The Dynamics of Communication Networking on Small and Medium Enterprises Growth in Entrepreneurial Economies: (Evidence from Nigeria)

John Joseph Etim, Ushie Michael Adadu, Otiala Boniface Paul

Department of Business Administration, Cross River University of Technology, Calabar– Nigeria

Abstract: - This study is designed to investigate the survival strategies for small and medium enterprises in Africa with particular reference to Nigeria. A total of 90 SME's were randomly selected from business industrial cluster in Lagos (South West) Nigeria and used for the study. Secondary data were used for data collection. Analysis was conducted via descriptive statistics; frequency tables were used for summarizing the data. The Statistical Package for Social Sciences (SPSS) version 2.0 was used, being relatively recent and advance version of SPSS, a multivariate regression model was used to measure the variables of communication networking models on SME's growth. The result reveals that the variables of communication networking models (knowledge spillover, technological innovation, and interactions within clusters) have significant positive influence on SME's growth. Both regression and correlation results indicated communication network model variables had positive influence on SME's growth. Knowledge spillover was the most significant with correlation relationship of 43.3% combined strategies to influence the profitability and growth of SME's. The study recommended that SME's owners should explore the dynamic changes occasioned by communication networking models in other to improve on information linkages behaviour, and networking characterization that can improve SME's existence in the business ecosystem.

Keywords: Communication, Networking, SME's growth, Entrepreneurial, Economies

I. INTRODUCTION

Background of the Study

The future of Small and Medium enterprises (SME's) growth in Nigeria business ecosysytemlies to a large extent in the hands of the owners/ promoters of indigenous small and medium enterprises (SME's). Globally, Small and Medium Enterprises (SME's) create most of the private sector jobs and act as an agent for empowering the citizens through employment generation that a rapidly growing labour force is craving, income distribution and rapid economic transformation and growth (Damirch & Rahimi, 2011).In several developing economies such as Nigeria, small and medium enterprises (SME's) are the main avenues for economic development and their importance for local, regional and national development has been on the increase (Ndabeni, 2008; Cooper & Park, 2008; Lalkaka & Abentti, 1999). Also, small and medium enterprises have become a formidable common form of business organization and the main creator of employment and output in many countries (Nichter & Goldmark, 2009; Neumark, 2008). That explains why SME's" are universally acknowledged as "effective instruments for income generation and economic growth" (Dimirchi & Rahimi, 2011: Pg 855). Specifically, "SME's account for more than 95 percent of all firms in many developed countries and they play a major role in the world economies" (Chiao, Yang, & Yu, 2006: Pg 595).

According to 2012 Enterprise Baseline study survey revealed that there are 17,284,671 Small and Medium Enterprises in Nigeria, employing 32,414,884 persons and contributing 46.5 percent of the nation's Gross Domestic Product in nominal terms (Fatoki, 2014). Despite their contributions to economic growth of entrepreneurial economy, it was documented that 70% SME's fail in their first three years of operations in Nigeria (Akingbolu, 2014). Hence the high failure rate is a cause for concern in an era characterized by potent driving forces of globalization, internationalization, advancing networking society, development of information technology, and innovation that are the bedrock for SME's growth in the business ecosystem. Because of this gloomy situation at various times in the past, the Nigerian government has designed and introduced measures to promote the survival and sustainable SME's (Akwani, 2007). Some of the measures include introduction of such institutional policies and proactive strategies like developing business clusters and the creation business collaborations to ensure SME's are strongly re-positioned as the force driver of growth and catalyst for socio economic transformation of the Nigeria entrepreneurial economy.

Although, previous study has been done on business networking in developed countries (Thrikawala, 2011), little attention has been given to communication networking in developing countries such as Nigeria. Communication networking is a useful way for SME's owner/ promoters to improve their business performance and SME's growth by sharing information, resources and capabilities through clusters, strategic alliance, and business collaboration. In this context, communication networking becomes the mandatory prerequisites for owners of SME's if they are determined to remain vibrant and sustainable (Shepherd, Douglas & Shanley, 2000). These kinds of strategies are mainly aimed at

increasing the formation, survival and growth rate of SME's (Rice, 2002). Unfortunately, the efforts of most SME's in Nigeria to attract growth in Nigeria entrepreneurial business ecosystem are futile. This development is disturbing, sending very little hope of growth in the SME's sub-sector.

Against this background, the study made conscious effort to explore the influence of communication networking model components via (knowledge spillover, technological innovation and interactions within clusters) as concept aimed at improving the relationship between two or more firms that communicate with each other by providing information, knowledge, flow of new information and exchange of ideas creation via information exchange in improving the growth rate of new ventures and establishing formidable growth mechanism for entrepreneurial oriented SME's in a fast moving entrepreneurial economy.

Objective of the Study

To examine the extent to which communication networking can enhance the growth of SME's in Nigeria entrepreneurial economy.

Research Question

How can the adoption of communication networking enhance the growth rate of entrepreneurial SME"s in Nigeria?

Research Hypothesis

There is no statistically significance relationship between communication networking and SME's growth in Nigeria entrepreneurial economy.

II. REVIEW OF RELATED LITERATURE AND HYPOTHESIS

The Concept of Communication Networking

The concept of communication networking has emerged as a formidable concept in determining the growth of SME"s in entrepreneurial economy in recent time (Nichter & Goldmark, 2009). The concept will anchor on Knowledge spillover (Lucas, 1986: Romer, 1988); Technological innovation (Ligthelm, 2010); Cluster (Porter, 1990).Communication networking refers to free business association, information sharing, knowledge spillover and competitive capabilities through strategic alliance among SME's capable of creating structural business changes, joint decision making and integrating the efforts of members to carry out services with communication interface built on exchanging of information and other resources to enhance SME's sustainability and growth (Roper, 1999). The assumption of Roper (1999) contributes to our understanding of communication networking. He emphasized that communication networking has been especially attractive as a means by which SME's can develop business collaboration tendencies and create business relationships based on trust and commitment through exchange of information knowledge in order to compete more effectively in the global market place and grow.

According to Hakimpoor, Tat, Kahni & Sanummi (2011) observed that communication networking in SME's refers to information exchange process and knowledge spillover mechanism undertaken by SME's owners/managers in managing the business. This view was supported by De Jong & Hulsink(2012) as they submit that the benefits of information sharing and exchange involvement among SME's established in clusters enable trusting relationships among businesses. Furthermore, Camarinha-Matos & Afsamanesh, (2006) contributions to communication networking predicts that an increase of collaboration, mutual engagement, and interconnected dyadic relationships established through effective communication and information exchange among SME's can lead to mutual benefits and long-term growth of SME's. They posit therefore, thata positive effect of communication networking is a driving force for SME's growth, in any entrepreneurial economy.

In this paper, the notion of communication networking in this context refers to a general concept of creating formidable trading opportunities through information knowledge spillover associated with relationships linking with SME's in business clusters to share contacts, develop trust, exchange information and resources through technological innovation in a cost effective way. It has been emphasized that communication networking in SME's can increase trust (Martinez & Aldrich, 2011). Trust is the first element needed in business relationships and communicating via networks is the conveyor belt, hence trust laid the foundation for a common ground where SME's can successfully meet their expectations. Another important force created by communication networking is commitment (Clerk, 2006). Communication via networks can enable commitment which is viewed as the willingness and investment of SME's in developing and maintaining relationships with other partners for sustainable growth (Tanga, 2011).

Communication networking also provides the ambiance for upgrading technological innovation and use of combination synergistic approaches to create networks of connectivity that can expand business activities domestically and globally. Communication networking has been acknowledged as a key determinant of SME's growth. It has been linked to "sustainable growth" (Vanek, Chem, Carre & Hussmanas 2014), knowledge sharing business collaboration and mutual benefits (De Clark, 2006)

The Conceptual Framework Diagram

Figure 1.1

Independent Variable

Dependent Variable
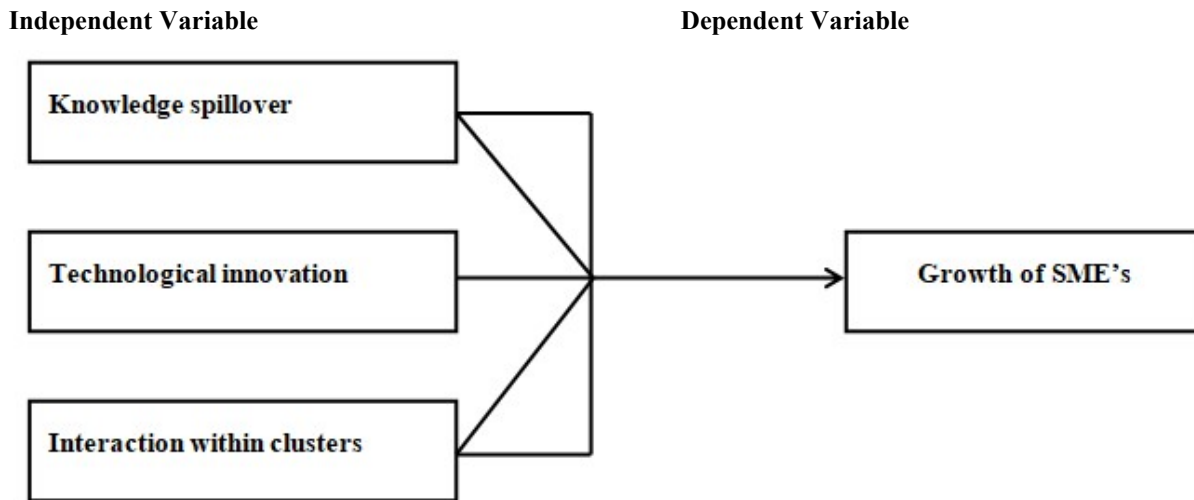
a). Knowledge Spillover

Knowledge spillover is an important component of communication networking because it reflects an important means by which homogenous SME's pursue growth and performance through information exchange and ideas collaborations (Howitt, 1992). Knowledge spillover reflects a fundamental willingness to depart from existing business practices and venture into current ways of using formal means information technology knowledge to increase productivity and establish growth (Audretsch and Feldman, 1996).

Knowledge spillover refers to a SME's propensity to creatively initiate new ideas such as social contact, face-to-face contacts and diffusion of creative knowledge that may result in business growth (Audrestch & Thurik, 2001).

b)   Technological Innovation

Technology innovation refers to the process by which SME's master and implements the design and production of product and services that are new to the business through information exchange modality and joint ideas which leads to commercial success of invention to enhance SME's growth (Naude & Szizmai, 2013) It is an invention-seeking, technological-breakthrough perspective characterized by creating something new and valuable utilizing information communication technology for knowledge sharing to benefits SME's in business collaborations.(Tsang, 2014).

c) Interaction within Cluster

Clusters refers to the conglomeration of homogenous group of business enterprises (SME's) and non- business organizations for whom membership within the group interacting through knowledge sharing, information exchange and joint idea generation to promote each member competitiveness (Enright, 1997). Mega (2013) noted that information exchange and ideas shared within the clusters helps SME's to expand market positions and look up for new

ideas for business growth. This observation aligns with Porter's (1990) previous view that in certain situation, SME's could utilize information exchange and communication asymmetries behaviour in an industrial cluster to enhance their joint competitive positioning in relation to other SME's growth, Accordingly, an information – driven entrepreneurial SME's is a leader in the business ecosystem because such SME's has the will and foresight to seize new opportunities or new market via technology – based inventions and quality ideas of innovations to enhance SME's growth and sustainability (Porter, 1998).

Empirical Review

A number of previous and recent studies have found a positive correlation between communicating networking and SME's growth (Hakimpoor, Tat, Khani & Samani 2011; Thrikawala, 2011; Chung-Leung (2008); Batjargal & Lu, 2004). In support, Kajikawa, Taked, Sakata & Matushima (2010) observed that communicating networking has a positive relationship with SME's growth. He submits further that building a high-value network via communication is extremely important to SME's growth and success in business environment. Watson (2007) noted that communication networking is significantly positively associated with SME's growth, He posit that successful communication networking is best achieved on the premise of valuable relationship of shared knowledge among SME's doing business directly that enables SME's to grow and survive, while Singh, Gang& Shanley (2008) observed that both formal and informal networks are associated with SME's growth. They emphasized that SME's can increase their growth rate and sustainability when participating in strategic communication networks.

In previous studies conducted by Smith (2004) it was empirically supported that SME's involved with networks via communication have a relatively higher survival and growth rate. In a related studies conducted by (Cruickshank and

Rolland, 2006; Inkpen & Tsang,2005) corroborated the assertions of the previous scholars and acknowledge accordingly that joining network is a pathfinder for SME's striving to gain a sustainable growth within their business environment, they argue further that networking no matter its form, has a positive impact on SME's growth.

Harris, Rae & Mismer (2012) noted that communication networking is of particular importance to SME's in developing economies as networking is considered to be one of the principal driving forces to business growth. In fact, researchers such as (De Clerk & Saayman, 2012) have found that SME's that operate an open network and diverse connections have greater opportunities to develop successful businesses than SME's with a single or closed network. In the same breath Hulsink (2012) submitted that the outcomes of communication networking by SME's can help a great deal in improving the growth rate of SME's.

Plethora of studies has found a positive correlation between knowledge spillover and SME's growth. For example, (Soete & Terwel, 1999 and Winjis & Cobbenhagen, 2000) found that knowledge spillover can dramatically increase growth rates of newly established SME's. Besides, Angion & Howit (1992) reported a positive relationship between knowledge spillover and large firm's growth following a survey of 235 SME's in China to investigate whether knowledge spillover affect SME's growth positively. The result concluded that the new ventures with higher growth rates as a result of active knowledge spillover adaptation have more interactions and idea creation than SME's with less participation in knowledge spillover.

Keller (2000) noted that knowledge spillover is related to SME's growth, while Audrestch &Thurik (2001) observed that the more SME's adopt knowledge spillover, the more likely they are to achieve increase growth rate. In investigating the influence of knowledge spillover on the performance of both newly established and existing small businesses in a turbulent "red ocean" business environment, Mackun &Macpherson (2008) found that knowledge spillover enhances the performance of SME's by making them to be competitive and enjoy higher growth rate, economies of scale, develop successful businesses and grow in any business situation.

A study conducted by Diaconu (2011) found a positive relationship between technological innovation and SME's growth. Okpara (2011) investigated the factors constraining the growth and survival of SMEs in Nigeria. The research result revealed that technological innovativeness is one of the factors that influence SME's growth in Nigeria.Chonge (2012) noted that technology innovation is politely related to SME's growth, while Yacoob &Radzi (20104) observed that the bore SME's adopt technological innovation, the more likely they are to achieve enhance performance and growth.

Bergman & Feser (1999) found that SME's that operate within homogenous industrial clusters tend to perform better because they largely pursue new market opportunities and achieve a higher level of growth. In the same breath Porter (1998) have strongly advocated a positive association between interactions of SME's within industrial clusters and SME's growth, while Clerk (2006) found that the decision of SME's to share trust and commitment within cluster from inception positively related to SME's growth.Fatoki (2014) found that SME's aggressively and proactively pursue cluster relationships achieve high level of market information to enhance SME's growth.

III. RESEARCH METHODOLOGY

This research adopted Ex-Post Facto design. The study was conducted in two major industrial business clusters in Lagos with targeted population of 90 SME's that have been in existence for at least five years. The consisted of SME's listed in the Manufacturing Association of Nigeria (MAN) directory covering a period of 10 years (2007-2016). The Statistical Package for Social Sciences (Version 2.0) was used to examine the effect of communication networking. The linear multiple regressions were used in estimating the model, apart from its simplicity, it gives reliable estimates. The Adjusted Coefficient determines (R-bar square) was used to test the best line.

Specification of the Model

The Statistical model was specified to examine the effect communication networking on the growth of the SMEs in Nigeria. It is a linear multiple regression model where the growth of the firm is made the dependent variable with a host of independent variables. Among the independent variables are knowledge spillover, technological innovation and interaction within cluster.

Thus we have; the linear multiple regression model of the form:

$$FGi = \beta O + \beta 1 KSO + \beta 2 TINV + \beta 3 IWC + \mu$$

Where:

FGi = Firms Growth

KSO = Knowledge spillover

TINV = Technological Innovation

IWC = Interaction within clusters

μ = the error term

i = 1… n, where n is the number of firms

*B'*s = are linear multiple regression coefficients estimated.

The expected signs *B1,>0, B2>0, B3>0, B4>0, B5>0* and *B5>0*

The determinants of growth of SMES include; Knowledge Spillover, Technological Innovation, Interaction within Clusters.

IV. DATA ANALYSIS

Data analysis was also done using a linear multiple regression models in the form of;

$FGi == \beta O + \beta 1KSO + \beta 2TINV + \beta 3IWC + \mu$

Where FGi = Firm's Growth which was the dependent variable of the study, $\beta 1KSO$, $\beta 2TINV$, $\beta 3IWC$, knowledge spillover, technological innovation and interaction within clusters which are the independent variable.

The model assesses the relationship between the dependent variable Y and the explanatory variables $\beta 1KSO$, $\beta 2TINV$, $\beta 3IWC$.

Table 4.1.1 Multi-variance Regression Model Fitness for Communication Network Model

Indicators	Coefficient
R	0.273
R-Square	0.363
Std error of the estimate	0.196

Table **4.1.1** Shows that the coefficient of determination also called the R square is 36.6%. This means that the combined influence of the predictor variables (Knowledge spillover, Technological Innovation and Interaction within clusters) explains 36.3% of the variations in growth of SME's. The correlation coefficient of 27.3% indicates that the combined strategies of the predictor variables have a positive correlation with growth of SME's.

Table 4.1.2 Analysis of Variance (ANOVA) – Network Communication Model

	Sum of squares	DF	Mean square	F	Sig.
Regression	106.684	67	1.592	1.952	0.000
Residual	171.316	210	0.816		
Total	278.000	277			

The results from **Table 4.1.2**: the analysis of variance shows that the model variance (1.592) for the data set is higher than the error variance (0.816) indicating that the different predictors succeeded in predicting SME's growth significantly at a 95% level of certainty.

Table 4.1.3   Regression Coefficient – Communication Networking

Variable	Beta	Std. error	T	Sig.
(Constant)	0.452	0. 169		0.00
Knowledge spillover	0.591	0. 142	5.24	0.000
Technology innovation	0.525	0.O75	3.301	0.039
Interaction within cluster	0.492	0.893	2.104	0.000

Table 4.1.3 above displays the regression coefficients of the independent variables. The results reveal that knowledge spillover, technological innovation and interactions within clusters were positively and statistically significant in explaining the survival rate of SME's. The findings imply that all the independent variables were strong determinants of SME's growth.

The results indicate that an increase in the knowledge spillover by one unit leads to an increase in growth of SME's by 0.591 units; an increase in the effectiveness of technological innovation by one unit leads to an increase in growth of SME's by 0.525 units; an increase in the effectiveness of interaction within cluster by one units leads to an increase in growth of SME's by 0.492 units.

Table 4.2 Test of Hypothesis

Variables	SME's Growth	Network Model
Correlation Coefficient(R)	0.309	0.273
Coefficient Determinants(R^2)	0.905	0.363
ANOVA P- Value	0.812	0.000

Multiple regression summaries of dependent and Independent variables

Discussion of Major Findings

Network model shows a positive correlation coefficient (R value). The R value 0...273 shows that there is a positive but weak relationship between dependent variable (SME's survival) and independent variables network models – Trade, Technological innovation, interaction within clusters. The coefficient determination R^2 0.363 implies that 36.3% variations of network model are explained by trade, technological innovation, and interactions within the clusters. i.e (0.000<0.05). This implies that the predictor is statistically significant in predicting the dependent variables. The coefficient table is relevant and can be interpreted since the predictor is statistically significant

ANOVA shows a P value of 0.000 which is less than 0.05 i.e. (0,000 < 0.05). This impales that the predictor is statistically significant in predicting dependent variables. The coefficient table is relevant and can be interpreted since the predictor is statistically significant. Inferential statistics shows that the correlation between survival of SME's and knowledge spillover was strong and positive (0.591) and significant (0.000). The regression results indicate that communicating networking in form of knowledge spillover among SME's stimulate businesses to compete more effectively in order to make profit and ensure steady growth. This finding agree with those of Watson (2007) that knowledge spillover through collaborative efforts among SME's influences competitiveness, ability for SME's to sustain its long-term performance other than competitors in the market which is measured profitability, market share and sales.

Inferential statistics shows that the correlation between growth of SME's and technological innovation was strong and positive (0.525) and significant (0.000). The regression correlation result indicates that SME's productivity can be achieved by adopting technological innovation. This aligns with the views of Talukder & Quazzi (2011) that technological innovation adoption enables SME's growth in tight competition, gain competitive advantage and compete against larger organizations. Inferential statistics shows that the correlation between growth of SME's and interaction within cluster among SME's weak but positive (0.492) and significant (0.000). The regression correlation result indicates that trust has an influence on SME's growth, development, sustainability and growth. This agrees with those of De Jong & Hulsink (2012) that the growth rate of SME's lies in the adoption of trust and commitment exhibited by owners/managers of SME's which helps a great deal in improving the survival rate of SME's.

V. SUMMARY AND CONCLUSION

Undoubtedly, SME's is a driving force in the economic development of Nigeria and are often constrained by so many factors that limit their growth. Several models have been developed, which this research has synchronized with communication networking. Theses models, knowledge spillover, technological innovation and interaction within cluster have immensely contributed to the growth and sustainability of the studied SMEs. The result indicated that knowledge spillover and interaction within the clusters proved to be the strongest components of communication networking and can be considered to be significant as models for the growth of SME's. This is consistent with the submission of Rice (2000) that "communicating networking plays an important role to the growth of new ventures by providing information, knowledge and expertise and also reducing the uncertainties that the SME'S are faced with in the global business world".

REFERENCES

[1]. Akwani, O. (2007). Global Business Investing in Africa--The Case of Nigeria.
[2]. Clerk, N. (2006). The Relationship between Network Commitment, its antecedents and Network Performance. *Management Decision 44 (9), 1183-1205.*
[3]. Chong, W. Y., (2012). Critical Success Factors for Small and Medium Enterprises:: Perception of Entrepreneurs in Urban Malaysia. *Journal of Business and policy Research,7,204-215.*
[4]. Chung-Leung, L., Yau, Q.H.M., Sin, L Y M., Tao, A.B.C., Chow, R P M., Leo, J S Y(2008) The Effect of Social Capital and Organizational Innovativeness in Different Institutional Contexts. *Journal of International Business Studies 39(4) 589-612.*
[5]. De Clerk., S., and Saayman, M.,(2012). Networking as Key Factor in Entrepreneurial Success. European Business Review 24(5) 382-390.
[6]. De Jong, J.P. and Hulsink, W.(2012). Patterns of Innovating Networking in Small Firms. *European Journal of Innovation Management, 15(3); 280-297.*
[7]. Dimirchi, Q.V., and Rahimi, G. (2011). Design a Contemporary ERP Models for Small and Medium Enterprises of Iran. *Interdisciplinary Journal Contemporary Research Business. 3(5):850-880.*
[8]. Hakimpoor, H., Tat, H.M., Khani, N., and Samani, M. B (2011) Marketing Networking Dimensions and SME's Performance: A New Conceptual Model. *Australian Journal of Basic Application Science 5(10)1528-1533.*
[9]. Harris, L., and Rae, A. M (2012) Punching Above their Weight, the Changing Role of Networking in SME's. *Journal of Small Business Enterprise Development 18(2)335-351.*
[10]. Inkpen, A.C and Tsang, E.W.K (2008) Social Capital Network and Knowledge Transfer. *Academic of Management Review 30(1) 46-165.*
[11]. Kajikawa, Y., Taked, y., Sakata, I., and Matushima, K.,(2010). "Multiscale Analysis of Inter Firm Networks in Regional Clusters" *Technovation, 30, 168-180.*
[12]. Ligtthelm, A. (2010), Entrepreneurship and Small Business Sustainability. *South African Business Review, Volume 14, Number 3, 131-153.*
[13]. Naude ,P(2014) The Influence of Network Effect on SME's Performance: *Industrial Marketing Management , 43,630-641.*
[14]. Naude, P, (2010). 'Entrepreneurship, developing countries and development economies: New approaches and insight', *Small Business Economics: An Entrepreneurship Journal, 34(1).*
[15]. Ndabeni, L.L. (2008). The Contribution of Business Incubators and Technology Stations to Small Enterprise Development in South Africa ", Development Southern Africa". 25(3), 259-268.
[16]. Neumark, D., Wall, B and Zhang (2008), "Do Small Business Create Jobs? New Evidence from the National Establishment Time Series ", NBER Working Paper, No. 13818.
[17]. Nichter, D. and Goldmark, L,(2009), "Small Firm Growth in Developing Countries ", World Development, 37(9), 1453-1464.
[18]. Nobre, H., and Silva, D., (2014). Social Network Marketing Strategy and SME Strategy Benefits. *Journal of Transnational Management, 19(2), 138-151.*
[19]. Nowak, M.J and Grantham, C.E.(2000), "The Virtual Incubator: Managing Human Capital in the Software Industry", *Research Policy, 29, 125-134.*
[20]. Olutunla G. T (2001). "Entrepreneurship for Economic Development," Inaugural Lectures Series 27, Federal University of Technology, Akure, Nigeria. ISBN – 978 – 33757 - 5– X, 1-64
[21]. Oke, J. O.(2015). The impact of Innovation Performance.*International Journal of Innovation in SME's, 5(1), 13-15.*
[22]. Okpara, J. O. (2009), Entrepreneurial Orientation and Export Performance Evidence from an Emerging Economy. *International Business Research Papers 5(6): 195 – 211.*
[23]. Okpara, J.O. and Kumbiadis, N.,(2008), SME's Export Orientation and Performance: Evidence from a Developing Economy.'*International Review of Business Research Papers. Vol. 4 No.5 October-November Pp. 109 – 119.*
[24]. Oni, O.E.(2012), Relevance of Entrepreneurial Pro activeness on Business Performance: Nigerian Company Experience. *Kuwait Chapter of Arabian Journal of Business and Management Review 1 (6).*
[25]. Organization for Economic Co-operation and Development (2002), OECD Small and Medium Enterprise Outlook, Paris, France.
[26]. Organization for Economic Co-operation and Development (OECD) (2007)."Small and Medium – Sized Enterprises in Turkey, issues and Policies".*www.oecd.org/agr*
[27]. Osarenkhoe, A. (210). 'A Study of Inter-Firm Dynamics between Competition and cooperation. A Competition Strategy '. *Management, Vol, 17, No. 3-4, pp. 201-221.*
[28]. Osotimehin, K.O.; Charles A.Jegede; Babatunde H.Akinlabi; O.T.Olajide.(2012).An evaluation of the challenges and prospects of micro and small scale enterprises development in Nigeria .*American International Journal of Contemporary Research*.174–185.
[29]. Oyeku, O.M.,Oduyoye,. O., Asikhia, O., Kabouh, M.,and Elemo, G. N (2014). On Entrepreneurial Success of Small and Medium Enterprises (SME's); A Conceptual andTheoretical Framework.

Journal of Economics and Sustainable Development, 5 (16), 14-23.

[30]. Ozman, M (2009)'Inter-Firm networks aand Innovation: A Survey of Literature', *Economics of Innovation and New Technology, Vol. 18, No. 1, pp,33-67.*

[31]. Pett, T. L and Wolff, J. A. (2011). SME Identity and Homogeneity-Are There Meaningful Differences between Micro, Small, and Medium Sized Enterprises? Paper submitted for presentation to the International Council for Small Business (ICBS) 2011 Conference, Stockholm Sweden.

[32]. Rauch, A,:Wikund, J,: Freese, M and Lumpkin, G. T (2004). Entrepreneurial Orientation and Business Performance; Cumulative Empirical Evidence. *Frontiers of Entrepreneurship Research, 164-177.*

[33]. Rice, M .P, (2002), "Co-Production of Business Assistance in Business Incubators: An Exploratory Study". *Journal of Business Venturing, 17, 163-187.*

[34]. Sanusi, J. O. , (2003) "Overview of Government's Efforts in the Development of SME's and The Emergence of Small and Medium Industries Equity Investment Scheme (SMEIS)". A paper presented at the National Summit on SMEIS organized by the Bankers' Committee and Lagos Chambers of commerce and industry (LCCI), Lagos, 10th June, 2003.

[35]. Scarborough, N.M., Zinmere T.W. and Wilson, D.I (2008), Effective Small Business Management: An Entrepreneurial Approach, 9th Edition, Prentice Hall.

[36]. Schillo, S., (2011). *Entrepreneurial Orientation and Capacity Performance. Can the Academic Literature Guide Managers?* Technology Innovation Management Review November.www.timereview.ca.20

[37]. Shepherd, D, Douglas, E and Shanley, M., (2000)," New Venture Survival: Ignorance External Shocks, and Risk Reduction Strategies", *Journal of Business Venturing, 15(5, 6), 393 SAYFA SONU.*

[38]. Singh, R. J., Gang, S. K. and Destmukh (2000) Strategy Development by SME's for Competitiveness: A Review. *International Journal of Business Management15 (5)525-547.*

[39]. Soininen, J (2012) Entrepreneurial Orientation in Small and Medium – Sized Enterprises during Economic Crisis in Finland. Management Research Review, Vol. 35, Issue 10, pp. 927-944.

[40]. Steel, W. F. (1995)., "Keynote Address", English and Henault. G. (Eds.) Agents of Change: Studies on the Policy Environment for Small Enterprise in Africa, Canada: *International Development Research Centre, 12-24.*

[41]. Sun, H, and Zhang, P. (2006) The Role of Moderating Factor in User Technology Acceptance. *International Journal of Human-Computer Studies 64, 53-78.*

[42]. Tang, Y.K.(2011) Influence of Networking on the Internalization of SME's. Evidence from Chinese Internationalized Chinese Firms. *International Small Business Journal, (1) 25.*

[43]. Thirkawala, S.S (2011), Impact of Strategic Networks for the Success of SME's in Sri Lanka. *World Journal of Social Sciences 1(12), 108-119.*

[44]. Trequettrini, R., Rasso, G., and Lombardi, R. (2012). Defining Business Network. *International Journal of Business Resource Management, 3(1) 29-54.*

[45]. Urban, B and Oosthuizen, C, (2009), Empirical Analysis of Corporate Entrepreneurship in the South African Mining Industry, *Journal of Contemporary Management, Vol. 6, pp. 170-192.*

[46]. Watson, J.(2007) Modeling the Relationship Between Networking and Firm Performance. *Journal of Business venturing, 22: 852-874.*

[47]. Wikund, J, and Shepherd D, (2005). The Sustainability of the Entrepreneurial Orientation Performance Relationship. *Entrepreneurship Theory and Practice 24(137-148).*

[48]. Williams W. S., (2006). "Supporting the Growth of Small and Medium Enterprises", Address to the Nova Committee of the Trinidad and Tobago Chamber of Industry and Commerce; March, 16.

[49]. Wong, H., and Meng, S. (2007). Small-Medium Sized Enterprise Cluster and Small Town Economic Development, Chinese Business Review 6(4):24-29.

[50]. Zahara, S.. A,. and Garvis, D. M.(2000). International Corporate Entrepreneurship and Firms Performance. The Moderating Effect of International Environmental Hostility. *Journal of Business Venturing, 15(5-6), 469-492.*

APPENDICES

Appendix 1:

Entrepreneurial orientation data table and regression output

Year	Growth of SMEs (y)	Innovativeness (x1)	Risk taking (x2)	Pro-activeness (x3)
2007	1.12	618.56	1.2	1.7
2008	1.22	666.68	0.7	1.5
2009	1.20	651.95	3.7	1.6
1010	1.20	649.32	3.3	2.3
2011	1.21	648.40	1.1	2.8
2012	1.37	722.60	-5.1	0.3
2013	1.37	732.34	4.2	1.1
2014	1.29	711.90	3.0	2.1
2015	1.28	713.49	4.3	3.3
2016	1.22	723.15	3.3	1.8

Entrepreneurial orientation variables indicator for Nigeria (GEM and OECD)

Model summary

Model	R	R. Square	STD error estimate
1	0.953	0.909	0.184

Predictors: (constant) Entrepreneurial Orientation – Innovativeness, Risk taking, Proactiveness

Analysis of Variance (ANOVA) Entrepreneurial Orientation

Model	Sum of square	DF	Mean square	F	Sig
Regression	44.651	4	11.16	328.547	0.00
Residual	4.486	132	0.034		
Total	**49.137**	**136**			

Independent variable: innovativeness, risk taking and pro-activeness

Predictors (Constant) Entrepreneurial Orientation coefficient

Model	Unstandardized coefficient		Standard coefficient		
	B	DF	Beta	F	Sig
Constant	7427.807			2.711	0.041
Innovativeness	229.683	0.065	0.431	6.618	0.00
Risk taking	217.62	0.063	0337	5.346	0.00
Pro-activeness	212.84	0.06	0.301	4.934	0.00
Total	**49.137**	**136**			

Independent variables: innovativeness, risk taking, pro-activeness

Appendix II: ## Network Model data table and regression output

Year	Growth of SMEs (y)	Innovativeness (x1)	Risk taking (x2)	Pro-activeness (x3)
2007	2.2	102.75	7.2	10.9
2008	2.4	483.97	6.4	12.7
2009	2.9	419.31	8.2	9.7
1010	4.0	371.13	8.5	9.0
2011	4.0	391.34	5.2	14.1
2012	3.5	235.49	7.8	11.7
2013	2.3	235.39	4.5	6.9
014	0.8	843.96	4.3	8.4
2015	4.1	123.91	0.4	11.6
2016	4.8	127.42	7.4	12.7

Network Model variables indicator for Nigeria (GEM and OECD)

Model summary

Model	R	R. Square	STD error estimate
2	0.273	0.363	0.196

Predictors: (constant) Network Model

Analysis of Variance (ANOVA) Network Model

Model 2	Sum of square	DF	Mean square	F	Sig
Regression	106.684	67	1.592	1.452	0.00
Residual	171.316	210	0.816		
Total	**278.00**	**277**			

a.   *Independent variable: trade, technological innovation and interaction within clusters*
b.   *Predictors (Constant) Network Model coefficient*

Model 2	Unstandardized coefficient		Standard coefficient		
	B	Std. error	Beta	F	Sig
Constant	9.649.026				
Trade	1303.577	-118	-269	5.221	0.006
Technological innovation	9987.6466	-111	-202	3.301	0.039
Interaction within clusters	-239.858	0.89	-1.29	2.104	0.101
Total					

Independent variables: trade, technological innovation, interaction within the clusters

Model summary

Model	R	R. Square	STD error estimate
1	.309	.905	22383

Dependent variable- SME's Survival

Model 1	Sum of square	DF	Mean square	F	Sig
Regression	.029	2	.014	253	.812
Residual	.273	5	.055		
Total	**.302**	**7**			

Dependent Variable SME's Survival