IIBA

Exam Questions CBDA

Certification in Business Data Analytics (IIBA - CBDA)

NEW QUESTION 1
- (Topic 1)
Which attributes from the Order entity will need to be normalized to avoid redundancies?
. OrderId
. OrderDate
. ItemId
. ItemName
. Quantity
. ItemPrice

A. OrderDate ItemPrice
B. ItemName ItemPrice
C. OrderDate ItemName
D. Item Name Quantity

Answer: B

Explanation:
The attributes ItemName and ItemPrice need to be normalized to avoid redundancies because they depend on the attribute ItemId, which is not part of the primary key of the Order entity. This is a case of partial dependency, which violates the second normal form (2NF) of database normalization. To achieve 2NF, the Order entity should be split into two entities: Order and Item, where Item contains the attributes ItemId, ItemName, and ItemPrice, and Order contains the attributes OrderId, OrderDate, ItemId, and Quantity. This way, the ItemName and ItemPrice are stored only once for each ItemId, and the Order entity references them through a foreign key12 References: 1: Balancing Data Integrity and Performance: Normalization vs ?? 2: Normalization Process in DBMS - GeeksforGeeks

NEW QUESTION 2
- (Topic 1)
The analytics team has been asked to assess sales data from their company's website with the hopes of providing insights to help increase online sales. It's the first time the team is looking at this specific data and they are concerned about the quality of data that has been captured. They decide to use the following approach as the next step:

A. Trend Analysis
B. Classification analysis
C. Data Analysis
D. Exploratory analysis

Answer: D

Explanation:
Exploratory analysis is the approach that the analytics team should use as the next step, because it is a technique that allows them to examine the quality, structure, and characteristics of the data, without making any assumptions or hypotheses. Exploratory analysis can help the team identify any issues or anomalies in the data, such as missing values, outliers, or errors, and decide how to handle them. Exploratory analysis can also help the team discover any patterns, trends, or relationships in the data, and generate new research questions or hypotheses for further analysis. References:
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 3: Analyze Data
•Understanding the Guide to Business Data Analytics, page 16
•CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 8, CBDA Exam Sample Questions and Self-Assessment, Question 8

NEW QUESTION 3
- (Topic 1)
A software company launched a new product in late 2016. The product manager is reviewing a Box and Whisker plot used to compare year-over-year sales, from 2017 to 2018. What is the conclusion he can make from this chart?
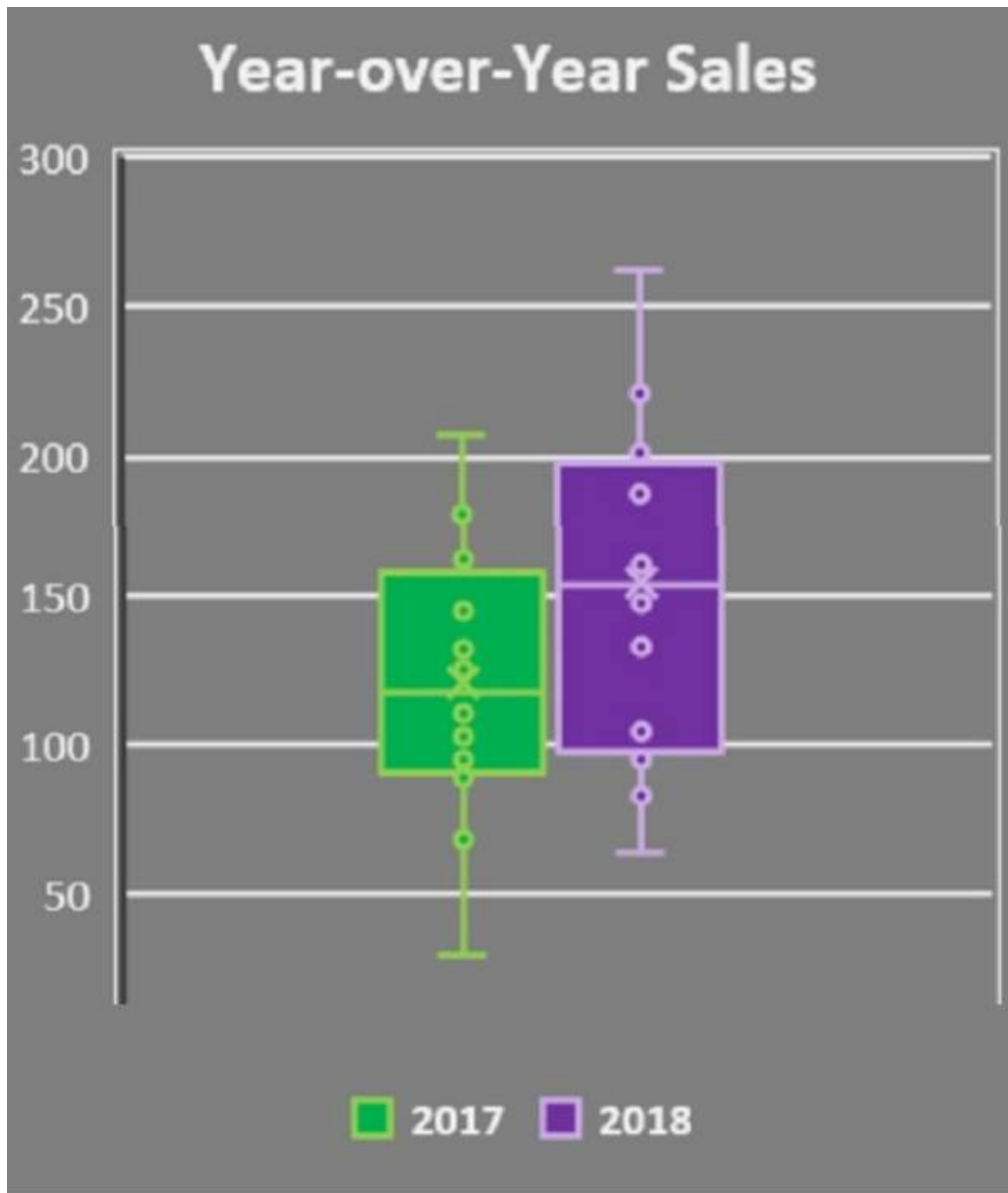
A. 2017 minimum and maximum sales are higher than 2018, and the 2017 median result is higher than the 2018 median result
B. 2017 minimum and maximum sales are higher than 2018, but the 2017 median result is lower than 2018 1st quartile result
C. 2018 minimum and maximum sales are higher than 2017, and the 2018 quartile results arehigher than 2017 quartile results
D. 2018 minimum and maximum sales are higher than 2017, and the 2018 1st quartile is higher than 2017 median result

Answer: D

NEW QUESTION 4
- (Topic 1)
The analytics team has been asked to determine if the organization should launch their highest revenue generating product into the North American market. To date, this has only been available in Eastern Europe. To answer this, the team formulates several research questions, including:

A. What product launch related costs can we expect?
B. How much revenue does the product generate in Eastern Europe?
C. Why does management need to know this?
D. Do existing customers really like the product?

Answer: D

Explanation:
One of the steps in identifying the research questions for business data analytics is to assess the feasibility and desirability of the proposed solution or change1. This involves understanding the needs, preferences, and satisfaction of the existing and potential customers. Therefore, asking whether the existing customers really like the product is a relevant research question for the analytics team. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 22.

NEW QUESTION 5
- (Topic 1)
A job satisfaction survey is being developed. Half of the employees will be asked the question "Do you enjoy working in your workplace?" The other half will be asked "Do you like the current work benefits?". The business analyst raises concern over the survey. What is concerning to the business analyst?

A. Precision
B. Reproducibility
C. Reliability
D. Validity

Answer: D

Explanation:
The business analyst is concerned about the validity of the survey. Validity is the extent to which a survey measures what it intends to measure. In this case, the survey is supposed to measure job satisfaction, but the two questions asked to different groups of employees are not equivalent or relevant to this construct. The question ??Do you enjoy working in your workplace??? is more directly related to job satisfaction than the question ??Do you like the current work benefits???. The latter question may capture only one aspect of job satisfaction, and may not reflect the overall level of contentment or happiness with the job. Therefore, the survey results may not be valid or accurate in measuring job satisfaction12 References: 1: Survey and questionnaires in business analysis - The Functional BA 2: Job Satisfaction Survey - Paul Spector

NEW QUESTION 6
- (Topic 1)
A lab is conducting a study on protein interactions. They have used the data to create a graph visualization. In graph visualization, what would a layout be?

A. A single data point
B. A link between two data points
C. A dedicated algorithm that calculates the node positions
D. A collection of data points and links

Answer: C

Explanation:
A layout is a way of arranging the nodes and links of a graph visualization to convey meaningful information about the data. A layout is determined by a dedicated algorithm that calculates the node positions based on certain criteria, such as minimizing edge crossings, maximizing node spacing, or emphasizing clusters12. A layout can also be influenced by user interaction, such as zooming, panning, or dragging3. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 642: Graph Drawing: Algorithms for the Visualization of Graphs, Giuseppe Di Battista et al., 1999, p. 33: Interactive Data Visualization: Foundations, Techniques, and Applications, Matthew O. Ward et al., 2015, p. 227.

NEW QUESTION 7
- (Topic 1)
While creating a dataset for analysis, the analyst reviews the data collected and finds a large percentage of records are missing values. Which activity would the analyst perform in order to use this dataset?

A. Clustering
B. Scale validation
C. Weighting
D. Factor analysis

Answer: C

Explanation:
Weighting is a technique that assigns different values or weights to different records or variables in a dataset, based on their importance or relevance. Weighting can be used to handle missing values by giving them a lower weight or imputing them with a weighted average of other values. Weighting can also help to adjust for sampling bias or non- response bias in the data collection process. References:
•Understanding the Guide to Business Data Analytics, page 16
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 3: Analyze Data
•CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 8, CBDA Exam Sample Questions and Self-Assessment, Question 4

NEW QUESTION 8
- (Topic 1)
To gain traction on online sales, a retailer initiated a marketing campaign using banner ads. The company has requested their analytics team to evaluate the performance of the campaign. During the presentation, the analyst confirmed that the campaign did bring in a large number of net new customers to the website and met the target sales conversion rate. They also noted that there was a high number of repeat visitors not completing a sale. What decision would help the retailer improve sales conversion rates for repeat visitors?

A. Increase investment in banner ads
B. Incentivize customers to subscribe to promotional notifications
C. Add additional new products to attract customers
D. Ensure the sales checkout process is streamlined

Answer: D

Explanation:
According to the Business Data Analytics: A Decision-Making Paradigm1, one of the key steps in the analytics process is to communicate insights and recommendations to stakeholders. The analyst should present the findings in a clear and concise manner, and provide actionable suggestions to improve the business outcomes. In this case, the analyst has identified that repeat visitors are not completing a sale, which indicates a possible issue with the sales checkout process. Therefore, the analyst should recommend the retailer to streamline the sales checkout process, which could reduce friction, increase customer satisfaction, and boost sales conversion rates for repeat visitors. References: Business Data Analytics: A Decision-Making Paradigm

NEW QUESTION 9
- (Topic 1)
An organization's customers are categorized based on the amount of purchases completed over the last 12 months. The analytics team would like to ensure the accuracy of their survey results and decide to randomly select 500 customers to participate in a survey from this large pool of customers. This is an example of:

A. Stratified sampling
B. Quota sampling
C. Purposive sampling
D. Snowball sampling

Answer: A

Explanation:
Stratified sampling is a technique that divides the population into homogeneous subgroups (strata) based on a relevant characteristic, such as the amount of purchases, and then randomly selects a proportional number of elements from each subgroup to form the sample. Stratified sampling ensures that the sample is representative of the population and reduces the sampling error and bias12. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 312: Statistics for Business and Economics, David R. Anderson et al., 2014, p. 262.

NEW QUESTION 10
- (Topic 1)
As the team discusses how to utilize the results of their data analysis to put forth a business recommendation, an analyst on the team voices concern over the current organizational culture presenting a roadblock to their ability to influence business decision making. Which of the following would be a justifiable concern at this stage of the team's efforts?

A. Difficulty bringing business stakeholders to a shared understanding about value when sharing data assets across business domains
B. Changing the mindsets of business stakeholders to trust insights gleaned from data over experience and intuition
C. Applying a myopic view of data and establishing data silos which create roadblocks to exploring available data sources
D. Finding data that creates value creating difficulties, as not all data helps a business make better decisions

Answer: B

Explanation:
A justifiable concern at this stage of the team??s efforts is changing the mindsets of business stakeholders to trust insights gleaned from data over experience and intuition. This is because some stakeholders may have a strong attachment to their own opinions or beliefs, and may resist or ignore data that contradicts them. This can create a barrier to data-driven decision making, which requires a culture of curiosity, openness, and evidence-based reasoning. The team needs to communicate the value and validity of their data analysis, and persuade the stakeholders to adopt a data-driven mindset12 References: 1: Use Data to Accelerate Your Business Strategy 2: Data-Driven Decision Making: A Step-by-Step Guide

NEW QUESTION 10
- (Topic 1)
A professor at a university has received a few complaints of the exams being too difficult. The professor is looking at exam performance results over the past 5 years to understand the normal tendency and outliers. Which chart should the professor use?

A. Sunburst
B. Scatterplot
C. Pie chart
D. Line

Answer: B

Explanation:
A scatterplot is a type of chart that shows the relationship between two variables by plotting data points on a two-dimensional plane. A scatterplot can help the professor to understand the normal tendency and outliers of exam performance results over the past 5 years by displaying the distribution, trend, and correlation of the data. For example, the professor can use the x-axis to represent the year and the y-axis to represent the exam score, and see how the scores vary over time and across different exams. Outliers can be identified as data points that are far away from the main cluster or the line of best fit12 References: 1: Scatter Plot - Statistics How To 2: Scatterplots - IIBA BABOK Guide v3

NEW QUESTION 15
- (Topic 1)
The marketing department for a major restaurant chain is interested in testing a Kids Eat Free campaign to determine if it will help to increase sales. They are interested in piloting the campaign to determine which day of the week will improve sales the most.
The campaign is launched across 7 cities with each city promoting a different day of the week. The sales data is collected and provided to a team for analysis.
What concern might the analytics team have regarding data quality across cities?

A. Normality
B. Heteroskedacity
C. Linearity
D. Variation

Answer: D

Explanation:
Variation is the degree to which the data values differ from each other or from a central tendency measure, such as the mean or median. Variation can affect the data quality across cities, as it can indicate the presence of outliers, errors, noise, or inconsistency in the data collection or processing methods. Variation can also influence the statistical analysis and interpretation of the results, as it can affect the significance, confidence, and validity of the findings12. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 302: Statistics for Business and Economics, David R. Anderson et al., 2014, p. 83.

NEW QUESTION 17
- (Topic 1)
The definition of data elements is different across various data sources. The organization is looking to improve the usability of data across the organization. Which practice would help address this problem?

A. Data governance
B. Data quality
C. Data architecture
D. Data ethics

Answer: A

Explanation:
Data governance is the practice of establishing and enforcing policies, standards, roles, and responsibilities for the management and use of data across the

organization. Data governance helps to address the problem of inconsistent data definitions across various data sources by ensuring that data is properly defined, documented, classified, and aligned with the business objectives and requirements12. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 292: Data Governance: How to Design, Deploy and Sustain an Effective Data Governance Program, John Ladley, 2012, p. 3.

NEW QUESTION 22
- (Topic 1)
A research marketer is interested in collecting information about the spending habits of families in North America. Concerned about the volume of data required to conduct the research, they choose to use sampling. The dataset is sourced using all credit card transactions from a leading North American credit card company for Quarter 1 of the prior year. The sample used is:

A. Statistically representative
B. Not relevant
C. Too large to be helpful
D. Biased

Answer: D

Explanation:
The sample used in this case is biased, meaning that it is not representative of the population of interest. The population of interest is the families in North America, but the sample is drawn from only one source of data: the credit card transactions from a leading North American credit card company. This sample excludes the families who do not use credit cards, or who use other credit card companies, or who use other payment methods. Therefore, the sample is not random or fair, and it may introduce sampling bias into the research results12 References: 1: Sampling Methods | Types, Techniques & Examples 2: Sampling Bias - an overview | ScienceDirect Topics

NEW QUESTION 24
- (Topic 1)
The interplay between enterprise systems and data analytics can be envisioned at various layers. The layer that connects the business processes to data analytics is the:

A. information layer
B. physical layer
C. technical layer
D. infrastructure layer

Answer: A

Explanation:
The information layer is the layer that connects the business processes to data analytics. It consists of the data models, data quality, data governance, and data security that enable the data to be accessed, analyzed, and transformed into insights. The information layer also supports the communication and collaboration among the stakeholders involved in the data analytics process. The other layers are the physical layer, which deals with the hardware and software components of the data infrastructure; the technical layer, which handles the data integration, data storage, data processing, and data analysis techniques; and the infrastructure layer, which provides the network, cloud, and security services for the data environment12 References: 1: Data and Analytics (D&A) - Gartner 2: Enterprise Data Analytics - SelectHub

NEW QUESTION 28
- (Topic 1)
What is the relationship between a Customer entity and an Order entity, where a customer entry will be present in the Customer entity only if they have made an order?

A. one-to-many
B. many-to-many
C. one-to-one
D. zero-to-one

Answer: D

Explanation:
The relationship between a Customer entity and an Order entity, where a customer entry will be present in the Customer entity only if they have made an order, is a zero-to-one relationship. This means that for each record in the Order entity, there can be either zero or one record in the Customer entity that is related to it. This implies that the Order entity is optional for the Customer entity, and the Customer entity is mandatory for the Order entity12 References: 1: A Guide to the Entity Relationship Diagram (ERD) - Database Star 2: Developing an Application - Oracle

NEW QUESTION 29
- (Topic 1)
A Data Dictionary is being developed for an employee database. When reviewing the data dictionary, the analyst recommends adding another primitive data element. Which element would be suggested?

A. Street address
B. First name
C. Customer name
D. Work phone number

Answer: A

Explanation:
A street address is a primitive data element, because it is a basic unit of data that cannot be further decomposed into smaller components. A primitive data element has a distinct name, definition, format, and value domain. A street address can be used to identify the location of an employee or a customer, and it can be stored as a string or a combination of numbers and characters. Options B, C, and D are not primitive data elements, because they can be further broken down into smaller components. For example, a first name can be divided into a prefix, a given name, and a suffix. A customer name can be composed of a first name

and a last name. A work phone number can be split into a country code, an area code, and a local number. References:
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 2: Source Data
•Business analysis data dictionary – The Functional BA
•CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 8, CBDA Exam Sample Questions and Self-Assessment, Question 15

NEW QUESTION 32
- (Topic 1)
Based on the results of a recently completed analytics initiative, the Human Resource department for a major department store implemented a change to its hiring practice to address the attrition rates of its sales associates. The new policy stated that candidates applying for sales positions must possess at least 3 years of relevant sales experience to be considered. After implementing the change, attrition rates are 10% higher and management is frustrated. Which of the following could result in this outcome?

A. The results of analysis have been incorrectly interpreted
B. Sales experience is not a relevant skill
C. Analytics is not helpful given this situation
D. The change proposed is not aligned to company strategy

Answer: D

Explanation:
The change proposed is not aligned to company strategy, because it may not address the root cause of the attrition problem, or it may conflict with other organizational goals or values. For example, the change may reduce the pool of qualified candidates, increase the hiring costs, or lower the diversity or customer satisfaction of the sales team. The change may also ignore other factors thatinfluence the attrition rates, such as compensation, training, feedback, or recognition. Therefore, the change may not achieve the desired outcome of reducing attrition, and may even worsen it. References:
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 5: Use Results to Influence Business Decision Making
•Understanding the Guide to Business Data Analytics, page 9
•CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 8, CBDA Exam Sample Questions and Self-Assessment, Question 13

NEW QUESTION 35
- (Topic 1)
A business analyst manager is planning budgets for the new year, and training opportunities for his team of business analysts. The manager sends out a survey to the team to obtain their top interests within the seven areas of training opportunities. The team results were compared against the manager's personal rating. What can be deduced from the following chart with regards to the survey results?

Employee Training Opportunity

—— Personal Rating   —— Avg. Team Rating

A. The team's top interests in training opportunities were aligned with the manager's, which included Negotiation & Conflict Resolution and Facilitation
B. The team's top interests in training opportunities were aligned with the manager's, which included Teamwork and Adaptability
C. The manager's rating did not match with the team's rating for any of the training areas
D. The team had equal interest across all training areas

Answer: A

Explanation:
The chart shows the personal rating of the manager and the average team rating on different areas of training opportunities. Both the manager and the team rated ??Negotiation & Conflict Resolution?? and ??Facilitation?? highly, indicating a shared interest in these areas. These areas are also relevant for business analysts, as they involve skills such as communication, collaboration, problem-solving, and stakeholder management12 References: 1: 6 Charts You Can Use to Create Effective Reports | SurveyMonkey 2: Business Analysis Core Concept Model™ (BACCM™) - IIBA BABOK Guide v3

NEW QUESTION 37
- (Topic 1)
Senior executives in a large organization receive numerous sales reports of every sale through a corporate dashboard on a weekly basis. The executives are considering budget increases for various functions but would like to know if they are obtaining good returns for current budget allocations. They ask the analytics team to research and Answer: "How effective is our marketing spend?" This question is:

A. Already answered in the sales data
B. Difficult to analyze because its narrowly focused
C. Sufficient to begin initial analysis
D. Too broadly scoped to be effectively answered
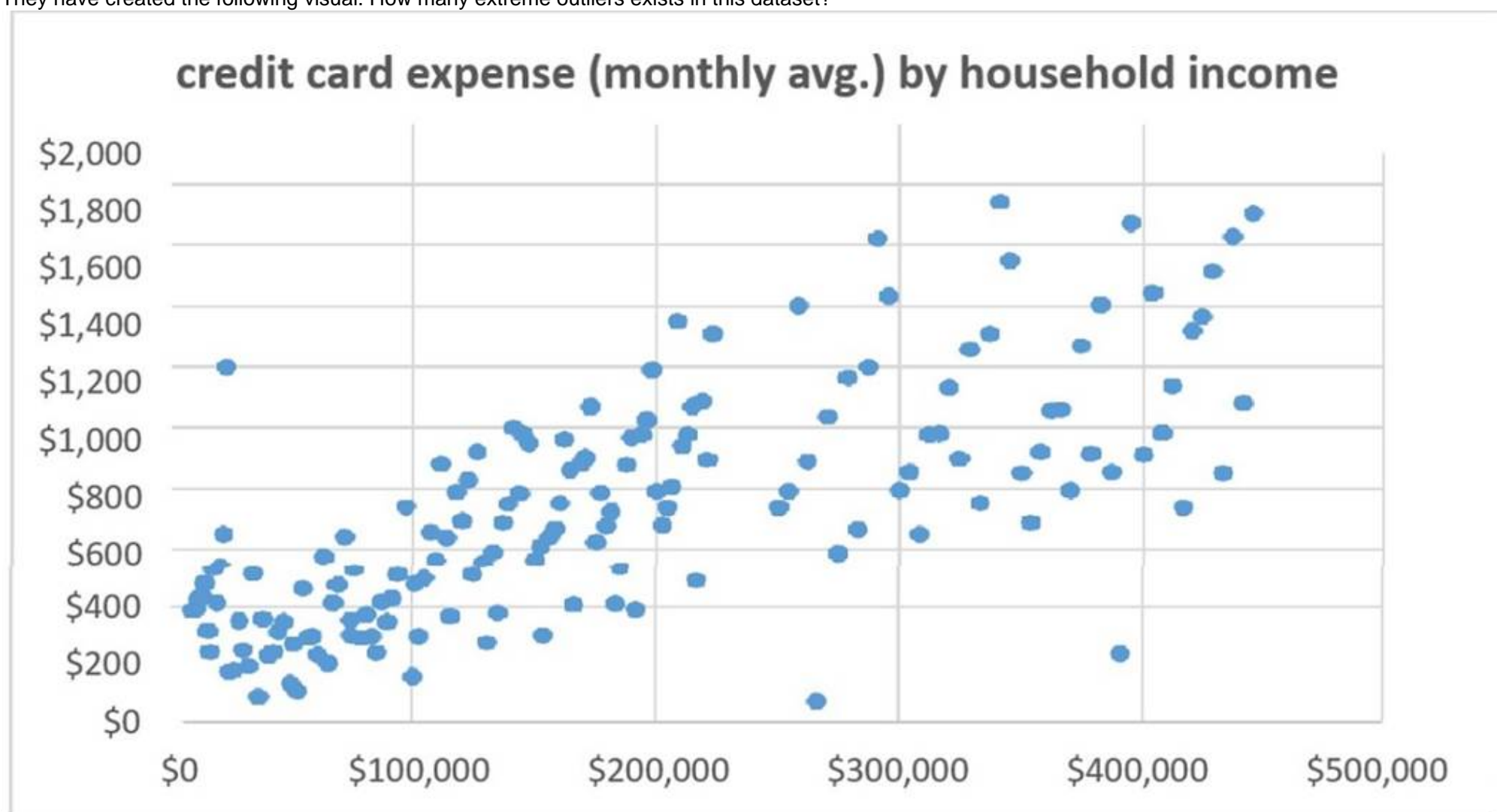
Answer: D

Explanation:
The question ??How effective is our marketing spend??? is too broadly scoped to be effectively answered, because it is a vague and ambiguous question that does not specify the criteria, scope, or timeframe for measuring the effectiveness of the marketing spend. The question also does not define what constitutes marketing spend, or how it relates to the sales data or the budget allocations. The question needs to be refined and clarified to make it more focused, relevant, and feasible for the analytics team to answer. For example, the question could be rephrased as ??How does the marketing spend per channel affect the sales revenue and customer retention rate in the last quarter??? References:
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 1: Identify the Research Questions
•Understanding the Guide to Business Data Analytics, page 10-11
•CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 8, CBDA Exam Sample Questions and Self-Assessment, Question 16

NEW QUESTION 42
- (Topic 1)
An analytics team employed at a leading credit card company is utilizing data analytics to identify unusual credit card purchases.
They have created the following visual. How many extreme outliers exists in this dataset?

credit card expense (monthly avg.) by household income

A. 5
B. 3
C. 2

Answer: C

Explanation:
According to the Business Data Analytics (IIBA®- CBDA) principles, extreme outliers in a dataset can be identified visually on a scatter plot as points that are distinctly separate from the bulk of the data. In this visual, there are three points that are significantly higher on the y-axis (credit card expense) relative to their position on the x-axis (household income), indicating unusual credit card purchases. References: The identification and interpretation of outliers is a standard practice in data analytics and is covered under the Business Data Analytics (IIBA®- CBDA) learning resources.

NEW QUESTION 44

- (Topic 1)
The architecture team puts forth a solution architecture that integrates multiple data sources from within and outside the organization. The architecture provides the foundation to source a new analytics program. If one of the objectives of the analytics team was to provide 'one source of the truth', this objective would be referring to which of the following?

A. Identifying one key stakeholder, who can make final decisions about which sources to relate/merge
B. Evaluating the completeness, validity, and reliability of the data from source systems
C. Ensuring stakeholders always have clear insight into the final requirements at all times
D. Enforcing master data management principles and practices

Answer: D

Explanation:
Providing ??one source of the truth?? means ensuring that there is a single, consistent, and authoritative source of data that can be used for analytics and decision making across the organization. This objective can be achieved by enforcing master data management principles and practices, which involve defining, governing, and maintaining the quality and integrity of the core data entities that are shared by multiple systems and processes. Master data management helps to eliminate data silos, reduce data duplication and inconsistency, and improve data accuracy and reliability12 References: 1: What is Master Data Management (MDM)? - Informatica 2: Master Data Management - IIBA BABOK Guide v3

NEW QUESTION 48
- (Topic 2)
Results of the data analysis have been analyzed and the team was confident with the results but also quite surprised the outcome was not what was expected. In pondering the value of what can be gleaned from the data, the team has no feasible solution to put forth to address the business need.A logical next step would be to:

A. Repeat the business analytics cycle with the formation of a new research question
B. Provide the results to a 2nd analytics team to see if similar conclusions are drawn
C. Analyze the data again, to determine if any insights were overlooked
D. Check the quality of the data that was used for the analysis

Answer: A

Explanation:
According to the Guide to Business Data Analytics, the business analytics cycle is an iterative process that consists of four phases: identify the research questions, source data, analyze data, and interpretand report results. The cycle can be repeated as many times as needed until the business problem or opportunity is addressed or resolved. In this situation, the team was confident with the results but also surprised that the outcome was not what was expected. This means that the initial research question may not have been relevant, specific, or testable enough to provide a feasible solution for the business need. Therefore, a logical next step would be to repeat the business analytics cycle with the formation of a new research question that is more aligned with the business goal, scope, and context.
References: Guide to Business Data Analytics, page 47-48; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 15.

NEW QUESTION 51
- (Topic 2)
A data scientist is working with a team of upper level managers to develop a strategy for creating an enterprise analytics program. What critical success factor would help ensure the organization obtains the most value from its data?

A. Management is aware of the value of data science and ensures support for all tactical initiatives
B. A sponsor is identified that helps champion the work
C. Management thinks analytically and fosters a culture where data science thrives
D. The data science team supports the functional units and priorities

Answer: C

Explanation:
According to the Introduction to Business Data Analytics: An Organizational View, one of the critical success factors for creating an enterprise analytics program is to have a management team that thinks analytically and fosters a culture where data science thrives. This means that the management team should understand the potential value and impact of data science, promote a data-driven mindset and decision-making process, encourage innovation and experimentation, and support collaboration and learning among the data science team and other stakeholders. A management team that thinks analytically and fosters a culture where data science thrives can help create a strategic vision, align the goals and objectives, allocate the resources and investments, and overcome the challenges and barriers for the enterprise analytics program.
References: Introduction to Business Data Analytics: An Organizational View, page 8- 9; CBDA Exam Blueprint, page 8; Guide to Business Data Analytics, page 85-86.

NEW QUESTION 53
- (Topic 2)
The Vice President at a commercial goods manufacturing company wants to create annual objectives for the team based on the company??s latest strategic goals. The Vice President has reached out to the business analytics team for data analysis that will help build SMART objectives. What type of analytics will help with creating these objectives?

A. Descriptive
B. Diagnostic
C. Descriptive and Diagnostic
D. Descriptive and Predictive

Answer: D

Explanation:
Descriptive and predictive analytics are types of analytics that can help with creating SMART objectives. SMART stands for Specific, Measurable, Achievable, Relevant, and Time-bound, which are criteria for setting effective and realistic goals1. Descriptive analytics is the type of analytics that summarizes what has happened in the past using data, such as historical trends, patterns, or performance2. Descriptive analytics can help with creating SMART objectives by providing

a baseline, benchmark, or context for the current situation and the desired outcomes. Predictive analytics is the type of analytics that forecasts what is likely to happen in the future using data, such as statistical models, machine learning, or artificial intelligence3. Predictive analytics can help with creating SMART objectives by providing a projection, estimation, or scenario for the future situation and the expected results.

Diagnostic and prescriptive analytics are other types of analytics that are not as helpful with creating SMART objectives. Diagnostic analytics is the type of analytics that explains why something has happened in the past using data, such as root cause analysis, correlation analysis, or hypothesis testing. Diagnostic analytics can help with understanding the causes and effects of past events, but it does not provide guidance or direction for setting future goals. Prescriptive analytics is the type of analytics that recommends what should be done in the future using data, such as optimization, simulation, or decision analysis. Prescriptive analytics can help with suggesting the best actions or alternatives for achieving future goals, but it does not define or measure the goals themselves. References:1: Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 122: Guide to Business Data Analytics, IIBA, 2020, p. 533: Guide to Business Data Analytics, IIBA, 2020, p. 54. : Guide to Business Data Analytics, IIBA, 2020, p. 54. : Guide to Business Data Analytics, IIBA, 2020, p. 55.

NEW QUESTION 54
- (Topic 2)
To support their recommendation, the analytics team has identified investment and resources required to implement. The team has also identified key activities and events that are required to transition the organization through various stages to the future state.This information is clearly articulated in the:

A. Risk assessment
B. Gap analysis
C. Change strategy
D. Gantt chart

Answer: C

Explanation:
According to the Guide to Business Data Analytics, a change strategy is a document that outlines the approach and plan for managing the change resulting from the data analysis and the proposed solution. A change strategy should include the following elements: the vision and objectives of the change, the scope and impact of the change, the stakeholders and their roles and responsibilities, the communication and engagement plan, the training and development plan, the transition and implementation plan, the risk and issue management plan, and the evaluation and measurement plan. A change strategy can help ensure that the change is aligned with the business goals, that the stakeholders are informed and involved, that the risks and issues are identified and mitigated, and that the benefits and outcomes are realized and sustained.
References:Guide to Business Data Analytics, page 84-85;CBDA Exam Blueprint, page 8; [Introduction to Business Data Analytics: A Practitioner View], page 26.

NEW QUESTION 59
- (Topic 2)
The results for a certification exam were revealed in percentage and percentile. How would you infer the results for an attendee at: 75%, 90th percentile?

A. While the attendee's exam score was 90/100. the attendee did better than 75% of the attendees
B. While the attendee's exam score was 90/100. the attendee did better than 25% of the attendees
C. While the attendee's exam score was 75/100. the attendee did better than 10% of the attendees
D. While the attendee's exam score was 75/100. the attendee did better than 90% of the attendees

Answer: D

Explanation:
A percentage is a way of expressing a number as a fraction of 100, while a percentile is a way of expressing a number as a rank or position in a distribution of values. A percentage tells us how much of something there is, while a percentile tells us how well something performed compared to others. To infer the results for an attendee at 75%, 90th percentile, we need to understand what these two numbers mean.
? 75% means that the attendee scored 75 out of 100 possible points on the exam.
This is the absolute score of the attendee, which does not depend on how others performed.
? 90th percentile means that the attendee scored higher than 90% of all the attendees who took the exam. This is the relative score of the attendee, which depends on how others performed. For example, if there were 1000 attendees, the 90th percentile would mean that the attendee scored higher than 900 attendees, and lower than 100 attendees.
Therefore, the correct inference is that while the attendee??s exam score was 75/100, the attendee did better than 90% of the attendees. This means that the attendee??s score was above average, and that the exam was relatively difficult or had a low pass
rate. References:
? Difference Between Percentage and Percentile | Major Differences - BYJU??S, BYJU??S, accessed on January 20, 2024.
? Difference Between Percentage and Percentile (with Examples and Comparison Chart) - Key Differences, Key Differences, accessed on January 20, 2024.
? Certification in Business Data Analytics (IIBA ® - CBDA), IIBA, accessed on January 20, 2024.

NEW QUESTION 63
- (Topic 2)
A food and beverage company would like to administer a survey to obtain customer insights about a new cookie product recently launched. A data team is asked to build the survey paying careful attention to reduce the degree of sampling error.Which criteria would help the team meet this objective?

A. Large sample size and variation in the target population
B. Large sample size and random selection of the target population
C. Small sample size and specific subset of the target population
D. Small sample size and using customers who agreed to take the survey

Answer: B

Explanation:
Sampling error is the difference between the results obtained from a sample and the results obtained from the population from which the sample is drawn1. Sampling error can affect the validity, reliability, and generalizability of the survey results2. To reduce the degree of sampling error, the data team should use a large sample size and a random selection of the target population. A large sample size means that the sample is more likely to represent the diversity and variability of the population, and that the results are more precise and accurate3. A random selection of the target population means that every member of the population has an equal chance of being included in the sample, and that the results are less biased and more representative4.
The other criteria would not help the team meet this objective, as they would increase the degree of sampling error. A large sample size and variation in the target population would not reduce the sampling error, as variation refers to the differences or heterogeneity within the population, not the sample. Variation in the target population can increase the sampling error, as it makes it harder to capture the true characteristics of the population with a sample5. A small sample size and

specific subset of the target population would not reduce the sampling error, as they would make the sample less representative and more prone to bias. A small sample size means that the sample is less likely to reflect the diversity and variability of the population, and that the results are less precise and accurate. A specific subset of the target population means that the sample is not randomly selected, but based on some criteria or convenience, and that the results are more biased and less representative. A small sample size and using customers who agreed to take the survey would not reduce the sampling error, as they would also make the sample less representative and more prone to bias. A small sample size has the same drawbacks as mentioned above. Using customers who agreed to take the survey means that the sample is not randomly selected, but based on self-selection or voluntary response, and that the results are more biased and less representative.

References:1: Guide to Business Data Analytics, IIBA, 2020, p. 542: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 223: Data Analysis: The Definitive Guide, Tableau, 4: Data Analysis: The Definitive Guide, Tableau, 5: Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, .

: Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Guide to Business Data Analytics, IIBA, 2020, p. 54. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 22. : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, .

NEW QUESTION 65
- (Topic 2)
The analytics team has completed their analytics work and have agreed on a set of five key recommendations. They are now discussing how best to communicate these recommendations to the finance, customer service, and marketing teams. Recognizing that this is a diverse set of stakeholders, the business analysis professional reminds the team:

A. All stakeholders should receive information about the recommendation in the same way
B. Stakeholders only have the ability to understand summarized recommendations
C. Recommendations are important and must be communicated with as much detail as possible
D. The recommendation should be communicated in different ways for different stakeholders

Answer: D

Explanation:
 According to the Guide to Business Data Analytics, the recommendation is the output of the data analysis that provides suggestions or guidance for actions or decisions based on the data insights. The recommendation should be communicated in different ways for different stakeholders, depending on their needs, preferences, and expectations. The communication should consider the following factors:
? The level of detail and complexity: Some stakeholders may require more or less detail and complexity in the recommendation, depending on their role, responsibility, and involvement in the data analysis project. For example, the finance team may need more detail and complexity than the customer service team, as they are more concerned with the financial implications and feasibility of the recommendation.
? The format and medium: Some stakeholders may prefer different formats and mediums for receiving the recommendation, depending on their availability, accessibility, and learning style. For example, the marketing team may prefer a visual and interactive format, such as a dashboard or a presentation, than a textual and static format, such as a report or a document.
? The tone and language: Some stakeholders may respond better to different tones and languages for the recommendation, depending on their culture, background, and personality. For example, some stakeholders may appreciate a formal and professional tone and language, while others may prefer a casual and friendly tone and language.
The communication should also follow the principles of clarity, accuracy, relevance, and timeliness, as well as adhere to the ethical and legal standards for data privacy and security.
References: Guide to Business Data Analytics, page 50-51; CBDA Exam Blueprint, page 7; [Introduction toBusiness Data Analytics: A Practitioner View], page 16.

NEW QUESTION 69
- (Topic 2)
A supermarket chain wants to improve supplier relations. One of the targets to track and help achieve this goal is to improve the average transaction time per order by 10%.From a SMART target perspective, what is missing?

A. is not attainable as weather conditions can slow down order times
B. S • should provide a target for each supplier
C. R - is not relevant to the goal as supplier relations is only dependent on quality of deliveries
D. T - There is no mention of the time-frame by which this target must be met

Answer: D

Explanation:
 SMART is an acronym that stands for Specific, Measurable, Achievable, Relevant, and Time-bound, which are criteria for setting effective and realistic goals1. From a SMART target perspective, what is missing in this scenario is the time-frame by which the target must be met. A time-bound target specifies the deadline or the duration for achieving the target, which helps to create a sense of urgency, motivation, and accountability2. Without a time-frame, the target is vague and indefinite, and it is difficult to monitor and evaluate the progress and the results. For example, a time-bound target could be to improve the average transaction time per order by 10% within the next six months.
The other options are not correct explanations of what is missing. The target is attainable, as it is realistic and feasible, and it does not depend on factors that are beyond the control of the organization, such as weather conditions. The target is specific, as it provides a clear and precise description of what needs to be achieved, and it does not need to provide a target for each supplier, as that would make the target too complex and cumbersome. The target is relevant, as it is aligned with the goal of improving supplier relations, and it does not assume that supplier relations is only dependent on quality of deliveries, as transaction time is also an important factor that affects the efficiency, satisfaction, and trust of the suppliers.
References:1: Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 122: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 12. : Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 12. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 12.

NEW QUESTION 74
- (Topic 2)
Analytics is being used to estimate the number of machine breakdowns a company will experience next year. The business analyst provides an optimistic estimate of 10 breakdowns, a pessimistic estimate of 100 breakdowns, and a most likely value of 50 breakdowns.What type of estimation is being used?

A. Parametric Estimation
B. PERT
C. Top-down

D. Delphi

Answer: B

Explanation:
According to the Guide to Business Data Analytics, PERT (Program Evaluation and Review Technique) is a type of estimation that uses three values: optimistic, pessimistic, and most likely. The PERT estimate is calculated as the weighted average of these three values, with more weight given to the most likely value. PERT can be used to estimate the duration, cost, or other variables of a project or activity, taking into account the uncertainty and variability of the data. PERT can help provide a realistic and reliable estimate based on the available information.
References: Guide to Business Data Analytics, page 54-55; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 16.

NEW QUESTION 76
- (Topic 2)
Interested in ensuring that analytics continues to contribute value to the overall organization, the lead analyst suggests developing a long term plan to define how the enterprise will identify, store, manage, share, and use its data long-term.The analyst is proposing the development of a:

A. Data roadmap
B. Business strategy
C. Data strategy
D. Data management plan

Answer: C

Explanation:
A data strategy is a long-term plan that defines how the enterprise will identify, store, manage, share, and use its data to achieve its business goals and objectives1. A data strategy aligns the data vision, mission, principles, and policies with the business strategy, and guides the data governance, data quality, data architecture, data security, data integration, data analytics, and data culture of the organization2. A data strategy helps the organization to leverage its data as a strategic asset, to create value, to improve performance, and to gain competitive advantage3.
A data roadmap is a document that outlines the specific actions, milestones, deliverables, and timelines for implementing the data strategy. A data roadmap is a tactical tool that helps the organization to prioritize, coordinate, and communicate its data initiatives, and to track its progress and outcomes. A data roadmap is not a long-term plan, but a dynamic and flexible plan that can be updated and revised as the data strategy evolves.
A business strategy is a high-level plan that defines how the enterprise will achieve its vision, mission, and goals in a competitive market. A business strategy sets the direction, scope, and value proposition of the organization, and guides its decisions on resource allocation, product development, customer segmentation, pricing, marketing, and differentiation. A business strategy is not a plan that defines how the enterprise will identify, store, manage, share, and use its data, but a plan that defines how the enterprise will create and sustain value for its stakeholders.
A data management plan is a document that describes the data that will be collected, generated, or used in a specific project, and how the data will be handled, stored, preserved, shared, and reused during and after the project. A data management plan is a operational tool that helps the project team to comply with the data policies, standards, and best practices of the organization, and to ensure the quality, integrity, security, and accessibility of the data. A data management plan is not a long-term plan, but a project- specific plan that can be modified and updated as the project progresses.
References:1: Guide to Business Data Analytics, IIBA, 2020, p. 392: Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 143: Data Strategy: The Definitive Guide, Tableau, . : Data Strategy: The Definitive Guide, Tableau, . : Data Roadmap: The Definitive Guide, Tableau, . : Business Strategy: The Definitive Guide, Tableau, . : Business Strategy: The Definitive Guide, Tableau, . : Data Management Plan: The Definitive Guide, Tableau, . : Data Management Plan: The Definitive Guide, Tableau, .
: Data Strategy: The Definitive Guide, Tableau, . : Guide to Business Data Analytics, IIBA, 2020, p. 39. : Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 14. : Data Strategy: The Definitive Guide, Tableau, . : Data Roadmap: The Definitive Guide, Tableau, . : Business Strategy: The Definitive Guide, Tableau, . : Data Management Plan: The Definitive Guide, Tableau, .

NEW QUESTION 81
- (Topic 2)
An analyst is performing regression analysis and reviewing the results. They would like to rescale the variables in the model to more clearly reflect the relationship between the regression coefficients.Which technique could be used to rescale the variables?

A. Dimension Reduction
B. Mean Centering
C. Normalization
D. Clustering

Answer: C

Explanation:
Normalization is a technique that rescales the values of the variables in a data set to a common range, such as [0,1] or [-1,1]. Normalization can help reduce the effect of outliers, improve the performance of some algorithms, and make the interpretation of the regression coefficients easier and more consistent. Normalization can be done using different methods, such as min-max scaling, z-score scaling, or unit vector scaling. References:Guide to Business Data Analytics, page 41; Introduction to Business Data Analytics: A Practitioner View, page 12.

NEW QUESTION 83
- (Topic 2)
From a prior analytics study, a telecommunications company has concluded that due to the maturity of the market the cost of obtaining new customers is on the rise. As a result, the company wants to increase their efforts on retaining customers. One of the key performance indicators that will help them track their progress in this area is the rate at
which customers leave/unsubscribe from their services over a given time period.Which performance indicator is this referring to?

A. Subscription rate
B. Acquisition rate
C. Churn rate
D. Retention rate

Answer: C

Explanation:

According to the Introduction to Business Data Analytics: A Practitioner View, churn rate is a measure of customer attrition, or the percentage of customers who stop using a product or service over a given time period. Churn rate is an important indicator of customer satisfaction, loyalty, and retention. A high churn rate implies that customers are dissatisfied or have found better alternatives, which can negatively affect the revenue and growth of a business. A low churn rate implies that customers are satisfied and loyal, which can positively affect the revenue and growth of a business. In this situation, the telecommunications company wants to increase their efforts on retaining customers, so they need to track their churn rate and try to reduce it.
References: Introduction to Business Data Analytics: A Practitioner View, page 17; CBDA Exam Blueprint, page 7; [Churn Rate Definition - Investopedia]

NEW QUESTION 84
- (Topic 2)
The sales department is interested in using business analytics to better understand their customer's purchasing habits. During the process of sourcing data, the analyst discovers geographic differences in how sales data is being recorded. The analyst would like to influence how the organization strategically plans for business analytics. Which practice, would move the organization closer to meeting this objective?

A. Data governance
B. Data integration
C. Data management
D. Data warehousing

Answer: A

Explanation:
Data governance is the practice of establishing and enforcing policies, standards, roles, and responsibilities for the quality, security, and usage of data across an organization1. Data governance helps ensure that data is consistent, reliable, and trustworthy, and that it aligns with the organization??s strategic goals and objectives. Data governance also facilitates collaboration and communication among different stakeholders, such as business analysts, data owners, data stewards, and data consumers2. By implementing data governance, the analyst can influence how the organization strategically plans for business analytics, as data governance can help address the issues of data quality, data integration, data access, data ethics, and data value3.
Data integration, data management, and data warehousing are related but distinct concepts from data governance. Data integration is the process of combining data from different sources into a unified view4. Data management is the process of collecting, storing, organizing, and maintaining data throughout its lifecycle5. Data warehousing is the process of creating and maintaining a centralized repository of data for analytical purposes. While these practices can support business analytics, they do not necessarily influence how the organization strategically plans for business analytics, as they are more focused on the technical aspects of data rather than the organizational aspects of data. References:1: Guide to Business Data Analytics, IIBA, 2020, p. 392: Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 143: Data Governance: The Definitive Guide, Tableau, 4: Data Integration: The Definitive Guide, Tableau, 5: Data Management: The Definitive Guide, Tableau, . : Data Warehousing: The Definitive Guide, Tableau, .

NEW QUESTION 86
- (Topic 2)
A lab is conducting a study on protein interactions. They have used the data to create a graph visualization.In graph visualization, what would an edge represent?

A. A single datapoint
B. A link between two datapoints
C. A collection of datapoints and links
D. A dedicated algorithm that calculates the node positions

Answer: B

Explanation:
A graph visualization is a type of visualization that shows the relationships among data points by using nodes (or vertices) to represent the data points and edges (or links) to represent the connections between them1. A graph visualization can help reveal patterns, clusters, outliers, or hierarchies in the data2. In a graph visualization, an edge represents a link between two data points, indicating that they have some kind of association, interaction, similarity, or dependency3. For example, in a study on protein interactions, an edge could represent a physical or functional interaction between two proteins, such as binding, signaling, or regulation4.
A single data point, a collection of data points and links, and a dedicated algorithm that calculates the node positions are not correct definitions of an edge in a graph visualization. A single data point is represented by a node, not an edge, in a graph visualization. A collection of data points and links is the whole graph, not an edge, in a graph visualization.
A dedicated algorithm that calculates the node positions is a method of graph layout, not an edge, in a graph visualization. A graph layout is the way the nodes and edges are arranged in a graph visualization, which can affect the readability, aesthetics, and interpretation of the graph.
References:1: Guide to Business Data Analytics, IIBA, 2020, p. 692: Data Visualization:
The Definitive Guide, Tableau, 3: Graph Visualization: The Definitive Guide, Tableau, 4: Protein Interaction Networks, Nature, . : Graph Visualization: The Definitive Guide, Tableau, . : Guide to Business Data Analytics, IIBA, 2020, p. 69. : Data Visualization: The Definitive Guide, Tableau, . : Graph Visualization: The Definitive Guide, Tableau, . : Protein Interaction Networks, Nature, . : Graph Visualization: The Definitive Guide, Tableau, .

NEW QUESTION 91
- (Topic 2)
A consumer products company is interested in finding ways to innovate utilizing business analytics. The team is reviewing a database of customer complaints. Interested in knowing how the organization currently interacts with its customers, the analyst proposes the use of which technique?

A. Document analysis
B. Journey map
C. Current state assessment
D. Interface analysis

Answer: B

Explanation:
A journey map is a visual representation of the interactions and experiences of a customer or stakeholder with an organization, product, or service over time. A journey map can help identify pain points, gaps, opportunities, and emotions along the customer journey. A journey map can also help understand the current state of the customer experience and how it can be improved or innovated using business analytics. References:Guide to Business Data Analytics, page 55; Introduction to Business Data Analytics: An Organizational View, page 18.

NEW QUESTION 95
- (Topic 2)
A movie production company wants to use analytics to decide which customers would choose to watch or not watch a particular movie after seeing a promotional teaser. The business analysis professional suggests they could make that prediction by identifying characteristics of the new movie and determining if the customer has watched other movies with similar characteristics.Thisis an example of using the following technique:

A. Logistic regression
B. Ouster analysis
C. Integer programming
D. Analysis of variance

Answer: A

Explanation:
 Logistic regression is a technique that can be used to model the probability of a binary outcome, such as choosing to watch or not watch a movie, based on one or more predictor variables, such as the characteristics of the movie and the customer??s viewing history. Logistic regression can help the business analysis professional to identify the factors that influence the customer??s decision and to estimate the likelihood of each customer??s preference. Logistic regression can also be used to test hypotheses and to evaluate the performance of the predictive model. References: [Guide to Business Data Analytics], page 55; [Business Data Analytics: A Practical Guide], page 93; [Introduction to Business Data Analytics: A Practitioner View], page 14.

NEW QUESTION 100
- (Topic 2)
DIAGRAM TAKEN
An analyst at an organization has just learnt about bullet charts. For the latest dashboard, the analyst has decided to display the customer satisfaction rate from the latest 2018 customer survey results through a bullet chart while comparing it to the 2017 customer satisfaction rate.What can be gleaned from this chart?
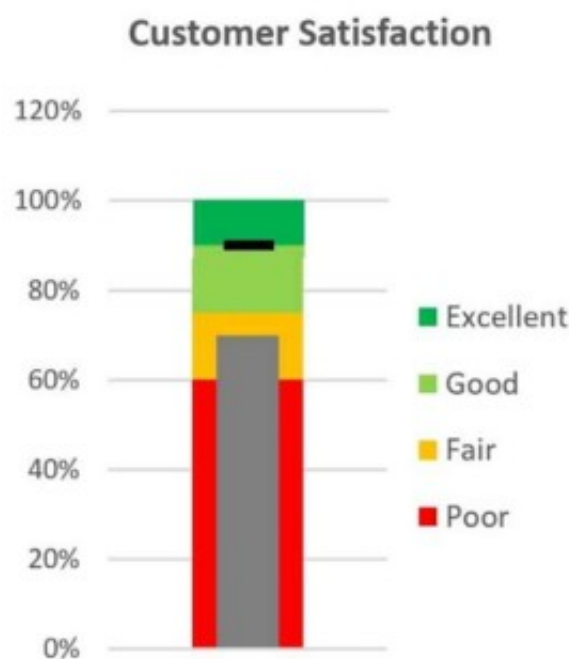
Customer Satisfaction
120%
100%
80%

A. The 2018 customer satisfaction rate is at 90%. between good and excellent, and exceeded its target of 70%
B. The 2018 customer satisfaction rate is at 90%. between good and excellent
C. The 2018 customer satisfaction rate was fair, at 70%, and did not reach its target of 90%
D. The 2018 customer satisfaction rate is at 90%. between good and excellent, while the 2017 customer satisfaction rate was at 70%

Answer: D

Explanation:
 A bullet chart is a type of bar chart that shows progress towards a goal or performance against a reference line1. It consists of a bar representing the featured measure, a reference line denoting a target or threshold, and a background with qualitative ranges (such as poor, fair, good, excellent)2. In this case, the featured measure is the customer satisfaction rate for 2018, the reference line is the target of 70%, and the background ranges are 0-50% (poor), 50-70% (fair), 70-90% (good), and 90-120% (excellent). The chart also shows a thin black bar representing the customer satisfaction rate for 2017, which can be used for comparison. From the chart, we can see that the 2018 customer satisfaction rate is at 90%, which falls in the excellent range and exceeds the target of 70%. We can also see that the 2017 customer satisfaction rate was at 70%, which falls in the good range and meets the target. Therefore, the correct answer is D, as it summarizes both the 2018 and 2017 customer satisfaction rates and their relation to the target and the ranges.
References:1: Understanding and Using Bullet Graphs | Tableau, 2: Bullet Charts - What Is It And How To Use It - JSCharting

NEW QUESTION 105
- (Topic 2)
The analytics team discovers there is an abundance of data available to them from various sources. They are excited about the potential of turning this data into usable information for their organization.They decide to focus the analytics work on:

A. Using the data that is easiest to collect in order to turn out reports quickly
B. Harnessing all the data and presenting various results to senior management
C. Harnessing all the data as long as the analysis meets key cost criteria
D. Using the data to answer a limited number of key questions

Answer: D

Explanation:
According to the IIBA® Guide to Business Data Analytics, analytics work should be driven by well-defined business problems or opportunities that are aligned with the organization??s strategic objectives1. Having an abundance of data does not necessarily mean that all of it is relevant, reliable, or useful for the analytics purpose. Therefore, the analytics team should focus on using the data to answer a limited number of key questions that are derived from the business context and that can generate actionable insights and outcomes. This approach can help the analytics team prioritize the most important data sources, methods, and tools, as well as avoid wasting time and resources on analysis that is not impactful or meaningful for the organization.
References:1: IIBA® Guide to Business Data Analytics, Chapter 3: Business Data Analytics Process, page 24-25

NEW QUESTION 107
- (Topic 2)
An insurance company would like to develop a range of insurance products for different types of customers. The analytics team is asked to conduct some research and share their insights with senior management. Which technique would be useful to divide the customer base into groups?

A. Linear regression
B. Survey sampling
C. Factor analysis
D. K-means clustering

Answer: D

Explanation:
K-means clustering is a technique that partitions a set of data points into a predefined number of clusters, based on their similarity or distance. This technique can be useful to divide the customer base into groups that have similar characteristics, preferences, or behaviors, and then design insurance products that cater to each group??s needs and expectations. K-means clustering can also help identify outliers or anomalies in the customer data that may require further investigation or attention.
References: Guide to Business Data Analytics, page 58-59; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 17.

NEW QUESTION 111
- (Topic 2)
The CustomerOrder entity will include information on all customer orders. Applying database normalization rules, which set of attributes will need to be normalized to avoid redundancies?
•CustomerId
•CustomerPhone
•OrderId
•OrderDate
•ProductName
•ProductQuantity
•OrderTotal

A. CustomerPhone ProductName
B. ProductName ProductQuantity
C. OrderId ProductName
D. CustomerId OrderDate

Answer: B

Explanation:
Database normalization is the process of organizing the data in a database to reduce redundancy and improve integrity, consistency, and performance1. Database normalization rules are based on the concept of normal forms, which are levels of database design that meet certain criteria2. One of the most common normal forms is the third normal form (3NF), which states that a table should not have any transitive dependencies, meaning that a non-key attribute should not depend on another non-key attribute3. In the CustomerOrder entity, the set of attributes that will need to be normalized to avoid redundancies are ProductName and ProductQuantity, as they are non-key attributes that depend on another non-key attribute, OrderId. This means that the same product information may be repeated for different orders, which could lead to data inconsistency, duplication, or update anomalies. To normalize this set of attributes, a separate table should be created for the OrderDetails entity, which would have OrderId, ProductName, and ProductQuantity as its attributes, and OrderId and ProductName as its composite primary key.
The other sets of attributes do not need to be normalized to avoid redundancies, as they do not violate the 3NF. CustomerPhone and ProductName are non-key attributes that depend on the primary key, CustomerId and OrderId respectively, which is allowed by the 3NF. OrderId and ProductName are part of the composite primary key of the OrderDetails entity, which is also allowed by the 3NF. CustomerId and OrderDate are both primary keys of the Customer and Order entities respectively, which are also allowed by the 3NF. References:1: Guide to Business Data Analytics, IIBA, 2020, p. 442: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 93: Database Normalization: The Definitive Guide, Tableau, . : Database Normalization: The Definitive Guide, Tableau, .
: Guide to Business Data Analytics, IIBA, 2020, p. 44. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 9. : Database Normalization: The Definitive Guide, Tableau, . : Database Normalization: The Definitive Guide, Tableau, .

NEW QUESTION 116
- (Topic 2)
A private school has decided to include bullet charts in students' end of year performance report. It will depict the student's score against the highest score achieved in that grade, and the qualitative category that the student's score falls under.Should a column chart be used instead?

A. Both charts are insufficient in meeting the requirements of a student score card
B. Both charts can be used as a column chart is a comparable alternative to a bullet chart
C. Yes, a column chart would be a better option to depict all three criteria in one chart
D. No, a bullet chart is a good option as it will depict all three criteria in one chart

Answer: D

Explanation:
A bullet chart is a type of bar chart that shows progress towards a goal or performance against a reference line1. It consists of a bar representing the featured measure, a reference line denoting a target or threshold, and a background with qualitative ranges (such as poor, fair, good, excellent)2. In this case, the featured measure is the student??s score, the reference line is the highest score achieved in that grade, and the background ranges are the qualitative categories that the student??s score falls under. A bullet chart is a good option for this use case because it can display all three criteria in one chart, using minimal space and

avoiding clutter. A column chart, on the other hand, would require either multiple columns for each student to show the score, the highest score, and the category, or a separate legend to map the colors of the columns to the categories. This would make the chart less effective in communicating the information and more difficult to compare across students.
References:1: Understanding and Using Bullet Graphs | Tableau, 2: Bullet Charts - What Is It And How To Use It - JSCharting

NEW QUESTION 120
- (Topic 2)
A large number of text messages are received by Twitter each year making Twitter one example of Big Data. What data characteristic represents this large number of text messages?

A. Veracity
B. Velocity
C. Value
D. Variety

Answer: B

Explanation:
Velocity is one of the four V??s of Big Data, along with Volume, Variety, and Veracity. Velocity refers to the speed at which data is generated, collected, and processed. A large number of text messages received by Twitter each year is an example of high- velocity data, as it requires real-time or near-real-time processing and analysis to extract insights and value from it. High-velocity data poses challenges and opportunities for business data analytics, as it requires efficient and scalable data infrastructure, streaming analytics, and timely decision-making.
References:1, page 9; 2, page 6.

NEW QUESTION 123
- (Topic 2)
There were 7 students enrolled in the Introduction to Artificial Intelligence course. The scores from the final exam were as follows: 64, 70. 80, 80, 90, 98, 100
What is the mean and median for the outlined scores?

A. 79.84.80
B. 83.14,80
C. 80,83.14
D. 83.14.90

Answer: B

Explanation:
The mean of a set of numbers is the sum of the numbers divided by the number of numbers. The median of a set of numbers is the middle value when the numbers are arranged in ascending or descending order. To find the mean and median of the given scores, we can use the following steps:
? To find the mean, we add up all the scores and divide by 7, the number of
students. The mean is (64 + 70 + 80 + 80 + 90 + 98 + 100) / 7 = 582 / 7 = 83.14
? To find the median, we arrange the scores in ascending order: 64, 70, 80, 80, 90, 98, 100. Since there are an odd number of scores, the median is the middle score, which is 80.
Therefore, the mean and median for the outlined scores are 83.14 and 80, respectively. References: Guide to Business Data Analytics, page 54; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 16.

NEW QUESTION 124
- (Topic 2)
A large bank has recently revamped their website, adding additional features such as financial investment opportunities, spending activity, and supporting reports. Which question will add value when evaluating how the website is being used?

A. What is the customer satisfaction rating across the branches?
B. What are the top keywords used in searches made within the website?
C. What is the customer retention rate since the website launch?
D. How many articles were published since the website launch?

Answer: C

Explanation:
Customer retention rate is a measure of how many customers continue to use a product or service over a given period of time. It is an important indicator of customer loyalty, satisfaction, and value. Customer retention rate can help the bank evaluate how the website is being used by comparing the number of customers who visited the website before and after the launch of the new features. A high customer retention rate would suggest that the new features are attractive, useful, and engaging for the customers, while a low customer retention rate would indicate that the new features are not meeting the customers?? needs or expectations. Customer retention rate can also help the bank identify the segments of customers who are more or less likely to use the website, and tailor their marketing and communication strategies accordingly. References:
? Certification in Business Data Analytics (IIBA ® - CBDA), IIBA, accessed on January 20, 2024.
? Business Data Analytics Certification - CBDA Competencies | IIBA®, IIBA, accessed on January 20, 2024.
? Guide to Business Data Analytics, IIBA, 2020, p. 23-24.
? What is Customer Retention Rate?| HubSpot, HubSpot, accessed on January 20, 2024.

NEW QUESTION 127
- (Topic 2)
An analyst calculates the average, median, and mode values for a dataset.What type of analytics is the analyst performing?

A. Predictive
B. Diagnostic
C. Prescriptive
D. Descriptive

Answer: D

Explanation:
 Descriptive analytics is the type of analytics that summarizes and visualizes data to provide an overview of what has happened or is happening. Descriptive analytics uses techniques such as statistics, charts, graphs, and dashboards to display data in an understandable and meaningful way. Descriptive analytics can help analysts explore data, identify patterns, and communicate insights. Calculating theaverage, median, and mode values for a dataset is an example of descriptive analytics, as it provides a measure of central tendency for the data distribution. References:
? Certification in Business Data Analytics (IIBA ® - CBDA), IIBA, accessed on January 20, 2024.
? Business Data Analytics Certification - CBDA Competencies | IIBA®, IIBA, accessed on January 20, 2024.
? Guide to Business Data Analytics, IIBA, 2020, p. 15.
? The 4 Types Of Analytics Explained (With Examples), Analytics for Decisions, accessed on January 20, 2024.

NEW QUESTION 130
- (Topic 2)
The research study is complete, the data has been analyzed and the team has created the necessary high impact visuals.The business analysis professional urges the team to:

A. Present the results to stakeholders
B. Validate regression analysis
C. Curate the data
D. Develop the narrative

Answer: D

Explanation:
 Developing the narrative is the process of creating a clear, concise, and compelling story that communicates the key insights, findings, and recommendations from the data analysis to the stakeholders1. Developing the narrative is an important step after completing the research study, the data analysis, and the high impact visuals, as it helps to bridge the gap between the data and the decision-making, to engage and persuade the audience, and to drive action and change2. Developing the narrative involves defining the purpose, audience, and message of the story, choosing the best format and medium to deliver the story, and using effective storytelling techniques, such as structure, context, emotion, and call to action3.
Presenting the results to stakeholders is the process of delivering the data story to the intended audience, using the appropriate communication channels, methods, and tools4. Presenting the results to stakeholders is a subsequent step after developing the narrative, as it requires a well-crafted and well-prepared data story to be effective and impactful. Presenting the results to stakeholders involves planning and rehearsing the presentation, adapting to the feedback and questions, and evaluating the outcomes and impacts of the presentation5.
Validating regression analysis is the process of checking the assumptions, accuracy, and suitability of a statistical model that estimates the relationship between one or more independent variables and a dependent variable. Validating regression analysis is a part of the data analysis step, not a step after completing the data analysis. Validating regression analysis involves testing the significance, fit, and residuals of the model, and comparing the model with alternative models or methods.
Curating the data is the process of organizing, annotating, and preserving the data for future use, reuse, or sharing. Curating the data is a part of the data management step, not a step after completing the data analysis. Curating the data involves applying the data policies, standards, and best practices of the organization, and ensuring the quality, integrity, security, and accessibility of the data.
References:1: Guide to Business Data Analytics, IIBA, 2020, p. 572: Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 153: Data Storytelling: The Definitive Guide, Tableau, 4: Guide to Business Data Analytics, IIBA, 2020, p. 585: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 27. : Guide to Business Data Analytics, IIBA, 2020, p. 55. : Data Analysis: The Definitive Guide, Tableau,. : Guide to Business Data Analytics, IIBA, 2020, p. 45. : Data Management: The Definitive Guide, Tableau, . : Data Storytelling: The Definitive Guide, Tableau, . : Guide to Business Data Analytics, IIBA, 2020, p. 57. : Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 15. : Data Storytelling: The Definitive Guide, Tableau, .
: Guide to Business Data Analytics, IIBA, 2020, p. 58. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 27. : Guide to Business Data Analytics, IIBA, 2020, p. 55. : Data Analysis: The Definitive Guide, Tableau, . : Guide to Business Data Analytics, IIBA, 2020, p. 45. : Data Management: The Definitive Guide, Tableau, .

NEW QUESTION 132
- (Topic 2)
A merger has been completed between two telecommunication companies and the analytic practices from both organizations are being joined. The newly formed analytics department will create a task force of data experts to combine the data from both companies into a structure usable for future analytics initiatives. Which of the following activities would provide a high level understanding about any potential data issues that might be encountered when merging sources?

A. Data conversion
B. Data cleansing
C. Data migration
D. Data profiling

Answer: D

Explanation:
 According to the Guide to Business Data Analytics, data profiling is a technique that analyzes the structure, content, and quality of data sources. Data profiling can help identify data issues such as missing values, outliers, inconsistencies, duplicates, and errors. Data profiling can also provide information about the data types, formats, ranges, distributions, and relationships of data elements. Data profiling can help prepare data for data conversion, data cleansing, and data migration by providing a high level understanding of the current state of cdata and the potential challenges and risks involved in transforming and integrating data from different sources.
References: Guide to Business Data Analytics, page 53; CBDA Exam Blueprint, page 7; Data Profiling vs Data Cleansing - Data Ladder

NEW QUESTION 137
- (Topic 2)
To ensure their recommendation can be acted upon, the business analysis professional on the analytics team helps the team complete financial analysis to support their recommendation. As part of the financial analysis that's completed, the cost-benefit analysis shows positive net benefits starting in the 2nd year. The team feels this is sufficient to proceed with their strong endorsement of the recommendation.The business analysis professional:

A. Agrees since all the necessary analysis work is complete
B. Disagrees since the risk of generating that net benefit is too high
C. Agrees recognizing that positive benefits are occurring quickly

D. Disagrees stating that the cumulative net benefits need to be reviewed
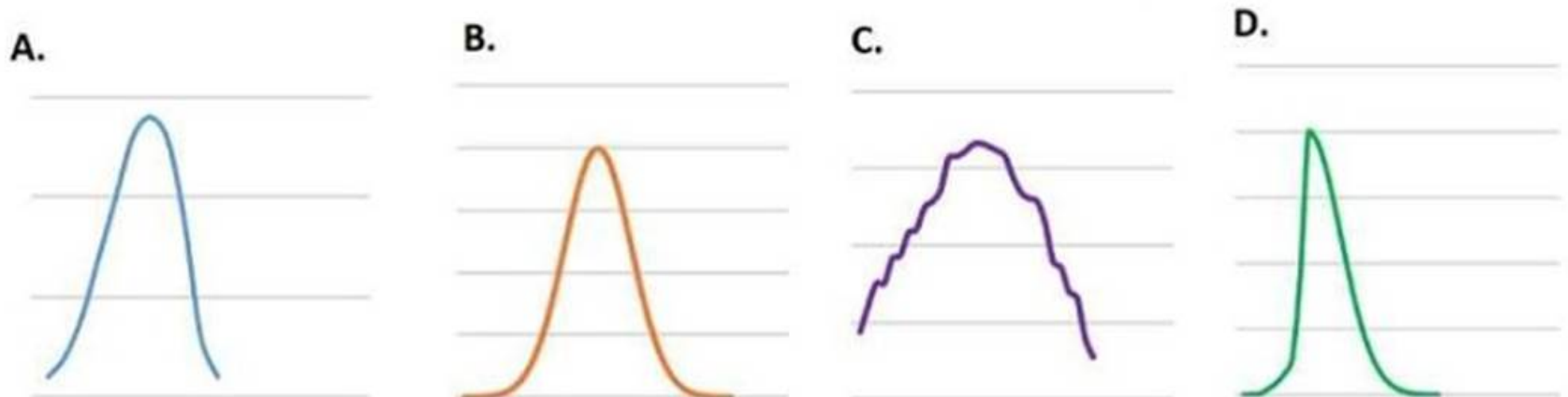
Answer: D

Explanation:
 According to the Guide to Business Data Analytics, a cost-benefit analysis is a technique that compares the costs and benefits of a project or decision over a period of time. The net benefit is the difference between the total benefits and the total costs. A positive net benefit indicates that the benefits outweigh the costs. However, a positive net benefit in one year does not necessarily mean that the project or decision is financially viable. The business analysis professional should also consider the cumulative net benefit, which is the sum of the net benefits over the entire time horizon. The cumulative net benefit reflects the overall value of the project or decision, taking into account the time value of money and the opportunity cost of capital. A project or decision is only financially feasible if the cumulative net benefit is positive at the end of the time horizon. Therefore, the business analysis professional should disagree with the team and suggest that they review the cumulative net benefit before endorsing the recommendation.
References: Guide to Business Data Analytics, page 55-56; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 19.

NEW QUESTION 142
- (Topic 2)
An analyst is doing a clinical study on the value of analyte among a large population of healthy people. The analyst is going to use a Gaussian Distribution to share the results. Which of the following represents a Gaussian Distribution? (IMAGE TAKEN)

A. D
B. B
C. A
D. C

Answer: C

Explanation:
 As explained in the previous question, a Gaussian Distribution, also known as a normal distribution, is represented by a symmetrical bell-shaped curve. The mean, median, and mode of the distribution are equal and are at the center of the distribution. This type of distribution is characterized by its mean and standard deviation. The curve is symmetrical around the mean. In the image, the curve labeled A is the only one that matches this description. The other curves are either skewed or irregular.
References: Guide to Business Data Analytics, page 58-59; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 17.

NEW QUESTION 144
- (Topic 2)
An analyst is interested in determining whether their company is charging the right prices for their products. Before creating a research question to frame their data analysis, they review a research study provided by the sales department and review several competitor websites.Which statement is true about document analysis?

A. Documents that add the most value during document analysis are marketing studies
B. Data mining is a form of document analysis
C. Document analysis should be limited to proprietary sources
D. Document analysis only involves reviewing physical documents

Answer: B

Explanation:
 Document analysis is a qualitative research technique that evaluates electronic and physical documents to interpret them and gain an understanding of their meaning1. It can be used to study various types of documents, such as informal, external, or contextual documents, and to explore their meanings, patterns, and themes. Data mining is a form of document analysis that involves applying statistical and computational methods to large datasets to discover hidden patterns, trends, or relationships2. Data mining can help analysts answer complex questions, generate hypotheses, or support decision making. Therefore, the correct answer is B, as data mining is a form of document analysis.
References:1: Document Analysis Guide: Definition and How To Perform It | Indeed.com, 2: Data Mining - an overview | ScienceDirect Topics

NEW QUESTION 149
......

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questons and Answers in PDF Format

CBDA Practice Exam Features:

* CBDA Questions and Answers Updated Frequently

* CBDA Practice Questions Verified by Expert Senior Certified Staff

* CBDA Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* CBDA Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
Order The CBDA Practice Test Here