

Unit 3

Warehousing

◆ Knowledge Learning Objectives 知识学习目标 ◆

- To understand the role of warehousing
- To know the warehouse activities
- To learn inventory management

◆ Skill Developing Objectives 技能培养目标 ◆

- Communication skill in introducing the warehouse
- Writing skill in introducing the warehouse
- Communication skill in the inventory situation
- Communication skill in the inventory goal

I . Warehouse Operation

1. Role of Warehousing (仓储的角色)

Warehousing plays a key role in integrated logistics strategy and in building and maintaining good relationship between supply chain partners. Warehousing affects customer service level, sales and marketing success. Warehousing can link the production facility and the consumer, or supplier and production facility. Warehousing supports production by consolidating inbound materials and distributing them to the production facility at the appropriate time. Warehousing also helps marketing to serve current customers and expand into new markets.

The warehouse is a point in the logistics system where a firm stores or holds raw materials, semi-finished goods, or finished goods for varying periods of time. Holding goods in a warehouse stops or interrupts the flow of goods, adding cost to the product

or products.

2. Main Components of Warehousing (仓储的构成要素)

The three basic components of warehousing are warehouse, equipment, and people. Space allows for the storage of goods when demand and supply are unequal. Space affects not only warehousing decisions but also the design of a logistics system. Warehouse equipment includes materials handling, storage racks and conveyor equipment. The equipment helps in product movement, storage, and tracking. People are the most critical component of warehousing. Space and equipment mean nothing without competent people.

The objective is to efficiently receive inventory, possibly store it until required by the market, assemble it into complete orders, and initiate movement to customers. This emphasis on product flow renders a modern warehouse as a mixing facility. As such, a great deal of managerial attention concerns how to perform storage to facilitate efficient materials handling.

3. Types of Warehouses (仓库的类型)

The warehouse is usually divided into private warehouse, public warehouse and contract warehousing.

The private warehouse is owned by the firm using it. Private warehouses provide more control since the firm has decision-making authority over all activities in the warehouse.

The public warehouse is essentially the space that can be leased to solve short-term distribution needs. Using public warehouses offers more flexibility for the users since it requires no capital investment on the user's part.



For many years, firms had two choices with respect to warehousing — public and private. But more recently, contract warehousing (also referred to as third-party warehousing) has emerged as another warehousing alternative. Contract warehousing is a long term, mutually beneficial arrangement which provides unique and specially warehousing and logistics services for one customer.

4. Warehousing Activities(仓储活动)

Warehousing activity is an important link between the producer and the customer. Warehousing activities involve receiving, transfer, storage, picking and shipping. Receiving may take place in railway station, dock, warehouse and so on. Transfer involves physical movement of the goods into the warehouse for storage, movement to areas for the specialized such as consolidation, and movement to out-bound shipment. Storage is a primary function of warehouse. Goods should be stored in areas with right

conditions. Picking is conducted after orders are translated into picking slips in many instances. Shipping is the last step. After properly packed and checked on against delivery note, the products should be transferred to staging area and loaded on carrier equipment for transportation.

5. The Function of Warehousing(仓储的功能)

The warehouse serves several value-adding roles in a logistics system. Companies will sometimes face less-than-truckload (LTL) shipments of raw materials and finished goods. Shipping goods long distances at LTL rates is more costly than shipping at full truckload or carload rates. By moving the LTL amounts relatively short distances to or from a warehouse, warehousing can allow a firm to consolidate smaller shipments into a large shipment (a carload or truckload) with significant transportation savings. For the inbound logistics system, the warehouse would consolidate different suppliers' LTL shipments and ship a volume shipment to the firm's plant. For the outbound logistics system, the warehouse would receive a consolidated volume shipment from various plants and ship LTL shipments to different markets.



New Words and Phrases

integrated ['ɪntɪɡreɪtɪd] *adj.* 整体的,综合的
strategy ['strætɪdʒi] *n.* 战略,计划
facility [fə'sɪlɪti] *n.* 设备
consumer [kən'sju:mə] *n.* 消费者,用户
consolidate [kən'solɪdeɪt] *v.* 统一,联合
inbound ['ɪnbəʊnd] *adj.* 内部的
appropriate [ə'prəʊpriɪt] *adj.* 适合的
component [kəm'pəʊnənt] *n.* 组成,成分
equipment [i'kwɪpmənt] *n.* 设备
rack [ræk] *n.* 货架
conveyor [kən'veɪə] *n.* 传送,传输
track [træk] *v.* 追踪
authority [ɔ:'θɒrəti] *n.* 权力

lease [li:s] *v.* 出租,租借
flexibility [ˌfleksə'bɪləti] *n.* 灵活性,适应性
emerge [i'mə:dʒ] *v.* 出现
beneficial [ˌbenɪ'fɪʃəl] *adj.* 有益的,有利的
consolidation [kən'solɪ'deɪʃən] *n.* 统一,联合
outbound ['aʊtbaʊnd] *adj.* 外部的
conduct [kən'dʌkt] *v.* 执行
supply chain 供应链
materials handling 物资搬运
private warehouse 私有仓库
public warehouse 公共仓库
contract warehousing 合同仓储
staging area 待运区,装货区



Notes

1. Warehousing plays a key role in integrated logistics strategy and in building and maintaining good relationship between supply chain partners. 在物流战略的整合以及建立、维持供应链各成员之间良好关系的过程中,仓储占据着重要的地位。

2. Warehousing supports production by consolidating inbound materials and distributing them to the production facility at the appropriate time. 仓储通过整合内部资源支持生产并在恰当的时间将原材料配送到生产点。

3. Warehouse equipment includes materials handling, storage racks and conveyor equipment. 仓储设备包括搬运设备、储存货架和传送设备。

4. People are the most critical component of warehousing. Space and equipment mean nothing without competent people. 人是仓储中最重要的组成部分。没有胜任的员工,空间和设备就显得毫无意义。

5. Private warehouses provide more control since the firm has decision-making authority over all activities in the warehouse. 由于公司对仓库中的所有活动拥有决定权,因此私有仓库具有更大的控制优势。

6. Using public warehouses offers more flexibility for the users since it requires no capital investment on the user's part. 由于不需要对设备进行投资,因此使用公共仓库有更大的灵活性。

7. Contract warehousing is a long term, mutually beneficial arrangement which provides unique and specially warehousing and logistics services for one customer. 合同仓储是一个长期的双方互惠协定,仓储设施的经营人为其客户提供独特的、专门的仓储和物流服务。

8. Warehousing activities involve receiving, transfer, storage, picking and shipping. 仓储活动包括货物接收、传送、储存、分拣和装运。



Exercises

I. Pair work: Discuss the following questions.

1. Why is warehousing necessary?
2. How do you understand the role of the warehouse?
3. What are the basic components of warehousing?
4. What are the main types of warehouse?
5. If you are a manager, do you prefer public warehouse to private warehouse?
6. Are you familiar with the warehousing activities?

II. Fill in the blanks with the words in the following box. Change the forms if necessary.

verify	automated	proximity	order	bridge
moderate	temporary	desired	achieve	sufficient

1. Warehouse provides _____ environment conditions and a wide range of products can be stored in this kind.
2. Usually, warehouses are typically viewed as a _____ place to store goods.
3. The cost of small _____ became expensive to transport.
4. Warehousing plays a vital role in providing a _____ level of customer service.
5. Customer service may be the deciding factor for warehouse site location, _____ to markets can improve its service level.
6. Distribution center is a large and highly _____ warehouse designed to receive

goods from various plants and suppliers.

7. A warehouse can be viewed as a _____ between supply and demand.
8. In order to _____ the efficiency they may have to hold stock, but this is not their main role.
9. Retailers found it difficult to source in _____ quantity from a single supplier.
10. After the goods are unloaded from the transportation carrier, they should be _____ against cargo manifest.

III. Translate the following sentences into Chinese.

1. The sites of warehouse are determined by customer and manufacturing locations and product requirements.
2. Inventories are frequently found in such places as warehouses, yards, shop floors, transportation equipment, and on retail store shelves.
3. A warehouse manager will have to minimize time spending on responding to demand and errors in dispatches.
4. His request for promotion to the position of a warehouse manager was turned down.
5. A data warehouse should be designed for data analysis.

IV. Translate the following sentences into English.

1. 仓储是生产者与消费者之间的重要纽带。
2. 仓库储存所有产品,配送中心以最低库存满足最大需求。
3. 商品的数量越多,所需仓库的规模也就越大。
4. 近年来,仓库的设备与技术发展很快。
5. 产品必须储存,以便日后使用和消费。

Dialogue 1 Visiting a Warehouse

(Li: a clerk of a warehouse; Wang: a student in logistics major)

Li: Welcome to the warehouse. Allow me to introduce myself first: I'm a warehouse keeper and I'm responsible for the management of goods.

Wang: How is the warehouse divided?

Li: According to the storage purpose, the warehouse is divided into deliver-center warehouse, storage-center warehouse and logistics-center warehouse.

Wang: What are the procedures after the goods arrived at the warehouse?

Li: First indoor operation, then warehouse management, finally warehouse operation.

Wang: What is indoor operation?

Li: There are a series of procedures including arranging storehouses, checking the goods, enrolling the goods accurately, loading and depositing them in standard.

Wang: What about the warehouse management?

Li: We need to check the products and facilities regularly, keep the warehouse clean and safe, standardize each operation and gather the information.

Wang: And what is the warehouse operation?

Li: It consists of the following five aspects: the warehouse procedures, the quantity of the goods, loading the goods and depositing them in standard, providing the goods according to the shipment list, saving and filing the bills of document.

Wang: Wow, it's very important to be a warehouse keeper. I got it. Thank you very much!

Li: You are welcome.



New Words and Phrases

divide [di'vaid] *v.* 区分, 分割

procedure [prə'si:dʒə] *n.* 程序, 手续

indoor ['indo:] *adj.* 入库的

arrange [ə'reindʒ] *v.* 安排

enroll [in'raʊl] *v.* 登记

deposit [di'pɒzɪt] *v.* 放置, 储存

facility [fə'siliti] *n.* 设备

regularly ['regjuləli] *adv.* 经常性地

standardize ['stændədəiz] *v.* 使标准化

gather ['gæðə] *v.* 收集



Notes

1. The warehouse is divided into deliver-center warehouse, storage-center warehouse and logistics-center warehouse. 仓库被分为配送中心型仓库、存储中心型仓库和物流中心型仓库。

2. First indoor operation, then warehouse management, finally warehouse operation. 首先要进行入库作业, 其次是在库管理, 最后是出库操作。

3. There are a series of procedures including arranging storehouses, checking the goods, enrolling the goods accurately, loading and depositing them in standard. 这有一系列程序包括安排仓位、核对物品、准确登记、规范装卸。

4. We need to check the products and facilities regularly, keep the warehouse clean and safe, standardize each operation and gather the information. 定期检查产品、设备, 保持仓库清洁、安全, 规范操作并进行信息汇总。

5. It consists of the following five aspects: the warehouse procedures, the quantity of the goods, loading the goods and depositing them in standard, providing the goods according to the shipment list, saving and filing the bills of document. 仓库运作包括五方面: 出库手续齐全、出库数量准确、装卸规范、按出货单先后发放货物、出库单据保存归档。



Exercises

I . Oral practice: Practice the above dialogue with your partner until you can learn the lines by heart.

II . Team work: Make up a dialogue according to the following situation and practice it with your partner.

Situation:

Kitty is a clerk of a warehouse. Now she is introducing the warehouse to her customers.

Tips:

1. I want to know how you handle warehouse storage.
2. What kind of goods do you need to keep?
3. I have to operate according to the instruction on the boxes.
4. I have to operate as what you say.
5. I have to operate regarding the order.
6. Keep away from moisture/fire/water.
7. How long do you need to keep?
8. No. 2-10-5-6 means the sixth case of the fifth layer of the tenth shelf in the second warehouse.

III . Write an E-mail to your customer, inviting him to visit the warehouse and hoping to establish the business relationship with him.

Contents:

1. 介绍仓库的现状(位置及规模等)。
2. 介绍仓库的优势(与竞争者相比)。
3. 洽谈合作意向。

IV . Fill in the blanks with the words in the following box. Change the forms if necessary.

acquaint	end	discharging	allocate
forward	chassis	export	shelf

Xiao Wang has just been employed by a _____ company at an airport. His job is to _____ the products to different _____. With the help of the warehouse manager, he is getting himself _____ with the work. At that moment, there is a truck that stops at the gate. Xiao Wang goes to find that a container _____ is at the gate and workers are _____ some electronic components in large cases. These cargos are to be _____ to R. O. Korea and Singapore. They will be leaving this afternoon, so Xiao Wang finds two shelves near the other _____ of warehouse for later easier shipment. He is a smart guy who can quickly learn how to work well.

II . Inventory Management

1. What Is Inventory(库存是什么)

Inventory refers to stocks of anything necessary to do business. Inventory can be defined as “stocks used to support production, supporting activities and customer service”. Inventory applied to finished goods, raw materials, parts and components, MRO (maintenance/repair/operating) and WIP (work-in-process). It includes new products and existing products. It covers all types of manufacturers, distributors, wholesalers, retailers and others in every industry.

2. The Role of Inventory(库存的作用)

There are many reasons why inventories are present in a supply channel. Just consider why a firm might want inventories at some level in their operations and they would also want to keep them at a minimum. Inventories are frequently found in such places as warehouses, yards, shop floors, transportation equipment and on retail store shelves.

Inventory is the key issue to supply chain management success. Customers demand that their orders be shipped complete, accurate and on-time. That means having the right inventory at the right place at the right time. There are five main purposes for inventory within the firm.

- Inventory as a buffer
- Economics of scale
- Balancing supply and demand
- Specialization
- Protection from uncertainties

3. Inventory Goals(库存目标)

Inventory is a large and costly investment. Better management of firm inventories can improve cash flow and return on investment. Theoretically, a firm could stock every item sold in a warehouse dedicated to serve each customer. However, few firms could afford such a large inventory. The objective is to achieve the desired customer service with the minimum inventory with the lowest total cost.

The primary goal of inventory management is to minimize inventory investment while still meeting the functional requirements.

4. Inventory Decision(库存决策)

Inventory decision involves knowing how much to order and when to order.

How much to order

In deciding how much to order, the company needs to balance order-processing costs against inventory-carrying costs. The order-processing costs include supplier selection, receiving, inspection, order paperwork preparation and so on. The inventory carrying costs consist of:

- storage cost
- physical management costs, including handling, housekeeping, accounting etc.
- insurance and taxes
- the risk of obsolescence due to engineering or style change
- the cost of money invested including interest

When to order

When the stock will be near safety stock level of used up, the material has to be reordered. The span of time is called lead time, which includes order preparation time, queue time, processing time, moving time, and receiving and inspection time. If the rate of sale for a product is 50 units per day, and the lead time is 5 days, to ensure that goods arrive just as the last unit is sold, and order should be placed 5 days ahead of the stock-out day.



New Words and Phrases

inventory [ˈɪnvəntri] *n.* 库存

define [diˈfaɪn] *v.* 下定义

manufacturer [ˌmænjʊˈfæktʃərə] *n.* 生产商, 制造商

distributor [disˈtribjutə] *n.* 经销商

buffer [ˈbʌfə] *n.* 缓冲器

balance [ˈbæləns] *v.* 平衡, 均衡

specialization [ˌspeʃəlaɪˈzeɪʃən] *n.* 专业化

uncertainty [ʌnˈsɜːntnti] *n.* 不确定性

investment [ɪnˈvestmənt] *n.* 投资

dedicate [ˈdedikeɪt] *v.* 致力于

inspection [ɪnˈspekʃən] *n.* 检查, 检验

obsolescence [ˌɒbsəˈlesəns] *n.* 过时, 作废

queue [kjuː] *n. / v.* 长队, 排队

finished goods 成品

raw materials 原材料

parts and components 零部件

economics of scale 规模经济

order-processing costs 订单处理成本

inventory-carrying costs 库存持有成本

safety stock level 安全库存水平

lead time 前置时间



Notes

1. Inventory can be defined as “stocks used to support production, supporting activities and customer service”. 库存定义为支持生产、经营以及客户服务的存储。

2. It covers all types of manufacturers, distributors, wholesalers, retailers and others in every industry. 各行各业的制造商、经销商、批发商、零售商以及其他企业都需要库存。

3. Customers demand that their orders be shipped complete, accurate and on-time. 客户要求完整、准确及准时地装运订单。

4. Inventory as a buffer 库存起到缓冲作用
5. Economics of scale 规模经济
6. Balancing supply and demand 均衡供给和需求
7. Protection from uncertainties 以防不确定性
8. Better management of firm inventories can improve cash flow and return on investment. 对库存的良好管理能够加快现金流动及资金回笼。
9. The objective is to achieve the desired customer service with the minimum inventory with the lowest total cost. 目标是以最低成本的库存达到满意的客户服务水平。
10. Inventory decision involves knowing how much to order and when to order. 库存决策包括下订单的数量和时间两方面。
11. The order-processing costs include supplier selection, receiving, inspection, order paperwork preparation and so on. 订单处理成本包含选择供应商、接收订单、检验、订单文件处理等方面。
12. The risk of obsolescence due to engineering or style change. 由于技术更新或型号改变而造成的货物废弃风险。
13. The cost of money invested including interest. 包括利息在内的机会成本。
14. The span of time is called lead time, which includes order preparation time, queue time, processing time, moving time, and receiving and inspection time. 这个时间周期包括订单准备、等待、处理、传输以及检验时间,这个时间段称作前置时间。



Exercises

I. Team work: Discuss the following questions.

1. How do you understand the inventory?
2. Is inventory necessary to every company?
3. What is the primary goal in inventory?
4. Why is inventory used as a buffer?
5. Why is inventory so important to a firm?
6. How many functions of inventory are there?
7. As an inventory manager, how do you achieve inventory goal?
8. As an inventory manager, how do you make inventory decision?

II. Fill in the blanks with the words in the following box. Change the forms if necessary.

cause	expand	warehouse	reorder	specialize
inventory	strategic	stocks	balance	decline

1. Managers must establish and implement inventory policies on the basis of _____ consideration.
2. When he adopted the new strategy in inventory management, he lowered the cost while _____ the sales.