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DEPARTMENT OF BUSINESS ADMINISTRATION

SUBJECT NAME: MATERIALS MANAGEMENT

SUBJECT CODE: MAM5W

SEMESTER: V

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UNIT -1

MEANING OF MATERIAL MANAGEMENT:

Material management is an essential business function. It is concerned with planning, acquisition and flow of material within the supply chain. Material is one of the four basic resources.

Example: Labor, Material, Equipment and capital of any industrial or business activity.

DEFINITION :

It is concerned with planning, organizing and controlling the flow of material from there initial purchase through internal operations to the service point through distribution.

or

Material management is a scientific technique, concerned with planning, organizing & control of flow of material from the initial purchase to destination.

OBJECTIVES OF MATERIAL MANAGEMENT:

- To ensure continuous uninterrupted production or operation or project work by maintaining a study flow of materials.
- To achieve the above objective in an efficient and economical manner
- To reduce working capital requirement through proper and scientific inventory control.
- To be alive to the changes in the market in respect of new product.
- To improve the quality of manufactured goods by use of better raw materials.
- To increase the competitiveness of manufactured goods by making it possible to reduce their prices.

SIGNIFICANCE or IMPORTANCE OF MATERIAL MANAGEMENT:

The importance of material management cannot be overemphasized in this complex industrial world. It affects not only a particular industry but the entire economic activity of a whole nations. Material contributed to the quality of the end product.

Material form the largest single expenditure item in most of the manufacturing organizations. They are usually responds 50-60 percent of the total cost of the final product.

Material management determines three cost categories within the company which in most cases,

- Material cost
- capital cost
- overhead expenses

FUNCTIONS OF MATERIAL MANAGEMENT:

- Material planning and programming
- Raw material purchase
- Receiving store keeping and warehousing
- Issuing of material
- Inventory control
- Value engineering
- Transformation of material
- Vendor development
- Vendor rating
- Disposal of scrap and surpluses

FOCUS OF MATERIAL MANAGMENT:

To procure right materials

- In right quantity
- Of right quality
- At right time

- From right sources
- At right prices
- 5 R's, Principles of purchasing

UNIT-2

INTEGRATED MATERIAL MANAGEMENT:

All the material related activities such as material planning & indenting purchase system & procedure, variety reduction through standardization rationalization.

TANGIBLE ADVANTAGES:

- Better accountability
- Better coordination
- Better performance
- Better Adaptability to EDP

INTANGIBLE ADVANTAGES:

- Noticeable team spirit
- Movable and cooperation

INVENTORY CONTROL:

It means stocking adequate number and kind of stores so that the material is available whenever required. Scientific inventory control results in optimal balance.

FUNCTION OF INVENTORY CONTROL

To provide maximum supply service, consistent with maximum efficiency & optimum investment

To provide cushion between forecasted & actual demand for the material.

Specifications

Value analysis

Ergonomics

INVENTORY MANAGEMENT:

Inventory management is the process of recording stocked goods and materials, ensuring that the record are accurate ensuring that further stock is ordered when necessary and supervising the cost of items held in stock.

ADVANTAGES OF INVENTORY MANAGEMENT;

- ensure that stock does not run out
- it indicates the reorder level
- keeps production units supplied
- reduces the likelihood of stock becoming obsolete
- identify when pilferage and spoilage occurs
- maximize use of storage space

ECONOMIC ORDER OF QUANTITY:

EOQ= Average monthly consumption x lead time [in months] + Buffer stock - Stock on hand

- Reorder level; stock level at which fresh order is placed
- Average consumption per day x lead time + buffer stock
- Lead time: duration time between placing an order & receipt of material
- Ideal - 2to6 weeks.

MATERIAL DEMAND FORCASTING - MRP

Material requirement planning (MRP) is a production planning scheduling and inventory control system used to manage manufacturing processes. Most MRP system are software based while it is possible to conduct MRP by hand as well.

MRP calculated and maintains an optimum manufacturing plan based on master production

schedules sales forecast inventory status, open order and bills of materials. If properly implemented, it will reduce cash flow and increase profitability.

ABC- ANALYSIS

[ABC= Always better control]

This is based on cost criteria.

It helps to exercise selective control when confronted with large number of items it rationalizes the number of order number of items & reduce the inventory.

About 10% of materials consume 70% of resources.

About 20% of materials consume 20% of resources

About 70% of materials consume 10% of resources.

'A' ITEMS:

Small in number but consumes large amount of resources

'B' ITEM:

Intermediate

'C' ITEM:

Larger in number, but consumes lesser amount of resources.

VED ANALYSIS;

Based on critical value & storage cost of an item.

It is a subjective analysis

- Items are classified into:

Vital

Essential

Desirable

SDE ANALYSIS:

Based on availability

Scarce

Difficult

Easily available

FSN ANALYSIS:

Based on utilization

Fast moving

Slow moving

Non- moving

Non- moving items must be periodically reviewed to prevent expiry

Obsolescence

STORE PLANNING:

Store planning is as important as planning one's own home. The owner must details of how space is to be allocated in different rooms of the house to different items and materials. The space should be used in such a way that should provide an overall appearance of organization clarity and harmony of different materials and utilities with the available space.

UNIT- 3

PURCHASE MANAGEMENT

DEFENITION:

Purchasing management directs the flow of goods and services in a company and handles all data relating to contract with suppliers.

MEANING:

- Purchasing management encompasses a group of application that control purchasing of raw materials needed to build product.

- Manages inventory stock
- Involves creating purchase orders\contracts
- Suppliers tracking
- Goods receipt and payment
- Regulatory compliance analysis
- Reporting

DEFENITION:

The acquisition of something for payment is known as purchasing

MEANING:

This may be defined as a function concerned with the search selection then purchase, receive storing and final use of a commodity in accordance with the catering policy of the establishment.

OBJECTIVES:

- To produce the needed material at a competitive price of the right quality in the right quantity and the right time
- To maintain continuity of supply to ensure production schedule at minimum inventory investment.
- To suggest better substitutes to material which are currently being used with a view to lower the cost and maintain quality of products.
- To assists in fixing probable price and delivery schedule.
- To create a goodwill and enhance the company's reputation for being fair and maintaining integrity through its dealing with the suppliers.

DYNAMIC PURCHASING:

The dynamic purchasing system (DPS) is unlike a traditional framework for the supply of goods, works or services. A DPS is an electronic system which suppliers can join at any time.

STEPS IN DYNAMIC PURCHASING :

- Selection criteria
- Call for competition
- Requests to participate
- Evaluation
- Supplier selection
- Tendering and award
- Audit and review

IMPORT SUBSTITUTION:

Import substitution is a trade policy aimed to promote economic growth by restricting import that competed with domestic products in developing countries.

The import substitution approach substitutes externally produced goods and services with locally produces once.

OBJECTIVES OF IMPORT SUBSTITUTION:

- Promotion of domestic industry
- Employment generation
- Promotion of industrialization
- Production of consumers goods
- Improvement in balance of payment

INTERNATIONAL PURCHASING:

"Boundaries are shrinking and disappearing, and what's becoming apparent is that global purchasing and domestic purchasing are flowing, blending, and covering into one stream"

-R. Jerry Baker.

REASON FOR PURCHASING INTERNATIONALLY:

- Changes in business environment
- Insufficient domestic capacity
- Lower prices, better quality, better delivers
- Reciprocal trading and countertrade arrangements
- Access to better technology

IMPORT PURCHASING PROCEDURE:

The following steps are used in importing goods:

1. Step1. Obtaining import licenses and quota
2. Step2. Obtaining foreign exchange
3. Step3. Placing an order
4. Step4. Dispatching letter of credit
5. Step5. Appointment clearing and forwarding agents
6. Step6. Receipt of shipment device
7. Step7. Receipts of document
8. Step8. Bill of entry
9. Step9. Delivery order
10. Step10. Clearing of goods
11. Step11. Payment to clearing and forwarding agents
12. Step12. Payment to export
13. Step13. Follow up

UNIT-4

STOCK KEEPING:

- Store plays a vital role in the operations of business
- It is in direct touch with the user department in its day-to-day activities

- The most important purpose served by the store is to provide uninterrupted service divisions
- Further stores is often equated directly with the money as money is locked up on the stores which includes different stocks and equipment stationery spare parts new and unused items.

MATERIAL HANDLING:

Material handling involves short-distance movement within the confines of a building or between a building a transportation vehicle. It uses a wide range of manual semi-automated, and automated equipment and include consideration of the protection.

OBJECTIVES :

- To avoid losses of sales
- To gain quality discount
- To reduce order costs
- To achieve efficient production run

FUNCTIONS :

I. Primary Functions:

The main objective of the store is to provide necessary inputs to the production/operations departments at a minimum cost.

- (i) To make available a balanced flow of raw materials, components, tools, equipment and other stores required for operation.
- (ii) To provide maintenance materials, spare parts and general stores as required.
- (iii) To receive and issue materials after physical inspection and proper identification.
- (iv) To store and preserve materials.
- (v) To ensure safety and security of materials.
- (vi) To arrange for collection, acceptance of scrap and other discarded materials for disposal.

II. Secondary Functions:

1. Collection, inspection and acceptance
2. Stores accounting.
3. Stock control
4. Help in standardization and variety reduction
5. Service information

STORE RESPONSIBILITIES:

Recruiting, performance management, and workplace scheduling. Product management, including ordering, receiving, price changes, handling damaged products, and returns. Team Development, facilitating staff learning training, and development.

LOCATION OF STORE HOUSE:

- The normal practice is to locate the store near the consuming department
- These problems are more important in the case of items that have a limited shelf life
- The number of end users and their locations
- The volume and the variety of goods to be handled,
- The location of the central receiving section and
- Accessibility of modes of transportation

CENTRALIZED STORE ROOMS:

A centralized store is that store which receives materials for and issues them to all department divisions and production floors of the company. Such a store is only one in the company which receives material for and issues to all who need them.

SECURITY MEASURES:

- Be aware of security threats and assess your existing practice
- Hire the right employee

- Train your employees well and communicate your policies
- Invest in the right tools
- Conduct loss prevention audits
- Have the right disciplinary procedure in place.

PROTECTION AND PREVENTION OF THE STORE:

- Create a shoplifting prevention strategy
- Beware of peak shoplifting times
- Avoid profiling customers
- Identify common suspicious behavior
- Look out for familiar shoplifting methods
- Add electronic article surveillance
- Fit security cameras.

UNIT - 5

VENDOR RATING:

Vendor rating is a term used in business and refers to the process of evaluating and approving potential vendor by quantitative assessment. The purpose of vendor rating is to ensure a portfolio of best in class vendor is available for use.

VENDOR MANAGEMENT:

Vendor management is a discipline that enables organization to control costs, drive service excellence and mitigate risk to gain increased value from their vendor throughout the deal life cycle.

EFFECTIVE VENDOR MANAGEMENT:

- Create an internal vendor management practice.
- Develop a clear vision for vendor management.

- Build strong relationship with the rest of the organization.

ACTIVITIES OF VENDOR MANAGEMENT:

- Scoping
- contract
- Relationship
- Service quality
- Governance

PURCHASE DEPARTMENT:

The role of purchase department also known as procurement department or a purchase department the purchasing department support company operations as the primary buyers of goods and services in private sector company.

RESPONSIBILITIES:

Vendor manager are employed by companies to manage vendor activities and maintain both new and existing vendor relationship.

Vendor manager facilitate and maintain relationship between your organization and vendors.

BUYER AND SELLER RELATIONSHIP:

Buyer and seller relationship is most difficult task in the concept of business marketing theory. Making the seller fulfill all your demand and getting the maximum number of buyer is the toughest job both of them have to encounter.

VALUE ANALYSIS;

Value analysis (VA) also known as value Engineering (VE) and Value management (VM) is a systematic and function based approach to improving the value of product , project, processes.

ISO:

- International organization for standardization

Geneva

140 members

1979- Genesis of ISO 9000

ISO 9000:

ISO 9000 standard represents an international consensus on good management practice with the aim of ensuring that the organization can time and again deliver the product or services that meet the client quality requirements.

BENEFITS:

- ISO 9000 certificate has become the defector minimum requirement for entering into global markets.
- It provides an opportunity to increase value to the activities of the organization by streaming quality management system.
- Improve the performance of processes activity continually thereby reducing the cost of production.
- It gives importance to customer satisfaction.
