

WAREHOUSE AND INVENTORY PLANNING

Introduction to Warehouse Management

by

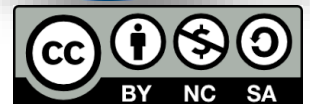
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Chapter Description

At the end of this chapter, students should be able to:

1. To discuss the role of warehousing in the supply chain
2. To explain what is Low-Cost Strategy and Time-Based Strategy
3. To identify a need of the warehouse



Role of Warehousing in a Logistics System

Warehousing

- Part's of the firm logistics system that stocks a products at an between points of origin and point of consumption.



The Role of Warehousing in a Logistics System

“transportation at zero miles per hour.”



Function of Warehouse

Temporary place to store inventory



Buffer in supply chains

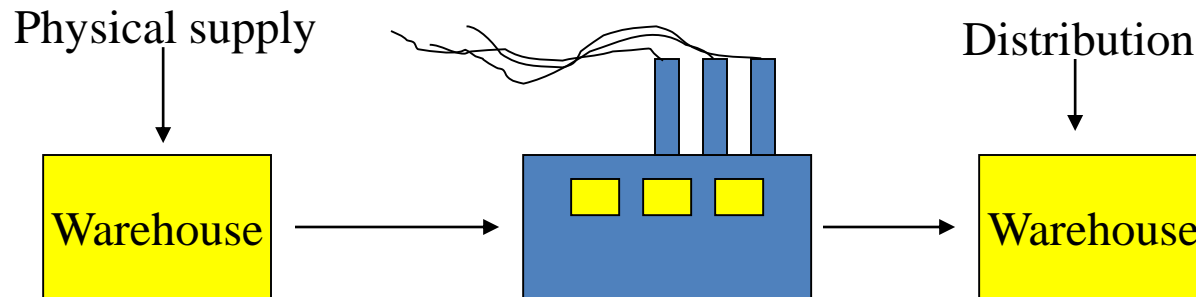
Matching product availability to consumer demand

To facilitate the movement of goods



Warehousing: Storage of inventories all through logistics process.

- Raw materials, components, parts.
 - Finished goods.
- Storing of products.
 - Provides information on status of goods.



Warehousing's Role in Supply Chain

Supporting
Economies of
Manufacturing

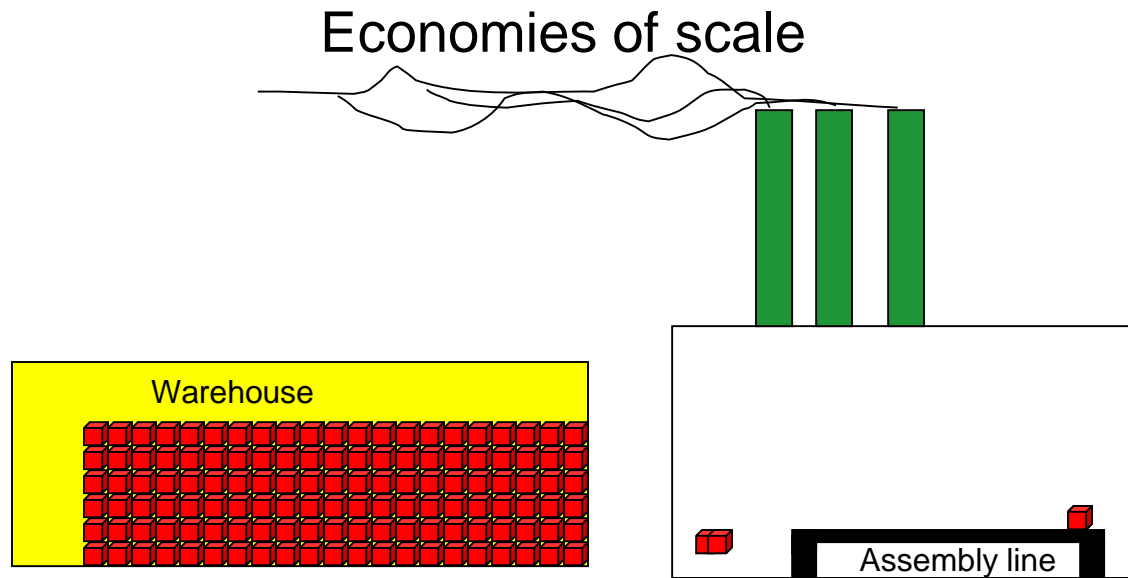
Supporting
Economies of
Purchasing

Supporting
Economies of
Transportation



Warehousing's Role in Supply Chain

Role in Supporting Economies of Manufacturing



Warehousing's Role in Supply Chain

Role in Supporting Economies of Purchasing

- Before ordering materials in a bulk, production department and buyers work together to evaluate material needs, lead times and price-break
- Purchase in a bulk quantity will provide cost saving per item
- Warehouses is added value to productions, assembly operations and receiving point for consolidation, storing, maintaining, picking and shipping materials.



Warehousing's Role in Supply Chain

Role in Supporting Economies of Transportation

- Utilization of transportation capacity and capability is a very crucial.
- Company's need to find which transportation mode that can provide more efficient and cost-effective which may reduce the cost when bigger or larger number of units are being transported.



Why Need Warehouse

Anticipatory
Inventory

Seasonal Stocking

Balance Supply
with Demand

Protection Against
Uncertainty in
Demand and Lead
Time

Competitive
Supply Chain
Strategies



Low-Cost Strategy

1. Large quantities of product require for a long-term storage .
2. To support economies in production, purchasing and transportation.
3. Become as focal points of stocking materials.
4. Therefore manufacturers do not have to service each individual in a final customer location.
5. Manufacturers ship in large quantities to regional warehouse and then will distribute is to a various end customers.
6. This utilizes truckload carrier service between manufacturer to regional warehouse.



Time-Based Strategy

Design and adopt time-based strategies will provide following advantages:

Reduce Level of
Inventory in the
System

Improve Service
Responsiveness
to Customer

Reduce Lead
time

Provide Flexible
services



Time-Based Strategy

Example: Cross Docking



Why Customer Service Role in a Warehousing is important?

1. Establish, maintain and strengthen their relevant market shares.
2. To ensure on hand inventory is checked and verified to avoid any shortages
3. Identify overages, shortages and damages (OS&D)- it can be happen anywhere along the distribution channel.
4. Consistent in a lead time.



Conclusion of The Chapter

Conclusion

