



Nakhon Pathom Rajabhat University



Chapter 8

Transportation Management

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Outlines

- Definition of transportation
- Definition of transportation management
- Objectives of transportation management
- Roles of transportation in Logistics and marketing management
- Modes of transportation



Outlines (con't)

- Impact of transportation deregulation on the transporter
 - Transportation costs and performance measurement
 - International transportation
 - Key activities of the transporter in transportation management
 - Importance of using a computer in transportation management
 - Exercises
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Definition of transportation

Transportation is “the movement of people, animals, and goods from one place to the other.”





Definition of transportation management

Transportation management is “the process of planning, executing, and optimizing the movement of goods.”









Objectives of transportation management

- ✌ **High transport efficiency**
- ✌ **Cost reduction**
- ✌ **Transparency in the supply chain**
- ✌ **Better customer service**





Roles of transportation in Logistics and marketing management

-  **Makes available raw materials to manufacturers or producers**
-  **Makes available goods to customers**
-  **Product movement in the warehouse**
-  **Mobility of labor**

Modes of transportation



Road transport

Road transport exists in all parts of the world, this involves the use of motor vehicles (cars, lorries, buses, bicycles, and trucks). This mode is more flexible than compared with other modes.





Railway transport

Railway transport includes the provision of reliable services. It can convey heavy and bulky goods; it is also very cheap, safe, and also comfortable for passengers over a long distance.





Water transport

Water transport is very important because it is the cheapest way of transporting bulky goods over a long distance. In the world, there are two major types of water transport namely: Inland water transport and ocean water transport.





Air transport

Air transport is the newest means of transport; it was introduced in 1903 but developed into full means of transporting people and goods in the 1930s. The greatest air transportation started after the Second World War (WWII). This mode of transportation can be used for both domestic and international flights.





Pipeline transport

This mode involves the use of hollow pipes in the transportation of water, crude oil (petroleum), and gas. It is safer than using tankers or trailers in the transportation of these liquids.

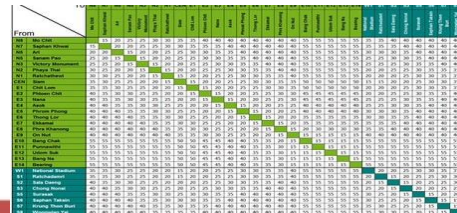




Impact of transportation deregulation on transporter

Transportation fares rate and service quality

Consumers have also benefited to a great extent from deregulation by having to pay lower fare rates while at the same time getting improved services and hence leading to an increase in overall demand for services.



Transportation costs and performance measurement



Types of transportation costs

Operating and running costs : Costs of operations are referred to as running costs. These expenses are variable in nature because they are dependent on the distance covered and the number of trips.



Types of transportation costs (con't)

Fixed costs : Insurance, tax, depreciation, driver wages, interest on capital, general supervision charges, and salary of operating managers are included under fixed or standing charges. These charges will have to be borne by the owner even if the vehicles are not operational.

Maintenance costs : As the name suggests these are expenses paid for maintaining the fleet including the wear on tires, repairs, overheads painting, etc.



Transportation performance measurement

Transportation performance measurement is a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.

Performance measures have four key measures i.e. Safety, Infrastructure condition, System reliability, and Transit asset management.





Definition of international transportation

International transportation is “the delivery of goods from one country of origin to a different country as a destination point.”





Modes of international transportation

Air freight

It is the fastest way to ship your cargo but it is costly. Air freight is your best option for time-sensitive cargo.





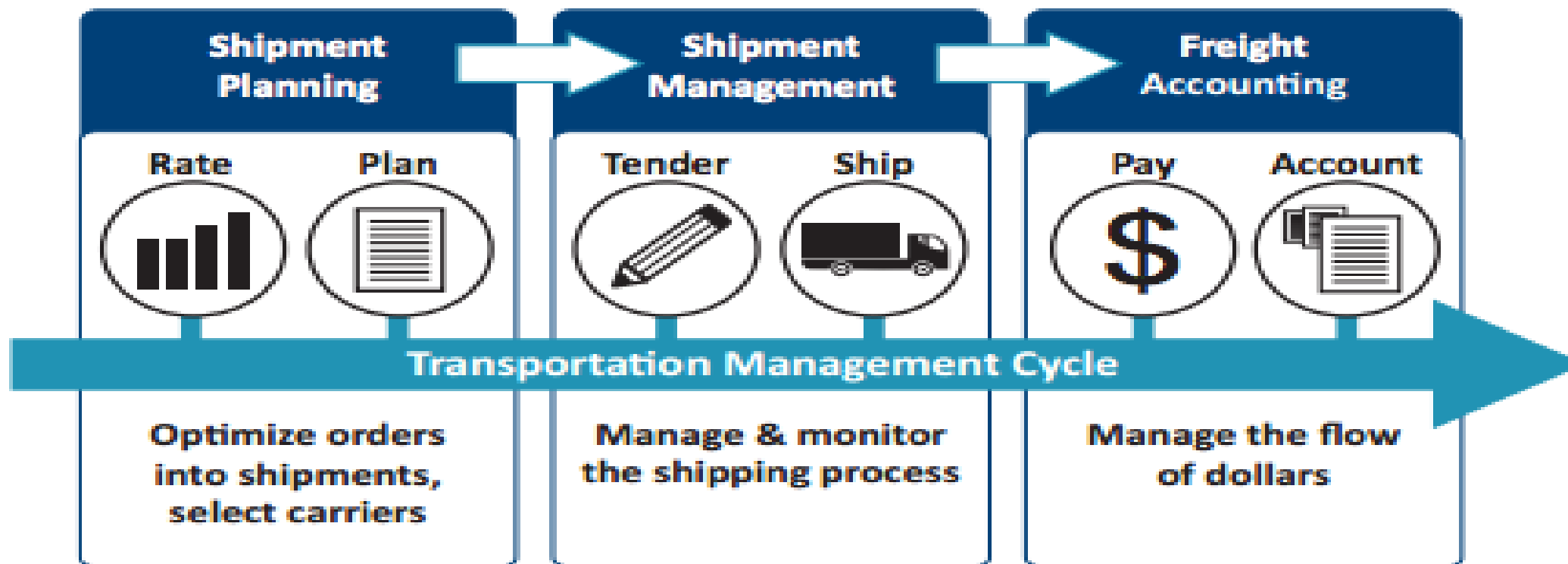
Ocean freight

There are 2 ways of shipping ocean ; FCL (Full Container Load) and LCL (Less Than Container Load).


It is always better to transport cargo to a location that is as close to the ultimate destination as possible. You might need to use a combination of services. Using **rail and road service** in addition to ocean freight service.





Key activities of the transporter in transportation management





 **Shipment planning** organizes orders into shipments and determines the best carrier.

 **Shipment management** executes the shipping plan through delivery, managing and monitoring the shipping process and flow of goods.

 **Freight accounting** handles settlement for inbound, outbound, and intercompany shipments, managing the cash flow.

Importance of using a computer in transportation management



Online booking

Traveling by land by bus or train typically begins with online booking on the computer. You can enter the date of departure and return and the destination and the computer screen will display ticket prices, and itineraries and offer the option to book and pay for the trip right online with a credit card.



Positive train control

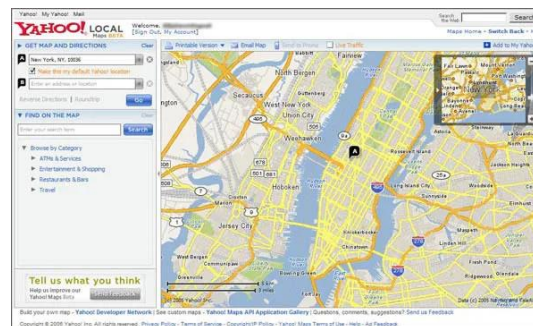
Positive train control is the computer system that tracks the movement of trains on various railways around the country. Metro train and subway systems and various freight and passenger train companies use various computer programs to maintain positive train control within their systems.





Mapping

Families planning road trips or truckers looking for an alternative route to a destination often use their home computers, laptops, or even smartphones to better understand the lay of the land. Driving directions and corresponding maps are available from websites like Yahoo, Google, and many others.





Car Navigation

One common computer used in land transportation today is the Global Positioning System or GPS. This form of car navigation is used for everyday travel by many people. These navigation computers are typically mounted on the dashboard of a car and feature a screen that shows a map that tracks your vehicle's movement via satellite signals.



Exercises Chapter 8



Question 1 : What is the meaning of transportation management ?

Question 2 : What are the objectives of transportation management ?

Question 3 : What are the roles of transportation in Logistics and marketing management ?

Question 4 : What are the modes of transportation ?

Question 5 : What are the transportation costs ?

Exercises Chapter 8 (con't)



Question 6 : What are the modes of international transportation ?

Question 7 : What are the key activities of the transporter in transportation management ?

Question 8 : What is the importance of using a computer in transportation management ?



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