## Experiencing MIS, 9e (Kroenke)

# **Chapter Extension 12 Supply Chain Management**

- 1) Which of the following statements is TRUE of an inter-enterprise system?
- A) It is constant in scope and complexity.
- B) It cannot be customized to the needs of organizations.
- C) It is shared by two or more independent organizations.
- D) It is easier to manage than other types of systems.

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-1: What Are Typical Inter-Enterprise Processes?

Classification: Concept

2) Many organizations can share a single inter-enterprise information system.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-1: What Are Typical Inter-Enterprise Processes?

Classification: Concept

3) The Automated Clearing House system among banks is an example of a standardized interenterprise system.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-1: What Are Typical Inter-Enterprise Processes?

Classification: Concept

4) Explain inter-enterprise IS processes with an example.

Answer: An inter-enterprise is an information system that is shared by two or more independent organizations. Inter-enterprise IS varies in scope and complexity. An example of a simple interenterprise IS includes a sales process at a small retailer in which the retailer processes customers' credit card transactions. The retailer, customer, and credit card company (and possibly the bank that issued the card) are all part of the business process that processes the payment.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-1: What Are Typical Inter-Enterprise Processes?

- 5) Which of the following refers to a network of organizations and facilities that transforms raw materials into products delivered to customers?
- A) supply chain
- B) distribution channel
- C) strategic business unit
- D) collaboration system

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-2: What Is a Supply Chain?

Classification: Concept

- 6) In a traditional supply chain, distributors order products from \_\_\_\_\_.
- A) retailers
- B) manufacturers
- C) customers
- D) suppliers

Answer: B

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-2: What Is a Supply Chain?

Classification: Concept

- 7) Which of the following statements is TRUE of supply chains?
- A) Supply chains consist only of customers, retailers, distributors, manufacturers, and suppliers.
- B) Not every supply chain has distributors and retailers.
- C) Each element in the supply chain can be connected to only one entity up and down.
- D) The only source of revenue in a supply chain is the retailer.

Answer: B

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-2: What Is a Supply Chain?

8) Every supply chain has four basic components: suppliers, manufacturers, distributors, and retailers.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-2: What Is a Supply Chain?

Classification: Concept

9) At each level of a supply chain, an organization can work with many organizations both up and down the supply chain.

Answer: TRUE

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-2: What Is a Supply Chain?

Classification: Concept

10) Each level of a supply chain has a distinct source of revenue.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-2: What Is a Supply Chain?

Classification: Concept

11) A major factor that affects supply chain performance is the \_\_\_\_\_.

A) number of work-centers

B) working capital

C) competitors

D) facilities

Answer: D

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

- 12) Nathan is in charge of inventory management at a furniture manufacturing company. Given his role, Nathan will be responsible \_\_\_\_\_.
- A) for the machinery used in manufacturing
- B) for the evaluation of the demand for furniture for a given period
- C) for the wood and aluminum used for the furniture
- D) for the capital required for production

Answer: C

AACSB: Reflective Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

Classification: Application

- 13) Which of the following statements is TRUE of inventory?
- A) Managing an inventory requires balancing between availability and cost.
- B) Inventory size increases as consumers purchase items.
- C) Inventory management decisions are limited to the size of the inventory.
- D) Increasing the inventory size always increases a company's profitability.

Answer: A

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

Classification: Concept

- 14) Which of the following factors influences supply chain performance by affecting the ways that organizations in the supply chain request, respond, and update one another?
- A) information
- B) transportation
- C) inventory
- D) facilities

Answer: A

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

15) is a factor of information that can be transactional, such as orders and order
returns, or it can be informational, such as the sharing of inventory and customer order data.
A) Purpose
B) Means
C) Availability
D) Direction
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Discuss the role of information systems in supply chain management and performance.
Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?
Classification: Concept
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16) Which of the following refers to the way organizations share their information?
A) means
B) purpose
C) availability
D) intent
Answer: C
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Discuss the role of information systems in supply chain management and
performance.
Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?
Classification: Concept
17) refers to the methods by which information is transmitted.
A) Direction
B) Means
C) Purpose
D) Availability
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Discuss the role of information systems in supply chain management and

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Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

performance.

18) As a factor affecting supply chain performance, inventory includes all of the materials in the supply chain, including raw materials, in-process work, and finished goods.

Answer: TRUE

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

Classification: Concept

19) Increasing the size of an inventory reduces the cost of the inventory.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

Classification: Concept

20) Decreasing the size of an inventory decreases the odds that an item will be unavailable for purchase.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

Classification: Concept

21) What is a supply chain? What are the four drivers that are crucial to the success of a supply chain?

Answer: A supply chain is a network of organizations and facilities that transform raw materials into products delivered to customers. In a typical supply chain, customers order from retailers, who, in turn, order from distributors, who, in turn, order from manufacturers, who, in turn, order from suppliers. The supply chain also includes transportation companies, warehouses, and inventories, and some means for transmitting messages and information among the organizations involved. Four major factors, or drivers, affect supply chain performance: facilities, inventory, transportation, and information.

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?

22) \_\_\_\_\_ is the difference between the sum of the revenue generated by the supply chain and the sum of the costs that all organizations in the supply chain incur to obtain that revenue.

A) Supply chain sustainability

B) Supply chain compatibility

C) Supply chain profitability

D) Supply chain feasibility

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-4: How Does Supply Chain Profitability Differ from Organizational

Profitability?

Classification: Concept

23) Each organization in a supply chain is an independent company with its own objectives.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-4: How Does Supply Chain Profitability Differ from Organizational

Profitability?

Classification: Concept

24) Profitability of a supply chain increases if all the organizations in the supply chain operate at their maximum profitability.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-4: How Does Supply Chain Profitability Differ from Organizational

Profitability?

25) Define supply chain profitability. How is it different from individual organizational profitability?

Answer: Supply chain profitability is the difference between the sum of the revenue generated by the supply chain and the sum of the costs that all organizations in the supply chain incur to obtain that revenue. In general, the maximum profit to the supply chain will not occur if each organization in the supply chain maximizes its own profits in isolation. Usually, the profitability of the supply chain increases if one or more of the organizations operate at less than their own maximum profitability.

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-4: How Does Supply Chain Profitability Differ from Organizational

Profitability?

Classification: Concept

- 26) The phenomenon in which the variability in the size and timing of orders increases at each stage up the supply chain is referred to as the \_\_\_\_\_.
- A) synergistic effect
- B) flanging effect
- C) stack effect
- D) bullwhip effect

Answer: D

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

- 27) Which of the following statements is TRUE of the bullwhip effect?
- A) It forces suppliers and manufacturers to carry smaller inventories than necessary.
- B) It is a natural dynamic that occurs because of the multistage nature of the supply chain.
- C) It is strongly associated with erratic consumer demand.
- D) It increases the overall profitability of the supply chain.

Answer: B

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

28) Juicebox Inc., a fruit juice processing company, has been facing irregular demand patterns for the last two years. These large fluctuations have created a bullwhip effect for the company.

Which of the following steps will Juicebox Inc. most likely take to cope with this effect?

A) carry larger inventories

B) follow the just-in-time inventory policy

C) reduce its annual production of juice

D) reduce the number of employees to cut costs

Answer: A

AACSB: Reflective Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Application

29) The bullwhip effect explains the amplification of demand at various stages of a supply chain.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

30) The large fluctuations of the bullwhip effect force organizations to stock fewer inventories than needed.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

31) The bullwhip effect increases if all the participants in the supply chain have an access to consumer-demand information from the retailer.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

32) Inter-enterprise information systems are necessary to share consumer-demand information.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

33) True demand is the demand from the only party that introduces money into the system.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

### 34) Explain the bullwhip effect with an example.

Answer: The bullwhip effect is a phenomenon in which the variability in the size and timing of orders increases at each stage up the supply chain, from customer to supplier. In a famous study, the bullwhip effect was observed in Procter & Gamble's supply chain for diapers. The number of babies determines diaper demand, and that number is constant or possibly slowly changing. Retailers do not order from the distributor with the sale of every diaper package. The retailer waits until the diaper inventory falls below a certain level, called the reorder quantity. Then the retailer orders a supply of diapers, perhaps ordering a few more than it expects to sell to ensure that it does not have an outage. The distributor receives the retailer's orders and follows the same process. It waits until its supply falls below the reorder quantity, and then it reorders from the manufacturer, with perhaps an increased amount to prevent outages. The manufacturer, in turn, uses a similar process with the raw-materials suppliers.

Because of the nature of this process, small changes in demand at the retailer are amplified at each stage of the supply chain. These small changes become quite large variations on the supplier end. The large fluctuations of the bullwhip effect force distributors, manufacturers, and suppliers to carry larger inventories than should be necessary to meet the real consumer demand. Thus, the bullwhip effect reduces the overall profitability of the supply chain.

AACSB: Analytical Thinking

Difficulty: 3: Challenging

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

35) Which of the following is used as the measure of supply chain speed?

A) dollar value of goods exchanged in a given period of time

B) amount of goods exchanged in a given period of time

C) total profit generated by the components of supply chain

D) time taken to transport goods from one component to another

Answer: A

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-6: How Do Information Systems Affect Supply Chain Performance?

Classification: Concept

- 36) Zim-ware, a kitchenware brand, recently started selling its products online. It plans to increase the sale of its products using e-commerce. Which of the following is Zim-ware most likely to experience as a result of this system change?
- A) reduced costs of buying and selling
- B) reduced supply chain speed
- C) increased size and costs of inventories
- D) optimized supply chain profitability

Answer: A

AACSB: Reflective Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-6: How Do Information Systems Affect Supply Chain Performance?

Classification: Application

37) The cloud storage has increased the costs of integrating an organization's information systems.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-6: How Do Information Systems Affect Supply Chain Performance?

Classification: Concept

38) Information systems have the capability to eliminate or greatly reduce the bullwhip effect.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-6: How Do Information Systems Affect Supply Chain Performance?

39) Information systems do not support just-in-time inventory.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-6: How Do Information Systems Affect Supply Chain Performance?

Classification: Concept

## 40) How do information systems affect supply chain performance?

Answer: Information systems, such as customer relationship management (CRM) and e-commerce sales systems have dramatically reduced the costs of buying and selling. Sourcing, buying, and selling have all become faster, easier, more effective, and less costly. Distributed systems in the cloud have enabled businesses to integrate their information systems with less cost and greater speed and agility than ever before. The presence of information systems has also expanded supply chain speed. Information systems have enabled both suppliers and customers to reduce the size of their inventories and, thus, reduce their inventory costs. Information systems also improve delivery scheduling. Using information systems, suppliers can deliver materials and components at the time and in the sequence needed. Such delivery enables just-in-time inventory, and it allows manufacturers to reduce raw materials inventory size as well as the handling of raw materials.

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and performance.

Learning Obj: LO CE12-6: How Do Information Systems Affect Supply Chain Performance?

Classification: Concept

41) When Disney Studios and Pixar Studios share an information system, they are using

A) collaborative resources

B) community property

C) inter-enterprise systems

D) an advanced enterprise system

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-1: What Are Typical Inter-Enterprise Processes?

42) occurs when a company such as Dell omits a part of the supply chain relationship
and sells directly to the consumer.
A) Disintermediation
B) Distribution channel
C) Strategic business unit
D) Collaboration system
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Discuss the role of information systems in supply chain management and
performance.
Learning Obj: LO CE12-2: What Is a Supply Chain? Classification: Concept
Classification. Concept
43) All of these are steps in supply chain management EXCEPT
A) removing inventory
B) payroll
C) purchasing items from the manufacturer
D) the customer's payment
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Discuss the role of information systems in supply chain management and
performance.
Learning Obj: LO CE12-2: What Is a Supply Chain?
Classification: Concept
44) All of these factors affect supply chain performance EXCEPT
A) number of work-centers
B) inventory
C) transportation
D) facilities
Answer: A
AACSB: Analytical Thinking
Difficulty: 1: Easy
Course LO: Discuss the role of information systems in supply chain management and performance.
Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance?
Classification: Concept

45) Managing inventory requires balancing between \_\_\_\_\_ and \_\_\_\_. A) managers; employees B) working capital; work-centers C) supply; demand D) availability; cost Answer: D AACSB: Analytical Thinking Difficulty: 1: Easy Course LO: Discuss the role of information systems in supply chain management and performance. Learning Obj: LO CE12-3: What Factors Affect Supply Chain Performance? Classification: Concept 46) The maximum profit to the supply chain will occur if organization in the supply chain maximizes its one profits. Answer: FALSE AACSB: Information Technology Difficulty: 1: Easy Course LO: Discuss the role of information systems in supply chain management and performance. Learning Obj: LO CE12-4: How Does Supply Chain Profitability Differ from Organizational Profitability? Classification: Concept 47) The \_\_\_\_\_ is a phenomenon in which the variability in the size and timing of orders increases at each state up the supply chain. A) demand of the retailer B) bullwhip effect C) reorder point D) amplification effect Answer: B AACSB: Analytical Thinking

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

- 48) What is one way to eliminate the bullwhip effect?
- A) Force suppliers and manufacturers to carry smaller inventories.
- B) Give all participants in the supply chain access to consumer-demand information from the retailer.
- C) Monitor consumer behavior with surveys.
- D) Send the same amount of inventory to every retail store on a monthly basis.

Answer: B

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

- 49) Which of the following is a benefit of information systems on supply chain performance?
- A) decrease supply chain speed
- B) increase size and cost of inventories
- C) enable JIT
- D) the bullwhip effect

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

50) Retailers do not want to share sales data with the entire sales chain because it mainly benefits the supply chain.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-5: What Is the Bullwhip Effect?

Classification: Concept

51) Inter-enterprise system management is much easier than management for other types of systems.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-1: What Are Typical Inter-Enterprise Processes?

52) Why is the term "chain" in supply chain management misleading?

Answer: The term is misleading because chain implies that each organization is connected to just one company up (toward the supplier) and down (toward the customer) the chain. That is not the case. Instead, at each level, an organization can work with many organizations both up and down the supply chain. Thus, a supply chain and the processes that support it are networks.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-2: What Is a Supply Chain?

Classification: Concept

53) List the benefits of information systems on supply chain performance.

#### Answer:

• Reduce costs of buying and selling

- Increase supply chain speed
- Reduce size and cost of inventories
- Improve delivery scheduling-enable JIT
- Fix bullwhip effect.

AACSB: Analytical Thinking

Difficulty: 2: Moderate

Course LO: Discuss the role of information systems in supply chain management and

performance.

Learning Obj: LO CE12-6: How Do Information Systems Affect Supply Chain Performance?