

CREDIT CARD

WEEKLY
STATUS REPORT

Nazish Khalid

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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.

Introduction

The project analyzes credit card customer behavior and financial performance using transactional and demographic data. The objective is to:

- Understand customer segments by age, income, and gender
- Track revenue and transaction trends over time
- Identify geographic hotspots for revenue
- Monitor delinquency and activation rates

Data Sources

customer.csv → Customer demographic and profile details (age, gender, marital status, income, education, satisfaction score, etc.)

credit_card.csv → Credit card transaction and usage details (credit limit, transaction amount, utilization ratio, delinquency, etc.)

cc_add.csv & cust_add.csv → Week 54 incremental data added later for trend extension.

Tools & Technologies

Microsoft SQL Server → Database setup, table creation, bulk data import.

SQL Server Management Studio (SSMS) → Database management and querying.

Power BI Desktop → Data modeling, transformation (DAX), and dashboard creation.

DAX (Data Analysis Expressions) → Custom calculations (Age Grouping, Income Grouping, WoW Revenue growth, etc.).

Data Preparation

- Created two main tables: `cc_detail` and `cust_detail` Imported CSV data using `BULK INSERT`
- Resolved **date format mismatches** in `Week_Start_Date`
- Appended Week 54 data into existing tables

Data Modeling & DAX Calculations

Customer Segmentation

- **Age Groups:** 20–30, 30–40, 40–50, 50–60, 60+
- **Income Groups:** Low (<35K), Medium (35K–70K), High (70K+)

Time Intelligence

- Week numbers generated using `WEEKNUM()`

Revenue Metrics

- Row-level and aggregate revenue calculated from **annual fees, transactions, and interest**

WoW Revenue Growth

- Measures created for **Current Week Revenue**, **Previous Week Revenue**, and **WoW % Growth**

Project Insights – Week 53 (31st Dec)

WoW Change

- Revenue increased by 2.88%
- Total Transaction Amount & Count increased by 1.52% & 2.22%
- Customer count showed positive growth

Year-to-Date (YTD) Overview

- Overall Revenue = 57M
- Overall Interest Earned = 8M
- Overall Transaction Amount = 46M
- Male customers contributed 31M revenue; Female customers contributed 26M
- Blue & Silver cards contributed to 93% of overall transactions

Dashboard Highlights (Power BI)

- Executive Overview Page → KPIs (Revenue, Transactions, Interest, Delinquency, Activation).
- Demographics Page → Age groups, income groups, gender distribution.
- Card Performance Page → Revenue share by card type (Blue, Silver, Gold, Platinum).
- Geographic Analysis → State-level revenue contributions (TX, NY, CA).
- Trend Analysis → Weekly revenue growth with WoW change tracking.

Business Impact

The dashboard enables:

- **Targeted Marketing:** Focus on high-value demographics and geographies
- **Product Strategy:** Optimize Blue & Silver card offerings
- **Risk Management:** Monitor delinquency trends and intervene early
- **Revenue Growth:** Identify drivers of WoW and YTD performance

Conclusion

This project successfully integrated **SQL, Power BI, and DAX** to deliver a robust dashboard with:

- **Demographic segmentation** (Age, Income, Gender)
- **Product performance** (Card type contributions)
- **Geographic insights** (State-level revenue)
- **Financial metrics** (Revenue, Transactions, Delinquency)