**ASSIGNMENTS**

1. **What are the objectives of Materials management? What are its advantages?**

Materials management is an important aspect of any business as it does keep in check what should be controlled, monitored and stored to the satisfaction of customers with respect to growth and profitability of the business entity. There are some very important objectives of managing materials as stated below:

* Efficient materials planning
* Storing and inventory control
* Quality assurance
* Good supplier and customer relationship
* Improved departmental efficiency

Advantages of Materials Management

**Better accountability** – Through consolidation of authority and responsibility for all aspects of materials management function, clear cut accountability is established. This helps in evaluating the performance of materials management in an objective manner.

**Better coordination** – Integration of the materials management functions creates an identity which is common. This results in better support and co-operation in the accomplishment of the materials function. This creates an atmosphere of trust and generally better relations between the user departments and the materials management department.

**Better performance** – As all the interrelated functions are integrated organizationally, greater speed and accuracy results in improved communication. Need for materials are promptly brought to the notice by materials planning. Purchase department is fed with stock levels and order status by stores and inventory control departments. All this calls for solid decisions that leads to lower costs and less paper work.

**Adaptability to electronic data processing (EDP)** – The centralization of the materials function makes it possible to design data processing system. All information with regard to materials function is centralized under the integrated materials management function. This facilitates the collection and analysis of data, leading to better decisions. Advanced and efficient electronic data processing systems can be economically introduced under in integrated set-up.

Materials management is simply the process by which an organization is supplied with the goods and services which it requires to achieve the objectives of buying, storage and movement of materials.

1. **What are the activities of materials and information flow in an organization?**

Activities of materials in an organization

One of the most important aspects of material activity is **purchasing**, during this process one must decide what need to be purchased, where to purchase and for what purpose. This attracts planning and researching on quality, price, availability, quantity and reliability of suppliers.

Incoming stock: sufficient supply of materials (needed) fuels smooth flow of operations without interruptions. As material manager one would need to have excellent control of materials to avoid having money tied up inventory that might not be needed in such time as well as keeping good control over materials that need special storage conditions to avoid spoilage before getting used for operations.

Receiving: Ensures the efficient and timely delivery of materials from suppliers. Analysis of this sub-process can lead to speedier and more accurate dock-to-stock.

Quality Control: Examines raw materials for defects or deviations from specifications. The examination and reporting of these materials is essential to the manufacturing process and should therefore be analyzed at a granular level.

Inventory Management & Control: Responsible for the storage, monitoring and transportation of raw materials from warehouses to production facilities. This sub-process can benefit from process models and flow charts by ensuring the materials reach the production facility without being damaged

Planning − one of the fundamental characteristics of the logistics information system is the ability to predict customer behavior, their demand for specific products. In this aspect, one must be able to predict demand. With adequate information and the time necessary to execute the supplies, the company is able to plan their inventories.

Control − this feature is to control all processes taking place in the whole logistics system, logistics companies mentioned herein may be: customer service, sales and delivery. Appropriate processes and standards should be established as a basis for which data are collected.

Co-ordination − this function is responsible for establishing cooperation between specific actions to carry out the sale in accordance with accepted standards in the enterprise customer service and controlling its implementation. Coordination requires a smooth flow of information between company sections, through interacting with each other.

Communication and customer service − in order to fulfill the tasks set by the company's customers, it is necessary to organize effective communication- -based telecommunications and data transmission channels of communication. The importance of communication is particularly important when handling customer requirements in good time, quality, quantity and price.

1. **What is the scope of materials management?**

From Module II notes **Scope of materials management** is the function that incorporates planning, purchasing moving (transportation), storing and controlling stock or inventory to the satisfaction of customers or rather the continuity of business operations without interruptions.

Purchasing of materials in right, quality, good price, quantity and in a timely manner should be of utmost important factor to be consider in order to keep operations up and running

Storage of materials should be properly implemented to maintain the quality of materials and to avoid theft as well. Materials should also be placed in proper coded bin locations for easier tracking during inventory, packing or picking activities.

Inventory control should also be monitored and managed well to maintain continuity of material flow

Material handling is also another important factor in material management scope as this process will involve inspections and standardization of materials in storage and those arriving from suppliers are sorted and graded out for production purposes.

1. **Define the various roles of materials management in the context of internal and external interfaces to materials management system.**

An effective material management section within an organization will always do the following:

* Making sure there are adequate and available products or services demanded by the customers at a considerable cost.
* Timely delivery of quality materials to minimize high costs of production.
* It can be used to set sales prices for the finished products based on the materials purchase data.

**Internal interfaces**

**Market forecasting** predicting future demands of materials requirement is of most importance in an organization, for example during winter period vehicles here in Afghanistan will use more engine antifreeze liquid than any other season, so it is my duty as a material manager to make sure we have adequate stock of antifreeze way before the start of winter at a cheaper rate than to wait until winter period which can be rather expensive to procure.

**Production** as stipulated above it will be very crucial to have adequate supply or stock of antifreeze and glow plugs during winter period so as to keep our maintenance operations up and running, failure or lack of stock would lead the company in incurring unnecessary costs due to engine seizures due to cold starting.

**Finance** materials management is directly linked to cost reduction with respect to the amount of inventory at hand, I will still use the example above whereby it will be prudent to purchase more antifreeze liquid and glow in September and October as at this time the prices of the said parts are less compared to buying them at and or in the winter season which usually kicks-off from December to April.

Inventory control

**Inventory control** this is one of the key factor in material management that takes care of what levels of holding stock should be stocked at what cost and at which period of time to control dead stock or rather slow moving items for example antifreeze would not be needed in large amounts during summer time and thus it will be costly to have it large quantities during this time hence inventory control comes in handy.

**Inspection** physical checks should be done promptly at the time of delivery to verify the quality of materials supplied by vendors, the process is very important in curbing down poor standards of end products for example when I receive parts from local vendors I always involve the workshop supervisor (requestor) in the inspection process to verify what is and not genuine.

**Materials handling, distribution and flow** materials management provides amicable avenues of proper storage, issuance and making sure there is always enough supply of needed materials to keep operations up and running. There is a need of making sure storage facilities are well within reach and locations established for easier tracking of materials and distribution of required materials in the production or operation lines.

**External interfaces**

**Customers** in this context materials management has the capacity to advice sales force or the company of the type of customer group or target market based on the kind of products in demand. They are able to interact with customers in the field during sourcing and would be in a position to gather intelligence on what is currently trending in the market.

**Supplier’s** materials management largely determines which vendors to contact for services based on their past performance records in terms of quality, cost and commitment to the values and policies of the company; In essence this section in an organization is very important when selection of reliable vendors is needed to supply products or services.

1. **Describe the role of material management in performing various functions in an organization?**

The main role of material management in an organization is to make sure that products or services are available when needed and at the right quality, quantity and price. There are various functions undertaken by this section within a given set-up in an organization as borrowed from Module 2, Table 2.1:

Making decision of whether to make or buy materials/services: making amicable decisions that will save operations costs based on past usages and purchases will definitely help an organization to point out grey areas and seal out the gaps thus saving unnecessary costs.

Material Forecasting: their input in making reliable predictions on future material or services requirements within an organization will be helpful to determine whether the materials

* will be needed in future and at what quantity
* will change prices as well dynamism in technological advancement

Material planning and budgeting: making reliable decisions on when, where, what, and from which supplier to buy materials and at what cost is of paramount importance role of material management section. Failure or success of an organization will entirely depend on good planning and budgeting strategies.

Information source: The information about price variations, reliable suppliers and availability of materials and market trends portrays a competent material management section within an organization; therefore this section should gather accurate and reliable market intelligence to avoid the organization in making knee jerk decisions whenever an unexpected situation arises.

1. **Discuss the scope of a product. Elucidate the term taking two products of your choice and comment on the satisfaction you derived by adoption**.

Product scope can also be termed as market scope. Most importantly, it involves decisions meant to determine the type of product to be made and the target market the company or organization is planning to introduce their products to.

An example of a product scope is where our IT manager was tasked to provide us with a new database system for inventory management. In this case, product scope would include the computers, servers, office space, network connectivity and requisite software. The overall product is the data center itself that keeps track of our inventory thus making it easier for us to monitor usage and ordering items to keep our operations running.

1. **Product mix and line decisions are viewed as strategic tools to increase market share and keep competition at bay. Discuss.**

Product mix can also be termed as product assortment or product portfolio where a company or an organization offers a complete set of products or services, while product line is a subset of product mix which consumers tend to use together or rather refer them as similar items.

Product as elaborated from Module II page 101 is a source of revenue and is treated as bread and butter that help the company to survive and sustain itself in ever changing market trends as well as satisfying the needs of their customers

Product mix can also be termed as product assortment or product portfolio where a company or an organization offers a complete set of products or services, while product line is a subset of product mix which consumers tend to use together or rather refer them as similar items.

Product mix increases sales by offering products or services that meets almost every need of customers

Improves business image as it helps in maintaining consistency within a wider business spectrum on existing target markets.

Product mix helps the business to stay focused on core business strengths in catering for wider or broad customer coverage rather than trying to appeal only a fraction of business clients/customers.

It helps in controlling stock or inventory of the kind of products more appealing to customers. It will be very much possible to weed out slow moving items and make room for business to continuously offer fresh products that customers really want, thus getting rid of clustering non-moving products from your inventory.

**References:**

* Materials Management <http://ispatguru.com/purchase-management/>
* Scope of Materials management refer from (module II notes pg 73/74 )
* Roles of materials management read further from (Module 2, Table 2.1)
* Read about product mix from [Marketing Education Resource Center: (Mix It Up; 2009](http://www.mark-ed.com/newlaps/PM_003/PM_3_st_PDF.pdf)) And
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