

INVENTORY MANAGEMENT SYSTEM



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Team Introduction



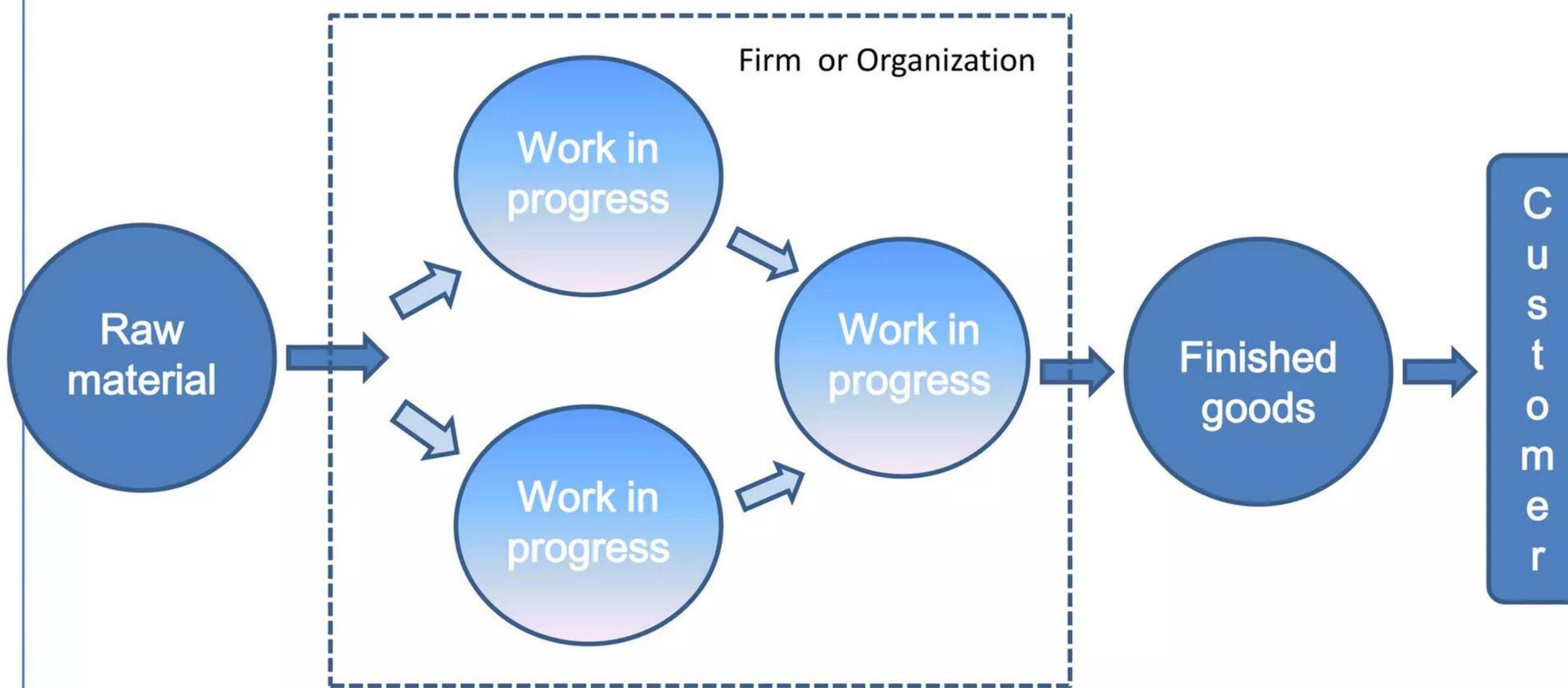
Contents

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- Types of Inventories
- What is Inventory management
- Tasks in Inventory management
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- Need of inventory management

What is Inventory?

- Inventory is stock of items held to meet future demand.
- It is a list for goods and materials, or those goods and materials themselves, held available in stock by a business.
- It is collection of goods processed to form desired output to the organization.

Types of Inventories



Types of Inventories contd.

- **Raw Material Goods**
 - Basic inputs that are converted into finished product through the manufacturing process.
- **“Work in progress” Goods**
 - Semi-manufactured products need some more works before they become finished goods for sale.
- **Finished Goods**
 - Completely manufactured products ready for sale.
- **Supplied Goods**
 - Office and plant cleaning materials not directly enter production but are necessary for production process and do not involve significant investment.

What is Inventory Management?

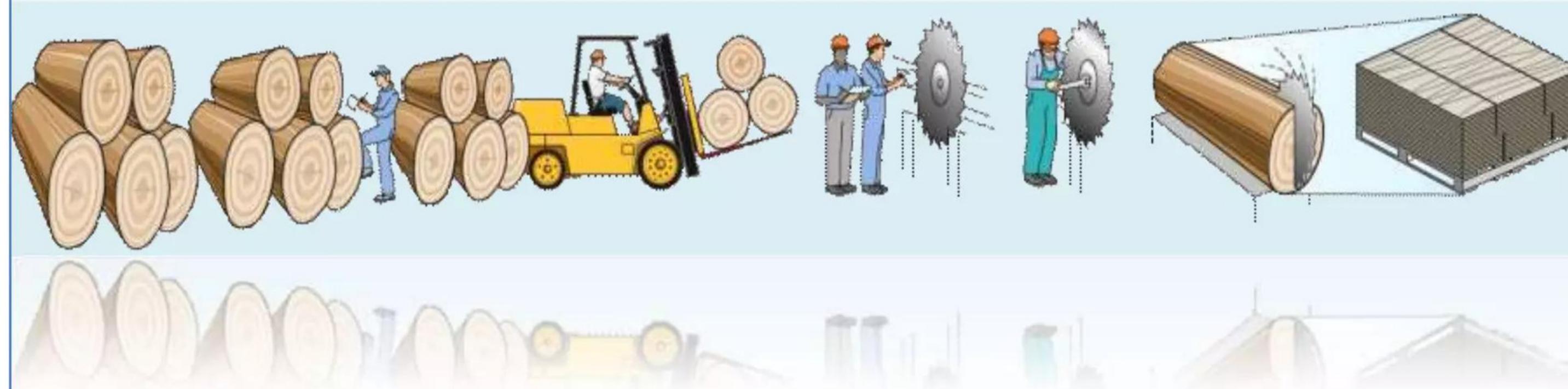
- Inventory management is all about specifying the size and placement of stocked goods.
- It is required at different locations within a facility or within multiple locations of a supply network to protect the regular and planned course of production against the random disturbance of running out of materials or goods.
- Inventory management also concerns with carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory.

Tasks in Inventory Management

- Track inventory
 - To look after the amount of inventory i.e. stock coming into the business.
- How much to order?
 - To specify units of inventory to be used by organization.
- When to order?
 - Specify the duration of getting the inventory.

Inventory Management flow cycle

Raw Material → Inspection → Moving → Processing → Setup → Final Product



Advantages of Inventory Management

- To decouple or separate various parts of the production process.
- To split up the firm from fluctuations in demand and provide a stock of goods that will provide a selection i.e. variety for customers.
- To take advantage of quantity discounts.
- To survive against inflation.

Inventory Management Models

For implementing specific model to any organization or firm, we must determine when and how much inventory is to be ordered.

Here is the classification of models,

- Basic Economic Order Quantity_EOQ
- Production Order Quantity_POQ
- Probabilistic Models and safety stock

Basic Economic Order Quantity model

- Demand of inventory is known, constant, and independent.
- Receipt of inventory is instantaneous and complete.
- Quantity discounts are not possible.

Production Order Quantity model

- Used when inventory builds up over a period of time after an order is placed.
- Used when units are produced and sold simultaneously.

Probabilistic Models and Safety Stock

- Used when demand of inventory is not constant or certain.
- Demand may fluctuate over time due to seasonal, cyclical and random influences viz. availability of stock.
- Used for safety stock to achieve a desired service level and avoid stock outs i.e. emptying of stock.

reasons for keeping stock

To preserve the Inventory management, collection of stock should be in solid state. Here are some reasons for firms to keep the stock,

- Time
 - The time lags present in the supply chain, from supplier to user at every stage, requires that you maintain certain amounts of inventory to use in this lead time.
- Variations
 - Inventory is to be maintained for consumption during 'variations in lead time'.

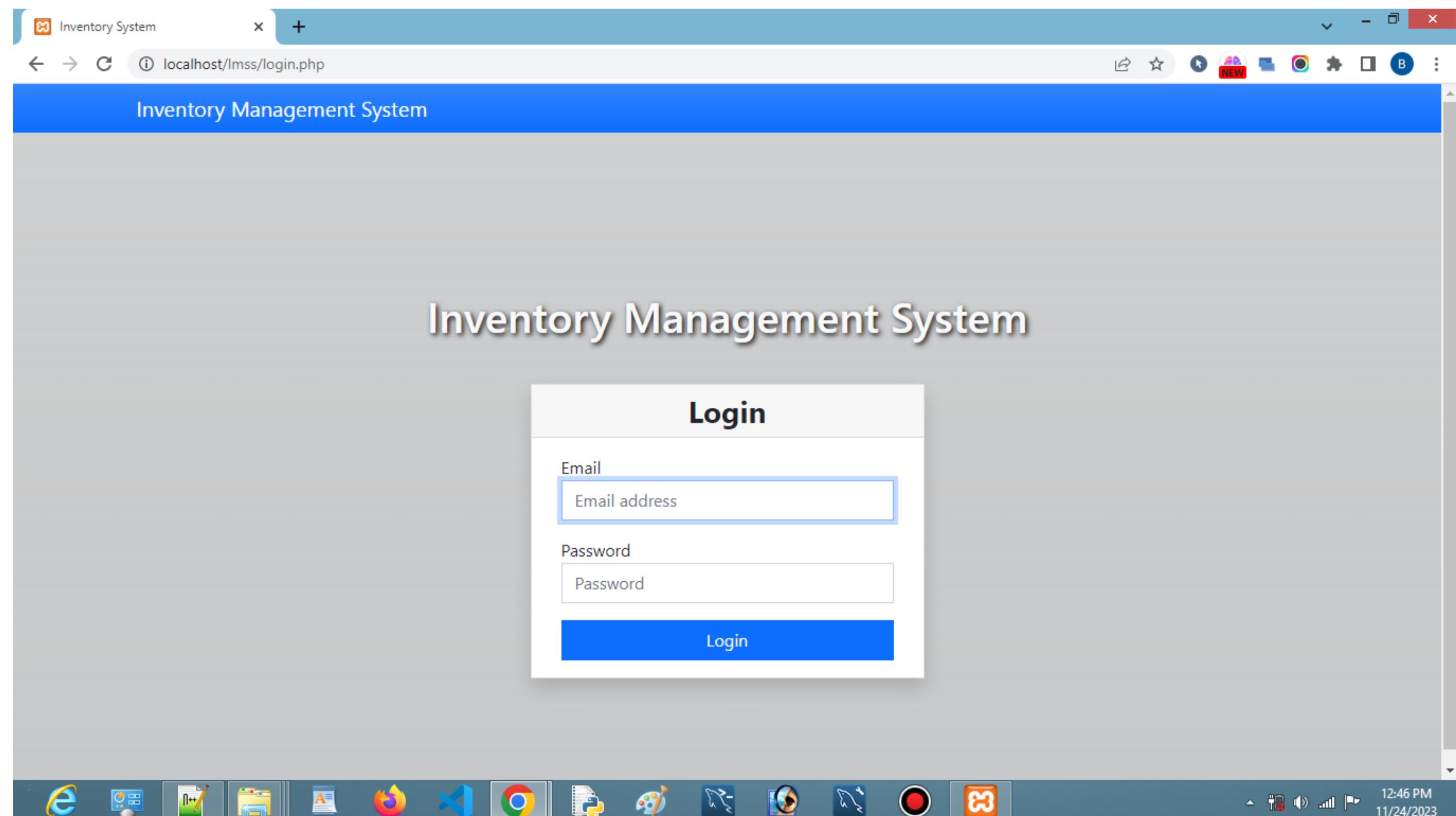
Reasons for keeping stock contd.

- Uncertainty
 - Inventories are maintained as buffers to meet uncertainties in demand, supply and movements of goods.
- Economies of scale
 - Ideal condition of "one unit at a time at a place, where a user needs it, when he needs it" principle tends to incur lots of costs in terms of logistics. So bulk buying, movement and storing brings in economies of scale, thus inventory.



OUTPUT

Login



Home

Screenshot of a web browser displaying the Inventory Management System (IMSS) homepage.

The browser title bar shows "Inventory System". The address bar shows "localhost/lmss/index.php". The page header includes the "Inventory Management System" logo and a navigation menu with links: Home, Customer, Category, Brand, Supplier, Product, Purchase, Orders, and an "Administrator" dropdown.

The main content area is titled "Inventory" and displays a table of product inventory data. The table has columns: #, Product/Code, Starting Inventory, Inventory Received, Inventory Shipped, and Inventory on Hand.

#	Product/Code	Starting Inventory	Inventory Received	Inventory Shipped	Inventory on Hand
1	Product 103 P-1003	20	10	0	30
2	Product 102 P-1002	15	35	3	47
3	Product 101 P-1001	10	25	5	30

Below the table, a message says "Showing 1 to 3 of 3 entries". Navigation buttons include "Previous", "1", and "Next".

The system tray at the bottom of the screen shows various icons for system applications like File Explorer, Task Manager, and Control Panel.

Customer

Inventory System + localhost/lmss/customer.php

Inventory Management System

Administrator

Customer List

New Customer

ID	Name	Address	Mobile	Balance	Action
2	George Wilson	2306 St, Here There	2147483647	35,000.00	
1	Mark Cooper	Sample Address	2147483647	25,000.00	

Showing 1 to 2 of 2 entries

Previous 1 Next



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11/24/2023

Category

Inventory System

localhost/lmss/category.php

Inventory Management System

Administrator

Category List

Add Category

ID	Category Name	Status	Action
3	Speaker	Active	
2	Random Item	Active	
1	Smartphone	Active	

Search:

Showing 1 to 3 of 3 entries

Previous 1 Next



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11/24/2023

Brand

Screenshot of the Inventory Management System (IMS) showing the Brand List page.

The browser title bar reads "Inventory System". The address bar shows "localhost/lmss/brand.php". The page header includes the "Inventory Management System" logo and a navigation menu with links: Home, Customer, Category, Brand, Supplier, Product, Purchase, Orders, and an "Administrator" dropdown.

Brand List

A table displays the following data:

ID	Category	Brand Name	Status	Action
9	Brand 303	Speaker	Active	
8	Brand 302	Speaker	Active	
7	Brand 301	Speaker	Active	
6	Brand 203	Smartphone	Active	
5	Brand 202	Smartphone	Active	
4	Brand 201	Smartphone	Active	
3	Brand 3	Random Item	Active	
2	Brand 2	Random Item	Active	

A "New Brand" button is located at the top right of the table area. A search bar is also present above the table.

The taskbar at the bottom shows various application icons, and the system tray indicates the date and time as 12:49 PM on 11/24/2023.

Supplier

Inventory System

localhost/lmss/supplier.php

Inventory Management System

Administrator

Supplier List

Add Supplier

Search:

ID	Name	Mobile	Address	Status	Action
3	Supplier 103	09789897879	Anywhere There	Active	
2	Supplier 102	094568791252	Over There	Active	
1	Supplier 101	09645987123	Over Here	Active	

Showing 1 to 3 of 3 entries

Previous 1 Next



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Product

Inventory System

localhost/lmss/product.php

Inventory Management System

Administrator

Product List

Add Product

Search:

ID	Category	Brand Name	Product Name	Product Model	Quantity	Supplier Name	Status	Action
3	Speaker	Brand 301	Product 103	P-1003	20	Supplier 103	Active	<input type="radio"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
2	Smartphone	Brand 201	Product 102	P-1002	15	Supplier 102	Active	<input type="radio"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
1	Random Item	Brand 1	Product 101	P-1001	10	Supplier 101	Active	<input type="radio"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>

Showing 1 to 3 of 3 entries

Previous 1 Next



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Purchase

Inventory System x + localhost/lmss/purchase.php

Inventory Management System

Home Customer Category Brand Supplier Product Purchase Orders Administrator

Purchase List

+ Add Purchase

ID	Product	Quantity	Supplier	Action
3	Product 103	10	Supplier 103	edit delete
2	Product 102	35	Supplier 102	edit delete
1	Product 101	25	Supplier 101	edit delete

Showing 1 to 3 of 3 entries

Search:

Previous 1 Next



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Orders

Inventory System

localhost/lmss/order.php

Inventory Management System

Administrator

Manage Orders

New Order

Search:

ID	Product	Total Item	Customer	Action
2	Product 102	3	George Wilson	
1	Product 101	5	Mark Cooper	

Showing 1 to 2 of 2 entries

Previous 1 Next



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THANK YOU