

Operational decisions and stocks

Materials management involves:

- the purchasing of stocks and their delivery
- the storing and control of stocks
- the issue and handling of stocks
- the disposal of surpluses
- the provision of information about stocks

Stock Levels

Affected by

- Demand; *buffer stock* is used to describe stock held for unforeseen rises in demand or breaks in supply
- Stockpile goods
- Cost of stock holding
- Amount of working capital available
- Type of stock
- Lead time *the amount of time it takes for a purchase to be placed, received, inspected and made ready for use*
- External factors

Stock Control

Economic order quantity *Calculate the level of stocks which minimize costs; it takes into account the costs of holding stock which rise with the amount of stock held and the average costs of ordering stock which fall as the size of the order is increased*

Fixed re-order interval *This method ignores the economic order quantity, but ensures that stocks are "topped up" on a regular basis*

Fixed re-order level *This method involves setting a fixed order level which is repeated at varying time intervals*

Two bin system *Method involved dividing stock into two bins*

Methods focus on:

- 1. Re-order quantity** *how much stock is ordered when a new order is placed*
- 2. Re-order level** *the level of stock when an order is placed*

The Nature of Stocks

Raw Materials and Components	Work-in-progress	Finished Goods
Purchased from suppliers before production	Partly finished goods	To cope with changes in demand and stock

Helps stop delays in production (happens in batch or flow production) Helps avoid the need to step up production rates quickly if needed.

Back-up plan in case suppliers are sucky Assembly line

Stock take involves recording the amount and value of stocks which the firm is holding; security reasons and to determine the value of total purchases during the year for a firm's accounts.

Computerized stock control

Having the business's entire stock on computer databases helps the company because it is an easy, fast and useful way of managing stock since different details may be reviewed fast in a computer

Cost of holding stocks

It can help improve business performance

Having too much stock may mean money is tied up unproductively, but inadequate stock can lead to delays in production and late deliveries

- There may be an opportunity cost in holding stocks.
- Storage can also prove costly.
- Spoilage costs (quality, outdated, deteriorate)
- Administrative and Financial costs (placing and processing orders)
- Out-of-stock costs are costs of lost revenue. (loss of goodwill)

Too much or too little stock

Too Much	Too Little
High costs	Not being able to cope with unexpected changes
Space	Running out of stock
Opportunity cost	Not being able to cope with shortages of materials
May result in unsold stock	Lost production
May result in theft by employees	Placing orders may raise total ordering costs

JIT and Stock Rotation

Just In Time Management; Stock Rotation is the flow of stock (FIFO and LIFO)