IMPACT OF INVENTORY MANAGEMENT ON FINANCIAL PERFORMANCE FROM MANUFACTURING ORGANIZATION

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ABSTRACT

In recent times, the world has witnessed a severe economic crisis that has affected many international companies and economies that had planned their production rates based on marketing forecasts created before the global crisis. This study explores the relationship between inventory control and the financial performance of a particular company through the use of the Case Street approach. It also examines the factors that reverse the inventory control process. The results show that a company's profitability has a significant relationship with inventory management and suggests that if inventory is managed effectively it ensures higher profits, while poor management translates to poor financial performance.

KEYWORDS: *Inventory Management, Financial Performance, Manufacturing Organization.*

INTRODUCTION

The process of managing inventory is a delicate matter and a difficult task in any business. Displaying misleading or distorted information in financial statements, which are considered to be the most reliable source of information that depends on making the right decisions fail to accurately reflect the outcome of the activity and the financial situation in an honest and fair manner,company or financial unit for that period. Interest has increased in developing accounting methods so as to include an honest and fair picture of the outcome of the activities as well as adequate disclosure to provide the financial position of the financial unit.

All types of inventory represent a key component of capital and the success or failure of a business depends on the performance of its inventory management, as effective inventory management not only helps solve liquidity problems but also increases the company's profitability. Inventory also plays an important role in determining the financial position of these organizations and contributes effectively in determining their profits. Inventory is one of the most important factors in the list of financial conditions, especially for commercial companies, because it represents the largest value of their assets, any defect in the value of that stock or its valuation is filled by incorrect financial statement output.

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It is the inventory management in the association that manages the identification and recording of every item in stock. Inventory management is essentially about verifying the size and condition of stored goods, and it is necessary in various areas of the office or organization to secure common and organized ways of production, compared to the random but annoying effect of running out of materialsor goods. Powerful inventory management determines how to maximize an organization's profits. The expansion of benefits depends on limiting costs and increasing income. Amplification is a productive concept that involves increasing value without developing assets. As a result, as a business organization, stocks are of central importance, and so are business benefits. Inventory issues can be a source of frustration for a business in terms of more or less available products. If a private enterprise is likely to face a serious asset stock-out, the output may fail.

Financial performance refers to the emotional extent to which a firm can properly use assets from the core techniques of its large business to create deals. The term is used to describe the general proportion of the overall financial interest of the organization during the guarantee period and can be used to examine competing companies in the comparative industry. One example in the literature shows that there is a positive relationship between the two, while others show that there is not a very large relationship between inventory implementation and financial implementation.

REVIEW OF LITERATURE:

Roughly, according to **Brackus (2000)**, half the quality of a product is determined by the characteristics of the raw material in the current production technology. It is important to use the right raw materials to produce high quality products at low cost. Technically, the raw material determines the right starting point for the industry. High quality raw materials are on the market, and are equally available to all users for their disposal. Proper selection of raw powders and their subsequent treatment are important for successful competition in the market. Various factors affect the properties of the raw powder.

According to **Langbir & Stoughton (2001)**, a successfully implemented inventory management program takes into account such things as purchasing goods on demand, seasonal differences, changing usage patterns, and monitoring theft. A primary step in the inventory management process is to determine the approximate cost of carrying inventory. Inventory management is an important task to help insure the success of manufacturing and distribution companies.

According to **Krishna and Yew (2010)**, inventory is a stock that has a resale value for profit. This represents the company's biggest expense, especially for trading firms, wholesalers and retailers. It's referred to as a "pile of money" on the shelf. Therefore, proper management of inventory should be done to facilitate the operations of the company. Inventory control is primarily about specifying the size and percentage of items in stock.

Rajeev Narayan Pillai (2010) has observed in his study 'Inventory Management Performance in Machine tool SMEs: What Factors do Influence them?' that SMEs in the inventory intensive manufacturing industries are likely to be aware of the need and importance of IM methods. Our study on machine tools SMEs in Bangalore suggests that these SMEs, without exception, are indeed aware of the importance of IM practices. However, when it comes to practice, almost a quarter of them have not practiced IM at all. This is mainly due to lack of motivation as well as lack of immediate financial profit. Of the remaining, 25 SMEs practiced IM based on the rules of thumb. The number of those who followed EOQ / ABC is around 30 while only 14 SMEs followed modern IM methods like computerized IM / JIT / VMI. Thus modern IM methods are limited only to minorities in the inventory intensive machine tools manufacturing industry. Our subsequent analysis showed that those who adopted better IM practices demanded more frequent stock checks as well as raw materials. Studies have shown that the two most important parameters of IM are per sale inventory and ITR. SMEs that can get good IM should be able to get low assets per sale as well as high ITR. If so, modern SMEs that adopt modern inventory methods will be able to achieve lower inventory costs and higher ITR per sale. Our study showed that this is indeed the case with machine tool SMEs. Our final analysis clearly shows that while good practices of IM have a positive impact, per sale listing has a negative impact on ITR. All of this enables us to infer that

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SMEs should be encouraged to adopt better IM practices as this will enable them to earn lower assets and higher ITR per sale.

Adamu Danlami Ahmed et al (2015) are observed in their research study 'Effect on Inventory Management on Financial Performance: Evidence from Nigeria Conglomerate Companies' that it has been shown that inventory management is significantly related to a company's profits. This means that better management of the inventory cycle will increase the company's profits. Inventory management plays an important role in financial management decisions. It is important to pay special attention to the management to ensure that the stock is not kept for too long. With that, capital will not be recruited; Like money can be used elsewhere to earn interest or good profits. Based on this, it is recommended that the combined company should try to see that the modern method of inventory management that has been implemented is management. To track the movement of goods, to avoid necessary delays in the manufacture and WIP items in stores and warehouses.

Enock Gideon Musau (2017) et. al (2017) are observed in their research paper 'The Effect of Inventory Management on Organizational Performance Among Textile Manufacturing Firms in Kenya' that Textile companies in Nairobi County appear to be aware of the importance of inventory management in the supply chain and have put in place clear mechanisms to monitor the flow of smooth and transparent materials that can be tracked with the help of supply systems and have invested in existing content flow systems. Systems like ERP, VMI, EOQ and RFI have the ability to optimize inventory and physical flow. Management should encourage the continued use of modern inventory systems to optimize supply chain performance and consequently improve the overall performance of companies. The current study was limited to textile companies in Nairobi County. Therefore, the context in which the study was conducted may have been affected. Researchers have therefore recommended that a similar study be repeated in textile companies in other sectors to improve the external validity of the findings.

Difference between Inventory Control and Inventory Management:

List control technology has evolved over time to minimize all aspects of manufacturing companies. There is a slight difference between inventory control and inventory management, but inventory control ensures that productivity is optimized and thus customer satisfaction is ensured. The main inventory control systems include permanent and periodic inventory systems. Barcode systems and radio frequency identification systems are examples of inventory management systems that fall into the realm of inventory control. These systems ensure a good track of content by providing enough information needed to control it. The system requires a method to identify inventory and their data through the use of barcode tags. The presence of a main database is also required which includes further analysis of all materials and information, preparation of reports and final report of inventory management process.

The sustainable inventory system ensures constant updating of data on inventory when materials are added or removed from the warehouse or when moved from one location to another. This system of inventory is preferred, as its results are more accurate. The system is used with information about the quantity of inventory and the location of the bins updated by the warehouse staff in the required time. The periodic system of inventory does not keep track of the data on inventory day by day, but at the beginning of the inventory financial period as well as at its end. This system uses a physical method of list inventory. The purchase account is updated after the physical calculation so that adjustments can be made in the final financial statements.

RESEARCH METHODOLOGY:

Convergence adapted to the design of parallel mixed methods, according to the study. Under this design, the qualitative descriptive method was combined with the quantitative explanatory method and first described the conceptual supply chain determinants and performance criteria used by manufacturing companies and then tried and explained the cause-and-effect relationship between supply chain determinants and purchases. The choice of this design was informed by the desire to fully

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analyze the problem by merging the performance qualitative and quantitative data. The population of the present study includes a complete set of 15 companies engaged in manufacturing the procurement department and the employees working in that department.

Stratified and simple random sampling methods were used to select procurement department staff from the respective manufacturing organizations and the final sample consisted of 124 procurement department staff and 15 procurement department heads. Both primary and secondary data were used for the study. Questionnaires and interview schedules were created in conjunction with two sets of study units designed to collect primary data for study purposes, and mixed methods are consistent with research design. Secondary data includes materials related to supply chain management and accredited publications. Data were first created and refined using descriptive statistics that included meanings, standard deviations, skewness and kurtosis, and standardized scores.

RESEARCH FINDINGS AND DISCUSSION:

The study targeted 184 procurement department staff and 15 department heads. The need to monitor response rates is based on the urge to find out if the response rate was representative of the target population, and the supply chain can predict the impact on driver purchasing performance. Out of 145 samples of 124 staff and 15 department heads, 106 staff and 9 department heads participated in the study. The total response rate was distributed as 79.31% as shown in Table 1.1.

Table 1.1 Response Rate

Sr. No.	Respondent Category	Expected Sample Size	No of Respondent	Response Rate
1.	Procurement Employee	130	106	81.53
2.	Head of Procurement Department	15	9	60.00
	Total	**145**	**115**	**79.31**

Inventory Management:

This objective sought to find out the effect of inventory management on the performance of manufacturing companies. Before examining the impact, a quantitative analysis of employee questionnaire responses was conducted to identify their awareness of the inventory management methods used in the firm. A total of six items were used to measure purchasing staff opinions on inventory management in the firm.

The total mean of 4.34 relative to the standard deviation of 0.615 indicates that procurement employees appeared to consistently agree to be aware of inventory management practices on offer in their respective companies (Table 4.5). The main methods identified for inventory management include: achievement of demand forecast to determine stock coverage (M = 4.22, SD = 0.717); Appropriate material handling to address stock out (M = 4.44, SD = 0.552); Timely response to customer references (M = 4.45, SD = 0.537); Ensuring inventory accuracy (M = 4.36, SD = 0.569); Optimizing capacity utilization (M = 4.31, SD = 0.654); And achieving optimal inventory (M = 4.30, SD = 0.660).

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Table 1.2 Inventory Management Practices

Sr. No.	Statement	Mean	Std. Dev
1.	The firm obtains accurate demand estimates to determine stock coverage	4.22	.719
2.	The firm has handled the right materials in case of stock out	4.44	.552
3.	The company responds in a timely manner to customer references to ensure stock availability	4.45	.537
4.	The company has mechanisms to ensure the accuracy of inventory	4.36	.569
5.	The firm optimizes the use of its capacity	4.31	.654
6.	The firm achieves optimal inventory	4.30	.660

Total Mean: 4.35, SD= .615

The findings on the methods used for inventory management in the sampled production organizations illustrate the importance attached to inventory management as a supply chain determinant of performance. The current state of the art methods for inventory management indicates a desire not to miss opportunities, and investing in the management of the flow of votes has the potential to ensure time and efficiency in the delivery of products to end users. The use of various methods to manage inventory found in the present study is keen for manufacturing companies to focus on synchronizing the flow of materials in their supply chain. This supports the findings that show that companies use a number of methods to coordinate the flow of content in order to achieve high efficiency.

The manufacturing companies in the Adityapur Industrial Area Development Authority (AIADA) respond in a timely manner to customer references and show that they have the right mechanism for inventory accuracy, which confirms the urge to stay competitive by controlling inventory in these companies. Other studies have also shown the usefulness of inventory management to improve efficiency; improving return on sales and return on equity, enhancing robust performance by holding stocks and ordering costs and increasing competitiveness.

Model Summary Result:

The model summary statistics displayed in Table 1.3 show that when background features were entered in Model 1, the R-square was 0.048, meaning that the difference in background features contributed only 4.8% to the performance. However, when the conceptual determinant was entered in Model 2, the coefficient of determination (r square) increased to 0.828. The corresponding R-square change was 0.784 which means that the difference between the determinants contributed 78.4% to the performance.

Table 1.3 Model Summary

Model	R	R²	Adjusted R²	Std. Error	R² Change	F Change	Df1	Df2	Sig. F Change
1	.216	.046	.009	.52547	.048	1.229	4	101	.305
2	.910	.828	.812	.22867	.784	87.471	5	96	.000

Regression Coefficient:

Examination of the regression coefficients displayed in Table 1.4 shows that although the coefficients of background characteristics were not significant, all conceptual determinants were significant.

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Model	Unstandardized Coefficient		Standardized Coefficient		
	B	Std. Error	Beta	T	Sig
(Constant)	4.593	.269		17.211	.000
Inventory Management	.151	.059	.176	2.541	.015

CONCLUSION AND RECOMMENDATION:

Inventory management is a supply chain determinant of performance. Manufacturing companies at AIADA appear to be aware of the importance of inventory management in the supply chain and have put in place clear mechanisms to monitor the smooth and transparent flow of materials in the supply chain and have invested in on-going content flow systems. Systems like ERP, VMI, EOQ and RFI have the ability to optimize inventory and physical flow. Management should encourage the continued use of modern inventory systems to optimize supply chain performance and consequently improve the overall performance of companies. The present study was limited to the manufacture of frames at AIADA (Adityapur Industrial Area Development Authority) Jamshedpur. Therefore, this conclusion may have been influenced by the context in which this study was conducted. Researchers have therefore recommended that similar studies be repeated in manufacturing companies in other sectors to improve the external validity of findings.

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