
INVENTORY MANAGEMENT: IMPERATIVE FOR ORGANIZATIONAL EFFECTIVENESS IN MANUFACTURING COMPANIES IN DELTA STATE: A CASE STUDY OF BETA GLASS PLC, UGHELLI AND PIKENSO INDUSTRIES, KOKO

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ABSTRACT

The study has been on inventory management as an imperative for organizational effectiveness in manufacturing companies in Delta State using Beta Glass Plc, Ughelli and Pikenso Industries, Koko, Delta State as case studies. The main objective of this study is to examine the impact of inventory management on the effectiveness of manufacturing companies in Delta State. Descriptive survey design was employed in carrying out the study. The population of the study is one hundred and twelve (112). A sample size of eighty six (86) was derived using the Krejcie and Morgan (1970) formula for sample size determination from a given population. Data were generated using questionnaire. Data collected were presented in tables and analyzed using descriptive statistics of mean and standard deviation to answer the research questions while Pearson product moment correlation coefficient was used in the hypotheses testing. From the analyses, it was found out that there is significant relationship between good inventory management and organizational effectiveness; inventory management has a significant impact on organizational productivity and there is a high positive correlation between good inventory management and organizational profitability. The study concluded that manufacturing companies in Delta State need to assess their level of

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inventory control which will serve as a guide to what they need to do in order to outperform their organizational performance by using a proper inventory management practices as a tool and make them closer to achieve business excellence. Against this background the study recommended, among others, that inventory management in manufacturing organization should be well-articulated whereby the management will increase support for training and retraining of staff to improve in inventory management for organizational effectiveness and maintain production consistency for organizational profitability.

INTRODUCTION

Inventory management comprises various actions taken by management to reduce cost, maintain production, sustain supply and reduce loss. According to Pandey (2005), the objectives of inventory management include: to maintain a large size of inventory for efficient, smooth production and sales operation, and to maintain a minimum investment in inventory to maximize profitability. Inventory management are the various techniques used to ensure that right quantity of an item is used at the right time and place. Inventory management is a critical management issue for manufacturing companies. Inventories are vital to the successful functioning of manufacturing organizations. According to Buffa and Sarin in Mukopi and Iravo (2015), there are several reasons for keeping inventory. Some, among others include, too much stock could result in funds being tied down, increase in holding cost, deterioration of materials, obsolescence and theft. On the other hand, shortage of materials can lead to interruption of products for sales; poor customer relations and underutilized machines and equipment. The approach to stock manufacturing company needs to be different from that in a trading or a commercial business. For a

Supermarket, the main reason for holding stock will be to provide good customer service. A high degree of such service will be required. If the cornflakes are out of stock, the customer will go elsewhere. The goods classed as "stock" will mainly be finished goods; ready for sale, ordering from suppliers will be done largely without considering the consequences on any manufacturing activity. For a manufacturing company, stock control systems must take account of manufacturing activities. Inevitably, there will be clashes or trade-offs between the level of stock carried, the service given to the customers, the cash flow involved in carrying stock and the influence stock ordering policy has on manufacturing costs. Stocks will not only cover finished goods stocks, but also raw materials, work-in-process and components ready for use. The term inventory in manufacturing organizations refers to the stock of raw materials, spare parts and finished products at hand at a given time (a tangible asset which can be seen, weighed or counted). In a wider sense inventory consists of usable but idle resources. The resources may be of any type; for example, men, materials, machines or money. When the resource involved is material or goods in any stage of completion, inventory is referred to as stock. Inventories may consist of raw materials, work-in-progress, spare parts/consumables and finished goods. It is not necessary that a company has all these inventory classes. But, whatever may be, the inventory items need management as, generally, a substantial share of an organization's funds is invested in them. Different departments within the same organization adopt different attitude towards inventory. For example, the sales department might desire large stock in reserve to meet virtually every demand that comes. The production department similarly would ask for stocks of materials so that the production system runs uninterrupted. On the other hand, the finance department would always argue

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for a minimum investment in stocks so that the funds could be used elsewhere for other better purposes (Vohra, 2008). Inventory represents an important decision variable at all stages of product manufacturing, distribution and sales, in addition to being a major portion of total current assets of many organizations.

In the past, inventory management was not seen to be necessary. In fact, excess inventories were considered as indication of wealth. Management by then considered over stocking beneficial. But today firms have started to embrace effective inventory management (Susan & Michael in Mukopi & Iravo, 2015). Managers now more than ever before need reliable and effective inventory control in order to reduce costs and remain competitive. Inventory management is a vital function to help ensure the success of manufacturing and distribution companies. The effectiveness of inventory management systems is directly measurable by how successful a company is providing high level of customer service, low inventory investment, maximum throughput and low costs (Ellram in Imeokparia, 2013). The challenge of productive inventory management is to support an upward trend in sales while keeping the investment at the lowest level consistent with adequate customer service. Control of inventory, which typically represents 45% to 90% of all expenses for business, is needed to ensure that the business has the right goods on hand to avoid stock-outs, to prevent shrinkage (spoilage/theft), and to provide proper accounting (Imeokparia, 2013).

STATEMENT OF THE PROBLEM

Improper inventory management has been a key source of business failure in both the emerging World and the Developed countries. This problem is even more serious in the Nigeria and Delta state specifically. Organisations have ignored the practice of savings from proper

inventory management. They see it as a necessary evil and not as an asset requiring management (Kamaou and Assumpta, 2015). Many inventory systems in Delta State are thus based on arbitrary rules and this has hindered the performance of the manufacturing sector in Delta state. A good inventory management is important to the successful operations of most organizations, unfortunately the importance of inventory is not always appreciated by top management. This may be due to a failure to recognize the link between inventories and achievement of organizational goals or due to ignorance of the impact that inventories can have on costs and profits. Managers are aware of the vital roles inventory plays in the activities of organizations. In most organizations, direct materials represent up to 50% of the total product cost as a result of the money entrusted on inventory thereby affecting the profitability of the organization. Yet organizational understanding of inventory management practices in many respects still has a long way to go. In fact, it is really only in the last decade or so that the direct link between inventory management effectiveness and corporate cash flow generation has been well understood by inventory managers in most organizations. Neglecting the importance of inventory in any organization can lead to the closing down of the company, especially if the factors of production are not well managed in order to meet customers' needs. The inventory problem consists of having insufficient supply of raw material, finished goods and spare parts components. The stock of items must be reasonable, meaning that it should not be too much or too little. The company should be in a position to meet customers' demand in terms of quantity and quality. Inventory management is of great importance especially for managers who must decide how to administer the rest of the logistic system more creatively in order to ensure that customer service does not suffer as a result

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of lower inventory levels. That is the reason why inventory management requires a particular attention or the support of the entire company's management levels in order to meet customers' satisfaction. Organizations at times do not control their inventory holding, resulting in under stocking and causing the organizations to stay-off production, thereby resulting in organizational ineffectiveness. This, therefore, creates relationship problems between inventory management and organizational productivity, profitability and effectiveness. Based on the above analogy, therefore, this seminar paper examines inventory management as imperative for organizational effectiveness in manufacturing companies in Delta State, with respect to: Beta Glass Plc, Ughelli and Pikenso Industries, Koko, both are manufacturing companies in Delta State.

OBJECTIVES OF THE STUDY

The main objective of this study is to examine the impact of inventory management on the effectiveness of manufacturing companies in Delta State. Specifically, the study sought:

1. To examine the relationship between inventory management and organizational effectiveness.
2. To determine the impact of inventory management on organizational productivity.
3. To evaluate the correlation between inventory management and organizational profitability.

Research Questions

The following research questions were raised to guide the study.

1. What is the nature of the relationship between inventory management and organizational effectiveness?
2. What is the impact of inventory management on organizational productivity?

3. To what extent does inventory management correlates with organizational profitability?

Research Hypotheses

The following hypotheses will be tested for the study.

1. Ho1: There is no significant relationship between inventory management and organizational effectiveness.
2. Ho2: There is no significant relationship between inventory management and organizational productivity
3. Ho3: There is no significant relationship between inventory management and organizational profitability

REVIEW OF RELATED LITERATURE

Concepts of Inventory

Inventory is the stock of any item or resource used in an organization. An inventory system is the set of policies and controls that monitors levels of inventory and determines what levels should be maintained, when stock should be replenished and how large orders should be (Chase and Aquilano, 1995). On the other hand, management is an act of organizational design. The basic functions of management are to identify the focal business organization areas of crucial contingencies and constraints so that the business organization can make structural responses to include these constraints and contingencies within its boundary (Onwuchekwa, 1993). Inventory constitutes an important item in the working capital of many business concerns vis-à-vis manufacturing companies. Net working capital is the difference between current assets and current liabilities. Inventory is a major item of current assets. A good inventory management is important to the successful operations of most organizations. According to Breuer

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(2009), inventory includes all types of stocks. For effective working capital management, inventory needs to be managed effectively. The level of inventory should be such that the total cost of ordering and holding inventory is the least. Simultaneously, stock out costs should also be minimized. Manufacturing companies, therefore, should fix the minimum safety stock level, re-order level and ordering quantity so that the inventory cost is reduced and its management becomes efficient. According to Scherr (2004), inventory planning helps to match inventory requirements to sales and production needs. It also helps to know inventory acquisition and usage during lead-time, quantity on hand and on order as well as the levels of safety stock. There are different methods of planning inventory needs including managerial opinion (or judgmental) and time series data. Scherr, contends that forecasts based on opinion relies on the analysis of subjective input obtained from various sources such as opinions of sales staff, managers and executives as well as consumer surveys. Forecasts on time series data are based on observations taken at regular intervals over a period of time (daily, weekly, monthly and so on) and are made on the assumption that future inventory demands can be estimated from the past. The accuracy of inventory planning depends on whether the forecast is made in conditions of relative certainty or uncertainty.

A firm's profitability depends on the successful sale of its product or service. For non-service oriented businesses, sufficient inventories must be available to meet demand. In determining an optimal level of goods in inventory, sales must be forecasted and developed. Since sales depend on many factors outside of a business' control, inventory management can be very challenging. Holding inventory levels at less than what is needed to support sales will cost the firm business. On the other hand, since

holding inventory involves costs such as storage and insurance expenses, excess inventory must also be avoided if minimal cost and maximum profits are desired (Maysami, 2009). In a manufacturing firm, it is assumed that inventories represent half of current assets. Inventory is also the component of working capital that can be best affected by a firm itself. There are three possible types of inventories in a typical manufacturing firm: inventories of raw materials, work-in-progress and finished goods (Oroka, 2013). Raw materials are goods that have not yet been taken to production in a firm. Work-in-progress includes materials that are already in the production process but have not been completed yet and are therefore not ready to be sold. The inventory of finished goods is for completed products that can be sold to customers (Arnold, 1998). Typically, the more finished the product is, the more working capital is tied up in the inventory. The size of inventory is affected by several factors: it depends on the predictability of sales and production, the length of time required by production and the nature of the product. If the product is perishable by nature, stock levels are held low, whereas other types of products are held in stock in order to offer better choice for customers (Arnold, 1998).

It is challenging for a firm to find the right balance between the costs of holding inventories and costs arising from low inventory levels. Holding inventories at high levels ties up working capital and increases additional storage and insurance costs. Also the risk of obsolescence and deterioration is higher. On the other hand, by holding larger stocks, a company can ensure that its production is not disturbed because of lack of materials which keep their customers satisfied. In addition, gaining remarkable discounts through purchasing in large quantities is attractive to some companies and leads to higher level of inventories.

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Through this procedure, a firm is able to increase its profits as long as the costs of holding larger inventories are less than the amount of discount. When inventory level is held low, orders need to be done more often, which leads to higher administrative costs and more physical handling of the goods. Administrative costs come from extra work, such as typing and checking ordering forms, accepting and checking arrived goods, and checking the invoices. There is also the risk of stock-outs which may cause loss of sales and profits in short period, and loss of goodwill in the long-run (Arnold, 1998; Mott, 2005). To balance the conflicting factors related to the management of inventories, many models for managing inventories have been developed. The purpose of these models is to assist in finding the optimal level for inventory. For example, economic order quantity (EOQ) is used to calculate the inventory level where the total inventory holding costs and ordering costs are in minimum, and Just-in-time (JIT) is based on long-term contracts with suppliers and deliveries exactly in needed amounts and times (Mott, 2005). Inventory, to many business owners, is one of the more visible and tangible aspects of doing business. Raw materials, goods in process and finished goods all represent various forms of inventory. Each type represents money tied up until the inventory leaves the company as purchased products. Likewise, merchandise stocks in a retail store contribute to profits only when their sale put money into the cash register. In a literal sense, inventory refers to stocks of anything necessary to do business. These stocks represent a large portion of the business investment and must be well managed in order to maximize profits (Hedrick, Barnes, Davis, Whybark & Krieger, 2011). In fact, many businesses cannot absorb the types of losses arising from poor inventory management. Unless inventories are controlled, they are unreliable, inefficient and costly. Curtis (1991) averred

that inventory is an idle resource at best, and a liability at worst due to the sensitivity that lies in adopting the 'perfect' inventory management strategy. Koumanakos (2008) make mention that more often than not, excessive inventory is an indication of sloppy and inefficient management (board), poor forecasting, haphazard scheduling and inadequate attention to detail given to processes and procedures. Koumanakos further added that excess inventory can lead to:

1. Having the wrong type of inventory on hand,
2. Having the inferior inventory quantity on hand,
3. Having the right inventory on hand but at the wrong location, and/or
4. Having the right inventory on hand too early and/or too late.

On the other hand, too little inventory often disrupts manufacturing operations and increases the likelihood of poor customer service. Stemming from the above, it is clear that inventory can be regarded as both an asset and a liability for any business. In the statement of financial position, inventory is shown as a current asset and is generally utilized (bought and sold) to generate a steady stream of income for a business but if ineffectively managed, inventory can become a current liability (by not 'moving') in the form of potential cash (that is tied up) and cannot be converted. Notwithstanding, Pillai (2010) was of the opinion that inventory management is a key driver in the stimulation of business development – particularly by becoming more competitive as well as attaining operational performance in relation to the effective 'movement' of inventory. Taking the above into account it is clear that inventory management is of paramount importance.

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Inventory Management

Inventory management is as important as it can either 'make or break' a business from a profitability and/or liquidity point of view. Large organizations are reported to make use of inventory management practices not only as a tool, but rather as a type of strategy to improve overall efficiency to become 'worthy' competitors in international markets (Imeokparia, 2013). Inventory management, therefore, has been defined in many ways by many authors. As expected, these authors defined inventory management based on their perception of the subject matter. Chalotra (2013) defined inventory management as controlling the business stock or controlling the flow of goods and services as per their demand while Deveshwar and Modi (2013) averred that inventory management as methods that company use to organize, store and replace inventory to keep an adequate supply of goods at the same time minimizing cost. In manufacturing, inventory management is even more important to keep production running. Every minute that is spent down because of the supply of raw materials will cost the company unplanned expenses. In this vein, inventory management is more than a means to control costs; it becomes a way to promote the business. The main objective of inventory management is to keep the inventory level of each element of the supply chain stable enough so as to satisfy the requirements of customers by ordering products from its immediate supplier of the supply chain (Garcia, Ibeas, Herrera & Vilanova, 2012). As suggested by Chalotra (2013), for proper inventory management, services of middle-men or intermediaries are required which is often known as supply chain. Inventory holding plays an important role in modern supply chains. Proper inventory management improves the responsiveness of supply chains which in lieu adds to the organizational performance (Khan, Bakkappa, Bhimaraya & Sahay, 2009). Thus, Chalotra

(2013) stated that the overall supply chain should be structured to meet the needs of different products and customer groups so as to ensure effective inventory turnover. The alignment of supply chain strategy, inventory management and product characteristics are extremely important for the successful operations of a company (Srinivas, 2013). John, Theodore and Terry (2008) stated that improvement in inventory is the responsibility of many functional managers due to their deep knowledge of the functional activities, an inventory of the skills necessary as well as the impact of the various skills on functional efficiency and effectiveness are required. The implementation of proper inventory management does not come without a risk factor and organizations should review the benefits and drawbacks of inventory management as the implementation and the impact of these practices can vary from organization to organization and from country to country. In one survey regarding inventory management conducted at Jimmy Market & Deli by Karen and Diana (2009), the result stated that among the barriers for proper inventory management are:

1. maintaining the stock – the owners never consistently stocked items that were not part of the core stock;
2. inconsistent stocking;
3. keeping the owner motivated to keep the produce section stocked;
4. high fixed and variables cost to operate;
5. no experience with inventory management, and
6. frequently indifferent to suggestions on ways to improve inventory management such as writing down a list of items that need to be restocked or other suggestions for inventory control.

Nwandu (2006) asserted that inventory management is a form of administrative control that is particularly

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essential in all manufacturing, wholesale and retail organizations. The essence of inventory, according to Nwandu, is "to have the right goods quality and quantity, at the right place and time". From the foregoing therefore, one can infer that inventory management is the act of ensuring that balanced items of stock are maintained at the right quantity, quality, place and time in an organization to ensure organizational effectiveness and business continuum.

Theoretical Framework

Thomas-Foster Jr. (2008) defined systems theory as theory that explain systems as a set of two or more elements where the behaviour of the elements can give impact to the other behaviour and systems as a whole and each of the elements are independent. Therefore, systems theory provides the idea of behaviour of such a system is inter-dependent among the elements that form the organizations. The theorist stated that the operational aspects of the systems is depending on the systems elements itself which include the elements of input, transformation, output, control, feedback, boundaries and environment. The theory is related to the present study because the study aims at examining inventory management as a system and how it impact on the organizational effectiveness as output of productivity and profitability after the transformational process and strategies as input. Koumanakos (2008) studied the effect of inventory management on firm performance and 1, 358 manufacturing firms operating in three industrial sectors in Greece, food textiles and chemicals were used in the study covering 2000 – 2002 period. The findings suggested that the higher the level of inventories preserved by a firm, the lower the rate of return. Agus and Noor (2006) did measure the perception of managers about the impact of inventory management practices on financial performance of manufacturing firms

in Malaysia. However, circumstances in Malaysia could be different from those in Delta State, Nigeria. Thus, there is no study that has been conducted on the impact of inventory management as a relationship to organizational effectiveness, productivity and profitability of manufacturing companies in Delta State, Nigeria. This implies that there is a gap in literature that the purpose of this study intends to fill.

Empirical Literature

Boniface et al (2015) investigated the effect of inventory warehousing systems on the financial performance of manufacturing firms in Kenya. The study used the descriptive statistics and the regression analysis. A sample of 30 persons was selected from a population of 216 employees. The result revealed a positive and significant relationship between financial performance and inventory warehousing systems. The study by Kamai and Assumpta (2015) focused on the influence of inventory management practices on organisational competitiveness using Safaricom in Kenya as a case study. The descriptive statistic was used for the analysis. A sample of 80 respondents were used, the result revealed that inventory management practices had significant influence on organisational performance. Stephen (2014) investigated the optimization of effective inventory control and management in manufacturing industries. Using Flour Mills in Calabar as a case study and the descriptive statistic, the result showed that effective inventory control and management is necessary for the performance of manufacturing industries. Cynthia and Amuhaya (2015) studied the effects of inventory management procurement function of Sugar manufacturing companies in Kenya. The study used the descriptive statistic. A sample of 30 procurement personnel was drawn from a population of 100 procurement personnel. The result revealed strong

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relationship between inventory system, supplier partnership and the procurement function of manufacturing companies. Madhusudhana and Prahlada (2009) studied inventory turnover ratio as a supply chain performance measure. Using the descriptive statistics, the study revealed that inventory turnover ratio improved supply chain performance.

Methodology

These are research procedures and materials that are used in acquiring data or information through research process. It include the research design, population, sample and sampling techniques, research instrument and methods of data collection and analysis. Research design provides overall activities for the collection and analysis of data of a study (Mandara, 2008). The study of inventory management as an imperative to organizational effectiveness in manufacturing companies in Delta State was carried out to assess the impact of proper inventory management on organizational performances in Beta Glass Plc, Agbarho and Pikenso Industries, Koko, both are manufacturing companies in Delta State. Descriptive survey design was employed in carrying out the study. The population of the study is one hundred and twelve (112). A sample size of eighty six (86) was derived using the Krejcie and Morgan (1970) formula for sample size determination from a given population. The research was conducted with the use of questionnaires to generate data. Questionnaire was used for the purpose of obtaining information and data from the respondents. Krejcie and Morgan (1970) argued that the use of questionnaire to obtain data is the best way of gathering information. Copies of the questionnaire administered and collected were computed using Statistical Package for the Social Sciences (SPSS) software. Two types of analysis were used; descriptive statistics and correlation analysis. Descriptive statistics

was adopted to describe phenomena and to describe the study sample with mean and standard deviation of data SPSS. In terms of correlation, AMOS 4.0 version was used to test the hypotheses.

Data Presentation, Analysis and Interpretation of Results

The data obtained from the field were presented and analyzed with descriptive statistics to provide answers to the research questions while the corresponding hypotheses were tested with Pearson's Product Moment Correlation at 0.05 alpha level.

Research Question One

What is the nature of relationship between inventory management and organizational effectiveness?

Table 1: Descriptive Statistics of the Relationship between Inventory Management and Organizational Effectiveness

Variables	Mean	Standard Deviation	No. of Respondents
Inventory management	15.4302	2.17223	86
Organizational effectiveness	15.4070	1.96066	86

Table 1 shows the descriptive statistics of the mean responses of manufacturing companies' respondents on the inventory management as imperative for organizational effectiveness. With the mean response of 15.4302 and standard deviation of 2.17223 for inventory management and mean response of 15.4070 and standard deviation of 1.96066 for organizational effectiveness and number of respondents of 86, however, the respondents to this study showed a relationship in their mean responses which implies that there is a significant relationship between the independent variable

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and dependent variable of the study for manufacturing companies in Delta State to operate effectively. This indicates that there is about the same variability of data points between the independent variable and dependent variable.

Research Question Two

What is the impact of inventory management on organizational productivity?

Table 2: Descriptive Statistics on the Impact of Inventory Management on Organizational Productivity

Variables	Mean	Standard Deviation	No. of Respondents
Impact of inventory management	12.5581	2.71208	86
Organizational productivity	17.8837	2.68949	86

Table 2 reveals the descriptive statistics of the impact of inventory management on organizational productivity. With the mean response of 12.5581 and standard deviation of 2.71208 for impact of inventory management and mean response of 17.8837 and standard deviation of 2.68949 for organizational productivity and the number of respondents of 86, by careful observation of standard deviation values, there is no much difference in terms of the standard deviation scores. This shows that there is about the same variability of data points between the dependent and independent variables. This implies that inventory management has a significant impact on the organizational productivity of manufacturing companies in Delta State.

Research Question Three

To what extent does inventory management correlate with organizational profitability?

Table 3: Descriptive Statistics on the Extent Inventory Management Correlate with Organizational Profitability

Variables	Mean	Standard Deviation	No. of Respondents
Extent of inventory management	15.4302	2.17223	86
Organizational profitability	15.1512	1.96749	86

Table 3 shows the descriptive statistics of the inventory management and organizational profitability, with a mean response of 15.4302 and standard deviation of 2.17223 for inventory management and a mean response of 15.1512 and standard deviation of 1.96749 for organizational profitability and the number of respondents of 86. Therefore, by careful observation of standard deviation values, there is no much difference in terms of the standard deviation scores. This indicated that there is about the same variability of data points between the dependent and independent variables. This implies that, there is strong correlation between inventory management and organizational profitability in manufacturing companies in Delta State.

Testing of Hypotheses
Hypothesis One

There is no significant relationship between inventory management and organizational effectiveness.

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Table 4: Correlations between Inventory Management and Organizational Effectiveness

		Inventory Management	Organizational Effectiveness
Inventory Management	Pearson Correlation	1	.859**
	Sig. (2-tailed) N	86	.000 86
Organizational effectiveness	Pearson Correlation	.859**	1
	Sig. (2-tailed) N	.000 86	86

Table 4 shows the Pearson's correlation for relationship between inventory management and organizational effectiveness. The correlation coefficient shows 0.859. The value shows that correlation is significant at 0.05 alpha level (2-tailed) which revealed that, there is a positive relationship between inventory management and organizational effectiveness ($r = .859$). The computed correlation coefficient is greater than the table value of $r = .195$ with 84 degree of freedom ($df = n-2$) at alpha level of 0.05 for a two-tailed test ($r = .859, P < .05$). Therefore, since the calculated $r = .859$ is greater than the table value of $.195$, the alternative hypothesis is accepted and the null rejected. This implies that, there is a high positive relationship between inventory management and organizational effectiveness in manufacturing companies in Delta State.

Hypothesis Two

There is no significant relationship between inventory management and organizational productivity

Table 5: Correlations between Impact of Inventory Management on Organizational Productivity

		Inventory Management	Organizational Productivity
Inventory Management	Pearson Correlation	1	.469**
	Sig. (2-tailed) N	86	.000 86
Organizational effectiveness	Pearson Correlation	.469**	1
	Sig. (2-tailed) N	.000 86	86

Table 5 reveals the Pearson correlation coefficient for impact of inventory management on organizational productivity. The correlation coefficient shows $r = 0.469$. This value revealed that a correlation is significant at 0.05 level (2-tailed) which shows that there is positive impact of inventory management on the organizational productivity of manufacturing companies. The calculated value of the correlation coefficient is greater than the table value of $r = .195$ with 84 degree of freedom at alpha level of 0.05 for a two-tailed test ($r = .469, df = 84, p < 0.05$). Hence, since the calculated value of correlation coefficient of $r = .469$ is greater than the table value of $r = .195$. The alternative hypothesis is therefore validated and the null hypothesis invalidated. This confirms that, there is a positive correlation between impact of inventory management and organizational productivity in manufacturing companies in Delta State.

Hypothesis Three

There is no significant relationship between inventory management and organizational profitability.

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Table 6: Correlations between the Extent of Inventory Management and Organizational Profitability

		Inventory Management	Organizational Profitability
Inventory Management	Pearson Correlation	1	.750**
	Sig. (2-tailed)	86	.000
	N	86	86
Organizational effectiveness	Pearson Correlation	.750**	1
	Sig. (2-tailed)	.000	86
	N	86	86

Table 6 reveals the Pearson correlation coefficient for the extent of inventory management and organizational profitability. The correlation coefficient shows $r = .750$. This value revealed that correlation is significant at 0.05 level (2-tailed) which shows that there is positive relationship between the extent of inventory management and organizational profitability of manufacturing companies. The calculated value of the correlation coefficient is greater than the table value of $r = .195$ with 84 degree of freedom at alpha level of 0.05 for a two-tailed test ($r = .750, df = 84, p < 0.05$). Since the calculated value of correlation coefficient of $r = .750$ is greater than the table value of $r = .195$. The alternative hypothesis is therefore upheld and the null hypothesis rejected. This means that there is a strong correlation between the extent of inventory management and organizational profitability of manufacturing companies in Delta State.

Discussion of Findings

This study focused on inventory management as imperative for organizational effectiveness in manufacturing companies in Delta State. The findings of the study acknowledge that proper inventory management is very crucial for organizational

effectiveness, productivity and profitability for the advancement of manufacturing companies. The study revealed that there is a strong positive relationship between inventory management and organizational effectiveness in manufacturing companies in Delta State, there is a positive correlation between impact of inventory management and organizational productivity in manufacturing companies in Delta State and there is a strong correlation between the extent of inventory management and organizational profitability of manufacturing companies in Delta State. Thus, the present study reveals that organizational effectiveness, productivity and profitability of manufacturing companies can be enhanced with effective and frequent inventory management in their operational processes. This finding is in line with the findings of Mwangi and Nyambura (2015) which found that inventory control of cost, continuous supply, minimized cost and increased production were highly statistically significant and hence influence performance of food processing companies. Also, the findings of Mole in Mwangi and Nyambura (2015) showed that there is every need for all production companies to support their production processes with proper inventory management for optimum better benefit. The study of Johnson (2008) which found that good inventory management in manufacturing company will save it from poor quality production, disappointment of seasoned customers, loss of profit and good corporate social responsibility, correlates with the present study.

CONCLUSION

The present study provides an understanding of the benefits of proper inventory management as imperative for organizational effectiveness, productivity and profitability towards the advancement of manufacturing companies in Delta State. The study has shed light on the state of inventory management as good provision

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and technique for influencing organizational performance. The study clearly indicate the necessity for manufacturing companies to provide support that would help them to implement the plan strategy if they are to successfully manage inventory. The study concluded that manufacturing companies in Delta State need to assess their level of inventory control which will serve as a guideline to what they need to do in order to outperform their competitors by using a proper inventory management practices as a tool and make them closer to achieving business excellence.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made.

1. Inventory management in manufacturing organizations should be well-articulated by increasing support for training and retraining of staff to improve inventory management for organizational effectiveness.
2. The manufacturing organizations should diversify their inventory system to suit specific needs of production for sustainable productivity.
3. Management of manufacturing organizations should closely monitor and manipulate their inventory system to maintain production consistency for organizational profitability and effectiveness.

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