



INNOVATIVE MINDSET AND ORGANIZATIONAL SUSTAINABILITY OF SMALL AND MEDIUM ENTERPRISES IN RIVERS STATE, NIGERIA

Lucky Ajour and Lawrence O. Alikor

Department of Management, Faculty of Management Sciences. Rivers State University, Port Harcourt

ABSTRACT: *This study examines the relationship between innovative mindset and organizational sustainability of Small and Medium enterprises in Rivers State, Nigeria. The study adopted the cross-sectional survey of the quasi-experimental design while the probability simple random sampling techniques were used to ensure equal chance of being selected. The theoretical foundation was built on the Resource Based View Theory of the firm. The population of the study consist of 1,200 owner/managers and supervisors of the small and medium enterprises operating in Rivers State, Nigeria. The sample size of 300 participants was derived, using the Taro Yemen sample size determination formula. The study made use of 50 selected accessible enterprises in Rivers State. Data were collected through a structured questionnaire survey on the respondents while the data analysis was done using the Spearman Rank Order Correlation Coefficient with the aid of the statistical package for social sciences (SPSS) version 21. The study revealed that a positive significant relationship exists between the predictor variable (innovative mindset) and the criterion variable (organizational sustainability). This was evidence from the fact that the null hypotheses tested were all rejected, giving room for the acceptance of the alternate hypotheses. Based on the revelation, the study concludes that SMEs chief executives, managers and employees should be entrepreneurial innovative in practicing organizational sustainability by initiating a strategic actions and campaigns towards achieving eco-innovation, that will thrive small and medium enterprises in Nigeria. The study therefore, recommends that Small and Medium Enterprises should adopt the application of sustainability initiative goal (2030) by the United Nations World Commission on Environment and Development on industry, innovation and infrastructure aimed at building resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation for sustainable performance.*

KEYWORDS: Innovative Mindset, Organizational Sustainability Economic, Sustainability, Social Sustainability, Environmental Sustainability, SMEs

INTRODUCTION

Entrepreneurial innovative mindset and organizational sustainability today, has become a crucial issue for the world and for business. Mindset is needed by individual, managers and employees at any level in the organization. Since the Brundtland report in 1987, a wide range of debates has emerged on eco-innovation (eg, eco-design, cleaner production) and sustainability - oriented innovations, that is, the integration of ecological and social aspects into products, processes and organizational structures (Klewitz & Hanse, 2013). The United Nations in September 2015, adopted the 2030 Agenda for sustainable development that



includes 17 sustainable development goals amongst other items, the industry, innovation and infrastructures, aimed at building resilient infrastructure, promoting inclusive and sustainable industrialization and foster innovation. How do SMEs successfully incorporate this goal into their organizational economics, social and environmental objective and practices in their strategic and tactical operational levels of doing business? According to Schaltegger (2011), one important way for firms to do this, is through their sustainability driven -innovation practices. This points to the importance of firms, to create, redesign, adapt and diffuse environmentally sound technology through eco-innovation practices such as cleaner production, life cycle assessments and eco-design (Klewitz & Hanse, 2013).

To contribute to organizational sustainability, innovative mindset becomes an important means in the innovation power in the discovering and realization of new opportunities by the entrepreneurs, managers and employees in organization. In both small and medium enterprises there is a deep need for creative thinking, new ideas, novelty, not only to develop new product or services of revenue generation but also to find smart solutions in solving social and environmental problems. According to OECD (2005) report, sustainable innovation involves the implementation of a new or significantly improved product (e.g. change in workplace organization) in business practices, workplace organization, or external relations. In the competitive environment, changes in the way things are done, by individuals, employers, managers and stakeholders are evolving and organizations must be compliance or be eroded away by rivalry competitors. The ability to survive is the ability to adapt to these changes which in most cases may not be favorable (Adim, Lebura & Adubasim, 2017). Many small and medium enterprises in Rivers State are stagnated, or have wind up because of its inability to innovate and remain socially and environmentally compliance to the legislative requirements of doing business. Kalay and Lynn (2014) opined that in a highly competitive environment, innovation is the essential key to a firm obtaining a dominant position and gaining higher profits. Therefore, the understanding of innovative mindset is first and critical in the organizational sustainability performance.

Many studies have been carried out on innovation and the role it plays on organizational performance. Walker (2008) investigated the relationship between innovation and organizational performance: evidence and research agenda. Odumeru (2013) investigated the outcome of innovation strategies on organizational performance. Klewicz and Hansen (2013) also carried out a study on sustainability-oriented innovation of SMEs: a systematic review. All of these studies did not directly investigate innovative mindset and its effect on organizational sustainability, hence, the main purpose of this study is to empirically investigate the relationship between innovative mindset and organizational sustainability of SMEs in Rivers State, Nigeria, while the specific objectives include:

- i. To examine the relationship between innovative mindset and economic sustainability of SMEs in Rivers State, Nigeria.
- ii. To examine the relationship between innovative mindset and social sustainability of SMEs in Rivers State, Nigeria.
- iii. To examine the relationship between innovative mindset and organizational sustainability of SMEs in Rivers State, Nigeria.

Based on the above-mentioned objectives, the following research questions were raised

- i. How does innovative mindset relate with economic sustainability of SMEs in Rivers State, Nigeria
- ii. How does innovative mindset relate with social sustainability of SMEs in Rivers State, Nigeria.
- iii. How does innovative mindset relate with environmental sustainability in Rivers State, Nigeria.

To effectively carry out the study, a conceptual framework was drawn to demonstrate the association between innovative mindset and organizational sustainability in Rivers State, Nigeria thus:

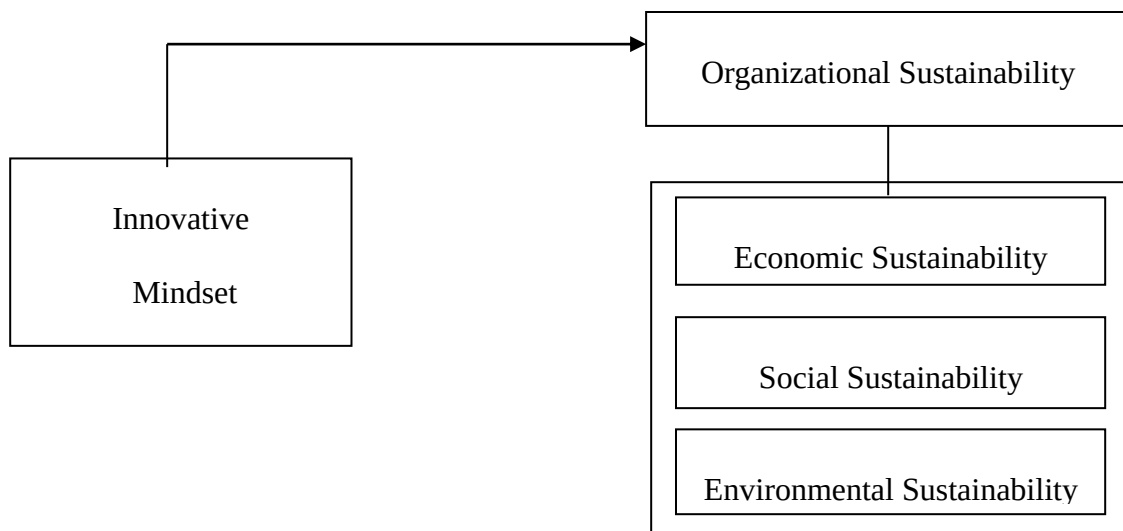


Fig. 1: Conceptual Framework of Innovative Mindset and Organizational Sustainability of SMEs

Source: Research Desk: 2019

LITERATURE REVIEW

Theoretical Foundation

The theoretical foundation of this study was based on the theory of Resource-Based View (RBV). This theory was first developed by E. T. Penrose in 1953. The theory has helped organizations to achieve sustainable competitive advantage in a complex environment. Organizational sustainability as well as entrepreneurial innovative mindset is concerned with the development of intangible assets including human capital organizational capital social capital and natural capital for sustainable organizational competitiveness (Sunday, 2017). The RBV, simply stated, in order to produce a competitive advantage that is sustainable, firms



should base their success in their distinctive competences which are grounded in their resources and routines (Adim, Lebura & Adubasim, 2017).

The tangible assets include land, building equipment, and personnel. These resources can be a source of competitive advantage to the firm but cannot form a long term sustainable competitive advantage (SCA) as the assets despite been valued can be eroded or duplicated by competitions unlike the intangible assets which include, clients, skills, trust, entrepreneurial orientation, innovation, reputation, intellectual property, database and networks that are more complex and difficult to define and cannot be imitable, immobile and non-substitutable (Cluclow, Gerstman & Barry, 2003). According to Mengue and Auh (2006), innovativeness is rare, valuable and hard-to-copy firm level competence and hence, serves as firm's sustainable competitive advantage (SCA). The RBV theory is applied to the entrepreneurial sustainable competitive advantage (SCA) by using the intangible assets that are internally and externally economic, social and environmentally innovative as a valuable competitive advantage over that of other competing firms who ignores to re-evaluate their strategic orientation and competence (Singh, Chakraborty & Roy, 2016).

Concept of Innovative Mindset

Sidhu, Goubet and Xia (2016) defined innovative mindset as a way of thinking that influences the way an individual view a situation and acts upon this situation that reflects his attitude towards innovation. Innovation is a question of mindset, and creating that mindset precedes everything else. It is the innovative mindset that overrides the aspects of human nature that are often holding back innovation in an entrepreneur (Bjorling, 2016). Studies reveal that behaviour can drive a performance but a mindset is more powerful since it actually drives individual behaviour either to increase or decrease performance (Alwi, Jaaffar, Yahya & Azami, 2018). An innovative mindset describes all the behaviours by which an individual can influence the innovation process, particularly focusing on behaviours oriented towards the generation and application of ideas (De and Den, 2007). In SMEs perspective, it has been found that entrepreneurs with innovative mindset will prioritize innovation as a tool to achieve business success and use strategic management practices and intellectual capital management as opposed to an SME owner-manager who lacks an innovative mindset (Volna, Kohnova, Bohdalova & Holienka, 2015). Kuczmarski (1996) assert that innovation is the single most important factor in the future growth of any business venture. Innovation is a mindset - a new way to think about business strategies and practice. This thinking according to him drives every aspect of a successful dynamic organization and penetrates every element of business, creating a clear and enduring vision. Similarly, Holderfield (2016) opined that innovation is creativity that is implemented. It could just impact on one person's life, or it could impact on a thousand of people's life but it must influence what we do and how we experience our lives. Innovation must augment our analytical thinking with creativity, which results in a human centered holistic perspective. The approaches require, establishing a mindset, follow a process and develop toolbox (Holderfield, 2016).

Since the creation of man on earth, innovation has always been part of mankind. Humans have been innovating, moving from one stage of discovery to the other and with more intent to discover more to accomplish life possibilities. Innovation probably, is the oldest known process because it is an extension of a person's creativity. We have used our innate skills to create many new things and to help mankind (Cupta, 2013). Asenge, Diaka & Soom (2018)



defined innovation as the introduction to new things, ideas, or ways of doing things/something, which is yet to be carried out by anyone or that is unique. In the worlds of Rebound (2008) innovation is described as the introduction of new or improved processes, products or service based on new scientific or technology knowledge and/or organizational know-how. Many management theorists suggest that innovation equates to the everyday running of an organization. Innovation therefore is seen as a necessary means and a desirable end for business in a fast-moving global economy. Hamel (1998) opined that only the entrepreneurs that are capable of recreating their mindset and their business in a profound way will be around in a decade hence. This important warning simply implies that an entrepreneur must innovate and have the right mindset or be ready to perish.

Arancha, Carmen, Amaia, Pablo & Alrarez (2013) see innovation as the creation or development of new and more effective processes, services products, technologies, as well as the successful assimilation and exploitation of them. Innovation helps to improve economic growth, social development and business competitiveness. According to Asenge, Diaka & Soom (2018). Many companies today, because of the competitive nature of the market are innovative, bringing about new ideas and modifying existing ones into their offerings. Innovation can be classified into product innovation, process innovation, management innovation and marketing innovation. Product innovation refers to new or the enhancement of old products, equipment or services that is successful in the market. Process, innovation involves the implementation of new or significantly improved production or delivery method of social service. Management innovation involve improving the way the organization is managed both internally and externally, while marketing innovation involves improvement in functions of product promotion, pricing and distribution.

Concept of Organizational Sustainability

Organizational Sustainability (OS) is broadly defined as an overall proactive strategic stance of firms towards the integration of organizational economic, environmental and social objectives and practice in their strategic, tactical and operational levels (Singh, Chakraborty, & Roy, 2016). It is an orientation of performing business in a sustainable manner (Lineneuecke and Griffiths, 2010). Colbert & Kuruez (2007) gave a colloquial definition of sustainability as being to "keep the business going," while another frequently use term in this context refers to the "future proofing" of organization (Wales, 2013). Boudreau and Ramstad (2005) refer to it as, achieving success today without compromising the needs of the future. Ford (2012) defines it as the ability to meet the needs of present customers while taking into account the needs of future generations. "Organizational sustainability is all about building a society with balance between economic, social and ecological aims" (Szekely & Knirsch, 2005).

Arising from the Brundland Commission (WCED, 1987) report, named after its chairperson, Gro Harlem Brundtland, the then, Norwegian prime minister, there has been an increased pressure on organization to broaden the focus of sustainability and accountability in business beyond that of financial performance (Lee & Saen, 2011), to include economic, environmental and social performance (Figge and Hahn, 2004).

The concept of corporate sustainability increasingly impacts on the nature of organizations operations (Lee, 2009). Green and sustainable management in organizations has to go beyond regulatory compliance and needs to include conceptual tools such as pollution prevention,



product7 stewardship and corporate social responsibility (Hart, 2005). Moving towards corporate sustainability, therefore, is now a major concern in most of the developed and developing countries resulting in stricter regulations concerning the impact of the products during their manufacturing, use and end life, including the obligation to define reverse logistics strategies and systems (Gou, Liang, Huang, & Zu, 2008; Hong, Ammons and Realff 2008; Kumar & Putnam, 2008).

Measures of Organizational Sustainability

Economic Sustainability

Economic sustainability is defined as how firms can stay in business over a long period of time (Singh, Chakraborty, & Roy, 2016). It is primarily concerned with monetary capital in consideration with natural, social and human capital (Kahn, 1995). Economic sustainability also referred to as "economic viability is at the core of corporate sustainability, since it generates profit and jobs it therefore contributes to the general social welfare (Azapagic, 2003). Economic sustainability is one of the measuring indicators of sustainability (IISD, 2015). It involves achieving a balance in all sectors of services. It tackles social issue as poverty reduction, low per capital income, inequality distribution, inefficiency in the mobilization of resources, unemployment issues formation, inefficiency in the mobilization of resources, unemployment issues, inflation, etc (Adejumo and Adejumo, 2014).

Initially, sustainability was based on environmental principles, to maintain ecological processes, life support systems, preserve genetic diversity and ensure the sustainable use of species and ecosystems. More recently, economic sustainability has emerged following the Brundtland report (1987) of the UN World Commission for Environmental Development (WCED). The CSD organized sustainable development Agenda 21 into four areas namely, social, economic, environmental and institutional for the purposes of developing sustainable development indicators (Bossel, 1999). According to Haskims (2009), to ensure economic sustainability, all sensible business enterprise must plan for their economic future by, building their assets, quality and expertise staff, business, products and brands with consumers and stakeholders, planning their finances, assessing its risk and deciding how to manage them. Acting in an ethical and fair manner, zero discrimination, equal pay and fair trading, training and development of staff or employee, social justice and ensuring environmental protection. etc. Vinodh and Joy (2012) assert that the most important economic aspects in Small and Medium Enterprises (SMEs) are; availability of capital, operational efficiency, implementation of production cycle; & use of quality raw materials. Good sustainable practice is crucial to the long-term success of an entrepreneur, without economic sustainability, an entrepreneurial venture will not be as successful especially when the aspects of social and environmental sustainability is ignored (Haskims, 2009).

Economic sustainability hence is an integrated part of sustainability and means that an entrepreneur must use, safeguard and sustain resources (human and materials) to create long term sustainable values by optimal use, recovery and recycling. In other words, he must conserve finite natural resources today so that future generations too can cater for their needs (Hogskolan, 2018). Economic sustainability, according to Doane and MacGillivray (2001) is integrally linked to the environmental and social outcomes an organization achieves. All three overlap and they interact. While a good financial and broader economic performance might mean that firms survive in the short-term, it does not necessarily secure a long-term



economic future, nor does it guarantee positive environmental or social outcomes. If the predictions about sustainable development are accurate, neglecting the environmental or social issues may be a barrier to long-term survival at both the micro or macro level. Consequently, those firms that can effectively manage their environment and the social will also help make themselves economically sustainable (Doane & MacGillivray, 2001).

Social Sustainability

This is one of the different ways of approaching sustainability. According to Cella-De-Oliverira (2013) social sustainability refers mainly to aspects as skills, motivation and loyalty of employees and business partners, it obliges the organization to internalize the social costs, maintaining and providing the growth of the social capital; avoiding exploiting the individual, giving incentive to auto-renewable structures; promoting democracy, amplifying the scope of personal choices and distributing resources and property rights in a fair manner (Dyllick & Hockerts, 2002). It causes management to understand the impact of its operations on the social systems and how the expectations of the different social groups relating to the organization are carefully considered (Emetuei & Ahiawe, 2012).

Social sustainability is a process for creating sustainably, successful places that promote wellbeing, by understanding what people need from the places in which they live and work (Woodcraft, 2015). Wanamaker, (2018) assert that it is a process of framework that promotes wellbeing within an organization's own members while also supporting the ability of future generations to maintain a healthy community. Social sustainability encompasses the impact of corporations on people and society - whether corporate, public sector, educational or nonprofit, it improves the lives of their employees, stakeholders, customers and the community in which they operate (Benojo, 2010). Social sustainability encompasses the notions of equity, empowerment, accessibility, participation, sharing, cultural identity; and institutional stability (Singh, Chakraborty, & Roy 2016). social sustainability concepts, incorporates questions related to human development; such as education, occupational health, workplace safety, training and development; to equality, - such as fair salaries and benefits, equal opportunities and absence from workplace discrimination; to ethics, such as human rights, cultural values, intergeneration and intergeneration (Muck, Muck, and Souza (2011).

Environmental Sustainability

According to Singh, Chakraborty and Roy, (2016) Environmental sustainability involves ecosystem integrity, carrying capacity and biodiversity. This means to avoid stressing a valued ecosystem beyond the limits of its resilience, stability and carrying capacity. An environmental sustainability entails that natural wealth act as a source of economic inputs and as a sink for wastes (Kahn, 1995; Basiago, 1998). A state in which the demand placed on the environment can be met without reducing its capacity to allow all people to live well now and in the future. Goodland and Daly (2006) defined environmental sustainability as holding waste emissions within the assimilative capacity of the environment without impairing it. It also means keeping harvest rates of renewable within regeneration rates.

Evidences are strong that we are exceeding and eroding the earth's carrying capacity (OECD, 2013). Effects are unpredictable and escalating as we approach a global average temperature rise of more than 2 degrees centigrade over pre-industrial levels (Oyeshola, 2008). The most essential environmental aspects in MSMEs are usage of renewable raw materials reduce,



reuse and recycling of solid and liquid wastes; conservation of energy levels, decrease of air and noise pollution level (Vinodh and Joy, 2012; Torgusa, O'Donohue, &Hecker, 2013; Schoenhrr, 2012).

Leading thinkers suggest that to stand any chance of achieving environmental sustainability, businesses including MSMEs, need to move with a sense of right mindsets, to exploit the natural environment to a worldview of mutual interdependence and radical eco-innovation. Many organizations are now taking on this challenge. The environmental sustainability encompasses the prevention of the impacts created by the organization on the natural system composed of living and non-living beings. (Emetuei and Ahaiwe, 2018). Pressures from the international Agencies, and stakeholders had sometimes resulted government placing stricter legislation on organizations to go beyond certifying the conformity to governmental regulations and initiatives, like in cares of recycling or efficient energy usage, since it does not exempt a comprehensive approach over the organizational operations, which are ruled by the evaluation of the impacts generated by the company's products, processes and daily services, by the elimination of unnecessary costs and of high emissions, besides minimizing practices that may affect the access of future generations to critical natural resources (Munck and Souza, 2011).

Innovative Mindset and Organizational Sustainability

Innovation has mainly been associated with new product development and development of the processes (Hilmarrsson, Oskarsson, & Gudlaugsson 2018). This view however, has been changing and now innovation can be related to any part of the value chain, whether developing new services, new business models, rethinking cooperation, revenue streams, distribution channels, or management styles. This new view of innovation applies to eco-innovation sustainability as well as retailing and industry or services (Hilmarrsson, Oskarsson, & Gudlaugsson, 2018). The importance of innovation for SMEs success is well understood and numerous researches have shown that there is a positive relationship between innovation performance and organizational sustainability (Bouquet, Barsoux, & Birkinshaw, 2011). As started by Klewitz and Hansen (2013), the debate on organizations that strive to achieve the goals of sustainable development through innovation was initially focused on eco-innovations. In general, one can argue that eco-innovations include several dimensions, such as; design dimensions, user dimensions, product service dimensions, governance dimensions, and the engagement of key stakeholders.

Recently, the trend has moved towards holistic sustainability management system standards and guidelines (Mass and Reniers, 2013). Lately, the debate on sustainability and innovation has expanded its focus to include a wide range of themes such as sustainability - related innovation (eg, Wagner, 2008; Klewitz and Hansen, 2013); sustainable innovation (Boons, Montalvo, Quist, & Wagner, 2013); CSR driven-innovation (eg, Hockerts, 2008) as well as the discussion regarding the development of more sustainable management system (Mass and Reniers, 2013).

In recent years, much has been discussed about the environmental and social impacts caused by economic activity, so that, firms are considered by many as being the source of the lack of sustainability in society (Wagner and Schaltegger, 2011). Bessant & Tidd (2009) emphasize that innovation is singled out as having a significant contribution to the degradation of the environment, basically for constituting an important portion of economic growth and



consumption. Elkington (2001) asserts that firms are the only organizations with resources, technology, reach and motivation to 'achieve' sustainability. Porter and Vander-Linde (1995) and Bessant and Tidd (2009) point out that innovation can also become an important part of the solution to environmental issues, especially by the insertion of products and technologies with environmentally issues, especially by the insertion of products and technologies with environmentally correct bias. Similarly, Daroit and Nascimento (2000). Emphasized that the quest for higher environmental quality enables the generation of innovations that improve production efficiency, contributing to the competitiveness of firms.

It has been found that an SME owner-manager with an innovative mindset will prioritize innovation as a tool to achieve business success and use strategic management practices and intellectual capital management as opposed to an SME owner-manager who lacks an innovative mindset (Volna, Kohnova, Bohdalova, & Holienka, 2015). To achieve sustainable performance, an entrepreneur must go beyond the simple compliance to the legislative requirements as it has the potential to proactively contribute to the sustainable development of society by introducing products and services that are both economically attractive and beneficial to the environment, thus contributing to the achievement of social need (Szekely & Knirsch, 2005). Sustainable innovation, also known as eco-innovation, has a key role in achieving global sustainability objective, with significant potential benefits for innovative organizations, industry sectors and even national economies (Paraschiv, Nemoianu and Lauga, 2011). Eco-innovation is defined as "any form of innovation resulting in or aiming at significant and demonstrable progress towards the goal of sustainable development or achieving a more efficient and responsible use of natural resources (Eco-AP, 2011). According to Reid and Miedzinski (2008) eco-innovation may refer to products, processes, marketing methods, or organizational structures.

The notion of sustainable entrepreneurship as an all-inclusive concept has been used by some researchers to address the contributions of entrepreneurial activities to solving societal and environmental problems. Kriscianas and Greblikaite (2007) assert that sustainable entrepreneurship obtains such main features as social responsibility, competitiveness, progressiveness, knowledge creation and usage, innovativeness, dynamism and seeks for business benefits and creating social value. A successful sustainable innovation is accomplished when entrepreneurial actors achieve competitive advantages, i.e., economic success by applying innovative environmental and/or social practices. Small and Medium enterprises (SMEs) are increasingly recognized as a driving force for innovation, entrepreneurial spirit and competitiveness, and is seen as one of the keys to achieving sustainable development on the contrary, it has also been argued by some researchers that sustainable entrepreneurship is a mirage as the world still suffer, immensurable poverty, high unemployment rate, poor health and other social vices in spite of it innovative capacities (Kardos, 2012). Based on the above, this paper hypothesizes as below.

H₀₁: There is no Significant relationship between innovative mindset and economic sustainability of SMEs in Rivers and Bayelsa States, Nigeria.

H₀₂: There is no significant relationship between innovative mindset and social sustainability of SMEs in Rivers and Bayelsa States, Nigeria.

H₀₃: There is no significant relationship between innovative mindset and environmental sustainability of SMEs in Rivers and Bayelsa States, Nigeria.



METHODOLOGY

This study adopted the cross-sectional survey of the quasi-experimental design while probability simple random sampling technique were used to ensure equal chance of being selected. The population of the study consists of 1,200 owner/managers and supervisors of small and medium enterprises operating in Rivers State, Nigeria. The Taro Yamen's sample size determination formula was used in determining the sample size of 300 participants from an accessible population of 50 selected enterprises in Rivers State, Nigeria. Data collection was done through the primary and secondary sources of data collection. The primary source made use of structured questionnaire designed to generate information from the respondents while the secondary source made use of textbooks, journals, electronic media via internet-web, research reports (literature survey) seminar papers and other published articles. The Cronbach alpha coefficient tool was used to test for the reliability of the instrument at 0.7 level of acceptability. Face and content validity were also adopted to validate our instrument for the study. Data analysis was done with the aid of the Statistical Package for Social Science (SPSS) version 21, using the Spearman Rank Order correlation coefficient to test the stated hypotheses in null form.

DATA ANALYSIS AND RESULT

Hypotheses One

H₀₁: There is no significant relationship between innovative mindset and economic sustainability of SMEs in Rivers and Bayelsa States, Nigeria.

Table 1: Spearman Order Correlation between Innovative Mindset and Economic Sustainability

			Innovative Mindset	Economic Sustainability
Spearman's rho	Innovative Mindset	Correlation Coefficient	1.000	.552**
		Sig. (2-tailed)	.	.000
		N	288	288
	Economic Sustainability	Correlation Coefficient	.552**	1.000
		Sig. (2-tailed)	.000	.
		N	288	288

**. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Ver. 21 Computation

From the result of the above table, the correlation coefficient ($r = 0.552$) between innovative mindset and economic sustainability of SMEs is strong and positive. The coefficient of determination ($r^2 = 0.30$) indicates that 30% change in economic sustainability of SMEs can be explained by innovative mindset. The significant value of 0.000 ($p < 0.05$) reveals a significant relationship. Based on that, the null hypothesis was rejected. Therefore, there is a



significant relationship between innovative mindset and economic sustainability of SMEs in Rivers and Bayelsa States, Nigeria.

H₀₂: There is no significant relationship between innovative mindset and social sustainability of SMEs in Rivers and Bayelsa States, Nigeria.

Table 2: Spearman Order Correlation between Innovative Mindset and Social Sustainability

			Innovative Mindset	Social Sustainability
Spearman's rho	Innovative Mindset	Correlation Coefficient	1.000	.688**
		Sig. (2-tailed)	.	.000
		N	288	288
	Social Sustainability	Correlation Coefficient	.688**	1.000
		Sig. (2-tailed)	.000	.
		N	288	288

** . Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Ver. 21 Computation

From the result of the above table, the correlation coefficient ($r = 0.688$) between innovative mindset and social sustainability of SMEs is strong and positive. The coefficient of determination ($r^2 = 0.45$) indicates that 45% change in social sustainability of SMEs can be explained by innovative mindset. The significant value of 0.000 ($p < 0.05$) reveals a significant relationship. Based on that, the null hypothesis was rejected. Therefore, there is a significant relationship between innovative mindset and social sustainability of SMEs in Rivers and Bayelsa States, Nigeria

H₀₃: There is no significant relationship between innovative mindset and environmental sustainability of SMEs in Rivers and Bayelsa States, Nigeria.

Table 3: Correlations Spearman Order Correlation between innovative mindset and environmental sustainability

			Innovative Mindset	Environmental Sustainability
Spearman's rho	Innovative Mindset	Correlation Coefficient	1.000	.702**
		Sig. (2-tailed)	.	.000
		N	288	288
	Environmental Sustainability	Correlation Coefficient	.702**	1.000
		Sig. (2-tailed)	.000	.
		N	288	288

** . Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Ver. 21 Computation



From the result of the above table, the correlation coefficient ($r = 0.702$) between innovative mindset and environmental sustainability of SMEs is strong and positive. The coefficient of determination ($r^2 = 0.49$) indicates that 49% change in environmental sustainability of SMEs can be explained by innovative mindset. The significant value of 0.000 ($p < 0.05$) reveals a significant relationship. Based on that, the null hypothesis was rejected. Therefore, there is a significant relationship between innovative mindset and environmental sustainability of SMEs in Rivers and Bayelsa States, Nigeria.

DISCUSSION OF FINDINGS

From our findings, we discovered that all the null hypotheses tested were rejected giving room for the acceptance of alternate hypotheses. This implies that, there is a significant relationship between innovative mindset and measures of organizational sustainability (economic sustainability, social sustainability and environmental sustainability) of SMEs in Rivers State, Nigeria.

The SPSS output with regards to innovative mindset and economic sustainability shows a significant and strong association. Data analysis ($r = 0.552$) between innovative mindset and economic sustainability of SMEs is strong and positive. The significant value of 0.000 ($P < 0.05$) revealed a significant relationship between innovative mindset and economic sustainability of SMEs is strong and positive. The significant value of 0.000 ($P < 0.05$) revealed a significant relationship, hence, the null hypothesis was rejected and the alternate hypotheses accepted. This is in line with the assertion Kaley and Lynn (2014) that to achieve organizational sustainability in a highly competitive environment, innovation is the essential key to a firm obtaining a dominant positive and gaining higher profits.

The relationship between innovative mindset and social sustainability also shows a significant and strong association. Data analysis ($r = 0.688$) between innovative mindset and social sustainability is very strong and positive. The significant value of 0.000 ($P < 0.05$) reveals a significant relationship, hence, the null hypothesis was rejected and the alternate hypothesis accepted. This is in line with Schaefer (2015) assertion, which suggest entrepreneurship as one of such processes of socio-economic transformation that can move humanity towards sustainability-as-flouring, new innovative ideas that impacts on social wellbeing. Based on the above, we conclude that there is a significant relationship between innovative mindset and social sustainability of SMEs in Rivers State, Nigeria.

In the relationship between innovative mindset and environmental sustainability, our findings also revealed a significant relationship between the predictor and criterion variables. Data analysis ($r = 0.702$) between innovative mindset and environmental sustainability of SMEs is strong and positive. The coefficient of determination ($r^2 = 0.49$) indicates 49% change in environmental sustainability of SMEs and can be explained by innovative mindset. The significant value of 0.000 ($P < 0.05$) reveals a significant relationship, hence, the null hypothesis was rejected and the alternate accepted. This is in line with Daroit and Nascimento (2000) assertion that the quest for higher environmental quality enables the generation of innovations that improves production efficiently and contributing to the competitive advantage of firms. Bessant and Tidd (2009) also pointed out that innovation can become an important part of the solution to environmental issues especially by the insertion



of products and technologies with environmentally correct bias. The availability of innovation (ie., technology, product, processes, business practices, or policy approach and the willingness to adopt such an innovation and truly incorporate it into business processes i.e, to change, are also mandatory for the success of paths to green environmental and thus require change in the mindset of top management and staff within an organization (Silvestre & Tirca, 2018).

This assertion agrees with the present study and implies that to achieve a sustainable organization devoid of environmental much challenges, entrepreneurs would have to align all internal and external processes (including decision making processes) to focus on the impact of their activities on society (Matos & Silvestre, 2013). Based on the above, we therefore conclude that there is a significant relationship between innovative mindset and environmental sustainability of SMEs in Rivers State, Nigeria.

CONCLUSION AND RECOMMENDATIONS

Based on the findings, the study concludes, that small and medium enterprises' chief executives, managers, and employees should be entrepreneurial innovative in practicing organizational sustainability to encourage clean and greener management of their firms. Enterprises, whether small or medium, should take seriously the importance of innovative mindset as inability of it may have a major effect on sustained business performance.

The study also concludes that, to achieve sustainable performance in any organization, an entrepreneur should operate within the simple compliance of the legislative requirements of doing business as it has the potential to proactively contribute to the sustainable development of society by innovatively introducing products and services that are both economically attractive and beneficial to the environment, thus contributing to the achievement of social and environmental needs.

Based on the findings and conclusion, the study recommends as follows;

- i. There should be a revitalization of organizational sustainability measures by initiating a strategic action and campaigns towards achieving eco-innovation, that will thrive small and medium enterprises in Nigeria.
- ii. Small and medium enterprises (SMEs) operators and managers should be more entrepreneurial innovative in practice, while considering the economic, social and environmental implications of their operations on the society.
- iii. The SMEs should adopt the application of sustainability initiative goal (2030) by the United Nations World Commission on environment and development (WECD), on industry, innovation and infrastructure aimed at building resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation, that will thrive SMEs towards achieving organizational sustainability.



REFERENCES

- Adejumo, A. V. & Adejumo, O. O. (2014). Prospects for achieving sustainable development through the millennium development goals in Nigeria. *European Journal of Sustainable Development*, 3(1), 33-46.
- Adim, C. V., Lebura, S., & Adubasim, E. I. (2017). Innovative culture and organizational survival in hospitality firms in port Harcourt. *Nigeria Business and Social Review*. 9(1), 66 - 79.
- Alwi, M. N. R., Jaaffar, A. H., Yahya, N. A., & Azami, N. (2018). Research framework for the impact of innovative mindset, innovative behaviour, and innovation performance on competitive advantage: An application for Halal SMES owner Manager. *The Journal of Social Science Research*, 2, 718-723.
- Asenge, E., Diaka, H., & Soom, A. (2018). Entrepreneurial mindset and performance of small and medium scale enterprises in makurdi metropolis, Benue State, Nigeria. *International Journal of Innovation*, 6(2), 124-146.
- Azapagic, A. (2003). Systems approach to corporate sustainability a general management framework. *Trans Ichem E*, 81.
- Basiago, A. D. (1998). Economic, social and environmental sustainability in development theory and urban planning practice. *Environmentalist*, 19(2), 145-667.
- Bonojo, (2010). *Social sustainability for business*. Australia: Surry Hills NSW.
- Boons, F., Montalvo, C., Quist, J., & Wagner, M. (2013). Sustainable innovation, business models and economic performance: an overview, *Journal of Cleaner Production*, 45, 01-08.
- Bossel, H. (1999). *Indicators for sustainable development: Theory, method, applications - international institute for sustainable development*, Canada: Winnipeg.
- Boudreau, J., & Ramsted, 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.
- Bouguet, C., Barsoux, J. L., & Birkinshaw, J. (2011). The 5 myths of innovation; *Mit Sloan Management Review*, 52(2), 43-50.
- Cella-De-Oliveira, F. A. (2013). Indicators of organizational sustainability: A proposition from organizational competences. *International Review of Management and Business Research*, 2(4), 962-979.
- De, J. J. P., & Den, H. D. N. (2007) How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, 10(1), 41-64.
- Doane, D., & MacGillivray, A. (2001). *Economic sustainability: The business of staying in business*. London: New Economic Foundation Press.
- Dyllick, T., & Hockerts, K. (2002). Beyond the case for corporate sustainability. *Business Strategic Environment*, 11, 13-141.
- Emetuei, E., & Ahaiwe, C. I. (2018). Quality assessment and corporate sustainability of deposit money banks in port harcourt. *Nigeria Business and Social Review*, 9(2), 141-154.
- Figge, F., & Haln, T. (2004). Sustainable value-added measuring corporate contributions to sustainability beyond eco-efficiency. *Ecological Economics*, 48, 173-187.
- Ford, J. (2012). Corporate government sustainability. Retrieved from; http://corporate.ford.com/doc/corpgov_susstainabilty_committee_chapter.pdf. Retrieved 04 April, 2019.



- Goodland, R., & Daly, H. (1996). Environmental sustainability: Universal and non-negotiable. *Ecological application*, 6(4), 1002 - 1017.
- Gou, G., Liang, L., Huang, Z., & Zu, C. (2008). Joint inventory model for an open-loop reverse supply chain. *International Journal of Production Economics*, 116, 28-42.
- Hart, S. (2005). Innovation, creative destruction and sustainability. *Research Technology Management*, 21-27.
- Haskims, C. (2009). *Using the concept to sustainable development to encourage corporate responsibility in small enterprise*. Norwegian University of Science and Technology - Trondheim, Norway.
- Hilmarsson, E., Oskarsson, G., Gudlaugsson, T. (2018). The relationship between culture and innovation performance. *Journal of Business Venturing*, 26(6), 125-130.
- Hogskolan, I. G. (2018). Economic sustainability. Retrieved from <http://www.higse/exteng/of-the-sustainable/economic-sustainability.html>.
- Holderfield, G. (2016). Design innovation mindset: Better design through humanity. Retrieved from <http://www.Mcormick.northwestern.edu/spring-2016/pdf/>. Retrieved 04 April, 2019.
- Hong, I. H., Ammons, J. C., Realff, M. J. (2008). Decentralized decision-making and protocol design for recycled material flows. *International Journal of Production Economics*, 116, 325-337.
- Hutchinson, C. (1996). Integrating environment policy with business strategy. *Long Range Planning*, 29(1), 11-23, in L. Abbott., A. Coldham., & R. Whisnaut. (2010). Organizational culture and the success of corporate sustainability initiatives: An empirical analysis using the competing values framework. *A dissertation*, Dept of Natural Resources and Environment, University of Michigan, USA.
- Kahn, M. (1995). Concepts, definitions and key issues in sustainable development: The outlook for the future. Proceedings of the 1995 International Sustainable Development. *Research Conference*, Manchester, England, Mar. 27/28.
- Kalay, F., & Lynn, G. S. (2014). The impact of strategic innovation management practices on firm innovative performance. *Research Journal of Business and Management*, 2(3).
- Kardos, M. (2012). The relationship between entrepreneurship, innovation and sustainable development. Research on European Union Countries. *Emerging markets queries in finance and business*, 3, 1030-1035.
- Klewitz, J., & Hansen, E. G. (2013). Sustainability - oriented innovation of SMEs: A systematic review. *Journal of Cleaner production*, 07/017.
- Klewitz, J., & Hanson, E. G. (2013). Sustainability-oriented innovation of SMEs: a systematic review. *Journal of cleaner production*. (xxx), 1-19. <http://doi.org/10.1016/j.jclepro.2013.07.017>.
- Krisciunas, K., & Grebikaite, J. (2007). Entrepreneurship in sustainable development: SMEs Innovation in Lithuania. *Engineering Economics*, 4(54), 20-26.
- Kruger, N. F. (1993). The impact of prior entrepreneurial exposure on perception of new venture feasibility and desirability. *Entrepreneurship theory and practice*, 18(1) 5-21.
- Kuezmarski, T. D. (1996). Fostering an innovative mindset. *Journal of Consumer Marketing*, 13(6) 7-13.
- Kumar, S., & Putnam, V. (2008). Cradle to cradle: Logistics strategies and opportunities across three industry sectors. *International Journal of Production Economics*, 305-315.
- Lee, H. K., & Saen, R. F. (2011). Measuring corporate sustainability management: A data environment analysis approach. *International Journal of Production Economics*.



- Lee, K. H., (2009), Why and how to adopt green management into business organizations? The case study of Korean SMEs in manufacturing industry. *Management Decision*, 47(7), 1101–1121.
- Maladzhi, W. R. (2016). Impact of risk-taking leadership on organizational performance and sustainability in SMEs. Conference paper. *Proceedings of the 2015 International Conference on Industrial Engineering and Engineering Management (IEEM)*.
- Mass, S., & Reniers, G. (2013). Development of a corporate social responsibility model for practice; Connecting five inherent area of sustainable business. *Journal of Cleaner Production*, 07-039.
- Mengue, B., & Auh, S. (2006). Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness. *Journal of the Academy of Marketing Science*, 34, 63-73.
- Munck, L., & Borim-de-Souza, R. B. (2011). Organizational sustainability: Concepts and characteristics which typify the sustainability of organizations. *Sociedade*, 3(6), 254 - 287.
- Odumeru, J. (2013). Innovation and organizational performance. Kuwait chapter of Arabian Journal of Business and management Review, 2(12), 18-22.
- OECD, (2013). Organizations for economic co-operation and development (2013). Organizational sustainability. <https://www.Oecd.org/dac/environment-development/final-post-global>. Retrieved 04 April 2019.
- Organization for Economic co-operation and Development (OECD), (2005). OSLO Manual. Guidelines for collecting and interpreting Innovation Data. (3), Paris OECD Publishing.
- Paraschiw, D. M., Nemoianu, E. L. & Lauga, C. A. (2012). Exploring eco-innovation trends in the European construction sector, focus on Romania. *The Romanian Economic Journal*, 14(42), 69-88.
- Porter, M. E., & Van Der-Linde, C. (1995). Green and competitive: ending the statement. *Harvard Business Review*, 73(5), 120-134.
- Schaefer, K., Corner, P.D., & Kearins, K. (2015). Social, Environmental and sustainable entrepreneurship research; what is needed for sustainability-as-flourishing? *sage Journal of organization and Environment*. 28(4).
- Schaltegger, S. (2011). Sustainability as a driver for corporate economic success. *Journal of Social Economics* (33), 15-28.
- Sidhu, I., Goubet, J. E., & Xia, Y. (2016) *Measurement of innovation mindset*. In M. N. R. Alwi., A. H. Jaaffar., N. A. Yahya., & N. Azami (2018). Research Framework for the Impact of Innovative Mindset, Innovative Behaviour, and Innovation Performance on Competitive Advantage: An Application for Halal SMEs Owner-Manager, *The Journal of Social Sciences Research*, 2, 718-723.
- Singh, J. V. (1986). Performance, slack and risk taking in organizational decision making. *Academy of Management Journal*, 29(3), 562-585.
- Silvestre, B. S., & Tirca, D. M. (2018). Innovations for sustainable development: Moving towards a sustainable future. *Journal of Cleaner Production*.
- Singh, P. M., Chakraborty, A., & Roy, M. (2016). Entrepreneurial commitment, organizational sustainability and business performance of manufacturing MSMEs: Evidence from India. *International Journal of Applied Business and Economics Research*, 14(6), 4615-4631.
- Singh, P. M., Chakraborty, A., & Roy, M. (2016). Entrepreneurial commitment, organizational sustainability and business performance of manufacturing MSMEs:



- Evidence from India. *International Journal of Applied Business and Economics Research*, 14(6), 4615-4631.
- Stauffer, D. A. (2015). Valuable novelty: A proposed general theory of innovation and innovativeness. *International Journal of Innovation Science*, 7(3), 169-182.
- Sunday, E. I. (2017). Intellectual capital and organizational sustainability in manufacturing firms in Rivers State. *International Journal of Advanced Academic Research/Social and management sciences*, 3(4), 02-17.
- Szekely, F., & Knirsch, M. (2005). Responsible leadership and corporate social responsibility; Metrics for sustainable performance. *European Management Journal*, 23(6), 628-647.
- Torugsa, N. A., ODonohue, W., Hecker, R. (2013), Capabilities, proactive csr and financial performance of SMEs: Empirical evidence form australian manufacturing industry sector. *Journal of Business Ethics*.
- Vinodh, S., & Joy, D. (2012). Structural equation modeling of sustainable manufacturing practices, *Clean Technologies and Environmental Policy*, 14(1), 79-84.
- Volna, J., Kohnova, L., Bohdalova, M., & Holienka, M. (2015). Innovative mindset and management styles. An intellectual capital approach; *Paper presented at the international conference on intellectual capital and knowledge management and organizational learning*.
- Wagner, M. (2008). *Links between sustainability - related innovation and sustainability management*. Discussion Paper 2008-046, Berlin: Technische University Munchen.
- Wales, T. (2013). Organizational sustainability; what is it and why does it matter? *Review of Enterprise and Management studies*, 1(1), 38-49.
- Walker, R. (2004), Innovation and organizational performance: Evidence and a Research Agenda. Advanced Institute of Management Research 2, Dot: 102139/ssrn.1306909 (accessed December 2019).
- Wanamaker, C. (2018). Environmental, economic and social components of sustainability. [www.soapboxie.com/social issues](http://www.soapboxie.com/social%20issues).
- Woodcraft, S. (2015) Understanding and measuring social sustainability. *Journal of Urban Regeneration and Renewal*, 8(2), 133-144.
- World Business Council for sustainable Development (WBCSD) (2017) Sustainable and enterprise risk management: The first step toward integration. www.wbcsd.org. (Accessed 04 April, 2019).
- World Commission on Environment and Development (WCED), (1987). Report of the world commission on environment and development: "Our common future". General Assembly document A/42/427. <http://www.wbcsd.org>. (accessed December, 2019).