Answers to End-of-Chapter Questions

# Chapter 1: Operations Management, Processes, and Supply Chain Management

## Review Questions

1. What is operations management? Define the term, the basic activities and then provide an example.

Answer:

OM refers to the effective planning, organizing, and controlling of the many value-creating activities of the firm including purchasing, producing, and delivering goods and services. When Walmart coordinates with suppliers to deliver goods to their distribution centers, this is operations management.

1. Define the terms process, supply chain and supply chain management.

Answer:

Processes--consist of a series of steps that turn inputs (such as experience, equipment, materials, time, and money) into outputs (goods, services, effective meetings, and educated kids).

Supply chain--the network of companies eventually making goods and services available to consumers, including all of the functions enabling the purchasing, production, delivery, and recycling of materials, components, and end products.

Supply chain management--the integration of key business processes concerning the flow of materials from raw material suppliers to the final customer.

1. What is process integration? What does it have to do with the management of supply chains?

Answer:

Managing and coordinating business processes within a network of supply chain trading partners.

It is the same thing as supply chain management.

1. What is meant by first-tier and second-tier suppliers and customers?

Answer:

The 1st-tier suppliers deliver goods and services to the focal firm. 2nd-tier suppliers are the suppliers’ suppliers. 1st-tier customers are the focal firm’s direct customers. 2nd-tier customers are the customers’ customers.

1. List and briefly describe the eight key supply chain processes.

Answer:

Customer Relationship Management--creating and maintaining customer relationships.

Customer Service Management--interacting with customers to maintain customer satisfaction.

Demand Management--balancing customer demand with supply capabilities.

Order Fulfillment--satisfying customer orders.

Manufacturing Flow Management--making products to satisfy target markets.

Supplier Relationship Management --creating and maintaining supplier relationships.

Product Development and Commercialization--develop new products frequently and get them to

market effectively.

Returns Management--manage product returns and disposal effectively.

1. Define concurrent engineering.

Answer:

Designing the manufacturing process or service delivery system simultaneously with the design of the product.

1. What is the difference between a good and a service? A manufacturer and a service producer?

Answer:

Manufacturers make physical or tangible products (goods) and service producers make intangible products, which may also include some tangible elements (services).

1. What is a goods-service package?

Answer:

The goods-service package is defined by the explicit service (travel from point A to point B, the haircut, the stock purchase); the implicit service (server attitudes, safety and security, convenience, atmosphere); the facilitating goods (the goods accompanying the service such as food or TV in a restaurant); and the supporting facility (the airplane, the bank building and the layouts).

1. What is customer contact and how does it impact service management?

Answer:

Customer contact refers to the amount or percentage of time customers are in contact with the service system while the service is being provided. As customer contact increases, the service processes become more difficult to manage.

1. What is lean thinking and what does it have to do with operations management?

Answer:

Lean thinking refers to a collection of processes and philosophies emphasizing the reduction of waste, along with continuous improvement, and the synchronization of material flows within the organization and between supply chain trading partners. It is part of operations management or a subset.

1. Describe the Six Sigma processes and how they came about. How is Six Sigma related to lean thinking?

Answer:

A philosophy encompassing a collection of processes that seek to improve quality continuously to please customers, reduce costs, and ultimately, create competitive advantage for the firm. Quality management is also an integral part of all lean production programs, since waste-free production requires high quality parts and products.

1. What are the historical developments of ERP?

Answer:

Starting with the Black & Decker company in 1964, material requirements planning (MRP) software applications were developed to try and balance part purchases and plant capacities with production requirements. Later, as computing capabilities grew, manufacturing resource planning (MRP-II) software systems were designed to allow firms to perform forward-looking *what-if analyses* of plant capacities. Eventually, MRP-II systems evolved into much more complex enterprise resource planning (ERP) systems in the 1990s.

1. What is project management?

Answer:

Project management is concerned with the planning, scheduling, and controlling of resources (such as capital, people, materials, and equipment) to meet the specific goals (such as completion date, budgeted cost, and required performance) of a project.

1. What marks the beginning of modern project management?

Answer:

The modern project management era started in 1958 with the development of CPM (the critical path method) and PERT (program evaluation and review technique).

1. What is RFID and how is it used?

Answer:

Radio frequency identification (RFID) technology enables a device to read data stored on chips at a distance, without requiring line-of-sight scanning. Walmart has enabled many supply chain participants to start thinking about or testing the use of RFID tags. The potential benefits include greater product visibility across the supply chain, better inventory management, easier product tracing and recalls, and reduced product tampering.

1. Describe sustainability and the triple bottom line. What is the difference between sustainability, corporate social responsibility, and being green?

Answer:

Sustainability as applied to supply chains is a broad term that includes green purchasing, some aspects of social responsibility, as well as financial performance (hence the linking of sustainability to what is termed the triple bottom line, or people, planet and profits). Sustainability can more formally be defined as the ability to meet the needs of current supply chain members without hindering the ability to meet the needs of future generations in terms of economic, environmental, and social challenges.

## Discussion Questions

1. Describe all of the processes you employ to come to class each day.

Answer:

Remember, processes consist of a series of steps that turn inputs (such as experience, equipment, materials, time, and money) into outputs. So students should list these series of steps, from getting up to driving to school and walking to class.

2. Describe a supply chain for a library. Would a library have any second-tier suppliers or customers? Explain.

Answer:

The supply chain should consist of the book, software, hardware, furniture, and service suppliers, like the janitors. Their customers would be students and any other people who visit the library. Internally, the library workers would be providing the operations. The library suppliers’ suppliers would be the 2nd-tier suppliers. It would be difficult to think of 2nd-tier customers.

3. Describe a number of customer relationship management and customer service management activities as you can, for your college or university.

Answer:

University customers are primarily students and their families, but also the general public such as football game customers, or businesses that hire students, and businesses who contract services to the university. The activities will vary.

4. Do you think it is a good idea to use only a small number of (really good) suppliers? Why?

Answer:

This is generally considered a good idea, because the focal firm can concentrate on managing fewer suppliers, it can increase the purchase quantities with the suppliers resulting in lower prices, and it can negotiate better services from the suppliers due to the greater quantities of purchased items. But, it can increase reliance on the suppliers, which is a greater risk.

5. Discuss the demand management activities you would find at a fast-food restaurant.

Answer:

Forecasts of demand and hiring people and buying food items to meet demand; drive-through ordering and counter ordering; promotions; use of part-timers; cross-training.

6. What sorts of customer contact do you see at McDonald’s? A fancy restaurant? A bank?

Answer:

McDonald’s—low level; counter server and drive-through server.

Fancy restaurant—high level; maître de, wait staff, manager, valet.

Bank—low level; ATM, counter server, loan specialist.

7. Describe the goods-service package for an exercise facility; a college bookstore; a radio station.

Answer:

Exercise facility--explicit service (improving health through exercising); the implicit service (server attitudes, safety, cleanliness, atmosphere); the facilitating goods (the machines, TV’s, food court, dressing rooms); and the supporting facility (the building).

Bookstore--explicit service (provision of books, magazines); the implicit service (server attitudes, convenience, atmosphere, information); the facilitating goods (books, clothing, magazines); the supporting facility (bookstore, book stacks).

Radio station--explicit service (entertainment, information); the implicit service (DJ attitudes, knowledge); the facilitating goods (music, talk, radio); the supporting facility (radio station building).

8. What impact should effective operations management have on costs? Profits? Productivity? Customer service? Quality?

Answer:

Costs—reduce costs due to better supplier relationships, volume purchasing, and better training.

Profits—higher profits due to lower costs and higher product prices due to improved quality.

Productivity—higher productivity due to better training, less waste, lower material costs.

Customer service—better customer service due to faster deliveries.

Quality—higher quality due to quality management, better suppliers.

9. Which is more important—customer relationship management or supplier relationship management?

Answer:

Interesting question—many will probably say that CRM is most important, since without customers, there will be no company. Others might say SRM since without good products, there will be no customers. Some will probably also say that both are equally important.

## Point-and-Click Video Questions

1. What does the sustainability video say that companies need to start doing to become more sustainable?

Answer:

Look at the business more holistically; use energy sources that don’t pollute; eliminate process waste; make products that are durable and recyclable.

2. Operations management jobs are primarily in which business sector?

Answer:

All business sectors.

3. What is the logical first phase of the supply chain cycle?

Answer:

Marketing.

4. What are the four parts of Beiersdorf’s supply chain?

Answer:

Plan, source, make, and deliver parts.

5. What is a dabbawala?

Answer:

A person who delivers hot lunches from homes, to business people for a monthly subscription fee.

6. What does Carlos Ghosn think about building cars in emerging markets?

Answer:

They are investing in these emerging markets to position themselves for growth.

7. What are some of the lessons David Neeleman has learned about running an airline?

Answer:

How to do more with less; live within the boundary; talk to your customers; build powerful work teams; treat your people right.