**Chapter 12: Demand Management and Customer Service**

**Practice Problems**

**MULTIPLE CHOICE**

1. The process of first determining accurately what the customer wants and then coordinating the processes and procedures both within the firm and across its supply chain to quickly and efficiently meet that customer’s needs is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | the marketing concept |
| b. | supply chain management |
| c. | demand management |
| d. | forecasting |

ANS: C PTS: 1 DIF: Easy

2. The notion that when there are in changes in customer demand, inventory fluctuations increase as you move further up in the supply chain from the retailer to the raw material supplier is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | the bullwhip effect |
| b. | supply chain uncertainty |
| c. | the razor effect |
| d. | the whiplash effect |

ANS: A PTS: 1 DIF: Medium

3. Demand planning and management activities can facilitate implementation of \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | total quality management |
| b. | Six Sigma |
| c. | Kaisen |
| d. | just-in-time |

ANS: D PTS: 1 DIF: Hard

4. Which of the following is usually NOT a factor that affects demand management?

|  |  |
| --- | --- |
| a. | average household incomes |
| b. | climate |
| c. | employment levels |
| d. | interest rates |

ANS: B PTS: 1 DIF: Easy

5. What is the beginning of demand management?

|  |  |
| --- | --- |
| a. | acquisition of data |
| b. | demand forecasting |
| c. | market research |
| d. | retail analysis |

ANS: B PTS: 1 DIF: Hard

6. Demand planning provides all but which of the following benefits?

|  |  |
| --- | --- |
| a. | a way to track a firm’s progress toward achieving its revenue and profit targets |
| b. | easy-to-use analytical modeling software |
| c. | reduction of operational costs |
| d. | promotes innovation |

ANS: B PTS: 1 DIF: Medium

7. An intermediate planning horizon is how long?

|  |  |
| --- | --- |
| a. | 1 week to 1 month |
| b. | 1 month to 1 year |
| c. | 3 months to 1 year |
| d. | 3 months to 3 years |

ANS: D PTS: 1 DIF: Medium

8. Short-term demand planning decisions affect all but which of the following?

|  |  |
| --- | --- |
| a. | capital Investments |
| b. | inventory planning and control |
| c. | purchasing |
| d. | transportation |

ANS: A PTS: 1 DIF: Medium

9. Forecasting error is defined as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | actual - forecast |
| b. | actual - target |
| c. | forecast - target |
| d. | target - actual |

ANS: A PTS: 1 DIF: Medium

10. A firm had a targeted demand of 120 units next month. They forecasted a demand of 125, and the actual sales were 110 units. What would be the forecast error?

|  |  |
| --- | --- |
| a. | -15 |
| b. | -10 |
| c. | +5 |
| d. | +10 |

ANS: A PTS: 1 DIF: Medium

11. The forecast error for most products falls within what range?

|  |  |
| --- | --- |
| a. | 1% to 5% |
| b. | 6% to 10% |
| c. | 11% to 24% |
| d. | 25% to 50% |

ANS: C PTS: 1 DIF: Hard

12. An example of predictable variation would be \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | a hurricane |
| b. | ice cream consumption during the summer months |
| c. | loss of electrical power due to a cyclone |
| d. | a traffic jam |

ANS: B PTS: 1 DIF: Easy

13. Which of the following is NOT an example of random variation?

|  |  |
| --- | --- |
| a. | monthly sales of pool supplies in New England |
| b. | number of potholes on a street |
| c. | 1 hour’s sales of lottery tickets |
| d. | number that shows up on a toss of a pair of dice |

ANS: A PTS: 1 DIF: Medium

14. The process gathering information from within and outside of the organization to forecast the demand for a product is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | adaptive forecasting |
| b. | collaborative forecasting |
| c. | market research |
| d. | statistical forecasting |

ANS: B PTS: 1 DIF: Medium

15. Which of the following is NOT a significant part of collaborative forecasting?

|  |  |
| --- | --- |
| a. | *h*istorical demand, including patterns, similar products, seasonality, and economic trends |
| b. | demand changes resulting from promotions and advertising campaigns |
| c. | statistical models |
| d. | unique insight and judgment of the company’s supply chain partners |

ANS: C PTS: 1 DIF: Medium

16. The enhancement of the integration and efficiency of supply chains by encouraging supply chain partners to collaborate on activities such as demand planning and forecasting, inventory management, and information sharing is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | adaptive modeling |
| b. | collaborative planning, forecasting, and replenishment |
| c. | enterprise resource planning |
| d. | strategic planning |

ANS: B PTS: 1 DIF: Easy

17. Which of the following is NOT a phase of the collaborative activities that buyers and sellers in a supply chain need to undertake to satisfy the demands of the end consumer?

|  |  |
| --- | --- |
| a. | collaboration phase |
| b. | demand and supply management phase |
| c. | execution phase |
| d. | strategy and planning phase |

ANS: A PTS: 1 DIF: Medium

18. The phase where the buyers and sellers in the chain establish common business goals and delineate the scope of collaboration and the response to events that cause supply chain disruptions is known as the \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | collaboration phase |
| b. | demand and supply management phase |
| c. | execution phase |
| d. | strategy and planning phase |

ANS: D PTS: 1 DIF: Medium

19. What are the two tasks in the demand and supply management phase?

|  |  |
| --- | --- |
| a. | establish common goals and delineate the scope of collaboration |
| b. | goods production and shipping |
| c. | planning and execution |
| d. | sales forecasting and order planning |

ANS: D PTS: 1 DIF: Medium

20. Determining future product ordering and delivery requirements, inventory levels, transit lead times, logistical constraints, and other factors that affect the supply required to meet end-consumer demand is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | forecasting |
| b. | order planning |
| c. | planning and execution |
| d. | sales management |

ANS: B PTS: 1 DIF: Medium

21. In what phase are goods produced, stocked, shipped, and delivered to meet demand?

|  |  |
| --- | --- |
| a. | establish common goals and delineate the scope of collaboration |
| b. | goods production and shipping |
| c. | planning and execution |
| d. | sales forecasting and order planning |

ANS: C PTS: 1 DIF: Medium

22. In what phase are tasks such as exceptionmanagement and performance assessment performed?

|  |  |
| --- | --- |
| a. | collaboration phase |
| b. | demand and supply management phase |
| c. | execution phase |
| d. | strategy and planning phase |

ANS: C PTS: 1 DIF: Medium

23. The continuous monitoring of shortages or sudden changes in the quality of materials is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | agile management |
| b. | error detection |
| c. | exception management |
| d. | performance management |

ANS: C PTS: 1 DIF: Medium

24. The development and calculation of key metrics to evaluate how well the organization has achieved business goals is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | agile management |
| b. | error detection |
| c. | exception management |
| d. | performance assessment |

ANS: D PTS: 1 DIF: Medium

25. When processes used to collect demand data are automated, enabling the forecaster to quickly consolidate and review the information, it is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | accelerated forecasting |
| b. | collaborative forecasting |
| c. | exception management |
| d. | rapid turnaround |

ANS: A PTS: 1 DIF: Easy

26. Which of the following is a good way to reduce forecasting errors?

|  |  |
| --- | --- |
| a. | use collaborative forecasting |
| b. | developing a unified database that gives all of the participants immediate information about demand |
| c. | rely more on sophisticated statistical tools |
| d. | outsource forecasting |

ANS: B PTS: 1 DIF: Hard

27. To improve the timeliness and accuracy of forecasts for individual products and time periods, one could

|  |  |
| --- | --- |
| a. | outsource forecasting |
| b. | use collaborative forecasting |
| c. | developing ways to aggregate and disaggregate demand across product families and time periods |
| d. | rely more on sophisticated statistical tools |

ANS: C PTS: 1 DIF: Hard

28. Companies often \_\_\_\_\_\_ to avoid lost revenue if their existing production capacity is insufficient to meet all of the customers’ demand in the current period.

|  |  |
| --- | --- |
| a. | use overtime |
| b. | offer discounts |
| c. | employ outsourcing |
| d. | shift demand to different time periods by staggering customer order fulfillment |

ANS: D PTS: 1 DIF: Hard

29. The primary challenge of global demand management is

|  |  |
| --- | --- |
| a. | learning new languages |
| b. | ensuring that inventories are readily available when demand arises in many dispersed locations |
| c. | government regulations |
| d. | tariffs |

ANS: B PTS: 1 DIF: Easy

30. The primary reason that localized supply chains are more responsive to order changes is that

|  |  |
| --- | --- |
| a. | units are closer together |
| b. | they often have shorter lead times |
| c. | communication is faster |
| d. | they speak the same language |

ANS: B PTS: 1 DIF: Hard

31. When firms adopt the demand planning and management strategies, they need to do all but the following:

|  |  |
| --- | --- |
| a. | use point-of-sale (POS) data |
| b. | increase the frequency of forecasting so forecasts can be evaluated more often against actual demand to determine forecasting errors |
| c. | sell excess inventory at discount |
| d. | collaborate and share timely information with their supply chain partners |

ANS: C PTS: 1 DIF: Medium

32. A postponement strategy requires a firm to

|  |  |
| --- | --- |
| a. | sell excess inventory at discount |
| b. | wait until the government demands a recall of the product |
| c. | employ both Six Sigma and TQM |
| d. | purchase components or retailers to order products that can be instantly configured as close to the point of sale as possible |

ANS: D PTS: 1 DIF: Medium

33. A drawback to the postponement strategy is

|  |  |
| --- | --- |
| a. | higher cost associated with customizing products |
| b. | lower quality |
| c. | increased recalls |
| d. | increased parts inventory |

ANS: A PTS: 1 DIF: Hard

34. Fluctuating demand is a problem for all but the following industry:

|  |  |
| --- | --- |
| a. | hospitality |
| b. | entertainment |
| c. | health care |
| d. | automotive manufacturing |

ANS: D PTS: 1 DIF: Medium

35. An example of excess capacity would be \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | work-in-process inventory |
| b. | a restaurant that overscheduled its wait staff on a slow night |
| c. | delays in fulfilling orders |
| d. | recalls |

ANS: B PTS: 1 DIF: Easy

36. Insufficient capacity can lead to all but the following:

|  |  |
| --- | --- |
| a. | poor quality |
| b. | longer wait times for service |
| c. | increased recalls |
| d. | inability to grow the business |

ANS: C PTS: 1 DIF: Medium

37. Many service providers redistribute capacity by \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | lowering advertising |
| b. | utilizing appointment and reservation systems |
| c. | increasing wages |
| d. | closing earlier |

ANS: B PTS: 1 DIF: Medium

38. Over the medium to long term, the organization uses demand forecasts primarily for all but the following:

|  |  |
| --- | --- |
| a. | financial planning |
| b. | acquisition or creation of the assets needed to deliver services |
| c. | detailed workforce scheduling |
| d. | capacity planning |

ANS: C PTS: 1 DIF: Medium

39. Service providers should first gauge their existing capacity to \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | fire personnel |
| b. | determine optimal inventory |
| c. | calculate required outsourcing |
| d. | assess whether it is possible to redistribute the workload over the long term |

ANS: D PTS: 1 DIF: Medium

40. Customer service can be defined as the ability to satisfy customers by all but the following:

|  |  |
| --- | --- |
| a. | cost |
| b. | time |
| c. | communication |
| d. | reliability |

ANS: A PTS: 1 DIF: Medium

41. Order cycle time consistency consists of the following:

|  |  |
| --- | --- |
| a. | speed and quality |
| b. | delivery safety and order delivery completeness |
| c. | low cost and solid communication |
| d. | knowledgeable |

ANS: B PTS: 1 DIF: Medium

42. One measure companies often use to track order delivery completeness is \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | order fill rate |
| b. | customer comments |
| c. | receipt count |
| d. | terminated orders |

ANS: A PTS: 1 DIF: Easy

43. Systems that allow customers to purchase products and have them delivered in different ways are known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | customer-focused supply chain management (CFSCM) |
| b. | enterprise resource management (ERP) |
| c. | multichannel marketing systems |
| d. | transforming customer service management |

ANS: C PTS: 1 DIF: Hard

44. What has led to a much wider use of the in-store kiosk?

|  |  |
| --- | --- |
| a. | artificial Intelligence |
| b. | speech-to-text displays |
| c. | text-to-speech displays |
| d. | touch screen displays |

ANS: D PTS: 1 DIF: Medium

45. The idea that the long-run profitability and efficiency of an enterprise depends on the customers’ overall satisfaction with the company and its supply chain partners is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | enterprise resource management (ERP) |
| b. | customer-focused supply chain management (CFSCM) |
| c. | multichannel marketing systems |
| d. | transforming customer service management |

ANS: B PTS: 1 DIF: Medium

46. Implementing an effective CFSCM program requires all but the following step:

|  |  |
| --- | --- |
| a. | establishment of free and open two-way communications with customers and suppliers |
| b. | establishment of functional interfaces between the company and its supply chain partners to collaborate with them on customer service |
| c. | development of an enterprise resource planning system |
| d. | understanding customers’ strategic service needs, such as speedy delivery and flexibility |

ANS: C PTS: 1 DIF: Easy

47. The process of allocating revenue and costs to specific customer segments or individual customers in order to determine the profitability of those segments or individual customers is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | customer-focused supply chain management (CFSCM) |
| b. | customer profitability analysis (CPA) |
| c. | multichannel marketing systems |
| d. | transforming customer service management |

ANS: B PTS: 1 DIF: Medium

48. \_\_\_\_\_\_ is the customer service objective that is measured by perfect and complete orders and on-time deliveries.

|  |  |
| --- | --- |
| a. | Communication |
| b. | Convenience |
| c. | Reliability |
| d. | Time |

ANS: C PTS: 1 DIF: Medium

49. \_\_\_\_\_\_ is the customer service objective that is measured by customer complaints and order status information.

|  |  |
| --- | --- |
| a. | Communication |
| b. | Convenience |
| c. | Reliability |
| d. | Time |

ANS: A PTS: 1 DIF: Medium

50. \_\_\_\_\_\_ is the customer service objective that is measured by ease of the returns process and response times to emergency situations.

|  |  |
| --- | --- |
| a. | Communication |
| b. | Convenience |
| c. | Reliability |
| d. | Time |

ANS: B PTS: 1 DIF: Medium