

Project Title:

# **Credit Card Transaction & Customer Weekly Report**

## 1. INTRODUCTION:

The purpose of this project is to develop a comprehensive credit card weekly dashboard aimed at providing real-time insights into key performance metrics and trends. By leveraging data from credit card transactions, the dashboard aims to facilitate effective monitoring and analysis of credit card operations.

In today's fast-paced financial landscape, having timely access to actionable insights is crucial for making informed decisions. A weekly dashboard offers stakeholders the ability to quickly identify trends, spot anomalies, and track key performance indicators (KPIs) related to credit card operations.

The importance of such a dashboard lies in its ability to:

- Enable stakeholders to monitor and analyse credit card operations on a regular basis, ensuring timely intervention and optimization of strategies.
- Provide visibility into critical metrics such as revenue, transaction volumes, customer demographics, and regional trends.
- Facilitate data-driven decision-making by identifying areas for improvement and opportunities for growth.
- Enhance operational efficiency by streamlining reporting processes and reducing manual efforts associated with data analysis.

Ultimately, the goal of developing a comprehensive credit card weekly dashboard is to empower stakeholders with the insights needed to drive strategic decisions, enhance customer experiences, and maximise the performance of credit card operations.

## 2. OBJECTIVE:-

The objective of this project is to develop a comprehensive credit card weekly dashboard, offering stakeholders real-time insights into critical performance metrics and trends.

The significance of this dashboard lies in its capacity to:

- Enable stakeholders to monitor credit card operations on a regular basis, fostering proactive decision-making and strategy refinement.
- Offer real-time visibility into critical performance indicators, facilitating rapid response to changing market dynamics and customer behaviour.
- Provide a holistic view of credit card operations, allowing stakeholders to identify areas for optimization and improvement.
- Enhance collaboration and alignment across teams by centralising data and insights in a user-friendly interface.
- Streamline reporting processes and reduce manual efforts associated with data analysis, freeing up resources for more strategic initiatives

### 3. DATA PREPARATION:-

1. Prepare csv file
2. import csv file into SQL
3. Create tables in SQL

details about the data sources used for the project,

- In credit\_card csv file there is
  - 18 columns
  - 10108 records
- In Customer csv file there is
  - 15 columns
  - 10108 records

### 3. Data Modeling and Analysis:

- columns and measures were created using DAX (Data Analysis Expressions) to derive meaningful metrics and KPIs.

- DAX Queries

#### 1.calculate AgeGroup

```
1 AgeGroup = switch(  
2     TRUE(),  
3     'cust_detail'[Customer_Age] < 30, "20-30",  
4     'cust_detail'[Customer_Age] >= 30 && 'cust_detail'[Customer_Age] < 40, "30-40",  
5     'cust_detail'[Customer_Age] >= 40 && 'cust_detail'[Customer_Age] < 50, "40-50",  
6     'cust_detail'[Customer_Age] >= 50 && 'cust_detail'[Customer_Age] < 60, "50-60",  
7     'cust_detail'[Customer_Age] >= 60, "60+",  
8     "unknown"  
9 )
```

#### 2. IncomeGroup

```
1 IncomeGroup = SWITCH(  
2     TRUE(),  
3     'cust_detail'[Income] < 35000, "Low",  
4     'cust_detail'[Income] >= 35000 && 'cust_detail'[Income] < 70000, "Med",  
5     'cust_detail'[Income] >= 70000, "High",  
6     "unknown"  
7 )
```

#### 3. week\_num2

```
week_num2 = WEEKNUM('cc_detail'[Week_Start_Date])
```

#### 4. Revenue

```
Revenue = 'cc_detail'[Annual_Fees] + 'cc_detail'[Total_Trans_Amt] +  
'cc_detail'[Interest_Earned]
```

## 5. Current\_week\_revenue

```
Current_week_revenue = CALCULATE(  
    sum('cc_detail'[Revenue]),  
    FILTER(  
        ALL('cc_detail'),  
        'cc_detail'[week_num2] = MAX('cc_detail'[week_num2]))
```

```
1 Current_week_revenue = CALCULATE(  
2     sum('cc_detail'[Revenue]),  
3     FILTER(  
4         ALL('cc_detail'),  
5         'cc_detail'[week_num2] = MAX('cc_detail'[week_num2]))
```

## 6. Previous\_week\_revenue

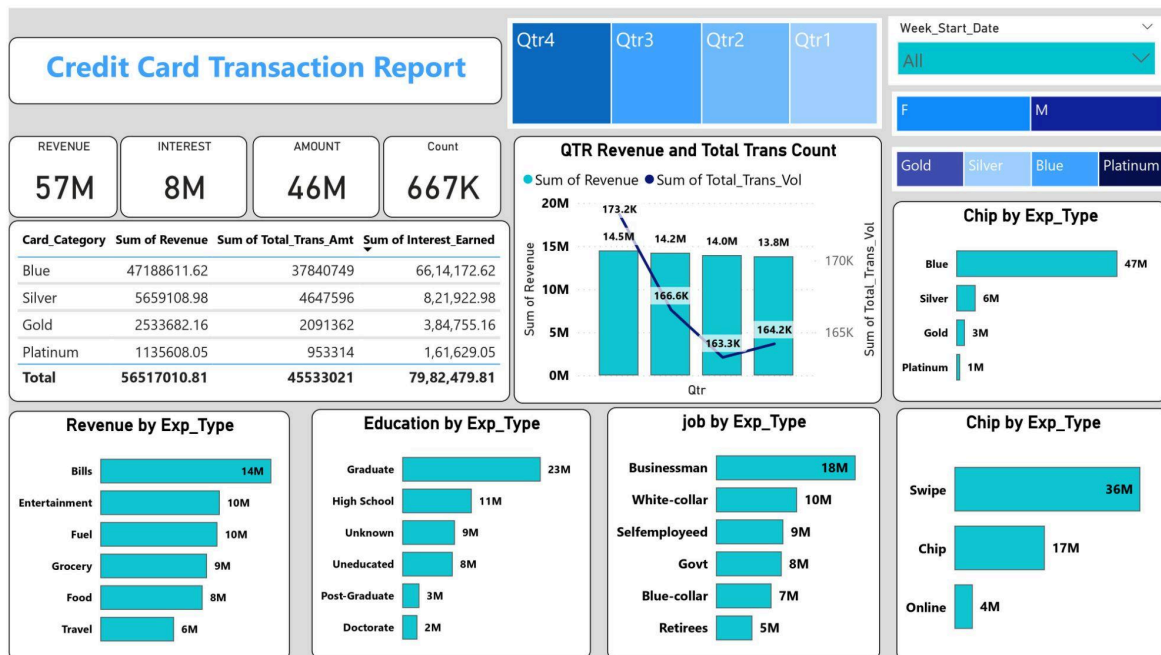
```
1 previous_week_revenue = CALCULATE(  
2     sum('cc_detail'[Revenue]),  
3     FILTER(  
4         ALL('cc_detail'),  
5         'cc_detail'[week_num2] = MAX('cc_detail'[week_num2])-1)
```

## 4. Key Insights:

- Project Insights- Week 53 (31st Dec)
  - WoW change:
    - Revenue increased by 28.8%,
    - Total Transaction Amt & Count increased by xx% & xx%
    - Customer count increased by xx%
  - Overview YTD:
    - Overall revenue is 57M
    - Total interest is 8M
    - Total transaction amount is 46M
    - Male customers are contributing more in revenue 31M, female 26M
    - Blue & Silver credit card are contributing to 93% of overall transactions
    - TX, NY & CA is contributing to 68%
    - Overall Activation rate is 57.5%
    - Overall Delinquent rate is 6.06%

## 5. Power BI Dashboard Overview:

### CREDIT CARD TRANSACTION REPORT



### CREDIT CARD CUSTOMER REPORT



## 7. Appendix:

### SQL queries used for data preparation

