ROLE OF SMEs' ENTREPRENEURIAL ACTIVITIES AND INDUSTRIAL CLUSTERING ON SMEs' PERFORMANCE

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ABSTRACT

The focus of this research is to examine the role of SMEs' Entrepreneurial activities and industrial clustering on SMEs' performance.A sample size of 65 owners/managers of technology-based small and medium enterprises were surveyed through the use of structured questionnaire. Linear and standard multiple regression were adopted in analysing the research instrument. The findings from the study suggest that SMEs' entrepreneurial activities such as new product/service creation and entrepreneurship education and training are very significant determinants of SMEs performance. More so, it is revealed that industrial clustering influences entrepreneurial activities and SMEs' performance. Although, the moderating effect of industrial clustering on entrepreneurial activities and SMEs' performance is established, but it is not significant.

Keywords: Entrepreneurial Activities, Entrepreneurship Education and Training, New Product Creation, Industrial Clustering, SMEs performance.

INTRODUCTION

The growing interest in the study of SME operations worldwide is premised on the pivotal role played by the sector in adding value to the economy by creating jobs, enhancing income, lowering costs and adding business convenience (Jevwegaga, 2004; Chen, 2005 cited in Kamoyo, Mavhima & Muranda, 2014). Also, there has been considerable interest and activity in clustering and the concomitant relation to significant economic sustainable development in recent times. SME clustering is therefore crucial to addressing social and economic objectives, achievement of which can make them more competitive in the global economy; generating and spreading innovations; creating employment; and distributing broad-based income and welfare. It is widely accepted that technological change underpins a global economy and that geographical locations and concentration is of foremost importance for regional development and competitive advantage (Braun, McRae-Williams & Lowe, 2005).

From the perspective of emerging technologies and the related knowledge economy business models, linking all the stakeholders in dynamic clusters is believed to enhance

competition and regional innovation of SMEs (OCED, 1999; Ibidunni, Ogunnaike & Abiodun, 2017). As it stands, the literature is saturated with views on geographic proximity, or clustering of industries, companies and institutions (Asheim, 2001; Brusco, 1990; Krugman, 1995; Porter, 1990). Despite significant roles played by SMEs and the previous studies done on it worldwide, there is no specific study focusing on evaluating the importance of industrial cluster on entrepreneurial activities and economic development. The process which should spur more researches is therefore needed to inform policy decisions on the successes or shortcomings towards economic development.

LITERATURE REVIEW

Industrial Clustering, Entrepreneurial Activities and SMEs Performance

A cluster as defined by the Cambridge English Dictionary is a group of similar things growing or held together, or a group of people or things that are close together. Munir, Lim and Knight (2011), however defined cluster as sectorial and geographical concentrations of enterprises that produce and market a range of complimentary goods and or services and face similar challenges and opportunities. In the same vein, industrial clustering can be described as the coming together of firms in the same industry, gathering together in close proximity in order to work and develop (Reveiu & Dardala, 2013). As explained by the economists, the major advantage for small industries is that they are able to enjoy the economies of scale that larger companies usually enjoy. While it may be said that there is a higher level of competition in industrial clustering, there are also the advantages having easy access to a pool of expertise and skilled workers and accessing information about the industry on time (The Economist, 2009). Marešová, Jašíková & Bureš (2014), further posited that clusters have a great advantage in that they increase productivity which allows companies to compete nationally and globally and Trousil, Jašíková & Marešová (2011) concluded that the ground idea of clustering is in sharing of various resources, technologies, knowledge and even the vision. The works of Christos, Peter & Nicholas (2007), stressed the fact that industrial cluster form in specific locations and their characteristics such as growth strength, structure, degree of similarity, age, size etc.) would greatly affect the behavior and performances of such cluster firms which would in turn affect the performance of the area or region as the case may be. Additionally, the suggestions of Chatterji, Glaeser & Kerr (2013), among other things focused on availability of industrial policy by way of public interventions to support new or old industries in declining areas. In this case, as much as it is given that government would eventually benefit from the taxes paid by successful firms in the future, it should provide support upfront with public subsidy and the likes. Also, there should be import of technical knowledge, intellectual support, credit market interventions for start-ups, to mention a few (Ibidunni, Ogunnaike & Abiodun, 2017).

While Slaper & Ortuzer (2015) also supports the view that industrial clustering is a panacea for SME performance because it strengthens competitiveness by increasing productivity. Also, a research by JP Morgan Chase foundation (2014) opined that this is an area of research that is still not well understood and which needs further research. There are more studies that have suggested that industrial clustering will need certain things put in place for further impact and for economic development. One of such suggestions was given by Slaper & Ortuzer (2015); that having an improved business environment, infrastructure, streamlining government rules, supporting local demand and by being open to foreign investment, and competition are all

important for a sustainable SME performance. JP Morgan Chase foundation (2014) supported this view by opining that leaders should help small businesses by providing public sector leadership and coordination, making programs accessible to all entrepreneurs, and delivering comprehensive and long-term support.

In Nigeria, the cluster concept was introduced in 2007 by the government with a view to re-strategizing on the plans of industrialization. The focus was to create a community of businesses that are in close proximity to one another, where members can seek enhanced environmental, social and corporate performance towards effective global trade competitiveness. Clustering was also to serve the purpose of enabling government to put infrastructure and amenities in place for the smooth operations of businesses. It was also hoped that due to proximity, clustering would enhance and promote innovativeness, which is necessary for industrialization and success. The cluster concept was to operate on five planks that is, Free Trade Zones; Industrial Parks; Industrial Clusters; Enterprise Zones; and, Incubators (Iwuagwu, 2013). The cluster concept was to be managed on public-private-partnership basis with the Government providing infrastructures and incentives, as well as location for the clusters. The private sector would locate their businesses within the clusters and undertake the physical structures aided by banks and other financial institutions. Consequently the following hypotheses are drawn:

H1: Creation of new products and services enhances SMEs' performance.
H2: Entrepreneurship education and training of existing entrepreneurs will have a positive influence on SMEs' performance.
H3: Industrial clustering has a direct effect on entrepreneurial activities.
H4: Industrial clustering has a direct effect on SMEs' performance.
H5: Industrial clustering moderates the relationship between entrepreneurship activities and SMEs' performance.

METHODOLOGY

The research study is descriptive in nature, such that it simply attempts to describe the relationships among the variables included in the research (Jong & van der Voordt, 2002).

Measures and Sampling

Questionnaire was used to gather primary data from the respondents. This research benefitted from the ideas of existing research studies. Questions that pertained to new product/service creation was developed based on Page (1993) and Ueasangkomsate and Jangkot, (2017). Items on entrepreneurial education and training was developed based on Njoroge and Gathungu (2013), Küttim, Kallaste, Venesaar and Kiis (2014) and Emmanuel (2017). Items on industrial clustering was designed based on Bölükbaş and Güneri (2017), while items of SMEs performance was developed based on Venkatraman (1989) & Wang, Chich-Jen & Mei-Ling (2010). In this research work the respondents include owners and managers of SMEs in Lagos state, Nigeria. A study of this nature is not common in existing literature, especially within the context of Nigeria. A total of 65 owners/managers of SMEs in the Ikeja technology-based market of Nigeria, commonly referred to as "Computer Village" were included in this study. Computer Village is a large technology-based market that consists of dealers in electronic, mobile phones

and telephone accessories. A pilot study of this nature is essential to demonstrate theoretical thoughts towards enhancing performance levels of SMEs in the Computer Village.

Reliability and Validity of the Scale Items

The reliability of the research items was ensured using the internal consistency method while the validity of scale items was carried out using construct validity. These tests were carried out using SPSS version 22. The Coefficient Alpha (α) or Cronbach Alpha is the most popularly used to measure internal consistency (Pallant, 2005). Table 1 below shows the reliability and validity results of the scale items.

Table 1 RELIABILITY AND VALIDITY OF THE SCALE ITEMS	
Factor & Loading	**Reliability & Validity Statistics**
NPC1 (0.826), NPC2 (0.802), NPC3 (0.781), NPC4 (.862), NPC5 (.821)	**α=0**.760; KMO=0.651; Bartlett's Test of Sphericity = Chi Sq.(95.581); df =10; Sig.=0.000
EET1 (0.848), EET2 (0.719), EET3 (0.719), EET4 (0.703), EET5 (.661), EET6 (0.633), EET7 (0.629), EET8 (0.819), EET9 (.786), EET10 (0.762), EET11 (0.453)	**α=0**.892; KMO=0.792; Bartlett's Test of Sphericity = Chi Sq. (363.675); df =55; Sig.=0.000
IC1 (0.956), IC2 (0.950), IC3 (.940), IC4 (0.935), IC5 (0.887), IC6 (.865), IC7 (0.835), IC8 (0.778), IC9 (0.305)	**α=0**.704; KMO=0.884; Bartlett's Test of Sphericity =Chi Sq. (605.458); df=36; Sig.=0.000
PERF1 (0.892), PERF2 (0.870), PERF3 (0.862), PERF4 (0.859), PERF5 (0.801), PERF6 (0.614), PERF7 (0.916), PERF8 (0.913), PERF9 (0.793), PERF10 (0.756)	**α=0**.859; KMO=0.804; Bartlett's Test of Sphericity =Chi Sq. (458.106); df =45; Sig.=0.000

Based on a generally acceptable factor value of 0.3 (Hair, Anderson, Tatham & Black, 1998), the factor loading for each scale item as indicated in Table 1 above are judged to be very satisfactory. The KMO values also surpass the minimum 0.6 benchmark and the Barlett's Tests of Sphericity as presented above are significant ($p < 0.05$). Moreover, the alpha reliability values surpass the benchmark of 0.7 (Pallant, 2005), thus indicating that all the scale items are reliable.

DATA ANALYSIS

A total of 65 copies of the research instrument was distributed and returned. The respondents that make up the study consist of both the male and female gender however the sample is made up of more males 42 (64.6%) than female 23 (35.4%) respondents. In terms of the age of respondents, 9 respondents (13.8%) are 25 years and below, 23 (35.4%) of the respondents are between 26-35 years, 17 (26.2%) of the respondents are between the age of 36-45 and 16 (24.6%) of the respondents are 46 years and above. 21 (32.3%) of the respondents are single, 31 (47.7%) of the respondents are married and 13 (20.0%) are under the categories of other, such as divorced and widowed. According to the statistics, 21 (32.3%) of the respondents have 5 years and below working experience, 20 (30.8%) of the respondents have 6-10 years' work experience, 12 (18.5%) of the respondents have 11-15 years' work experience and 12 (18.5%) of the respondents have 16 years and above work experience.

Variables	β	T	P-value	R	R^2	F-value	Remark
Table 3 **REGRESSION RESULTS**							
Direct Relationship							
New Product/Service Creation[1]	0.492 **	3.759	0.000	0.428	0.183	14.129(1,63)Sig.=0.000	H_o Rejected
Entrepreneurial Education and Training[1]	0.462 **	3.420	0.001	0.396	0.157	11.697(1,63) Sig.=0.001	H_o Rejected
Industrial Clustering[2]	0.069 *	2.076	0.042	0.253	0.064	4.308(1,63) Sig.=0.042	H_o Rejected
Industrial Clustering[1]	0.091 *	1.935	0.058	0.237	0.056	3.743(1,63) Sig.=0.058	H_o Rejected
Moderating Effect							
New Product/Service Creation[1]	0.330*	2.311	0.024	0.499	0.249	10.252(2,62)=0.000	H_o Rejected
Entrepreneurial Education and Training[1]	0.279*	1.937	0.057				H_o Rejected
Entrepreneurial Activity × Industrial Clustering[1]	0.090	1.039	0.303	0.511	0.262; ΔR^2 =0.013	7.203(3,61)Sig.= 0.000	H_o Accepted

*p $\leq$ 0.05, **p $\leq$ 0.01

[1]Dependent Variable=SME Performance; [2]Dependent Variable =Entrepreneurial Activities

The results in Table 3 indicate that new product/service creation directly relates with SMEs performance (β=0.492, Sig.=0.000). Entrepreneurial education and training was also shown to influence SMEs' performance (β=0.462, Sig.=0.001). Industrial clustering was also shown to have influence entrepreneur activities (β=0.069, Sig.=0.042). Moreover, the relationship between between industrial clustering and SMEs performance is established (β=0.091, Sig.=0.058). The moderating effect of industrial clustering on the relationship between entrepreneurial activity and SMEs performance is established but is found not to be statistically significant (β=0.090, Sig.=0.303).

DISCUSSION

This study investigated the relationships between entrepreneurial activities, industrial clustering and SMEs performance in Nigeria. The statistical results from the study established that new product/service creation is significant to enhancing SMEs performance, thus requiring that SMEs operating in Nigeria's technology-based market keep seeking for new products that can enhance the market performance of the firm (Osabuohien & Efobi, 2012). Moreover, the need for continuous entrepreneurship education and training among existing business owners/managers cannot be over emphasized, especially since it could serve as an important determinant for higher levels of SMEs performance (Olokundun, Ibidunni, Peter, Amaihian, Moses & Iyiola, 2017). The statistical results also establishes the fact that industrial clustering

strongly stimulates success for entrepreneurial activities and SMEs performance. The research study revealed that industrial clustering does not significantly moderate the relationship between entrepreneurial activities and SMEs performance. This result indicates that there are still very low priorities given to industrial clustering, especially with respect to technology based clustering in developing economies like Nigeria. None the less, existing studies in more developed context have shown that industrial clustering could significantly enhance SMEs performance (Barmuta, Bykovskiy, Demin, Mazur & Tokhomirov 2016; Bölükbaş & Güneri, 2017).

CONCLUSION

This study investigated the relationship between entrepreneurial activities, industrial clustering and SMEs performance in Nigeria. Technology-based SME owners/managers formed the respondents for the study and the linear and multiple regressions were used to analyse the responses gathered. The statistical analysis supports the relationship between new product/service creation and SMEs performance. Consequently, this study concludes that entrepreneurial activities, such as new product/service creation and entrepreneurship education and training are significant to enhancing SMEs performance. Moreover, a significant positive effect of industrial clustering was discovered on both entrepreneurial activities and SMEs performance. Therefore, it is concluded that industrial clustering is a strong influencer of entrepreneurial activities and SMEs performance. Although the moderating role of industrial clustering on the relationship between entrepreneurial activities and SMEs performance was revealed in the study, the conclusion drawn from the statistical analysis is that industrial clustering does not perform a significant role in establishing such relationship.

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