Chapter 1: Basic Principles of Logistics Management

Objectives

- Define logistics management in the context of supply chain.
- Establish the types of activities of logistics.
- Examine logistics planning.

1. Introduction – Changing Market Place

For the past few years, managers have witnessed a period of dramatic change in terms of advances in technology and globalisation of markets, and political upheavals.

With the increasing number of world-class domestic and foreign competitors, enterprises have to improve their internal and external processes rapidly in order to stay competitive.

The rules of business have changed. In today's environment, new products are launched and businesses are born every day. Customers are increasingly difficult to keep and costly to replace.

2. Logistics Management

Logistics systems are made up of four main activities: purchasing management, inventory management, warehousing management and transportation management.

Supply chain management consists of firms collaborating to leverage strategic positioning and to improve operating efficiency.

Logistics is the work required to move and position inventory throughout a supply chain.

As such, logistics is a subset of and occurs within the broader framework of a supply chain.

3. Definition of Logistics

Logistics management, as defined by The Council of Logistics Management, refers to the process of planning, implementing and controlling the efficient, effective flow and storage of goods, services and related information from point of origin to the point of consumption for conforming to customer requirements.

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point of consumption for the purpose of conforming to customer requirements.”

4. Logistics Planning

Logistics is the process that creates value by timing and positioning inventory; it is the combination of a firm’s order management, inventory, transportation, warehousing, materials handling, and packaging as integrated throughout a facility network.

Logistics planning serves to link and synchronise the overall supply chain as a continuous process and is essential for effective supply chain connectivity.

Figure 1-1 organises these components, or activities, as to where they are most likely to take place in the supply channel.

5. Key Activities

Logistics management may be divided into materials management and physical distribution as shown in Figure 1-1.

Key and support activities are separated because certain activities will generally take place in every logistics channel, whereas others will take place, depending on the circumstances, within a particular firm.

![Figure 1-1: Logistics Chain](image)

6. The Strategic Importance of Logistics Planning

The key objective of logistics is to provide customer satisfaction by having the correct product in the correct place at the correct time. Competition worldwide is increasing. Creating customer satisfaction is important to most companies.

The concept of satisfaction has multiple dimensions. These dimensions contribute to a feeling of overall satisfaction and are made up of:
- **Cost** – what customers receive for what they paid
- **Convenience** – the effort expended to achieve the purchase
- **Confidence** in the support services both included and promised

Logistics planning is the ability to satisfy and retain customer.

Consider Amazon.com, which provides books selected from the internet store delivered to your door (within a stated period). The marketing proposition is simple and based on convenience. The same product could be purchased from a bookshop.

If the back-office operation of Amazon either takes six weeks to deliver the book once ordered, or fails to meet a promised delivery date, then the probability is that the customer would be dissatisfied.

The same applies to FedEx with its delivery next day before 10am promise. Speed is becoming an important aspect of service provision.

McDonald’s controls its supplies along the entire length of its supply chain from meat purchasing and paper cups to 28,000 franchise outlets worldwide.

For major companies operating in global markets, the stakes are high. Managing the logistics of supply chain offers the capability to create and reach markets before competitors, and achieve competitive advantage by providing increased customer satisfaction through delivering the right product at the right time at greater value for money because of reduced overall cost.

Logistics is the primary conduit of product and service flow within a supply chain arrangement. Each firm engaged in a supply chain is involved in performing logistics. Such logistical activity may or may not be integrated within that firm and within overall supply chain performance.

Achievement of logistical integration is the focus and desire for organisations to achieve competitive advantage in the market place in which the organisation is competing.

7. **Conclusion**

This chapter has covered the definition of logistics as a key function in supply chains.

Logistics ensures that goods are moved from suppliers to end users in accordance with the 5R concept of right product at the right place at the right price at the right quantity and right quality.

The 5R concept is carried through via the logistics network which will be covered in the next chapter.
References


Case Study

You are required to:

1. Prepare a formal report on your findings
   Date of submission: Last class of module.
   No of words: 1500.
   Format: Formal report format in word document.

2. Present your findings
   Date of presentation: Last class of module.
   Duration of presentation: 20 minutes.
   Format: Not more than 15 slides and submit immediately after presentation.

You are required to work in groups.

Background Information

After operating a number of years in South East Asia, a company has decided to reduce the number of its warehouses from 12 to 4.

The company is serving the ASEAN region with a population of about 620 million.

Products & Distribution

The company is a major distributor of consumer medical equipment such as pedometer, heart-beat meter, blood pressure meter and others. It buys products from Canada, US, Europe and Japan.

<table>
<thead>
<tr>
<th>Country</th>
<th>Original Number of DC</th>
<th>Location of DC</th>
<th>No of Retailer(s)</th>
<th>GDP (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei</td>
<td>0</td>
<td>*</td>
<td>3</td>
<td>US$17 billion</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0</td>
<td>*</td>
<td>2</td>
<td>US$14 billion</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3</td>
<td>Jakarta, Surabaya, Medan</td>
<td>20</td>
<td>US$877 billion</td>
</tr>
<tr>
<td>Lao</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>US$9 billion</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2</td>
<td>KL, Kuching</td>
<td>30</td>
<td>US$305 billion</td>
</tr>
<tr>
<td>Myanmar</td>
<td>0</td>
<td>*</td>
<td>1</td>
<td>US$53 billion</td>
</tr>
<tr>
<td>Philippines</td>
<td>1</td>
<td>Manila</td>
<td>20</td>
<td>US$250 billion</td>
</tr>
</tbody>
</table>
Singapore | 2 | Singapore | 40 | US$291 billion
Thailand | 2 | Bangkok | 40 | US$366 billion
Vietnam | 2 | HCM, Hanoi | 20 | US$156 billion
**Total** | **12** | | **177** | **US$2,338 billion**

*Note: These countries are supported by Singapore DC*

**Revenue**
The company’s revenue for the last 3 years is:

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$50 million</td>
<td>$75 million</td>
<td>150 million</td>
</tr>
</tbody>
</table>

**Markets**
The market is characterized by a growing middle class who has a higher disposable income and is able to buy more products and the keen willingness to invest in wellness programs. This is seen in the rise of the number of gymnasiums across the region and exponential growth of health chains selling healthcare products and supplements. Analysts are optimistic about this sector in the long term.

**Assignment**
Your task is to prepare a report and a presentation focusing on the following:

1. Discuss the reduction of inventory when the company reduces the number of warehouses.
2. What is the impact on customer service level when only 4 warehouses are now serving the entire ASEAN region?
3. Discuss where the 4 DC should be located. Explain your choice(s).