

Objective:

Developed an interactive Power BI dashboard to analyze credit card transactions and customer behavior, providing actionable insights on revenue trends, customer segmentation, and spending patterns to drive data-driven business decisions.

Project Overview:

This project involved creating a dynamic and visually engaging Power BI dashboard to provide insights into credit card transactions and customer behaviors. The dashboard integrates multiple metrics to highlight trends, patterns, and areas for improvement, enabling better decision-making for stakeholders in the financial services domain.

Project Insights - Week 53 (31st Dec)

Week-on-Week (WoW) Change:

- Revenue increased by 28.8%.
- Customer count increased by 12.80%

Year-to-Date (YTD) Overview:

- Overall revenue: \$57M.
- Total interest: \$8M.
- Total transaction amount: \$46M.
- Male customers contributed \$31M in revenue, while female customers contributed \$26M.
- Blue and Silver credit cards contributed to 93% of overall transactions.
- States TX, NY, and CA accounted for 68% of transactions.
- Overall activation rate: 57.5%.
- Overall delinquent rate: **6.06**%.

Key Insights Generated:

Revenue Trends:

Overall revenue is 57M.

Revenue increased by 28% in week 53.

<u>Customer Behaviour:</u>

Customers with higher education levels (graduates) contributed significantly to overall revenue.

Married customers and those in the 30–40 age group showed higher spending patterns.

Card Usage Patterns:

Swipe transactions dominated card usage, contributing the most to revenue.

Tools and Techniques Used:

- **Power BI:** Created visually compelling dashboards with advanced visualization techniques such as bar charts, line charts, and tables.
- Data Modeling: Designed data relationships and calculated measures (e.g., total revenue, total transactions, interest earned).
- DAX (Data Analysis Expressions): Used custom DAX formulas to calculate KPIs like customer satisfaction scores and revenue by demographics.
- Data Cleaning and Transformation: Ensured data accuracy and usability by cleaning and organizing data from transaction and customer datasets.

Conclusion:

This Power BI project showcases my ability to analyze and visualize complex data sets, turning them into actionable insights. By leveraging interactive dashboards, I enabled data-driven decision-making for financial service stakeholders. This project demonstrates my proficiency in Power BI, data modeling, and DAX, as well as my ability to deliver results-oriented analytical solutions.