ISSN: 2360-989X, Volume 14, Issue 6, (May, 2023) pages 167 – 185

DOI: 2726145237114611 www.arcnjournals.org



# Innovative Capability and Survival of Small and Medium Enterprises in Rivers State

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Abstract: The empirical work explores the association between innovative capability and survival of small and medium enterprises in Rivers State. The study adopted the cross-sectional design in looking at how innovative capability affects the survival of SMEs. The data for the research was collected using questionnaires. The study used a sample size of 85 business owners and managers. The data obtained was analysed using spearman rank order correlation coefficient. The result of the study showed a significant and positive relationship between the dimensions of innovative capability and the measures of survival. The study concluded that organizations should ensure that the have the have innovative capability with will contribute to the firm's growth and adaptability of small and medium enterprises. Therefore, it was noted that for firms to survive everchanging environment, there is need to tap into technological and product innovation. The study recommended that owner/managers of small and medium enterprises must enhance their level of product innovativeness as this will help them adapt to the environmental changes and enable them survive the environmental changes.

#### Introduction

Due to the global competition and the high level of competitiveness in business environment occasioned by technological advancement, there has been an increasing pressure on SMEs for their survival and sustenance. Owing to the fact that the essence of business is for profit making along with long term survival, there is need for organizations to ensure that they put in strategies and policies in place to make sure they survival the ever-changing environment of business. More so, small businesses in Nigeria face the most challenges due to the external environment of business occasioned by so much uncertainties, it has therefore become a concern for managers and owners of SMEs to be able to survive the turbulent environment of business. Business survival according to Akindele, Oginni and Omoyele (2012) describes the continuous operations of a business and its concern about remaining in business for a long time.

In their perspective Bercovitz and Mitchell (2007) noted that business survival describes the amount of time the enterprise takes to carry out its activities from when the business is found to the time of its closure. They further noted that the people who take benefits from the continuation of an organisation are not just the owners and managers of such business but also people from the community such as the workers, the consumers and those who supplies raw materials for the production of goods. Danes, Loy and Stafford (2008) opined that the persistence of a business

enterprise can be regarded as one of the features of the company's effectiveness. This means that when there is higher performance, the business is bound to survival. It is therefore important that for businesses to survival they must ensure that they have the capacity to adapt to the uncertain conditions that surround the business (Pfeffer & Salancik, 1978). Moreover, in comparison with companies with larger capital, small and medium enterprises are faced with more uncertainties due to factors that are related to the external environment, therefore, small scale enterprises are more adversely affected and chances of survival becomes slim (Carroll & Huo, 1986).

However, one of the factors that contributes significantly to the survival of SMEs in Nigeria especially in Rivers state is due to the level of innovative capabilities of owners and managers of small and medium scale enterprises. Therefore, it is important to state that the importance of innovative capability to the survival of SMEs cannot be overstated. Innovation is the backbone of the successful businesses and around the world as it is concerned with the capacity to continuously turn information and ideas into new products, systems and processes that will benefit the firm and the stakeholders involved (Kafetzopoulos & Psomas, 2015; Heenkenda, Xu, Kulathunga, & Senevirathne, 2022). Innovative capability is concerned not only with the ability to judiciously management a new business opportunity but also the capacity to combine corporate operational paradigms to suit the demand and needs of the clients (Benn & Danny, 2001). In their studies, Romijn and Al-Baladejo (2002) stated that innovative capability is the ability and knowledge that is required to engage effectively, enriching the existing technologies, leading and creation of novel ties. While Xu, Lin and Lin (2008) referred to innovative capability as the aptitude of a firm to penetrate, design and the utilization of methods that are innovative for the imitation of design and production. Yang (2011) defined innovation capability as the potential aptitude of a company to position itself in an arena of modernism such as new product development, technology and other advancements that give an edge in competition over its rivals.

#### State of the Problem

The contributions of small and medium enterprises (SMEs) to national building and economic development of a nation cannot be overstressed. This is because it the bedrock of sustainable economic development through the creation of employment for the youths, opportunities, innovation, adaptability and the utilization of world technological advancement (Arribas & Vila, 2007). However, as a result of globalization, it has been more difficult managing SMEs in Nigeria due to the stiff competition and the changing business environment occasioned by constant policy and economic changes. Moreover, these challenges have made it more difficult for SMEs to overcome their inherent problems, couples with the barriers that are posed by larger companies. In addition to this, most managers and owners of SMEs are not experience and does not have the required capabilities in comparison with companies and businesses with a more sophisticated system and capital to cushion the effects of economic and policy changes in the business environment (Naradda, et al., 2020; Talib, Ali & Idris, 2014). Therefore, it is crucial for SMEs to find a way to enhance their innovative capabilities through the development of strategies and competence enhance for it to be possible to remain in business. Although, studies have been done previously on ways to improve continuity of businesses using various constructs (Oginni & Adesanya, 2013; Obidile, Nwankwo & Okpara, 2022; Abalaka & Arumona, 2022). However, despite these studies, SMEs in Nigeria are still struggling and many have fizzled out as a result of their inability to adapt to the changes in the environment of business. It is as a result of this observed gap that this study seeks to look at how the survival of small and medium scale enterprises can be improved in Rivers state from the angle of innovative capability.

# **Objectives of the Study**

The objectives of this study are as follows:

- 1. To examine the relationship between product innovation and adaptability
- 2. To explore the relationship between technological innovation and growth
- 3. To examine the relationship between product innovation and adaptability
- 4. To explore the relationship between technological innovation and growth

#### **Hypotheses**

- 1. There is no relationship between product innovation and adaptability of SMEs in Rivers State.
- 2. There is no relationship between technological innovation and growth of SMEs in Rivers State.
- 3. There is no relationship between product innovation and adaptability of SMEs in Rivers State.
- 4. There is no relationship between technological innovation and growth of SMEs in Rivers State.

#### **Review of Literatures**

#### **Innovative Capability**

All prosperous economies around the world are built on innovation. It is seen as a key component of economic development in the creation of jobs opportunities, reducing poverty and enhancing the growth of gross domestic production (GDP) in both established and emerging economies (Heenkenda, Xu, Kulathunga, & Senevirathne, 2022). Different categorizations of innovation capabilities related to renewing product, process, service, and organizational structure have been presented by various studies (Hult.et.al, 2004; Saunila.et.al, 2014). Some studies focused on specific set of innovation capabilities such as process innovation product and process innovation (Martínez-Costa & Martínez-Lorente, 2008), and management and marketing innovation (Gunday.et.al, 2011). Other studies employed collective set of innovation capabilities such as product, process, management and marketing innovation capabilities (Avermaete.et.al, 2003), product, process, marketing, and organizational innovation (OECD, 2005). In conceptualizing innovation capability in SMEs' context, research emphasized on innovation as an outcome and a process.

Researchers have described innovation capacities as a one-dimensional model that describes a method for producing novel products (Dadfar, Dahlgaard, Brege, & Alamirhoor, 2013; Keskin, 2006) and enhance SMEs' performance (Castela, Ferreira, Ferreira, & Marques, 2018). Keskin

(2006) defined innovation capabilities as an organization's ability to execute new concepts, create novel methods of doing things, and sustain inventiveness in daily operations however Zhang and Hartley (2018) argued that innovation capability focuses on utilizing ideas and experiences from distinct origins. In a similar vein, innovation capability was argued to have multiple dimensions (e.g. leadership, competence management, organizational culture, utilization of external knowledge and employee creativity) to creative outputs (Boly, Morel, Camargo, 2014; Saunila & Ukko, 2014). Similarly, some researchers argued that innovation capabilities consists of specific capabilities such as marketing capabilities, learning capabilities, entrepreneurial capabilities, networking capabilities and resource exploitation capabilities (Oura, Zilber, & Lopes, 2016).

In relation to SMEs, innovation capabilities is mostly grouped into incremental explorative and exploitative innovation capabilities (Kittilaksanawong & Ren, 2013). This research didn't consider technological innovation capabilities as they mostly related to product and process innovation (Exposito & Sanchis-Llopis, 2018). Such classification offers a thorough and in-depth description of the many innovation skills held by owners and managers of SMEs, as well as their effects on various aspects of business operations and financial results. Therefore, it can be said that innovative capabilities of organization directly or indirectly affects the survival of businesses especially as it pertains to small and medium enterprises as it comes through varying approaches, and are subject to entrepreneurs and firm's strategic orientation. For the aim of this research therefore, we shall be looking at product and technological innovations as dimensions of innovative capabilities as it relates with the survival of SMEs.

#### **Product Innovation**

Product innovation This can be considered as any good or service that is perceived by an individual or a firm as new (Abdilahi et al; 2017). Also, It speaks about the launch of new goods or services in an effort to create new markets or customers, or satisfy existing market or customers (Obunike & Udu, 2018). Product innovation entails diverse organizational strategies as well as unique inputs which results in novel outputs (Martinez-Ros and Labeaga, 2009). Product innovation is usually the result of producing and commercialization of new goods (products or services) or with improved performance characteristics. Product innovations assist firms to distinguish themselves from their competitors, through proffering solutions to individual or national challenges.

Product innovation is the improvement of original goods, modify in design of recognized goods, or exercise of fresh supplies in the construct of recognized goods (Alegre et al., 2006). Product innovation which is latest and in the past it was unfamiliar to the marketplace the business operate in. Product innovation is defined as the new product which is totally diverse from the old product and there is an idea that phrase of product innovation goes hand in hand with phrase of newness (Dada, 2016). According to Suhaq et al. (2015) product innovation is a process which involves the practical design, research and development, administration and marketable actions which concerned in the promotion of the novel good. The product innovation is the main factor for the business development and performance of the business product innovation method is measured component of new product development mostly the companies earn profit in future with the help of product innovation (Wheelwright, 1992).

In business perspective product innovation include a new products invention, quality improvements and technical specification given to a product, or the addition of new materials, components or valuable functions into an existing product. It covers the enhancement of goods and services or the development of the new categories (Rennings et al., 2006). According to Alegre et al. (2006) in recent times there is highly aggressive and forceful atmosphere, the product innovation is highly explored and its highly important to survive, product innovation is mostly the outcome of the three major inclinations; high worldwide competition split, challenging marketplace and third one is the difference and quickly changing in the technologies.

According to Olayemi et al. (2020) the business capability to produce constant flow of the product innovations is the highly significant to run the business or to improve the effectiveness of the company or for the development of the business, and product innovation is crucial for the business to survive in the market and to capture the market share due to huge competition and day by day competition increases in the market. Due to the high competition the life of the product decreases because of the huge competition and product innovation. So, mostly the main focus of the businesses is on the innovation of the product either to improve the product or to develop the new product (Alegre et al., 2006). Product innovation remains one of the major roots of competitive advantage to firms (Mohd and Syamsuriana, 2013).

Product-oriented innovativeness involves either a new or improved product, which is distinguished significantly from previous products. Product-oriented innovativeness targets quality improvement of products. They further argue that it offers potential protection to firms from market threats and competitors. It is the creation of new products or alterations to current goods, technological newness in product and product differentiation to meet consumers and market equilibrium. It is the result of producing and the promotion of novel products/services or imitating foreign or competitors' product. It involves radical product which can be new to the firm or new in the market (Obunike & Udu, 2018).

#### **Technological Innovation**

Zahra (2020) defined capability as "a collection of capabilities and specialties that businesses could use in their marketplaces to further their objectives." Burgelman, et al. (2004) asserted that "technological capabilities are essential for businesses to develop rivals advantage." They also defined TICs as "a broad range of firm features that enhance and support the firm's technological innovation strategies." Guan and Ma (2003) and Rahim and Zainuddin (2017) described TICs as "a remarkable asset of a firm, including product, process, technology, organization, knowledge, and experience." Regarding firms' TICs conceptualization, Wang et al. (2008) and Shafia et al. (2016) used the multidimensional approach. From a miscellany perspective, such a high level of interrelation with capacities has been investigated. Guan et al. (2006) argued, "TICs are firmly grounded in varied organizational activities like manufacturing, marketing, strategy planning, learning, and resource allocation." TICs apply a continuous and extensive series of managerial functions in innovation development.

#### Firm Survival

The need for business to survive in a distressed economy brings about survival strategies which must be adopted by owners or managers of these businesses. According to Wale-Osinowo (2018), small businesses are faced with limited access to financial resources, strong managerial capabilities, technology, specialized skills and the basic infrastructures. Thus they have to create many opportunities based on diverse ideas and the available information. This will serve as forms of survival strategies that will help them to accommodate and deal with their challenges. Survival strategies can be classified into three groups which are avoidance-being less committed psychologically to a challenge; passive survival-being partly sensitive to a challenge; and active survival-being totally and emotionally attached to a challenges (Sahler and Carr, 2009).

Going by the perspective of Lum (2017), survival strategies involve defensive and aggressive action taken to gain a position and to make returns on investment. Small business survival is lowest at the beginning phase of a business. Ifekwem and Ademola (2016) see survival strategies as future ability of a business to operated ethically and contribute to economic development while improving the quantity of life for its workforce, the local and global community as well as future generations. In the light of Ifekwen and Ademola (2016), there exist three basic strategies: Porters generic strategy, market matrix and Mile and Snows adaptation strategy.

However, for this study, the survival strategies do not completely fall into any of those categories because the researcher are interested on strategies peculiar to Akwa Ibom State. Based on this, it is observed that managerial strategy are survival strategies adopted by most business in the area. A study by Palmquist (2014) identifies three other survival strategies which were not taken into consideration in this study. They are keeping cost down, differentiation and customization. Survival in this study were assessed in terms of whether entrepreneurs take full responsibility for the business strategic management, make survival strategies a priority activity performed on regular basis, follow a define set of procedures in strategy process and provide resources for sustenance of the business.

Business survival is defined as the ongoing operation of a company, which is sometimes referred to as managing to remain in business (Akindele et al., 2012). In an effort to react to the actions that will permit organisation to operate on going – concern, organisations are constantly in the process of structuring and restructuring to keep abreast with these activities which do come in form of complexities to include leadership styles, changes, uncertainty, conflict, culture, Innovation, organisational design, competitive market, financial success, and workplace inspiration (Adeoye, 2012). In light of these difficulties, organisations must strategically plan and create the most suitable and adaptable framework that will allow them to make the best use of their resources, optimise their potential, and ultimately accomplish their goals (Mullins, 2002; Akindele et al., 2012).

## **Adaptability**

Russell and Emery (1972) termed adaptability as 'the ability of an individual or system to modify itself or its environment, when either has changed to the individual's or systems disadvantage, so as to regain at least some of its lost efficiency.' This has the value of focusing on adaptability as a

capacity to adapt or change. Consonant with this, other writers (noted below) refer to adaptations as actual changes. We shall retain this distinction.

But a problem with the Ackoff-Emery definition is that it is so broad that the capacity of an entity to alter its environment is regarded as adaptability. An organizationally inflexible oligopoly that forced its rivals to go bankrupt by any means would be deemed adaptable. In biology, adaptation refers to an evolutionary change in the structure or functioning of an organism that makes it better suited to its environment (Daintith 2005). When an organism changes its habitat this is described differently, as niche construction (Odling-Smee et al. 2003) for example. We prefer to focus on organizational adaptability and classify the capacity to manipulate the environment as a different phenomenon. Another problem with their definition is that it relies on the concept of efficiency, which is itself capable of several different interpretations.

Turning to the word adaptation, in the organizational studies literature it typically refers to a change in a specific organization rather than an environmental or other change. For Daniel Levinthal (1992, p. 432) 'adaptation is defined to have occurred when an organization changes its strategy, structure or some other core attribute to fit some new environmental contingency.' More narrowly, for Ross Brennan and Peter Turnbull (1999, p. 182): 'Adaptations can be defined as behavioral modifications made by one company, at the individual, group or corporate level, to meet the specific needs of another organisation.' Although this focuses appropriately on organizational change, it overly restricts adaptations to serving the undefined 'needs' of another entity. Despite the importance of inter-firm adaptations (Hallén 1991), we see no reason to restrict the meaning of organizational adaptation to business-to-business relations. A further complication is that the concept of adaptation has acquired different meanings in biology and organization studies. In biology, adaptation refers to change in a whole population, including population changes resulting from natural selection. In organization studies and business economics it has shifted its meaning to changes performed by any one organization, to refer to the process or outcomes of adjustment of the characteristics of an individual organization in a given environment. These different meanings complicate the growing use of ideas originally developed in biology to help understand processes of organizational change (Hodgson and Knudsen 2010, Hodgson 2013).

To tangle matters even further, alternative terms have arisen that seem to describe outcomes or processes that others refer to as adaptations. For example, Henk Volberda (1998, p. 100) flags the idea of 'organizational flexibility', which he defines as 'the range of management capabilities an organisation possesses and how quickly they may be used to boost management's capacity for control and enhance controllability of the organization.' His persuasive argument that flexibility and stability are two sides of the same coin, and flexibility without stability results in organizational chaos, ties in with similar statements in the organization studies literature on adaptation (e.g. Levinthal 1992). But his notion of 'flexibility' also signals a capacity for adaptation. Another prominent term is 'dynamic capabilities', which David Teece at al. (1997, p. 516) specified as "the firm's capacity to incorporate, develop, and reposition its internal and external skills to deal with constantly evolving environments." Again this amounts to another way of describing adaptability as a capacity. Another related term is 'organizational resilience', which is defined loosely by Timothy Vogus and Kathleen Sutcliffe (2007) in their overview as 'the maintenance of constructive adaptation in trying circumstances so that the organisation survives

those circumstances strengthened and more resourceful'. This definition is so close to some definitions of adaptability that there seems little value in an additional term, unless a clear definitional demarcation is in place.

It is not easy to clear up this terminological mess, but we propose the following solution. When addressing organizations and their strategic dilemmas, the primary matter is the *capacity* of an organization to change, in a manner that improves its performance by some appropriate criterion, and increases its chances of survival. The capacity of any organization to change – even a small firm – depends on structured internal relations and not on the intentions of individuals alone. The study of organizational adaptability is much about internal structures and procedures and their capacity to enable appropriate change. The internal culture of the firm is intimately connected to those structures and procedures, as well as to the values and beliefs of individuals (Schein 1996, Sørensen 2002).

#### Growth

For past few decades, the firm's growth has become a major topic in the field of strategic management research. The three basic components such as the small firm's characteristics, the entrepreneur's characteristics, and the firm's development strategies combine together and results into the procedure for small businesses to expand (Ferreira et al., 2011). Every business owner wants to see their companies develop and perform exceptionally well (Rosli and Abdullah, 2015). There hasn't been much advancement in recent years in the studies on corporate growth. Therefore, it is essential to identify several elements that have an impact on the success of SMEs businesses. Many researchers have stressed more on on business expansion as an important indicator of MEs performance (Chandler and Hanks, 1993; Brush and Vanderwerf, 1992; Fombrunand Wally, 1989). Wilklund (1999) has also argued that growth of SMEs businesses can determine the performance of SME more accurately relative to other measures of performances (financial and non-financial). The firm's business growth also reveals its failure or success. According to the researchers' findings (Garnsey et al., 2006), a number of internal and external factors may have an impact on the enterprises' early success.

The expansion of the company also shows the actions of entrepreneurs or business owners in small businesses (Green and Brown, 1997). The majority of entrepreneurial enterprises, according to Lee and Tsang (2001), are small to medium-sized, privately owned companies, and hence they are not legally obligated to disclose information about their financial performance. Moreover, it is a sensitive matter for MEs to depict their financial performance. On the other hand, disclosing data on business growth may be a less sensitive matter for MEs businesses (Lee and Tsang, 2001). Moreover, Chandler and Hanks (1993) also found higher internal consistency and better content validity in self-reported data on MEs business growth as compared to selfreported data about financial or non-financial performances of ventures. Growth is the result of the combination of firm's specific resources, capabilities and routines. Firms' growth is dependent on the extent to which firms' specific resources like employees, capital and knowledge are acquired, organized and transformed into sellable products and services through organizational routine, practices and structure. It refers to an increase, expansion or change over time. Small and medium scale enterprises 'growth has been identified as a key driver for the creation of wealth and employment

and economic development in every country. An impressive share of radical breakthrough innovations has been shown to originate from entrepreneurs and small firms' growth (Corradini et al., 2016).

Growth can be attributed to an increase in factors of production, improvements in the efficient allocation across economic activities, knowledge and rate of innovation. Innovativeness is considered as one of the critical issues in the firm growth (Obunike and Udu, 2018). The dimension of business growth used in this study includes: employment growth, sale growth, firm size growth and market share growth.

Since SMEs are crucial for advancing the economic development of the country, the phrase "growth and survival of SMEs" refers to their flourishing and continuous existence in the commercial world. SMEs are commercially viable, which means that their contributions to the society should not be neglected. Hence, the operators of SMEs (owners or managers) should be adequately supported so that they can adapt and survive the adverse conditions and the challenging business environment. Numerous roles are being played by the SMEs for the economic development of the nation. They include but not limited to; job creation, skill development and technology transfer. Others according to Onugu (2005) and Muriithi (2017) state that some of these objectives are: introducing new products and services; meeting the demands of more established sectors that depended on the small scale enterprises for business success; satisfying the consumers at any given time with the availability of products; promoting the development of indigenous manpower as well as increasing local participation in the manufacturing sector; improving standard of living of the populace; provision of large scale employment; mobilization of domestic savings; utilization of local resources and disposal of industrial products and services. Additionally, Sallem and Nasir (2017) pointed out that the actions of SMEs might be used to accomplish quick industrialisation and hastened economic growth.

SMEs are significant in Nigeria, however the majority of them fail during their initial five years of operation (Gumel, 2017). Even though the Nigerian government established several organisations to promote the expansion of SMEs, these organisations are also anticipated to improve the SMEs' stability and efficiency. For instance the establishment of Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), National Directorate of Employment (NDE), Microfinance Banks, National Economic Reconstruction Fund (NERFUND) and Bank of Industries (BOI). Notwithstanding the effort of the government to provide support to SMEs through these agencies, according to Kayode & Ilesanmi (2014), SMEs in recent times are still failing. The failure could be as a result of negligence of certain factors which are yet to be ascertained. Considering the objectives of these agencies towards enhancing the growth and survival of SMEs, one wonders why the growth of SMEs has not tremendously improved in the State. Hence, determining the factors that could affect SMEs and cause their failure becomes important so that SME operators and all concerned should take precaution and work towards enhancing the expansion and survival of SMEs to boost the country's economic of the State.

In the views of Laosebikan etal (2013) organizational growth signifies various things to various organisations because there are many parameters a company may use to measure its growth. This is so because the ultimate goal of most organisations is profitability, most organisations will measure their growth in terms of net profit, revenue, and other financial data. Other criteria for assessing the organisational growth are volume of sales, number of employees, physical expansion, success of a product line, or increased market share (Lipton and Mark, 2003). In the views of Roberts and John (2004), organisational growth will be gauged by how well a firm does relative to the goals it has set for itself and in the same vein, Coffman etal (2002) in Oginni (2010) were of the opinion that the intention and desire to keep the business to operate on going concern definitely calls for growth of the organisation otherwise such organisations will cease to exist. Aluko etal (1999) however added another dimension to what organisational growth is all about by saying that it is something for which most organisations strive, irrespective of their size.

## **Innovative Capabilities and Small and Medium Enterprises**

Innovation capabilities offer an active and balanced method for gauging company performance (Saunila et al. 2014; Taticchi et al. 2010). Results from studies on innovation and SME company success are inclusive and/or inconsistent (Rosenbusch et al., 2011; Sok et al., 2015; Terziovski, 2010), due to limited research and lack of robust large-scale data surveys and the need to combine specific resources such as technological, human, and financial resources, which are considered a major constraints of SMEs (Sok.et.al., 2015). Research has paid little attention to investigate different performance indicators of SMEs (Hervas-Oliver.et. al., 2014). SMEs are more inventive than their larger competitors (Gupta.et.al, 2013), despite the fact that they are described as reactive businesses with informal strategies, adaptable structures, and resource constraints (Terziovski, 2010). SMEs' managers and entrepreneurs need to innovate in order to effectively compete with established larger companies (Rosenbusch.et.al, 2011).

Research on innovation capabilities and firm performance addressed dimensions of both operational and financial performance. Sales expansion and a decline in production expenses are examples of financial success dimensions (Love & Roper, 2015). Maldonado-Guzmán, Garza-Reyes, Pinzón-Castro and Kumar (2018) argued that innovation in products, processes, marketing and management has a positive and significant effect on the business return of Mexican SMEs. Operational dimensions of firm performance involves increasing productive capacity and improving product quality. Research paid less attention to examining the impact of innovation on SMEs' operational performance (Rosenbusch.et.al, 2011).

Innovation improves organisations' capacity to set greater standards of excellence for their goods or services, according to Prajogo et al. (2013) whereas Saunila (2016) contended that innovative firms maintain distinctive capabilities to identify, assimilate and apply knowledge more easily throughout the firm. Process and organizational innovations may lead to improving the quality of a product or service resulting from introducing new forms of management that enhances quality in the whole company or in certain areas (Prajogo.et.al., 2013). Hence, innovation capabilities related to improving product or services enhances the operational performance of SMEs. Walker et al. (2015) stated that organizational innovation leads to improving SMEs' performance. Innovation has a positive relationship with firm's financial performance such as sales growth and

internal efficiency, thereby considerably decreasing production costs resulting from increasing productive capacity (Foreman-Peck, 2013). Product and process innovations have a positive effect on increasing SME productivity and reducing production costs and positive impact on SMEs' financial turnover (Foreman-Peck, 2013; Hervas-Oliver et al., 2014).

Research on SMEs performance focused on specific financial performance dimensions such as profitability, sales, productivity, and production costs (Nemlioglu & Mallick, 2017). Innovation research didn't emphasize the potential impact of a particular type of innovation on specific operational or financial performance dimension (Rosenbusch.et.al, 2011). Therefore, Hervas-Oliver and Sempere-Ripoll (2015) and Lichtenthaler (2016) emphasised the need of considering innovation as a complex phenomenon with diverse positive performance consequences for SMEs in connection to the particular sort of innovation that the companies undertook. Additionally, studies on the relationship between technical innovation, which includes product and process innovation, and firm improvement in performance metrics were mostly centred on this relationship (Walker et al., 2015; Vu, 2020) while little attention was paid to other performance dimensions such as quality improvement and non-technological innovations (Lichtenthaler, 2016). Mejía Vallejo and Arias-Pérez (2017) showed that process and product innovation capabilities don't necessarily lead to increasing market share or sales growth. Firms' ability to design and manage quality into products is vital for product and process innovation to translate new ideas into product features and technical specification that meet customer's expectation in effective and timely manner (Sahoo, 2019).

Researchers suggested utilising a multi-dimensional analytical strategy to look at the effects of different sorts of innovations on various dimensions of organizational performance such as financial, sales and operational performance (Exposito & Sanchis-Lopis, 2018; Nemlioglu & Mallick, 2017; Rosenbusch.et.al, 2011). Therefore, this study investigates the impact of product, organizational, process, and marketing innovation capabilities on SMEs' operational and financial performance.

# Methodology

The study adopted the cross-sectional research design. Using a structured questionnaire that was administered by the researcher to obtain primary data for the study. The population of the study comprise of SMEs in Rivers State. Due to the high number of SMEs in the state, the study made use of 85 business owners and managers of SMEs in Choba and its environs to make up the assessable population of the study. Since the population of the study is within the control of the researcher, the entire population was used as the sample size while the analysis of the data collected was done using the Spearman rank order correlation coefficient in order to ascertain the relationship between the variables under control and also to carry out the testing of the formulated hypotheses to know if they would be accepted or rejected based on the result.

#### **Data Analysis and Result**

This part shows the data and analysis of the data collected through the questionnaire for this study. Furthermore, the section ensures the reliability measures are in order while the correlation between

the dimensions of innovative capability and measures of firm survival are presented and analysed. After this is done, the study will show the result of the analysis of the hypotheses formulated to determine if they are to be rejected or accepted for the study.

Table 1 Correlation Between Product Innovation and Measures of Firm Survival

			Product Innovation	Adaptability	Growth
Spearman's rho	Product Innovation	Correlation Coefficient	1.000	.820**	.782**
		Sig. (2-tailed)		.000	.000
		N	85	85	85
	Adaptability	Correlation Coefficient	.820**	1.000	.854**
		Sig. (2-tailed)	.000		.000
		N	85	85	85
	Growth	Correlation Coefficient	.782**	.854**	1.000
		Sig. (2-tailed)	.000	.000	
		N	85	85	85

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The test of hypothesis 1 & 2, as shown in the table above, the SPSS output reveals that Significant level (Sig) = 0.000 which implies that (Sig<0.01) while Spearman Correlation coefficient (rho) = (0.820, 0.782) also indicates that product innovation has strong and positive correlation with survival of SMEs. We therefore reject the null hypotheses and accept the alternative hypotheses which state that there is a significant relationship between product innovation and SMEs survival in Rivers State.

Table 2 Correlation between Technological Innovation and SMEs Survival

			Technological Innovation	Adaptability	Growth
Spearman's rho	human resource flexibility	Correlation Coefficient	1.000	.945**	.823**
		Sig. (2-tailed)		.000	.000
		N	85	85	85
	Adaptability	Correlation Coefficient	.945**	1.000	.862**
		Sig. (2-tailed)	.000		.000
		N	85	85	85
	Growth	Correlation Coefficient	.823**	.862**	1.000
		Sig. (2-tailed)	.000	.000	
		N	85	85	85

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The test of hypothesis two, as shown in the Table above, the SPSS output reveals that Significant level (Sig) = 0.000 which implies that (Sig<0.01) while Spearman Correlation coefficient (rho) = (0.945, 0.832) also indicates that technological has strong and positive correlation with survival of small and medium enterprises. We therefore reject the Null hypotheses and accept the alternative hypotheses which state that there is a significant relationship between technological innovation and survival of small and medium enterprises in Rivers State.

#### **Discussion of Findings**

Based on the results generated via all the hypotheses, it showed that there exist a significant and positive correlation between innovative capability and survival of small and medium enterprises in Rivers state. This is evident from the correlations of 0.820, 0.782, 0.945 and 0.832 for the four hypotheses formulated respectively. From the result, it was apparent that the dimensions of innovative capabilities all had positive association with survival of small and medium enterprises in Rivers State. Furthermore, theses associations are spread across the measures and dimensions noted in the results and they are related at different levels. Thus:

The first and second hypotheses indicated that product innovation has a positive linear notable correlation with survival of firms based on the P-value less than 0.05 (P-value = 0.000 < 0.05) which implies that both variables have direct positive relationship which moves in the same positive direction. The third and fourth hypothesis showed that technological innovation has a positive linear notable correlation with corporate survival based on the P-value less than 0.05 (P-value = 0.000 < 0.05) which implies that both variables have direct positive relationship which moves in the same positive direction. The result obtained from the analysis is in agreement with the studies of Saunila, et al, (2014) which opined that the innovation capabilities of organization

represent a fair view of performance and survival of firms. It also agrees with the findings of Prajogo et al (2010) who noted that innovation and capabilities enhances the ability of organizations to establish higher standards of quality in their products and services which enhance their survival. In a similar vein, Walker et al (2015) concurs with the assertion that organizational innovation leaders to improvement in the performance of small and medium enterprises.

#### **Conclusion and Recommendation**

Based on the findings of this empirical study, it has been shown that the dimensions of innovative capability will contribute to the level of growth and adaptability which measures the survival of small and medium enterprises. Although each of the dimensions and measures affects each other at various degree, therefore it can be said that when there is a change is each of the dimensions, it automatically affects the measures of the survival. Following this result, it is important for owners and managers of small and medium firms to have a proper understanding of how that product and technological innovation can enhance the level of the firm's growth and their ability to adapt to the changes in the turbulent business environment. The study therefore conclude that SMEs should employ innovative capabilities in terms of product and technological innovations to drive adaptability and growth of their firms which will enhance the survival of such firms.

Flowing from the findings of this research, it is hereby recommended that;

- i. Owners and managers of SMEs should enhance their level of product innovativeness to as to be able to adapt to changes and survive turbulent business environment.
- ii. Owners and managers of small and medium enterprises should ensure that they invest in technologies that will help them keep up with competitors so as not to fizzle out of business.
- iii. There should be proper development of products that are needed in the market to enhance the firm's level of growth and ensure that they retain and expand market shares.
- iv. There should be technological drives and automated systems that will help the company to stay ahead competition wise ahead of other people in the same line of business as this will drive the growth of the enterprises.

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