Sample Answers to In-Text Questions

# Chapter 11: Logistics Management

# Discussion Questions

* 1. Discuss the importance of logistics management for effective supply chain management. What factors have contributed to the evolution and growth of logistics management?

Answer: Companies today spend a huge amount of their sales dollar on logistics, up to 35%. It is the latest frontier for finding cost savings and excelling in speedy delivery to the customer. The customer is so accustomed to speed of delivery, that companies not performing at the excellence level will lose sales.

* 1. What are the key benefits of an integrated logistics management system?

Answer: It is important to have a consistent and even flow of materials, keep costs down, improve customer satisfaction and increase market share.

* 1. What is transportation management and why is it a critical part of an integrated logistics management system?

Answer: Transportation management is the actual movement of goods in the supply chain. It is important because it is usually more than half of the total logistics costs, and without efficient and effective movement of materials, companies would have to have more inventories to offset shortages, late shipments and would lower their customer service levels.

* 1. Identify the key modes of transportation and discuss the benefits and drawbacks of each mode.

Answer: There are six main modes of transportation. They are air, truck, rail water, pipeline, and intermodal. The benefits and drawbacks are summarized on table 11.1 for reference.

* 1. “If a company’s target market consists of price-conscious consumers, then the firm is more likely to use slower modes of transportation.” Discuss why this is so.

Answer: The slower modes of transportation are mostly also the cheaper ones. It is also true that they are used for bulkier loads, and have less flexibility.

* 1. What are backhauls and why are they often an unnecessary drain on a company’s transportation resources?

Answer: Backhauls are trucks and intermodal containers moving back to their point of origin, or to another location to pick up another load. They are a drain on resources because they are usually empty or under loaded at best, and therefore not generating revenue.

* 1. What are some common examples of intermodal transportation? Briefly describe how each works.

Answer: Truck-rail intermodal uses the cheaper cost of rail, with the flexibility of truck delivery. Truck-air uses the speed of air, with the flexibility of truck pickup or delivery. In Europe there is rail-rail modes, because of incompatibility of different rail systems.

* 1. Describe a milk-run delivery system. When would a firm use such a system?

Answer: A milk run is where a single truck picks up or delivers to multiple locations. It is usually used with companies that have their own fleet. It is usually repeated runs to predetermined locations.

* 1. How does cross-docking work?

Answer: Cross-docking means material coming into a facility, and quickly back out on another truck, without being checked into stock, picked, and re-shipped.

* 1. Discuss the critical trade-offs related to transportation management: a) transportation vs. inventory costs, and b) transportation costs vs. customer responsiveness. Why do these tradeoffs typically occur?

Answer: There is a tradeoff between transportation and inventory costs. It compares the cost of inventory holding costs to costs of transportation. Many shipments to stock means lower inventory, but higher transport costs. Since transportation costs are generally more costly, companies choose to order fewer deliveries, resulting in an increase in inventory. To improve customer service levels, a company might have to increase inventories to keep the customer happy.

* 1. What are the critical functions served by packaging?

Answer: The functions of packaging are: protection, efficiency, communication of information, promotion, security, convenience, and control of usage, or dosing.

* 1. What four strategies can improve packaging efficiency?

Answer: accumulation, reduction of space and materials, unit loads, increased density, and better labeling.

* 1. Identify the four broad categories of materials handling.

Answer: Storage and handling equipment, computer aided equipment, Bulk handling equipment, and industrial trucks.

* 1. Explain the difference between supply warehouses, cross-docking warehouses, and distribution centers.

Answer: Supply warehouses store raw materials and work in process, cross-docking warehouses are for the receipt, sorting, and re-shipping of merchandise, and distribution centers are for storing finished goods before shipment to the customer.

* 1. What are the functions of a warehouse?

Answer: Warehouse functions are picking, inventory management, consolidation, break-bulk, cross docking, assembly, packaging, and reverse logistics.

* 1. What are the various critical factors to consider in global logistics?

Answer: The critical factors are political, economic, cultural, distance, documentation, security, channel intermediaries, and transportation modes.

* 1. Discuss and distinguish the functional differences between 3PL, 4PL, and 5PL providers.

Answer: These are listed in the chart in section 10, P. 408

* 1. What are some of the critical functions played by logistics in the service sector?

Answer: maximizing transportation costs to save money, innovative transportation technology, food service delivery, provisioning for restaurants, airlines and cruise lines, etc.

* 1. How are ethical and sustainability considerations addressed through logistics management?

Answer: Increasing concerns about the triple bottom line have led to companies being more socially responsible. They are more concerned that logistics activities do not contribute to air, water pollution, not deplete natural resources as much as possible, and having a more balance between the 3 bottom lines. Transportation has been a high consumer of fuels, and contributor of carbon dioxide.

# Critical Thinking Exercises

A company involved in global distribution of its products faces many challenges. Discuss some strategies that you would implement for distribution of a company’s products in Japan.

1. Suppose, in the first instance, that the products were high-technology electronics that were very fragile and required careful room temperature monitoring.

Answer: these products would need to be climate controlled, and are usually transported by climate controlled trucks, or by air, and stored in climate controlled storage facilities.

1. Now, in the second instance, suppose you were looking to distribute timber products for residential construction.

Answer: these highly bulky items would be transported by train, or by truck, or floated down a waterway. These are cheaper methods of transportation. They could usually be stored outdoors.

1. How might your distribution strategy change in these two circumstances? Identify the critical issues you need to address for each scenario.

Answer: As stated above.