Credit Card Transaction Dashboard

Project Objective

- To develop a comprehensive credit card weekly dashboard that provides real-time insights into key performance metrics and trends, enabling stakeholders to monitor and analyze credit card operations effectively.

- To provide insights and analysis of credit card data to help stakeholders understand key metrics and trends.

Steps Taken

1. **Data Collection**: Created a New Database on MS SQL which later connected to PowerBI.
2. **Data Cleaning**: Processed and cleaned the data in MS SQL to ensure accuracy and consistency.
3. **Data Modeling**: Created relationships between tables and built a data model for efficient analysis.
4. **Report Design**: Designed the report layout, including visuals such as charts, graphs, and tables to display key metrics.
5. **Data Analysis**: Conducted data analysis to uncover insights and trends.
6. **Visualization**: Created interactive dashboards and reports to present the findings in an easily understandable format.
7. **Validation**: Validated the data and visuals to ensure accuracy and reliability.

Key Outputs

1. **Transaction Analysis**:

   - **Monthly Transaction Trends**: Identified peak transaction months and seasonal patterns, enabling better financial planning.
   - **Category Spending**: Highlighted the top spending categories, with a significant portion allocated to travel and dining.

2. **Customer Segmentation**:

   - **Demographic Insights**: Analyzed customer demographics, revealing that the majority of high-spenders are in the 30-45 age group.

- **Customer Lifetime Value (CLV)**: Calculated CLV for different customer segments, helping in targeting high-value customers with tailored offers.

3. **Financial Performance**:

   - **Interest and Fees Revenue**: Showcased the contribution of interest and fees to overall revenue, with a detailed breakdown by customer segment.

   - **Credit Utilization**: Provided insights into average credit utilization rates, highlighting opportunities to promote higher credit limits.

4. **Customer Behavior**:

   - **Spending Patterns**: Detailed analysis of spending patterns across different days of the week and times of the day, helping to optimize marketing strategies.

   - **Loyalty and Retention**: Insights into customer loyalty and retention rates, with suggestions for improving customer engagement.

5. **Market Trends**:

   - **Economic Indicators**: Correlated transaction data with economic indicators, providing a macroeconomic context to the credit card usage trends.

   - **Competitor Benchmarking**: Benchmarked performance against industry standards and competitors, identifying areas for improvement.