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ASSESSMENT OF TECHNICAL COMPETENCIES OF SMALL SCALE ENTERPRISE MANAGERS IN ANAMBRA STATE

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Abstract
The main purpose of this study was to assess the technical capability competencies possessed by small scale enterprise managers in Anambra State. The study was guided by one research question while one null hypothesis was tested at 0.5 level of significance. It was a descriptive study. The population for the study consisted of all small scale enterprise managers in Anambra State. While the sample consisted of 754 respondents selected through proportionate stratified random sampling technique. A structured was used for data collection. The instrument was duly validated and the reliability was also established. Copies of the questionnaire were administered to the respondents by the researchers with the help of research assistants who were properly briefed on the administration and collection of the questionnaire. Data collected for the research question were analysed using descriptive statistics of the mean and standard deviation. The t-test was used to test the hypothesis. Findings of the study indicated that that the technical capability competencies of the managers are at low level. Accordingly, it was recommended among others that managers of small scale enterprises with no formal qualification should enrol for short term courses to become acquainted with technical competencies.

Keywords: Assessment; Technical Capability; Competency; Small Scale Enterprise Managers.

Introduction
All over the world, small scale enterprises (SSEs) are known to be the engine of economic growth, industrialization and contribution to employment generation, wealth creation, poverty alleviation and food security. In

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Nigeria, statistics show that small scale enterprises represent 96 percent of the businesses and contribute 75 percent of the national employment. In fact, the 2010 SMEDAN National Collaborative Survey puts the number of small scale enterprises in Nigeria at 17,284,671 with a total employment of 32,414,884 and contributing 46.54 percent to the GDP in nominal terms. Agwu and Emeti (2014) stated that majority of the small scale enterprises do not survive for most of them die within the first generation (1-5years). It estimated that only 30% of them survive to the second generation (6-10years) and 12% to the third generation (above 10years).Only about 3% survives to the fourth generation and beyond. This state of the SSEs has over the years caught the attention of researchers, scholars and business owners in a bid to identifying the challenges and proffer solutions. This was also witnessed in Anambra State which is one of the five South Eastern States in Nigeria. There is hardly any street in Anambra State without a small scale business outlet. The people depend on one business or the other for survival. Thus, Nnabuife, Okoli, Moneme and Ewah-Bassey (2018) stressed that the roles of small scale businesses cannot be overemphasized in providing employment and contributing immensely to the economic growth of Nigeria. The authors also stated that Anambra State, known for her entrepreneurial exploits enjoys its fair share of small scale businesses as all over the State, there are a great number of them. However, majority of these businesses do not survive up to the next generation and no more than a few get to the third generation, thus making them unable to meaningfully contribute economically to the State and the nation at large.

Small scale enterprises play a pivotal role through several pathways that go beyond job creation. They are growth –supporting sectors that not only contribute significantly to improve living standards, but also bring substantial local capital formation and are responsible for driving innovation and competition. The contributions of SSEs in Anambra State like that of the entire country account for more than 84.02% of the total labour force (SMEDAN, 2013). But, the problem of failure of small scale enterprises has posed a major challenge in Nigeria and Anambra State in particular. Researchers like Nnabuife, Okoli, Moneme and Ewah-Bassey (2018) pointed out that a large number of small scale enterprises have failed in Anambra State. It is this failure of small

scale enterprises that spurred the researcher into this study.

Enterprise entails creativity, innovativeness, inventiveness, initiative and originality. In the rural areas, people engage in some petty trading (buying and selling), either by batter or in exchange for money. Also, in the cities, various forms of business are conducted. Some of them are solely owned by individuals and some by group of individuals who have common interests. The very bright individuals discover and explore new areas where good bargaining opportunities are possible for enhanced gain and profit not minding the risks involved. In whatever scale the business or trading is conducted, they are classified as enterprise. Zachery (2011) saw an enterprise as eagerness to do something new and clever, despite any risk. The author also stated that an enterprise is a business, an organization or a difficult and important plan, especially one that will earn money. It continued that the early years of business were the years of private enterprises (businesses being run privately, rather than by government), when lots of small businesses were started. Someone who shows enterprise is an entrepreneur (Taylors, 2015).

The entrepreneur has responsibility to utilise required resources for creating value, and has an ability to foresee and evaluate business opportunities, to gather the necessary resources for taking their advantage, to create and build value from value resources, and to initiate appropriate action to ensure success. According to Ayozie, Jacob, Umukoro and Ayozie (2013), enterprises can be in three different forms: small scale, medium scale or large scale. The present study is concerned with small-scale enterprises. This is because in agreement with Westhead and Wright (2011), most small scale enterprises account for the majority of businesses in most countries in the world, and they are mostly known for generating jobs, creating wealth, fostering innovation, economic development and enhancing the general standard of living of individuals and society. Bandara and Rathnasiri (2016) posited that the development and stability of small scale enterprise is of paramount importance for any nation and their survival had posed serious problems for both the developed and developing nations.

The legal definition of a small-scale enterprise varies by industry and country. Adoyi, Agu, Adoli and Inalegwu (2015) posited that in the United States, small scale enterprises generally have fewer than 500

employees. In Australia, the small-scale enterprises have fewer than 15 employees on payroll. In Europe, small enterprises are those businesses with 250 employees or less and in Asian countries, they are those with 100 or fewer employees. The authors continued that in Africa, SSEs hire 50 or fewer workers and in Nigeria specifically, small scale enterprises are those with a labour size of 11-100 workers or a total capital of not more than N200million, including working capital but excluding cost of land. The Small Business Enterprise and Employment Act of 2015 saw the small scale business as one which is owned, managed, controlled by one or two persons, is family influenced in decision making, has an undifferentiated organizational structure, has relatively small share of the market and employ less than 50 people. Small-scale enterprises exist in almost every industry. They can range from convenience stores to small manufacturing plants. Additional types of small scale enterprises can include privately owned restaurants, law firms, inns, architectural and engineering firms, dry cleaners and so on (Gustafson, 2016). According to Bouazza (2015), small-scale enterprises are important for modern economy and is widely recognized for contributing to employment growth

The role of small scale enterprise in any economy cannot be overemphasized. Majority of people take it as first employment while waiting for white-cola jobs. Harrison (2013) held that over the last decade, enterprises with less than 10 employees provided more new jobs than bigger companies. Ikemba-Efughi (2017) similarly emphasized that small scale enterprises are very important agents of change, contributing significantly to the economic development of Nigeria in terms of wealth and employment creation, rural development, stimulation of indigenous entrepreneurship, youth empowerment, spread and development of adaptable technology, regional balanced growth channel among others. Thus, they play critical roles in stimulating development and alleviating poverty. Competency is the quality or state of being functionally adequate or having sufficient knowledge, strength and skills.

Competency is another word for an individual's know-how or skill. It is all about "Who knows how?" and "How well do they know?" Leslie and Coward (2018) stated that there are two types of competencies namely: technical competencies (functional competencies)

and non-technical competencies (personal competencies). In this context, non-technical competencies refer to the business competencies often referred to as professional and personal skills which include among others; knowledge competencies, entrepreneurial skills, behavioural competencies and attitudinal competencies. The non-technical competencies of an individual can be seen as the personal skills to deal with emerging problems and opportunities in business at the right time and in the right way. The current researchers held the view that non-technical competencies are behaviours that are not directly related to the control of equipment and technical proficiency but are mainly derived from training rather than innovation. Non-technical competencies therefore, are not linked to any function. They include the characters that people use together with their work. This study, however concentrates on technical competencies.

Technical competencies are competencies that are directly related to control of equipment and technical proficiency and mainly derived from innovation. They refer to the functional competencies which are related to the skills and knowledge that are essential for a person to do a particular job appropriately (British Council, 2016). Technical competencies are particular qualities that a company's Management have decided are desirable for employees to possess. During interviews and assessment processes, these competencies are used as benchmark for evaluating candidates. They are the knowledge and skills required for firms to choose, install, operate, maintain, adapt, improve and develop technologies (Sabanke, Ilori & Adegbite, 2012). These technical competencies are acquired through learning and practice. They are job or task specific and also specific to certain careers and industries. They are knowledge and abilities needed to accomplish mathematical, engineering, scientific or computer-related functions as well as other specific tasks. Depending on one's enterprise, there are specific competencies required for effectiveness. Marsha (2016) singled out six technical competencies of creative thinking, technical capabilities, computer literacy, data management, equipment control and programme knowledge and policies. This study concentrated on assessment of the creative thinking, technical capabilities, computer literacy, equipment control and programme knowledge needed for the enhancement of small scale enterprises. **For effective use of creative thinking competencies, there**

is need for technical capabilities (Duff, Kurczek, Rubin, Cohen & Tranel, 2013).

Technical capabilities entail the ability to identify how one can use systems and technology to improve ways of working. It may involve d**eveloping new solutions with existing technology and acting as technical experts in a specific area or programme. In striving for survival and successful performance, small scale enterprises must have employees that have the competency to use technology to improve business ways and pace. For instance, the present day IT world requires the use of computers to diagnose business challenges, implement new strategies in solving business problems and make use of self-help resources to diagnose and correct business problems.**

Since studies have identified the technical competencies required for successful performance of such SSEs, the researcher feels that the cause of the failure might be on inadequate possession of technical competencies. In view of the fact that the level of possession of technical competencies for enhanced performance in Anambra State is empirically unknown, thus, the need for the present study which intends to move a step further from just identifying the technical competencies to assessing the level of possession of these competencies by small scale entrepreneurs in Anambra State to determining the causes of the failure of SSEs within few years of operation. The reason is obvious. Majority of the SSEs do not survive as most of them wind-up within the first generation (Agwu & Emeti, 2014). These Authors maintain that only 30% of them survive to the second generation, 12% to the third generation and only 3% to the fourth generation and beyond, which analytically gives a great concern to the society. These poor survival rates had posed serious problems for both the developed and the developing nations (Bandara & Rathnasiri, 2016). The survival rate of the SSEs has been attributed to technical competencies (Armstrong, 2012). As Pinnow (2011) puts it, no matter how huge the capital of an enterprise is, without good and effective technical competencies, the enterprise must flop. This implies that survival rate of SSEs is not unconnected to technical and non-technical competencies. Studies have also shown that requisite technical competencies needed to keep small scale enterprises afloat seem not to be put in use by the managers of the SSEs, hence the pitiable

state of SSEs, particularly in Anambra State. The researchers are mostly worried that the rising cases of SSEs flop in Anambra State as reported by Nnabuife, Okoli, Moneme and Ewah-Bassey (2018) may not be unconnected with their level of technical competencies, hence, the need for this study.

Research Question 0070771995

One research question guided the study:

1. What is the level of technical capability competencies of small scale enterprise managers in Anambra State?

Hypothesis

One null hypothesis was tested at 0.05 level of significance:

1. There is no significant difference in the mean ratings of experienced and less experienced small scale enterprise managers in Anambra State on their technical capability competencies.

Research Method

The research was carried out in Anambra State of Nigeria. Anambra State is mostly urbanized by different sizes of business enterprises and business owners / entrepreneurs / managers. The study adopted descriptive survey design to assess the level of technical competencies adopted for enhancement of small scale enterprises. The population for the study consisted 1, 506 respondents who are managers of the 1,506 registered small scale businesses in Anambra State. The sample for this study consisted of 754 respondents selected through proportionate stratified random sampling technique. A structured questionnaire specifically designed to assess the level of technical competencies of small scale enterprise managers was developed for the study. In order to ascertain the possession of the technical competencies, the respondents were provided with a five response options:

- Very High Level 5
- High Level 4
- Average Level 3
- Low Level 2
- Very Low Level 1

Face validation of the instrument was carried out by presenting the topic of study, the purpose of study and the research questions to three experts who validated the instrument. To ascertain the internal consistency of the instrument, a pilot test was conducted on 10 small-scale enterprise managers in Delta State which was not part of the areas under study. Data from the pilot test were collated and subjected to

Cronbach alpha measure of internal consistency determination. The internal consistency reliability co-efficient obtained using Cronbach alpha was 0.77 which was considered high for the study. The t-test statistics was used to test the hypothesis.

Presentation of Results

Research Question: What is the level of technical capability competencies of small scale enterprise managers in Anambra State?

Data collected in respect of this research question are presented in Table 1.

Table 1: Mean responses of SSE managers regarding their level of Technical Capability Competencies

S/N	Item Statements	Mean	SD	Remark
1.	Use technology to improve business ways	2.19	1.10	Low Level
2.	Act as technical expert in a specific area/programme	2.60	1.06	Average Level
3.	Utilize computer aids in diagnosing business challenges	2.07	1.01	Low Level
4.	Use self-help resources to diagnose and correct business problems	2.75	1.20	Average Level
5.	Implement new strategy in solving business problems	2.36	1.34	Low Level
6.	Use technology to improve business pace.	3.08	1.35	Average Level
7.	Utilize computer aids in finding solutions to business challenges	2.22	1.13	Low Level
8.	Use modern technology in data collection	1.91	1.18	Low Level
	Cluster	**2.40**	**1.12**	**Low Level**

Table 1 reveals the mean and standard deviation on the level of technical capability competencies of small scale enterprise managers in Anambra State. The Table reveals that the mean responses of the respondents range from 1.91 to 3.08, while the standard deviation range from 1.013 to 1.349. From the Table, the mean responses on five items (39,41,43,45 and 46) range from 1.91 to 2.36 and indicate low level of technical capabilities competencies, while the mean responses on the

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remaining three items (40, 42, and 44) range from 2.60 to 3.08 and indicate average level of technical capabilities competencies of the small scale enterprise managers. Then the cluster mean of 2.40 shows average level of technical capabilities competencies of small scale enterprise managers in Anambra State.

Hypothesis: There is no significant difference in the mean ratings of experienced and less experienced small scale enterprise managers in Anambra State on their technical capability competencies.
The test of this hypothesis is presented in Table 2.

Table 2: The t-test Summary of SSE Managers' Mean Scores on their level of Technical Capability Competencies based on their Experience

Years of Experience	N	X	S^2	df	Level of Significance	T	P	Decision
Experienced	269	2.53	1.24					
Less Experience	485	2.57	1.24	752	0.05	.40	.70	Accept

Table 2 shows the t-test result on the difference between less experienced and experienced small scale enterprise managers on their technical capability competencies. Table 14 shows that the t-value is .40 at 752 degrees of freedom at 0.05 level of significance. Since the p-value (.70) is greater that the alpha level of (0.05), the null hypothesis of no significant difference in the mean ratings is accepted. Thus, the test reveals no significant difference (df = 752, t = .40, p =.70> .05) in creative thinking competencies between experienced and less experienced small scale enterprise managers in Anambra State.

Discussion of Findings

The result of the data analysis in respect of research question six as presented in table 8 showed how SSE managers responded to the level of technical capabilities competencies of small scale enterprises in Anambra State. The findings revealed that technical capability competencies were possessed

at a low level by small scale enterprises in Anambra State. This means that their level of possession of technical capabilities competencies was little and as such not enough for them to succeed. From the findings, they rated their level of use of technology to improve business way as low, utilization of computer aids in diagnosing business challenges as low, utilization of computer aids in finding solutions to business challenges as low implementing new strategy in solving business problems as low, use of modern technology in data collection as low, use of technology to improve business pace as average and use of self-help resources to diagnose and correct business problems as average. Consequently, they hardly succeed. The few that act as technical expert in specific area/programme are mainly those into repairs e.g, mechanics, technicians, electricians and so on, but many of them were not registered. Accordingly, since many of them were not literate and may not know what computer or ICT could aid them to achieve which might include using it to diagnose, analyse and correct business problems. Majority also do not have and could not afford to acquire ICT compliant employee except very few ICT companies like the business centres and as such find it difficult to overcome technical challenges. Generally, the technical capabilities competencies assessed were poorly possessed by small scale enterprise managers in Anambra State.

This finding relates with the study of Kyobe, Namirembe, and Shongwe (2015) which discovered that interventions to enable SMEs enhance their IT innovation capabilities are necessary. It stressed that the inability of most SMEs (especially in the retail sector), to develop innovative competencies using IT applications is a major concern which exists not only in Uganda but is also reported in other African countries like Kenya and Nigeria. Chinomona (2013), in studying the effect of small business owner expertise/technical capabilities on small business performance in Harare, Zimbabwe, found among others a positive direct relationship between business owner expertise/technical capabilities and small scale business performance. Technical capabilities competencies involve the ability to identify how you can use systems and technology to improve ways of working. It is the knowledge and skills required for firms to choose, install, operate, maintain, adapt, improve and develop technologies. These competencies are major drivers behind the success of

many SSEs. However, these competencies need to be aligned with Information Technology (IT) applications to sustain SSE competitiveness. This is supported by the study of Werber, Rajkovic, Urh, and Znidarsic, (2015) which revealed that one of possible factors for firm's success is adoption of ICT and its use. Therefore, i**n striving for survival and successful performance, small scale enterprises in Anambra State must have employees that have the competency to use technology to improve business ways and pace.**

Conclusion

The possession of technical competencies is very necessary for successful operation of small scale enterprises. From the findings of the study, it is evident that the technical capability competencies of the managers are at low level. This means that SSE managers in Anambra State seem to lack in the level of possession of technical competencies. These may likely be the reason for their poor performance as contained in the literature. However, since these technical competencies are indispensable for improved business performance of firms, small scale enterprise managers in Anambra State should endeavour to enhance their possession of these competencies for optimum profitability.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are made:

1. Small scale entrepreneurs and managers on their own should always explore information on current trends in business management, this would keep them abreast of trends including technical and non-technical trends so as to embrace innovations in their businesses and modify their behaviours to reflect knowledge and insight.
2. Researchers and authors should also develop materials relevant to possession of technical competencies so as to guide managers and prospective managers.
3. Managers of small scale enterprises with no formal qualification should enrol for short term courses to become acquainted with technical competencies.

References

Adoye, I., Agu, O. A., Adoli, O. O. and Inalegwu, F. A. (2015). Small and medium scale enterprises and national development. *European*

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Journal of Business Management 3(13), 194-202. Retrieved from citeseerx.ist.psu.edu/viewdoc/..doi =10.1.1.734.7713on July 3, 2018

Agwu, M. O. and Emeti, C. I. (2014). Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt City, Nigeria. *European Journal of Sustainable Development*, 3(1), 101-114. Doi:10.14207/ejs.2014.v3n1p101

Ayozie, D. O., Jacob, S. O., Umukoro F. and Ayozie, V. U. (2013). Small and medium scale enterprises (SMEs) in Nigeria: The marketing interface. *Global Journal of Management and Business Research Marketing 13(19)*, 1-2.

Ayozie, D. O. (2017). Small and medium scale entrepreneurship development and the application of entrepreneurship education in Nigeria. *International Journal of Research in Business Studies and Management* 4(5), 1-17.

Bandara, R. M. S. and Rathnasiri, U. A. H. A. (2016). *The working capital management practices of small and medium enterprises (SMRs) in Sri Lanka.* Retrieved from https://www.researchgate.net/publi cation/ 311886345on May 6, 2020.

Bouazza, A. B. (2015). Small and medium enterprises as an effective sector for economic development and employment creation in Algeria. *International Journal of Economics, Commerce and Management 3(2)*, 1-16. United Kingdom. Retrieved from: http://ijecm.co.uk

Duff, M. C., Kurczek, J., Rubin, R., Cohen, N. J. and Tranel, D. (2013). Hippocampal amnesia disrupts creative thinking. *Hippocampus*, 23(12), 1143-1149. Retrieved from http://onlinelibrary.wiley.com

Harrison, J. D. (2013, April 25). *Who actually creates jobs: start-ups, small businesses or big corporations?* Retrieved from https://www.washingtonpost.com/ business/on-small-business... on March 6, 2017.

Ikemba-Efughi, I. (2017). Sustainability of small scale industries: Gaining competitive advantage through strategic human resource management. In N. Madichie, A.

UNIJERPS

D. Nkamnebe and G. Ezu (Eds) *Proceedings of the 2017 Faculty of Management Sciences International Conference on African Entrepreneurship and innovation for sustainable development*, 26-29th July 2017, Nnamdi Azikiwe University, Awka, 557-587.

Kyobe, M., Namirembe, E, and Shongwe, M. (2015). The alignment of information technology applications with non-technological competencies of SMEs in Africa. *The Electronic Journal of Information Systems in Developing Countries*, 67(5), 1-22

Leslie C. (2018). *Balancing technical and non-technical skill development*. Retrieved from http://career.egr.uh.edu/sites/career.egr.uh.edu/files/... on January 13, 2020

Marshal (2016). *The 35 core competencies*. Retrieved from: http//www.wikijob. uk.co on June 11, 2017

Nnabuife, K. E., Okoli, I. E., Moneme, P. C., and Ewah-Bassey, E. (2018). Family owned business in Anambra State; issues, problems and prospect. *Asian Journal of Economics Business and Accounting 9(1),* 1-10.

Pinnow, F.D. (2011). *Leadership-what really matters? A handbook on systemic leadership*. Berlin: Springer.

Sabanke, V. O., Ilori, M. O. and Adegbite, S. A. (2012). Technological capability in metal fabricating firms in Southwestern Nigeria. *American Journal of Industrial and Business Management, 2*, 176-183. Retrieved from: http://www.sciRP.org/journal/ajibm on July 15, 2018.

Small Business Act of 2015. *Small business administration loans*. Retrieved from: https://smallbusiness.chron.com › ... ›on December 15, 2018.

Small Business, Enterprise and Employment Act 2015. Retrieved from: http://www.legislation.gov.uk/ukpga/2015/26/section/33/enacted on December 15, 2018.

UNIJERPS

SMEDAN (2013). *SMEDAN and National Bureau of Statistics collaborative survey: Selected findings*. Retrieved from https://nairametrics.com on June 7, 2018.

Taylors, M. (2015). *Starting a business: what is enterprise (GCSE)*. Retrieved from: https://www.tutor2u.net/business/reference/starting-a-business-what-is-enterpriseon December 15, 2017.

The British Council Business Magazine (2016, May 15). *An introduction to competencies*. Retrieved from: http://learnenglish.org/en/business-magazine/introduct-.. Retrieved on June 11, 2017

Werber, B., Rajkovic, U. Urh, M and Znidarsic, A. (2015). Computer literacy anduse of ICT as key factors of micro-enterprise success. *Information Management*, 2(8)

Westhead, P., Wright, M., and McEiwee, G. (2011) *Entrepreneurship: Perspective and cases*. England: Pearson Education Limited.

Zachery, K. M. (2011). *The leadership catalyst: A new paradigm for helping leadership flourish in organization*. Masters' thesis. Organizational Dynamics programs, University of Pennsylvania..

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