

# IIBA

## Exam Questions CBDA

Certification in Business Data Analytics (IIBA - CBDA)



### NEW QUESTION 1

- (Topic 1)

The analytics team has established two equally strong potential recommendations which will deliver the desired outcomes with similar benefits to be derived from each one. On the surface there is no discernable difference in costs or schedule for either option. To help the analytics team reach a recommendation the business analysis professional recommends the team:

- A. Complete market research
- B. Assess risks for each option
- C. Vote to choose the recommendation
- D. Seek management guidance

**Answer: B**

#### Explanation:

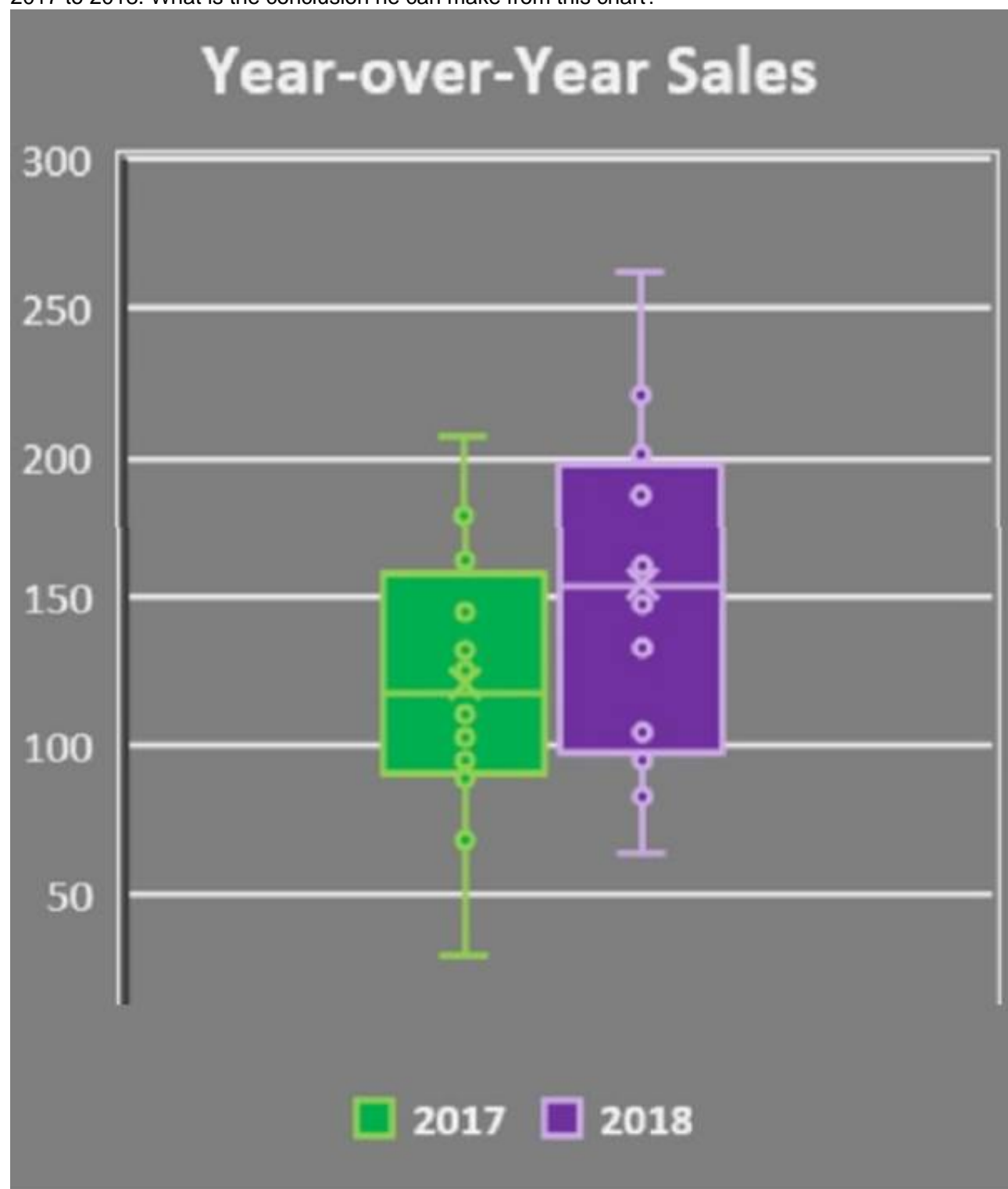
Assessing risks for each option is the recommendation that the business analysis professional should make to the analytics team, because it is a technique that involves identifying, analyzing, and evaluating the potential positive or negative impacts of each option on the project, the organization, or the stakeholders. Assessing risks can help the team compare the pros and cons of each option, and determine which one has the highest expected value or the lowest expected loss. Assessing risks can also help the team prepare contingency plans or mitigation strategies for the chosen option, and communicate the rationale and assumptions behind their recommendation. 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 12

### NEW QUESTION 2

- (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 are higher 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 3

- (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 change<sup>1</sup>. 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 4

- (Topic 1)

The results for a certification exam were revealed in percentage and percentile. The results for one of the attendees was: 75%, 90th percentile. What is the value in sharing the percentile score?

- A. The percentile score provides value by assessing the attendee's score against the average score for that exam
- B. While the exam score is an objective score, the percentile is a relative score that assesses the attendee's score against the highest possible score
- C. By ranking, it provided additional insight on how the attendee performed in comparison to other attendees
- D. The percentile score does not add any additional value in assessing the attendee's performance

**Answer: C**

#### Explanation:

The percentile score provides value by ranking the attendee's score among all the scores of the exam takers. A percentile score of 90 means that the attendee scored higher than 90% of the exam takers, and only 10% scored higher than the attendee. This gives a relative measure of how the attendee performed in comparison to other attendees, and how competitive or exceptional the score is. The percentile score does not depend on the average or the highest possible score of the exam, but only on the distribution of the scores of the exam takers. References:

- Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 4: Interpret and Report Results
- Understanding the Guide to Business Data Analytics, page 9
- What is a Percentile? - Statistics By Jim

### 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 satisfaction<sup>12</sup> References: 1: Survey and questionnaires in business analysis - The Functional BA 2: Job Satisfaction Survey - Paul Spector

### NEW QUESTION 6

- (Topic 1)

A consumer goods manufacturer has recently completed an analytics study to understand how to improve its operational excellence. From the top highlights, online sales outperformed other channels in sales growth and there was a direct relationship between positive customer reviews and increased internet sales. Which strategic business decision may be logically derived from these results?

- A. Improve quality of the products
- B. Create an empowered and collaborative work culture
- C. Encourage customers to complete online reviews
- D. Improve operational efficiencies

**Answer: C**

#### Explanation:

The strategic business decision that may be logically derived from the results is to encourage customers to complete online reviews, because the results show that there is a direct relationship between positive customer reviews and increased internet sales. By increasing the number and quality of online reviews, the consumer goods manufacturer can boost its online sales performance, which outperformed other channels in sales growth. Online reviews can also help the manufacturer gain customer feedback, improve customer loyalty, and enhance its brand reputation. 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 6

**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)

An insurance company has seen an upward trend in winter-related accidents over the past three years. The company has just completed an analytics study to better understand the primary reasons for these accidents and assess how many of the drivers were using winter tires. This analysis will help the company decide how to move forward with drivers not taking precautionary measures during winter. What type of analysis will help in determining the primary reasons and percentage of those drivers with winter tires?

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

**Answer:** D

**Explanation:**

Descriptive analytics is a type of analytics that summarizes and visualizes the data to provide an overview of what has happened or is happening, such as the trend of winter-related accidents over the past three years, or the percentage of drivers using winter tires<sup>12</sup>. Diagnostic analytics is a type of analytics that explores and analyzes the data to understand why something has happened or is happening, such as the primary reasons for these accidents, or the factors that influence the drivers' decisions<sup>13</sup>. To answer the question, both descriptive and diagnostic analytics would be needed to provide the relevant information and insights for the company. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 182: Business Analytics: Data Analysis & Decision Making, S. Christian Albright and Wayne L. Winston, 2015, p. 53: Data Science for Business, Foster Provost and Tom Fawcett, 2013, p. 13.

**NEW QUESTION 9**

- (Topic 1)

A database analyst is modelling a database for a large toy manufacturer. Which statement describes a logical database model?

- A. The layer of views created to summarize data or provide another perspective of certain data
- B. A model that depicts the actual design of the relational database
- C. An abstraction of the conceptual data model that includes rules of normalization
- D. Modelling that involves objects being defined at the schema level

**Answer:** C

**Explanation:**

A logical database model is a data model of a specific problem domain expressed independently of a particular database management product or storage technology. It describes data using notation that corresponds to a data organization used by a database management system, such as relational tables and columns. It also includes rules of normalization, which are the process of converting complex data structures into simple, stable data structures<sup>12</sup>. References: 1: Logical schema - Wikipedia 2: What Is a Data Model? | Coursera

**NEW QUESTION 10**

- (Topic 1)

An analyst at a bank is trying to identify research questions for an analytical study on top customer issues across branches. During an interview with a branch manager, the analyst asks the manager what their top customer concerns are relating to this branch?

After the manager's reply, the analyst asks a follow up question on how their top customer concerns compare against the top customer concerns across all branches? Was the analyst's follow-up question valid?

- A. No, there is no value comparing the results of a single branch with results across all branches
- B. Yes, it builds on the previous question and allows the analyst to identify branch-specific concerns
- C. No, the question is not valid in this particular scenario
- D. Yes, only for the purpose of ensuring that the manager is aware of the company-wide reports

**Answer:** B

**Explanation:**

The analyst's follow-up question is valid because it helps to refine the scope and context of the research questions for the analytical study. By comparing the top customer concerns across branches, the analyst can identify the common and unique issues that affect customer satisfaction and loyalty. This can also help to prioritize the most critical or urgent problems that need to be addressed by the bank<sup>12</sup>. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 212: Business Analysis for Practitioners: A Practice Guide, PMI, 2015, p. 43.

**NEW QUESTION 10**

- (Topic 1)

The analytics team has been asked to provide an estimate of the number of customers they expect to have in 12 months. They debated how accurate that figure needs to be and determined that based on the availability of good data, they could predict within + or - 10%. This is an example of a:

- A. ROM estimate
- B. Delphi estimate
- C. Parametric estimate
- D. Definitive estimate

**Answer:** A

**Explanation:**

A ROM estimate is a rough order of magnitude estimate that provides a quick and approximate estimate of the cost, time, or effort required for a project or a task. A ROM estimate is based on expert opinion or experience from past projects, and it usually has a large range of variation, such as + or - 10%. A ROM estimate is useful when there is limited information or data available, or when a high-level estimate is needed for planning or budgeting purposes. However, a ROM estimate also has a high degree of uncertainty and variability, and it should be refined as more details become available12 References: 1: Project Estimation Techniques Business Analysts Should Know About 2: Estimation techniques for business analysts – The Functional BA

**NEW QUESTION 13**

- (Topic 1)

A new dataset describing employee salaries is received by a company. A colleague wonders whether a variable follows a Gaussian distribution. Which of the following plots would demonstrate this?

- A. Normal probability plot
- B. Scatterplot
- C. Boxplot
- D. Lowess curve

**Answer:** A

**Explanation:**

A normal probability plot is a graphical technique that can be used to check if a variable follows a Gaussian distribution. It plots the observed values of the variable against the expected values under the normal distribution. If the variable is normally distributed, the points should form a straight line. A scatterplot, a boxplot, and a lowess curve are not suitable for testing normality, as they do not compare the observed values with the theoretical values of the normal distribution.  
<https://www.graphpad.com/support/faq/testing-data-for-normal-distribution/>

**NEW QUESTION 16**

- (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 18**

- (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 21**

- (Topic 1)

There were 7 students enrolled in the Introduction to Artificial Intelligence course. These were the student's scores from the final exam: 64, 70, 80, 80, 90, 98, 100 What is the mean and mode for the outlined scores?



- A. 83.14, 80
- B. 79.84, 81.40
- C. 80,80
- D. 80, 83.14

**Answer:** A

**Explanation:**

The mean is the average of all the scores, which is found by adding them up and dividing by the number of scores. The mode is the most frequent score, which is the one that occurs the most times. To find the mean and mode for the outlined scores, we can use the following steps:

- Arrange the scores in ascending order: 64, 70, 80, 80, 90, 98, 100
- Add up the scores:  $64 + 70 + 80 + 80 + 90 + 98 + 100 = 582$
- Divide the sum by the number of scores:  $582 / 7 = 83.14$
- The mean is 83.14
- Count how many times each score occurs: 64 occurs once, 70 occurs once, 80 occurs twice, 90 occurs once, 98 occurs once, 100 occurs once
- The score that occurs the most times is 80
- The mode is 80

Therefore, the mean and mode for the outlined scores are 83.14 and 80, respectively<sup>12</sup> References: 1: Mean, median, and mode review (article) | Khan Academy  
2: Mean, Median, and Mode: Measures of Central Tendency - Statistics By Jim

**NEW QUESTION 23**

- (Topic 1)

Based on the financial analysis that's been completed by the analytics team, the business analysis professional reminds the team that the most financially feasible option is the one with the:

- A. Highest ROI, highest present value, lowest NPV and highest payback period
- B. Highest ROI, highest present value, highest NPV, and lowest payback period
- C. Highest ROI, lowest present value, lowest NPV and highest payback period
- D. Highest ROI, lowest present value, highest NPV and lowest payback period

**Answer:** B

**Explanation:**

The most financially feasible option is the one that maximizes the return on investment (ROI), the present value (PV), and the net present value (NPV), and minimizes the payback period. ROI measures the annual percentage return of an investment, PV measures the current value of future cash flows, NPV measures the difference between the PV and the initial cost of an investment, and payback period measures the time it takes to recover the initial cost of an investment. A higher ROI, PV, and NPV indicate a more profitable and valuable investment, while a lower payback period indicates a faster recovery and lower risk of an investment

**NEW QUESTION 24**

- (Topic 1)

The results of the data analytics work led to some clear and strongly supported outcomes and the analytics team is very confident in their recommendations; particularly given that the payback on the required changes are a short 3 months. However, there is concern because the organization operates in a highly regulated environment and some new regulatory changes are being considered with announcements and implementation in the next 6 months. Under these conditions the team decides to:

- A. Recommend no action be taken at this time and revisit in 6 months
- B. Reassess their results to ensure their validity and then decide what to do
- C. Identify and carefully document assumptions for their recommendation
- D. Postpone recommendations for 6 months until the announcements are made

**Answer:** C

**Explanation:**

The best option for the team under these conditions is to identify and carefully document the assumptions for their recommendation, such as the expected impact of the regulatory changes, the risks and benefits of implementing the changes before or after the announcements, and the sensitivity of the results to different scenarios. This way, the team can communicate their findings and recommendations clearly and transparently, while also acknowledging the uncertainty and limitations of their analysis. This can help the decision makers to evaluate the trade-offs and make informed choices<sup>12</sup>. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 242: Data-Driven Decision Making: A Primer for Beginners, Anand Rao, 2018, 1.

**NEW QUESTION 25**

- (Topic 1)

Insights based on the data collected indicate that a multi-national company could increase its sales of a mature product by reducing its price by 20% which would result in increased revenues of 2% over a 6-month period. The team recommends this as an appropriate goal for its organization. This is considered a good goal because:

- A. It meets all the criteria for a well-defined objective
- B. The organization can derive additional revenue from the product
- C. It indicates that the company does not have to incur costs associated with retiring this product
- D. Management will be pleased that the mature product can still contribute to revenue

**Answer:** A

**Explanation:**

A well-defined objective is one that is specific, measurable, achievable, relevant, and time-bound (SMART)<sup>1</sup>. The goal of increasing sales of a mature product by reducing its price by 20% which would result in increased revenues of 2% over a 6-month period meets all these criteria, as it clearly states what the desired outcome is, how it will be measured, whether it is realistic and attainable, how it aligns with the organization's strategy, and when it will be achieved<sup>2</sup>.

References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 192: SMART Goals: How to Make Your Goals Achievable, MindTools, 2021, 1.

**NEW QUESTION 26**

- (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 requirements<sup>12</sup>. 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 28**

- (Topic 1)

With the recent departure of two of its employees, an IT helpdesk team is now understaffed and finding it difficult to keep up with the current workload. The number of tickets being received has increased as well as the number of days to resolve the tickets. The IT manager has set up a meeting with the IT director to request funding for two new helpdesk agents. To prepare for the meeting, the manager is interested in showing the tickets processed against ticket volume over the past year. What type of chart should the manager use to effectively show the change in processing rate over time?

- A. A pie chart to compare the number of tickets coming in versus tickets being processed each month, over the past year
- B. A column chart to compare the number of tickets coming in versus tickets being processed each month, since June
- C. A line chart to show the widening gap between the number of tickets being processed against the number coming over the past year
- D. A waterfall chart to show the number of tickets coming in are a lot higher than those being processed as of year to date

**Answer:** C

**Explanation:**

A line chart is the type of chart that the manager should use to effectively show the change in processing rate over time, because it is a technique that displays data as a series of points connected by straight lines. A line chart can help the manager visualize the trends and patterns in the ticket volume and processing rate over the past year, and highlight the widening gap between them. A line chart can also show the seasonal variations and fluctuations in the data, and compare the performance of different categories or groups. Options A, B, and D are not suitable for showing the change in processing rate over time, because they are techniques that display data as proportions (A), comparisons (B), or accumulations (D) of different categories or groups at a single point in time or over a fixed period. References:

- Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 4: Interpret and Report Results
- Understanding the Guide to Business Data Analytics, page 18
- 16 Best Types of Charts and Graphs for Data Visualization [+ Guide]

**NEW QUESTION 33**

- (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 environment<sup>12</sup>. References: 1: Data and Analytics (D&A) - Gartner 2: Enterprise Data Analytics - SelectHub

**NEW QUESTION 38**

- (Topic 1)

An analytics system is being developed by relying entirely on research questions that are framed using the results from benchmarking. Which research question is being asked?

- A. Which customers provide the greatest profit to the company?
- B. How efficient is the company compared to its competitors?
- C. Will more profit be made if we increase or decrease our sales price?
- D. Which employees are we in danger of losing?

**Answer:** B

**Explanation:**

Benchmarking is a method of comparing the performance of a business with others in the same industry or with industry standards<sup>12</sup>. It helps to identify areas of improvement and best practices for superior performance<sup>34</sup>. A research question that is framed using the results from benchmarking would focus on how the company compares to its competitors or to the industry average on a specific metric or process. For example, how efficient is the company compared to its competitors? This question would require the company to measure its efficiency using a relevant indicator, such as cost per unit, time per task, or output per

employee, and compare it to the same indicator for its competitors. This would help the company to identify its strengths and weaknesses, and to find ways to improve its efficiency and gain a competitive advantage

**NEW QUESTION 40**

- (Topic 1)

A colleague proposes measuring job satisfaction by asking the question "What is your salary?". What is the concerning factor about this question?

- A. Validity
- B. Clarity
- C. Reproducibility
- D. Subjectivity

**Answer:** A

**Explanation:**

Validity is the extent to which a measure or a question accurately captures the intended concept or construct<sup>1</sup>. The question ??What is your salary??? is not a valid measure of job satisfaction, as it does not reflect the various aspects of job satisfaction, such as work environment, recognition, autonomy, growth, etc. Salary is only one possible factor that may influence job satisfaction, but it is not a direct or comprehensive indicator of it<sup>23</sup>. Therefore, the question is not valid for measuring job satisfaction. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 302: Job Satisfaction: Application, Assessment, Causes, and Consequences, Paul E. Spector, 1997, p. 23: Job Satisfaction Survey, 1.

**NEW QUESTION 45**

- (Topic 1)

An analyst has just completed building a data model that shows the table structures including table names, table relationships with primary and foreign keys and column names with respective data types. What type of data model has the analyst just built?

- A. Physical
- B. Hierarchical
- C. Conceptual
- D. Logical

**Answer:** A

**Explanation:**

A physical data model is the most detailed and specific type of data model, which shows how the data is stored, accessed, and manipulated in the database. It includes the table structures, column names, data types, primary and foreign keys, constraints, indexes, and other physical attributes of the data<sup>12</sup>. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 542: Data Modeling Essentials, Graeme Simsion and Graham Witt, 2005, p. 15.

**NEW QUESTION 48**

- (Topic 1)

A call center has requested to review their sales conversion data for the month. The analyst working on this request is trying to identify the chart that will effectively present the data, which includes: the number of leads, the number of calls made, the number of calls completed, the number of customers interested and the number of sales. What chart should the analyst use to show the values across each stage of the pipeline?

- A. Pie chart
- B. Funnel chart
- C. Bar chart
- D. Bullet chart

**Answer:** B

**Explanation:**

A funnel chart is a type of chart that shows the values of different stages of a process, such as a sales pipeline, where each stage represents a subset of the previous one. A funnel chart is useful for showing the conversion rate, the drop-off rate, and the potential revenue or profit at each stage<sup>12</sup>. A funnel chart would be an effective way to present the data requested by the call center, as it would show the number of leads, calls, customers, and sales, as well as the percentage of change between each stage. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 662: Data Visualization: A Practical Introduction, Kieran Healy, 2018, p. 233.

**NEW QUESTION 50**

- (Topic 1)

An online retailer of men's athletic apparel is seeking to become the market leader in the industry. To deliver on this strategy, the analytics team continuously collects data on the prices of competitor products and uses this information to adjust the retailer's prices. What type of analytics is the retailer using to maintain their pricing structure?

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

**Answer:** D

**Explanation:**

Prescriptive analytics is the type of analytics that the retailer is using to maintain their pricing structure, because it is a technique that uses data and models to recommend the best course of action for a given situation. Prescriptive analytics can help the retailer optimize their prices based on the data collected from the competitors, the market conditions, and the customer preferences, and thus achieve their strategic goal of becoming the market leader. References:

- Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 3: Analyze Data
- Understanding the Guide to Business Data Analytics, page 17
- CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 8, CBDA Exam Sample Questions and Self-Assessment, Question 11



#### NEW QUESTION 51

- (Topic 1)

A professional association is funded by membership fees. The membership renewal occurs every 5 years. Although, they have a strong subscription rate each year, their renewal rate is low. They are working with an external firm specializing in Business Analytics to identify the groups of customers that have a high likelihood of cancelling their subscription after their first 5-year term ends. This type of study is called:

- A. Untrained learning
- B. Supervised learning
- C. Trained learning
- D. Unsupervised learning

**Answer: D**

#### Explanation:

Unsupervised learning is a type of study that involves finding patterns or clusters in data without any predefined labels or outcomes. It is useful for exploring data and discovering hidden structures or groups of customers. For example, the professional association can use unsupervised learning to identify the characteristics of customers who are likely to cancel their subscription after their first 5-year term ends, and then design strategies to retain them12 References: 1: What is Unsupervised Learning? - IBM 2: Unsupervised Learning - IIBA BABOK Guide v3

#### NEW QUESTION 52

- (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?



- 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 54

- (Topic 1)

Collaborative games are used by a business analyst to identify the research questions to be explored within an analytics system.

Participants are asked to write down a research question on a sticky note, put the notes on the wall, and move them towards related research questions. What type of Collaborative game is being played?

- A. Affinity Map
- B. Fishbowl
- C. People polling
- D. Product Box

**Answer:** A

**Explanation:**

An affinity map is a collaborative game that helps participants to group similar ideas or features together. It is useful for identifying research questions that are related to each other and finding common themes or patterns. In this game, participants write down their research questions on sticky notes and place them on the wall. Then, they move the notes around to form clusters of related questions. The clusters can be labeled with a descriptive name or a question that summarizes the theme. An affinity map can help participants to prioritize the most important or relevant research questions and generate insights from the data.

<https://businessanalystmentor.com/collaborative-games-business-analysis/>

**NEW QUESTION 59**

- (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 63**

- (Topic 1)

The outcome from an analytics initiative has resulted in key stakeholders wanting to move forward with a project to redesign the company's website. The business analyst has called a meeting to work on drafting a plan to assess the level of effort required to complete this work. Many of the invited participants redesigned the website before and were invited so they could provide estimates using their knowledge and experience from the past. The business analyst is using which method to estimate this work?

- A. Rolling wave
- B. PERT
- C. Parametric
- D. Rough order of magnitude

**Answer:** D

**Explanation:**

The business analyst is using the rough order of magnitude method to estimate this work. This method is based on expert opinion or experience from past projects, and it provides a quick and approximate estimate of the cost, time, or effort required for a project or a task. This method is useful when there is limited information or data available, or when a high-level estimate is needed for planning or budgeting purposes. However, this method also has a high degree of uncertainty and variability, and it should be refined as more details become available<sup>12</sup> References: 1: Project Estimation Techniques Business Analysts Should Know About 2: Estimation techniques for business analysts – The Functional BA

**NEW QUESTION 68**

- (Topic 1)

Interested in building out the analytics capability based on the positive results obtained by past analytics efforts, the Chief Marketing Officer (CMO) pitches the idea of using analytics to guide future decision making across the enterprise. Before allocating budget to build up an enterprise analytics practice, the decision makers should:

- A. Request that a small team be assembled to brainstorm a list of capabilities to develop with any approved monies
- B. Identify the sponsor and a project manager who can collaborate on the development of the project charter
- C. Oversee the completion of up-front analysis to determine how value can be achieved through an enterprise-wide analytics practice
- D. Determine if the company has the sufficient resources to build up the analytics practice

**Answer:** C

**Explanation:**

Before investing in an enterprise analytics practice, the decision makers should have a clear understanding of the expected value and benefits of such a practice. This requires conducting an up-front analysis that identifies the business problems or opportunities that can be addressed by analytics, the data sources and technologies that are needed, the analytical models and methods that are appropriate, and the metrics and indicators that will measure the impact and outcomes of the analytics solutions<sup>12</sup>. This analysis will help to define the scope, objectives, and requirements of the enterprise analytics practice, as well as the resources,

roles, and governance structures that are necessary to support it34. An up-front analysis will also help to prioritize the analytics initiatives based on their feasibility, alignment with the business strategy, and potential value creation

#### NEW QUESTION 69

- (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?



- 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 70

- (Topic 1)

The team has completed their analysis on a vast amount of collected data and agree on their recommendations for action.

However, they are having difficulty in developing the appropriate messages to support their recommendations. The business analysis professional suggests which technique to assist the team?

- A. T-Testing
- B. Simulation
- C. Visioning
- D. Storyboarding

**Answer: D**

#### Explanation:

Storyboarding is a technique that helps the team to develop the appropriate messages to support their recommendations by creating a visual sequence of the main points, evidence, and actions. Storyboarding helps the team to organize their thoughts, identify gaps, and communicate their findings in a clear and compelling way12 References: 1: Developing Key Messages for EffectiveCommunication - MSKTC 2: 11 Ways Highly Successful Leaders Support Their Team - Redbooth

#### NEW QUESTION 74

- (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 reliability<sup>12</sup> References: 1: What is Master Data Management (MDM)? - Informatica 2: Master Data Management - IIBA BABOK Guide v3

**NEW QUESTION 79**

- (Topic 1)

The analytics team scheduled a meeting with key stakeholders to present their recommendations. The team envisioned this as the final step of their work and fully expected complete acceptance of those recommendations, particularly given that very few questions were asked. They were surprised when they received word that the organization wasn't ready to move forward. What did they overlook?

- A. Stakeholders need to hear the same information multiple times
- B. Stakeholders never make quick decisions
- C. Communicating information requires a written report
- D. Communicating information is bi-directional and iterative

**Answer:** D

**Explanation:**

The analytics team overlooked the fact that communicating information is not a one-way or one-time process, but rather a bi-directional and iterative one. This means that the team should not only present their recommendations, but also solicit feedback, address concerns, clarify doubts, and confirm understanding from the stakeholders. By doing so, the team can ensure that the stakeholders are fully engaged, informed, and aligned with the recommendations, and that any potential barriers or risks are identified and mitigated before moving forward. References:

- Understanding the Guide to Business Data Analytics, page 9
- Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 4: Interpret and Report Results
- CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 5, Step 3– Schedule and Take The Exam

**NEW QUESTION 82**

- (Topic 1)

A government agency is conducting a study on the performance of 12th grade students' in mathematics across the country. In particular, they want to understand if there is a relationship between intelligence and scores, as well as the difference in performance between various locations. Which combination of inferential statistics procedures should be used?

- A. Range, standard deviation
- B. Mean, median
- C. Correlation co-efficient, analysis of variance
- D. Frequency distribution, time-series

**Answer:** C

**Explanation:**

A correlation co-efficient is a measure of the strength and direction of the linear relationship between two variables, such as intelligence and scores. A correlation co-efficient can range from -1 to 1, where -1 indicates a perfect negative relationship, 0 indicates no relationship, and 1 indicates a perfect positive relationship<sup>12</sup>. An analysis of variance (ANOVA) is a procedure that tests whether the means of two or more groups are significantly different from each other, such as the performance of students across various locations. ANOVA can compare the variation within each group and the variation between groups to determine if there is a statistically significant difference among the group means<sup>34</sup>. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 582: Statistics for Business and Economics, David R. Anderson et al., 2014, p. 7133: Guide to Business Data Analytics, IIBA, 2020, p. 594: Statistics for Business and Economics, David R. Anderson et al., 2014, p. 849.

**NEW QUESTION 87**

- (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 goals<sup>1</sup>. Descriptive analytics is the type of analytics that summarizes what has happened in the past using data, such as historical trends, patterns, or performance<sup>2</sup>. 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 intelligence<sup>3</sup>. 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 91**

- (Topic 2)

The finance manager has reported that customers are taking much longer to remit payments this year than last. They would like help in finding a solution to address the situation. One suggestion was to offer a 10% discount to entice customers to pay their invoices in full within the first 30 days. Before offering the discount, the finance manager would like the analytics team to do some research to determine if there is value in addressing the accounts receivable problem. Which of the following is a valid question to ask in this situation?

- A. Have discounts been offered before?
- B. Are sales decreasing when accounts receivables are increasing?
- C. How does credit score impact the customer's ability to pay?
- D. Should the discount offered be set at 10% or 15%?

**Answer:** A

**Explanation:**

According to the Guide to Business Data Analytics, one of the steps in conducting business data analytics is to identify the research questions that will guide the analysis and help answer the business problem or opportunity. The research questions should be relevant, specific, measurable, achievable, and testable. In this situation, the business problem is the delay in customer payments and the potential solution is to offer a discount. A valid question to ask in this situation is whether discounts have been offered before, and if so, what was the effect on customer behavior and profitability. This question is relevant because it can help assess the feasibility and effectiveness of the proposed solution. It is also specific, measurable, achievable, and testable, as it can be answered by collecting and analyzing historical data on customer payments and discounts.

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 94**

- (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 99**

- (Topic 2)

While formulating the results from completed analysis, the analytics team is applying different techniques to determine an optimal solution to the specified business problem. Which of the following runs the risk of introducing bias in their decision making process?

- A. Evidenced-based decision making
- B. Expert judgement and experience
- C. Correlations identified through artificial intelligence
- D. Letting the data tell the story

**Answer:** B

**Explanation:**

Expert judgement and experience are valuable sources of knowledge and insight for business data analytics, but they can also introduce bias in the decision making process. Bias is a tendency to favor or reject a certain perspective, outcome, or solution based on personal or subjective preferences, beliefs, or expectations. Bias can affect the quality, validity, and reliability of the data analysis and the resulting decisions. Some examples of bias that can affect expert judgement and experience are confirmation bias, availability bias, anchoring bias, and overconfidence bias. To avoid or minimize bias, business data analysts should apply critical thinking, data literacy, and ethical principles throughout the data analysis process. They should also seek diverse perspectives, challenge assumptions, validate findings, and communicate uncertainties and limitations. References: 10 Cognitive Biases in Business Analytics and How to Avoid Them; Business Data Analytics: A Decision-Making Paradigm, page 8; Guide to Business Data Analytics, page 11.

**NEW QUESTION 100**

- (Topic 2)

A financial institution is interested in leveraging analytics to address a recent surge in credit card fraud. The company has decided to invest in streaming analytics to obtain instant access to real-time data to stop fraudulent behavior before it occurs. Which practice will help the financial institution integrate the data as it is collected?

- A. Data quality
- B. Data management
- C. Data security
- D. Data architecture



**Answer:** D

**Explanation:**

Data architecture is the practice of designing and implementing the structures, models, standards, and processes that enable data integration, storage, and consumption. Data architecture is essential for streaming analytics, as it defines how data is collected, processed, and delivered in real time from multiple sources. Data architecture helps the financial institution integrate the data as it is collected by ensuring data compatibility, consistency, and quality across the streaming pipeline. Data architecture also supports data security, scalability, and performance for streaming analytics. 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. 17-18.

? What is Streaming Analytics? | Google Cloud, Google Cloud, accessed on January 20, 2024.

? What is Data Integration? | IBM, IBM, accessed on January 20, 2024.

**NEW QUESTION 104**

- (Topic 2)

A job satisfaction study is being considered. Half of the employees of the company will be interviewed by senior managers and the other half of the employees will be interviewed by an external market research company, using the same set of questions. Which of the following might be a concern for using this approach to collect study data?

- A. Reliability
- B. Validity
- C. Timeliness
- D. Precision

**Answer:** A

**Explanation:**

Reliability is the degree to which a data collection method produces consistent results under the same conditions<sup>1</sup>. In this case, the reliability of the study data might be compromised by the different interviewers (senior managers vs. external market research company), who might have different biases, expectations, or rapport with the employees. This could affect how the employees respond to the same set of questions, and thus introduce variability in the data. Validity, timeliness, and precision are not directly affected by the choice of interviewers, as they depend more on the quality, relevance, and accuracy of the questions and the data analysis. References: <sup>1</sup>: Guide to Business Data Analytics, IIBA, 2020, p. 26.

**NEW QUESTION 107**

- (Topic 2)

A small business has recently launched their website and wants to understand how the website is being used. In particular, there is interest in identifying which areas of each page receive the most attention. The analyst has decided to communicate this information by displaying the top pages overlaid with colours denoting the volume of clicks. What type of visualization technique is being used here?

- A. Surface chart
- B. Heatmap
- C. Treemap
- D. Scatter chart

**Answer:** B

**Explanation:**

According to the Guide to Business Data Analytics, a heatmap is a type of visualization technique that uses colours to represent the values of a variable across a two-dimensional space. A heatmap can help reveal patterns, trends, and outliers in the data, as well as show the relative importance or intensity of different areas. In this situation, the analyst has decided to communicate the information about the website usage by displaying the top pages overlaid with colours denoting the volume of clicks. This is a heatmap, as it uses colours to show the distribution and magnitude of clicks across the web pages. References: Guide to Business Data Analytics, page 61; CBDA Exam Blueprint, page 7; Heat Maps | Trendz Analytics

**NEW QUESTION 110**

- (Topic 2)

The data analysis completed by the analytics team points to three potential options that could be recommended by the team each of which will help their organization meet their desired goal. Given that there is no significant difference in the results that each option would provide, the team will reach a final recommendation by determining value to be delivered to specific parts of the organization and:

- A. Within the functional unit with the most staff
- B. By which manager wants the change the most
- C. Assessing the impact of change for each one
- D. By obtaining a decision by senior management

**Answer:** C

**Explanation:**

According to the IIBA's Guide to Business Data Analytics, one of the steps in the data analysis process is to use the results to influence business decision making. This involves evaluating the feasibility, viability, and desirability of the potential options or solutions that are derived from the data analysis, and recommending the best option or solution that aligns with the business goals and objectives<sup>1</sup>. To evaluate the feasibility, viability, and desirability of the options or solutions, the data analysis team should consider the value to be delivered to specific parts of the organization and the impact of change for each one. The value to be delivered refers to the benefits, outcomes, or improvements that the option or solution will provide to the stakeholders, customers, or processes of the organization. The impact of change refers to the costs, risks, or challenges that the option or solution will entail for the implementation, adoption, or maintenance of the organization. By assessing the value and the impact of each option or solution, the data analysis team can compare and contrast the trade-offs, pros and cons, and strengths and weaknesses of each option or solution, and select the one that maximizes the value and minimizes the impact for the organization<sup>2</sup>.

The other options are not correct criteria for reaching a final recommendation. The functional unit with the most staff, the manager who wants the change the most, and the senior management are not relevant factors for evaluating the options or solutions, as they do not reflect the value or the impact of the options or solutions. The functional unit with the most staff may not be the most affected or the most important part of the organization for the data analysis project. The manager who wants the change the most may not have the authority, influence, or expertise to make the best decision for the organization. The senior management may not be the only or the final decision makers for the data analysis project, as they may delegate, consult, or collaborate with other stakeholders or experts. References: <sup>1</sup>:

Guide to Business Data Analytics, IIBA, 2020, p. 572: Guide to Business Data Analytics, IIBA, 2020, p. 58. : Guide to Business Data Analytics, IIBA, 2020, p. 57. : Guide to Business Data Analytics, IIBA, 2020, p. 58.

#### NEW QUESTION 115

- (Topic 2)

An analytics team completed their research to determine why customers are abandoning items in their online shopping cart. The team suggests improvements to the website to address the problem. The Director of Sales proclaims that the current website is fine and indicates that the problem materialized when the company increased its shipping rates. The solution proposed by the team seems misaligned. What has gone wrong?

- A. This scenario cannot be addressed with analytics
- B. The team has not agreed on the root cause of the problem
- C. The team did not agree on the business problem
- D. An insufficient amount of planning was performed

**Answer: C**

#### Explanation:

Agreeing on the business problem is the first and most critical step in any analytics project, as it defines the scope, purpose, and objectives of the analysis, and aligns the expectations and interests of the stakeholders<sup>1</sup>. Agreeing on the business problem involves identifying the problem statement, the problem owner, the problem context, the problem impact, and the problem criteria<sup>2</sup>. If the team did not agree on the business problem, the solution proposed by the team may seem misaligned with the actual needs, preferences, or assumptions of the decision makers, and may not address the root cause or the main drivers of the problem. In this scenario, the team and the Director of Sales may have different views on what the business problem is, why it is important, and how it should be solved. The other options are not correct explanations of what has gone wrong. This scenario can be addressed with analytics, as it involves using data to understand customer behavior, identify factors influencing cart abandonment, and recommend improvements to the website or the pricing strategy. The team may or may not have agreed on the root cause of the problem, but that is not the main issue, as the root cause analysis is a part of the data analysis step, not the problem definition step. The team may or may not have performed an insufficient amount of planning, but that is not the main issue, as the planning process is a subsequent step after the problem definition step, and it depends on the clarity and agreement of the business problem.

References:<sup>1</sup>: Guide to Business Data Analytics, IIBA, 2020, p. 252: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 11. : Guide to Business Data Analytics, IIBA, 2020, p. 25. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 11.

#### NEW QUESTION 120

- (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 goals<sup>1</sup>. 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 accountability<sup>2</sup>. 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.

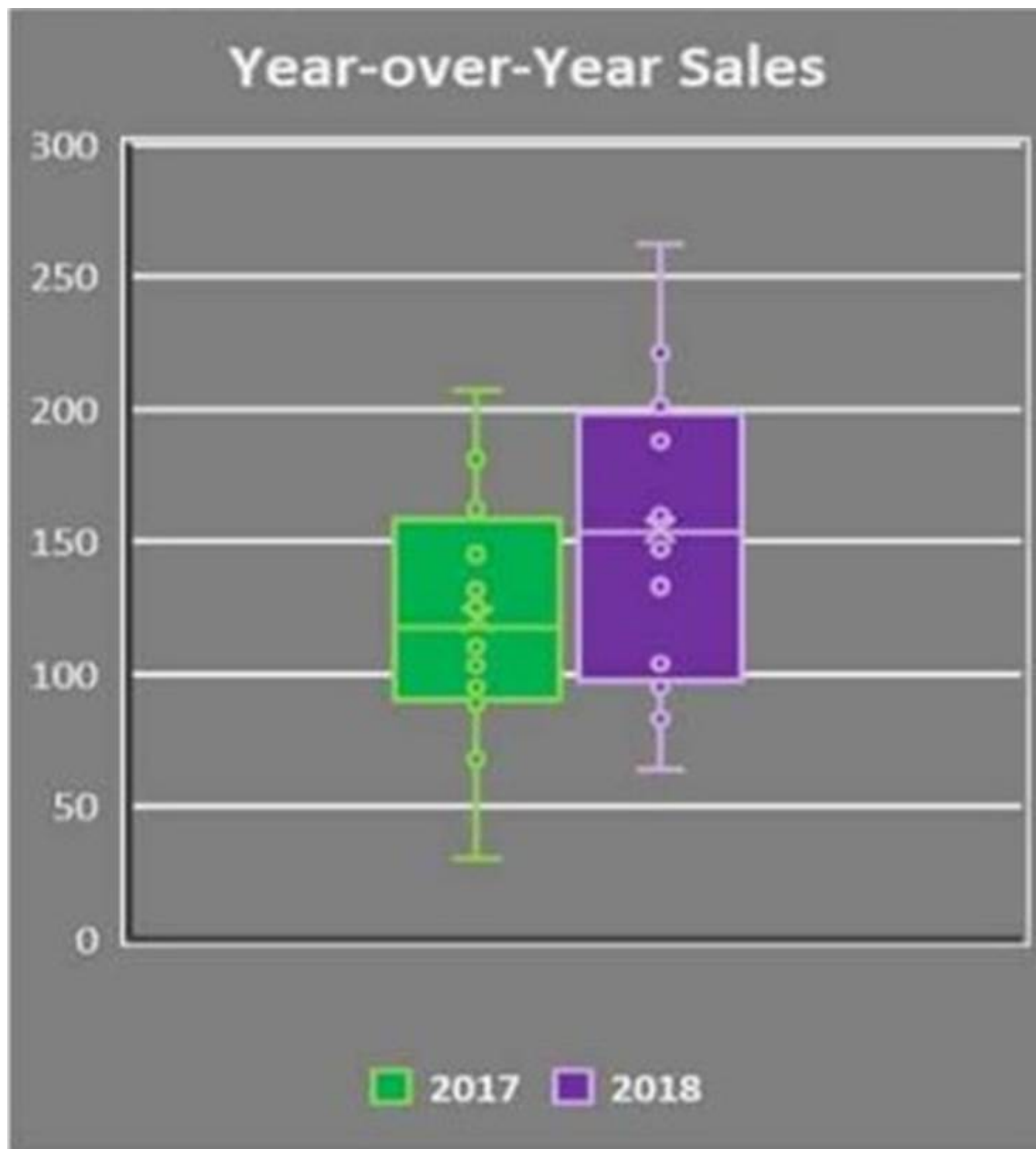
References:<sup>1</sup>: Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 122: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 12. : Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 12. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 12.

#### NEW QUESTION 124

- (Topic 2)

DIAGRAM

The following boxplot is produced from a dataset. From this boxplot which of the following conclusions can be drawn?



Year-over-Year Sales  
 300  
 200

- A. The medians and the inter-quartile range is the same in each group
- B. The medians and the inter-quartile ranges are different in each group
- C. The medians are the same but the inter-quartile ranges are not
- D. The inter-quartile ranges are the same but the medians are not

**Answer: B**

**Explanation:**

According to the Guide to Business Data Analytics, a boxplot is used to provide a visual summary of one or more groups of data values through their quartiles. In this case, the boxplot shows two different years, 2017 and 2018, with distinct medians and interquartile ranges. The median is represented by the line inside the box, while the interquartile range is represented by the height of the box itself. Outliers are marked with circles above and below the box. From the boxplot, we can see that the median sales for 2018 are higher than the median sales for 2017, and the interquartile range for 2018 is narrower than the interquartile range for 2017. This means that the sales for 2018 are more concentrated around the median and have less variability than the sales for 2017. Therefore, the correct answer is B.  
 References: Guide to Business Data Analytics, page 58-59; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 17.  
 ![Year-over-Year Sales]

**NEW QUESTION 125**

- (Topic 2)

An analyst at an Insurance company has been asked to share results and provide insights into any impacts to the business since a new government regulation took effect. The analyst is in the process of reviewing the analyzed data to identify any patterns. When interpreting results, what would be one of the questions the analyst will be asking?

- A. How will the recipients receive the results?
- B. Are the right data dimensions being used?
- C. What do the results mean in the context of the business?
- D. Is the data accurate based on the sources being used?

**Answer:** C

**Explanation:**

According to the IIBA's Guide to Business Data Analytics, one of the steps in the data analysis process is to interpret and report results, which involves explaining the meaning, significance, and implications of the results in the context of the business problem and the stakeholders' needs<sup>1</sup>. When interpreting results, one of the questions the analyst will be asking is what do the results mean in the context of the business, which means how the results relate to the business situation, objectives, and outcomes, and how they can be used to support decision making and action taking<sup>2</sup>. For example, the analyst may ask how the new government regulation affects the business performance, operations, or strategy, and what recommendations or changes are needed to comply with the regulation and achieve the business goals.

The other options are not correct questions for interpreting results. How will the recipients receive the results is a question for presenting results, not interpreting results. Presenting results is a subsequent step after interpreting results, and it involves choosing the best format, medium, and style to communicate the results to the audience<sup>3</sup>. Are the right data dimensions being used is a question for analyzing data, not interpreting results. Analyzing data is a prior step before interpreting results, and it involves applying the appropriate techniques, tools, and methods to manipulate, transform, and explore the data<sup>4</sup>. Is the data accurate based on the sources being used is a question for sourcing data, not interpreting results. Sourcing data is a prior step before analyzing data, and it involves identifying, collecting, and validating the data from the relevant sources<sup>5</sup>.

References:1: Guide to Business Data Analytics, IIBA, 2020, p. 572: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 253: Guide to Business Data Analytics, IIBA, 2020, p. 584: Guide to Business Data Analytics, IIBA, 2020, p. 555: Guide to Business Data Analytics, IIBA, 2020, p. 45. : Guide to Business Data Analytics, IIBA, 2020, p. 57. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 25. : Guide to Business Data Analytics, IIBA, 2020, p. 58. : Guide to Business Data Analytics, IIBA, 2020, p. 55. : Guide to Business Data Analytics, IIBA, 2020, p. 45.

**NEW QUESTION 126**

- (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 objectives<sup>1</sup>. 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 organization<sup>2</sup>. A data strategy helps the organization to leverage its data as a strategic asset, to create value, to improve performance, and to gain competitive advantage<sup>3</sup>.

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 130**

- (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 132**

- (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 them<sup>1</sup>. A graph visualization can help reveal patterns, clusters, outliers, or hierarchies in the data<sup>2</sup>. In a graph visualization, an edge represents a link between two data points, indicating that they have some kind of association, interaction, similarity, or dependency<sup>3</sup>. 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 regulation<sup>4</sup>.

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: <sup>1</sup>: 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 136**

- (Topic 2)

A large retail chain has asked their analytics team to complete a study on their customers' purchasing patterns. The analyst assigned to the study has decided to draw further insight by grouping customers based on their purchasing habits. This clustering approach is an example of:

- A. Untrained learning
- B. Trained learning
- C. Unsupervised learning
- D. Supervised learning

**Answer: C**

**Explanation:**

Unsupervised learning is a category of data analysis techniques that does not require labeled data or predefined outcomes. Unsupervised learning aims to discover patterns, structures, or relationships in the data without any guidance or supervision. Clustering is a common example of unsupervised learning, where the data is grouped into clusters based on some similarity or distance measure. Clustering can help reveal customer segments, market trends, or product preferences, among other insights. References: Guide to Business Data Analytics, page 39; Introduction to Business Data Analytics: A Practitioner View, page 10.

**NEW QUESTION 141**

- (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 142**

- (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 line<sup>1</sup>. 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)<sup>2</sup>. 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 143**

- (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 147**

- (Topic 2)

A data scientist at a consumer goods company, has been asked to do a detailed analysis on customer profiles. The Data Scientist has identified an external data source that carries valuable additional information on their customers. The data scientist also identifies the address column as the most reliable column to join the internal data source with the external data source. Addresses may appear in different formats for example:

File A = "13 Smith St"

File B = "Unit 7, 13 Smith Street"

Which of the following techniques would be useful in this situation?

- A. Deterministic linkage
- B. Probabilistic linkage
- C. Genetic linkage
- D. Cuff linkage

**Answer: B**

**Explanation:**

Probabilistic linkage is a technique that uses statistical methods to match records from different data sources based on the similarity of key variables, such as

name, address, date of birth, etc1. Probabilistic linkage can handle variations, errors, or missing values in the data, and assign a score or probability to each potential match2. Probabilistic linkage would be useful in this situation, as the address column may have different formats, spellings, or abbreviations in the internal and external data sources, and a deterministic linkage (which requires exact matches) might miss some valid matches or create false matches.

Deterministic linkage is a technique that uses predefined rules or criteria to match records from different data sources based on the exact agreement of key variables, such as identifiers, codes, or hashes3. Deterministic linkage would not be useful in this situation, as the address column may not have consistent or unique values in the internal and external data sources, and a probabilistic linkage (which allows for some variation or uncertainty) might find more accurate matches or avoid false matches.

Genetic linkage is a term used in genetics to describe the tendency of genes or DNA sequences that are located close together on a chromosome to be inherited together4. Genetic linkage is not relevant to this situation, as it has nothing to do with matching records from different data sources based on the address column.

Cuff linkage is a term used in sewing to describe the process of attaching a cuff to a sleeve by stitching or fastening. Cuff linkage is not relevant to this situation, as it has nothing to do with matching records from different data sources based on the address column. References:1: Guide to Business Data Analytics, IIBA, 2020, p. 452: Data Linkage: The Definitive Guide, Tableau, 3: Guide to Business Data Analytics, IIBA, 2020, p. 454: Genetic Linkage, National Human Genome Research Institute, . : Cuff Linkage, Sewing Dictionary, .

: Data Linkage: The Definitive Guide, Tableau, . : Genetic Linkage, National Human Genome Research Institute, . : Cuff Linkage, Sewing Dictionary, .

#### NEW QUESTION 148

- (Topic 2)

A pharmaceutical company is conducting research to determine whether a new medicine in development is more successful in reducing the pain associated with rheumatoid arthritis than their current drug in the market. A group of volunteers are selected for the research. One set of participants is provided the existing drug while a second set of participants is given the new drug. Which technique is being applied?

- A. Observational design
- B. Block design
- C. A/B testing
- D. Natural experiment

**Answer:** C

#### Explanation:

A/B testing, also known as randomized controlled trial or split testing, is a technique that compares the outcomes of two or more groups that are randomly assigned to different treatments or interventions. The purpose of A/B testing is to measure the causal effect of the treatments on the outcomes of interest, such as pain reduction in this case.

A/B testing can help determine whether the new medicine is more effective than the existing drug by comparing the average pain scores of the two groups of participants after the treatment.

References: Guide to Business Data Analytics, page 60-61; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 18.

#### NEW QUESTION 149

- (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 the average, 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 152

- (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 156**

- (Topic 2)

A data dictionary is being developed for a dataset describing a company's customer base. Within the data dictionary, which of the following represents a composite data element?

- A. Street address
- B. First name
- C. Total sale
- D. Birthdate

**Answer:** A

**Explanation:**

A composite data element is a data element that is made up of smaller units called sub-elements, which are separated by a sub-element separator character, such as a colon (:). For example, ITEMNO is a composite data element that consists of three sub- elements: part number, aisle number, and bin number. A street address is also a composite data element that can consist of sub-elements such as street number, street name, city, state, and zip code. First name, total sale, and birthdate are simple data elements that do not have sub-elements.

References:Data Elements - IBM, UN/EDIFACT Syntax Rules

**NEW QUESTION 158**

- (Topic 2)

A fashion retailer is developing a new line of luxury handbags and would like to evaluate their target market and pricing. After an extensive evaluation based on product features, their target market, and pricing of competitor products, the analytics team has come up with a pricing proposal. On presenting the results, the management team is of the opinion that additional analysis was required before making a decision. What type of additional analysis will help the management team make a decision on pricing?

- A. How diverse are the competitors- product portfolios?
- B. How can we broaden the target market?
- C. How can costs be reduced to improve the profit margin?
- D. What is the breakeven point before profits are generated?

**Answer:** D

**Explanation:**

According to the Introduction to Business Data Analytics: A Practitioner View, the breakeven point is the point at which the total revenue equals the total cost of a product or service. The breakeven point indicates the minimum sales volume or price required to cover the fixed and variable costs and to start making a profit. The breakeven point can help the management team make a decision on pricing by showing them how sensitive the profitability is to the price changes and how much margin of safety they have. The breakeven point can also help the management team evaluate the feasibility and risk of the pricing proposal and compare it with alternative scenarios.

References: Introduction to Business Data Analytics: A Practitioner View, page 18; CBDA Exam Blueprint, page 7; [Break-Even Point (BEP) Definition - Investopedia]

**NEW QUESTION 163**

- (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 data 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 166**

- (Topic 2)

What type of data model describes the highest level of relationship between entities and represents how a business perceives its information?

- A. Conceptual
- B. Entity Relationship
- C. Logical
- D. Physical

**Answer:** A

**Explanation:**

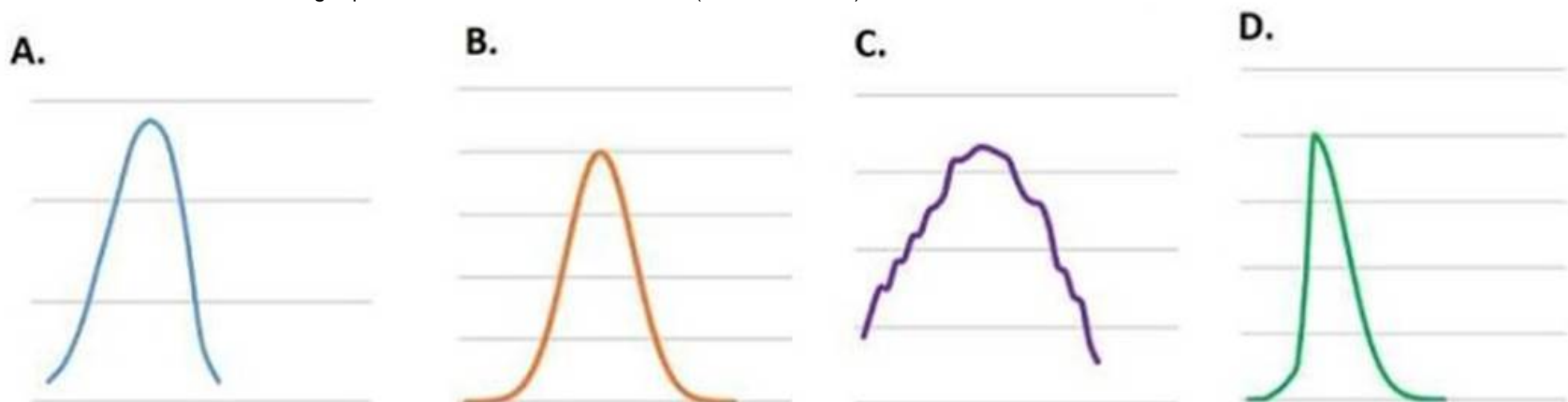
According to the Guide to Business Data Analytics, a conceptual data model is a type of data model that describes the highest level of relationship between entities and represents how a business perceives its information. A conceptual data model is independent of any specific technology or implementation details. It focuses on the key concepts and their attributes, as well as the business rules and constraints that govern them. A conceptual data model can help communicate the business requirements and scope of the data analysis project to various stakeholders.

References: Guide to Business Data Analytics, page 53; CBDA Exam Blueprint, page 7; Data Model Types: An Explanation with Examples

**NEW QUESTION 171**

- (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 175**

- (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 meaning<sup>1</sup>. 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 relationships<sup>2</sup>. 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: <sup>1</sup> Document Analysis Guide: Definition and How To Perform It | Indeed.com, <sup>2</sup> Data Mining - an overview | ScienceDirect Topics

**NEW QUESTION 176**

.....

## 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](#)**