Inventory Management and Organizational Performance of Selected Small and Medium Enterprises in Nigeria

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Abstract

This study examines inventory management and organizational performance of the selected Small and Medium Enterprises. The objective of the study was to examine the relationship between inventory management and organizational performance. Primary and secondary data was employed, primary data collection instrument is a structured questionnaire designed and statistical Package for social Sciences for the study (SPSS) was used as the secondary data analysis. The independent variables used was inventory management while the dependent variable used were profitability and productivity. Data were analyzed with the aid of descriptive statistic such as simple percentage and mean. Results reveal that inventory management have positive and significant impact on the performance. Hence the study recommends that inventory management is very vital to the success and growth of organizations. The entire profitability of an organization is tied to the volume of products sold which has a direct relationship with the quality of the product against this background the study recommended that organizations should ensure that inventory were sufficient to meet production requirement and customer demands at all times and avoid holding unnecessary surplus inventory that might increase holding cost and thus ensure enhanced customer satisfaction.

Keywords: Inventory Management, organizational performance, Profitability and productivity.

1.   Introduction

Inventory plays a significant role in the growth and survival of an organization in the sense that ineffective and inefficient management of inventory will mean that the organization loses customers and sales will decline. Prudent management of inventory reduces depreciation, pilferage, and wastages while ensuring availability of the materials as at when required (Ogbadu, 2009). Inventory management is critical to an organization's success in today's competitive and dynamic market. This entails a reduction in the cost of holding stocks by maintaining just enough inventories, in the right place and the right time and cost to make the right amount of needed products. High levels of inventory held in stock affect adversely the procurement performance out of the capital being held which affects cash flow leading to reduced efficiency, effectiveness and distorted functionality (Koin, *et al.,* 2014).

A business, whether small, medium or large, is set to make profit. For profit making objective to be achieved, efforts are usually geared towards revenue maximization and cost minimization. Overstocking and under-stocking of inventory are two of the problems affecting cost of manufacturing. There is overstocking when the quantity of materials or finished goods stored is too much, leading to high cost of storage and the possibility of part of inventory stored getting spoiled before the time of usage. There is under/stocking when the quantity of inventory stored is not enough to cope with the rate of usage which usually lead to unexpected production stoppages and idle time on the part of factory workers.

Previous studies such as Adamu (2016), Ogbo and Ukpere (2014), Takim (2014) and so on, have related inventory management practices with various aspects of organizational performance such as financial and economic performance, and most of these studies have focused on external inventory management practices. In addition, most studies that attempted to focus on operational performance concentrated on solvency and operating performance of firms based in Kenya and India such as Kamau and Kagiri (2015), Oballah, Waiganjo and Wachiuri (2015), and Shafi (2014). Very limited studies have been carried out on internal inventory management practices. It is therefore evident that knowledge gap exists on the specific relationship between internal inventory management practices and operational performance. This study intends to bridge this gap by determining the relationship between internal inventory management practices and operational performance of selected companies in Nigeria.

Inventory is a vital part of current assets mainly in manufacturing concerns. Huge funds are committed to inventories as to ensure smooth flow of production and to meet consumer demand. However, maintaining inventory also involves holding or carrying costs along with opportunity cost. Inventory management, therefore, plays a crucial role in balancing the benefits and disadvantages associated with holding inventory. Efficient and effective inventory management goes a long way in successful running and survival of a business firm, when organizations fail to manage their inventory effectively they are bound to experience, stock out, the decline in productivity and profitability, customer dissatisfaction.

Following the build-up of these issues, the current study seeks to establish the effect of inventory management on return on assets of the selected small and medium enterprises in Nigeria. In order to achieve this broad objective, the following tentative statements were synthesized:

H_{01}: *There is no significant relationship between inventory techniques and return on asset of selected Small Medium Enterprises in Nigeria?*

H_{02}: Inventory turnover does not significantly influence return on asset of selected Small Medium Enterprises in Nigeria?
H_{03}: There is no significant relationship between inventory conversion period and return on asset of selected Small Medium Enterprises in Nigeria.

2.   Literature Review
2.1   Conceptual Review
Inventory Management and Control

Inventory are raw materials, work-in progress, finished goods and supplies required for creation of a company's goods and services. It is also the number of units and/or value of the stock of goods a company holds. Also, inventory is defined as "the stock of any item or resource used in an organization". In a broader context, inventory can include inputs such as financial, energy, human, equipment, and physical items such as raw material; inputs such as parts, components, and finished goods; and interim stages of the process, such as partially finished goods or work-in-progress. postulate that inventory management refers to the entire activities involved in developing and managing the inventory levels of raw materials, semi-finished materials (work-in-progress) and finished good so that adequate supplies are available and the costs of over or under stocks are low. Inventory management is the process of effectively overseeing the constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer of the units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of a business into jeopardy. Effective inventory management seeks to control the costs associated with the inventory, from the perspective of the opportunity cost of the capital tied up in the inventory, the holding cost and the ordering costs.

Gitau(2016) describes inventory control as the managerial activity performed to ensure that materials sufficient for uninterrupted organizational operations are available both in quality and in quantity. It is concerned with the control of the physical quantities and the monetary values of inventory items at predetermined levels or within safe limits. The philosophy of inventory control is that the organization neither suffers a stock-out situation nor ties down large capital in form of heavy stock carrying.

Naliaka and Namusonge(2015) opines that it is the coordination of materials controlling, utilization and purchasing. It has the purpose of getting the right inventory at the right place in the right time with right quantity because it is directly connected with the production. The objective of any organization is to get a good return out of every money invested in the company.

Inventory Management Techniques

Different manufacturers adopt different technique of inventory management. The choice of technique is determined by each manufacturer's level of exposure and the importance attached to stock keeping. Among the commonly used techniques are perpetual inventory method, Just-in-time (JIT) techniques, ABC Analysis method, and VED Analysis. According to Harrington and Lambert (1990), perpetual inventory method is the act of continuously monitoring stock levels for the purpose of detecting early the items of stock that have gone down for immediate replenishment and those that are slow-moving for the purpose of cutting purchases .Under perpetual inventory methods, stock taking is done after every receipt and issue .Each time stock taking is done, record balance is compared with physical balance to detect error and fraud. Just – in-Time (JIT) was an innovation discovered in Japan in the early 1970's by a worker of Toyota Automobile Industry (Taichiohno). According to Atseye, Ugwu and Takon (2015), JIT is an

inventory technique companies employ to increase efficiency and reduce waste by receiving goods only as they are needed in the production process, thereby reducing inventory cost. JIT, as an inventory control method, requires that producers are able to accurately forecast demand. It is a strategy for inventory management in which raw materials and other components are delivered by the suppliers immediately they are needed in the manufacturing process.

Adeyemo and Salami (2010) hold the view that the storage of unused inventory is a waste of resources and that JIT system exposes hidden cost of keeping inventory. As highlighted by Munyao, Omulo, Mwithiga, Chepkulei (2015) the fundamental factors that must be present for JIT to be an effective inventory management technique include steady production, quick machine set up and high sense of dedication on the part factory workers .Problems associated with JIT includes unforeseen failure on the part of supplier, unexpected change in taste of consumers and manufacturers' inability to meet unanticipated demands. Onuoha (2012) describes ABC analysis and VED analysis methods as different ways of classifying inventory for the purpose of knowing the item of stock that deserve great care and attention.

Under VED analysis technique, items of stock are classified based on criticality into V =Vital, E = Essential and D =Desirable .Vital items (V) must be available all the time because they are critically needed for the continuous flow of production .Non-availability of vital items can have negative implication on the survival of the company .Essential items (E) are materials with lower critical need but which may be available .Essential items are items whose non-availability can be afforded for a short time .Desired items are the remaining materials with lowest criticality, the absence of which will not so much affect manufacturing activities even if their non-availability persist for a very long period. In effect, vital items deserve more care and attention in the warehouse than essential items while essential items deserve more care and better handling in the warehouse than desirable items.

Small and Medium Scale Enterprises and Cost Effectiveness using Inventory Management

There is no universal acceptable definition of SMEs. The definition therefore varies from country to country. According to the European Union an SME is defined by its number of employees and its turnover; the Table 1 identifies three different categories. Medium enterprises are conceived as enterprises which have at most 300 employees and an annual turnover not exceeding 15 million US dollars. Further to the above, there is the distinction of small enterprises having fewer than 50 staff members and up to 3 million US dollars turnover while micro-enterprises have up to 10 persons and $100,000 turnover. In the UK, sections 382 and 465 of the Companies Act 2006 define an SME for the purpose of accounting requirements. According to this, a small company is one that has a turnover of not more than £5.6 million, a balance sheet total of not more than £2.8 million and not more than 50 employees. A medium-sized company has a turnover of not more than £22.8 million, a balance sheet total of not more than £11.4 million and not more than 250 employees.

In Nigeria, Small and Medium Sized Development Agency of Nigeria (SMEDAN) defines SMEs as based on the following criteria: a micro enterprise as a business with less than 10 people with an annual turnover of less than ₦5,000,000.00, a small enterprise as a business with 10-49 people with an annual turnover of ₦5 to 49,000.000.00; and a medium enterprise as a business with 50-199 people with an annual turnover of ₦50 to 499,000.000.00. National Council of Industries also sees SMEs as business enterprises whose total costs, excluding land, are not more than two hundred million naira (₦200, 000,000.00) [28]. Also, the Central Bank of Nigeria defined SMEs as any enterprise with a maximum asset base of two hundred million

Naira excluding land and working capital with its employees ranging between ten and three hundred.

Operating costs are the expenses which are related to the operation of a business, or to the operation of a device, component, and piece of equipment or facility. They are the cost of resources used by an organization just to maintain its existence.

In respect to inventory management, Okanda, Namusonge and Waiganjo (2016) point out that inventory costs in an organization comprises of inventory carrying costs (opportunity costs, insurance, rent, and so on), ordering costs (transport charges, insurance on goods in transits, inspection of goods inwards, and so on) as well as the shortage costs (idle machines, labour, loss of sales). Cost reduction is measured by evaluating whether the manufacturers' cost is higher, equal, or lower than their industrial competitors. In addition, manufacturers were asked to respond whether they are lagging, below averaged, average, above, or the leader in the industry in terms of meeting customers' requirement. Kitheka and Gerald (2014) adds that three types of costs must be considered in setting inventory levels namely: holding cost, ordering cost and stock out cost.

Kitheka (2012) asserts that many companies' inventory policy is to hold sufficient finished stock to meet the market demand while minimizing the holding costs, and to enable them meet their objectives, computerized inventory management systems are introduced. All this put together, it implies that automation leads to lower operational costs and improved customer service. Kitheka (2012) further states that to fully realize the reviewed benefits of proper inventory management, firms have opted to automate their inventory management operations. Liu and Keith (1995) conclude that the systems can give the companies opportunities to maintain detailed stock records.

2.2　Theoretical Review
Queuing Theory

This theory will guide the study in investigating the relationship between material handling equipment and effective inventory management. Queuing theory is a mathematical study of waiting for lines or queues (Pandey, 2005). The theory enables mathematical analysis of several related processes, including arriving at the back of the queue, waiting in the queue (a storage process) and being served in front of the queue. The theory permits the derivation and calculation of several performance measures including the average waiting time in the queue or the system, the expected number waiting or receiving service, and the probability of encountering the system in certain states such as empty, full having an available server or having to wait a certain time to be served.

2.3　Empirical Review

Previous studies on inventory management and organization performance have convergent views that positive relationship exist between inventory management practices and organization performance.Takim (2014) assesses inventory management practices and its effect on the financial performance of SMEs in the Northern Region of Ghana. The study adopted a descriptive cross-sectional survey research design which allowed the collection of primary quantitative data through structured questionnaires. The data was analyzed using both descriptive and inferential statistics. Results reveal that SME financial performance was positively related to efficiency of inventory management.

Namgembe and Munene (2016) examined the effect of inventory management on performance of the procurement function of sugar manufacturing companies in the western sugar

belt. The study makes use of structured questionnaires that were self-administered to the respondents. Data was analyzed with the aid of descriptive and inferential statistics. Results reveal that there is significant relationship between inventory management practices and performance of the procurement function of sugar manufacturing companies in the western sugar belt.

Nsikan*et al.,* (2000) also examine inventory management practices in flour milling manufacturing firms and their effects on operational performance. Structured questionnaire was the major instrument for the collection of relevant primary data while mean and standard deviation was used to analyze descriptive data. Results indicate that inventory management strategies have significant impact on performance.

3.   Methodology

Research Design

The research is descriptive in nature. Descriptive research permits the explanation of phenomena without any intervention from the researcher.

Population of study

The population of the study is composed of store keepers, factory workers and sales agents of SMEs industries in Ogun State, Nigeria.

Sample and Sampling Technique

Due to the nature of the population, the sample of the study is randomly selected from the working population of YewaSouth and Sango Ota of Ogun state. The sample for this study was limited to SMEs companies in Ogun state, Nigeria.

Methods of Data Collection

This research entails the collection of data from both primary and secondary source. The primary source of data collection for the study is the structured questionnaire administered on the respondents. Similarly, data was obtained secondarily from textbooks, journals and internet sources.

Research Instrument

A structured questionnaire was utilized for the collection of first-hand information from participants of the study.

Validity and Reliability Test

The validity of the instrument was determined through content and construct validity. As regards reliability. Cronbach Alpha's test was carried out to ascertain the reliability of the research instrument and the result is presented in the next section.

4.   Presentation of Result

Table 1: Reliability Test

Cronbach's Alpha	N of Items
.735	16

Source: Researcher's Field Survey, 2019.

The table 1 shows the reliability of the questionnaire used for the survey research. The Cronbach's alpha value is 0.735 which is an indication that the questionnaire is reliable and can be used for the research work.

Table 2:Demographic information of the respondents

S/N	Statement	Responses	Frequency	Percentage (%)
1.	**Size of Enterprise**	Small	19	*47.5*
		Medium	21	*52.5*
2.	**Marital status**	Single	25	*62.5*
		Married	15	*37.5*
3.	**Age distribution**	18-25 years	14	*35.0*
		26-30 years	16	*40.0*
		31-35 years	9	*22.5*
		Above 36 years	1	*2.5*
4.	**Type of Labor**	Skilled	21	*52.5*
		Semi-skilled	14	*35.0*
		Unskilled	5	*12.5*
5.	**Educational background**	SSCE	12	*30.0*
		OND	8	*20.0*
		HND/B.Sc.	20	*50.0*

Source: Researcher's Field Survey, 2019.

The demographic distribution in table 2 shows that 19(47.5%) of the respondents were small size enterprise and 21(52.5%) of the respondents were medium size enterprise. Also, 25(62.5%0 of the respondents were single and the remaining 15(37.5%) of the respondents were married. However, it was concluded that 14(35%) of the respondents were within the age of 18-25 years, 16(40%) of the respondents were within the age of 26-30 years, 9(22.5%) of the respondents were within the age of 31-35 years and 1(2.5%) of the respondents were above 35 years of age. Furthermore, 21(52.5%) of the respondents were skilled, 14(35%) of the respondents were semi-skilled and the remaining 5(12.5%) of the respondents were unskilled. However, 12(30%) of the respondents were SSCE holder, 8(20%) of the respondents were OND holder and the remaining respondents were HND/B.Sc. holder.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.743[a]	.553	.516	.41703

Source: SPSS Output
a. Predictors: (Constant), Inventory Conversion Period, Inventory Turnover, Inventory technique

Table 3 shows the model summary of the regression presenting the R which is the coefficient of determination among the variables employed as 0.743 i.e. 74.3%, after adjustment of for abnormalities the adjusted R Square which shows the extent in which the independent variables can explain the dependent variable is shown as 0.516 i.e. 51.6% of the total variation in the dependent variable (Return On Assets) can be explained by the independent variables (Inventory Conversion Period, Inventory Turnover, Inventory technique) and the rest of the 49.4% can be explained by other variables not employed in this research work. Also the standard error of the estimate is shown as 0.41703.

Table 4: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.739	3	2.580	14.833	.000^b
	Residual	6.261	36	.174		
	Total	14.000	39			

Source: SPSS Output
a. Dependent Variable: ROA
b. Predictors: (Constant), Inventory Conversion Period, Inventory Turnover, Inventory technique

The Analysis of Variance in the regression model is displayed in Table 4 showing the regression source of variation of 7.739 which is higher than the residual source of variation of 6.261. Thus, the regression model is able to explain larger portion of the variations in the dependent variables (ROA) than the residual source of variation. The table also shows the sum of square, the degree of freedom, mean square, F-statistics and its probability value. From the F-statistics which is given as 14.833 with a probability value of 0.000 which is statistically significant at a significant level of 0.05. Hence it is statistically right to conclude that the overall fitness of the model is achieved.

Table 5: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.672	.214		3.139	.003
	Inventory technique	.670	.218	.873	3.067	.004
	Inventory Turnover	-.025	.064	-.044	-.388	.000
	Inventory Conversion Period	-.110	.210	-.149	-.525	.603

Source: SPSS Output
a. Dependent Variable: ROA

Table 5 also show the coefficients of the regression model presenting un-standardized coefficients and standardized coefficients, the t-statistics and its probability values. The unstandardized can be used to write Equation 1 of the regression model as:

$$ROA = 0.672 + 0.670INT - 0.025INVTO - 110INVCP + \mu 10INVCP + \mu \text{-----Equation 1}$$

After adjusting for regression errors, the model can be rewritten as:

$$ROA = 0.672 + 0.873INT - 0.044INVTO - 149INVCP + \mu 49INVCP + \mu \text{-----Equation 2}$$

The regression equation shows that the Return On Assets of Small and Medium s in Nigeria will always depend on a constant factor of 0.672 regardless of the existence of other determinants. Every unit improvement in the Inventory Technique will improve the return On asset by 67%, a unit increase in Inventory Turnover will bring about 25% decrease in return on Asset while a unit increase in Inventory Conversion Period will reduce the Return On Asset by 11%. All the variables except Inventory Conversion Period are significant as the p-value is less than the standard significance level of 0.05.

HYPOTHESES TESTING
Hypothesis One
H_{01}: *There is no significant relationship between inventory technique and Return On Asset of selected Small and Medium Enterprises in Nigeria.*

The relationship between inventory technique and return on asset can be established in table 4.2.3 above showing a positive beta coefficient of 0.670 with a t-value of 3.067. This implies that an improvement in the inventory techniques will in turn increase the return on asset of Small and Medium Enterprises with a p-value of 0.004 which is less than 0.05 level of significance. Based on the above findings, it is statistically correct to reject the null hypothesis and accept the alternate hypothesis which state that there is a significant relationship between Inventory technique and return on asset of selected Small and Medium Enterprises in Nigeria.

Hypothesis Two
H_{02}: *Inventory Turnover does not significantly influence Return On asset of selected Small and MediumEnterprises in Nigeria.*

The regression estimation reveals that a significant positive relationship exists between Inventory Turnover and ROA (t= -0.388, p=0.000<0.05). We therefore use this as some evidence to empirically state that inventory turnover has an effect on companies' financial performance, and hence we reject the null hypothesis and accept the alternative hypothesis which state that there is significant relationship between inventory turnover and Return On assets of Small and Medium Enterprises in Nigeria. The implication is that small businesses that have higher inventory turnover tend to have better performance than those with lower inventory turnover.

Hypothesis Three
Ho: *There is no significant relationship between Inventory Conversion Period and return On Asset of Selected Small and Medium Enterprises in Nigeria.*

Findings from this study in table 4.2.3 above revealed an insignificant negative relationship between inventory conversion period and Return On Assets of Small and Medium Enterprises in Nigeria ((t=-0.525, p=0.603>0.05). therefore, it is statistically correct to accept the null hypothesis which state that there is no significant relationship between Inventory Conversion Period and Return On Assets of Small and Medium Enterprises in Nigeria. This implies that the longer days it takes SMEs to turn raw materials purchased into finished goods and sold to customers the lesser profits the firm will make. However, the result is not significant. The result meets our *a priori* expectation and consistent with the findings of Everett, Adam and Ronald (2010).

5.   Conclusion

Inventory Management is very vital to the success and growth of organizations. The entire profitability of an organization is tied to the volume of products sold which has a direct relationship with the quality of the product. Management does a lot to present a good organization to the public in terms of quality production. Good inventory management in any manufacturing organization, saves the organization from poor quality production, disappointment of seasoned customers, loss of profit and good social responsibility. This is done by ensuring timely delivery of raw materials to the factory and distribution of finished goods, in order of production to the warehouse.

If inventory management is not adequately maintained, production cannot meet the aspirations of customers which is loss of revenue to the organization. Right from procurement to the time of processing, quality of raw material is the chief determinant of the productive efficiency of any manufacturing concern. This varies from organization to organization. The processing machines and technology are, however imported. Other raw materials are water and sucrose which are locally sourced. The organizations combine the First-in-First-out (FIFO) and Average Methods in their inventory allocations.

6.   Recommendations

In line with the findings, the following recommendations are made:

a) The companies should ensure that stocks were sufficient to meet production requirements and customer demands at all times and avoid holding unnecessary surplus stocks that might increase holding costs and thus ensure enhanced customer satisfaction.
b) Inventory management should maximize space and timely delivery to avoid staying off production.
c) The overriding need for any method of stock allocation should be customer satisfaction.
d) Cost minimization techniques should be employed in the keeping and allocation of inventory.
e) Management should closely monitor and manipulate their inventory system to maintain. production consistency for organizational profitability and effectiveness.

References

Adamu, D.A. (2016). Effect of inventory management on financial performance: Evidence from Nigerian conglomerate companies. *International Journal of Social, Behavioural, Educational, Economic, Business and Industrial Engineering*, *10* (9), 3021-3025.

Adeyemi S.C. & Salami A.O. (2010). Inventory management: A tool of optimising resources in a manufacturing industry. *Journal of Social Science,23*(2), 135-142.

Atseye, F. A., Ugwu, J. I. &Takon, S. M.   (2015).   Determinants   of   working   capital management. *International Journal of Economics, Commerce and Management*, 3(2),1-11.

Everett, E., Adam, J.R. & Ronald, J. E. (2010). *Production and operations management* (5th ed.). Prentice hall India.

Gitau, R.W. (2016). *Inventory management practices and organizational productivity in parastatals in Kenya*. Master thesis of University of Nairobi.)

Kitheka, S. S. &Gerald, O. O.   (2014).   Inventory management automation and the performance of supermarkets in Western Kenya. *International Journal of Research in Management & Business Studies, 1(4), 9-18.*

Kamau, L. W., &Kagiri, A. W. (2015). Influence of inventory management practices on organizational competitiveness: A case of Safaricom Kenya Ltd. *International Academic Journal of Procurement and Supply Chain Management, 1* (5)*, 72-98.*

Kitheka, S. S. & Gerald, O. O. (2014). Inventory management automation and the performance of supermarkets in Western Kenya. *International Journal of Research in Management & Business Studies, 1(4), 9-18.*

Koin V. R., Cheruiyot, G. K.&Mwangangi, P. (2014). Effect Of Inventory Management On The Supply Chain Effectiveness in the Manufacturing Industry in Kenya: A Case Study Of Tata Chemicals Magadi, *International Journal of Social Sciences Management And Entrepreneurship 1*(2)*, 189-202.*

Munyao, R.M., Omulo, V.O., Mwithiga, M.W., &Chepkulei, B. (2015). Role of inventory management practices on performance of production department: A case of manufacturing firms. *International Journal of Economics, Commerce and Management, III* (5)*, 1625-1655.*

Naliaka, G., &Namusonge, N. (2015). Role of inventory management on competitive advantage among manufacturing firms in Kenya: A case study of Unga Group Limited. *International Journal of Academic Research in Business and Social Sciences, 5* (5)*, 87-104.*

Namagembe, S., &Munene, J. C. (2016). Information sharing inventory management and customer satisfaction: The case of manufacturing firms in Kampala. *International Journal of Economics and Management Sciences, 1 (6), 35-44*.

Nsikan, E.F., Etim, J.J., &Ime, T.U. (2015). Inventory management practices and operational performance of flour milling firms in Lagos, Nigeria. *International Journal of Supply and Operations Management, 1*(4)*, 392-406.*

Oballah, C. B., Waiganjo, D. T., &Wachiuri, J. K. (2015). Effect of inventory management practices on organizational performance in public health institutions in Kenya: A case study of Kenyatta National Hospital. *International Journal of Education and Research, 3*(3)*, 703-714.*

Ogbadu, E. E. (2009). Profitability through Effective Management of Material. *Journal Of Economics and International Finance, 1*(4), 099-105.

Ogbo, A. I., &Ukpere, W.I. (2015). The impact of effective inventory control and management on organizational performance: A study of 7up Bottling Company Nile Mile Enugu, Nigeria. *Mediterranean Journal of Social Science, 5* (10)*, 109-118.*

Onuoha, B. C. (2012). The environments of the manufacturing sector in Nigeria: Strategies towards vision 20: 2020. *International Business and Management, 5* (1), 67 - 74.

Shafi, M. (2014). Management of inventories in textile industry: A cross country research review. *Singaporean Journal of Business Economics and Management Studies, 2*(7), 45-59.

Pandey, I. M. (2005).*Financial Management. Enlarged Edition*. Vikas Publishing House Ltd. New Delhi, 904

Takim, S. A. (2014). Optimization of effective inventory control and management inmanufacturing industries: Case study of flour mills company, Calabar, Nigeria. *Journal of Emerging Trends in Engineering and Applied Sciences, 5*(4)*, 265-276.*

Okanda, S., Namusonge, G. S.&Waiganjo, E. (2016). Inventory management practice and the performance of the unit of Vaccines and Immunizations in the Minstry Health, Kenya. *International Journal of Academic Research in Business and Social Sciences, 6* (7)*, 142-158.*)