IIBA

Exam Questions CBDA

Certification in Business Data Analytics (IIBA - CBDA)

NEW QUESTION 1
- (Topic 1)
An analytics team is interested in reviewing the results of a public opinion poll that is going to be conducted at the end of the month. One of the factors the team is interested in, is ensuring the result set is statistically significant. Why would this factor be important to the team?

A. To make sure the criteria for the target audience is met
B. Guarantee that the objectives of the poll are met
C. Improve the likelihood of receiving a response rate of 100%
D. Ensure that results are not biased or random

Answer: D

Explanation:
Ensuring the result set is statistically significant is important to the team because it means that the difference or relationship observed in the data is unlikely to be due to chance or sampling error. Statistical significance helps the team to assess the validity and reliability of their findings, and to draw meaningful conclusions and recommendations from the data.
Statistical significance also helps the team to communicate their results with confidence and credibility to the stakeholders and decision makers12 References: 1: An Easy Introduction to Statistical Significance (With Examples) - Scribbr 2: Statistical Significance in Experimentation and Data Analysis - All About Circuits

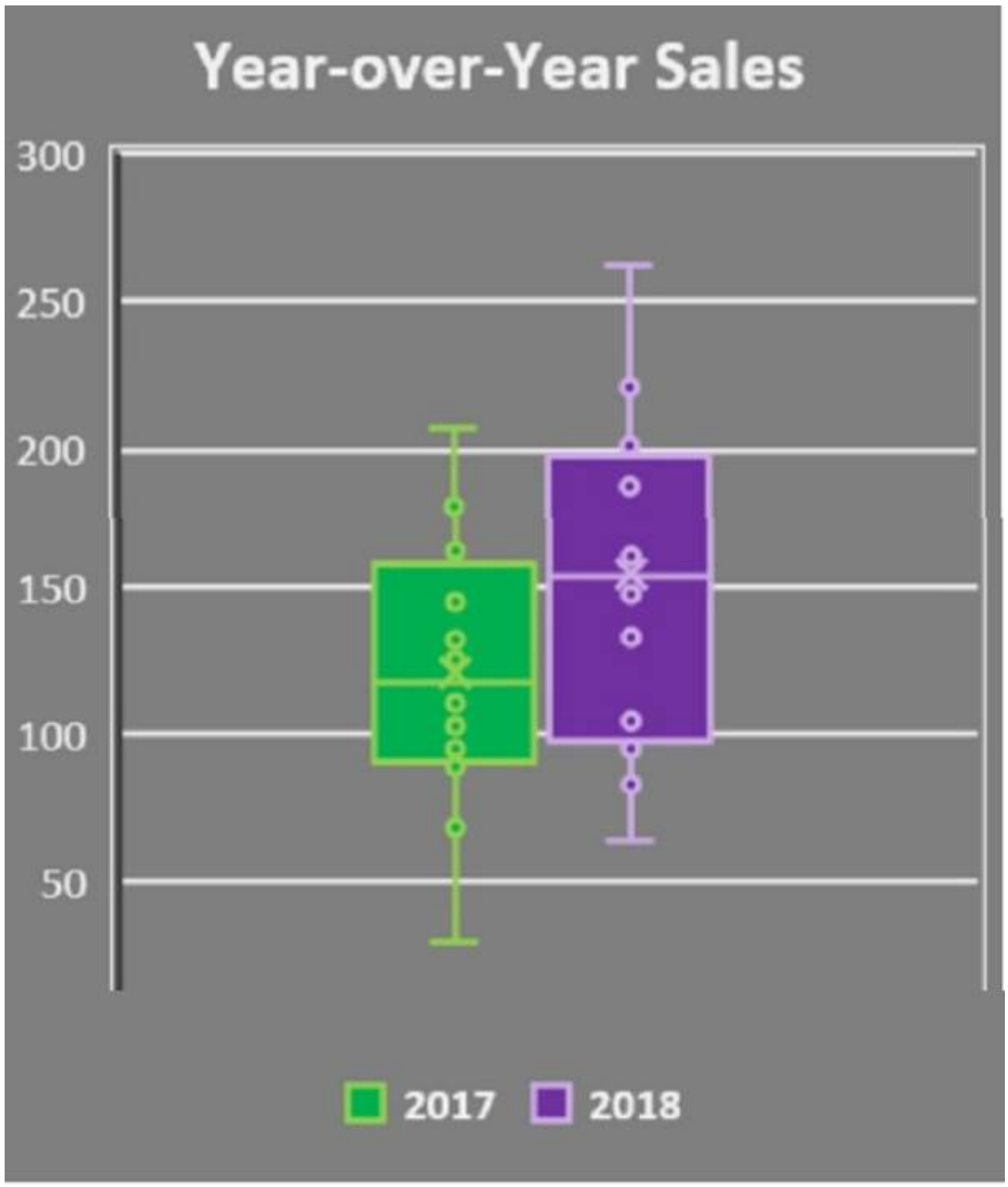
NEW QUESTION 2
- (Topic 1)
An analytics team has been asked to answer the following question: "Given that you're a customer, would you work at our company?" The team is concerned about answering this question because it is:

A. Insignificant
B. Short
C. Unethical
D. Unclear

Answer: D

Explanation:
The question ??Given that you??re a customer, would you work at our company??? is unclear, because it is a hypothetical and subjective question that does not specify the purpose, scope, or context of the analysis. The question also does not define what constitutes a customer, or how the customer??s experience or satisfaction relates to the employee??s motivation or performance. 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 customer satisfaction score affect the employee retention rate in our company??? 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 3
- (Topic 1)
A software company launched a new product in late 2016. The product manager is reviewing a Box and Whisker plot used to compare year-over-year sales, from 2017 to 2018. What is the conclusion he can make from this chart?



A. 2017 minimum and maximum sales are higher than 2018, and the 2017 median result is higher than the 2018 median result
B. 2017 minimum and maximum sales are higher than 2018, but the 2017 median result is lower than 2018 1st quartile result
C. 2018 minimum and maximum sales are higher than 2017, and the 2018 quartile results arehigher than 2017 quartile results
D. 2018 minimum and maximum sales are higher than 2017, and the 2018 1st quartile is higher than 2017 median result

Answer: D

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

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

Answer: D

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

NEW QUESTION 5
- (Topic 1)
A 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 6
- (Topic 1)
The analytics team has completed analyzing a dataset and unfortunately the data didn't deliver the kinds of insights that the team was hoping for. After much contemplation, they decide to:

A. Summarize the results and indicate the outcome was inconclusive
B. Inform management that analytics could not derive insightful results
C. Wait a few weeks and rerun the analysis using refreshed data
D. Restart the work with formation of a new research question

Answer: D

Explanation:
The analytics team should restart the work with formation of a new research question, because the existing one may not be well-defined, relevant, or feasible. A well-formed research question is the first step of the business data analytics cycle, and it guides the subsequent steps of sourcing, analyzing, interpreting, and reporting data. If the data analysis does not yield meaningful insights, the team should revisit the research question and refine it based on the business problem, stakeholder needs, data availability, and analytical methods. References:
•Understanding the Guide to Business Data Analytics, page 10-11
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 1: Identify the Research Questions
•CERTIFICATION IN BUSINESS DATA ANALYTICS HANDBOOK - IIBA®, page 8, CBDA
Exam Sample Questions and Self-Assessment, Question 5

NEW QUESTION 7
- (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 bank12. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 212: Business Analysis for Practitioners: A Practice Guide, PMI, 2015, p. 43.

NEW QUESTION 8
- (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 9
- (Topic 1)
The analytics team is assessing the results of their analysis. They are surprised to find that their data indicates two events seem to be strongly related even though the general belief in the organization is that they are independent of each other. Knowing that this information will be used for decision making, they are concerned about presenting this data. At an impasse, the business analysis professional reminds them that the data can be presented as long as the team has:

A. Review the results with management ahead of time and highlight any potential risk of using this data
B. Confidence that the correlation will reliably occur in the future and the risk of acting on this is low
C. Followed all rules for data analysis endorsed as organizational standards so the risk of acting on this is low
D. The ability to rerun the data analysis and the results are the same thereby minimizing the risk of acting on this

Answer: D

Explanation:
The ability to rerun the data analysis and the results are the same is the condition that the team should have before presenting the data, because it is a technique that ensures the validity, reliability, and reproducibility of the data analysis. By rerunning the data analysis, the team can verify that the results are consistent and not affected by random errors, biases, or anomalies. The team can also confirm that the data analysis process is well- documented, transparent, and traceable, and that the results can be replicated by other analysts or stakeholders. This can minimize the risk of acting on the data, and increase the confidence and trust in the data analysis. 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
•Business Data Analytics (IIBA®-CBDA Exam preparation) | Udemy, Section 4: Interpretand Report Results, Lecture 20: Data Validation and Verification

NEW QUESTION 10
- (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-distrbution/

NEW QUESTION 10
- (Topic 1)
The analytics team is identifying research questions to address a business problem. The business analysis professional reminds the team that the most important dimension to consider is the:

A. Sources of data
B. Quality of the data
C. Timeframe of analysis
D. Measurement scale

Answer: B

Explanation:
The quality of the data is the most important dimension to consider when identifying research questions, as it affects the validity, reliability, and accuracy of the analysis and the results. Data quality refers to the degree to which the data meets the requirements and expectations of the stakeholders and the purpose of the analysis12. Poor data quality can lead to erroneous conclusions, ineffective decisions, and wasted resources3. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 282: Data Quality Assessment, Arkady Maydanchik, 2007, p. 33: Data Quality: The Field Guide, Thomas C. Redman, 2001, p. 1.

NEW QUESTION 12
- (Topic 1)
A manufacturing company, specializing in turf maintenance equipment, has recently seen a decline in their lawn mower sales. As a result, the analytics team is asked to review the latest customer satisfaction survey results. An analyst on this team creates a report for senior management with attractive visuals, supported by the KPI results. Upon reviewing the report, the analyst's manager mentions that the report is missing the narrative. What does this mean?

A. The data tables that support the visuals and help answer questions
B. A narrative that supports insights with additional context and draws correlations
C. Notes on assumptions and unavailable data for analysis
D. Commentary around why each graphic was selected to provide additional context

Answer: B

Explanation:
A narrative is a written or spoken explanation of the data analysis results that tells a story with the data, provides additional context and background information, highlights the key insights and findings, and draws correlations and implications for the decision makers12. The report is missing the narrative, meaning that it does not communicate the meaning and value of the data analysis effectively, and it leaves the interpretation and action to the senior management without any guidance or recommendation34. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 672: Storytelling with Data, Cole Nussbaumer Knaflic, 2015, p. 93: Data Storytelling: The Essential Data Science Skill Everyone Needs, Brent Dykes, 2016, 14: The Power of Data Storytelling, Harvard Business Review, 2018, 2.

NEW QUESTION 16
- (Topic 1)
The interplay between enterprise systems and data analytics can be envisioned at various layers. The layer that connects the business processes to data analytics is the:

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

Answer: A

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

NEW QUESTION 21
- (Topic 1)
A large telecommunications company wants to increase their Average Revenue Per User per month by 5%, by end of year, to increase revenue in a highly competitive market. From a SMART target perspective, what is missing?

A. T - The increase should be seen sooner
B. A - It is too easy of a target to attain
C. R - Since competition is high, focus should be on increasing customer base and not on ARPU
D. S - There is no mention of which product group/line the target pertains to

Answer: D

Explanation:
A SMART target is one that is specific, measurable, achievable, relevant, and time-bound1. The target of increasing the Average Revenue Per User (ARPU) per month by 5%, by end of year, to increase revenue in a highly competitive market is missing the specificity criterion, as it does not mention which product group or line the target applies to. The target should be more specific and clear about the scope and context of the desired outcome, such as which segment, region, or service the target relates to23. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 192: SMART Goals: How to Make Your Goals Achievable, MindTools, 2021, 13: How to Set SMART Marketing Goals, CoSchedule, 2021, 2.

NEW QUESTION 24
- (Topic 1)
Based on the results of a recently completed analytics initiative, the Human Resource department for a major department store implemented a change to its hiring practice to address the attrition rates of its sales associates. The new policy stated that candidates applying for sales positions must possess at least 3 years of relevant sales experience to be considered. After implementing the change, attrition rates are 10% higher and management is frustrated. Which of the following could result in this outcome?

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

Answer: D

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

NEW QUESTION 25
- (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 competitorproducts 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 27

- (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 31
- (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 35
- (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 36
- (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 available12 References: 1: Project Estimation Techniques Business Analysts Should Know About 2: Estimation techniques for business analysts – The Functional BA

NEW QUESTION 39
- (Topic 1)
A data scientist is performing statistical analysis and is interested in graphically depicting the data set according to the associated quartiles Minimum, First Quartile, Median, Second Quartile, Third Quartile. Which technique would allow for the display of this statistical five number summary?

A. Gaussian distribution
B. Scatter plot
C. Multivariate histogram
D. Box plot

Answer: D

Explanation:
A box plot is the technique that would allow for the display of the statistical five number summary, because it is a technique that shows the distribution of a data set using a rectangular box and whiskers. A box plot can help the data scientist visualize the minimum, maximum, median, first quartile, and third quartile of the data set, as well as any outliers or skewness. A box plot can also help the data scientist compare the variation and symmetry of different groups or categories of data. Options A, B, and C are not suitable for displaying the statistical five number summary, because they are techniques that show the frequency, relationship, or density of the data, but not the quartiles or outliers. References:
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 3: Analyze Data
•Understanding the Guide to Business Data Analytics, page 18
•16 Best Types of Charts and Graphs for Data Visualization [+ Guide]

NEW QUESTION 40
- (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 solutions12. 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 42
- (Topic 1)
While sourcing data, an analyst runs into a situation where different business units are usingdifferent names to refer to the same data element. This lack of standardization is resulting in confusion and additional time required to properly prepare data for analysis. Which practice, if implemented would address this situation and mature the organization's business analytics practice?

A. Data quality management
B. Database operations management
C. Data warehousing
D. Meta data management

Answer: D

Explanation:
Meta data management is the practice that, if implemented, would address the situation and mature the organization??s business analytics practice, because it is a technique that involves defining, documenting, and maintaining the information about the data elements, such as their names, definitions, formats, sources, and relationships. Meta data management can help the analyst resolve the inconsistencies and ambiguities in the data element names, and ensure that the data is standardized, consistent, and understandable across different business units. Meta data management can also help the analyst improve the data quality, accessibility, and usability for the analysis. References:
•Business Analysis Certification in Data Analytics, CBDA | IIBA®, CBDA Competencies, Domain 2: Source Data
•Guide to Business Data Analytics - Iiba - Google Books, page 14
•Business Data Analytics (IIBA®-CBDA Exam preparation) | Udemy, Section 2: Source Data, Lecture 8: Meta Data Management

NEW QUESTION 46
- (Topic 1)
A marketing director has asked the question 'How many product purchases are expected this coming year given the current marketing campaign?". What type of analytics would be performed to answer this question?

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

Answer: B

Explanation:
Predictive analytics is a type of analytics that uses historical and current data, as well as statisticaland machine learning techniques, to forecast future events or outcomes, such as product purchases, customer behavior, or market trends12. To answer the question ??How many product purchases are expected this coming year given the current marketing campaign???, predictive analytics would be performed to estimate the demand and sales based on the existing data and the marketing campaign variables. References: 1: Guide to Business Data Analytics, IIBA, 2020, p. 182: Predictive Analytics: The Power to Predict
Who Will Click, Buy, Lie, or Die, Eric Siegel, 2016, p. 3.

NEW QUESTION 49
- (Topic 1)
A financial software company has growth and expansion as one of their top strategic priorities for the year. The senior executive team would like to assess their sales performance over the last 3 years to help set sales objectives. In discussion with the business analytics manager, for a comprehensive sales report, the sales lead recommends looking into the number of contracts signed over the past 3 years and the dollar value for the signed contracts. Which other question is important to consider when evaluating sales performance?

A. What is the time to market the software?
B. What is the total cost incurred per year?
C. What is the number of customers retained over the past 3 years?
D. What is the average time for conversion?

Answer: D

Explanation:
The average time for conversion is the average number of days it takes to convert a lead into a customer. This is an important question to consider when evaluating sales performance, because it indicates the efficiency and effectiveness of the sales process. A shorter time for conversion means that the sales team can close more deals in less time, and thus increase the revenue and profitability of the company. A longer time for conversion may indicate that there are bottlenecks, challenges, or inefficiencies in the sales process that need to be addressed. 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
•Business Data Analytics (IIBA®-CBDA Exam preparation) | Udemy, Section 4: Interpret and Report Results, Lecture 19: Sales Performance Metrics

NEW QUESTION 54
- (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 surprisedwhen 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 55
- (Topic 2)
Results of the data analysis have been analyzed and the team was confident with the results but also quite surprised the outcome was not what was expected. In pondering the value of what can be gleaned from the data, the team has no feasible solution to put forth to address the business need.A logical next step would be to:

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

Answer: A

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

NEW QUESTION 57
- (Topic 2)
As the organization looks to advance its analytics practices, the topic of provisioning access to executive dashboards and visualizations is under discussion. Establishing standards and implementing role based logins to executive dashboards will address:

A. Data management
B. Data security
C. Data governance
D. Content management

Answer: B

Explanation:
According to the Guide to Business Data Analytics, data security is the protection of data from unauthorized access, use, modification, or destruction. Data security includes the policies, procedures, and technologies that ensure the confidentiality, integrity, and availability of data. Data security is an important aspect of data management, which is the planning, execution, and oversight of the data lifecycle. Data security is also related to data governance, which is the establishment and enforcement of rules, roles, and responsibilities for data quality, access, and usage. Data security is not the same as content management, which is the creation, storage, distribution, and maintenance of digital content.
One of the ways to enhance data security is to provision access to executive dashboards and visualizations based on the roles and permissions of the users. This can help prevent unauthorized or inappropriate access to sensitive or confidential data, as well as ensure compliance with data privacy and ethical standards. By establishing standards and implementing role based logins to executive dashboards, the organization can address the data security needs of its analytics practices.
References: Guide to Business Data Analytics, page 52-53; CBDA Exam Blueprint, page 7; Introduction to Business Data Analytics: An Organizational View, page 10.

NEW QUESTION 58
- (Topic 2)
A future state data model is created to depict how information will be structured in a proposed solution but the analyst is also interested in modeling how and when data is transformed throughout various processes across the organization.In which model would the analyst find this information?

A. Process flows
B. Data flow diagram
C. Data transformation model
D. Physical data model

Answer: B

Explanation:
A data flow diagram (DFD) is a graphical representation of how data flows and transforms through a system or process. A DFD shows the sources and destinations of data, the data inputs and outputs, the data transformations and logic, and the data stores and flows. A DFD can help the analyst model howand when data is transformed throughout various processes across the organization, as well as identify potential data quality issues, bottlenecks, and redundancies. A DFD can also complement a future state data model by showing the relationships and dependencies among the data entities and attributes. 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. 19-20.
? Data Flow Diagram - Everything You Need to Know About DFD, Visual Paradigm, accessed on January 20, 2024.

NEW QUESTION 62
- (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 65
- (Topic 2)
The results for a certification exam were revealed in percentage and percentile. How would you infer the results for an attendee at: 75%, 90th percentile?

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

Answer: D

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

NEW QUESTION 66
- (Topic 2)
A toy manufacturing company wants to improve operational efficiencies as a means of reducing costs. The Operational Manager wants an analytics study to identify areas of improvement within their operational processes. During a meeting with the analyst, the Operational Manager mentions concerns about old machinery and suggests this be the area of focus for the study. They can have a touchpoint in three weeks to assess progress. Has the Operational Manager limited the potential of this study?

A. By providing the focus area of the study, the Operational Manager has limited the scope of the study with their biased opinion
B. The Operational Manager is the expert, so there is no problem in the manager providing guidance to the analyst
C. The Operational Manager has limited the scope of the budget by providing a timeline ofthree weeks
D. Since the study is being funded by the Operational Manager, providing the focus areas helps the analyst stay on track with time and budget

Answer: A

Explanation:
According to the Guide to Business Data Analytics, one of the key competencies of a business data analyst is to identify the research questions that guide the analytics work1. The research questions should be based on the business problem or opportunity, the stakeholder needs, and the data availability and quality2. By providing the focus area of the study, the Operational Manager has limited the scope of the study with their biased opinion, as they have not considered other possible factors that might affect theoperational efficiencies, such as demand, inventory, quality, labor, or customer satisfaction. The Operational Manager has also not involved other stakeholders who might have different perspectives or interests in the study. This could lead to a narrow or incomplete analysis that might miss some important insights or recommendations. The Operational Manager should instead collaborate with the analyst to define the research questions that are relevant, specific, measurable, achievable, and time-bound3.
The other options are not correct, as they do not address the issue of defining the research questions. The Operational Manager is not necessarily the expert on the operational processes, as they might have a limited or biased view of the situation. The Operational Manager has not limited the scope of the budget by providing a timeline of three weeks, as this is a reasonable time frame for an analytics study, depending on the complexity and availability of the data. The Operational Manager has not helped the analyst stay on track with time and budget by providing the focus areas, as this might actually waste time and resources if the focus areas are not aligned with the actual business problem or opportunity.
References:1: Guide to Business Data Analytics, IIBA, 2020, p. 312: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 113: Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 12.

NEW QUESTION 69
- (Topic 2)
A consumer product company has recently seen decline in sales in their athletic wear over the last 3 quarters. Along with a customer satisfaction survey on their athletic wear products, a study on the competitive market has been initiated. The analyst working has created a dashboard, integrating the results from the market study with customer feedback. On reviewing with the analytics manager, the feedback received was that the visuals were powerful, but the dashboard lacked narrative.What does the manager mean by this?

A. Commentary around why each visual was selected to depict the data will provide context
B. More commentary needs to be added to add value to the audience
C. Adding a story example will augment the experience for the audience
D. Insights need to be supported by context and comments to engage the audience

Answer: D

Explanation:
According to the Guide to Business Data Analytics, a narrative is a way of communicating the results of data analysis in a clear, concise, and compelling manner. A narrative should include the following elements: the purpose of the analysis, the main findings and insights, the implications and recommendations, and the evidence and reasoning. A narrative should also use appropriate language, tone, and style for the intended audience and medium. A narrative can enhance the impact and value of the data analysis by providing context, explanation, and interpretation of the data, as well as by highlighting the key messages and actions. A dashboard that lacks narrative may not be able to convey the full meaning and significance of the data, and may not be able to engage the audience or influence their decision-making.
References: Guide to Business Data Analytics, page 81-83; CBDA Exam Blueprint, page 8; [Introduction to Business Data Analytics: A Practitioner View], page 25-26.

NEW QUESTION 72
- (Topic 2)
A food and beverage company would like to administer a survey to obtain customer insights about a new cookie product recently launched. A data team is asked to build the survey paying careful attention to reduce the degree of sampling error.Which criteria would help the team meet this objective?

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

Answer: B

Explanation:
Sampling error is the difference between the results obtained from a sample and the results obtained from the population from which the sample is drawn1. Sampling error can affect the validity, reliability, and generalizability of the survey results2. To reduce the degree of sampling error, the data team should use a large sample size and a random selection of the target population. A large sample size means that the sample is more likely to represent the diversity and variability of the population, and that the results are more precise and accurate3. A random selection of the target population means that every member of the population has an equal chance of being included in the sample, and that the results are less biased and more representative4.
The other criteria would not help the team meet this objective, as they would increase the degree of sampling error. A large sample size and variation in the target population would not reduce the sampling error, as variation refers to the differences or heterogeneity within the population, not the sample. Variation in the target population can increase the sampling error, as it makes it harder to capture the true characteristics of the population with a sample5. A small sample size and specific subset of the target population would not reduce the sampling error, as they would make the sample less representative and more prone to bias. A small sample size means that the sample is less likely to reflect the diversity and variability of the population, and that the results are less precise and accurate. A specific subset of the target population means that the sample is not randomly selected, but based on some criteria or convenience, and that the results are more biased and less representative. A small sample size and using customers who agreed to take the survey would not reduce the sampling error, as they would also make the sample less representative and more prone to bias. A small sample size has the same drawbacks as mentioned above. Using customers who agreed to take the survey means that the sample is not randomly selected, but based on self-selection or voluntary response, and that the results are more biased and less representative.
References:1: Guide to Business Data Analytics, IIBA, 2020, p. 542: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 223: Data Analysis: The Definitive Guide, Tableau, 4: Data Analysis: The Definitive Guide, Tableau, 5: Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, .
: Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Guide to Business Data Analytics, IIBA, 2020, p. 54. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 22. : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, . : Data Analysis: The Definitive Guide, Tableau, .

NEW QUESTION 77
- (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 82
- (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 86
- (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 conditions1. 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: 1: Guide to Business Data Analytics, IIBA, 2020, p. 26.

NEW QUESTION 89
- (Topic 2)
A 3rd party is marketing an application for financial institutions to use for credit scoring. This application is an example of what type of analytics?

A. Descriptive analytics
B. Prescriptive analytics
C. Exploratory
D. Inferential

Answer: B

Explanation:
Prescriptive analytics is the type of analytics that provides recommendations or suggestions for optimal actions or decisions based on data analysis. Prescriptive analytics uses techniques such as optimization, simulation, and decision analysis to generate and evaluate various scenarios and outcomes. Prescriptive analytics can help financial institutions to use credit scoring to determine the best loan offers, interest rates, and repayment terms for their customers, as well as to manage risk and compliance.
Prescriptive analytics is the most advanced and complex type of analytics, as it requires a high level of data quality, integration, and modeling, as well as human judgment and domain expertise. 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. 15-16.

NEW QUESTION 93
- (Topic 2)
An operations manager for a new hotel is in need of determining the optimum number of vans to purchase to shuttle guests to/from the airport. It will be necessary to determine the most efficient routes and schedule to follow to ensure guests do not experience excessive delays. Which business analytics technique would lend itself to supporting these types of business decisions?

A. Linear programming
B. Factor analysis
C. Regression
D. K-means Clustering

Answer: A

Explanation:
Linear programming is a business analytics technique that can lend itself to supporting these types of business decisions. Linear programming is a mathematical method that optimizes the allocation of limited resources to achieve a desired objective, subject to a set of constraints1. Linear programming can help the operations manager to determine the optimum number of vans to purchase, the most efficient routes and schedule to follow, and the minimum cost or time to shuttle guests to/from the airport, by formulating a linear objective function and a system of linear inequalities that represent the relevant variables, parameters, and restrictions2.
The other options are not correct business analytics techniques for these types of business decisions. Factor analysis is a statistical method that reduces the dimensionality of a large set of correlated variables into a smaller set of uncorrelated factors that explain the underlying structure or patterns of the data3. Factor analysis can help the operations manager to identify the key factors that influence the guest satisfaction or loyalty, but it cannot help to optimize the resource allocation or efficiency. Regression is a statistical method that estimates the relationship between one or more independent variables and a dependent variable. Regression can help the operations manager to predict the demand or revenue of the hotel based on the variables such as season, price, or location, but it cannot help to optimize the resource allocation or efficiency. K-means clustering is a machine learning method that partitions a set of data points into a predefined number of clusters based on the similarity or distance between the data points. K-means clustering can help the operations manager to segment the guests into different groups based on their characteristics or preferences, but it cannot help to optimize the resource allocation or efficiency.
References:1: Guide to Business Data Analytics, IIBA, 2020, p. 532: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 93: 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. : Guide to Business Data Analytics, IIBA, 2020, p. 53. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 9.
: 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 98
- (Topic 2)
A supermarket chain wants to improve supplier relations. One of the targets to track and help achieve this goal is to improve the average transaction time per order by 10%.From a SMART target perspective, what is missing?

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

Answer: D

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

NEW QUESTION 101
- (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 102
- (Topic 2)
An analytics team is discussing ways to improve company performance. Before identifying a set of research questions to analyze, they identify the need to understand the current company strategy and performance. The business analyst suggests using the Balanced Scorecard technique to guide this discussion. In which dimension of the matrix would the team be discussing metrics for changing and improving?

A. Learning and Growth
B. Customer
C. Financial
D. Internal Business Process

Answer: A

Explanation:
According to the Introduction to Business Data Analytics: An Organizational View, the Balanced Scorecard technique is a strategic management tool that helps organizations align their vision, mission, and goals with their performance measures. The Balanced Scorecard consists of four dimensions: financial, customer, internal business process, and learning and growth. Each dimension has a set of objectives, measures, targets, and initiatives that reflect the organization??s strategy and value proposition. The learning and growth dimension focuses on the metrics for changing and improving the organization??scapabilities, such as employee skills, knowledge, innovation, and culture. The learning and growth dimension supports the other three dimensions by providing the necessary resources and competencies to achieve the desired outcomes.
References: Introduction to Business Data Analytics: An Organizational View, page 9- 10; CBDA Exam Blueprint, page 7; [Balanced Scorecard Basics - Balanced Scorecard Institute]

NEW QUESTION 106
- (Topic 2)
Analytics is being used to estimate the number of machine breakdowns a company will experience next year. The business analyst provides an optimistic estimate of 10 breakdowns, a pessimistic estimate of 100 breakdowns, and a most likely value of 50 breakdowns.What type of estimation is being used?

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

Answer: B

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

NEW QUESTION 111
- (Topic 2)
An analyst is performing regression analysis and reviewing the results. They would like to rescale the variables in the model to more clearly reflect the relationship between the regression coefficients.Which technique could be used to rescale the variables?

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

Answer: C

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

NEW QUESTION 114
- (Topic 2)
The sales department is interested in using business analytics to better understand their customer's purchasing habits. During the process of sourcing data, the analyst discovers geographic differences in how sales data is being recorded. The analyst would like to influence how the organization strategically plans for business analytics. Which practice, would move the organization closer to meeting this objective?

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

Answer: A

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

NEW QUESTION 119
- (Topic 2)
A lab is conducting a study on protein interactions. They have used the data to create a graph visualization.In graph visualization, what would an edge represent?

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

Answer: B

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

NEW QUESTION 123
- (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 125
- (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 128
- (Topic 2)
A movie production company wants to use analytics to decide which customers would choose to watch or not watch a particular movie after seeing a promotional teaser. The business analysis professional suggests they could make that prediction by identifying characteristics of the new movie and determining if the customer has watched other movies with similar characteristics.Thisis an example of using the following technique:

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

Answer: A

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

NEW QUESTION 133
- (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 135
- (Topic 2)
A private school has decided to include bullet charts in students' end of year performance report. It will depict the student's score against the highest score achieved in that grade, and the qualitative category that the student's score falls under.Should a column chart be used instead?

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

Answer: D

Explanation:
A bullet chart is a type of bar chart that shows progress towards a goal or performance against a reference line1. It consists of a bar representing the featured measure, a reference line denoting a target or threshold, and a background with qualitative ranges (such as poor, fair, good, excellent)2. In this case, the featured measure is the student??s score, the reference line is the highest score achieved in that grade, and the background ranges are the qualitative categories that the student??s score falls under. A bullet chart is a good option for this use case because it can display all three criteria in one chart, using minimal space and avoiding clutter. A column chart, on the other hand, would require either multiple columns for each student to show the score, the highest score, and the category, or a separate legend to map the colors of the columns to the categories. This would make the chart less effective in communicating the information and more difficult to compare across students.
References:1: Understanding and Using Bullet Graphs | Tableau, 2: Bullet Charts - What Is It And How To Use It - JSCharting

NEW QUESTION 140
- (Topic 2)
There were 7 students enrolled in the Introduction to Artificial Intelligence course. The scores from the final exam were as follows: 64, 70. 80, 80, 90, 98, 100
What is the mean and median for the outlined scores?

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

Answer: B

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

NEW QUESTION 145
- (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 then 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 147
- (Topic 2)
An analyst is working through data on comparing performance scores in different schools across the state, for ranking purposes. Since there is a lot of data and some extreme outliers, the analyst is trying to determine which type of statistical average would best represent the results. Which of the following is a concern when relying too heavily on summary statistics during data analysis?

A. Contextualization
B. Data variation
C. Data properties
D. Frequency

Answer: A

Explanation:
Summary statistics are numerical measures that describe certain characteristics of a data set, such as the mean, median, mode, standard deviation, range, or quartiles. Summary statistics can help simplify and communicate complex data, but they can also obscure or distort important information, such as the distribution, shape, outliers, or trends of the data. Contextualization is the process of providing relevant background information, assumptions, limitations, or explanations for the data analysis and its results. Contextualization can help avoid misinterpretation, confusion, or bias when using summary statistics. Contextualization can also help connect the data analysis to the business problem, objectives, and stakeholders.
References:Guide to Business Data Analytics, page 43; Introduction to Business Data Analytics: A Practitioner View, page 13.

NEW QUESTION 152
- (Topic 2)
A fifty-year-old brick and mortar business is interested in determining the potential for selling their current products online. The sales director has asked the analytics team to predict future sales for their most popular product. A simple question is formed "Would you buy this product online?" The sales director would like to survey students from local colleges and universities within a 50km radius.As a result, the team will conclude:

A. The sample size being considered may be too large to work with
B. The research question will be easily answered with currently available data
C. Focusing on a 50km radius will allow the team to complete the analysis quickly
D. The survey will establish a poor study population

Answer: D

Explanation:
According to the Guide to Business Data Analytics, a study population is the subset of the population that meets the eligibility criteria for the research question. A study population should be representative of the population of interest and relevant to the business problem or opportunity. In this situation, the survey will establish a poor study population because the students from local colleges and universities within a 50km radius may not reflect the characteristics, preferences, and behaviours of the potential online customers for the fifty-year-old brick and mortar business. The students may have different demographics, income levels, shopping habits, and needs than the target market for the business. Therefore, the survey results may not be generalizable or applicable to the population of interest and may not provide valid and reliable insights for predicting future sales.
References: Guide to Business Data Analytics, page 48-49; CBDA Exam Blueprint, page 7; Population vs. Sample | Definitions, Differences & Examples - Scribbr

NEW QUESTION 156
- (Topic 2)
Freedom Insurance is planning to offer a new type of insurance policy and would like to determine how to optimally price it. The company seeks to identify the characteristics of this policy that would produce the maximum profit in the coming year. What type of analytics would Freedom Insurance be considering to achieve this objective?

A. Retrospective analytics
B. Descriptive analytics
C. Predictive analytics
D. Prescriptive analytics

Answer: D

Explanation:
According to the Guide to Business Data Analytics, prescriptive analytics is a type of analytics that provides recommendations or suggestions for optimal actions or decisions based on data analysis. Prescriptive analytics uses techniques such as optimization, simulation, and decision analysis to evaluate various scenarios and trade-offs and to determine the best course of action for a given objective and constraint. Prescriptive analytics can help organizations achieve their goals, improve their performance, and increase their efficiency and effectiveness. In this situation, Freedom Insurance wants to determine how to optimally price a new type of insurance policy that would produce the maximum profit in the coming year. This is a prescriptive analytics problem, as it involves finding the optimal solution for a complex and uncertain decision problem.
References: Guide to Business Data Analytics, page 49-50; CBDA Exam Blueprint, page 7; [Introduction to Business Data Analytics: A Practitioner View], page 14.

NEW QUESTION 157
- (Topic 2)
An analytics team is sourcing data for a new analytics initiative and is deciding between two comparable data sources. One source being considered is a very large dataset and another consists of three smaller sources. What advantage will the larger dataset provide over the three smaller sources?

A. More significant results
B. Higher validity
C. More reproducibility
D. Higher reliability

Answer: A

Explanation:
A larger dataset may provide more significant results than three smaller sources, as it may have more statistical power to detect differences or relationships among variables1. Statistical power is the probability of finding a statistically significant result when there is a true effect in the population2. A larger dataset may have more power because it may have more variability, less sampling error, and higher precision than smaller datasets3. More significant results may lead to more confident and valid conclusions and recommendations for the analytics initiative.
Higher validity, more reproducibility, and higher reliability are not necessarily advantages of a larger dataset over three smaller sources, as they depend on other factors besides the size of the data. Validity is the degree to which the data and the analysis measure what they are intended to measure4. Reproducibility is the degree to which the data and the analysis can be replicated by another analyst using the same methods and data sources. Reliability is the degree to which the data and the analysis produce consistent results under the same conditions. These qualities may be affected by the quality, accuracy, completeness, and relevance of the data, as well as the appropriateness, transparency, and rigor of the analysis methods. A larger dataset may not be valid, reproducible, or reliable if it has errors, biases, missing values, or irrelevant variables, or if the analysis methods are not suitable, documented, or verified.
References:1: Guide to Business Data Analytics, IIBA, 2020, p. 542: Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 233: Data Analysis: The Definitive Guide, Tableau, 4: Guide to Business Data Analytics, IIBA, 2020, p. 26. : Introduction to Business Data Analytics: A Practitioner View, IIBA, 2019, p. 25. : Guide to Business Data Analytics, IIBA, 2020, p. 26. : Introduction to Business Data Analytics: An Organizational View, IIBA, 2019, p. 13.

NEW QUESTION 161
- (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 162
- (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 163
- (Topic 2)
An analyst is interested in determining whether their company is charging the right prices for their products. Before creating a research question to frame their data analysis, they review a research study provided by the sales department and review several competitor websites.Which statement is true about document analysis?

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

Answer: B

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

NEW QUESTION 165
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