Module Two Journal

Data Quality Assessment Journal

DAT 300 Valid Data: Getting Data Right

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To address the questions at hand, I identified the necessary data as follows:

For inventory trends, I need data on Product ID to track individual products, Stock Levels to monitor inventory over time, Restock Dates to identify restocking patterns, and Sales Data to correlate inventory levels with sales.

To understand monthly sales increases, I require Order Date to identify sales trends by month, Sales Amount to quantify monthly sales, and Product Category to see if certain categories drive sales increases.

For identifying products that produce the biggest revenue stream, I need Product ID to identify individual products, Sales Amount to calculate revenue generated by each product, and Product Category to group products and identify top-performing categories.

To overcome the obstacle of missing data or variables, I would use strategies such as Data Imputation to estimate missing values, Data Collection to gather additional data if possible, Data Integration to combine data from multiple sources, and Consultation with domain experts to make informed assumptions.

When analyzing the data set, I would determine if it reveals a problem by looking for inconsistencies, outliers, or missing values that could indicate data quality issues, and comparing the data against known benchmarks or industry standards.

To determine if the data set is usable, I would check for completeness to ensure all necessary variables are present, assess accuracy by verifying data against reliable sources, and evaluate relevance to ensure the data aligns with the questions being addressed.

I would assess the data set for consistency and completeness by performing data validation checks to identify and correct errors and using data profiling tools to assess the quality and completeness of the data.

In identifying data to keep and data to discard, I would keep data that is relevant, accurate, and complete, and discard data that is redundant, irrelevant, or of poor quality. Data profiling would help identify which data meets these criteria.

Finally, I would describe obstacles that could interfere with providing an accurate data quality assessment, such as Data Sensitivity to ensure sensitive data is protected and handled according to privacy regulations, Data Accessibility to ensure all necessary data is accessible and not restricted, Data Integration challenges in combining data from different sources, and managing Data Volume efficiently to avoid processing delays.

By following these guidelines, I can ensure a thorough and accurate data quality assessment, enabling more informed decision-making and strategic planning.

Resources

Mosley, M., Brackett, M. H., Earley, S., Henderson, D., & Data Administration Management Association. (2010). *The DAMA guide to the data management body of knowledge : (DAMA-DMBOK Guide)* (First Edition). Technics Publications.

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