Chapter 1   Data and Analytics in the Accounting Profession

1) One key feature of self-service business intelligence (SSBI) software is that
A) it is easy to use.
B) it costs less to implement.
C) it connects to multiple data sources.
D) it provides dashboarding capabilities.
Answer: A
Explanation: There are two key features of SSBI software: it provides extended data processing capabilities for preparing data, analyzing data, and reporting data analysis results; and it is easy to use.
Diff: 1
LO: 1-1
Bloom: C
Min.: 1
AACSB: Analytic
AICPA: FC: Measurement, Analysis, and Interpretation

2) Alteryx is an example of SSBI software that can
A) replace Excel since it can provide more complex functions.
B) replace a database since it can store transactional data.
C) replace the data warehouse.
D) be used to clean data by removing null values or removing leading or trailing spaces.
Answer: D
Explanation: There are two key features of SSBI software: it provides extended data processing capabilities for preparing data, analyzing data, and reporting data analysis results; and it is easy to use.
Diff: 1
LO: 1-1
Bloom: C
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3) How has data analytics changed the audit profession?
A) The cost of audit engagements has increased due to the growing data volume that needs to be validated.
B) The cost of audit engagements has decreased since the data that is received from clients are more trustworthy.
C) An auditor can now analyze the entire population of audit-relevant data for exceptions or outliers.
D) There is a greater assurance that financial statements do not have material misstatement since the data is more timely and complete.
Answer: C
Explanation: Self-service business intelligence tools has empowered accountants to use data and analytics to provide value-added services to their clients and employers.
Diff: 2
LO: 1-1
Bloom: AP
Min.: 1
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4) Data analytics is
A) the process of analyzing raw data to answer questions or provide insights.
B) the process of storing relevant raw data so that data can be analyzed.
C) the process of cleaning data so that data can be more trustworthy.
D) the process of using machine learning and predictive modeling.
Answer: A
Explanation: Data analytics is the process of analyzing raw data to answer questions or provide insights.
Diff: 1
LO: 1-1
Bloom: C
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5) Robotic process automation (RPA) software is being used to
A) build artificial intelligence models to eliminate manual audit tasks.
B) analyze auditing data and performing substantive tests.
C) audit sample-based testing so that auditors can focus on analysis and provide valuable insights.
D) automate manual tasks so that auditors can focus on more strategic tasks.
Answer: D
Explanation: RPA can be used to perform routine financial accounting functions such as recording journal entries, creating trial balances, doing preliminary account analyses, and creating financial statements to let accountants spend more time analyzing data for insights.
Diff: 1
LO: 1-1
Bloom: C
Min.: 1
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6) Robotic process automation (RPA)software can be used by financial accountants
A) to perform routine financial accounting functions such as recording journal entries and creating trial balances.
B) to perform non-routine financial accounting functions such as analyzing potential mergers and acquisitions.
C) to perform routine financial accounting functions such as determining revenue recognition on complex construction projects.
D) to make predictions within financial capital markets.
Answer: A
Explanation: RPA can be used to perform routine financial accounting functions such as recording journal entries, creating trial balances, doing preliminary account analyses, and creating financial statements to let accountants spend more time analyzing data for insights.
Diff: 2
LO: 1-1
Bloom: AP
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7) Robotic process automation (RPA) software can be used by management accountants
A) to create automatic financial performance reports for department managers.
B) to evaluate return on investments on capital projects.
C) to evaluate strategic sourcing opportunities with vendors.
D) to identify the cost drivers for activity-based costing models.
Answer: A
Explanation: RPA can be used to perform routine financial accounting functions such as recording journal entries, creating trial balances, doing preliminary account analyses, and creating financial statements to let accountants spend more time analyzing data for insights.
Diff: 2
LO: 1-1
Bloom: AP
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8) Robotic process automation software (RPA) can be used by tax accountants
A) to analyze potential saving opportunities for the client.
B) to extract data from the client's financial statements and automatically populate the data into the tax preparation software.
C) to assess the client's residency for tax purposes.
D) to respond to IRS inquiries.
Answer: B
Explanation: RPA can be used to perform routine financial accounting functions such as recording journal entries, creating trial balances, doing preliminary account analyses, and creating financial statements to let accountants spend more time analyzing data for insights.
Diff: 2

LO: 1-1
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9) With SSBI software, management accountants can use data to
A) automate non-routine tasks.
B) identify and manage risks.
C) store transactional data in a central repository.
D) None of the answer choices are correct.
Answer: B
Explanation: With SSBI software, management accountants can more easily use data to help: identify and manage risks; improve budgeting and forecasting by incorporating more data; automate internal reporting; identify operational improvements; and create dashboards of key performance indicators (KPI).
Diff: 2
LO: 1-1
Bloom: AP
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10) The stages in the data analysis process are
A) Analyze, Report, and Reflection.
B) Strategize, Plan, and Analyze.
C) Plan, Analyze, and Report
D) Plan, Report, and Reflection.
Answer: C
Explanation: The data analysis process is comprised of three equally important stages: Plan, Analyze, and Report.
Diff: 1
LO: 1-2
Bloom: C
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11) In the Planning stage of the data analysis process, the Planning stage involves
A) identifying the problem, selecting the data sources, and creating an implementation plan.
B) selecting the data, evaluating alternatives, and creating a strategy to perform the analysis.
C) identifying the motivation, determining the objective, and creating a strategy to perform the analysis.
D) exploring the data, preparing the data, and building information models.
Answer: C
Explanation: Planning includes identifying the motivation for the analysis, determining the objective and questions to answer, and devising a strategy to perform the analysis.
Diff: 1

12) In a data analysis process, motivation
A) is the reason the analysis is being performed or why we are doing the analysis.
B) is the project's goals.
C) is the desired outcome of the analysis.
D) is the objective of the analysis.
Answer: A
Explanation: Motivation is the reason the analysis is being performed.

13) You are a management accountant within the finance department. An example of an external motivation in a data analysis project is
A) when your manager asks you to analyze variances between budgeted and actual values for the last fiscal year.
B) an analysis of vendor performance so that strategic vendors can be selected to improve the supply chain.
C) an analysis of accounts receivables to determine allowance of doubtful accounts.
D) when the marketing department requests for an analysis of sales projections for all sales channels.
Answer: D
Explanation: External motivation: The project originates from a request or requirement by another party, such as external stakeholders like investors, creditors, supply chain partners, industry regulators, or government agencies.

14) You are an internal auditor within the internal auditing department. An example of an internal motivation in a data analysis project is
A) when your manager asks you to analyze the compliance of segregation of duties for cash deposits.
B) when the external auditor requests an analysis of inventory balances at all warehouse locations.
C) when the creditor requests a report on the cash flow activity through the year.
D) when the marketing department requests for an analysis of sales projections for all sales channels.
Answer: A
Explanation: Internal motivation is when the project is motivated by a desire to better serve a client, better understand phenomena to gain business intelligence, or perform job responsibilities.
Diff: 2
LO: 1-2
Bloom: AP
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15) In a data analysis process, the objective
A) is why we are doing the analysis.
B) is the project's goals.
C) is the desired outcome of the analysis.
D) is the reason the analysis is being performed.
Answer: B
Explanation: The objective is the goal of the project. To identify the objective, form specific questions to guide the analysis.
Diff: 1
LO: 1-2
Bloom: C
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16) When designing a strategy within a data analysis process, the two parts of strategy are to
A) determine what data is necessary to answer questions and decide the type of analysis is appropriate.
B) determine what data is necessary to generate the desired outcome and decide what type of analysis is appropriate.
C) determine what data is necessary to answer questions and decide which stakeholders should be involved in the analysis.
D) determine what data is reliable for the analysis and decide which stakeholders should be involved in the analysis.
Answer: A
Explanation: There are two aspects to strategy–a data strategy and an analysis strategy.
Diff: 2
LO: 1-2
Bloom: C

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17) A descriptive analysis
A) assesses what is happening currently and in the past.
B) identifies a problem to understand why an outcome occurred.
C) predicts what might happen in the future.
D) helps determine what should happen to meet goals or objectives.
Answer: A
Explanation: Descriptive analytics are used to understand what is currently happening or has happened in the past.
Diff: 2
LO: 1-2
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18) A diagnostic analysis
A) assesses what is happening currently and in the past.
B) identifies a problem to understand why an outcome occurred.
C) predicts what might happen in the future.
D) helps determine what should happen to meet goals or objectives.
Answer: B
Explanation: Diagnostic analytics help reveal why something has happened.
Diff: 2
LO: 1-2
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