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Does Technology Orientation really matter for Firm Performance in North-Western Nigeria?

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Abstract: This study examined the influence of technology orientation on Firm performance. The objective of this study is to investigating the effect of Technology orientation on Firm performance among Nigeria Small and Medium Enterprises in all sectors. Data was collected using self-administered structured questionnaire from 266 SME's in North-western Nigeria. The collected data was analysed with statistical package for social sciences (SPSS) technique. The findings revealed that technology orientation has significance positive relationship with firm performance. The findings also revealed that TO has a significant SMEs success factor. It has been concluded from this study that adopting and implementing technology orientation by managers/owners of SMEs can increase their performance.

Keywords: Technology orientation, firm performance, SMEs, Nigeria.

Introduction

This paper deals with the issue of technology orientation as an important factor for small-sized and medium-sized enterprises (SMEs). Nowadays, more and more attention is paid to the ability of organizations to develop their technology orientation. Not only targeting the development towards major technological innovations brings financial value to a firm. Over the years, SMEs have gained an increasing attention from all over the world due to the role they play in the economic growth and the development of any economy (Yauri, Koko, & Bankanu, 2008). SME sector constitutes greater part of the business organization, they serve as an engine for employment generation, wealth creation and poverty reduction, improve per capita income, sustainable economic growth, and development, increase value addition to raw materials supply, step up capacity utilization in key industries and improve export earnings (SMEDAN, 2013). Nowadays, SMEs performance is generating amount of discussion among business researchers, practitioners, investors and government organizations due to the constraint and limitations such as lack of innovativeness, limited number of employees, market orientation, inadequate access to finance, skills, educational background and experience and lack of managerial expertise (Akingunola 2011; Samad 2007; Mohd Aris 2006; Saleh & Ndubisi 2006).

SMEs constitute dominant sector in many countries and contribute enormously toward their economies. SMEs serve as a backbone for the economic revival of various nations in Sub-Saharan Africa (Babajide, 2011). They are featured with various micro and other small businesses and employed a large number of labor force in an economy as well as increase their Gross Domestic Product (GDP) (Naala, 2016; Babajide, 2011, Abiodum, 2003). Most nations all over the world employed SMEs as a tool for generating employment, poverty reduction as well as to improve the growth domestic product (SMEDAN, 2013; Mahmood & Hanafi, 2013).

Despite the importance of SMEs to the development of any economy, they faced several challenges which affect their performance compared with the larger organizations. (Mwobobia, 2012; SMEDAN, 2012; Lucky, & Minai, 2011; Covin, Green & Slevin, 2006). Lack of skills and technology, innovations, social network, poor access to finance, logistics and infrastructure costs and regulatory uncertainty make it difficult for SMEs to survive in the competitive environment (World Trade Report 2017). Even though SMEs constitute 96 percent of the business in Nigeria, their impact on GDP growth is very low compared to the aforesaid countries, SMEs contribute only less than 10 percent to the GDP (Bello, 2014; Gbandi &

Amissah, 2014). Nigerian economy is facing a lot of challenges as a result of declining oil revenue, very high foreign exchange rates high youth unemployment. To tackle these challenges, there is a need for urgent need for diversification and resuscitation of the economy. Although SMEs are recognized as one of the vital to economic growth and development in many countries (Naala, Nordin & Wan, 2017; Mahmood & Hanafi; 2013; Hilmi, Ramayah, Mustapha & Pawanchik, 2010) and constitute 96 percent of the entire economy, unfortunately their contribution to the overall economy in Nigeria is still low when compared with developed and other developing countries (Ghandi & Amissah, 2014; Eniola, 2014; Aliyu & Bello, 2013; Oyeyinka, 2012). Ibru (2013) stated that the failure of SMEs in Nigeria is an issue of concern to the Nigerian government and other interested parties.

Studies on TO show that organizations can achieve competitive advantage by contributing better products to their target market through continuous development of new and improved technology and investing heavily in R & D (Hakala & Kohtamaki, 2011; Mu & Di Benedetto, 2011; Voss & Voss, 2000; Gao, Zhou, & Yim, 2007; Gatignon & Xuereb, 1997;). TO is also defined as organizations ability to utilize its technical knowledge in order to build a new technical solution to satisfy the needs and wants of the target market (Spanjol, Qualls, & Rosa, 2011; Gatignon & Xuereb, 1997). Similarly, Rusetski (2011) stated that TO is the ability and willingness of firms to obtain technical knowledge and apply it to improve product development. Technology-orientated firms have a better advantage in generating innovative ideas. Similarly, TO help organizations in creating and improvement of their products/services as knowledge of technology can help in product design, quality, and prevent possible risks (Akgün, Keskin, & Byrne, 2012; Tuominen, Rajala, & Möller, 2004). Also, technological knowledge and capability can help the organization to discover and correct problems arising from financial and operational inefficiency or outdated production systems (Li, 2005).

The objective of this study is to investigate the relationship between the technology orientation and firm performance. The paper is organized as follows. Previous literature is presented in the Literature Review section. The research methods and data collection are presented in the Methodology section. The fourth section presents the results. Finally, discussion and conclusions, including limitations of the study and suggestions for future research, are presented.

Firm performance

Firm performance refers to the organization desire of success in doing business (Suliyanto & Rehab, 2012). Performance is a relevant construct in strategic management research, one of the most significant and frequently used as a dependent variable that is a concern in almost all areas of management (Ibrahim & Mahmood, 2016; Santos & Brito, 2012; Richard, Devinney, & Johnson, 2008). Minai and Lucky (2011) see a performance from both financial and the nonfinancial perspectives. While, Lusthaus, Adrien, Anderson, and Montalván. (2002) argued that performance is a significant step in ensuring firm success. Nevertheless, despite this importance, there is hardly a consensus about its definition, dimensionality and measurement, what limits advances in research and understanding of the concept because of the complexity of the construct (Santos & Brito, 2012; Crook, Ketchen, Combs, & Todd, 2008; Richard et al., 2009). Firm Performance is still an indistinct and 'loosely defined' variable, hence organizational research literature shows that it has been used substantially as a dependent variable and that several studies concentrated on identifying the aspects that affect the variability in performance outcomes (Richard et al., 2008; Rogers & Wright 1998; March & Sutton 1997).

Studies in the past have found a strong relationship between subjective and objective measurements (Santos & Brito, 2012; Dawes, 1999; Dess *et al.*, 1997; Jaworski & Kohli, 1993; Dess & Robinson, 1984). Minai and Lucky (2011) viewed SME performance in two perspectives: the financial/monetary and the non-financial/non-monetary measures.

Technology Orientation

Technology orientation is a significant firm level construct (Li, 2005). This is because achieving corporate goal lies on the ability of the organization to welcome innovative ideas and quick adaptation of new technologies (Hurley & Hult, 1998). TO is defined as the organization's openness to innovative ideas and its tendency to implement new technologies (Hurley and Hult, 1998). It signifies "a firm's proactivity in developing new technologies and generating new ideas and its use of sophisticated technologies in new product development, etc." (Li, 2005, p. 432). It comprises activities like the use of sophisticated technologies in product/service innovation, considerable investment in research and development, and the rapid incorporation of new technologies (Slater, Hult, and Olson, 2007, Zhou, Kin & Tse, 2005).

TO as one of the strategic orientation reflects an organization's values and beliefs on management actions and resource allocation (Noble, Sinha, and Kumar, 2002). Thus, the acceptability of the product in the market defend on technological superiority of the firm because consumers prefer quality goods and services. Thus, TO is defined in this study as the technological ability of the firm to adopt new technology as a source of product improvement or development in order to satisfy the target market.

Theoretical Background

Resource-Based View

Barney (1991) posited that firm's sustainable performance advantage by securing rare resources of economic value and the ones that competitor and other rivals cannot easily copy, imitate or substitute. As such, firms with rare resources should be able to leverage them for their own peculiar benefit. Amit and Schoemaker (1993) stated that resources are organizational assets that are processed through ownership or control, while capabilities are referring a firm's capability to combine resources and adequately use them. RBV collected works established that firms could obtain economic benefit as the basis of unique business assets that are of value, uncommon, hard to replicate and non- harmonious with other resources (Barney, 1991). Barney (1991) posited that firm's sustainable performance advantage by securing rare resources of economic value and the ones that competitor and other rivals cannot easily copy, imitate or substitute. As such, firms with rare resources should be able to leverage them for their own peculiar benefit.

Therefore, a good technology-oriented strategy can be rare, valuable, imitable and non-substitutable, hence the need for RBV. Organizational culture is regarded as the unique way of life of a group of people and their comprehensive way of life; hence a sound culture of an organization can give that organization an edge over and above other organizations and can help achieve a competitive advantage. Hence, in this study technology orientation is significant and valuable variables for SMEs because they assist them in acquiring knowledge, understanding oneself, building skills, the economy, understanding customers, the stakeholders, suppliers, the market environment, consumers, creation of business strategies and product modification that may lead to firm performance.

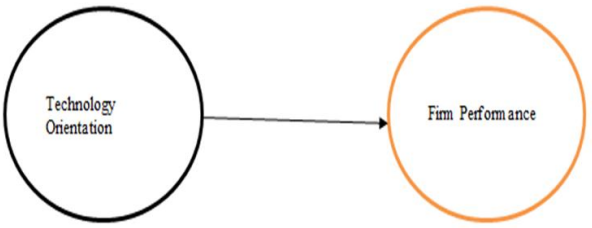

Figure 1: Research Framework

Technology Orientation and Firm Performance

The contribution of TO on firm performance have been conducted by several studies (Gatignon & Xuereb, 1997; Hortinha, Lages, & Lages 2011; Mu & Di Benedetto, 2011; Spanjol, Qualls, & Rosa, 2011; Hakala & Kohtamaki, 2010; Gao et al., 2007; Voss & Voss, 2000).

Lee, Choi & Kwak (2015) Investigate the effects of technology, entrepreneurial, market, and learning orientations on firm innovativeness, and the mediating effect of firm innovativeness on these relationships. The results reveal that technology orientations significantly influence firm innovativeness and firm performance. Hsu et al., (2014) investigate the roles of technological capability on the influence of strategic orientation on both market and financial performance of new products. The findings of the study show that TO positively affect market performance. Al-Ansari, Altalib and Sardoh, (2013) examines how technology orientation interacts with innovation to affect business performance in small and medium-sized enterprises (SMEs). The findings indicate that technology orientation did not have a significant and direct influence on business performance.

H_1: there is a relationship between technology orientation and firm performance in North-western Nigerian SMEs.

Methodology

Measurement

The approach of this study is quantitative. Measurement of the study rooted from different sources. The firm performance measures are adopted and modified from the work of Gupta and Batra, (2016); Suliyanto and Rahab (2012) and Morgan, Vorhies, and Mason, (2009). The firm performance is measured on a subjective perspective (financial and non-financial) involving self-reported measures. Subjective measures were employed in this study because the majority of SMEs are privately owned and have no legal obligation to reveal their information. Consequently, respondents may be unwilling to provide actual financial information (Tse et al., 2004; Atuahene-Gima & Li, 2002). Suliyanto and Rahab (2012) have found reliability values of.828.

In this study, TO will be operationalized using Gatignon and Xuereb (1997) Gatignon and Xuereb (1997) found technology orientation construct reliability alpha value of 0.87 which provides the validity of all instruments. The Firm performance and Technology orientation scales have measured a unidimensional with eight and eight items respectively.

4.2 Population and Sampling

The population comprises all small and medium enterprises from different industries across the Northwestern State of Nigeria which comprises Kano, Kaduna, Jigawa, Kebbi, Katsina, Sokoto and Zamfara States. Based on the SMEDAN and National Bureau of Statistics (NBC) (2013) collaborative survey data there are a total of 16,043 SMEs in Northwestern states. The data collection employed questionnaire survey, which was administered by hand delivery to SMEs in the northern part of Nigeria. A cluster sampling technique was utilized to select samples in which every sample was selected (Hair, Black, Babin, Anderson & Tatham, 2006). Krejcie and Morgan (1970) table for sample size determination was employed, the sample size of 377 selected.

Results

Data was collected through self - administration of the 377 questionnaires to SMEs owner/managers operating in north-western part of Nigeria. However, 266 questionnaires were returned representing 70.55 percent response rate. A response rate of 79.8 percent was considered acceptable (Sekaran, 2003). The responses were keyed into SPSS version 23.

Before testing the hypotheses, the validity of the constructs was assessed. Assessment of outliers, normaliy test, no-response bias, multicollinearity and common metod variance were conducted and found to be satisfactory.

The suitability of this test was subjected to the utilization of Kaiser – Meyer – Olkin (KMO) measure of sampling adequacy and the Bartlett's test of Sphericity. Therefore, KMO value greater than 0.6 and the Bartlett's test is large and significant ($p<0.05$) (Hair, Ringle & Sarstedt, 2010), factorability is then considered possible, it was used to determine the unidimensionality of the constructs and to eliminate unreliable items. All items were subjected into principal component analysis. Items with factor loadings of more than 0.3 will be accepted to represent the factor since it is regarded as a threshold to meet the minimum level for interpretation of the structure (Sekaran, 2003; Hair, et al., 2006: 2010). Base on the FA tests, five items were eliminated because it loaded alone on another factor. The results of the FA presented in Table 1 and 2.

Table 1: Result of the Factor Analysis for Firm Performance

	items	Component
FP01	Our firm has improved regarding sales growth.	0.703
FP02	Our firm has improved regarding employment growth.	0.742
FP03	Our firm has improved regarding market value growth.	0.733
FP04	Our firm has improved regarding profit.	0.714
FP05	Our firm has improved regarding return on asset.	0.732
	Eugene value	2.685
	Percentage of variance	44.72
	KMO.	0.773
	Bartlett's Test of Sphericity	330.08
	df	15
	Sig.	0

Table 1. Provides the result of factor analysis for business performance. It shows that all the items were loaded onto a single factor with an eigenvalue greater than 1.0. A single factor is extracted 59.636% of the total variance explained.

Table 2: Result of the Factor Analysis for Technology orientation

	Items	Component 1
TO01	Our firm adopts up-to-date technologies in its product/services development.	0.566
TO02	Our products/services are always at the state of the art of the technology.	0.762
TO03	Our firm is very proactive in the development of new technologies.	0.687

TO04	Our firm has the will and the capacity to build and to market a technological breakthrough.	0.722
TO05	Our firm has built a large and strong network of relationships with suppliers of technological equipment.	0.699
TO06	Our firm has an aggressive technological patent strategy.	0.59
	Eugene value	2.77
	Percentage of variance	34.7
KMO		0.772
Bartlett's Test of Sphericity		373.011
	df	28
	Sig.	.000

Table 1. Provides the result of factor analysis for technology orientation. It shows that all the items were loaded onto a single factor with an eigenvalue greater than 1.0. A single factor is extracted 34.7% of the total variance explained.

The reliability test was conducted to ascertain the existence of an internal consistency of items by calculating the Cronbach's alphas of the constructs after the conduct of factor analysis. It found that all the study variables possess an acceptable level of internal consistency ranging from .777 (FP) and .760 (TO). All the variables, therefore, meet the minimum threshold as recommended by Hair et al., (2010) and Nunally (1994). In order to assess the extent of multicollinearity, the variance inflation factor (VIF) was computed. The VIF factors were significantly below the cut-off value of 10, and therefore, it is suggested that multicollinearity did not cause problems.

Table 4: Correlation Analysis Result of the Variables

Variables	FP	TO
Firm Performance	1	
Technology orientation	.592**	1
N		266

** Correlation is significant at the 0.01 level (2-tailed).

Table 4. above shows the intercorrelations of all the variables in this study at a significance level of 5% (0.05) (Sekaran & Bougie, 2010). The correlation analysis results indicated that technology orientation is significantly related to FP at ($r = .592$, $p<.01$). Thus, H1 is supported.

In terms of Hypotheses, the regression results show that the hypotheses was accepted (see Tables 4 and 5). Detailed results of the regression analyses are presented below.
Hypothesis 1 stated that "There is a significant relationship between technology orientation and firm performance." This hypothesis was supported. The Model shows that the degree of exploiting technology orientation relationship with firm performance
However, the adjusted R^2 is only 0.348, which indicates that only 34.8% of the variance can be explained with the model

	Firm Performance (Dependent variable)						
Independent variable	Beta	Std. Error	Beta	T	Sig	Tolerance	VIF
(Constant)	1.281	0.196		6.531	.000		
Tech_orientation	0.625	0.052	0.592	11.937	,.000	1	1
R^2	0.351						
Adj. R^2	0.348						
Significance of F	.000						

Table 5. Indicated the result on the relationship between the predicting variable and the criterion variable. Based on the result R^2 (R^2 =.351, $p< .000$), which indicated that TO have significant impact in explaining firm performance.

Discussion and Conclusion

The aim of this study is to investigate the relationship between TO and FP of SMEs in the northern part of Nigeria. The main findings of the study based on the result of Pearson analysis, significant correlations exist among technology orientations and firm performance. This finding supported the previous findings of Lee, et al., (2015) who found a significant positive relationship between technology orientation and firm performance. The essential prerequisites for driving firm performance defends on well-designed, developed, and implemented technology which play the important roles in bringing new ideas, improvement, reduction in cost of production and increase in firm performance.

The study has some limitations that should be acknowledged. The issue has been studied SMEs in Northern part of Nigeria. Thus, the results may not be fully generalizable to other parts of Nigeria and the world in general. The study was limited on cross sectional data to investigate the impact of technology orientation on firm performance. There are many variables that influence SMEs performance that are not included and tested in this study. Therefore, future studies should may include these variables to expand the framework.

References

Abiodun, B. Y., (2012). The Impact of Corporate Social Responsibility on Firms Profitability in Nigeria, *European Journal of Economics, Finance and Administrative Sciences*, 45, 39-50.

Akgün, A. E., Keskin, H., & Byrne, J. (2012). Organizational emotional memory. *Management Decision*, *50*(1), 95-114. *Review*, *2*(1).

Akingunola, R. O. (2011). Small and medium scale enterprises and economic growth in Nigeria: An assessment of financing options. *Pakistan Journal of Business and Economic*

Al-Ansari, Y., Altalib, M., & Sardoh, M. (2013). Technology orientation, innovation and business performance: A study of Dubai SMEs. *The International Technology Management Review*, *3*(1), 1-11.

Aliyu, S. M., & Bello, G. B. (2013). An Assessment of the Contribution of Commercial Banks to the Growth of Small and Medium Scale Enterprises in Nigeria. *International Journal of Research in Social Sciences*, *2*(4), 47-55.

Amit, R., & Schoemaker, P. J. (1993). Strategic assets and organizational rent. *Strategic management journal*, *14*(1), 33-46.

Atuahene-Gima, K., & Li, H. (2002). When does trust matter? Antecedents and contingent effects of supervisee trust on performance in selling new products in China and the United States. *Journal of Marketing*, *66*(3), 61-81.

Babajide, A. (2011). Impact analysis of microfinance in Nigeria. *International Journal of Economics and Finance*, *3*(4).

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, *17*(1), 99-120.

Bello, M. (2014, November 25). SMEs Contribute Only 1% to Nigeria GDP. *Nigerian pulse of the naion*. Retrieve from http://www.nigeriancurrent.com/ck84-business/smes-contribute-only-1-to-nigeria-gdp-bello-2

Covin, J. G., Green, K. M., & Slevin, D. P. (2006). Strategic process effects on the entrepreneurial orientation–sales growth rate relationship. *Entrepreneurship theory and practice*, *30*(1), 57-81.

Crook, T. R., Ketchen, D. J., Combs, J. G., & Todd, S. Y. (2008). Strategic resources and performance: a meta-analysis. *Strategic management journal*, *29*(11), 1141-1154.

Dawes, J. (1999). The relationship between subjective and objective company performance measures in market orientation research: further empirical evidence. *Marketing Bulletin-Department of Marketing Massey University*, *10*, 65-75.

Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit. *Strategic management journal*, *5*(3), 265-273.

Dess, G. G., Lumpkin, G. T., & Covin, J. G. (1997). Entrepreneurial strategy making and firm performance: Tests of contingency and configurational models. *Strategic management journal*, 677-695.

Eniola, A. A., & Ektebang, H. (2014). SME firms performance in Nigeria: Competitive advantage and its impact. *International Journal of Research Studies in Management*, *3*(2), 75-86.

Gao, G. Y., Zhou, K. Z., & Yim, C. K. B. (2007). On what should firms focus in transitional economies? A study of the contingent value of strategic orientations in China. *International Journal of Research in Marketing*, *24*(1), 3-15.ent. *Journal of marketing*, *64*(1), 67-83.

Gatignon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *Journal of marketing research*, 77-90.

Gatignon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *Journal of marketing research*, 77-90.

Gbandi, E. C., & Amissah, G. (2014). Financing options for small and medium enterprises (SMEs) in Nigeria. *European Scientific Journal, ESJ*, *10*(1).

Gupta, V. K., & Batra, S. (2016). Entrepreneurial orientation and firm performance in Indian SMEs: Universal and contingency perspectives. *International Small Business Journal*, *34*(5), 660-682.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). SEM: confirmatory factor analysis. *Multivariate data analysis. Pearson Prentice Hall, Upper Saddle River*, 770-842.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, *19*(2), 139-152.

Hakala, H., & Kohtamäki, M. (2011). Configurations of entrepreneurial-customer-and technology orientation: Differences in learning and performance of software companies. *International Journal of Entrepreneurial Behavior & Research*, *17*(1), 64-81.

Hilmi, M. F., Ramayah, T., Mustapha, Y., & Pawanchik, S. (2010). Product and process innovativeness: evidence from Malaysian SMEs. *European Journal of Social Sciences*, *16*(4), 556-564.

Hortinha, P., Lages, C., & Filipe Lages, L. (2011). The trade-off between customer and technology orientations: impact on innovation capabilities and export performance. *Journal of International Marketing*, *19*(3), 36-58.

Hsu, T. T., Tsai, K.-H., Hsieh, M.-H., & Wang, W.-Y. (2014). Strategic orientation of the firm and new product performance: The roles of technological capability. *Canadian Journal of Administrative Sciences*, *31*, 44–58.

Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *The Journal of marketing*, 42-54.

Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *The Journal of marketing*, 42-54.

Ibrahim, N. M. N., & Mahmood, R. (2016). Mediating Role of Competitive Advantage on the Relationship between Entrepreneurial Orientation and the Performance of Small and Medium Enterprises. *International Business Management*, *10*(12), 2444-2452.

Ibru, G. (2013, April 25). Poor power supply affecting productivity. *The Nation Newspaper*, pp. 1.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *The Journal of marketing*, 53-70.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, *30*(3), 607-610.

Lee, D. H., Dedahanov, A. T., & Rhee, J. (2015). Moderating role of external networks and mediating effect of innovation performance on the relationship between technology orientation and firm performance. *Asian Journal of Technology Innovation*, *23*(3), 321-334.

Li, J. J. (2005). The formation of managerial networks of foreign firms in China: The effects of strategic orientations. *Asia Pacific Journal of Management*, *22*(4), 423–443.

Lucky, E. O. I., & Minai, M. S. (2011). Re-investigating the effect of individual determinant, external factor and firm characteristics on small firm performance during economic downturn. *African Journal of Business Management*, *5*(26), 10846.

Lusthaus, C., Adrien, M. H., Anderson, G., Carden, F., & Montalván, G. P. (2002). Organizational Assessment: A framework for Improving Performance. Ottawa: International Development Research Centre.

Mahmood, R., & Hanafi, N. (2013). Entrepreneurial orientation and business performance of women-owned small and medium enterprises in malaysia: competitive advantage as a mediator. *International Journal of Business and Social Science*, *4*(1).

Mahmood, R., & Hanafi, N. (2013). Entrepreneurial orientation and business performance of women-owned small and medium enterprises in malaysia: competitive advantage as a mediator. *International Journal of Business and Social Science*, *4*(1).

March, J. G., & Sutton, R. I. (1997). Crossroads—organizational performance as a dependent variable. *Organization science*, *8*(6), 698-706.

Minai, M. S., & Lucky, E. O. I. (2011). The moderating effect of location on small firm performance: Empirical evidence. *International Journal of Business and Management*, *6*(10), 178.

Minai, M. S., & Lucky, E. O. I. (2011). The moderating effect of location on small firm performance: Empirical evidence. *International Journal of Business and Management*, *6*(10), 178-192.

Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, *30*(8), 909-920.

Mu, J., & Di Benedetto, C. A. (2011). Strategic orientations and new product commercialization: mediator, moderator, and interplay. *R&D Management*, *41*(4), 337-359.

Mu, J., & Di Benedetto, C. A. (2011). Strategic orientations and new product commercialization: mediator, moderator, and interplay. *R&D Management*, *41*(4), 337-359.

Mwobobia, F. M. (2012). The challenges facing small-scale women entrepreneurs: A case of Kenya. *International Journal of Business Administration*, *3*(2), 112.

Naala, M. I. N., Nordin, N., & Omar, W. A. W. (2017). Innovation Capability and Firm Performance Relationship: a Study of Pls-Structural Equation Modeling (Pls-Sem). *International Journal of Organization & Business Excellence*, *2*(1), 39-50

Naala, M. N. I. (2016). *Moderating and mediating roles of human capital and competitive advantage on entrepreneurial orientation, social network and performance of SMEs in Nigeria* (Doctoral dissertation, Universiti Utara Malaysia).

Noble, C. H., Sinha, R. K., & Kumar, A. (2002). Market orientation and alternative strategic orientations: a longitudinal assessment of performance implications. *Journal of marketing*, *66*(4), 25-39.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychological theory. *New York, NY: MacGraw-Hill*.

Oyelaran-Oyeyinka, B., & Adebowale, B. A. (2017). University-industry collaboration as a determinant of innovation in Nigeria. *Institutions and Economies*, 21-46.

Richard, D. Yip & Johnson (2008). Measuring Organizational Performance as a Dependent Variable: Towards Methodological Best Practice. *Strategic Management Journal DOI*, *10*.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of management*, *35*(3), 718-804.

Rogers, E. W., & Wright, P. M. (1998). Measuring organizational performance in strategic human resource management: Problems, prospects and performance information markets. *Human resource management review*, *8*(3), 311-331.

Rusetski, A. N., & Ruuge, E. K. (1990). Magnetic fluid as a possible drug carrier for thrombosis treatment. *Journal of magnetism and magnetic materials*, *85*(1-3), 299-302.

Saleh, A. S., & Ndubisi, N. O. (2006). An evaluation of SME development in Malaysia. *International review of business research papers*, *2*(1), 1-14.

Samad, N. A. (2007). Positioning Malaysian SMEs in the global. Proceedings of Persidangan Kebangsaan IKS 2007, Kota Kinabalu: University Utara Malaysia

Santos, J. B., & Brito, L. A. L. (2012). Toward a subjective measurement model for firm performance. *BAR-Brazilian Administration Review*, *9*(SPE), 95-117.

Sekaran, Uma, and R. Bougie. "Research Methods for Business: A Skill." *Building Approach. UK: John Wiley* (2010).

Slater, S. F., Hult, G. T. M., & Olson, E. M. (2007). On the importance of matching strategic behavior and target market selection to business strategy in high-tech markets. *Journal of the Academy of Marketing Science*, *35*(1), 5-17.

SMEDAN (2012*). Survey Report on Micro, Small and Medium Enterprises (MSMEs) in Nigeria.* Abuja: Small and Medium Enterprises Development Agency of Nigeria.

SMEDAN. (2013). *Survey report on Micro, Small, and Medium Enterprises (MSMEs) in Nigeria*. Abuja: Small and Medium Enterprises Development Agency of Nigeria.

Spanjol, J., Qualls, W. J., & Rosa, J. A. (2011). How many and what kind? The role of strategic orientation in new product ideation. *Journal of Product Innovation Management*, *28*(2), 236-250.

Suliyanto, S., & Rahab, R. (2012). The role of market orientation and learning orientation in improving innovativeness and performance of small and medium enterprises. *Asian Social Science*, *8*(1), 134

Tse, A. C., Sin, L. Y., Yau, O. H., Lee, J. S., & Chow, R. (2004). A firm's role in the marketplace and the relative importance of market orientation and relationship marketing orientation. *European Journal of Marketing*, *38*(9/10), 1158-1172.

Tuominen, M., Rajala, A., & Möller, K. (2004). Market-driving versus market-driven: Divergent roles of market orientation in business relationships. *Industrial marketing management*, *33*(3), 207-217.

Uma, S., & Roger, B. (2003). Research methods for business: A skill building approach. *book*.

Voss, G. B., & Voss, Z. G. (2000). Strategic orientation and firm performance in an artistic environm

World Economic Forum. (2017). The Global Competitiveness Report. World Economic Forum.

Yauri, N. M., Koko, M. A., & Bankanu, M. B. (2008). Micro-finance, Small Scale Enterprises and Poverty Reduction: Evidence from Sokoto Metropolis. *J. Manage. Stud., UDU. Sokoto*.

Zakaria, Z. A., Gopalan, H. K., Zainal, H., Pojan, N. H. M., Morsid, N. A., Aris, A., & Sulaiman, M. R. (2006). Antinociceptive, anti-inflammatory and antipyretic effects of Solanum nigrum chloroform extract in animal models. *Yakugaku Zasshi*, *126*(11), 1171-1178.

Zhou, K. Z., Yim, C. K., & Tse, D. K. (2005). The effects of strategic orientations on technology-and market-based breakthrough innovations. *Journal of marketing*, *69*(2), 42-60.