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# Business Innovation and Organizational Sustainability: A Cross Sectional Study of Entrepreneurial Business in Uyo Metropolis

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**ABSTRACT:** This research was designed to examine the relationship between business innovation on organizational sustainability in Nigeria. Survey research design was adopted for the study and a sample size of 196 entrepreneurs was drawn for the study. For the objective of the study to be achieved, three hypotheses were formulated. The major instrument for data collection was a structured questionnaire administered to the respondent using purposive sampling techniques. Data collected were analysed using simple percentage and Pearson Product Moment Correlation. Results show that there is a significant correlation between variables of business innovation such as product innovation, process innovation and marketing innovation and organizational sustainability variables of environmental, social and economic sustainability among entrepreneurs in Akwa Ibom State. Consequently, it is recommended first to business consultant, data on the use of innovations by final consumers is of value to business managers and policy makers. Secondly, to the government, technological developments such as the Internet, 3-D printing and crowdfunding platforms can potentially support the innovation activities of individuals, although technical and commercial success is likely to result in a transition from the Household to the Business sector.

**KEYWORD:** business innovation, organizational sustainability, product innovation, process innovation and marketing innovation.

### **INTRODUCTION**

Right from the advent of industrial Revolution of the 1700s when production capacity started expanding organizations needed to do something extra in order to attract and retain

customers. This endeavour is known as innovation. In the era of globalization, the industries have become more cut-throat as a result of increased competition from more firms. To compete, organization enhance their capabilities and competencies to improve operational performance in myriad ways as judged under various criteria. Thus, organization must apply new technologies to track and respond to customer demands and achieve sustainability. Sustainability will be achieved based on innovation in response to customer needs for new services and products, which will lead to increased market share and profits and will also contribute to organizational sustainability (Nambisan, 2015).

Innovation studies have advanced greatly in recent times. Schumpeter (1934) defined innovation as carrying out new combination of existing factors in any of five ways: new products, new processes, new markets, new sources of supply, and new organization of industries. Van Kleef and Roome (2017) defined "innovation as the process of discovery and development that generates new products, production processes, organizations, technology, and institutional and systemic arrangements". This definition includes employing ideas, knowledge, and technology in a manner that enables firms to significantly improve performance. Onsel (2015) indicated that innovation is not necessarily related to problem-solving but instead typically related to improving competitiveness and economic success and it is frequently spurred by technology. Though grappling with an inherently uncertain and mercurial object of study, researchers have mapped out the process by which an idea is taken from its initial generation to its introduction to the market. Innovation has now become a central part of the business system (Roome 2014), permeating every aspect from new product development to management practices and customer communication. The impact of innovation is so considerable that strategy can be measured by how it guides and affects the innovation activities of the firm (Nambisan, 2015).

However, the advance of information technology has led to three new contexts that expose the limitations of traditional innovation practices, where much of the emphasis has been on the technological imperative within the producer-oriented perspective that naturally arises in the manufacturing industry: the emerging service economy characterized by the increasing importance of service components of all offerings, growing stakeholder power, and increasing globalization (Chen and Miller 2015). Today, many innovative ideas originate outside the firm and are commercialized through external paths to market (Chesbrough, 2003, 2006), thereby transforming the locus of innovation.

Innovation is considered an important element of firm success. Harper and Becker (2013) indicated that innovation resulted in significant change preferably an improvement in the real product, process, or service that exceeds the impact of previous achievements; these authors further indicated that innovation supported sustainable business management. Firms encourage innovation to achieve production and marketing goals, to improve product or service quality, to lower their operational costs, to increase their market share, to attain production flexibility, and to improve the management process.

Becker (2013) defined sustainable business management as "the management of sustainable business that recognizes its embeddedness in social, environmental and economic systems

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and focuses on management and relationships to meet the environmental, social, and economic requirements of many stakeholders in its networks". Recently, innovation for sustainable business management has received an increasing amount of attention from management, as innovation is increasingly recognized as an important means to contribute to sustainability. However, people and firms tend to focus on and take advantage of existing practices rather than exploring new ideas, needs, and opportunities for innovation; thus, it is difficult to encourage innovation in these cases. Hence, there is an essential need for firms to explore the insights of capabilities and competencies to drive innovation. This study seeks to investigate the relationship between business innovation and organizational sustainability among entrepreneurial businesses in Akwa Ibom State.

### **Statement of Problems**

The process of innovation is not always smooth. It often requires a specific environment to be in place so that the people involved are encouraged, as well as enabled, to generate ideas freely, ideas that can truly propel project forward. Innovation is a major factor in terms of organizational growth and success. Generating a culture of innovation in your company is a critical initiative today but despite this, many businesses combat internal challenges that slow the innovation process.

There has been significant growth with respect to investment and business development in the country, and this cuts across all areas of the Nigerian economy; E-commerce, mobile technology, fintech start-ups among others. Despite the many possibilities and potentials in the Nigerian market, not so many new businesses are able to scale through the fundamental stage, and as such are either forced to relocate or perhaps fold up, if they don't end up being purchased by a third-party company. Some of the entrepreneur of the internet era that have failed the test of time in Akwa Ibom State at the fundamental stage include a couple of prominent businesses and/or brands who came in with bold statements such as Unama Paper Mill, Efritinzs, Fero, Wiko, Wechat, Tambo Mobile, Easy Taxi, among several others. While some of these businesses were able to scale through for years before going pear-shaped, others could barely scale through beyond a year. It's interesting to note that many of these businesses share similar key issues that led to their respective failures, including a lack of proper research before entering the market, spending invested funds and never hitting the profitability mark, misappropriation of resources, lack of employee confidence, Poor Marketing, Building the wrong product etc Delgado (2009). Sadly, a couple of existing entrepreneurs with seemingly great potential are still towing this familiar path to failure.

However, Zahra (2007) and Colquitt (2010) also noted that innovation may be a risky investment; developing and launching new products and/or services is necessary for firm survival and sustainability, but these are costly business processes. Delgado (2009) argued that the positive effects of innovation, particularly technology innovation, may be exaggerated, whereas the potential negative effects are typically ignored or underemphasized. The manner in which innovation assists sustainable business management must be investigated to gain greater and deeper insights for organizations' managers.

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### **Objectives of the Study**

The general objective of the study was to examine the relationship of business innovation on organizational sustainability in Nigeria. In specific, the following objectives are to be achieve by this study.

- i. To examine the relationship between product innovation and environmental sustainability among entrepreneurs.
- ii. To ascertain the relationship between process innovation and economic sustainability among entrepreneurs.
- iii. To examine the relationship between marketing innovation and social sustainability among entrepreneurs.

### **Research Questions**

- i. What is the relationship between product innovation and environmental sustainability among entrepreneurs?
- ii. What is the relationship between process innovation and economic sustainability among entrepreneurs?
- iii. What is relationship between marketing innovation and social sustainability?

### Hypothesis of the Study

- **Ho1:** There is no significant relationship between product innovation and environmental sustainability among entrepreneurs.
- **Ho2:** There is no significant relationship between process innovation and economic sustainability among entrepreneurs.
- Ho3: There is no significant relationship between marketing innovation and social sustainability.

### LITERATURE REVIEW

### **Theoretical Framework**

### **Resource Based Theory (RBV) by Wernfelt (1984)**

The theory paraphrased stipulates that, for a firm to excel in its area of operation with competition from other firms, its resources must have competitive advantage (Barney, 1991). Barney noted that such resources should have some characteristics, denoted as VRIN. This means the resources should be value adding, rare, in-imitable and non-substitutable by competitors. However, Danny (2003) countered Barney theory and asserted that competitive advantage does not depend so much on resources but on intangible assets as skills, processes or assets which a firm cannot cost. Gomes et al., (2011) had also noted such assets were less used as measures of maintenance performance. This competitive advantage is not limited to specific innovative offerings but also arises from a firm's history of innovation activity, which "culminates in a uniquely valuable system of strategic attributes" (Roberts and Amit 2003). If it is difficult for a competitor to imitate a specific bundle of capabilities, which are themselves valuable, then a firm has a competitive advantage.

The resource-based view (RBV) does not consider firms as a set of product-market positions, rather treats as a collection of resources and capabilities. It emphasized on the development of resource-based capacities difficult for others to imitate or copy and makes performance difference with other firms based on firm specific, rent-generating and valuable resources and capabilities (Hamel and Prahalad, 1994). Dynamic capabilities theory, as discussed by Teece and Pisano (1994: 541), advocated for the "subset of the competences/capabilities which allow the firm to create new products and processes and respond to changing market circumstances".

These theories demand human resources and organizational learning, manufacturing process development, prioritization of R&D and other innovative outlets. But these two set of theories have many shortcoming: a) the value of resources may change over time becoming unpredictably; b) knowledge development and study replication is difficult without a understanding of the specific activities underlying capabilities; and c) many resources are complementary and it often complicated to identify which resources could account for effective performance (Teece and Pisano, 2014). Though there are many sets of propositions on how to manage organizational innovation including community of creations model, new knowledge management theories and so on, this paper discussed two prominent approaches to marketing innovation, product innovation and process innovation in a more elaborated way.

## New Growth Theory by Paul Romer (1986)

The new growth theory assumes that economic growth arises from the unlimited wants and desires of humans. The theory argues that every individual's personal pursuit of profits will eventually increase the real gross domestic product per person (GDP per capita). The new growth theory argues against the exogenous source of growth for the economy by emphasizing on the important of entrepreneurship, innovation, knowledge and technology as the main drivers of economic growth and sustainability (Maddison, 2015). The new growth theory views knowledge as an asset for growth that is not subject to diminishing returns, and that innovation and new technologies are formed or adopted from the desire for increased knowledge or human capital to achieve higher profits. As economic growth from payments systems can be drawn from internal consumption through the use of platforms, it is therefore an endogenous source of growth in the economy. As human capital in the form of technical know-how and education is required for the use of many modern sophisticated platforms which represent information technology, it can therefore serve as a basis for this study as the three when intertwined lay the foundation for effective adoption of innovative systems in Nigeria which will lead to increased consumption and subsequently improved economic growth in the long run (Romer, 1986).

## **Concept of business innovation**

Business innovation is a multidisciplinary area of expertise that bridges the gap between traditional fields of study such as business administration, organizational studies, marketing, arts, design, engineering and entrepreneurship. It focuses on the creation, acceleration and management of new and sustainable business through innovation (Crossan and Apaydin,

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2010). business innovation is a design-oriented field of study that addresses creating and validating new and sustainable business through innovation in ambidextrous contexts.

Business innovation is ambidextrous by nature: the word 'businesses literarily refers to the matters that one's time and attention is occupied with at this moment, while the linguistic origins of 'innovation' are quite the opposite: "a novel change, experimental variation, new thing introduced in an established arrangement" 1. The concept of ambidexterity differentiates business innovation from other fields of study in management science. Romme (2016) argued that while organizational studies originated with early management thinkers such as Taylor and Ford, it has become a more deliberate, explanatory field of science, although practitioners often deal with organizational learning in an emergent, exploratory way. Simon (1991) noted the importance of organizational learning and this idea is still prevalent in today's debate about the concept of management (Romme, 2016; Romme and Endenburg, 2006). Organizational learning is a critical requirement for business innovation (Garud and Van De Ven, 1992) and, more specifically, for business model innovation (Berends, et al, 2016). Simon (1991) addressed the concept of organizational learning, arguing that organizations that want to gain knowledge about innovation need to simultaneously focus on discovery and validation (a process that is severely hindered by 'bounded rationality', a concept for which Simon won the Nobel Prize). Romme (2016) pointed out that because business innovation requires organizational learning, it also requires a design-oriented approach rather than a more explanatory, deliberate approach to deal with the ever-changing, unsure and unpredictable context of business (Van De Vrande, 2017).

## What is innovation?

Innovation is a word that is derived from the Latin word innovare, this means "into new". The simplest definition of innovations is doing something different. Innovation is a word that often is used in the business world and for companies this usually mean something risky, costly and time consuming (Costello & Prohaska, 2013). Innovation can also be explained as s new idea, product, device or novelty. It is a mind-set, a way of thinking beyond the present and into the future. Innovations is important for companies and when used well it can be a process, strategy and management technique (Kuczmarksi, 2003). Innovation can at a fundamental level be the process of generating and combining ideas to make a relationship between present accomplishments and past experiences to solve a future problem. This is often associated with technological feats and it play a critical role in the world economy (Baskaran & Mehta, 2016). Innovation is big in the business world and is sustainable to create value and be strong in the competitive environment. There is a link between innovation, jobs, profit and standard of living. A common way to associate innovation with is new products, materials, new process, new services and new organizations. There is a range of definitions for innovation witch often overlap and there is no clear and authoritative definition. Scientist point towards this problem and without a clear definition of innovation it will be hard to develop strategies to be innovative (Baregheh, et al, 2009).

## **Types of Innovation**

Types of innovation include but not limited to product (including goods and services), process and marketing. Damanpour (1991) states that "An innovation can be a new product

or service, a new production process technology, a new structure or administrative system, or a new plan or program." These factors are also dimensions of innovation. Single innovations refer to small adoptions affecting one dimension of the innovation. On the other hand, complex innovation refers to the dimensions of innovation, namely, product, process, etc., which are affected by the single innovation. The more dimensions are affected by a single innovation, the more complex the innovation is. In other words, if several dimensions are affected by a single innovation, the innovation becomes complex. Today, socioeconomic problems and governments' expectations from government increase and more actors are involved in the innovation process. In fact, "The relationship between organization and innovation is complex, dynamic, and multilevel" (Lam 2006). Thus, it is better to adopt complex innovation as complex innovations can solve complex problems Demircioglu, (2016). In addition, types of innovations can be administrative vs. technical, product vs. process, and incremental vs. radical (Damanpour 1991).

### **Product Innovation:**

A product in the traditional sense is any tangible physical good or raw material, ranging extensively from everyday products (e.g. toothpaste) to industrial goods (e.g. steel pipes) (Gao et al., 2017). At the early stage of the product lifecycle, there is no prevalent design in the market and products are subject to major changes. Therefore, a firm must constantly improve on an innovation to meet customer demand, expand the customer base and build up greater market advantages. There is a recent trend among service companies (e.g. insurers, financial firms, telecommunications carriers and other professional service firms) to promote their services as "products". One case in point is the successful launch of Alipay, an online financing product, by Ant Financial Company in 2004, which is trying to bring inclusive financial services to the world. As described by Fortune's Annual Change the World List 2017, Ant Financials' Ant Forest app has encouraged 450 million users in China to do just that in fulfilment of parent Alibaba Group's pledge to use financial technology to tackle climate change. Users earn points toward planting virtual trees by adopting earth-friendly habits (Demircioglu, 2016).

### **Process innovation**

Process innovation is a new mode of producing or delivering a new product or service, for example, innovation in production processes, technological roadmaps or production equipment (Pilav-Velić) and Marjanovic, 2016). For a manufacturer, process innovation includes the adoption of new processes, techniques, manufacturing methods and technologies to achieve advantages in cost, quality, lead time, development cycle and delivery speed, or to improve the custom-making capacity of products and services (Lawson and Samson, 2001). In the case of washing machine manufacturing, a process innovation may take the form of the adoption of a new sheet material or the replacement of a traditional machine tool with a computerized numerical control (CNC) machine tool, which contributes to 50 percent cost reduction or threefold productivity or more (Demircioglu, 2016). The purpose of product innovation is to optimize product design and performance singularity, whereas the purpose of process innovation is to improve product quality, reduce production cost, maximize productivity, minimize energy consumption and upgrade the working environment. Process

innovation delivers multiple benefits (e.g. larger margin, less cost, higher productivity and higher employee satisfaction), makes value delivery more stable and reliable and benefits the customer as well (Hobday, 2000). Process innovation is unique in that it's normally invisible to the customer; in other words, it occurs at the backstage of the firm. Only when a mishap of the corporate internal procedure causes a failed delivery of products or services will the customer take notice of the problematic procedure.

## Marketing innovation:

Marketing innovation has been considered from multiple perspectives in both policy and academic literature. Policy makers, such as international organisations and government agencies, include marketing innovation within their various reports e.g. European Innovation Scoreboard (European Union, 2017); Global Innovation Index (Cornell University, INSEAD and WIPO, 2018); and Community Innovation Survey conducted by the European Commission). These various reports draw on definitions outlined in the Oslo Manual (OECD/Eurostat, 2005, 2018) and consider marketing innovation as a single item or within an umbrella innovation concept. However, there has been some variation in conceptualising marketing innovation in the academic literature while direct quotations have been drawn from the literature, articles which use a similar or the same definition have also been included in the references. Numerous definitions have been offered, encompassing either specific (e.g. customer management) or broader marketing practices. The majority of authors define marketing innovation as new marketing methods involving either the 4Ps of marketing or some combination thereof.

# **Organizational Sustainability**

Sustainability is "an economic, social, and ecological concept Boudreau and Ramstad (2005). It is intended to be a means of configuring civilisation and human activity so that society and its members are able to meet their needs and express their greatest potential in the present, while preserving bio-diversity and planning and acting for the ability to maintain these ideals indefinitely. Sustainability is providing for the best for people and the environment both now and in the indefinite future (Colbert and Kurucz, 2007).

The Charter of the Sustainability Committee created by the Board of Directors at Ford focuses on sustainable growth, which it defines as "the ability to meet the needs of present customers while taking into account the needs of future generations" (Ford, 2012). Sustainable growth encompasses a business model that creates value consistent with the long-term preservation and enhancement of financial, environmental and social capital. According to the Chartered Institute of Personnel and Development (CIPD, 2012), the essence of sustainability in an organizational context is "the principle of enhancing the societal, environmental and economic systems within which a business operates". This introduces the concept of a three-way focus for organizations striving for sustainability. This is reflected also by (Colbert and Kurucz, 2007), who state that sustainability "implies a simultaneous focus on economic, social, and environmental performance".

Colbert (2012) writes that the paradigm of 'sustainable development' rests on three conceptual pillars. These pillars are 'economic sustainability', 'social sustainability', and

'environmental sustainability' Economic sustainability, by way of growth, development, and productivity, has guided conventional development science in the past. Market allocation of resources, sustained levels of growth and consumption, an assumption that natural resources are unlimited and a belief that economic growth will 'trickle down' to the poor have been its hallmarks. 'Sustainable development' expands development's concern with monetary capital to consider natural, social and human capital. Restraint upon economic growth and consumption (Colbert, 2012). Social sustainability encompasses notions of equity, empowerment, accessibility, participation, sharing, cultural identity, and institutional stability (Beadle and Moore, 2006). Economic, social, and environmental 'sustainability' form elements of a dynamic system. They cannot be pursued in isolation for 'sustainable development' to flourish.

# Economic sustainability

Economic sustainability' implies a system of production that satisfies present consumption levels without compromising future needs. The 'sustainability' that 'economic sustainability' seeks is the 'sustainability' of the economic system itself. The notion of 'economic sustainability' was originated by (Hicks in his classic work Value and Capital 1939; second edition 1946), Hicks defined 'income' as 'the amount one can consume during a period and still be as well off at the end of the period'. Traditionally, economists, assuming that the supply of natural resources was unlimited, placed undue emphasis on the capacity of the market to allocate resources efficiently. They also believed that economic growth would bring the technological capacity to replenish natural resources destroyed in the production process. Today, however, a realization has emerged that natural resources are not infinite. The growing scale of the economic system has strained the natural resource base. This has caused many commentators, such as Goodland, to question the feasibility of uncontrolled growth and exponential consumption. Goodland (1995) writes that to speak accurately in terms of 'economic sustainability', it is necessary to 'generalise the definition of Hicksian income from its sole focus on human-made capital and its surrogate money to embrace the other three forms of capital natural, social and human'.

## Social sustainability

In the most basic sense, 'social sustainability' implies a system of social organization that alleviates poverty. In a more fundamental sense, however, 'social sustainability' establishes the nexus between social conditions such as poverty and environmental decay (Ruttan, 1991). This theory of social organization identifies a negative linkage between sustained colonization, sustained poverty levels, and sustained natural resource exploitation. There is a divergence of opinion in development theory whether 'environmental sustainability' is a prerequisite of economic growth and poverty alleviation, or economic growth and poverty alleviation are needed before 'environmental sustainability' can even be addressed. There is some evidence that 'environmental sustainability' may be a necessary pre-condition of sustained economic growth. For example, the United States has been expanding the amount of its land area covered by trees since the 1920s and actively managing its soils since the 1930s (Ramstad, 2005). These measures have greatly improved America's productivity in paper products and foodstuffs since the Great Depression. On the other hand, some

developing countries, for example, Costa Rica, are jeopardizing their long-term socioeconomic prospects by engaging in rapacious resource depletion (Net losses of natural capital in these nations imperil social gains from improvements in financial, technical and human capital Repetto, 1992). The latter position was defended by the late Indian Prime Minister Indira Gandhi, on the grounds that very poor countries must accept temporary environmental degradation in order to meet immediate needs of food and shelter before they can pursue permanent economic and environmental improvements.

# **Environmental sustainability**

Environmental sustainability' requires maintaining natural capital as both a provider of economic inputs called 'sources' and an absorber called 'sinks' of economic outputs called 'wastes' (Daly, 1973; 1974; World Bank, 1986; Pearce and Redclift, 1988; Pearce et al., 1990a; 1990b; Ser. ageldin, 1993). At the 'source site', harvest rates of resources must be kept within regeneration rates. At the 'sink site', waste emissions from industrial production must be controlled so as to not exceed the capacity of the environment to assimilate them without impairment (Goodland, 1995). It has become commonplace for 'sustainable development' or 'sustainability' to be defined strictly in terms of 'environmental sustainability'. This misconception holds that what is wrong with the contemporary pattern of international development is simply that it is destroying the environment. This view is superficial in the extreme, however, for it ignores the market forces and social inequalities that are driving environmental degradation. Goodland (1995) has identified the overlap among economic, social, and environmental 'sustainability', particularly the strong linkage between 'economic sustainability' and 'environmental sustainability'. It is fitting that unprecedented attention has been given to 'environmental sustainability' in recent years, given the fact that development theory has focused on matters of economic underdevelopment and poverty alleviation in developing countries, and was late in responding to unprecedented threats to the global environment.

## **Conceptual Framework**

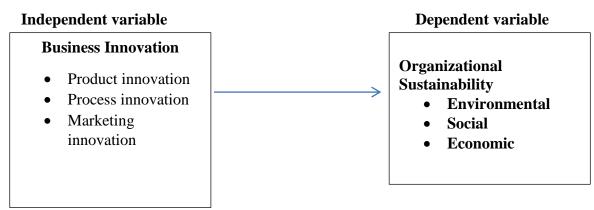


Figure (1): Study Model between business innovation and organizational sustainability

### Product Innovation and Environmental Sustainability

A review of literature reveals that there is little knowledge on why and how companies integrate environmental sustainability into new product development. The business climate is undergoing rapid change in terms of societal and environmental expectations from multiple stakeholders. Marketers are facing increasing challenges to address sustainability issues in order to attract, satisfy, and retain customers. The size of green markets is increasing and is likely to get bigger in future.

### **Process Innovation and Economic Sustainability**

Dyllick and Hockerts (2002) define economically sustainable businesses as the businesses with guaranteed cash flows and persistent profitability. Based on this definition, economic sustainability is largely focused at meeting the needs of shareholders at a given time. In other words, economic sustainability reflects the fact that, a business is the basic economic unit with a fundamental obligation to be productive and profitable (Carroll, 1979) and endure economically (Galbreath, 2011). Thus, engaging on sustainability initiatives can be dependent on managers' understanding the expected economic benefits (Prud'homme and Raymond, 2016).

Galbreath, (2011). studied application of process innovation and economic sustainability by women SME owner/managers in Kenya. The purpose of this study was to explore the application of process innovation practices by women SME owner/managers in Kenya. The study used a cross-sectional survey design was adopted. Data was collected using a structured questionnaire. The data was analyzed using descriptive statistics, Pearson correlation and qualitative methods. the dependent variable economic sustainability and the independent variable includes process innovation, marketing innovation and product innovation. The results finding showed that Out of the 100 questionnaires that were issued to respondents 58 were returned. The study concluded that the women managers also need to develop affordable business innovation systems which could appeal to their employees.

### Marketing Innovation and Social Sustainability

The marketing mix represents the interface between a company and its customers. It comprises the variables that marketers control and manipulate to win the custom and loyalty of their target market. The concept of the 'mix' emerged in the late 1940s and early 1950s, but it was McCarthy's (1960) memorable four 'P' factors of Product, Price, Place and Promotion that captured the collective marketing imagination and have endured for the last 50 years, despite many changes to the world and to marketing. The conventional 4Ps mix model has regularly been criticised for perceived weaknesses, omissions or negative side-effects. Two criticisms of the conventional mix are important from a sustainability perspective. The first is that it is producer orientated, and therefore cuts across the consumer orientation that underpins the marketing discipline (Shaw/Jones 2005). The product is what the producer believes the market will bear. The other Ps are dominated by the management of the producer's distribution channels, and promotional efforts. The second is that the 4Ps model was never intended by McCarthy to consider a wider range of stakeholders than the end user (Silverman 1995).

### METHOD

### **Research Design**

Research design is defined as the framework or plan that is used as a guide in collecting and analyzing the data for a study. The descriptive phenomenological approach was used. Phenomenological inquiry explores "how human beings make sense of experience and transform experience into consciousness how they perceive it, describe it, feel about it, judge it, remember it, make sense of it (Patton, 2002).

### **Population of the study**

The nature and purpose of the study should dictate the sampling method to be used (Baridam, 2001). A purposive sampling technique was use to select this 196 entrepreneurs in Uyo on purpose for this study because it can be useful in situation when you need to reach a targeted sample quickly, and where sample for proportionality is not the main concern. Employing purposive sampling provides rich information and offers valuable indicators of the phenomenon (Iversen, 2017). This is irrespective of the demographic variables or social status.

### Sample size determinant

Using purposive sampling of entrepreneurs from the catering/decoration services, super markets/stores, beading/makeup services, restaurants/drinking centres in Uyo metropolis, Akwa Ibom State, helped to identify information-rich participants for the study. Therefore, the sample size is 196.

### Validity of the Instrument

The face validity and content validity of the research instrument were determined after thorough evaluation by the supervisor of this project and other experts. Their suggestions and recommendations for improvement were used to review and improve on the research instrument, by so doing, the validity of the instrument was assured.

### **Reliability of the Instrument**

The internal consistency of the items in the research instrument was tested by using Cronbach's Alpha statistical tool at 0.943. An acceptable lower limit could be as low as 0.5 (Field, 2005; Buehl and Zoefel, 2005; George and Mallery, 2003; Nunnally, 1978). Therefore, a Cronbach Alpha Co-efficient of above 0.5 indicates internal consistency of items and can be relied on to explain the relationship between the variables under measurement. The Cronbach's Alpha is preferred because it gives a more accurate estimate of instrument reliability (Olaitan and Nwoke, 2000). Thus, the coefficients for the items in the instrument for this study were greater than 0.5 and found reliable.

### Method of Data Analysis

Data Analysis Technique; to determine the extent of relationship that collectively exist between the Business innovation dimensions (process innovation (PI)=X1, product innovation (PI)=X2, and marketing innovation (MI)=X3, which are the independent variables and organizational sustainability (OS)= Y, the dependent variable. The Pearson Product

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Moment Correlation technique were used at a 0.05 level of significance (e) (George and Mallery, 2003).

# **Testing of Hypotheses**

**Ho1:** There is no significant relationship between product innovation and environmental sustainability among entrepreneurs in Uyo, Akwa Ibom State.

### Correlation between product innovation and environmental sustainability

	-	Product Innovation	Environmental Sustainability
Product Innovation Pearson Correlation		1	.723**
	Sig. (2-tailed)		.000
	Ν	166	166
	Pearson Correlation	.723**	1
Environmental	Sig. (2-tailed)	.000	
sustainability	Ν	166	166

\*\*. Correlation is significant at the 0.01 level (2-tailed).

From Table above, the correlation (r) value of 0.723 indicates that there is a positive relationship between product innovation and environmental sustainability among entrepreneurs in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis rejected. This means that there is a significant relationship between product innovation and environmental sustainability among entrepreneurs in Uyo, Akwa Ibom State. As such the new hypothesis is proposed thus: there is a significant relationship between product innovation and environmental sustainability among entrepreneurs in Uyo, Akwa Ibom State.

Ho<sub>2</sub>: There is no significant relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State

Correlation between process innovation and economic sustainability.

		Process Innovation	Economic Sustainability
Process Innovation	Pearson Correlation	1	.663**
	Sig. (2-tailed)		.000
	Ν	166	
	Pearson Correlation	.663**	1
Economic	Sig. (2-tailed)	.000	
Sustainability	Ν	166	166

\*\*. Correlation is significant at the 0.01 level (2-tailed).

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From table above, the correlation(r) value of 0.663 indicates that there is a positive relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis rejected. This means that there is a significant relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. As such the new hypothesis is proposed thus: there is significant relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. As such the new hypothesis is proposed thus: there is significant relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State.

**Ho3:** There is no significant relationship between marketing innovation and social sustainability in Uyo, Akwa Ibom State.

	-	Marketing Innovation	Social Sustainability
Marketing Innovation	Pearson Correlation	1	.645**
	Sig. (2-tailed)		.000
	Ν	166	166
	Pearson Correlation	.645**	1
Social	Sig. (2-tailed)	.000	
Sustainability.	Ν	166	166

Correlation between marketing innovation and social sustainability.

\*\*. Correlation is significant at the 0.01 level (2-tailed).

From Table above, the correlation(r) value of 0.645 indicates that there is a positive relationship between marketing innovation and social sustainability among entrepreneur in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis rejected. This means that there is a significant relationship between marketing innovation and social sustainability in Uyo, Akwa Ibom State. As such the new hypothesis is proposed thus: There is significant relationship between marketing innovation and social sustainability in Uyo, Akwa Ibom State.

## **DISCUSSION OF FINDINGS**

The first objective was to examine the relationship between product innovation and environmental sustainability among entrepreneurs.in Uyo, Akwa Ibom State. From Table 4.4.1, the correlation (r) value of 0.723 indicates that there is a positive relationship between product innovation and environmental sustainability among entrepreneurs in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis is rejected. This means that there is a significant relationship between product innovation and environmental sustainability among entrepreneurs in Uyo, Akwa Ibom State. As supported by (Chen, Tong, and Ngai, 2007; Hobday, 2000). product innovation include the Apple iPhone, Haier's environmentally

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friendly twin tub washing machine (no need for washing powder) and the Huawei Mate 8 fingerprint recognition smart phone and Vredenburg, (2003) study business innovation dimension such as product innovation, marketing innovation and their impact on firms' sustainability: A Field Study in Jordanian Commercial Banks. The purpose of the study was to examine the impact of business innovation on firms' sustainability. A simple random sampling of (7) banks were adopted. (190) questionnaires were distributed (185) surveys were included in the analysis". The dependent variable firm's sustainability and the independent variable includes business innovation dimension such as product innovation, marketing innovation.

The second objective was to ascertain the relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. From Table 4.4.2, the correlation(r) value of 0.663 indicates that there is a positive relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis rejected. This means that there is a significant relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. Supported by Lawson and Samson, (2001) process innovation relate with economic sustainability usually alternate. On the one hand, a new process makes the production of new products possible. On the other hand, a state-of-the-art workstation helps a firm realize computer-aided manufacturing which is a boost to speed and efficiency. In addition, a product innovation developed by a firm may be a process innovation for another. by a manufacturer is used by a firm for machining, it is considered a process innovation for the latter since it improves speed, quality and efficiency and Galbreath, (2011). studied application of process innovation and economic sustainability by women SME owner/managers in Kenya. The purpose of this study was to explore the application of process innovation practices by women SME owner/managers in Kenya. The study used a cross-sectional survey design was adopted. Data was collected using a structured questionnaire. The data was analyzed using descriptive statistics, Pearson correlation and qualitative methods. the dependent variable economic sustainability and the independent variable includes process innovation, marketing innovation and product innovation. The results finding showed that Out of the 100 questionnaires that were issued to respondents 58 were returned.

The third objective was to examine the relationship between marketing innovation and social sustainability among entrepreneurs in Uyo, Akwa Ibom State. From Table 4.4.3, the correlation(r) value of 0.645 indicates that there is a positive relationship between marketing innovation and social sustainability among entrepreneur in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis rejected. This means that there is a significant relationship between marketing innovation and social sustainability in Uyo, Akwa Ibom State. As supported by Silverman (2015) study the Impact of marketing innovation on Organizational sustainability: A Case Study of the Textile Industry in Thailand. The purpose of this exploratory study is to investigate the impact of marketing innovation on Organizational sustainability. A questionnaire survey was conducted during December 2012-March 2013. About 354

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questionnaires were mailed to the random sample drawn from the Textile Directory (2006). A total of 63 usable returned questionnaires were obtained. Descriptive statistics were used to analyze the obtained data. The dependent business sustainability and independent variable includes marketing innovation and strategic impact. The study findings reveal that the sample respondents perceived that marketing innovation has a positive impact on organizational sustainability with respect to time savings, cost savings, information effects. Zeb-Obipi (2018) study business innovation variables such as marketing, process and product innovation in the oil and gas sector in Nigeria. This study ascertained the relationship between business innovation and organizational sustainability in the oil and gas sector in Rivers State, Nigeria. The systems theory considered as a theoretical framework for this study with prospects viewing the interaction between the organization and its external environment. The total population size of 217 was examined for this study and a sample size of 141 was obtained via the Taro Yemen's formula. Questionnaires designed and distributed to the personnel/human resources staff of 4 leading oil and gas organizations in Port Harcourt metropolis, 127 out of the 141 was returned and 121 (95.3%) was considered useful for the study. The quasiexperimental method was used in this survey to determine the influence of business innovation and organizational sustainability. The findings show a strong, direct and positive interaction between the independent and dependent variable.

# CONCLUSIONS

The major findings of this study are concluded as thus: According to the study findings in table 4.2.1. above, the respondents attributed that product innovation enhance environmental sustainability. From the first objective which examine the relationship between product innovation and environmental sustainability among entrepreneurs. From Table 4.3.1, the correlation (r) value of 0.723 indicates that there is a positive relationship between product innovation and environmental sustainability among entrepreneurs in Uyo, Akwa Ibom State.

The second objective was to ascertain the relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. From Table 4.4.2, the correlation(r) value of 0.663 indicates that there is a positive relationship between process innovation and economic sustainability among entrepreneurs in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis rejected.

The third objective was to examine the relationship between marketing innovation and social sustainability among entrepreneurs in Uyo, Akwa Ibom State. From Table 4.4.3, the correlation(r) value of 0.645 indicates that there is a positive relationship between marketing innovation and social sustainability among entrepreneur in Uyo, Akwa Ibom State. Also, since the p-value (0.000) is less than the level of significance of 0.01 (2 tailed). Therefore, the null hypothesis rejected.

#### Recommendations

The following recommendations were made,

First to the business consultant, data on the use of innovations by final consumers is also of value to business managers and policy makers. Individuals can contribute useful data for the design of new products and processes, for example behavioural data through their digital online footprint and the use of connected devices, as well as through feedback and review mechanisms.

Secondly, to the government, technological developments such as the Internet, 3-D printing and crowdfunding platforms can potentially support the innovation activities of individuals, although technical and commercial success is likely to result in a transition from the Household to the Business sector. Individuals can also finance the innovation activities of other members of the Household sector or start-ups, for instance through crowdfunding platforms.

Finally, Academics and research organisations are regular and frequent users of innovation data collected. Furthermore, they often self-organise as consortia to conduct one-off or regular surveys of innovation or related topics.

#### References

Alfirevic, T. (2011). Open innovation at Siemens AG. Leading Open Innovation. 19-34.

- Atuahene-Gina, W. (2005). Innovation Management for Technical Products.
- Baregheh, M., Udin, N., Wahab, F., & Ismail, R. (2016). Innovation Management Framework in Academic Institutions. *International conference on Applied computer and applied computational science. pp. 215-220.*
- Barney, M. (1991). *The social responsibility of business is to increase its profits*. New York Times Magazine (13 September), 32(33), 122–126.
- Baskaran, E., & Mehta, A. (2016). Strategies for improving research utilization. *Technology Review*, 80(5), 32-39.
- Bentz, M.A. (1997). A classification and review of models of the intra-firm innovation process. R&D Management, 14, (1) 11-24.
- Becker (2013). Knowledge-intensive business services as co-producers of innovation. *Int. J. Innov. Manag. 2000, 4, 491–528.*
- Beadle, R. and Moore, G. (2006). "MacIntyre on Virtue and Organization", Organization Studies, 27, 323–340.
- Blackledge, P. and Knight, K. (2011). Virtue and Politics: Alasdair MacIntyre's Revolutionary Aristotelianism. *University of Notre Dame Press*.
- Boudreau, J. and Ramstad, P. (2005). Talentship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. *Human Resource Management*, 44(2), 129–136.
- Berchicci, A., & bodewes, R. (2005). *Evidence in development of sustainability reporting: A case of a developing country*. Business Strategy and the Environment, 20(3), 141–156.

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Vol.10, No.4, pp. 74-93, 2022

Print ISSN: 2053-4019(Print)

Online ISSN: 2053-4027(Online)

- Berghman, R., Dunbar, C.& Zhu, Q. (2007). A three-tier knowledge management scheme for software engineering support and innovation. Journal of Systems and Software. 80(9), 1494-1505.
- Calantone, E. (2002). *Implementation of construction innovations*. Building research & information. 28(1), 2-17.
- Casrud, T., Brannback, D. (2010). Resetting the clock: The dynamics of organizational change and failure. Administrative Science Quarterly, 38(1), 51–73.
- Chen and Miller (2015), Service delivery innovation: Antecedents and impact on firm performance. J. Serv. Res. 2009, 12, 36–55.
- Choi, S., & William, K. (2013). An overview of Hofstede-inspired country-level culture research in international business since 2006. *Journal of International Business Studies*, 48(1), 30-47.
- Claudy, A., León Serrano, G., & Pavón-Morote, J. (2015). La gestión de la innovación y la tecnología en las organizaciones. Madrid: Ediciones Pirámide.
- Colbert, B. and Kurucz, E. (2007). Three conceptions of triple bottom line business sustainability and the role for HRM, Human Resource Planning 30.
- Colbert, Y. (2012). The drivers of green brand equity: Green brand image, green satisfaction and green trust. *Journal of Business Ethics*, 93(2), 307–319.
- Damanpour, F. (1991), 'Organizational Innovation: a meta-analysis of effects of determinants and moderators', Academy of Management Journal, 34, 555-590
- Danny, Y. (2003). Sustainable Business (online). Available at www.endsreport.com/reports/sb2011.
- Demircioglu, M. (2016). *Primer on open innovation*: Principles and practice. PDMA Visions. 30(2), 1317.
- Deephouse, D. (1996). Does isomorphism legitimate? Academy of Management Journal, 39(4), 1024–1039.
- Deephouse, D. (1999). To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic Management Journal*, 20(2), 147–166.
- Dotzel, L., Figueiredo, A., Salerno, M., & Kazuo, R. (2016). Unpacking the innovation ecosystem construct: Evolution, gaps and trends. *Technological Forecasting & Social Change*
- Daugherty, V., & Spanjol, J. (2011). *Adaptive Innovation Management*. In: The Agile Enterprise. Springer, Boston, MA.
- Davey, D., &, Sanders, A. (2012). Innovation Management System A Necessity for Business Performance. 29th IBIMA Conference.
- Dyllick, K., & hockert, S. (2011). CSR and environmental responsibility: Motives and pressures to adopt green management practices. Corporate Social Responsibility and Environmental Management, 18(1), 11–24.
- Eccles, R., Ioannou, I. and Serafeim, G. (2011). The Impact of a Corporate Culture of Sustainability on Corporate Behaviour and Performance. *Harvard Business School Working Paper 12-035*.
- Fell, V., Coughlan, P. & Voss, C. (2003). Development of a Technical Innovation Audit. *The journal of product innovation management.* 13(2), 105-136.
- Ford (2012). http://corporate.ford.com/doc/corpgov\_sustainability\_committee\_charter.pdf.

@ECRTD-UK: https://www.eajournals.org/

Vol.10, No.4, pp. 74-93, 2022

Print ISSN: 2053-4019(Print)

Online ISSN: 2053-4027(Online)

- Fri, G., Dinara, S., & Bayan, E. (2013). World experience of realization the open innovations paradigm. *International Business Information Management Association*.
- Galbreath, A. A. (2011). Good fences make good neighbors: A longitudinal analysis of an industry self-regulatory institution. *Academy of Management Journal*, *51*, *1150-1170*.
- Gao, C., Yepes, V., Pellicer, E (2017). Factores determinantes y propuestas para la gestión de la innovación en las empresas constructoras. Revista Ingeniería de Construcción. 22(1), 5-14.
- Garcia, A., & Kantola, J. (2002). Adapting crowdsourcing in innovation management. International Journal of Innovation and Learning. 19(3), 314 334.
- Gisbert-lopes, R. (2014). Towards the fifth-generation Innovation Process. International Marketing Review, 11, (1), 7-31.
- Gobble, J. (2012). Modelling the origins of nationally-bound administrative heritages: A historical institutional analysis of French and British firms. Organization Science, 8(6), 681–696.
- Gomes, R., Ioannou, I. and Serafeim, G. (2011). The Impact of a Corporate Culture of Sustainability on Corporate Behaviour and Performance. *Harvard Business School Working Paper 12-035*.
- Goodland, P. (1995) Globalization and the environment: Determinants of firm self-regulation in China. *Journal of International Business Studies*, 32(3), 439-459
- Gupta, T. & Voelkel, D. (2006). Managing open innovation in biotechnology. ResearchTechnology Management. 49(3), 14-18
- Hamel, P. & Prahalad, U (1994). Doing Good: Business and the Sustainability Challenge (online). Economist Intelligence Unit Report. Available at www.eiu.com.
- Harper and Becker (2013). Competitive advantage though service differentiation by manufacturing companies. J. Bus. Res. 2011, 64, 1270–1280.
- Hobday, M. (2000). Innovation management system A necessity for business performance.
- John, A.M (2014). A review of innovation research in tourism. Tour. Manag. 2010, 31, 1–12.
- Hult, S., Skrzypek, K., & Dąbrowski, K. (2004). *ERP-based innovation management system* for engineering-to-order production. Innovation Management, Development Sustainability, and Competitive Economic Growth-Vision. 3007-3016.
- Kurulz, M. W. (2010). How firms respond to being rated. *Strategic Management Journal*, 31, 917-945.
- Kucmarks, S. (2013). Total design: integrated methods for successful product engineering.
- Kahn, P. (1995). Multinational companies and the natural environment: Determinants of global environmental policy standardization. *Academy of Management Journal*, 47(5), 747760.
- Lawson, P. & Valls, J. (2001). Tecnología e innovación en la empresa. Ediciones UPC. Universidad Politecnica de Cataluña.
- Lee, S. & Johnson, N. (2017). An overview of innovation, The Positive Sum Strategy: Harnessing Technology for Economic Growth. Washington, D.C.: National Academy Press.
- Lumpkin, K., & Dess, J. (1996). Encouraging trade at the boundary of organizational culture and institutional theory. Journal of Management Inquiry, 21(1), 114–117.
- Miller, M.K., (2009). *Cognitive Dissonance Theory (Festinger)*. New York; John Wiley and Sons Ltd, 358p.

@ECRTD-UK: https://www.eajournals.org/

European Journal of Business and Innovation Research

Vol.10, No.4, pp. 74-93, 2022

Print ISSN: 2053-4019(Print)

Online ISSN: 2053-4027(Online)

- Mallery, R. M. (2003). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58 (3): 20-39.
- Maddisin, R. (2015). MBA"s learn the value of green thinking, The Guardian Work Section (29 January).
- Maddidin, A. (1982). After Virtue, 2nd edn. London: Duckworth
- Mankiw, R., Prahalad, C. K. and Rangaswami, M. R. (1992). Why sustainability is now the key driver of innovation, Harvard Business Review, 87(9), 56–64.
- Nambisan, (2015). *Configuration of innovation and performance in the service industry:* Evidence from the Taiwanese hotel industry. Serv. Ind. J. 2008, 28, 1015–1028.
- Onsel (2015). Antecedents of innovation activities in tourism: An empirical investigation of the Alpine hospitality industry. Tourism 2013, 61, 7–27.
- Pilav-Velic, R. & Sicilia, M. (2016). An innovation activity model for Very Small Entities in the software sector: an empirical study. R&D Management, 47(5).