

Entrepreneurial Innovation and Sustainable Growth of Small and Medium Enterprises (SMEs) in Gas Sub- Sector in Lagos State, Nigeria

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Abstract

Product innovation and firms' sustainable growth are veritable focus for organisations to outwit competitors and achieve set goals. However, most SMEs do little or no product innovation in the course of running their businesses leading to collapse of such businesses shortly after incorporation. This study examined the effect of entrepreneurial innovation on SMEs sustainable growth in gas sub-sector in Lagos State Nigeria. Survey research design was adopted. The study population consists of owner/managers and heads of units of all SMEs in gas sub-sector that is registered with Nigerian Association of Liquefied Petroleum Gas Marketers (NALPGAM). Stratified and proportionate random technique was employed. The total population was 1,043 (NALPGAM, 2017). The sample size of 495 was derived through Chocram formula. Structured questionnaire was used for data elucidation which was analyzed with simple linear regression. Result indicated that entrepreneurial innovation has significant effect on SMEs sustainable growth ($\beta = 0.147$, $t = 2.996$, $R^2 = .021$, $F_{(1/417)} = 8.796$, $p < .05$). The study recommends that management of SMEs in the gas sub- sector should create enabling environment for the employees to be innovative in their operations in order to take its competitive advantage through creation of innovative services leading to increased performance and growth of the sector. The policy makers and all stake holders need to re-strategies and create forums that can boost innovativeness among the existing and potential entrepreneurs. There is need for routine benchmark of competitors and environmental scanning so as to be alert regarding sectorial changes, consumers' tastes fashion and fades and imbibe innovativeness to beat competition and follow industry best practice and remain sustained.

Keywords:

Entrepreneurial
innovation, SMEs,
Sustainable growth,
Competitors and
Strategic

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Background to the Study

The veritable backbones on which the world and modern ideas continue to develop are the entrepreneurs (Kabuoh, Ogbuanu, Chieze, & Adeoye, 2017). Developed nations across the world owe their current prosperity to the collective effort of intrepid entrepreneurs on whose innovation also rests the future prosperity of the developing world (Anam & Antai, 2016). Entrepreneurship plays a vital role in the development of a country's economy as this is the key contributor to innovativeness, product improvement and reduction of unemployment. It is the practice of starting a business in order to earn profit on new found opportunities of which its dynamism goes a long way to stabilize the economy of a nation as well as generate returns to the government (Redford, 2016).

Strategic entrepreneurship has become dominant and inspiring in the contemporary world. Currently, it is considered as an effective weapon for economic development in both Less Economically Developed Countries (LEDC) and in More Economically Developed Countries (MEDC) (Mujuru, 2014). However, little attention has been paid to the role of strategic entrepreneurship in SMEs in Nigeria to achieve the overall government expectations from this sector. Successive governments in Nigeria have always emphasized the place of the Small and Medium Scale Enterprises (SMEs) as the engine of growth, without concrete action on ways of actively developing the sector (Oduyoye, Adebola & Binuyo, 2013).

Entrepreneurship is the cornerstone and at the heart of the free enterprise economy (Alese, 2017; Popoola, 2014). Specifically, Alese (2017) argues that this argument stems from the realization that almost all countries that have focused on SMEs sector have ended up in the significant reduction in poverty level and its attendant enhancement in the quality and standard of living, reduction in crime rate, increase in per capita income as well as rapid growth in national output among other salutary effects. Moreover, studies by United Nations Industrial Development Organization-Nigeria, 2012 show that Micro, Small and Medium Enterprises (MSMEs) has the propensity to drive the Nigerian Economy, and data reveal that there are currently over 17 million MSMEs employing over 31 million Nigerians. MSMEs account for over 80% of enterprises that employ about 75% of the Nigeria's total workforce, and therefore formulating and effectively implementing MSMEs friendly policies represents innovative ways of building the capacity to engage in entrepreneurial activities and creating job opportunities thus, playing a central and invaluable role in helping Nigeria realize its quantity advantage. In addition, the 2012 Global Entrepreneurship Monitor (GEM) has empirically identified Nigeria as one of the most entrepreneurial countries in the world. The study showed that 35 (over a third out of every 100 Nigerians are engaged in some kind of entrepreneurial activity or the other.

Innovation is one of the driving forces for competitive scuffle in the present chaotic environment. According to Zwingina and Opusunju (2017), SMEs in Lagos State have not frequently applied the concept of innovation in their businesses. There are less new products in the market, less adoption of marketing innovation strategies, poor business innovation processes which negatively reduce the sales volume of SMEs in Lagos State. The market is filled with existing products which the consumers already have pre-knowledge about the

quality, quantity and taste. This is because SMEs in Gas sub-sector in Lagos State are yet to fully apply product innovation, process innovation and marketing innovation and organizational innovation in order to increase its sales volume in the sector. Previous studies such as Mohd and Syamsuriana (2013), Masood, Sadia, Muhammad and Saman (2013), Adhiambo (2014), Adeyeye (2014) studied the innovation and performance of SMEs but studies on effect of innovation on the sustainable growth of SMEs in Gas sub-sector in Lagos State are few as existing studies are based in the developed countries. Few that exist (Akande & Oladejo, 2013; Oyewale, Adeyemo, & Ogunleye, 2013) did not adequately explore the effect of innovation on SMEs in gas sub-sector's sales volume and their challenges in Lagos, hence there is the need to fill the gap in knowledge.

Objective of the Study

The study examines the effect of entrepreneurial innovation on SMEs sustainable growth of gas sub-sector in Lagos State Nigeria.

Research Question

What is the effect of entrepreneurial innovation on SMEs sustainable growth of gas sub-sector in Lagos State Nigeria?

Research Hypothesis

Entrepreneurial innovation does not have a significant effect on SMEs sustainable growth of gas sub-sector in Lagos State Nigeria.

Conceptual Review

Entrepreneurial Innovation

Entrepreneurial innovation is the process of pursuing opportunities with actions and adjustments to suit the situation and responses in a free market for wealth creation (Atashi & Abdolpour, 2012; Awang, et al. 2015; Chang & Wang, 2013; Daryani & Tabrizinia, 2015; Deryck, 2013; Djordjevic, 2013; Dogan, 2015; Nhuta & Kapofu 2015; Tsai & Lei 2016). It is introducing new approaches that can make constant values (Daryani & Tabrizinia, 2015).

Innovation is a term that is widely used across disciplines and is inherently rooted in and associated with entrepreneurship. The origins of the study of innovation can be found in the economics of innovation as outlined by Schumpeter (1934). Schumpeter linked entrepreneurship to innovation by describing the entrepreneur as someone who introduces 'creative destruction', i.e. radical innovation, which leads to more efficient allocation of production factors and thus productivity improvements. Innovation is a key outcome firms seek through entrepreneurship and is often the source of competitive success. Firms that encourage entrepreneurship are risk takers, are committed to innovation, and act proactively in that they try to create opportunities rather than wait to respond to opportunities created by others (Djordjevic, 2013). Creativity stands for the production of new and useful ideas in all areas and it is the beginning of innovation. Ireland, Hitt and Sirmon (2003) describe its key components as entrepreneurial opportunities, entrepreneurial alertness, real options, and an entrepreneurial framework (cited in Tuluca & Yurtkur, 2015, p. 724).

Collaborative innovation can enable both small and large firms to overcome their respective challenges related to successfully engaging in strategic entrepreneurship (Tsai & Lei, 2016). Collaborative innovation is the creation of innovations across firm (and perhaps industry) boundaries through the sharing of ideas, knowledge, expertise, and opportunities (Miles, Miles, and Snow, 2005). For small firms, pursuing innovation collaboratively allows them to preserve their creativity and flexibility while mitigating the inherent liabilities of smallness. Typically, a small firm that devises a valuable innovation runs the risk that larger firms will imitate the innovation and gain significant market share before the small firm can fully develop its idea and appropriate value by successfully taking that idea to the market. Tsai and Lei (2016) opine that through collaborative innovation, small innovations can be implemented on a scale that permits market entry to be as fast and effective as that of large firms.

Similarly, collaborative innovation facilitates large firms' efforts to exploit their advantage creating skills while concurrently exploring innovation-related opportunities outside their current domain. Large firms already have the resources and market power that small firms need to protect their innovations from rivals. Large firms also operate on a scale that allows them to be efficient in their operations. Large firms can learn how to 'think small' through their interactions with small firms. This does not imply having small ambitions; it suggests the value of approaching opportunity seeking with the open-minded optimism traditionally possessed by start-ups and young ventures. Such a mind-set is difficult to maintain over time, because growth is commonly accompanied by the emergence of bureaucratic procedures, complex structures, and rigid cultures. This suggests that collaborative innovation can fuel the strategic renewal that large firms often find elusive (Floyd and Lane, 2000).

The essence of entrepreneurship is to identify and exploit these opportunities. Importantly, entrepreneurs or entrepreneurial managers must be able to identify opportunities not perceived by others. Identifying these opportunities in a dynamic and uncertain environment requires an entrepreneurial mind-set that entails the passionate pursuit of opportunities. After identifying the opportunities, entrepreneurs take action to exploit them and establish a competitive advantage (Djordjevic, 2013). The process of identifying and pursuing opportunities is entrepreneurial, but this activity alone is rarely enough to create maximum wealth or even to survive over time. Actions must be valuable, rare, difficult to imitate and to substitute in order to create and sustain a competitive advantage. Without the competitive advantage, success will be only temporary. An innovation may be valuable and rare early in its life, if a market perspective is used in its development. However, strategic action must be taken to introduce the new product to the market and protect its position in the market against competitors (difficult to imitate) to gain a competitive advantage. These actions combined represent strategic entrepreneurship (Djordjevic, 2013).

Djordjevic (2013) argues that "innovation is the specific function of entrepreneurship, whether in an existing business, a public service institution, or a new venture started by a lone individual". Moreover, Drucker suggests that innovation is "the means by which the entrepreneur either creates new wealth, produces resources or endows existing resources

with enhanced potential for creating wealth”. Thus, entrepreneurship and the innovation resulting from it are important for large and small firms, as well as for startup ventures as they compete in the 21st century competitive landscape. Therefore, we can conclude that, Entrepreneurship and innovation are central to the creative process in the economy and to promoting growth, increasing productivity and creating jobs.

Sustainable Growth

Sustainable growth is the ability of a firm to achieve its goals by transforming inputs into output at the lowest cost Olayemi, (2004) which enhances organizational growth and the company's ability to maintain such growth. Career growth is another aspect of the expectations of employees. Every employee wants career growth. There are a number of ways to define a career and the term is used in a variety of ways. Andrew (2011) states that career growth is the ability to be promoted within the company to a position which has greater authority, more decision making and the possibility of supervising other employees or work independently. It also usually implies more compensation (higher wage or salary) or perks. Career growth can also be called career advancement. Every employee wants to advance in his or her career.

Employees would like to feel that they are a part of an organization they work in. Letting employees be more active in the decision-making related to their job makes them feel valued and important to their organization and such increase employees' motivation. Motivating employees in this way and in some other ways such as merit-based pay, bonuses, gain sharing and stock ownership plans are all great motivators for employees (Chieze, 2016).

Organizational Career Growth

Career is understood as the succession of work experiences in an individual's lifetime (Arthur, 2008). Career growth is defined as “one's perceptions of the chances of development and advancement within an organization” (Daud, 2014). Likewise, we can frame the meaning of organizational career growth. It is the opportunity of career growth within present working organization. Spector (2003), defined career growth or the so-called career ladder as an improvement in the positions of employees who put in an effort to gain necessary skills and upgrade their performance. In search of previous literatures, researchers concluded with many different views on the construction of organizational career growth like Ho, Chang, Shih & Liang 2009 and Weng, and Hu (2010). The prominent and feasible in the context of Nepalese environment was adopted from Weng & Hu (2010). The Weng and Hu's (2010) construct proposed four main constructs of Organizational career growth, viz., career goal progress, professional ability development, promotion speed and remuneration growth. Wherein career goal progress is a typical example of higher order need satisfaction (Weng, & Hu, (2010).

Sales Growth

Different authors have given varied views on enterprise growth, the stages of an enterprise growth, but the events through which each enterprise passes remain resource-based perspective, the motivation perspective, the strategic adaptation perspective and the

configuration perspective (Gupta, Guha & Krishnaswami, 2013). Sales growth as a nomenclature has two varied meanings. It is related to increase in the amount of goods sold such as growth in output, export and sales. The next is the growth observed from improvement in quality of products or services. Delma, Davidson and Gartner (2013) see growth in form of vertical integration to be achieved through other means such as licensing, franchising, alliances or joint ventures as related to the views of other authors (Killing, 2009; Levie, 2007; Roberts & Berry, 2008).

Berkham, Gudgin and Hanvey (2009) opined that there are various growth variables used by managers to measure size of a firm such as sales revenue, profit, human and physical capital. Sales revenue is one major aspect of an organization's growth indices used to measure firms' size followed by growth rate for a period of time. Revenue is also an assessor of organizational performance. Barkham et al (2009) noted that any analysis of firms' growth is associated with revenue changes. Profit is determined by matching its revenue against associated cost. Profitability is often determined when costs are placed against revenue (Albrecht, 2011). Human and physical capital are other vital forms of organizational resources that need to be effectively and efficiently managed to enhance growth. Ikhwan, and Nugroho, (2015) found that the resources required to develop the potential business opportunities are individual, family and organizational resources.

Theoretical Review

Strategy and Theory of Strategic Behaviour

The decision to classify the strategic behavioural theory of the firm as part of an organizational economics approach to strategic management has its precedents, notably in the work of Barney and Ouchi (1986). Furthermore, the strategic behavioural theory of the firm serves as an important block in transaction costs theory; it is also a building block in dynamic capabilities theory and evolutionary economics (Nelson & Winter, 2002). The theory emphasizes the actual process of making business decisions and provides detailed observation of the ways in which organizations make these decisions.

The theory of behavior provides strategic assumptions about events that happened in the past, what is currently happening or what may happen in the future. There are nine categories of strategic assumptions. These nine types are the assumptions being made about: macro-environmental forces (from a STEP or PEST analysis); the market dynamics (e.g. from an analysis of the Porter's Five Forces model); the needs of customers; the expectations and behaviours of other stakeholders; the availability and allocation of money; the organization's internal processes; the strengths and weaknesses of its assets; its workforce, and the "Background of Shared Obviousness", that is, the groupthink that exists within the organization around what the company is, what it is able to do and not able to do.

The behavioral model made a great impact on the theory of the firm. It gave insights in the process of goal formation and fixation of aspiration levels and resource allocation. Its critics claim that the theory is unnecessarily complicated. The virtual assembly of the firm, with the decision making process as the unit, for the purpose of predicting their behaviour is highly

questioned by critics. There has also been staunch support for profit maximization rather than satisfying behaviour, which is one of the core elements of the model.

The major critique is whether or not there is anything to go by as strategic entrepreneurship. Van Resburg in an article of (February 2013) argues that “there is paucity of empirical work especially on its micro foundations” and “the construct is of an expeditionary nature and is still being uncovered” It is argued that Strategic Entrepreneurship could simply be a perspective of Strategic Management. On the contrary Foss and Lyngsie, (2011) in their paper entitled “The emerging Strategic Entrepreneurship field, origins, key tenet and research gaps” state that though noble as an academic field which is cross between the established field of Strategy and Entrepreneurship, the field has had a tendency to be heavily leaned to Entrepreneurship as it is to Strategy, thus giving an imbalanced perspective of issues. It is also important to note that it is mainly theory based with scant examples picked from the developing economies.

Ansoff (2010) states that strong leadership believes that human resources are the most important asset of any organization. Human resource part of an organization, therefore, has a very important role to play in the achievement of organizational objectives. Ansoff's (2010) theory of strategic behaviour is meant to bridge a gap in management literature between such concepts as abstracts, academic and a growing literature of prescriptive techniques for managing the relationship between a firm and its environment. The main idea is gotten from a researcher, Chandler (2011) who gives the theory some support for a dynamic sequential relationship between the environment, a firm's strategic behaviour in the environment (strategy) and the resulting changes to the internal structure of the firm. Ansoff (1994) increases the scope of the theory by stating that alternative sequence of changes in environment-strategy structure are possible and covers both private sector firms and government organizations.

This concept can be viewed as an extension of an entrepreneurial strategy making. Strategic entrepreneurship emphasizes the importance of managing entrepreneurial resources or activities strategically in order to obtain competitive advantage especially in Nigeria where efforts are being made to position SMEs firmly.

Entrepreneurial Innovation and Sustainable Growth

Jayathilake (2015) did a study which deduced that dynamic capabilities (resource integration and coronation capabilities, entrepreneurial learning capabilities, strategic competitive response capabilities) are most influential in driving a firm's strategic entrepreneurship. Strategic entrepreneurship has been widely acknowledged as the appropriate context representing the way of creating value in business organization. However, the process/elements of strategic entrepreneurship are yet to be fully understood and as such strategic entrepreneurship remains in need of further explanation. Imatia (2014) in his study noted that entrepreneurial skills played a role on the innovations adoption along the mango value chain.

Djordjevic (2013) concluded that, to compete effectively in the landscape of the 21st century, firms must identify and exploit opportunities because the practice of strategic entrepreneurship creates value for all stakeholders, especially for shareholders and customers, and also contribute to the economic development of the nation. The competitive landscape that has evolved in the 21st century presents firms with substantial change, a global marketplace, and significant complexity and uncertainty. Because of this, firms cannot easily predict the future. Duobiene (2013) noted that the expression of corporate entrepreneurship continuously grows in the first three stages of organizational life-cycle. However the difference in corporate entrepreneurship in renewal and decline stages occurs and is mainly caused by innovations. When the business grows, the organizational management is changed, yet changes often reduce flexibility, adaptability and other features provided by entrepreneurship. Therefore, how does organizational entrepreneurship change in organizational life-cycle? It has to follow the economic trend of the environment by adopting SWOT analysis to benchmark competitors' activities.

Siyabola, Aderemi, Egbetokun, and Sanni (2011) in the discussions relating to how industrial development have made prominent the concept of entrepreneurship in recent times, did a research and found that technological entrepreneurship, which exploits existing scientific and technological knowledge to meet market needs—is what brings about the national productivity and competitiveness that entrepreneurship is said to provide. However, it has been observed that while entrepreneurship would bring about job creation and wealth generation, it has limitations in bringing about accelerated industrial development that would enable a country to compete in the frontiers of global rapid technological developments (Siyabola, Aderemi, Egbetokun, & Sanni, 2011).

Methodology

Research Design

This study adopted the survey research design. The survey design was used to obtain information from the study population concerning the current status of the phenomena through primary data collection. The study population consists of owner/managers and heads of units of all SMEs in gas sub-sector that is registered with Nigerian Association of Liquefied Petroleum Gas Marketers (NALPGAM) Membership Directory. Lagos State was classified into five divisions; Ikorodu 95, Epe 132, Ikeja 500, Badagry 210 and Island 106. The total population is 1,043 (NALPGAM, 2017).

The sample size for this study was determined applying the Cochran (1997) formula.

The formula is:

$$n = \frac{NZ^2pq}{d^2(N-1) + Z^2pq}$$

Where:

n = sample size

N = Total number of oil and gas firms (N=1043)

Z = 95% Confidence Interval (Z = 1.96),

p = 0.5

$$q = 1 - p$$

$$d = \text{degree of accuracy or estimation (d = 0.04)}$$

Therefore;

$$n = \frac{1043 (1.96)^2 (0.5) (0.5)}{(0.04)^2 (1043 - 1) + (1.96)^2 (0.5) (0.5)} = 381$$

However, to compensate for the non-response and for wrong filling of questionnaires, the sample size was increased by 114 which is 30% of the total sample. This is as recommended by researchers (Zikmund, 2000).

$$\text{Therefore; } 30\% \text{ of } 381 = 114$$

$$\text{Then the appropriate sample size is given as } n = 381 + 114 = 495$$

$$\mathbf{n = 495}$$

The sample size for this study was determined by adopting sampling fraction technique in order to ensure that all the elements or groups under investigation are well represented in the sample. Furthermore, the technique helps in the observation of relationships between two or more sub-groups.

Sampling Technique

Stratified and Proportionate random sampling techniques were adopted in this study by the researcher. The reason for the adoption of these techniques in this study is that SMEs were grouped to align with the five divisions of Lagos State according to Makinde (2015); and these divisions are Badagry, Epe, Ikeja, Ikorodu and Lagos Island. Proportionate random sampling technique is used because there are variations in the number of registered SMEs in gas sub-sector in Lagos divisions. To ensure heads of units from various divisions that all the elements or groups under investigation are well represented in the sampling and selection, proportionate sampling technique will be adopted. See application below.

Application of sample size to the population

The five divisions of Badagry, Epe, Ikeja, Ikorodu and Lagos Island were given allocation according to the proportion of each division as the number of registered SMEs in gas sub-sector are not equal in these divisions. The proportionate number for each division was calculated by adapting Chigbu (2014) formula to suit this study:

Where Q = the number of employees in each division
 n = sample size of finite population
 N = finite population size

$$\text{Therefore: Ikorodu} = \frac{95 \times 495}{1043} = 45$$

$$\text{Epe} = \frac{132 \times 495}{1043} = 63$$

$$\begin{aligned} \text{Ikeja} &= \frac{500 \times 495}{1043} = 237 \\ \text{Badagry} &= \frac{210 \times 495}{1043} = 100 \\ \text{Island} &= \frac{106 \times 495}{1043} = 50 \end{aligned}$$

The above figures derived above represents each number of respondents from each division while the total sum of 495 is the sample size. Therefore, associated proportionate questionnaires shall be administered to each of the five divisions as indicated in Table below.

Table 1: The Five Divisions of Lagos State with Employees and Proportionate Numbers

Five Division in Lagos State	Population	Proportionate Sample Size
Ikorodu	95	45
Epe	132	63
Ikeja	500	237
Badagry	210	100
Island	106	50
Total	1043	495

Source: Researcher's Computation 2017

For the purpose of this study, primary sources were adopted. The primary data source was through structured questionnaire that was used for the collection of data from Owner-Managers and heads of units (respondents) of the SMEs in gas sub- sector registered in Lagos State.

Structured questionnaire was used as the research instrument which will cover all the study variables. As postulated by Saunders, Lewis and Thornhill (2007), the questionnaire is one of the methods mostly used for survey research. The reason for the choice of this instrument was to collect a large data from the expected respondents and questionnaire is time-efficient and also minimal cost was involved. Respondents' views are made without reservations. All completed copies of the questionnaire were assembled and analyzed accordingly using descriptive and inferential statistics.

Table 2: Descriptive Statistics of Entrepreneurial Innovation

Entrepreneurial Innovation	Very High	High	Fairly High	Fairly Low	Low	Very Low	Mean	Standard Deviation
Innovation	101 (24.1%)	279 (66.6%)	37 (8.8%)	0 (.0%)	2 (.5%)	0 (.0%)	5.14	.595
Creativity	117 (27.9%)	256 (61.1%)	42 (10.0%)	4 (1.0%)	0 (.0%)	0 (.0%)	5.16	.627
New technologies	33 (7.9%)	187 (44.6%)	172 (41.1%)	23 (5.5%)	4 (1.0%)	0 (.0%)	4.53	.758
Competitive advantage	49 (11.7%)	284 (67.8%)	84 (20.0%)	2 (.5%)	0 (.0%)	0 (.0%)	4.91	.573
New product launch	34 (8.1%)	162 (38.7%)	187 (44.6%)	33 (7.9%)	3 (.7%)	0 (.0%)	4.46	.782
Sustainability	178 (42.5%)	208 (49.6%)	28 (6.7%)	4 (1.0%)	0 (.0%)	1 (.2%)	5.33	.679
Average Score							4.92	.669

Source: Field Survey, 2017

Descriptive Analysis of SMEs' Sustainable Growth

In this section, the researcher sought the respondents' perception as regards the various aspects of SMEs' sustainable growth in Gas sub-sector in Lagos State. The respondents were asked to respond on statements relating to SMEs' sustainable growth in Gas sub- sector in Lagos State. The responses were also captured in a six point likert scale and the general level of acceptance was determined by calculating the frequencies, percentages, means and standard deviation for the various statements. The results were as presented in Table

Table 3: Descriptive Statistics of SMEs' Sustainable Growth

Sustainable Growth	Very High	High	Fairly High	Fairly Low	Low	Very Low	Mean	Standard Deviation
Sales growth	106 (25.3%)	249 (59.4%)	64 (15.3%)	0 (.0%)	0 (.0%)	0 (.0%)	5.10	.630
Performance	100 (23.9%)	272 (64.9%)	45 (10.7%)	2 (.5%)	0 (.0%)	0 (.0%)	5.12	.593
Sustainable competitive advantage	53 (12.6%)	283 (67.5%)	79 (18.9%)	4 (1.0%)	0 (.0%)	0 (.0%)	4.92	.589
Critical success factors	99 (23.6%)	223 (53.2%)	91 (21.7%)	6 (1.4%)	0 (.0%)	0 (.0%)	4.99	.715
Environmental scanning	56 (13.4%)	258 (61.6%)	101 (24.1%)	4 (1.0%)	0 (.0%)	0 (.0%)	4.87	.631
sustainable employee career growth	66 (15.8%)	273 (65.2%)	76 (18.1%)	4 (1.0%)	0 (.0%)	0 (.0%)	4.96	.613
Average Score							4.99	.629

Source: Field Survey, 2017

Entrepreneurial innovation and sustainable growth of SMEs were generated by adding scores of responses of all items for each of the variable. The results of the regression analysis are presented in Tables below.

Table 4: Regression results for effect of entrepreneurial innovation on sustainable growth of SMEs in Gas sub- sector in Lagos State

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.144 ^a	.021	.018	2.65586
a. Predictors: (Constant), Entrepreneurial Innovation				

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	62.047	1	62.047	8.796	.003 ^b
	Residual	2941.342	417	7.054		
	Total	3003.389	418			
a. Dependent Variable: Sustainable Growth						
b. Predictors: (Constant), Entrepreneurial Innovation						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	25.625	1.468		17.455	.000
	Entrepreneurial Innovation	.147	.050	.144	2.966	.003
a. Dependent Variable: Sustainable Growth						

Source: Researcher's Result (2017)

Table 4 above gives details of regression analysis results for the effect of entrepreneurial innovation on sustainable growth of SMEs in gas sub-sector Lagos State. The results presented in Table 4.shows that entrepreneurial innovation has significant effect on sustainable growth of SMEs gas sub sector in Lagos State (F = 8.796, p<0.05). The p-value of 0.003 implies that the model of sustainable growth is significant at the 5 percent significance. From Table 4, 2.1% of the variations in sustainable growth of SMEs' in gas sub-sector in Lagos State was explained by variation in entrepreneurial innovation (R² = .021). The regression coefficient was also statistically significant ($\beta = .147$, t = 2.966, p<0.05). Overall, regression results in Table 4 indicate that entrepreneurial innovation has positive effect on sustainable growth of SMEs' in gas sub-sector in Lagos State. The established linear regression equation becomes:

$$SG = 25.625 + .147EIN$$

Where:

SG = Sustainable growth

EIN = Entrepreneurial innovation

From the above regression equation, taking all factors constant at zero, sustainable growth of SMEs in Gas sub-sector in Lagos State was 25.625. The regression coefficient of entrepreneurial innovation was 0.147, which implies that for every unit increase in entrepreneurial innovation, there is a 0.147 (β value) unit increase in sustainable growth of SMEs in gas sub-sector in Lagos State. This is confirmed by t-value of 2.966 which is greater than the critical value 2.0 and a p-value of 0.000 which is less than 0.05. This implies that sustainable growth of SMEs in Gas sub-sector in Lagos State change significantly when entrepreneurial innovation is effectively implemented. The p-value is less than 0.05 suggesting that entrepreneurial innovation affect sustainable growth of SMEs in Gas sub-sector in Lagos State. Therefore, the null hypothesis which states that entrepreneurial innovation does not have any significant effect on sustainable growth of SMEs in gas sub sector in Lagos State is hereby rejected.

Discussion

The study objective examined the effect of entrepreneurial innovation on SMEs' sustainable growth in Gas sub-sector in Lagos State. Regression analysis was used to test the hypothesis that entrepreneurial innovation does not have any significant effect on sustainable growth of SMEs in gas sub sector in Lagos State. The results yielded a significant effect of entrepreneurial innovation on SMEs' sustainable growth. The findings imply that those firms with effective entrepreneurial innovation have higher chances of having higher firm performance in terms of sustainable growth as compared to those without organizational factors. The study findings agreed with that of Jayathilake (2015) who did a study and derived that dynamic capabilities(resource integration and coronation capabilities, entrepreneurial learning capabilities, strategic competitive response capabilities) are most influential in driving a firm's strategic entrepreneurship. Strategic entrepreneurship has been widely acknowledged as the appropriate context representing the way of creating value in business organization.

Summary, Conclusion and Recommendations

1. Entrepreneurial innovation has significant effect on sustainable growth of SMEs in the Gas sub- sector in Lagos State ($\beta = 0.147$, $t = 2.996$, $R^2 = .021$, $F_{(1/47)} = 8.796$, $p < .05$).
2. The study examined the relationship between entrepreneurial innovation and sustainable growth of small and medium enterprises in the gas sub-sector in Lagos State, Nigeria..
3. The study provided conceptual overview of entrepreneurial innovation and sustainable growth of small and medium enterprises in the gas firms in Lagos State, Nigeria.
4. The study provided theoretical and empirical evidences to show that entrepreneurial innovation has significant effect on sustainable growth of small and medium enterprises in gas sub-sector, Lagos State, Nigeria.

Based on the summary of findings, the study concludes that SMEs operating in gas sub-sector in Lagos State exhibit high level of entrepreneurial innovation which has significant effect on their sustainable growth. Therefore, those SMEs that has high level of strategic entrepreneurship as exhibited by entrepreneurial innovation, experience better performance in comparison to similar conservative firms.

1. The objective of the study was to examine how being entrepreneurial innovative can affect SMEs' sustainable growth in the Gas sub- sector. The study recommends that management of SMEs in the gas sub- sector should create enabling environment for the employees to be innovative in their operations in order to take its competitive advantage through creation of innovative services leading to increased performance and growth of the sector.
2. The policy makers and all stake holders need to re-strategise and create forums that can boost innovativeness among the existing and potential entrepreneurs. Strategies to enhance innovativeness and creativity should be adopted and promoted.
3. There is need for routine benchmark of competitors and environmental scanning so as to be alert regarding sectorial changes, consumers' tastes fashion and fades and imbibe innovativeness to beat competition and follow industry best practice and remain sustained growth wise.

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