

Team Member:

Md Islam

Sales Performance Enhancement Analysis for Next Quarter**Objective:**

To analyze sales data from the `dbo.proj_sales` table and identify actionable opportunities to improve sales performance in the upcoming quarter.

Scope of Work:**Data Extraction and Preparation:**

- Extract sales data from the `dbo.proj_sales` table in Azure Data Studio.
- Clean and process the data to ensure accuracy and consistency.

Data Analysis:

- Perform comprehensive sales performance analysis.
- Conduct customer segmentation analysis.
- Analyze product performance and trends.

Visualization and Reporting:

- Create visualizations to highlight key findings and support recommendations.
- Develop a concise presentation deck summarizing the analysis and recommendations.

Recommendations:

- Provide actionable insights to improve sales performance.
- Suggest strategies based on data-driven analysis.

Methodology:**Data Extraction:**

- Connect to the SQL server and extract data using SQL queries.
- Ensure the data includes key metrics such as `Order_Number`, `Line_Item`, `Order_Date`, `Delivery_Date`, `CustomerKey`, `StoreKey`, `ProductKey`, `Quantity`, and `Currency_Code`.

Data Cleaning and Preparation:

- Handle missing values, especially in `Delivery_Date`.
- Convert date columns to appropriate datetime formats.
- Normalize currency values if needed for consistency in analysis.

Sales Performance Analysis:

- Aggregate total sales by month and quarter to identify trends.
- Analyze average delivery times and their correlation with sales performance.
- Segment sales data by region, product, and sales representative to uncover performance disparities.

Customer Analysis:

- Segment customers based on purchase frequency and total spending.
- Identify high-value customers and potential upsell opportunities.
- Analyze customer churn rates and retention strategies.

Product Analysis:

- Evaluate product performance by sales volume and revenue.
- Identify top-performing products and those with declining sales.
- Analyze seasonal trends or patterns in product sales.

Software and Tools:

- Azure Data Studio: For querying the `dbo.proj_sales` table and for managing the SQL server and executing queries.
- Python: For data manipulation, analysis, and visualization.
- Microsoft Excel: For additional data manipulation and preliminary analysis.

Key Deliveries:**Data Analysis Report:**

A detailed report summarizes the sales, customer, and product analysis findings. Actionable insights and recommendations based on the analysis.

Source Code and Queries:

All SQL queries, Python scripts, and Tableau/PowerBI files were used in the analysis. They are organized and documented in the class organization's GitHub repository.

Conclusion:

This project aims to provide data-driven insights to enhance sales performance in the next quarter. By leveraging SQL, Python, and business intelligence tools, it will provide a comprehensive analysis and recommendations to support the VP of Sales to make informed decisions.