

Chapter 01: Introduction to Supply Chain Management

True / False

1. According to the textbook, the keys to successful supply chain management include trust, cooperation, collaboration and honest, accurate communications between supply chain partners.

- a. True
- b. False

ANSWER: True

2. Supply chain management is concerned about how suppliers' products are designed, produced, and transported.

- a. True
- b. False

ANSWER: True

3. One definition of supply chain management is "Coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers."

- a. True
- b. False

ANSWER: True

4. The universally accepted definition of supply chain management is "the management and integration of the parties involved in producing the end items coveted by consumers."

- a. True
- b. False

ANSWER: False

5. The assembly or production of finished products, producing the right amount of product, and ensuring that finished products meet specific quality, cost, and customer service requirements can all be considered elements of operations.

- a. True
- b. False

ANSWER: True

6. According to the textbook, supply chains include raw material suppliers, intermediate component manufacturers, end-product manufacturers, wholesale distributors, retailers and end-product consumers.

- a. True
- b. False

ANSWER: True

7. Trade estimates suggest that the bullwhip effect results in excess costs on the order of 50 percent for each firm in a supply chain.

- a. True
- b. False

ANSWER: False

8. According to the textbook, a supply chain's end customers are the only true source of income for all supply chain organizations.

Chapter 01: Introduction to Supply Chain Management

- a. True
- b. False

ANSWER: True

9. The foundation elements of supply chain management are Supply, Operations, Customer Service, and Logistics.

- a. True
- b. False

ANSWER: False

10. Supply chain management activity includes managing the various compensation and benefit programs within an organization.

- a. True
- b. False

ANSWER: False

11. Highly valued customers with large purchasing budgets who achieve moderate supply chain management success have been known to lower purchasing and inventory carrying costs and create better quality products with higher levels of customer service.

- a. True
- b. False

ANSWER: True

12. Many large firms are moving to in-house vertically integrated structures where they have more control over each business unit.

- a. True
- b. False

ANSWER: False

13. Supply chain analytics can be used along the supply chain to schedule production according to expected supplier deliveries

- a. True
- b. False

ANSWER: True

14. According to the textbook, in the 1950s and 1960s, mass production techniques focused on creating supplier partnerships, improving process design and flexibility, and improving product quality.

- a. True
- b. False

ANSWER: False

15. Supply Chain Management activities work with computer-aided design programs to ensure continued supply of a scarce item.

- a. True
- b. False

ANSWER: False

Chapter 01: Introduction to Supply Chain Management

16. According to the textbook, environmental and social impacts are considered outside of supply chain management.

- a. True
- b. False

ANSWER: False

17. Trends in supply chain management include expansion of the supply chain and decreasing supply chain visibility.

- a. True
- b. False

ANSWER: False

18. Circular economy refers to an economic system aimed at eliminating waste and the continual use of resources.

- a. True
- b. False

ANSWER: True

19. The bullwhip effect causes an amplification of the variation in the demand pattern along the supply chain.

- a. True
- b. False

ANSWER: True

20. The bullwhip effect is the result of companies producing excessive defective products; defective items are whipped back from the end customer toward the manufacturer of the defect.

- a. True
- b. False

ANSWER: False

Multiple Choice

21. When a particular item is in short supply accompanied by rising prices, a firm might find it beneficial to:

- a. Discontinue buying the product and focus more on cheaper products.
- b. Align itself with one of the suppliers to ensure a continued supply of the scarce item.
- c. Purchase the item from a manufacturer who cuts corners and provides a product below market price.
- d. All of these

ANSWER: b

22. Supply chain management includes the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. It also includes:

- a. Human resources and job design
- b. Selling and marketing products
- c. Coordination and collaboration with channel partners
- d. Program evaluation and review techniques.

ANSWER: c

Chapter 01: Introduction to Supply Chain Management

23. Which of the following companies are indirectly involved in most supply chains?

- a. Trucking and airfreight companies
- b. Freight forwarders
- c. Public warehousing firms
- d. All of these

ANSWER:

d

24. According to the textbook, conditions which must be present for successful supply chain management include:

- a. High level of trust among firms
- b. Corporate contracts regarding performance expectations
- c. Short-term company focused performance
- d. Benchmarking

ANSWER:

a

25. According to the text, the FOUR important elements of the supply chain are:

- a. Purchasing, manufacturing, transportation, retail stores
- b. Supply, operations, logistics, integration
- c. Purchasing, manufacturing, logistics, transportation
- d. Supply, operations, manufacturing, distribution

ANSWER:

b

26. Encouraging or helping a firm's suppliers to perform in a desired fashion can be referred to as:

- a. Progressive procurement
- b. Supplier management
- c. Right-shoring
- d. Supply chain performance management

ANSWER:

b

27. Which of the following activities would fall under the foundational element of operation?

- a. Distribution network
- b. Supplier management
- c. Demand management
- d. Third-party logistics services

ANSWER:

c

28. One operational method for managing inventory is the implementation of a software system which can be referred to as:

- a. Customer relationship management (CRM)
- b. Demand capacity tracking (DCT)
- c. Material requirements planning (MRP)
- d. Demand process reengineering (DPR)

ANSWER:

c

Chapter 01: Introduction to Supply Chain Management

29. Which of the following tends to reduce duplicate testing and inspections and the need for extensive supplier evaluations?

- a. Supplier certification
- b. Right-shoring
- c. Business process reengineering
- d. Pilot Production

ANSWER: a

30. According to the textbook, the order of product and service flow is as follows:

- a. Raw material supplier, retailer, component manufacturer, wholesale distributor, end product manufacturer, end-product consumer
- b. Raw material supplier, component manufacturer, retailer, wholesale distributor, end product manufacturer, end-product consumer
- c. Component manufacturer, raw material supplier, retailer, wholesale distributor, end product manufacturer, end-product consumer
- d. Raw material supplier, component manufacturer, end product manufacturer, wholesale distributor, retailer, end-product consumer

ANSWER: d

31. Which of the following is a reverse logistics activity?

- a. Delivering finished goods to your customer
- b. Recycling products and components
- c. Developing a collaborative relationship with your supplier
- d. Managing the quality of products

ANSWER: b

32. Which of the following would be considered a third party logistics provider?

- a. A raw materials supplier
- b. An intermediate component manufacturer
- c. A firm that leases storage warehousing
- d. An end product manufacturer

ANSWER: c

33. Which of the following statements is TRUE?

- a. Supply chain management was invented by the auto manufacturing industry.
- b. Strategic partnerships are seen as one of the foundations of supply chain management.
- c. Purchasing is seen as the final and most difficult step in the supply chain.
- d. Service response logistics is the digital distribution of services.

ANSWER: b

34. Which of the following acronyms is NOT paired with its correct "translation"?

- a. TQM – Total Quality Management
- b. JIT – Just-in-Time
- c. TLS – Third-party Logistics Services

Chapter 01: Introduction to Supply Chain Management

- d. ERP – Enterprise Resource Planning

ANSWER:

c

35. Lean production is typically associated with which of the following company's production systems?

- a. Procter and Gamble
- b. Kraft
- c. Samsung
- d. Toyota

ANSWER:

d

36. Customer relationship management, distribution network, transportation management, and service response logistics are all important issues that are most closely related to:

- a. Purchasing
- b. Logistics
- c. Integration
- d. Manufacturing

ANSWER:

b

37. The following strategy is usually employed by lean organizations in an effort to ensure continued quality compliance among suppliers and with internal production facilities:

- a. Six Sigma
- b. MRP II
- c. 3PL
- d. CAPS

ANSWER:

a

38. Indicate which of the following can 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.”

- a. Reverse logistics
- b. Enterprise resource planning
- c. Sustainability
- d. Strategic partnerships

ANSWER:

c

39. According to the text, which of the following is considered a current trend in supply chain management?

- a. Outsourcing the CRM function
- b. Increasing supply chain visibility
- c. Use of self-directed teams
- d. None of these

ANSWER:

b

40. Developed in the 1990s as a popular way of developing radically new business processes in an effort to reduce waste and increase performance is referred to as:

- a. Process integration

Chapter 01: Introduction to Supply Chain Management

- b. Benchmarking
- c. Business process reengineering
- d. Vertical integration

ANSWER:

c

41. The term Supply Chain Management and the field of study it represents today seems to have emerged in the:

- a. 1960s
- b. 1970s
- c. 1980s
- d. 1990s

ANSWER:

c

42. An example of an internal or external event that causes a disruption or failure of supply chain operations is:

- a. Supply chain risk
- b. Back-shoring
- c. Six Sigma quality management
- d. COVID-19 Pandemic

ANSWER:

d

43. Which of the following can happen as a result of the bullwhip effect?

- a. Increase in defective products
- b. Excess costs for each firm in a supply chain
- c. Decreased levels of safety stock
- d. Quicker distribution to warehouses

ANSWER:

b

44. The continuing cycle of erratic demand causing forecasts to include safety stock which in turn magnify supplier forecasts and cause production planning problems is known as:

- a. Supply chain management
- b. Process integration
- c. Back-shoring
- d. Bullwhip effect

ANSWER:

d

45. The following is an example of the bullwhip effect:

- a. Nike includes safety stock of 5,000 units of shoestrings in its demand forecast causing its shoestring supplier to increase their normal output for Nike.
- b. Nike products are so successful that it adds a new retailer for distribution
- c. Nike produces a defective product and thus realizes an excessive increase in consumer returns
- d. Nike is unhappy with the performance of a distributor which causes a chain-reaction of replacements to companies involved in its supply chain

ANSWER:

a

Chapter 01: Introduction to Supply Chain Management

Subjective Short Answer

46. There are many definitions for supply chain management. a. Define supply chain management in your own words. b. What is the goal of supply chain management?

ANSWER:

a.	Supply chain management is managing the activities involved in sourcing, production, and distribution of products. It is also involved in coordinating or integrating a number of goods- and services-related activities among supply chain participants.
b.	The goal of supply chain management typically involves improving operating efficiencies, increasing quality of products and strengthening customer service among the collaborating organizations.

47. Give three examples of benefits that may be realized by a firm that successfully manages its supply chain.

ANSWER:

	<i>Benefits from successfully managing the supply chain</i>
a.	Lower purchasing and inventory carrying costs
b.	Better product quality
c.	Higher levels of customer service
d.	Increase in sales

48. Briefly explain how technology has impacted supply chain management. Give three examples.

ANSWER:

	<i>How technology has impacted supply chain management</i>
a.	Shipments can be tracked and monitored using technology and alerts sent to shippers about items that are in transit and delivered.
b.	Technology can be used to help a facility make more economic use of their utilities such as automated controls for lighting and air conditioning.
c.	RFID and automated storage and retrieval systems can be used to move product through a warehouse
d.	Inventory visibility is made easier by technology and the use of MRP and ERP systems.

49. Briefly discuss three current trends in supply chain management:

ANSWER:

a.	Use of supply chain analytics which refers to examining raw supply chain data and then reaching conclusions or making predictions with the information.
b.	Improving supply chain sustainability which involves meeting 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.
c.	Increasing supply chain visibility so manufacturers, business partners, and customers know exactly where products are, at any point in the supply chain.

Essay

50. Discuss the differences between supply chain partnerships of the past and those that have developed today.

ANSWER: In the past, supply chain partnerships did not really exist.

Chapter 01: Introduction to Supply Chain Management

- Supply chains were seen as a series of independent organizations that were looked on, to perform their core competency for the sake of their downstream "partner."
- Firms in the past did not seek to share information.
- Buyers of supplies and services instead usually were reduced to bargain hunters. Low cost was valued over quality.
- Traditional relationships were also characterized by a large number of partners and short-term contracts. This put an emphasis on low cost that would provide short-term profits versus sustainable profits that might come along with consistently high quality goods and services.
- In some cases, conglomerates were formed by firms seeking more supply chain control.

Modern supply chain partnerships are much different.

- Partnerships of today encourage sharing and collaboration from the design phase to the delivery phase.
- Partners, nowadays, see each other as a chain of customers connected by their goal of pleasing the final end customer.
- While cost is still an important aspect of creating value for the customer, today supply chains also focus on the importance of higher quality, more customization, and swift delivery service.
- It is for this reason that modern partnerships focus on collaboration from the moment they begin to design a product until the product's lifecycle has run its course.
- Modern partnerships often include a small number of partners who understand the value of long-term contracts that value quality, speed, and flexibility as much, if not more, than cost.

51. List the four elements of supply chain management and provide a brief explanation of each of the four elements. What types of failures might each of those elements create within the supply chain? Why might those results be linked to errors in a particular element?

ANSWER: Note: While the descriptions of each of the four elements are relatively general and accurate, the types of failures each of the elements may be responsible for, are rather long lists. Therefore, in many cases it is important for the student to explain why one element may ultimately be responsible for a certain problem with a list.

- a. Supply Elements – Supply management professionals most often perform the purchasing function. Effective supply management has resulted in smaller supply bases and the development of more long-term supplier relationships to achieve the competitive benefits. Supply management is one of the foundations of supply chain management, since incoming material quality, delivery timing, purchase price, product safety, and purchasing's impact on the environment are all affected by the buyer-supplier relationship and the capabilities of suppliers.

Some of the mistakes in purchasing can cause low-quality end-items, high inventories, stockouts, excessive cost of goods sold, interruptions in production, or excessive operational costs.

- b. Operations Elements – The operations elements of the supply chain take into account the assembly or processing of materials and components into finished products or services. Operations is also responsible for creating the right amount of product within an appropriate period of time that will meet the demand needs of the customer while still satisfying their specific needs in terms of quality, cost, customization, and timely delivery.

Mistakes in operations can cause shortages, stockouts, high inventories, low inventories, excessive operational costs, late deliveries, low-quality end-items, defects, or dangerous end-items.

- c. Logistics Elements – the distribution elements of the supply chain are focused on delivering products to customers at the right time, quality, and volume. The distribution elements include transportation,

Chapter 01: Introduction to Supply Chain Management

warehousing, break-bulking, packaging, containerization, and any services related to developing and keeping a distribution itinerary.

Mistakes in distribution can cause shortages, stockouts, excessive operational costs, damaged end-items, high pilferage rates, customer complaints, delivery errors (wrong item to the wrong destination), and lost inventory.

- d. **Integration Elements** – The integration elements involve the planning and coordination required to create a seamless supply chain. Supply chain integration requires management to inform all supply chain parties of how important it is for them to share information, articulate their needs, and develop relationships.

Poor supply chain integration will cause conflicts between supply chain partners, late deliveries, tardy production, overproduction, under production, poor forecasting, over purchasing, material shortages, long lead times, high operational costs, excessive waiting times, and excessive inventories.

52. Explain the bullwhip effect. What can be done to reduce the bullwhip effect? Give an example of how the bullwhip effect results in excess costs in the supply chain.

ANSWER:

- a. The bullwhip effect is a build-up of safety stocks due to poor forecasting and communication that cause order quantities to be increased throughout the supply chain. The increases become amplified as the product continues farther down the supply chain. This will likely cause overstock and excess costs for each firm in a supply chain.
- b. Better communication between each link in the supply chain and sharing of upcoming demand forecasts makes it easier for companies to feel confident about their order quantity. Trading partners feel more comfortable with manufacturers who consistently produce high quality products. Firms feel more confident and have better working relationships with manufacturers that have better products and better services. Better working relationships lead to single source for supplies and this helps the manufacturer plan for demand.
- c. Example of the bullwhip effect – Company A sells widgets to customers. Actual demand from customers is 20 widgets. Company A orders 25 widgets from the distributor B; an extra 5 units are to ensure it doesn't run out of floor stock. Distributor B wants to order in bulk to save costs, so it orders 30 widgets from supplier C. Supplier C always keeps safety 20% stock on hand, so it orders 36 widgets from Manufacturer D. At Manufacturer D's factory, it must produce in runs of 50. Now 50 units have been produced for a demand of only 20 units causing each firm in the supply chain excess costs.

53. Draw a generic global supply chain and label all the participants.

ANSWER: A Generic Supply Chain

Chapter 01: Introduction to Supply Chain Management

