

The Influence of Innovation on Market Orientation, Training, Social Network, Access to Finance and Business Performance of Women in the North-Western Nigeria: A Pilot Study

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Abstract

The purpose of this pilot study is to examine the few sample data on the influence of innovation on Market orientation, training, social network, access to finance and business performance of women MSMEs in Nigeria. Thus, content, face validity, reliability and structural modeling were also examined. Data from 30 women entrepreneur were collected and analyzed using Partial Least Squares (PLS) path modeling. The finding reveals the instruments to be valid and reliable. Path coefficient results that market orientation, training, social network, access to finance and innovation are positively related to business performance of women. The results also demonstrated a significant relationship between market orientations, training, social network, access to finance, innovation and business performance of women.

Keywords: *Market Orientation, Training, Social Network, Access to Finance, Innovation, Micro Small and Medium Enterprises.*

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1. Introduction

Even though women entrepreneurs play an essential role in the economic development of their countries and families, nevertheless, it has been revealed that they have lower performance in their business in contrasted to their male counterparts (Ogujiuba, Fadila & Stiegler 2013; Abdulkadir, Umar, Garba & Ibrahim, 2012), as such lack of education or training, and social network affects their entrepreneurial performance (SMEDAN, 2013). According to Koko, Maishanu and Hassan, (2017), most developing nation women entrepreneurs are lack easy access to finance for entrepreneurial activity while the rate of female involvement in the informal sector of the economy is higher than the male in Nigeria (Akinyi, 2009; Terungwa, 2012) This problem is due to inability to save because of poverty, low household income, and unemployment (Ogujiuba, Fadila & Stiegler, 2013). In other words, women activities specifically in business allow them economically and enable women to contribute to the general development of the country. Yet, women in the most parts of the developing world (including Nigeria) continue to face various forms of discriminations, which limit their opportunities to develop to their full potentials and they also face some difficulties in pursuit of enterprise success (Koko, et.al. 2017; Abubakar, 2013). More so, women entrepreneurs are indeed innovative by nature in an attempt to create economic value and satisfy family needs, they create businesses and exhibit entrepreneurial acumen. Indeed their contributions to the sustenance of families and economy of their respective communities are enormous.

Over the time, professionals have acknowledged the fact that market orientation research is an important effect on the development of marketing knowledge (Kanagal, 2017; Kohli & Jaworski, 1990). Studies on market orientation about business have advocated that organisations that are continually studying their competitors' actions and customers' needs will have a better understanding in combating their rivals as well as meeting the needs of their consumers (Ansah & Chinomona, 2017; Wang, Chen & Chen, 2017). The social network is vital to entrepreneurs in starting up, and growing business as such women entrepreneur is in developing countries are lacking social connections of sourcing information on accessing the micro-finance facilities (Zali, Schott, Kordnaeji & Najafian, 2017; Ogunnaike & Kehinde, 2013). On the other hand, social network is becoming a popular subject in entrepreneurship literature (Watson, 2012). Studies in the field of entrepreneurship have found Networking as an important tool in which entrepreneurs use on it variety of contacts to help them achieve their business and objectives and which gives them greater access to resources, new clients, information and people with similar business interests to contribution their cutter in the development and growth of small business (Shaw & Conway, 2000; Ascigil & Magner, 2009).

Innovation suggests that, in the era of "innovation-led technology", establishments are compelled to compete with each other for their survival. According to Drejer (2004) and Amara, Este, Landry and Doloreux (2016), innovations have been regarded as competitive powers by businesses for more than six decades; as far back in 1930s. The development in information and communication technology is regarded as an empowering factor, which assists organisations as well as nations to enhance their productivity and efficiency (Che-Ha & Mohd-Said, 2012). Innovations improve the economic growth of a nation, and

consequently are the focal points for MSME in the Malaysian Third Industrial Plan, 2006. The ability to make innovations and unceasingly capable to improve on the products and services are essential in strengthening the MSME's competitive abilities (Varis & Littunen, 2010). This study focuses on the significant activities that result to improving innovation.

The current study used innovation as a mediator to probe the effects of market orientation, training, social network and access to finance on business performance of women. More so, it is important to note that without analyzing the mediating variable, it is difficult to evaluate the link between market orientations, training, social network, access to finance and business performance on why they affect each other under what condition of indirect effects (Baron & Kenny, 1986; Hayes, 2009). Therefore, based on literature review, the present study intends to investigate if innovation mediates the effects of market orientation, training, social network and access to finance on business performance of women in Nigeria.

Framework of the study

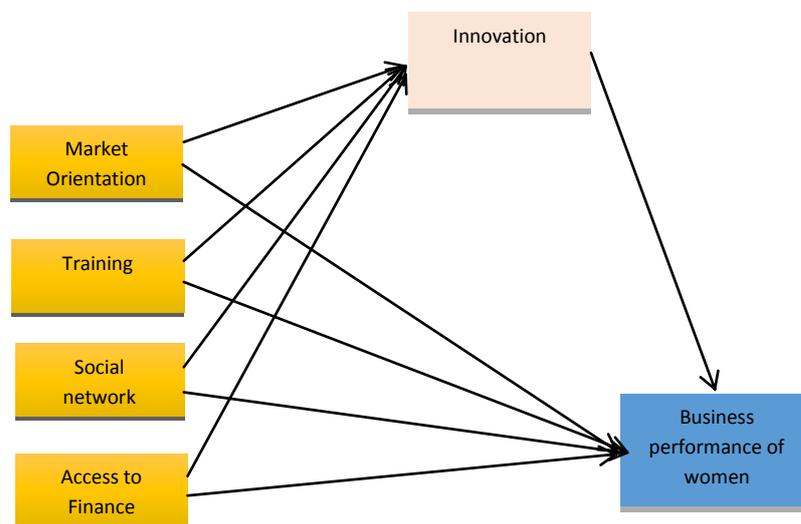


Figure 1. Pilot test Framework

Several studies have revealed that Market Orientation can influence business Performance has significant positive effect which is similar to previous studies (Ansah & Chinomona, 2017; Jogaratnam, 2017; Lee, Kim, Seo & Hight, 2015). Similarly, some studies have revealed training to be a variable that influence women MSMEs business performance which has a positive significance effect, and this concurs with some past studies (Sila, 2014; Saks & Burke-Smalley, 2014; Georgiadis & Pitelis, 2016).

Empirical literatures clearly indicate that social network and business Performance has a significant positive effect, and this concurs with some past studies (Ogunnaike & Kehinde, 2013; Surin & Wahab, 2013; Zaglia, 2015). Several studies have used access to finance in examine business performance with a view of significant positive effect and this is consistent

with some of those found in the literature (Sajuyigbe, 2017; Harelimana, 2017; Fowowe, 2017). In addition, since MSMEs are not operating in a vacuum, an encouraging business performance with innovation is a good predictor of performance and findings also show a significant mediating role of Innovation on the following literature (Davoudi et.al, 2018; Al-Sa'di, Abdallah, & Dahiyat, 2017; Lu, Zhu & Bao, 2015).

This study conducted a pilot test for two important reasons, firstly, to test the reliability and validity of the survey variable. Secondly with the view to get a glimpse of the real conditions of the effect assessment, it allows the researcher to potentially anticipate the problems and to make adjustments when embarking on the actual thesis writing. The primary concerns of the pilot test are the reliability and validity of the variables. According to Sekaran and Bougie (2016), reliability measures the degree to which variables are consistent, free from error and stable across various items of the scale. While, validity measures the extent to which a variable is measuring what it is supposed to measure, for this purpose, this paper presents the result of the pilot test on women MSMEs performance in North-Western Nigeria.

Gay, Mills and Airasian, (2006) point out that a pilot study is assumed to be “an outfit preparation” thought-out the study in which a little trial of scale study is carried out earlier before the main study. Thus, pilot study is carried out in order to achieve some basic objectives, which include: the test of reliability and validity of the variables of the research, and to get a nearby result to the real situation of the main research. Therefore, this would predict the best possible solutions to the problem under study. Among the main problem of pilot test is the variable reliability and validity. According to (Sekaran & Bougie, 2016), reliability is a measure that indicates the extent to which a variable is free from error and thus, stable and consistent across time and various items in the scale. While Validity of measuring variable is the extent to which the variable is measuring what it is supposed to measure and not something else? To end the present study the result of reliability of the survey variables of Cronbach Alpha pilot test with regard to the effects of market orientation, training, social network, access to finance and innovation on business performance of women in the context of the North-Western Nigerian micro Small and medium enterprises.

2. Methodology

This study adapted a survey design in order to find reliability and validity of the instrument. Women owner/managers of MSMEs in the North-Western Nigeria were the target assessment of the study. According to Nunnally's (1978), pilot test sample tests are usually small, even though that it could be increased to 100 responses. Therefore, a number of 30 questionnaires were distributed personally and were returned correctly filled. Self-administered questionnaire was used because it helps the study to create an understanding of the respondents while introducing the survey, that is a way of making clarifications to the respondent instantly, and to make the response rate high and also the act of collecting the questionnaires immediate. (Sekaran & Bougie, 2016). Close-ended questionnaire was used as method of data collection. However, closed-ended questionnaire are among the reliable and widely means of data collection instrument used because it enables the respondents to make fast and easy choice, and it is simpler and easier for the researcher to code the data within a short period of time for further analysis (Sekaran & Bougie, 2016). The questionnaire used for this study is well prepared with a closed-ended multiple choice-questions. However, most of the

items in the questionnaire are measured towards the respondents' perceptions. Therefore, 5 Likert scale was used with a viewed of being the most suitable and reliable means of measurement (Miller, 1991).

Furthermore, the questionnaire items were measured on five-point Likert scale of all the 30 questionnaires having correctly filled and were used for the analysis. In this study, the content or face validity was conducted in order to ensure the validity of the items on the face value of its measurement of the intended construct. Also, the study conducted reliability test, to different the statistical methods of testing the reliability of the items. To this end, this study use PLS SEM to test the reliability and validity of the measures.

The main variable of this study are: market orientation, access to finance, social network, training, and innovation on business performances of women. All the variables are considered as uni-dimensional part A: consists of seven questions measuring the business performance of women. Part B: consists of ten questions targeted at measuring market orientation on business performance of women. Part C: comprised seven questions to measure the extent of training on business performance as seen by the respondents. Part D: have seven items that measure the social network on business performances of women. Part E: contains eight items to measure access to finance on business performances of women. Part F: contains six items that measure innovation. Finally, Part G: measure questions on demographic facts of the respondents. Only items mentioned in the research questions are included in the questionnaire. Additionally, responsive questionnaire are not part of this study in order to obtain high response rate (Sekaran & Bougie, 2016).

3. Analysis and Results

The reliability test was done during the pilot-test in order to prove the accuracy, stability, or consistency level of the data collected revealing a particular group of people. The test was conducted in order to find the Cronbach Alpha values of all items listed in the questionnaire. If the Cronbach Alpha value is more than 0.70, the item/construct has accepted as reliable (Nunnally, 1978). On the other hand, Hair, Hult, Ringle & Sarstedt, (2017), consider 0.60 to below 0.70 as reasonable and adequate for use in the research. Table 1 shows a summary of reliability test results based on the 30 respondents from the pilot-test. The alpha scores which range from 0.717 to 0.913 for the constructs are all within the acceptable limits (Hair et al., 2017).

Table 1 Reliability Test Results of the Survey Instruments

Survey Instruments	Constructs	Number of items	Cronbach Alpha Coefficients
BP	Business Performance	7	0.894
MO	Market Orientation	10	0.807
TR	Training	7	0.717

SN	Social Network	7	0.801
AF	Access to Finance	8	0.913
I	Innovation	6	0.877

4. Discussion

This pilot study investigated the influence of market orientation, training, social network, access to finance and innovation on business performance of women among the MSMEs in the North-Western Nigeria. The results of the study provide empirical support for the influence of market orientation, training, social network, access to finance innovation and business performance of women. Specifically, the results showed market orientation, training, innovation are positively related to business performance of women. Building on Resource Based-View theory, we argued that market orientation, training, innovation of a manager/owner of the business can increase the level of their MSME performance. This prediction is consistent with the previous studies conducted (e.g. Ansah & Chinomona, 2017; Jogaratnam, 2017; Chinomona, 2013; Sila, 2014; Saks & Burke-Smalley, 2014).

This finding seems to suggest that women MSME owners/managers that have social network system are more likely to improve their performance than those without social networking the results further suggested that social network is significantly related to business performance. This result is also consistent with (Ogunnaike & Kehinde, 2013; Surin & Wahab, 2013), who have argued that the social network increase the performance of business while the Social Network Theory (SNT) on the other hand explains how social structure of relationships among individual, person, group, or organization influence with people behaviors (Barnes, 1954).

The finding links well with the view of past studies that argue MSMEs' lack of access to finance in relation to SMEs' peculiar characteristics of business operating strategies (Kyophilavong, 2011; Mazanai & Fatoki, 2012). Consistent with Turyahebwa, Sunday and Ssekajugo (2013), this result shows that MSMEs that adopt business vision of generating more profit through retained earnings. Drawing upon the notion that support the understanding of several studies that access to funding depend on the SMEs' strategic activities or vision (Ghimire & Abo, 2013; Kyophilavong, 2011; Pandula, 2011). In line with the pecking-order theory, internal financing is the most preferred source of financing for MSMEs. However, the ability of MSMEs to improve their internal finance depends on how they organize their bundle of resources (Chen & Chen, 2011; Myers & Majluf, 1984).

5. Conclusion

As it was clarified in the introduction, the one of the objectives of pilot studies is pre-tests of the reliability and Content validity of the items in the study in preparation for the major research. Based on the results of the current test the convergent validity and discriminant validity, composite reliability for the respective constructs under investigation all within the

acceptable limit above seen in Table 1 shows a summary of reliability test results based on the 30 respondents from the pilot-test. The alpha scores which range from 0.717 to 0.913 for the constructs are all within the acceptable limits (Hair et al., 2017) while figure 1 is the framework of the study. Structural Equation Model testing was used to path coefficient results of Market orientation, training, social network, access to finance and innovation are all positively related to business performance of women.

References

- Abdulkadir, F.I., Umar, S., Garba, B.I. & Ibrahim S.H. (2012). The impact of microfinance banks on women entrepreneurial development in Kaduna metropolis. *Microeconomics and Macroeconomics*, 1(3), 28-38.
- Abubakar, k. m. (2013). Capital Access Strategies and Enterprise Growth: A Study of Selected Indigenous Women Entrepreneurs in Sokoto Metropolis, Nigeria. *Sokoto Journal of Management Studies*, 4(1), 25-38
- Akinyi, J. (2009). The role of microfinance in empowering women in Africa. Retrieved January 10, 2010, from *The African Executive Magazine* <http://www.google.com>.
- Akinyi, R. (2009). Formal and Informal Institutions' lending policies and access to credits by small scale enterprises in Kenya: An Empirical assessment Nairobi. Kenya: *African Economic Research Consortium*.
- Al-Sa'di, A. F., Abdallah, A. B., & Dahiyat, S. E. (2017). The mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. *Business Process Management Journal*, 23(2), 349-376.
- Amara, N., D'Este, P., Landry, R., & Doloreux, D. (2016). Impacts of obstacles on innovation patterns in KIBS firms. *Journal of Business Research*, 69(10), 4065-4073.
- Ansah, M. O., & Chinomona, R. (2017). Analysis of Market Orientation on Business Performance in the Multinational Service Industries. *Journal of Social Sciences*
- Ascigil, S. F., & Magner, N. R. (2009). Business incubators: leveraging skill utilization through social capital. *Journal of Small Business Strategy*, 20(1), 19-34.
- Barnes, J. A. (1954). *Class and committees in a Norwegian island parish*. New York: Plenum.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.

- Che-Ha, N., & Mohd-Said, S. (2012). Innovation practices by Malaysian SMEs. *Malaysian SMEs in the new economy*, 39-58.
- Chen, Y., Tang, G., Jin, J., Li, J., & Paillé, P. (2015). Linking market orientation and environmental performance: The influence of environmental strategy, employee's environmental involvement, and environmental product quality. *Journal of Business Ethics*, 127(2), 479-500.
- Davoudi, S. M. M., Fartash, K., Venera, G. Z., Asiya, M. B., Rashad, A. K., Anna, V. B., & Zhanna, M. S. (2018). Testing the Mediating Role of Open Innovation on the Relationship between Intellectual Property Rights and Organizational Performance: A Case of Science and Technology Park. *EURASIA Journal of Mathematics Science and Technology Education*, 14(4), 1359-1369.
- Drejer, I. (2004). Identifying innovation in surveys of services: a Schumpeterian perspective. *Research policy*, 33(3), 551-562.
- Fowowe, B. (2017). Access to finance and firm performance: Evidence from African countries. *Review of Development Finance*, 7(1), 6-17.
- Gay, L. R., Mills, G. E., & Airasian, P. (2006). Education research: Competencies for analysis and applications Columbus, OH: Pearson Education. *Inc. Google Scholar*.
- Georgiadis, A., & Pitelis, C. N. (2016). The Impact of Employees' and Managers' Training on the Performance of Small-and Medium-Sized Enterprises: Evidence from a Randomized Natural Experiment in the UK Service Sector. *British Journal of Industrial Relations*, 54(2), 409-421.
- Ghimire, B., & Abo, R. (2013). An empirical investigation of Ivorian SMEs access to bank finance: Constraining factors at demand-level. *Journal of finance and investment analysis*, 2(4), 29-55.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling*. 2nd Ed. Thousand Oaks: Sage.
- Harelimana, J. B. (2017). Role of Access to Finance for the Performance of Small and Medium Enterprises in Muhoza Sector, Rwanda. *Account and Financial Management Journal*, 2(01), 559-567.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication monographs*, 76(4), 408-420.

- Jogaratnam, G. (2017). How organizational culture influences market orientation and business performance in the restaurant industry. *Journal of Hospitality and Tourism Management, 31*, 211-219.
- Kanagal, N. B. (2017). Development of Market Orientation for Marketing Strategy Formulation. *International Journal of Marketing Studies, 9*(4), 54.
- Kohli, A. K., Jaworski, B. J., & Kumar, A. (1993). MARKOR: a measure of market orientation. *Journal of Marketing research, 467-477*.
- Koko, M. A, Maishanu, M. M, & Hassan, A. (2017). Women entrepreneurs accessibility to growth capital and socio-economic development in Sokoto State, Nigerian. *IOSR Journal of business & Management, 19*(5) 69-75
- Kyophilavong, P. (2011). SMEs access to finance: Evidence from Laos. *Small and Medium Enterprises (SMEs) Access to Finance in Selected East Asian Economies, 117-150*.
- 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.
- Lee, N., Sameen, H., & Cowling, M. (2015). Access to finance for innovative SMEs since the financial crisis. *Research policy, 44*(2), 370-380.
- Lee, Y. K., Kim, S. H., Seo, M. K., & Hight, S. K. (2015). Market orientation and business performance: Evidence from franchising industry. *International Journal of Hospitality Management, 44*, 28-37.
- Lu, K., Zhu, J., & Bao, H. (2015). High-performance human resource management and firm performance: The mediating role of innovation in China. *Industrial Management & Data Systems, 115*(2), 353-382.
- Mazanai, M., & Fatoki, O. (2012). Access to finance in the SME sector: A South African perspective. *Asian Journal of Business Management, 4*(1), 58-67.
- Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the penn state worry questionnaire. *Behaviour research and therapy, 28*(6), 487-495.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics, 13*(2), 187-221

- Nunnally, J. C. (1978). *Psychometric Theory* (2nd Edit.) McGraw-Hill. Hillsdale, NJ.
- Ogujiuba K, Fadila&Stiegler (2013). "Challenges of Microfinance Access in Nigeria: Implication for Entrepreneurship Development". *Mediterranean Journal of Social Science*. 4 (6)
- Ogunnaike, O. O., & Kehinde, O. J. (2013). Social networking and business performance: The case of selected entrepreneurs in Ota, Nigeria. *Journal of Business Administration and Management Sciences Research*, 2(5), 116-122.
- Pandula, G. (2011, February). An empirical investigation of small and medium enterprises' access to bank finance: The case of an emerging economy. In *Proceedings of ASBBS Annual Conference* (Vol. 18, No. 1, p. 18).
- Sajuyigbe, A. S. (2017). influence of financial inclusion and social inclusion on the performance of women-owned businesses in Lagos State, Nigeria. *Scholedge International Journal of Management & Development*, 4(3), 18-27.
- Saks, A. M., & Burke-Smalley, L. A. (2014). Is transfer of training related to firm performance?. *International Journal of Training and Development*, 18(2), 104-115.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shaw, E., & Conway, S. (2000). Networking and the small firm. *Enterprise and small business*, 367-383.
- Sila, A. K. (2014). Relationship between training and performance: a case study of Kenyan women finance trust eastern Nyanza region, Kenya. *Eur. J. Bus. Soc. Sci*, 3(1), 95-117.
- SMEDAN, (2013). *Survey report on micro, small and medium enterprises in Nigeria*. Nigerian Bureau of statistics and small and medium enterprises development agency of Nigeria.
- Surin, E. F., & Ab Wahab, I. (2013). The effect of social network on business performance in established manufacturing small and medium enterprises (SMEs) in Malaysia. *International Proceedings of Economics Development and Research*, 67, 55.
- Terungwa, A. (2012). Risk management and insurance of small and medium scale enterprises (SMEs) in Nigeria. *International Journal of Finance and Accounting*, 1(1), 8-17.

- Turyahebwa, A., Sunday, A., & Ssekajugo, D. (2013). Financial management practices and business performance of small and medium enterprises in western Uganda. *African journal of business management*, 7(38), 3875-3885.
- Varis, M., & Littunen, H. (2010). Types of innovation, sources of information and performance in entrepreneurial SMEs. *European Journal of Innovation Management*, 13(2), 128-154.
- Wang, C. H., Chen, K. Y., & Chen, S. C. (2012). Total quality management, market orientation and hotel performance: The moderating effects of external environmental factors. *International Journal of Hospitality Management*, 31(1), 119-129.
- Watson, J. B. (2017). *Behaviorism*. Routledge.
- Zali, M. R., Schott, T., kordnaeij, A., & Najafian, M. (2012). Role of social network in business performance: moderating effect of role model and entrepreneurial motivation (some evidences of gem data in iran, croatia and denmark).