

23BAE743 Logistics and Supply Chain Management

Question Bank - Unit 2

2 Mark Questions & Answers, 16 Mark Questions

Supply Chain Management

2 Mark Questions & Answers

1. What is Supply Chain Management (SCM)?

SCM is the management of the flow of goods and services, including all processes that transform raw materials into final products, and ensuring their timely delivery to end customers.

2. Define a supply chain.

A supply chain is a network of organizations, resources, activities, and technologies involved in the creation and distribution of products or services from suppliers to customers.

3. What is the meaning of supply chain integration?

Supply chain integration involves aligning and coordinating activities across the supply chain to improve efficiency, reduce costs, and meet customer demand more effectively.

4. Explain the term "logistics" in SCM.

Logistics refers to the management of the movement, storage, and distribution of goods within a supply chain, ensuring products reach their destination on time and in the right condition.

5. Define demand forecasting in the context of SCM.

Demand forecasting is the process of predicting future customer demand for products or services, helping organizations plan inventory, production, and distribution accordingly.

6. What is the primary objective of Supply Chain Management?

The primary objective of SCM is to ensure the efficient flow of goods, services, and information from suppliers to customers, maximizing value while minimizing costs.

7. Why is supply chain management significant to businesses?

SCM is significant because it improves operational efficiency, reduces costs, enhances customer satisfaction, and enables competitive advantage by optimizing the end-to-end process from production to delivery.

8. How does supply chain management contribute to customer satisfaction?

SCM ensures the timely delivery of high-quality products to customers at the right price, which directly influences customer satisfaction and loyalty.

9. What role does inventory management play in SCM objectives?

Inventory management ensures that the right amount of stock is available at the right time, minimizing storage costs and preventing stockouts, which helps meet customer demand effectively.

10. How can supply chain objectives influence a firm's competitive advantage?

Effective SCM can help a firm reduce costs, improve quality, and enhance delivery performance, leading to better customer satisfaction and a stronger competitive position in the market.

11. What is the key difference between service and manufacturing supply chains?

Manufacturing supply chains focus on producing tangible goods, while service supply chains are concerned with delivering intangible services, requiring different management strategies and supply chain dynamics.

12. How does customer involvement differ in service supply chains compared to manufacturing supply chains?

In service supply chains, customers are often directly involved in the production process (e.g., in healthcare or hospitality), whereas in manufacturing, customers are usually not involved in production.

13. Why are inventory management practices different in service and manufacturing supply chains?

In manufacturing, inventory can be stored and controlled, whereas in services, inventory is often intangible (e.g., service capacity), and management focuses more on resource scheduling and service delivery.

14. How can service supply chains be optimized by applying Lean principles?

Lean principles can be applied in service supply chains by eliminating waste, improving service quality, and enhancing the speed of service delivery, leading to reduced costs and improved customer experience.

15. What are the challenges of managing demand in service supply chains?

The challenges include fluctuating demand, perishable service capacity (e.g., hotel rooms), and the difficulty of predicting service levels due to the intangible nature of the output.

16. What are the key phases in the evolution of SCM?

The evolution of SCM includes phases such as the traditional logistics phase, the integration phase, and the current advanced stage of supply chain optimization through technology and global networks.

17. How has globalization affected the evolution of SCM?

Globalization has expanded supply chains internationally, increased the complexity of logistics, and necessitated the adoption of advanced technologies for managing global operations and diverse markets.

18. How did the rise of e-commerce impact supply chain management?

E-commerce has increased the need for faster delivery, more flexible inventory management, and real-time tracking, leading to innovations in last-mile delivery and the integration of digital technologies.

19. How has technology influenced the evolution of SCM?

Technology has enabled real-time data sharing, automation of routine tasks, improved forecasting, and greater supply chain visibility, making operations more efficient and responsive to changes in demand.

20. Predict the future direction of supply chain management.

The future of SCM will likely include greater automation, increased use of AI and machine learning for decision-making, and a focus on sustainability and circular supply chains to address environmental concerns.

21. What is a service supply chain?

A service supply chain is a network of organizations and activities involved in delivering a service to customers, with a focus on managing service processes, resources, and customer interactions.

22. How does demand variability impact service supply chains?

Demand variability in service supply chains can lead to overcapacity or under capacity, making it difficult to provide consistent service levels without overburdening resources.

23. How can service supply chains be improved through collaboration?

Collaboration among service providers, suppliers, and customers can lead to better resource utilization, improved service quality, and more accurate demand forecasting.

24. How does capacity planning affect service supply chains?

Effective capacity planning ensures that service providers have the right resources (e.g., staff, equipment) available at peak demand times, preventing delays and improving customer satisfaction.

25. What is the importance of customer feedback in service supply chains?

Customer feedback is crucial for improving service quality, adjusting supply chain processes to meet customer needs, and enhancing overall service delivery efficiency.

26. What is a manufacturing supply chain?

A manufacturing supply chain is a series of interconnected steps involved in producing and distributing physical goods, from sourcing raw materials to delivering finished products to customers.

27. How does Just-In-Time (JIT) inventory management benefit manufacturing supply chains?

JIT reduces inventory holding costs by ensuring that raw materials arrive exactly when needed for production, minimizing waste, and improving cash flow.

28. What is the role of suppliers in a manufacturing supply chain?

Suppliers provide the raw materials, components, and services required for production. Their reliability and quality are crucial to maintaining smooth production processes.

29. How does production scheduling affect a manufacturing supply chain?

Production scheduling ensures that resources are allocated efficiently, reducing downtime, minimizing bottlenecks, and ensuring timely delivery of products to customers.

30. How can sustainability be integrated into manufacturing supply chains?

Sustainability can be integrated by sourcing environmentally friendly materials, reducing waste, optimizing energy use, and ensuring ethical labor practices throughout the supply chain.

31. What is a key metric for measuring supply chain performance?

Key metrics include order fulfillment rate, lead time, inventory turnover, cost per unit, and on-time delivery, all of which help assess supply chain efficiency and effectiveness.

32. How does lead time affect supply chain performance?

Lead time affects supply chain performance by influencing how quickly products are delivered to customers. Shorter lead times generally improve customer satisfaction and inventory management.

33. What is the Total Cost of Ownership (TCO) in supply chain management?

TCO is a measure of all the costs associated with acquiring and using a product, including purchase price, transportation, storage, and disposal costs, helping firms evaluate supply chain decisions.

34. How does on-time delivery impact supply chain performance?

On-time delivery is critical for customer satisfaction, inventory management, and reducing the risk of stockouts. It directly influences the reliability and efficiency of a supply chain.

35. What is the "Perfect Order" metric in SCM?

The "Perfect Order" metric refers to delivering the right product, to the right place, at the right time, in the right condition, and with the right documentation, indicating optimal supply chain performance.

36. What is the Bullwhip Effect in supply chains?

The Bullwhip Effect occurs when small fluctuations in consumer demand lead to larger fluctuations in orders placed upstream in the supply chain, causing inefficiencies and excess inventory.

16 Mark Question

1. Define Supply Chain Management (SCM) and explain how it contributes to a company's competitive advantage. Illustrate your answer with an example from either a manufacturing or service industry.
2. How does supply chain integration improve operational efficiency? Discuss the role of technology in achieving integration.
3. Explain the key objectives of Supply Chain Management and evaluate how each objective impacts an organization's bottom line.
4. Discuss the significance of sustainability in modern supply chains. How can companies balance sustainability goals with profitability?

5. Compare the characteristics of service and manufacturing supply chains, particularly in terms of inventory management and demand variability.
6. How do customer participation and service customization impact the dynamics of a service supply chain? Provide examples.
7. Trace the evolution of Supply Chain Management from traditional logistics to the modern focus on integrated, global supply chains. How have technological advancements contributed to this evolution?
8. Analyze the impact of globalization on supply chain management. What are the key challenges faced by companies in managing a global supply chain?
9. What are the unique characteristics of service supply chains compared to manufacturing supply chains, particularly in terms of capacity planning and demand forecasting?
10. How can service organizations leverage technology to improve supply chain efficiency? Discuss the role of digital tools in service delivery.
11. How does Just-in-Time (JIT) inventory management improve efficiency in manufacturing supply chains? Provide an example of a company successfully using JIT.
12. Explain the concept of lean manufacturing and its relevance to modern manufacturing supply chains. How can it reduce costs and improve quality?
13. What are the key performance metrics used to evaluate supply chain performance? Analyze how these metrics influence decision-making.
14. Analyze the relationship between demand forecasting and supply chain management. How can inaccurate forecasting impact operations?
15. What strategies can companies implement to reduce the impact of the Bullwhip Effect in their supply chains? Evaluate the role of communication and information sharing.