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EXTENT OF UTILIZATION OF JUST-IN-TIME TECHNIQUE BY MANAGERS AND ACCOUNTANTS OF SMALL AND MEDIUM SCALE ENTERPRISES IN ANAMBRA STATE

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Abstract
This study determined the extent to which managers and accountants of SMSEs in Anambra State utilise just-in-time inventory technique. The study was conducted in Anambra State. One research question and one null hypothesis guided the study. The researchers adopted the descriptive survey research design. The population of the study consisted of 483 Managers and 244 Accountants of SMSEs Anambra State while the sample was 712 respondents selected through stratified random sampling technique. Instrument for data collection was a structured questionnaire developed by the researchers. The instrument was validated by three experts and the reliability was duly established. The administration of the instrument was carried by the researchers and research assistance. Data collected regarding the research question was analysed using mean and standard deviation while the t-test was used to test the null hypothesis at 0.05 level of significance. Findings indicated that managers and accountants of SMSEs in Anambra State utilize Just-in-time technique to a moderate extent. Accordingly, it was among others recommended that owners of small and medium scale enterprises should organize regular training for their employees on just-in-time inventory management technique for effective operation of their enterprises.

Keywords: Managers; Accountants; Small And Medium Scale Enterprises; Utilization; Just-In-Time; Inventory Technique.

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Introduction

From 1960s to date, Small and medium scale enterprises (SMSEs) have been given due recognition especially in developed nations for playing very important roles towards fostering accelerated economic growth, development and stability within several economies (Abosede, Hassan & Oko-Oza, 2017). The contributions of SMSEs to the development of the Nigerian economy are immense and have been acknowledged by many (Imeokparia and Ediagbonya, 2014). Mohammed and Nzelibe (2014), stated that data/document from the Federal Office of Statistics in Nigeria affirmed the importance of SMSEs and revealed that about 97 percent of the entire enterprises in the country are SMSEs employing an average of 50 percent of the working population as well as contributing to 50 percent of the country's industrial output.

The International Finance Corporation (IFC), in Ilori, Ilori and Zenith bank (2015), defined SMSEs as firms with less than 300 employees and total assets less than One million US Dollars. Agu in Imeokparia and Ediagbonya, (2014) also defined SMSEs as businesses which are owned, led by one or a few persons, with direct owners' influence in decision making, and having a relatively small share of the market and relatively low capital requirement. SMSEs are generally regarded as the engine of economic growth in developing economies and developed nations. They have been largely acknowledged as the oil required for lubricating the engine of socio-economic transformation of any nation, Nigeria inclusive (Alese, 2017; Abosede, Hassan & Oko-Oza, 2017).

In Nigeria, the respective governments policies accord and give priority to the country's small and medium scale enterprises, various agencies are created to do the job of stimulating the development of the small and medium scale business sector of the economy. They include the National Directorate of Employment (NDE), Peoples Bank of Nigeria (PBN), Microfinance Banks, National Economic Reconstruction Fund (NERFUND), National Bank of Commerce and Industry and Small and Medium Enterprises Development Agency (SMEDAN) with the mandate to develop the SMSEs (Alabi, Awe & Musa, 2017). In recognition, they constitute the fountain head of vitality for the national economy, and consequently their problems have been viewed as those of the nation, by virtue of their number, diversity, penetration in all sectors of

production and contribution to employment and to the prosperity of the particular areas in which they operate (Kayode and Ilesanmi, 2014; Gumel, 2017). A major challenge facing Small and medium scale enterprises (SMSEs) is the utilization of inventory management techniques.

Utilization is the action of making practical and effective use of something (Hornby, 2015). It is the practical and effective use of inventory and inventory management techniques for the attainment of organizational goals. Considering the level of investment required for inventory in manufacturing organizations, it is necessary to manage inventory efficiently and effectively in order to avoid idle resources and also, to ensure production continuity.

Inventory refers to stocks of goods necessary to do business. Umeji and Obi (2013) defined inventory as the total amount of goods and/or materials contained in the store or a factory at any given time. Business enterprises have various inventories held in the form of raw materials, work-in-progress, finished goods, products bought for resale and service items or spare parts. Inventory is the life wire of any business organization. Usually, it represents a substantial part of a business enterprise's asset, particularly working capital. It helps an enterprise to avoid tying up capital so as to guard against incurring costs of spoilage and storage and among other. Salami and Adeyemi (2010) stated that inventory control is pivotal for effective and efficient operation of an enterprise. Therefore, it is important to manage inventories that have to be held for later use in the case of production outfit (which is the concern of this work) or later exchange activities in the case of sales outfit.

The principal goal of inventory management is to balance the conflicting issue of not wanting to hold too much stock, thereby having to tie up capital so as to guard against incurring costs such as storage, spoilage, pilferage and obsolescence, and the desire to make items or goods available (quality and quantity wise), when and where required, so as to avert the cost of not meeting internal or external demands. Therefore, inventory problem of too great or too small quantities can cause business failure. A Customer expects a business or an enterprise to store the items wanted. If an item is not stocked when the customer thinks it should, the business can lose the customer not only on that item, but also on many other items in the future (Onwuliri

2013).Generally, it leads to ineffective management of inventories.

Effective management of inventories can increase the profit of a business and as well add to its return on total asset. Silver, David and Reins (2010) defined inventory management as a system concerned with the integration of information, transportation, acquisition, inspection, material handling, warehousing, packaging and control of supplies and ensuring security of inventory. The reason for paying greater attention to inventory management is that, for many businesses (SMSEs inclusive), it is the largest item appearing on the asset side of the balance sheet. Due to this reason, there is need for the application of suitable inventory management techniques by managers and accountants of SMSEs. One of such management–oriented technique is just-in-time (JIT).

Aside from reducing loss from obsolete stocks there is need for production economy through efficient planning by applying just-in-time inventory management technique. Kinyua (2015) saw Just-in-time as a system that considers making what is needed, when it is needed, in the quantity it is needed by using both minimum resource of people and materials. In just-in-time technique of inventory management, the organization keeps only as much inventory as it needs during the production process. With no excess inventory in hand, the company saves the cost of storage and insurance.

Statement of the Problem

One of the significant features of a flourishing and growing economy is a vibrant and booming Small and Medium Scale Enterprises (SMSEs) sector. SMSEs are recognized and acknowledged worldwide as vital and significant contributors to economic development, introduction and diffusion of new technology, generation of potential entrepreneurs and skilled workers for the industrialization process both nationally and internationally. SMSEs like other business entities are bedevilled with a number of challenges that even make some of them to go in to extinction. There has been stunted growth and sluggish development in the SMSEs all over the world, Nigeria inclusive (Mohamed, Balarabe & Salwa, 2016). This has been of great concern to both government and citizenry, and efforts have been made by both government and non-government agencies towards improving the performance of SMSEs in Nigeria.

In spite of all the efforts and supports of governments and multilateral

institutions, SMSEs have not been able to make the desired impact on the Nigeria economy. This therefore, underscores the fact that there exist fundamental issues confronting Small and Medium Scale Enterprises that have not been adequately addressed. It could be that the efforts and assistance from the governments and others are not properly channelled. Olowaloju (2013) opined that these assistance and efforts to encourage Small and Medium Scale Enterprises have been directed towards the provision of fund. However, in most cases the crucial problem of management has not been addressed. For any business to perform well there is need for wise demand management that is anchored in effective inventory management.

Available literature revealed that SMSEs often find it difficult to adequately manage their inventory and employ various inventory management techniques to deal with inefficiencies, eliminate inventory wastes and provide accurate inventory data. This seems true of many managers and accountants of SMSEs in Anambra State. This is because many of the managers of small scale enterprises are either school dropouts, uneducated or educated without basic knowledge of inventory management techniques. This situation seems to be responsible for poor performance and failure in applying inventory management techniques in SMSEs in Anambra State. The focus of this study is just-in-time inventory management technique. It is therefore necessary to carry out a study to identify the extent of just-in-time inventory management practices utilized by SMSEs in Anambra State.

Research Question

One research question guided the study

1. To what extent do Managers and Accountants of SMSEs in Anambra State utilise just-in-time inventory technique?

Hypothesis

One null hypothesis was tested at 0.05 level of significance:

1. Managers and Accountants of SMSEs in Anambra State do not differ significantly in their mean ratings on the extent of utilization of just-in-time inventory technique.

Research Method

This study was conducted in Anambra State. One research question and one null hypothesis guided the study. The researchers adopted the descriptive survey research design. The population of the study consisted of 483 Managers

and 244 Accountants of SMSEs Anambra State. The sample for the study was 712 respondents selected through stratified random sampling technique. Instrument for data collection was a structured questionnaire developed by the researchers. The instrument was validated by three experts. To establish the internal consistency of the instrument, a pilot test was conducted and Cronbach Alpha was used to test data collected to determine the internal consistency. The analysis yielded a co-efficient score of 0.84. The questionnaire was structured on a five-point scale, with response categories as "Very Greatly Utilized (VGU), Greatly Utilized (GU), Moderately Utilized (MU), Lowly Utilized (LU) and Very Lowly Utilized (VLU)"

The administration of the instrument was carried by the researchers and research assistance. Data collected regarding the research question was analysed using mean and standard deviation while the t-test was used to test the null hypotheses at 0.05 level of significance. In order to determine the extent to which Managers and Accountants of SMSEs utilize just-in-time inventory management technique, a decision rule based on mean ratings between 4.50-5.00 were regarded as very greatly utilized, items with mean ratings of 3.50-4.49 were considered as greatly utilized and items with 2.50-3.49 were regarded as moderate utilized. Furthermore, items with mean ratings of 1.50-2.49 and 0.50-1.49 were considered as lowly utilized and very lowly utilized respectively. In testing the null hypothesis, where the calculated p-value is less than the stipulated level of significance (0.05), it meant that there was a significant difference and the hypothesis was rejected. Conversely, where the calculated p-value is equal to or greater than the stipulated level of significance (0.05), it meant that there was no significant difference and the hypothesis was not rejected.

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Presentation of Results

Research Question 1: To what extent do Managers and Accountants of SMSEs in Anambra State utilize just-in-time technique?

Table 1: Managers and Accountants' mean ratings on the extent just-in-time technique are utilized in SMSEs in Anambra State. N=712

	Mean	SD	Remark
1. Producing right items at the right time	2.46	.75	LU
2. Making available right quantity of items at the right time	2.43	.75	LU
3. Providing right quality of goods at right place or location in the right time	2.57	.78	MU
4. Managing the material in flow in a plant in order to reduce the levels of inventory	2.44	.74	LU
5. Focusing on pull production concept to reduce the overall inventories in warehouses	2.32	.76	LU
6. Having planned and programmed activities that avoid overproduction.	2.45	.76	LU
7. Projecting necessary units and quantities to achieve plus or minus zero performance to schedule.	2.75	.97	MU
8. Improving the return on investment of a business by reducing inventory and its associated carrying costs	2.40	.78	LU
9. Creating items that arrive when needed, neither earlier nor later.	3.05	.87	MU
10. Having quick communication of the consumption of old stock, that triggers new stock to be ordered,	2.59	.72	MU
Mean of Means	2.55	.79	MU

Table 1 shows the mean of means score of 2.55 indicating that Managers and Accountants of SMSEs in Anambra State utilize just-in-time technique to a moderate extent. The analysis of the items further indicates that Managers and

Accountants rated 4 out of the 10 listed items as being utilized to a moderate extent. The mean rating for the 4 items ranged from 2.57 to 3.05. The remaining 6 items were rated by Managers and Accountant as being utilized to a lowly extent with mean ratings of the 6 items ranging from 2.32 to 2.46.

Hypothesis: Managers and Accountants of SMSEs in Anambra State do not differ significantly in their mean ratings on the extent of utilization of just-in-time technique.

Table 13: Summary of t-test analysis on the Mean Ratings of Managers and Accountants of SMSEs in Anambra State on the extent of utilization of just-in-time. N=712

Source of variation	N	Mean SD	Df	t-cal	*P*-value	Decision
Managers	447	2.46 .27	710	6.28	.000	Sig
Accountants	235	2.70 .71				

As shown in Table 2, the mean score for Managers (*M=2.46, SD=.27*) was significantly less than that of the Accountants (*M=2.70, SD=.71*; *t (710) 6.28,p=.000*. The null hypothesis of no significant difference between the two groups on the extent of utilization of just-in-time technique was therefore rejected.

Summary of Findings

1. Managers and Accountants of SMSEs in Anambra State utilize Just-in-time technique to a moderate extent
2. Managers and Accountants of SMSEs in Anambra State differ significantly in their mean ratings on the extent of utilization of just-in-time inventory technique.

Discussion of Findings

The results from the findings of the study on the extent of utilization of just-in-time technique in SMSES show that Managers and Accountants of SMSEs in Anambra State utilize Just-in-time technique to a moderate extent. This shows that manufacturing processes are

controlled to an average level which is neither poor nor excellent. This finding is in conformity with the findings of Mah, Merdad and Moryeza (2010) and Musara (2012) which stated that SMSEs practices JIT system to an average level and because of that could not benefit much from it.

The Study also revealed that Managers and Accountants of SMSEs in Anambra State differ significantly in their mean ratings on the extent of utilization of just-in-time inventory technique. This finding is in line with the findings of Yazan (2017) which states that small and medium operators differ in their mean ratings on the extent of utilization of JIT. This difference could be as a result of market power. This finding is in agreement with the findings of Maja and Josipa (2012) and Kootanaee, Babu and Talari (2013), which revealed that larger firms have more market power that provides them the opportunity to charge higher prices, earn higher profits and acquire all the resources required for production including tenets of inventory management.

Conclusion

The conclusion of this study is that managers and accountants of SMSEs in Anambra State utilize Just-in-time technique to a moderate extent. It is also concluded that both managers and accountants of SMSEs in Anambra State differ significantly in their mean ratings on the extent of utilization of just-in-time inventory technique.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Owners of small and medium scale enterprises should organize regular training for their employees on just-in-time inventory management technique for effective operation of their enterprises.
2. Employees that are involved in the management of inventories in small and medium scale enterprises should ensure that organisation's policy on inventory management is strictly adhered to in the cause of day-to-day discharge of their duties.
3. Owners of small and medium scale enterprises should embrace the just-in-time inventory management technique which will guide them in avoiding over or under-stockings in their business outfits.
4. The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) should offer short course on just-in-time inventory management technique to managers

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and accountants of small and medium scale enterprises to acquaint them with the rudiments for effective inventory management in their enterprises.

References

Abosede, A. J., Banjo, H. A & Regin, O. O. (2017). Performance of small and medium scale enterprises in Lagos State: The implication of finance. *Acta Universitatis Danubius*, *13*(5), 72-83.

Agu, O. A., Obianike, H. O. & Eke, C. N. (2016). Effect of inventory management on the organizational performance of selected manufacturing firms in Singaporean. *Journal of Business Economics and Management Studies, 8*(4), 56-59. Retrieved from www.singaporeanjbem.com

Alabi, Y., Awe, O. J. & Musa, L. Y. (2017). Managing small and medium scale enterprises in Nigeria: Challenges and prospect. *Review of Public Administration and Management, 3*(7), 55-62.

Alese, O. J. (2017). *Strategic management and the development of small and medium enterprises in south-west, Nigeria. An unpublished PhD Thesis* . Olabisi Onabanjo University, Ogun State, Nigeria.

Gumel, B. I. (2017). Critical challenges facing small business enterprises in Nigeria: a literature review. *International Journal of Scientific & Engineering Research, 8*(8), 18-29 Retrieved from https://www.researchgate.net/publication/319326712

Ilori,D.B, Ilori, M. A & Zenith Bank (2015).Small and Medium Scale Enterprises Financing and Development in Nigeria: A Critical Assessment. *Journal of Finance and Bank Management.3*(1) 190-198.DOI: 10.15640/jfbm.v3n1a17

Kayode, K. B., & Ilesanmi, A. O. (2014). Determinants of factors influencing capacity of small and medium enterprises (SMEs) in employment creation in Lagos State, Nigeria. *International Journal of Financial Research, 5*(2), 133-141. doi:10.5430/ijfr.v5n2p133

Kinyua, B. K. (2015). An assessment of just in time procurement system on organization performance: a case study of corn products Kenya limited. *European Journal*

UNIJERPS

of Business and Social Sciences, 4(5), 120-130.

Kootanaee, A. J., Babu, K. N. & Talari, H. F. (2013). Just-in-time manufacturing system: from introduction to implement. *International Journal of Economics, Business and Finance, 1*(2), 7-25.

Mahdi S., Mehrdad A. & Morteza R. (2010). Impact of JIT On Firms' Financial Performance Some Iranian Evidenc. *Global Journal of Management and Business Research* 10(4). 21-29.

Maja, P. &Josipa, V.(2012) Influence of firm size on its business success. Croatian *Operational Research Review,* 3(1), 213-223.

Mohammed, S. A,, Balaraba, A. J. & Salawak, A. (2017). Challenges affecting the performance of small and medium scale enterprises (SMSEs) in Nigeria. *International Journal of Scientific & Engineering Research, 9*(2), 151-160. Retrieved from https://www.researchgate.net/publication/319326712

Mohammed, U. D. & Obeleagu-Nzelibe, C. G. (2014). *Entrepreneurial skills and profitability of small and medium enterprises (SMSEs): Resource acquisition strategies for new ventures in Nigeria*. Proceedings of 25th International Business Research Conference Cape Town, South Africa.

Musara, M. (2016) Impact of just-in-time (JIT) inventory system on efficiency, quality and flexibility among manufacturing sector, small and medium enterprise (SMEs) in South Africa. *African Journal of Business Management, 6*(17), 5786-5791. Retrieved from http://www.academicjournals.org . doi: 10.5897/AJBM12.148

Olowolaju, M. (2013). An assessment of inventory management in small and medium scale industrial enterprises in Nigeria. *European Journal of Business and Management,* 5(28),150-158. Retrieved from http;//www.iiste.org

Onwuliri, O.C.(2013).*Procurement: Purchasing and Supply Concep*t. Nigeria: Wolsak Nigeria Ltd.

Silver, E. E. & Rein, P. (2010). *Inventory management production planning and scheduling.* New York: John Wiley & Sons.

UNIJERPS

Umeji, A. U. & Obi, C. A. (2013). Inventory valuation and price determination skills needs of small scale business operators in Anambra State. *Journal of Nigeria Vocational Association*, 1(18), 237-247.

Yazan, E. A. (2017). Just-in-time system and its impact on operational excellence: An empirical study on Jordanian industrial companies. *International Journal of Business and Management, 12*(12), 158-167,doi:10.5539/ijbm.

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