CLUSTERS ACTIVITY IMPACTING THE PRODUCTIVITY OF NIGERIAN SMALL AND MEDIUM-SCALE ENTERPRISES

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ABSTRACT

The cooperation of small and medium scale Enterprises is becoming more important as a tool of economic development of a country. Entrepreneurs tend to work together in order to share their competencies, consolidate limited resources, and hereby increase their profitability. It is emphasized that the role of clustering is crucial in the development of SME sector, as SMEs may benefit from economies of scale and extend the operation limits. Thus, the current study has analyzed the effect of clustering activities on the performance of small and medium scales enterprises in Nigeria; The study adopted a quantitative research method by utilizing a self-administered questionnaire that involve 255 respondents comprising of fabric store owners and their employees. All stages of data analysis use the method of regression analysis as an analytical tool to develop a model and to test the study hypothesis. The outcomes of the study shows that Market Limitation (ML) and Employee Performance (EP) had negative effects on the Performance of Small and Medium Scale Enterprise (PSME), while Social Responsibilities (SR), Market Segmentation (MS), and Social Networking (SN) had significant positive effects on Performance of Small and Medium scale Enterprise (PSME). Given that SMEs in Nigeria are the main drivers of employment growth, it would be beneficial to conduct studies to ascertain whether there are any other factors effecting SMEs' performance, it would also be beneficial to expand the scope of this research by increasing both the population and sample size.

Keywords: Clustering, Employee performance, Market limitation, Market segmentation, Organizational performance, Small and medium scale enterprise, Social networking, Social responsibilities

INTRODUCTION

The increasing interest in studying small and medium-scale enterprise clusters around the world is based on the sector's critical contribution to the economy's value creation through job creation, income enhancement, cost reduction, and business convenience (Jevwegaga, 2004; Chen, 2005 cited in Kamoyo, Mavhima & Miranda, 2014). Additionally, clustering and its relationship with central economic sustainability have recently attracted much attention and action (OECD 2017). Therefore, small and medium-scale enterprises cluster is essential to achieving social and financial goals, as doing so can increase their competitiveness in the global economy, generate and spread innovations, create jobs, and distribute broadly based income and welfare (OECD 2017).

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In Nigeria, small and medium-scale enterprises have been viewed as the foundation for developing technology and creating new jobs (Anthony 2014). In our society, SMEs have been seen as a group. In groups of five, ten, and even more, they congregate. Despite SMEs' crucial roles and the numerous studies conducted on them globally, more research needs to be done to assess the significance of industrial clusters for entrepreneurship and economic growth. Therefore, the process that should encourage additional study is necessary to educate political choices about the achievements or failures of economic development.

The aim of the study is:

1. To investigate the extent that Market location effect on the Performance of small and medium scale enterprises.
2. To investigate the extent that Social Responsibilities effect on the Performance of small and medium scale enterprises.
3. To investigate the extent that Employee Performance effect on the Performance of small and medium scale enterprises.
4. To investigate the extent that Market Segmentation effect on the Performance of small and medium scale enterprises.
5. To investigate the extent that Social Networking effect on the Performance of small and medium scale enterprises.

The Problem of Research

Adisa, Abdulraheem &Mordi (2014) quoted Erdem &Erdem (2011) & Alaye-Ogan (2012), who proposed that SMEs are without a doubt significant to the growth of any nation's economy as they are an outstanding source of employment creation, help in the development of local technology, and the expansion of native entrepreneurs. They are also vital to the increase and growth of a nation.

Most of these SME owners are self-employed, and Nigeria's unemployment figures jumped by virtually 30 percent in 2018, according to a November 2018 Statement by the National Bureau of Statistics. By the end of 2018, another 2 million were expected to be unemployed, but less than 40 percent of Nigeria's nearly 200 million citizens as of 2018 were fully employed (VOA News,2018).

It has been observed that SMEs are responsible to an extent for reducing a certain percentage of people from the unemployment market. When these SMEs expand, more hands will be needed, hence the employment of some unemployed people.

Therefore, this research aims to investigate and evaluate the relationship between clustering activities and the performance of small and medium-scale enterprises over the years and to ascertain whether this is positively or negatively influenced.

The study provides insight into clustering activities, such as Market location, Social Responsibilities, Employee Performance, Market Segmentation, Social Networking, and Performance of small and medium-scale enterprises. The significance of the study highlights how clustering operations affect customer base, sales, capital, business size, profit, and growth of the textile business in Nigeria markets. The study aims to determine whether clustering activities (Market location, Social Responsibilities, Employee Performance, Market Segmentation, and Social Networking) have a positive or negative impact on the Performance of SMEs so that the vendors can understand how their industry is doing and ascertain the effect on the labour market.

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LITERATURE REVIEW

Approaching the Research Framework

In a conceptual model, the potential for research idea interference is examined. This map shows all potential research phases and connects the various research efforts. The framework explains the interconnected research activities (Mathooko, 2011). The theoretical framework demonstrates that the model comprises the key foretellers for successful clustering activities, such as market location, social responsibilities, employee performance, market segmentation, and social networking that influence the performance of small and medium-scale enterprises. However, this study views it as a novel and promising study that, by combining market location, social responsibilities, employee performance, market segmentation, and social networking, promotes the implementation of SMEs. Clustering activities are further studied to ascertain the extent to which the five independent variables (Market location, Social Responsibilities, Employee Performance, Market Segmentation, and Social Networking) are crucial to their management.

The author's concept, modified after Delgado, Porter & Stern's (2012) "A group of closely related and interconnected industries operating in a particular district," defines a cluster. However, a research structural model has been created to clarify the research hypotheses, as in the figure below. Five ideas generated for clustering activities, Market Location (ML), Social Responsibilities (SR), Employee Performance (EP), Market Segmentation (MS), and Social Networking (SN), were tested in the structural research model Figure 1.

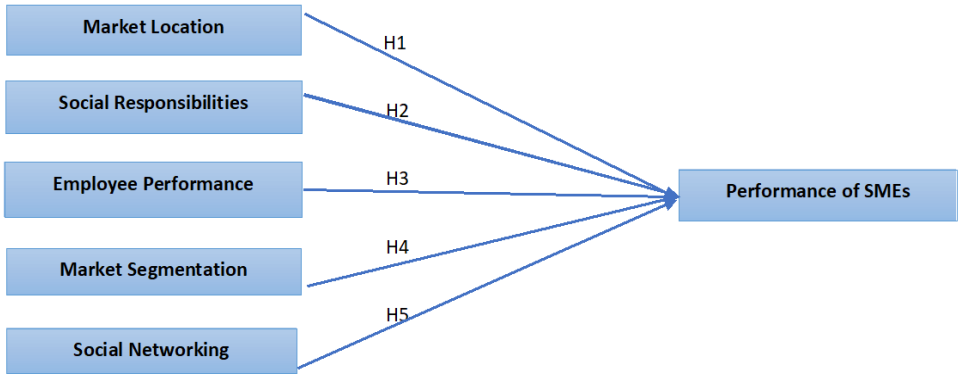

Figure 1
ILLUSTRATES THE CONCEPTUAL FRAMEWORK OF THIS STUDY

METHODOLOGY AND ANALYSIS

According to Omona, J. (2013) recommendation that a sample of 10 to 50% is sufficient if carefully chosen, the sample size of the clothing vendors in this study was 45.6% of the entire population. The respondents from the relevant trim and medium-scale firms were chosen using simple random selection and a stratified sample procedure. The population was divided into subgroups (strata) using stratified sampling, and respondents were randomly selected from each stratum. According to Zikmund et al., (2010), simple random selection guarantees that every population component has an equal probability of being included in the sample.

In this study, the SMEs considered are those who sell fabrics. The target population was used to select the sample size. The poll was open to all clothing vendors who owned

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stalls and businesses and their employees at the market. Since there were 560 clothing vendors, including their employees, and they could be studied in the time allotted, the study used the complete population. A sample should be appropriately representative, according to Gaye (1981); hence, 255 SME cloth vendors were utilized for the study Table 1, 2.

Table 1
POPULATION, SAMPLING FRAME, AND RESPONDENT SELECTION

Population	Sampling	Respondent's basis
560 Shop Owners & Employees	255 Shop Owners & Employees	Fabric Stores

Table 2
RESPONDENT PROFILE

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Gender	Male	74	29	29	29
	Female	181	71	71	100
	Total	255	100	100	
Marital Status	Single	51	20	20	20
	Married	193	76	76	96
	Divorced	11	4	4	100
	Total	255	100	100	
Age	18 – 25	15	5.9	5.9	5.9
	26 – 35	42	16.5	16.5	22.4
	36 – 45	102	40	40	62.4
	46 & Above	96	37.6	37.6	100
	Total	255	100	100	
Market Experience	1 – 3 Years	29	11.4	11.4	11.4
	4 – 5 Years	15	5.9	5.9	17.3
	6 – 7 Years	45	17.6	17.6	34.9
	8 & Above	166	65.1	65.1	100
	Total	255	100	100	
Position	Shop Owner	143	56.1	56.1	56.1
	Employee	112	43.9	43.9	100
	Total	255	100	100	
Level of Education	Diploma	149	58.4	58.4	58.4
	Bachelor	78	30.6	30.6	89
	Master	28	11	11	100
	Doctoral	0	0	0	
	Total	255	100	100	

There is a worldwide type of simple statistics to describe the primary data pattern scientists use (Lonigan, Dickinson, and Newman, 2006). Utilizing statistical tables, diagramming charts and graphs, and computing statistical parameters like measure change and central slope measures (mean, median, and method), this sort of analysis is used to characterize (summarize) the data (range, standard deviation, and variance).

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In this study, quantitative data was examined. The returned copies of the surveys were examined to check for inaccuracies and to reduce their likelihood. SMEs in the market were evaluated for their performance from 2021 to 2022 using the SPSS data analysis technique, and the relationship between clustering activities and the implementation of SMEs in the market was measured.

The study selected a sample size from the population through a convenience sampling method to obtain the sample size of the study population. The subjects are chosen for convenience and proximity to the researchers (Sekaran & Bougie, 2017). The sample size is a subset of the entire study population, and this can be calculated using Krejcie & Morgan's (1970) formulae for measuring the sample size.

RESULT AND DISCUSSION

The Statistical Social Science Package (SPSS) 26.0 was used to analyse the data. SPSS is a result processing and analysis system designed to carry out statistical data analysis, including statistical descriptive data, including the plots, frequencies, charts, and lists of data, as well as advanced statistical inferential and multivariate approaches, including variance analysis (ANOVA) factor analyses, cluster analysis, and categorical data analytics. (Sekaran & Bougie 2016) The findings are presented in line with the research issues that drive the current research. The results processing and data collection statistics were started, and the respondents' profiles were taken into account. Next, we describe the validity and reliability of the variables. Finally, the results are presented in relation tests between variables Table 3.

Table 3
DESCRIPTIVE STATISTICS

	N	Range	Minimum	Maximum	Mean	Std. Deviation
ML (Q1)	255	4	1	5	3.1294	1.17843
ML (Q2)	255	4	1	5	3.1137	1.1219
ML (Q3)	255	4	1	5	3.2275	1.20172
ML (Q4)	255	4	1	5	3.2588	1.11701
ML (Q5)	255	4	1	5	3.0784	1.1846
SR(Q1)	255	4	1	5	3.0902	1.18874
SR(Q2)	255	4	1	5	3.0902	1.14143
SR(Q3)	255	4	1	5	3.0039	1.08859
SR(Q4)	255	4	1	5	3.0353	1.17835
SR(Q5)	255	4	1	5	3.1686	1.38858
EP1(Q1)	255	4	1	5	3.0039	1.0958
EP2	255	4	1	5	3.1529	1.28442
EP3	255	4	1	5	3.2392	1.28653
EP4	255	4	1	5	3.1804	1.20971
EP5	255	4	1	5	3.0235	1.11867
MS(Q1)	255	4	1	5	2.9647	1.13061
MS (Q2)	255	4	1	5	2.9686	1.2419
MS (Q3)	255	4	1	5	2.9608	1.23532
MS (Q4)	255	4	1	5	2.9098	1.24376
MS (Q5)	255	4	1	5	3.0039	1.20856
SN (Q1)	255	4	1	5	3.0784	1.27735

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SN (Q2)	255	4	1	5	2.9294	1.13417
SN (Q3)	255	4	1	5	2.8902	1.17876
SN (Q4)	255	4	1	5	3.1608	1.25555
SN (Q5)	255	4	1	5	3.0549	1.19255
PSME(Q1)	255	4	1	5	3.0039	1.21181
PSME(Q2)	255	4	1	5	2.8667	1.21258
PSME(Q3)	255	4	1	5	2.9686	1.22916
PSME(Q4)	255	4	1	5	3.0627	1.29048
PSME(Q5)	255	4	1	5	3.0667	1.21323
Valid N (listwise)	255					

Table 4
RELIABILITY TEST

Contrast	Cronbach's Alpha	No. of items
Marketing Location	0.731	5
Social Responsibilities	0.769	5
Employee Performance	0.774	5
Market Segmentation	0.801	5
Social Networking	0.722	5
Performance of SME	0.805	5

Several successive reliabilities testing treatments have been tested for the six multi-variable variables in this study. Statistical results for all variables indicate that the alpha score of Cronbach is at least 0.722, which means the entire building is considered reasonably high in reliability from Table 4.

The reliability of the scales is calculated via an iterative process: if the removal of any item increases the scale's reliability, the item is omitted and examined again; however, the removal of the items resulting in significant increases was not carried out as suggested by (Nunnally & Bernstein, 1994). According to the degree to which a variable is consistent in what is supposed to be measured (Hair et al., 2014). In this analysis, the alpha value of all variables is not removed, as shown in the Table above. The value is more significant than 0.7.

Durbin-Watson statistics were used to check and verify the freedom of error assumption. In the case of a decline in the Durbin-Watson statistic values between 1.50 and 2.50, the error term independence was not infringed (Coakes & Ong, 2011). Below table offers an overview of the Durbin-Watson value. It means that there were no problems of self-correlation between relevant values. In addition, the research was performed using the multi-recording framework for Market Limitation, Social Responsibilities, Employee Performance, Market Segmentation, and Social Networking as independent variables and Performance of Small and Medium scale Enterprise as dependent variables.

Tables 5 below should apply to the tests

Table 5
MULTIPLE REGRESSION TEST

Model	R	R Square	R 2	Std. Er	Change Statistics					Durbin-Watson
					R Square	F	df1	df2	Sig. F	
1	.357a	0.127	0.11	0.8708	0.127	7.272	5	249	<.001	1.964

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a. **Predictors:** (Constant), SN, ML, EP, SR, MS

b. **Dependent Variable:** PSME

The determination coefficient (R2), as suggested (Hair et al., 2014), is used when the researcher wants to calculate its value as indicated by the independent variables or the predictor variables concerning the fraction of the total variance of the dependent variable. When the R2 value is high, the explanatory power of the regression model is solid. In addition, the values and significance of the regression coefficients decide the variables included in the model Table 6.

Table 6
ANOVA TEST

ANOVA[a]						
S.No	**Model**	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	**Regression**	27.573	5	5.515	7.272	<.001b
2	**Residual**	188.817	249	0.758		
	Total	216.39	254			

Regarding the association between independent and dependent variables, the outcomes support 5 of the five hypotheses. The outcomes of the study show that Market Limitation (M) and Employee Performance (EP) had insignificant adverse effects on the Performance of Small and Medium Scale Enterprise (PSME). In contrast, Social Responsibilities (SR), Market Segmentation (MS), and Social Networking (SN) had significant positive effects on the Performance of Small and Medium scale Enterprises (PSME).

The first hypothesis (H1) states that Market Location (ML) has no positive relationship with Performance of Small and Medium scale Enterprise (PSMEs). According to Pallant (2016) in a test of correlation if P value is less than 0.01, implies there is a statistically significant relationship and we accept the hypothesis, in accordance with our analysis, we notice a negative relationship between Market Location and Performance of Small and Medium scale Enterprise, with our correlation examines value, while the value of P = .267, which is high than 0.01 level. Therefore, the hypothesis (H1) is rejected Table 7.

Table 7
MARKET LOCATION CORRELATION

		ML	**PSME**
ML	Pearson Correlation	1	0.07
	Sig. (2-tailed)		0.267
	N	255	255
PSME	Pearson Correlation	0.07	1
	Sig. (2-tailed)	0.267	
	N	255	255

The second hypothesis (H2) states that Social Responsibilities (SR) have a positive relationship with Performance of Small and Medium scale Enterprise (PSMEs). According to Pallant (2016) in a test of correlation if P value is less than 0.01, implies there is a statistically significant relationship and we accept the hypothesis, in accordance with our analysis, we

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notice a positive relationship between Social Responsibilities and Performance of Small and Medium scale Enterprise, with our correlation examines value, while it was found that the value of P is <.001, which is less than 0.01 level. Therefore, the hypothesis (H2) is supported Table 8.

Table 8
SOCIAL RESPONSIBILITIES CORRELATION

		SR	**PSME**
SR	Pearson Correlation	1	.252**
	Sig. (2-tailed)		<.001
	N	255	255
PSME	Pearson Correlation	.252**	1
	Sig. (2-tailed)	<.001	
	N	255	255

The third hypothesis (H3) states that Employee Performance (EP) has No positive relationship with Performance of Small and Medium scale Enterprise (PSMEs). According to Pallant (2016) in a test of correlation if P value is less than 0.01, implies there is a statistically significant relationship and we accept the hypothesis, in accordance with our analysis, we notice negative positive relationship between Entrepreneur Performance and Performance of Small and Medium scale Enterprise, with our correlation examines value, while it was found that the value of P value=0.228, which is high than 0.01 level. Therefore, the hypothesis (H3) is rejected Table 9.

Table 9
EMPLOYEE PERFORMANCE CORRELATION

		EP	**PSME**
EP	Pearson Correlation	1	0.076
	Sig. (2-tailed)		0.228
	N	255	255
PSME	Pearson Correlation	0.076	1
	Sig. (2-tailed)	0.228	
	N	255	255

The fourth hypothesis (H4) states that Market Segmentation (MS) have a positive relationship with Performance of Small and Medium scale Enterprise (PSMEs). According to Pallant (2016) in a test of correlation if P value is less than 0.01, implies there is a statistically significant relationship and we accept the hypothesis, in accordance with our analysis, we notice a positive relationship between Market Segmentation (MS) and Performance of Small and Medium scale Enterprise, with our correlation examines value, while it was found that the value of P is <.001, which is less than 0.01 level. Therefore, the hypothesis (H4) is supported Table 10.

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Table 10 MARKET SEGMENTATION CORRELATION			
		MS	**PSME**
MS	Pearson Correlation	1	.244**
	Sig. (2-tailed)		<.001
	N	255	255
PSME	Pearson Correlation	.244**	1
	Sig. (2-tailed)	<.001	
	N	255	255

The fifth hypothesis (H5) states that Social Networking (SN) have a positive relationship with Performance of Small and Medium scale Enterprise (PSMEs). According to Pallant (2016) in a test of correlation if P value is less than 0.01, implies there is a statistically significant relationship and we accept the hypothesis, in accordance with our analysis, we notice a positive relationship between Social Networking and Performance of Small and Medium scale Enterprise, with our correlation examines value, while it was found that the value of P is <.001, which is less than 0.01 level. Therefore, the hypothesis (H5) is supported Table 11, 12.

Table 11 SOCIAL NETWORKING CORRELATION			
		SR	**PSME**
SR	Pearson Correlation	1	.252**
	Sig. (2-tailed)		<.001
	N	255	255
PSME	Pearson Correlation	.252**	1
	Sig. (2-tailed)	<.001	
	N	255	255

Table 12 RESEARCH HYPOTHESIS SUMMARY			
#	**Hypothesis**	**Code**	**Hypothesis**
1	Market Location does not significantly affect the Performance of Small and Medium scale Enterprise	MI⇨ PSME	H1 Rejected
2	Social Responsibilities significantly affect the Performance of Small and Medium scale Enterprise	SR⇨ PSME	H2 Supported
3	Employee Performance does not significantly affect the Performance of Small and Medium scale Enterprise	EP⇨ PSME	H3 Rejected
4	Market Segmentation significantly affects the Performance of Small and Medium scale Enterprise	MS⇨ PSME	H4 Supported
5	Social Networking significantly affects the Performance of Small and Medium scale Enterprise	SN⇨PSME	H5 Supported

CONCLUSION

This study shows that Market Location, Social Responsibilities, Employee Performance, Market Segmentation, and Social Networking play different significant roles in influencing the Performance of SMEs in Nigeria, as empirical findings are consistent with the results of this research. However, Market Location and Employee Performance are optional tools in the Nigerian market, while others (Social et al.) are essential for businesses'

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continuation, upkeep, and Performance. However, according to the findings in the study, 2 of the clustering activities (Market et al. performance) insignificantly aided the expansion of SMEs. Hence, Social Responsibilities, Market Segmentation, and Social Networking factors have significantly aided the expansion of SMEs. Given that the result will influence employment growth, conducting studies to ascertain any other factors impacting SMEs' Performance would be beneficial. Results from this study could be used to expand SMEs, which would increase employment in Nigeria to some extent. In order to find answers that can be put into practice for the development of Nigeria, it would also be beneficial to expand the scope of this research by increasing both the population and sample size.

REFERENCES

Asheim, B., Cooke, P., & Martin, R. (2006). The rise of the cluster concept in regional analysis and policy. *Clusters and Regional Development: Critical Reflections and Explorations*, 1-29.

Begum, A., & Abdin, M.D. (2015). Employment generation and poverty alleviation through SME cluster development in Bangladesh.

Braun, P., McRae-Williams, P., & Lowe, J. (2005). Small business clustering: Accessing knowledge through local networks. *Journal of New Business Ideas and Trends, 3*(2), 57-63.

Cavén, H. (2011). What is the role of a cluster in the business co-operation development?

Chatterji, A., Glaeser, E., & Kerr, W. (2013). The origins of entrepreneurship and innovation clusters.

Delgado, M., Ketels, C., Porter, M.E., & Stern, S. (2012). The determinants of national competitiveness (No. w18249). *National Bureau of Economic Research*.

Delgado, M., Porter, M.E., & Stern, S. (2014). Clusters, convergence, and economic performance. *Research Policy, 43*(10), 1785-1799.

Development in Bangladesh, Turkish Economic Review, 2.

Dickinson, D., & Neuman, S.B. (2006). Handbook of early literacy research, (2), 29-40.

Eniola, A.A. (2014). The role of SME firm performance in Nigeria. *Oman Chapter of Arabian Journal of Business and Management Review, 34*(2352), 1-15.

F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review, 26*(2), 106-121.

Harvard Business School, (2012) Clusters and the New Economics of Competition.

Jevwegaga, H., Ade-adeniji, O., Ibidunni, A.S., Olokundun, M.A., Borishade, T.T., Falola, H.O., & Ogunniyi, A. (2018). Role of SMEs' entrepreneurial activities and industrial clustering on SMEs' performance. *Academy of Entrepreneurship Journal, 24*(1), 1-7.

JP Morgan Chase & Co. (2014). Corporate Responsibility Report Reflects Focus on Cities as Engines of Economic Growth.

Jucevicius, G., & Grumadaite, K. (2015). Patterns for cluster emergence in latecomer economies. *Procedia-Social and Behavioral Sciences, 213*, 198-203.

Khan, M., & Khalique, M. (2014). Strategic planning and reality of external environment of organizations in contemporary business environments. *Business Management and Strategy, 5*(2).

Kim, J.W., Choi, Y., Lee, D., & Jung, S.Y. (2013). Intelligent MADS with clustering and elastic net and its application to optimal design of interior PM synchronous machines. *IEEE Transactions on Magnetics, 49*(5), 2209-2212.

Kolympiris, C., Klein, P.G., & Kalaitzandonakes, N.G. (2007). The Entrepreneur's Choice of Location: Evidence from the Life Sciences.

Kuah, A.T. (2002). Cluster theory and practice: Advantages for the small business locating in a vibrant cluster. *Journal of Research in Marketing and Entrepreneurship, 4*(3), 206-228.

Lezgovko, M., & Lezgovko, A. (2018). The effect of service clusters on the sustainable economic development. *Economics and Culture, 15*, 75-87.

Merriam-Webster. (2020). Definition of cluster.

Navickas, V., & Malakauskaite, A. (2009). The impact of clusterization on the development of small and medium-sized enterprise (SME) sector. *Journal of Business Economics and Management, 10*(3), 255-259.

Njue, L.M. (2011). The Menengai caldera structure and its relevance to geothermal potential. *In ARGEO-C3, Third East African Rift Geothermal Conference, Djibouti*, 22-25.

Porter, M. E. (1998). Clusters and the new economics of competition. *76*(6), 77-90. Boston: Harvard Business Review.

Citation Information: Raymond. S.A (2023). Clusters activity impacting the productivity of nigerian small and medium-scale enterprises. *Business Studies Journal, 15*(S5), 1-10.

Zulaikha Mohd, R., Suriah Abd, R., Zalifah Mohd, K., Wan Aida Wan, M., Mohd Hazali Mohamed, H., Zulmadi, A., & Ummul Fahri Abdul, R. (2011). Nutritional status and physical activities among army trainees in public institutions of higher education in Malaysia. *Food and Nutrition Sciences*, 2011.

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