

# Supply Chain Digitization (NPTEL)

## Assignment 5

1. Consider a scenario in which a newsvendor observes market demand for newspapers and decides to procure from the regional supplier to sell in the immediate future period. Here, the newsvendor decides the units that are finally made available to the market based on his/her potential profits. The supplier has the option to accept the order placed by the newsvendor.
  - a. This is an example of centralized decision-making
  - b. This is an example of decentralized decision-making
  - c. This is an example of multi-period centralized decision-making
  - d. None of the above

Ans: This is an example of decentralized decision-making

2. Consider a regional supplier that reaches a breakeven point after selling 20,000 units. Selling above 20,000 units, the regional supplier earns a marginal profit of Rs. 2.5/ unit. Considering the above situation, which of the following statements is correct for earning profit by the regional supplier?
  - a. A regional supplier would like to sell 20,000 units to earn a profit.
  - b. A regional supplier would like to sell less than 20,000 units to earn a profit.
  - c. A regional supplier wants to sell as many as possible, beyond 20,000 units, to earn profit.
  - d. A regional supplier would like to sell 15,000 units to earn a profit.

Ans: A regional supplier wants to sell as much as possible beyond 20,000 units to earn profit.

3. In a supply chain context, which of the following are mutually acceptable contract terms?
  - a. Validity duration of the business transaction
  - b. Order quantities/schedule
  - c. Price
  - d. Payment terms

Ans: Validity duration of business transaction, Order quantities/schedule, Price, Payment terms

4. Which of the following decision-making gives local benefits to supply chain entities but not to the entire supply chain?
  - a. Centralized decision-making
  - b. Decentralized decision-making

Ans: Decentralized decision-making

5. In the supply chain context, which cannot be achieved through contracts?
  - a. Information Visibility
  - b. Inventory visibility
  - c. Increase in lead time variability
  - d. Risk sharing among supply chain partners

Ans: Increase in lead time variability

6. Which of the following is correct if the retailer is a brick-and-mortar store?
- a. Retailer travels to customers to sell products
  - b. Customers travel to retailers to purchase the products
  - c. The success of the retail store does not depend upon its physical service experience
  - d. None of the above

Ans: Customers travel to retailers to purchase the products

7. Which of the following is a challenge for retailers in a brick-and-mortar system?
- a. Customers can physically evaluate the product before purchasing
  - b. The real-time interaction helps customers capture market information
  - c. Customers need to travel to the store, wait in queue to purchase the product
  - d. Retailers can help generate customer loyalty by providing a good service experience

Ans: Customers need to travel to the store, wait in queue to purchase the product

8. In a supply chain context, what does "Dual Channel" mean?
- a. Manufacturer sells directly to customers.
  - b. Manufacturer sells via retailer (Brick & Mortar) to customers
  - c. Manufacturer uses both direct and retailer (Brick & Morter) strategies to sell
  - d. None of the above

Ans: Manufacturer uses both direct and retailer (Brick & Morter) strategies to sell

9. Which of the following comes under "Sales rebate contracts"?
- a. The supplier purchases any excess stock at the end of the newsvendor at a buyback price
  - b. A full refund is provided to the newsvendor for a portion of the excess stock.
  - c. The newsvendor is rewarded for every excess unit sold beyond a certain threshold.
  - d. The buyer pays the supplier a payback price for excess stock produced but not purchased by the buyer.

Ans: The newsvendor is rewarded for every excess unit sold beyond a certain threshold.

10. Which of the following statements is true regarding "Quantity discount" contracts?
- a. Any excess stock at the end of the sales period is purchased from the newsvendor at a buyback price by the supplier.
  - b. Newsvendor provides a share of revenue to the supplier in return for a discount on the wholesale price.
  - c. Vendor and buyer share vendor's costs in infrastructure, operations, etc.
  - d. Lower unit wholesale prices are charged for larger order sizes placed by the newsvendor (buyer) from the supplier.

Ans: Lower unit wholesale prices are charged for larger order sizes placed by the newsvendor (buyer) from the supplier.

11. In an apparel supply chain, the retailer visits the distributor physically to evaluate product quality and price before placing an order. In this situation, is this part of the supply chain considered a "brick-and-mortar" system?
- No
  - Yes

Ans: Yes

12. What are the benefits of adopting the Brick-and-Mortar system?
- Customers can physically check the products
  - Retailers must invest in space for (Storage, showcasing products, etc.)
  - Customer needs to travel to the store and wait in queue for purchase
  - Real-time interaction and customer loyalty

Ans: Customers can physically check the products, Real-time interaction and customer loyalty

13. Which of the following is an effective dual-channel strategy for combining the benefits of independent channels (Direct and brick-and-mortar) while balancing the costs and loss of service in each channel?
- Giving each channel a half-share of the business
  - Enabling contracts within independent channels to coordinate the supply chain
  - No business spillover from one channel to another
  - None of the above

Ans: Enabling contracts within independent channels to coordinate the supply chain

14. Which of the following is correct about the omnichannel concept?
- Customers can only use one channel at a time to interact with a brand.
  - Customers can seamlessly interact with a brand through multiple integrated channels.
  - Customers must visit a physical store to complete their purchase.
  - Businesses focus only on online sales without physical store integration.

Ans: Customers can seamlessly interact with a brand through multiple integrated channels.

15. Which of the following is an example of an omnichannel customer experience?
- A customer starts shopping on a mobile app, adds items to the cart, and seamlessly completes the purchase in a physical store.
  - A retailer only sells products through its website without any physical store or customer support integration.
  - Customers can only return online purchases through the online store, not in physical locations.
  - A business operates separate inventory systems for online and offline stores, causing inconsistencies.

Ans: A customer starts shopping on a mobile app, adds items to the cart, and seamlessly completes the purchase in a physical store.