A. K. (2012). A review on the models of organizational effectiveness: A Look at Cameron's Model in Higher Education. *International Education Studies* Vol. 5, No. 2.

Glasford, D. E., Dovidio, J. F., & Pratto, F. (2009). I continue to feel so good about us: In-group identification and the use of social identity. Enhancing strategies to reduce intragroup dissonance. *Personality and Social Psychology Bulletin,* 35(4), 415–427.

Godin, B. (2009), Innovation as Evil, *Project on the Intellectual History of Innovation*, INRS: Montreal, Forthcoming.

Goffin K., Herstatt C., & Mitchell R., (2012). Innovations management: Strategien und effektive Umsetzung von Innovationsprozessen mit dem PentathlonPrinzip. Innovation management: Strategies and efficient implementation of innovation processes through Pentathlon principle. München: Finanzbuchverlag.

Gokman, A. & Hansioglu, A. B. (2011). Tacit Knowledge and its Correlation to innovation and Performance in Obtaining Competitive Advantage: A Study in a Business Operating in the Textile Industry. *International Journal of Economics and Administrative Studies. 4(7), 19 – 34.*

Gomez-Uribe, C. & Hunt, N. (2016). The Netflix recommender system: algorithms, business value, and innovation. *ACM Transaction on Management Information Systems*, 6(4): 1-19.

Grant, A., M., & Ashford, S., J., (2008). The dynamics of proactivity at work. Research in organizational behavior. 28, 3-34.

Greguras, G. J., & Diefendorff, J. M. (2010). Why does proactive personality predict employee life satisfaction and behaviors? A field investigation of the mediating role of the self-concordance model. *Personnel psychology*, 63, 539-560.

Grend, M. D., Nwiepe, N. M. & Kpunee, H. N. (2017). A Review of Defensive Strategies for Market Success. *International Journal of Marketing and Communication Studies* ISSN 2545-5273. 2 (3).

Griffin, R. W., & Lopez, Y. P. (2008). Bad Behavior" in Organizations: . *Journal of Management*, 31.

Guisado, M., Guisado,T. M. ,& Sandoval, P. Á. (2013). Determinants of innovation performance in Spanish hospitality companies: analysis of the coexistence of innovation strategies. *The Service Industries Journal,* 33(6). 580-593.

Gunawan, T., Jacob, J., & Duysters, G. (2016). *International Entrepreneurship Management Journal*, 12:575. https://doi.org/10. 1007/s11365-014-0355-y.

Gupta, S., Misra, S. C., Kock, N., & Roubaud, D. (2018). Organizational, technological and extrinsic factors in the implementation of cloud ERP in SMEs. *Journal of Organizational Change Management*, 31(1), 83–102.

Handrich, M., Handrich, F., & Heidenreich, S. (2015). Firm innovativeness-the sufficient condition for business success? Examining antecedents of firm innovativeness and how it affects business success. *International Journal of Innovation Management*, 19(5), 1-26.

Hass, D. (2010). Employee satisfaction and firm SISE, entrepreneurial perspective, Journal of Korea GSJ: 6 (7).

Henry, E. A. (2011). Is the influence of organizational culture on organizational effectiveness universal? An examination of the relationship in the electronic media (radio) service sector in the English speaking Caribbean. *Unpublished PhD thesis*. University of Mississippi.

Hitt, A., Ireland, D., Camp, M. & Sexton, L. (2009). Guest editors‟ introduction to the special issue strategic entrepreneurship: entrepreneurial strategies for wealth creation. *Strategic Management Journal. 2, 43-56.*

Homburg, C., & Fürst, A. (2007). See no evil, hear no evil, speak no evil: A study of defensive organizational behavior towards customer complaints. *Journal of the Academy of Marketing Science*, 35(4), 523–536.

Høyrup, S. (2010). Employee-driven innovation and workplace learning: basic concepts, approaches and themes", Transfer, Vol.16, No.2, pp. 143-154.

Hughes, M., & Morgan, R. E. (2009). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36, 651-661.

Iraguha, F., Ramelan, A., & Setyono, P. (2022). Assessment of current solid waste management practices, community perceptions, and contributions in the city of Kigali, Rwanda. IOP Conference. Series. Earth *Environmental. Science*. 1(1016), 012056. https://doi. Organization/10. 1088/1755-1315/1016/1/012056.

Israel, G. D. (2003). Sampling the Evidence of Extension Program Impact. Program Evaluation and Organizational Development, IFAS, University of Florida. PEOD-5. October.

Ivy, T. & Nur, H. (2021). The effect of innovation, risk-taking, and proactiveness on business performance among MSMEs in Jakarta. Advances in Economics, Business and Management Research, volume 216 Tenth *International Conference on Entrepreneurship and Business Management* 2021 (ICEBM 2021)

Jaja, S. A., & Amah, E. (2014). Mentoring and organizational resilience: A study of manufacturing companies in Rivers State. *IOSR Journal of Business and Management (IOSRJBM),* 16(10), 1-9.

James, C. R. (2008). Designing learning organizations. *Organizational Dynamics*, 32(1), 46- 61.

Jasmine, O. Tamunosiki-Amadi, R. Ogbise, C. & Blessing, I. (2019). Competitive aggressiveness and organizational resilience in mobile telecommunication firms in Rivers State, Nigeria. *International Journal of Entrepreneurship* ISSN 2520-4734 (Online) Vol.3, Issue 1 No.1, pp 1-16, 2019

Jin, Z., Hewitt, N. & Thompson, J. (2009). Innovativeness and performance: Evidence from manufacturing sectors. *Journal of Strategic Marketing 12 (4), 255-266.*

Johnson, M. D. & Fred, S. (2009). Customer Portfolio Management: Toward a Dynamic Theory of Exchange Relationship, *Journal of Marketing*, (66) (1-17).

Kabuoh, M. N., Iwuchukwu, R. C., Onyia, V. A. & Akintaro, A. A. (2020). Competitive Aggressiveness and Market Share of Selected Small and Medium Scale Enterprises in Lagos State Nigeria. *The Journal of Social Sciences Research* ISSN(e): 2411-9458, ISSN(p): 2413-6670 Vol. 6, Issue. 5, pp: 576-585, 2020

Kadarusman, S. R. (2022). Innovativeness, Risk-Taking, Pro-activeness, and Firm Performance with Learning Organizations as Mediating Variables. Matrik: *Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan* Vol. 16, No. 1.

Kadarusman, T. & Siti, R. (2022). Innovativeness, Risk-Taking, Proactiveness, and Firm Performance with Learning Organizations as Mediating Variables. Matrik: *Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan* Vol. 16, No. 1, Februari 2022.

Kadianaki, I. (2014). The transformative effects of stigma: Coping strategies as meaning-making efforts for immigrants living in Greece. *Journal of Community & Applied Social Psychology*, 24(2), 125–138.

Kam-Sing, W. S. (2014). Impacts of environmental turbulence on entrepreneurial orientation and new product success. *European Journal of Innovation Management*, 17(2), 229-249.

Kang, S., & Na, Y. K. (2020). Effects of Strategy Characteristics for Sustainable Competitive Advantage in Sharing Economy Businesses on Creating Shared Value and Performance. *Sustainability, 1-21.*

Karakaya, F. & Telfic, D. (2011). Defensive Marketing and Entry Deterrence Strategy Framework in Global Market, *American Marketing Association*, Conference Preceding.

Katarzyna, S., & Karolina, W. (2020). Innovation and enterprise innovation strategies. *Silesian university of technology publishing house scientific papers of Silesian University of*

Technology organization and management series NO. 148

Kim, E. (2022). The moderating effect of proactivity between protean career attitude and proactive career behavior of University Students. Korean Association Learner-Centered Curriculum Instruction, 20(22), 883-895. https://doi. Organization/10. 22251/JLCCI. 2022. 22. 20. 883

Kopaliński, W. (2007). Słownik wyrazów obcych i zwrotów obcojęzycznych z almanachem. Warszawa: Oficyna Wydawnicza Rytm.

Kozubíková, L., Sopková, G., Krajčík, V., & Tyll, L. (2017). Differences in innovativeness, proactiveness and competitive aggressiveness in relation to entrepreneurial motives. *Journal of International Studies*, 10(4), 207-218. doi:10.14254/2071-8330.2017/10-4/16.

Kraus, S., Rigtering, J.C., Hughes, M. & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: a quantitative study from the Netherlands. *Review of Managerial Science*, Vol. 6 No.2, pp.161-182.

Kristiansen, M. & Bloch-Poulsen, J. (2010). Employee Driven Innovation in Team (EDIT) – innovative potential, dialogue, and dissensus, *International Journal of Action Research*, Vol 6, Nos 2–3, pp 155– 195.

Kropp, F., Linsday, N. J., & Shoham, A. (2009). Entrepreneurial, market and learning orientations and international entrepreneurial business venture performance in South African firms. *International Marketing Review,* 23(5), 504-523.

Krzyzanowska, K. (2016). Aggressive behavior and the impact on job satisfaction and productivity of employees in Ireland. *Dissertation Master in Human Resources Management, National College of Ireland*, 113.

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480–498.

Kuratko, D. F., Morris, M. H., & Covin, J. G. (2011). *Corporate innovation and Entrepreneurship*, 3rd Edition, Canada: South-Western, Cengage Learning.

Kwoba, T. B., Ebewo, P. E. (2022). A Critical Investigation Of Factors Influencing Ugandan Family-owned Manufacturing Businesses' Performance. JMER, 2(3), 71-87. https://doi. Organization/10. 34001/jmer. 2022. 12. 03. 2-29.

Laban, O. M., & 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.*

Laudon, K. C., & Laudon, J. P. (2020). Management information systems: *Managing the digital firm. Pearson*, 16, New York University, 283 - 285.

LawanShamsu, A. & Fakhrul, A. Z. (2015). Vision, Innovation, Pro-activeness, Risk-taking and SMEs Performance: A Proposed Hypothetical Relationship in Nigeria. *International journal of academic research in economics and management sciences* Vol. 4 , No. 2, 2015, E-ISSN: 2226-3624 © 2015.

Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*, 32(1), 36–60.

Lim, J.N, Schultmann, F. & Ofori, G. (2010). Tailoring Competitive Advantage Derived from the Needs of Construction Firms. *Journal of Construction Engineering and Management. 568 – 580.*

Linton, G, (2019). Innovativeness, risk-taking, and pro-activeness in startups: A case study and conceptual development, *Journal of Global Entrepreneurship Research*, ISSN 2251-7316, Springer*, Heidelberg*, Vol. 9, Iss. 20, pp. 1-21,

Linyiru, B. M., & Ketyenya, R. P. (2017). Influence of competitive aggressiveness on performance of state corporations in Kenya. *International Journal of Entrepreneurship.*

Löfsten, H. (2014). Product innovation processes and the trade-off between product innovation performance and business performance. *European Journal of Innovation Management*, 17(1), pp.61-84. DOI: 10.1108/EJIM-04-2013-0034.

Lomberg, C., Urbig, D., Stöckmann, C., Marino, L. D., & Dickson, P. H. (2017). Entrepreneurial orientation: the dimensions' shared effects in explaining firm performance. *Entrepreneurship Theory and Practice*, 41(6), 973-998.

Lumpkin, G. T., Brigham, K. H. & Moss, T. W. (2010). Long-term orientation: Implications for the entrepreneurial orientation and performance of family businesses. *Entrepreneurship and Regional Development* 22(3-4): 241-64.

Lumpkin, G. T., Brigham, K. H., & Moss, T. W. (2010). Entrepreneurs and regional development. *Academic of Management Review*, 22(3), 24 1-264.

Lumpkin, G.T. & Dess, G.G. (2001). Linking two dimensions of entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(135-172).

Madhani, P. M. (2010). Resource Based View (RBV) of Competitive Advantage: An Overview. ICFAI Business School.

Mahmood, R., & Hanafi, N. (2013). Entrepreneurial orientation and business performance of women owned small and medium enterprises in Malaysia, Competitive advantage as a mediator, *International Journal of Business and Social Sciences.* 4(1), 231-247.

Marinidarraga, D. A., & Cuartas-Martin, J. C. (2019). Relationship between innovation and performance: Impact of Competitive Intensity and Organizational Slack. *Journal of Business Management, 59(2), 95-107.*

Markides, C. (2007). Strategic innovation. MIT Sloan Management Review. citeseerx.ist.psu.edu/view doc/download? doi=10.1.1.466.5445.

Maxim, K., Alexander, A. & Meissner, D. (2013). Innovation concepts and typology an evolutionary discussion. Basic research program working papers series: *Science, technology and innovation WP BRP* 05/STI/2013.

Maxwell, J. C. (2009). *The 360 degrees leader: developing your influence from anywhere in the organization.* Nashville, Tennessee: Thomas Nelson.

Mayseless, O., & Popper, M. (2009). Reliance on leaders and social institutions: an attachment. *Perspective Attachment and Human Development*, 9, 73-93.

McGuire, W. J., & Papageorgis, D. (1962). Effectiveness of forewarning in developing resistance to persuasion. *The Public Opinion Quarterly*, 26(1), 24–34.

Menzel, H.C., Aaltio, I. & Ulijn, J.M. (2010). On the way to creativity: Engineers as intrapreneurs in organizations, *Technovation*, Vol. 27 No.12, pp.732-743.

Miles, R. E. & Charles, C. S., (2008). Organizational Strategy, Structure and Process, Stanford Business Classic, California, Stanford University Press.

Miles, R. E., Snow, C. C. & Meyer, A. D. (1978). *Organizational Strategy, Structure, and Process*, (McGraw Hill, America 1978).

Mohammed, Z. Fauziah, M. (2021). The Innovation, Risk Taking and Pro-activeness on Performance of SMEs in Nigeria, The moderating role of microfinance institute. *IOSR Journal of Business and Management* (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 23, Issue 3. Ser. VI (March 2021), PP 20-27

Mone, N., & London, M. (2009) Effect of firm size on business performance, Management practical approach, *International Journal of Business Management*, 4(3), 456-467.

Morant, N., & Edwards, E. (2011). Police responses to diversity: A social representational study of rural British policing in a changing representational context. *Journal of Community & Applied Social Psychology*, 21(4), 281–296. https://doi. org/10.1002/casp.1074.

Morgan, R. E., & Strong, C. A. (1998). Market orientation and dimensions of strategic orientation. *European Journal of Marketing*, 32(11/12), 1051-1073.

Muhonen, S. (2017). *The profitability of competitive aggressiveness*: The moderating effect of industry-related and organizational factors.

Muigai, R. G., & Gitau, S. N. (2018). The Effect of Innovation Strategies on Financial Performance of Banking Industry in Kenya. *European Journal of Economic and Financial Research, 3(1), 168-186.*

Mwaura, A. T. W., Gathenya, J. W & Kihoro,J, M (2015). Dynamics of entrepreneurial orientation on the performance of women owned enterprises in Kenya. *International Journal of Academic Research in Business and Social Sciences* 5(9). 2222-6990.

Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2009). Entrepreneurial orientation, risk taking, and performance in family firms. *Family Business Review*, 20(1), 33–47.

Naseer, S., Khawaja, K. F., Qazi, S., Syed, F., & Shamim, F. (2021). How and when information pro-activeness leads to operational firm performance in the banking sector of Pakistan? The roles of open innovation, creative cognitive style, and climate for innovation. *International Journal of Information Management*, 56, 102260.

Nguyen, T. L. H., Pham, N. T., Dao, V. P. L., Ngo, T. T. T., & Le, T. T. B. (2020). Critical factors affecting the innovation activities of businesses: Evidence from Binh Dinh Province, Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(7), 425-438.

Nguyen, T. L., Mohsen, B., Nuong, L.T. & Binh, L. T. (2023). Do innovation and pro-activeness impact the business performance of women-owned small and medium-scale enterprises in Vietnam? *A study using the PLS-SEM approach. Nurture:* Volume 17, Issue 3, 253-271, 2023 Online ISSN: 1994-1633/ Print ISSN: 1994-1625 DOI: 10.55951/nurture.v17i3.314| URL: www.nurture.org.pk

Nielsen, U. (2016). http://innovation.nielsen.com/innovationanalytics2 (accessed October 9, 2016).

Nnokam N. C. P., & Nwokocha J. (2019). *Employer's perception of distance education graduates.* A survey of organizations in Ogba Egbema Ndoni Local Government of Rivers State. Manuscript submitted for publication.

Nwachukwu, P.S. & Onuoha, B.C. (2023). Competitive Aggressiveness and Corporate Resilience of Food and Beverages in Rivers State. *Research Journal of Management Practice*, 3(6), 26-39.

Nwokocha J. (2019). Aspects of Intelligence and their roles in higher education. Manuscript submitted for publication. Manuscript submitted for publication.

Odhiambo, G.O. (2008). Innovation strategies at the standard chartered bank. (Kenya) limited. Unpublished MBA Project. University of Nairobi.

Odukoya, T. (2019). *Proactive Leadership.* Retrieved from https://www.premiumtimesng.com/news/157730-proactive-leadership.html.

Odumeru, J.A. (2013). Innovation and Organizational Performance. *Kuwait Chapter of Arabian Journal of Business and Management Review, 2 (12), 18-22.*

Oke, A. (2007). Innovation types and innovation management practices in service companies. *International Journal of Operations & Production Management 27 (6). Emerald Group Publishing Limited: 564–87.*