

Chapter 01 - Introduction to Business Analytics

Multiple Choice

1. The decisions concerning an organization's goals and future plans are called _____.

- a. financial decisions
- b. tactical decisions
- c. strategic decisions
- d. operational decisions

ANSWER:

c

2. Tactical decisions are concerned with _____.

- a. the day-to-day activities of the organization
- b. the goals and plans of the organization
- c. the domain of operations managers, who are close to the customer
- d. how the organization should achieve the goals and objectives set by its strategy

ANSWER:

d

3. Picks and Axes Inc. is an Internet-based retail seller of hiking boots and mountaineering gear. The company decides to open retail stores across the major areas of the city to help complement its Internet-based strategy. This activity would be categorized as a(n) _____.

- a. tactical decision
- b. operational decision
- c. strategic decision
- d. financial decision

ANSWER:

c

4. What is the most critical step of the decision-making process?

- a. Choosing an alternative
- b. Identifying and defining the problem
- c. Evaluating the alternatives
- d. Determining the set of alternatives

ANSWER:

b

5. Which of the following is NOT an approach to making decisions?

- a. Tradition
- b. Rules of thumb
- c. Intuition
- d. Guess and check

ANSWER:

d

6. Data-driven decision making tends to decrease a firm's _____.

- a. market value
- b. productivity
- c. risk
- d. profit

Chapter 01 - Introduction to Business Analytics

ANSWER:

c

7. Data dashboards are what type of analytics?

- a. Predictive
- b. Descriptive
- c. Prescriptive
- d. Decision

ANSWER:

b

8. The extraction of information on the number of shipments, how much was included in each shipment, the date each shipment was sent, and so on from the manufacturing plant's database exemplifies _____.

- a. spreadsheet models
- b. data dashboards
- c. data mining
- d. data queries

ANSWER:

d

9. Which of the following do corporate-level managers use to summarize sales by region, current inventory levels, and other company-wide metrics all in a single screen?

- a. Simulations
- b. Cross-tabulations
- c. Data dashboards
- d. Tables

ANSWER:

c

10. A forecast that helps direct police officers to areas where crimes are likely to occur based on past data is an example of _____.

- a. predictive analytics
- b. decision analysis
- c. prescriptive analytics
- d. descriptive analytics

ANSWER:

a

11. Which one of the following is used in predictive analytics?

- a. Data dashboard
- b. Linear regression
- c. Data visualization
- d. Optimization model

ANSWER:

b

12. A retail store owner offers a discount on product A and predicts that the customers would purchase products B and C in addition to product A. Identify the technique used to make such a prediction.

- a. Data query
- b. Simulation

Chapter 01 - Introduction to Business Analytics

- c. Data mining
- d. Data dashboards

ANSWER:

c

13. Which of the following is used in the pharmaceutical industry to assess the risk of introducing a new drug?

- a. Data dashboard
- b. Chart
- c. Spreadsheet model
- d. Simulation

ANSWER:

d

14. Which of the following analytical techniques helps us arrive at the best decision?

- a. Predictive analytics
- b. Data mining
- c. Prescriptive analytics
- d. Descriptive analytics

ANSWER:

c

15. Simulation optimization helps _____.

- a. in identifying the constraints of the situation
- b. to find good decisions in highly complex and highly uncertain settings
- c. in assigning values to outcomes
- d. to model certainty using optimization techniques

ANSWER:

b

16. A decision maker faced with several alternatives and an uncertain set of future events uses what to develop an optimal strategy?

- a. Utility theory
- b. Predictive analytics
- c. Data mining
- d. Decision analysis

ANSWER:

d

17. What assigns values to outcomes based on the decision maker's attitude toward risk, loss, and other factors?

- a. Simulation optimization
- b. Utility theory
- c. Optimization model
- d. Data dashboard

ANSWER:

b

18. Which of the following best exemplifies big data?

- a. Five hundred Facebook users upload one thousand pictures per day.
- b. Cellphone owners around the world generate vast amounts of data by calling, texting, tweeting, and browsing

Chapter 01 - Introduction to Business Analytics

the Web on a daily basis.

c. A local grocery store collects data from those that scan their loyalty card.

d. A pharmacy keeps track of customer purchases to send its customers coupons.

ANSWER:

b

19. Which of the following sources of big data is NOT publicly available?

a. Twitter

b. Weather data

c. Medical records

d. Sports records

ANSWER:

c

20. Advanced analytics generally refers to _____.

a. descriptive and prescriptive analytics

b. simulation

c. predictive and prescriptive analytics

d. decision analysis

ANSWER:

c

21. In the financial sector, what models are used to construct financial instruments such as derivatives?

a. Descriptive and prescriptive

b. Predictive

c. Descriptive

d. Prescriptive

ANSWER:

b

22. Optimization models can be used to _____.

a. assess the risk of investment portfolios

b. forecast future financial performance

c. successfully manage commercial real estate risk

d. decide on how to invest cash received from insurance policies

ANSWER:

d

23. What does utility theory study that basically means the relative desirability of a particular outcome that reflects the decision maker's attitude toward a collection of factors, such as profit, loss, and risk?

a. Total worth

b. Total cost

c. Feasibility

d. Financial wellness

ANSWER:

a

24. What technology allows data, collected from sensors in all types of machines, to be sent over the Internet to repositories where it can be stored and analyzed?

Chapter 01 - Introduction to Business Analytics

- a. Internet of Things (IoT)
- b. MapReduce
- c. Hadoop
- d. Advanced analytics

ANSWER:

a

25. Which of the following is a programming model used within Hadoop that performs the map step and the reduce step?

- a. MapReduce
- b. Internet of Things (IoT)
- c. Advanced analytics
- d. Optimization model

ANSWER:

a

26. An open-source programming environment that supports big data processing through distributed storage and distributed processing on clusters of computers is _____.

- a. Hadoop
- b. Excel
- c. Java
- d. MapReduce

ANSWER:

a

27. What techniques use models, constructed from past data, to predict the future or to ascertain the impact of one variable on another?

- a. Predictive analytics
- b. Descriptive analytics
- c. Simulation
- d. Prescriptive analytics

ANSWER:

a

28. Which type of decision involves higher-level issues and is concerned with the overall direction of the organization, defining the overarching goals and aspirations for the organization's future?

- a. Strategic
- b. Tactical
- c. Intuitive
- d. Operational

ANSWER:

a

29. Which decision is concerned with how the organization should achieve the goals and objectives set by its strategy?

- a. Tactical
- b. Strategic
- c. Intuitive
- d. Operational

ANSWER:

a

Chapter 01 - Introduction to Business Analytics

30. What type of analytics uses techniques that take input data and yield a best course of action?

- a. Prescriptive
- b. Simulation
- c. Strategic
- d. Operational

ANSWER:

a

31. In the spectrum of business analytics, which is the most complex?

- a. Descriptive
- b. Predictive
- c. Prescriptive
- d. Operational

ANSWER:

c

32. In order to manage an organization's human resource activities, such as hiring employees, tracking, and influencing employee retention, HR personnel use ____.

- a. both descriptive and predictive analytics
- b. both descriptive and prescriptive analytics
- c. both predictive and prescriptive analytics
- d. only predictive analytics

ANSWER:

a

33. A clearer understanding of consumer behavior through analytics directly leads to ____.

- a. more profits
- b. better pricing strategies
- c. reduced advertising costs
- d. reduced risk

ANSWER:

b

34. A light bulb manufacturer uses descriptive analytics to ____.

- a. present supply chain to managers visually
- b. achieve efficiency in delivery of goods
- c. schedule staff and vehicle for delivery
- d. plan capacity utilization by incorporating the inherent uncertainty in commodities pricing

ANSWER:

a

35. What does the U.S. Internal Revenue Service use to identify patterns that distinguish questionable annual personal income tax filings?

- a. Utility theory
- b. Prescriptive analytics
- c. Data mining
- d. Decision analysis

ANSWER:

c

Chapter 01 - Introduction to Business Analytics

Subjective Short Answer

36. _____ may be used to develop an optimal strategy when a decision maker is faced with several decision alternatives and an uncertain set of future events.

ANSWER: Decision analysis

37. An increase in data _____ would help to protect stored data from destructive forces or unauthorized users.

ANSWER: security

38. _____ are analytical tools that describe what has happened.

ANSWER: Descriptive analytics

39. The use of analytical techniques for better understanding patterns and relationships that exist in large data sets is _____.

ANSWER: data mining

40. A dashboard is a collection of tables, charts, and maps to help management _____ selected aspects of the company's performance.

ANSWER: monitor

41. A decision concerned with how the organization is run from day to day is known as a(n) _____.

ANSWER: operational decision

42. A mathematical model that gives the best decision, subject to the situation's constraints, is a(n) _____.

ANSWER: optimization model

43. A data _____ is a request to obtain information with certain characteristics from a database.

ANSWER: query

44. Business analytics is the _____ process of transforming data into insight for making better decisions.

ANSWER: scientific

45. A data _____ is trained in both computer science and statistics and knows how to effectively process and analyze large amounts of data.

ANSWER: scientist

46. The use of probability and statistics to construct a computer model to study the impact of uncertainty on the decision at hand is called _____.

ANSWER: simulation

47. Predictive and prescriptive analytics can also be referred to as _____.

ANSWER: advanced analytics

48. _____ analytics is the analysis of online activity, such as visits to websites or social media.

ANSWER: Web

49. One of the 4 Vs of big data that refers to uncertainty due to data inconsistency and incompleteness, ambiguities,

Name _____ Class _____ Date: _____

Chapter 01 - Introduction to Business Analytics

latency, deception, and model approximations is _____.

ANSWER: _____ veracity

50. Data that are too large or too complex to be handled by standard data-processing techniques and typical desktop software are called _____.

ANSWER: _____ big data

51. Veracity has to do with how much _____ is in the data.

ANSWER: _____ uncertainty

52. What are the four Vs of big data?

ANSWER: _____ Volume, Velocity, Variety, Veracity