

# Effect Of Storage Systems On The Organizational Performance

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## ABSTRACT

In the recent past the study about the storage systems of the holdings have not been taken care of. The efficiency and effectiveness of an organization is the main concern of every management of the organization; therefore, this study seeks to investigate how storage system affects organizational efficiency. The objective of this research is to propose or find out the efficient storage systems meant for improving the performance of organizations. The study will be based on secondary sources of data, where the available literature pertaining to the field of the study will be explored to reach the research objectives. The findings of the study will highlight the different storage systems implemented by the companies, that is, open storage system, closed storage system, random access storage system and automated storage system. From the problems identified and conclusions drawn, appropriate recommendations will be made, and an approach considered looking into the circumstances leading to inefficiency in the organization's performance and storage systems hence effective solutions be made promptly. This research will therefore conclude by establishing and identifying different storage systems that the firms should offer and adopt for their organizations in different operations to enable them to meet set goals and objectives.

## Introduction

Storage systems are an integral part of any supply organization. The main function of the storage system is to put material into storage, hold the material in a fixed position within the storage system, and finally retrieve the material from the warehouse. This is often called picking. According to Saleemi (2001), a good warehousing system is one in which the functions of the warehousing department are carefully planned and coordinated to successfully achieve the warehousing goals. The storage system ensures smooth functioning of the entire company, perfect coordination between the various functions within the department and other departments within the organization, avoidance of all kinds of delays, waste and corruption, reduction of operating costs at all levels. should aim to ensure that the goal should also be to separate the purchasing function from the material organization, including the time and effort to complete the task. According to Marc Goetscharcky (2012), storage system performance depends on four internal properties and their interrelationships. Storage capacity or equivalent storage density, ease of access to storage locations, complexity of internal structures, and level of information technology.

Inventory keeping systems were not investigated by many previous researchers, but they complained of increased resource use by the same resources. Most inventory keeping systems in recent days have been automated. We've meticulously thought about the need for a storage system and abandoned other non-automated systems. Other organizations are unable to efficiently carry out their activities due to insufficient storage. Organizational efficiency is a major concern in managing an organization. This has really hindered the efficiency of most organizations. As such, researchers have thought to investigate how storage systems affect organizational efficiency.

## Literature Review

The review of literature in this research mostly covers the various types of storage systems used by the companies.

## Storage System Type

According to Saleemi (2006), storage systems are the tools that perform this function in the marketing and physical sales of storage. Having a warehouse system in place allows an organization to maintain inventory in convenient locations for distribution in various regions, making the warehouse system an integral part of organizational efficiency. Preserving commodities for the future is an ever-present human desire, even in the dark and distant past, when human food supplies consisted of grains, roots, and wild fruits. There is ample evidence that they were stored from the time of greatest availability to the time of greatest need. Thus, the storage system is intended to be controlled by a random-access storage system.

### *Central Storage System*

Central warehouses typically store tools, supplies, and general storage, but the extent to which raw materials are stored and parts are picked is for these items shared by multiple sections of the plant. It depends on the number. As a rule, work in progress is not stored centrally. If your organization consists of several companies engaged in similar work and located away from a central point, you can have a central warehouse at that point. If your organization is spread nationally or internationally, a central warehouse can be used to hold bulk inventory or common spare parts for industry-manufactured machinery for assembly or maintenance at various locations. According to Jessop (2009), centralized warehouse systems are generally viewed as operating to a critical standard and acting as a wholesaler of units, departments, or sub stores issuing goods directly to users.

### *Closed Storage System*

According to Fearson (1989), a closed storage system is one in which all material is physically stored in a closed or controlled area. A common practice in this storage system is to maintain physical control by locking the storage area, and material entering and exiting the area only if accompanied by written authorization. The system is designed to provide maximum physical security and strict accounting control of inventory items. This storage system allows an organization to identify all items clearly and completely in an engineering BOM. A company-wide uniform inventory number system for the items produced is mandatory when using this system. In this warehouse system, the list of materials first goes into the inventory record section and the total required amount of each material required for the order is subtracted from the current inventory balance. Before a content request is made in the shop, the required quantity is reserved and not used for other work. An allocation system can be used to ensure material availability for a given order regardless of the method used to approve inventory picks. As such, closed systems are often used by companies with job shop operations to maintain organizational efficiency.

### *Open Storage System*

Following Aguillar (1992), open storage systems represent the second major type of storage system. Open storage systems are best suited when standardized products are produced just-in-time by repetitive manufacturing operations. Materials handled in open systems must not be easily damaged. If production requires sensitive items, they should probably be checked in closed storage. In general, open systems are most likely to work well if they are not applied to large numbers of items, so systematic application of such systems to multiple numbered items is usually limited to thousands of items.

## Automated Storage System

Automated storage systems are becoming a reality for more and more businesses. Today, many stockpiles have been replaced by automated storage systems, which are mounted on captive floor rails to reduce injuries and increase safety. Even with the development of adequate identification systems, the security of materials in warehouses can still be an issue. A step to minimize this problem is to record the location of the inventory in the inventory catalog. According to Roodbergen K.J. (2008), automated warehouse systems are space-less technologies for associating specific items with facilities in the form of barcodes. It enables accurate and rapid item identification. The operations manager knows the quality and location of each unit. That information can be used by a human operator to load units anywhere in the warehouse. As suggested by Hessen et al. (2001), the exact inventory levels and exact locations required imply potential utilization of the entire facility, as no space is required in a particular storage unit.

## Methods

### Aim and Objectives of the Study

The main aim of this research is to investigate how storage system affects organizational efficiency.

### Research Objectives

1. To investigate how storage system affects organizational efficiency.
2. To determine the types of storage system.
3. To determine the relationship between the storage systems and organizational profitability.

This section presents a description of the research process followed in this research and how the data was collected to identify papers relevant for this study. As the first step the research questions addressed by this study are:

RQ1. How storage system affects organizational efficiency?

RQ2. What are the various types of storage systems?

RQ3. What is the relationship between storage systems and organizational profitability?

The followed step was to define the inclusion/exclusion criteria: (1) Search limitations to papers, (2) considering only papers written in English language, and (3) Exclusion of papers not accessible as full-text.

For the next step, data collection, the keywords used were defined as: Storage System types, Central, Closed, Open and Automated Storage System, Organization, Performance. Then used to search them in online journals databases and scholarly databases (Emerald insights, Taylor & Francis Group) and Google Scholar. The keywords should be found in the paper title, paper keywords and/or paper abstracts. Then the papers were read to assess their relevance and contribution to the present study, and as a final step the discussion of the findings for the future work.

## Discussion

According to Corina Govrea et al, (2011), continued performance is the goal of all organizations, and only through improved performance can an organization grow and evolve. Management's primary concern is to achieve three basic objectives. Optimize the efficiency of the entire procurement and delivery process by leveraging and assessing individual competencies so that materials are in good condition and available where and when needed to meet operational needs as planned to achieve goals and resulting activities at optimal cost. Many organizations have found that closed storage systems are best for high value items and prevent regular material loss. Therefore, organizations with high-

value products should use this storage system. In an open storage system, materials are stored where the same material can be requested. In facilities with open storage systems, there are no storage rooms per se. Each material is stored as close as possible to where it is used. The open system was developed to speed up production activities. In an ideal application, the physical security of materials is of little concern. There is considerable justification for this approach as materials are used relatively quickly and are not subject to high rates of deterioration, obsolescence, or theft. Automotive assembly plants provide the clearest example of open storage systems.

According to Corina et al, (2011), automated warehouse systems can further improve operational efficiency by connecting production planning and control computer systems. In this case, the required production materials are automatically issued and "picked" by machines from the warehouse at the command of a computer initiated by a computer-enabled production structure in the production planning department. Good news for finance professionals concerned about building and real estate costs. This significantly reduces warehouse labor and running costs.

Warehousing organizes an organization's work by importance and then grouping it together. A good critical inventory organization is one in which the functions of the inventory department are carefully planned and coordinated to successfully meet inventory targets. Therefore, warehouse organizations should aim at the following functions to achieve organizational efficiency:

At all levels smooth functioning of the entire company, full coordination of various functional departments and coordination between other departments within the organization, avoidance of all kinds of delays, waste and corruption and reduction of related time and effort Reducing operating costs in operating workplaces. Purchasing functions should be separate from critical organizations and should be performed by independent administrators. An independent manager is individually responsible for his or her work and reports directly to the Managing Director. The entire storage department should be overseen by an independent manager. An Independent Manager is individually responsible for his or her duties and reports directly to the General Manager. Although the inventory material organization breakdown is too broad, it results in well-defined categories. A storekeeper must be on-site in a prescribed manner for the storage system to function efficiently. Issuing transactions and appropriate authorizations, following appropriate procedures, and staffing the appropriate personnel, and of course maintaining complete, up-to-date and accurate records in the shortest possible time, in order to preserve original value and quality Store materials, replenish and manage inventory. Daily operations of the warehouse department, especially those related to obsolete, unusable, and slow-moving items.

## Conclusion

After reviewing the literature on storage systems and organizational efficiency, storage systems need to be implemented. Organizations should take their storage systems seriously and follow guidelines so that they can be efficient according to established rules.

Benefits from a properly set up storage system are lower storage costs, minimal degradation, and avoidance of space misuse, allowing organizations to achieve efficiencies. Most businesses must employ closed storage systems. This is because there is a corresponding increase in performance, fewer accidents, less spoilage of materials, and improved efficiency after implementation. A closed storage system is much more secure than an open storage system. To enable effective and efficient business processes, organizations must maintain proper storage systems.

## Limitations

The time factor is very important because it affects the quality of the research. In this study, the researcher encountered problem about the time, as the time was very short, and the researcher was unable to collect a lot of information from different sources. Inherent limitations associated with any single study provide avenues for future research. This paper uses a qualitative approach. Therefore, one direction consists of empirically testing the generalizability of the proposed

findings. Further research using a quantitative approach to study would be desirable regarding companies making use of various types of storage systems for achieving organizational efficiency.

## Acknowledgments

We would like to thank Middle East College for organizing the 6th MEC Students conference and providing an opportunity to students to showcase their research potential.

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