

The Role of Material Management on Organizational Performance: A Case Study in Commercial Bank of Ethiopia

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ABSTRACT

Recently, the Ethiopian financial sector experienced higher growth, which coincides with the Persistent profit trend and data obtained from the respective banks shows that the largest share of expense are attached with material cost. Owing to this fact the main aim of this thesis is to identify the role of material management on organizational performance in particular of commercial bank of Ethiopia; the study, with the owe of the above Fact, will employs qualitative and quantitative research design utilizing both descriptive & inferential statistics using of census sampling method. The thesis result reveals the study established that there is practice of planning and using it, but federal proclamation is not well obeyed. This concluded that the bank's endeavor to material procurement is not backed by proper practice based on law. In addition, inventory control system is employed only averagely that it lacks consistency and profundity. However, annual inventory practice is carried out in the bank implying linger of a year to get information on materials procured and used.

Keywords: Material management, Procurement, material handling, Purchasing, material inspection, inventory control.

1. INTRODUCTION

Material management is simply the process by which an organization is supplied with the goods and services that it needs to achieve its objective of buying, storage and movement of materials. Material management is related to planning, procuring, storing and providing the appropriate material of right quality, right quantity at right place in right time so as to co-ordinate and schedule the production activity in an integrative way for an industrial undertaking. Most industries buy materials, transport them in to the plant, change the material in two parts, assemble parts in to finished products, sell and transport the product to the customer. All these activities of purchasing of material flow of materials, manufacturing them in to the product, supply and sell the product at the market requires various types of materials to manage and control their storage, flow and supply at various places. It is only possible by efficient material management. The material requirement planning, purchasing, inventory planning, storage, inventory control, material supply, transportation and material handling are the activities of materials management.

1.1 Back Ground of the study

Materials management is a process for planning, executing and controlling field and office activities in construction. The goal of materials management is to insure that construction materials are available at their point of use when needed. The materials management system attempts to insure that the right quality and quantity of materials are appropriately selected, purchased, delivered, and handled onsite in a timely manner and at a reasonable cost. materials management is the system for planning and controlling all of the efforts necessary to ensure that the correct quality and quantity of materials and equipment are properly specified in a timely manner, are obtained at a reasonable cost, and, most importantly, are available at the point of use when required. **(Mohammed KASHIF UL ASAD (2015)** Evaluation of Performance Measures for Materials Management Process in Industrial Construction Projects. page 1, Material management is an approach for planning, organizing, and controlling all those activities principally concerned with the flow of materials into an organization.

The scope of Materials Management varies greatly from company to company and may include material planning and control, production planning, Purchasing, inventory control, in-plant materials movement, and waste management.

It is a business function for planning, purchasing, moving, storing material in an optimum way which helps organization to minimize the various costs like inventory, purchasing, material handling and distribution costs.

Materials management is decision making with respect to design, procurement storage issue packing and handling and accountings of materials to get most out of every amount invested in material and it's connected with maintaining adequate supply of something (raw material, spares, and components, operating supplies (utilities) to meet anticipated demand economically. (Dr.A.k.Singn, material management page1,2008).

This research emphasizes on the assessing the role of material management in Commercial bank of Ethiopia. The Bank use different materials of having high value so that the material management practice is the area of attracting significant concern of the top management which has multiple influences in its overall performance.

1.2 Organizational Background

Commercial Bank of Ethiopia

The Commercial Bank of Ethiopia (CBE) is the largest commercial bank in Ethiopia the history dates back to the establishment of the State Bank of Ethiopia in 1942. It was legally established as a share company in 1963. In 1974, CBE merged with the privately owned Addis Ababa Bank. Since then, it has been playing significant roles in the development of the country. Commercial Bank of Ethiopia is the Pioneer to introduce modern banking to the country. It has more than 1250 branches stretched across the country and the first bank in Ethiopia to introduce ATM service for local users. As of June 30, 2017, 1501 ATM machine and 6,811 POS machines were available. It has leading African bank with assets of 485.7 billion Birr as on June 30th 2017. The bank combines a wide capital base with more than 33,000 talented and committed employees.

The bank also operates four branches in South Sudan, and is contemplating opening re-opening a branch in Djibouti, and opening branches in Dubai and Washington, DC, all to serve the Ethiopian Diaspora.

The bank is pioneer to introduce modern banking to Ethiopia and credited for playing a catalytic role in the economic progress and development of the country.

1.3 Statement of the Problem

Materials management as a definition is the process which integrates the flow of supplies into, through and out of an organization to achieve a level of service which ensures that the right materials are available at the right place at the time in the right quantity and quality and at the right cost. It includes the functions of procurement, materials handling and storage, production and inventory control, packaging, transport and associated information systems and their application throughout the supply, manufacturing, service and distribution sectors."

Material Management is responsible for purchasing the highest quality equipment and products at the lowest possible cost for the organization.

Material Management is also responsible for managing purchasing, inventory control functions, shipping and receiving, and also planning and administering department budgets. Production Control, Purchasing, Master Scheduling (Demand Planning) and Warehousing are the critical issues that should be given by the material management experts. Controlling costs of Purchases with PPV also is key.

Material management is defined as a function of not only receiving material, storing materials, purchasing, but an overall function of an organization. It constitutes the major cost for the organization, and a low profile of the department should be maintained to curtail costs, so the organization could go making profit. As materials constitute 70% of the bulk requirement the possibility is to curtail cost to the minimum. You have encountered checking, inspection, quality control function of material management. But till date no importance is given to these functions. (Md. Arifur Rahman (2004) material management Page 1,

It is common to observe the scattered equipment & assets out of the warehouse of the warehouse in the office compound that at risk of theft. A large number of stocks of materials are stacked in the store which is seriously exposed to dust. Sometimes, the interruption of operations is happened due to the lack of raw materials inventories and there is damage and spoilage of materials due improper placement. The materials that are broken and need maintenance are located to the different corners of the warehouse compound covered with dust. Items are not stacked in a proper way so that not easily accessible when needed for withdrawal or for execution. These and similar gaps in the bank implementation attracts the researcher to assess & review the material management practice on the bank.

This research finding will be expected to introduce the modern material management in stock level, safety stock and a proper system of ordering for inventory. The characteristics of efficient & effective material management will be recommended after the data analysis and presentation of the study.

1.4 Research Questions

Depending on some gaps described above, the following questions are derived from them that require straightforward answers through this study.

1. What are the fundamental tasks/functions /processes /involved in material management of the bank.
2. What are the standard tools employed by the bank during its day to day material management practices?
3. What are the local & national rules & regulations the bank strictly adhered in undertaking its material management process?
4. What are the common procurement methods under employment by the bank?

1.5 Objective

1.5.1 General Objective

The general objective of the study was to assess the role of Material Management on Organizational

Performance in case of commercial bank of Ethiopia

Specific Objectives

The study specifically aimed at achieving the following objectives:-

- To examine the procurement process on the stock handling practice of the bank.
- To identify the tools of material management & ways of their application.
- To review & verify to what extent the local & national respective rules & regulations are adhered & conformed.
- To determine the influence of methods of procurement employed by the bank on the quality of its operation
- To review the material inspection & storage techniques of the bank time delivery & reception.
- To examine the techniques of inventory methods used by the bank to establish optimal stock.

1.6 Scope of the Study

This study was focused on reviewing, identifying & assessing the role of material management in commercial bank of Ethiopia.

2. REVIEW OF RELATED LITERATURE

Material management is relatively new field and one of the increasing importances. The importance of materials management can realized when it is said purchasing account for nearly 50 % of organizations annual expenditure: that nearly 80% of working capital is tied up the inventory carrying cost is almost 25% a year, that material represents 40-60% the sales price or 60-80% in material cost will substantially increase the profit margin of an enterprise. (Nair. (1990) purchasing and material management page3,

From the above it is possible to say that the emphasis a firm places up on material management depends on the type of operation it conducts and importance of materials to the success of these operations. Therefore, sound materials management results in increased productivity of capital by preventing large amount of capital by being locked up for long period in investments.

2.1 Meaning and Definition of Materials Management

Here, when we are talking about materials it may include raw materials, components; sub-assemblies etc. now let us see the different definitions of materials management. Bailey and farmer define materials management as the management of the flow of materials in to organization to the point where those materials are converted in to the firm's product.

Material management refers to the flow of materials from the environment to the organization and within the organization until it is ready to be dispatched back to the environment. It is concerned with what types of materials to get, how much to get, when and where to get, at what price etc. materials management, therefore, is a process of planning, organizing, directing and controlling the flow of materials including the acquisition and utilization of materials in a organization. Materials management involves the task of coordination of the performance of the various materials function, the provision of communication networks, moving, storing and controlling materials in optimum manner so as to provide quality service at a minimum cost. (Abuja,(1992) material management page6,

According to (Nair,(1990) material management page3, materials management is the integrated functioning of purchasing and allied activities to achieve the maximum co-ordination and optimum expenditure in the area. From these definitions we can define materials management as the planning, organization, sourcing, and purchasing, moving storing and controlling of materials, form their initial purchase through internal operation to distribution of finished goods or services in optimum manner i.e. minimum cost.

Although materials management organization can vary between firms, it can include a number of separated groups, such as material planning and control, material and purchasing research, receiving stores, scrap and surplus disposal.

The main object of materials management are to solve material problems from a total company viewpoint (optimize) the coordinating performance of the various material functions, providing a communication network, and controlling material flows.

More specifically it is possible to say that the main objective of materials management is cost reduction and efficient handling of materials at all stage and in all section and in all the under taking.

The rational of materials management is the integration of related material function to provide cost effective delivery of materials and services to the organization. (Leenders, (2002) material management page6,

2.2 Functions of Materials Management

Material management is an approach for planning, organizing, and controlling all those activities principally concerned with the flow of materials into an organization. The scope of materials management varies greatly from company to company and may include material planning and control, production planning, Purchasing,

inventory control, in-plant materials movement, and waste management. It is a business function for planning, purchasing, moving, storing material in a optimum way which help organization to minimize the various costs like inventory, purchasing, material handling and distribution costs. Materials management is a broad concept that includes functions like materials planning, purchasing, receiving store keeping, inventory control, material handling disposal of scrap and surplus and transportation. (Leenders,(202) material management page 7,

2.3 Responsibility of Purchasing

Purchasing is the first phase of materials management. Purchasing means procurement of goods and services from some external agencies. The object of purchase department is to arrange the supply of materials, spare parts and services or semi-finished goods, required by the organization to produce the desired product, from some agency or source outside the organization.

The purchased items should be of specified quality in desired quantity available at the prescribed time at a competitive price. In the words of Alford and Beatty, "Purchasing is the procuring of materials, supplies, machines, tools and services required for equipment, maintenance, and operation of a manufacturing plant.

The responsibility of purchasing section does not stop at placing orders. It has to ensure that materials do arrive at the right time, various follow up methods are used for this purpose. It also contributes cost reduction through value analysis, standardization etc. the disposal of surplus and scrap is another function often handled by the purchase (Smriti Chand,(1990) material management page5,

2.4 Importance of Purchasing

To identify the type of cost associated with working with your supplies and purchasing add value to the organization. Once the costs have been identified the buyer can develop strategies on how to manage key purchase in each category. In fact, most buyers today have specific target for cost saving to be achieved. Of course, cost saving is only one way to improve purchasing performance with in companies. The significant of the role of purchasing in organization today is based on the size of expenditure for goods and services.

Effective purchasing and supply management can contribute significantly to success of most organization (lenders, 2002) material management page.3,

3. RESEARCH METHODOLOGY

3.1. Research design

The purpose of this research was to assess the role of material management in the case of commercial bank of Ethiopia. The research employed descriptive research designed to describe the role of material management on the bank's performance.

The study aims at assessing the role of materials management on the performance of commercial bank of Ethiopia.

3.2. Target Population of the Study

The target populations of the study were 80 employees of the bank who are directly involved in the material management aspects. All are organized in different functions with various mandates with different roles in each work unit such as warehouse unit, procurement unit, human resource, finance & Audit. The study targeted all concerned employees who have direct & indirect relationship with the material management process of the bank.

3.3. Sampling method

To undertake this study the researcher used census sampling, by involving all of the employees of the bank who are working in material management as the population of the study.

3.4. Method of Data Analysis

The quantitative data were analyzed through descriptive statistics such as mean, standard deviation, median and percentages. Narrative approach besides this was applied in analyzing the qualitative data in order to demonstrate the findings of the study in a cleaner manner using table and analyzed with the help of percentage.

3.5. Type and Sources of data

Data were collected from primary source such as purchasing section head and employees, , warehouse section of the bank, whereas secondary Source such as data on purchasing procedures and policies, documents of the bank and other related documents.

3.6. Method of data collection

Out of five basic tools (instrument) the researcher select two of them for collecting data for this study, these are questionnaires, (open and close) and observation.

4. Major finding

The result indicates that a mean of 3.20 respondent answered there is a periodic procurement plan in the bank. Similarly, they respond the bank undertakes procurement activities based on the plan with a mean of 3.47 indicating moderate performances on each issue. The practice of using bids for procurement is good; a mean of 3.55 respondents' answered so. Likewise the procurement method is appropriate as they employees answer with a mean of 3.64 (frequency on agreement being 50 out of respondents). Moderate market availability for the bank is depicted from the result. This is shown with a mean response of 3.43.

On the other hand the employees of the bank believe the relation between the departments is a poor one, a mean of only 2.99 assures they are not satisfied with the existing relation. In contrary, the purchasing section set up for the achievement of goals is moderately convenient shown in an agreement of respondents with 3.40 mean. The manager gives due attention to materials acquisition, proper management and utilization of the bank (mean answer 3.48).

The bank fall short obeying the federal government procurement policy as only 28 respondents agreed the project obeys the policy (mean answer 2.86). In the same way, the coordination between the departments of procurement, finance and warehouse is not good. This is shown in the answer of respondents with mean value equal to 2.97.

In material procurement of the bank the other important requirement is the adequate provision of finance. The finding of the research in this respect indicated that there is an average availability of financial resource for the procurement required materials, the mean response being 3.29.

For procurement activity qualified and trained human resource is required. The employees who work in the procurement and warehouse section of the bank meet the qualification set for their positions as response of 3.16 mean of the answers indicates this. Similarly, they are moderately (mean = 3.14) engaged in periodic trainings which help them increase their capacity. With respect to materials the results showed average performance of the bank. The evidence is answers with mean value of 3.36 to the claim that the raw materials provided by the procurement team of the bank meet the standard quality. Likewise, there is a 3.38 response the timely provision of materials requested by the procurement team.

4.1. Inventory Control Systems

Inventory control system has a profound effect on performance of procurement activities. To asses this issue the researcher raised seven questions to the respondents.

In 4.5 mean value of responses more than or equal to 3.5 is good, between 3 and 3.5 moderate and less than or equal to 3 is poor. The findings of the research show that there is an average use of stock card and bin card as tools of controlling the stock transaction in the bank. Similarly, the bank keeps safety or minimum stock level to avoid disruption of bank activities with the same standard as the above. These are dedicated from an answer of 3.45 and 3.26 mean values respectively. In the warehouse, however, undertakes annual inventory consistency as depicted from a 3.56 response.

In contrary, fixed assets in the bank averagely own distinctive tag No that identifies one item from the other similar items. This is assured from the mean response (3.05). Likewise, the management team receives the audit report and takes corrective measures against the gaps identified in material management of the bank. (Mean = 3.05)

4.2. The Material Storage Management and Practice

The material storage management and practices have influences on the banks overall performance. The survey used six questions to study storage management and practices of the bank.

The bank organizes sufficient storage space for the items it procures to avoid any waste or theft indicated by mean response of 3.56. Most of the time items are stacked based on their size; similarly buffer stock is held in warehouse as determined from answers of respondents averaging 3.31 and 3.14 respectively. In the bank there is average use of the technique of economic order quantity (EOQ) in order to determine the quantity to be ordered (mean = 3.14). Similarly, the project averagely uses the technique of reorder point to determine the time when the order should be raised as indicted by answer of the respondents showing mean value of 3.4. The strong monitoring of the material storage practices by the management is witnessed by respondents having average value of 3.08 out of 5 showing the practice to be a moderate one.

4.3. The Material Inspection and Receiving Process

One of the key things in employing material procurement is material inspection and receiving process. Three

questions were raised for respondents of the research to find out the performance of the project in using power material inspection and receiving activities.

The findings illustrate percentile for the practice of inspection of new procured items using technical staff is 57% depicting average performance in this regard. Finally, goods received note is not always issued and submitted to finance whenever new items are procured and stocked in. However from mean value 3.11 and 56% percentile from neutral to strong agreement the activity is practiced in average manner.

5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

The study was conducted to assess the role of material management on organizational performance of commercial bank of Ethiopia. This chapter deals with the findings, conclusion, recommendations and suggestions for further research in the area.

5.1. Summary of the Findings

The study result shows that the bank use and follow plan for material recruitment purpose. However, the practice does not meet the standard expected by respondents. The bank uses bids and appropriate procurement methods as stated by the result. Contrary to this neither the bank obeys the Federal Government Procurement Policy nor, there is good relation between procurement, finance and warehouse departments. Availability of finance for procurement purposes and presence of and proper development of qualified workers in the procurement and warehouse section of the bank is moderately met. Similarly most of the time procured materials meet required standard and are delivered timely.

The study further showed that the inventory control systems employed in the bank are in middling standard. Usage of bin card to control stock transaction, keeping of minimum stock level to avoid disruption of bank activities and identifying items each with distinctive tag number are practiced with average standard. But, higher standard was depicted from annual inventory practice in the bank.

The bank has sufficient storage space where size is used to stack materials, buffer stock is held and techniques ROP and EOQ are used for ordering. Moreover, only partly new procured items are inspected using technical staff and Goods received notes issued to finance for new items.

5.2. Conclusion

The objective of the study was geared to provide useful insight to the future of prospects of the bank if at all materials management is given priority as a total concept. The study established that there is practice of planning and using it, but federal proclamation is not well obeyed. This concluded that the bank's endeavor to material procurement is not backed by proper practice based on law. In addition, inventory control system is employed only averagely that it lacks consistency and profundity. However, annual inventory practice is carried out in the bank implying linger of a year to get information on materials procured and used.

The finding also released that even though storage space is available material storage management practices fail to meet the upper standard showing further inconsistency of the practices in the bank. Similarly the material inspection and receiving processes are practiced only partially.

5.3. Recommendations

Based on the findings, it is inevitable to provide recommendations to the management of bank and other companies operating in the area. The first recommendation is the bank should do all the material procurement activities based on the Federal Government Proclamation. This is important for both assuring the right method and process in the activity and protecting people involved not to be liable by law.

The study recommends that there is a need to enormously employ inventory control systems and information and communication technology especially in MRP so as to excel and guarantee its future, hence improving organizational performance. Further the study recommends that similar companies in Ethiopia should increase their commitment to improve material management so as to develop the performance. The researcher also recommends that the annual inventory to continue for the bank to have insight of the material procurement on yearly basis.

Items procured should always be stacked based on their size and buffer stock should regularly held in warehouse of the bank as this will make the material storage management practice of the bank meet the standards thereby increasing its performance. Moreover, frequent and regular use of the technique of economic order quantity (EOQ) in order to determine the quantity to be ordered must be practiced. The other technique to be applied habitually in storage is the technique of reorder point as this help to determine the quantity of the item to be ordered and purchased.

Finally the researcher recommends the use of technical staff for inspection of newly procured items to be done on a regular basis and always issue goods received note to finance department of the bank.

5.4. Suggestions for Further Research

The study variables were i) procurement methods and practices, ii) inventory control systems, iii) material storage management and practice, and iv) material inspection and receiving practice. Thus, there is a need for future examination of variables like organizational culture, risk assessment and e-procurement usage in the material procurement area of the bank.

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