










# Credit Card Transaction Report

## Business Requirement

The goal of this analysis is to evaluate credit card transaction data to identify revenue drivers, customer segments, and performance trends. The analysis focuses on revenue contribution by customer demographics, spending patterns, card categories, and geographic distribution. The objective is to uncover actionable insights to improve revenue, optimize marketing strategies, enhance customer satisfaction, and manage delinquency risk.

## KPI's Requirements

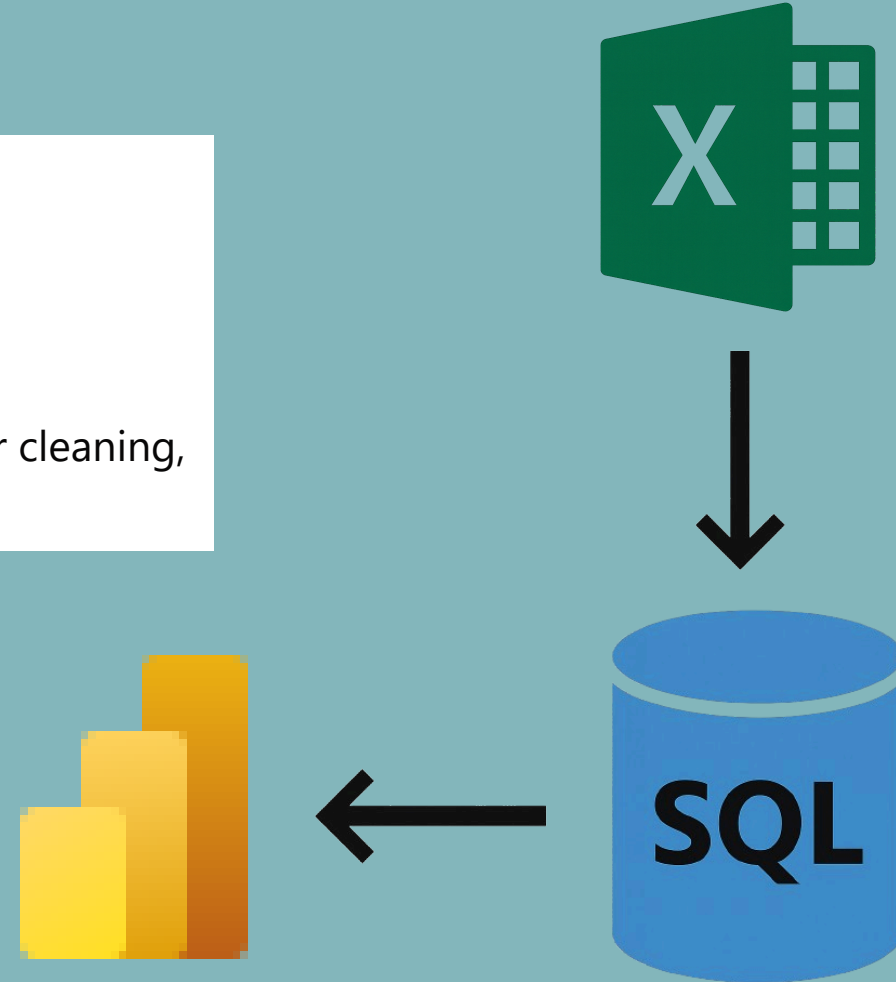
-  **Total Revenue** – Overall revenue generated.
-  **Total Transactions** – Total number of transactions.
-  **Total Customers** – Unique customer count.
-  **Average Income** – Average customer income.
-  **Satisfaction Score** – Average customer satisfaction rating.
-  **% Non-Delinquent Accounts** – Percentage of accounts without delinquency.
-  **% Delinquent Accounts** – Percentage of accounts with delinquency.



# Load Data

## Load data into SQL database

- Prepare csv files
- Create tables in SQL
- Import csv files into SQL
- Connect SQL to Power BI (or Power Query) and load the data for cleaning, transformation, and visualization.





# DAX Query

## Calculated Columns

Income\_Group = SWITCH(TRUE(),Customers[Income]>=35000 && Customers[Income]<70000,  
"Medium",Customers[Income]>70000,"High","low")

Age\_Group = IF(AND(Customers[Customer\_Age]>=18,Customers[Customer\_Age]<=30),"18-30",  
IF(AND(Customers[Customer\_Age]>=31,Customers[Customer\_Age]<=40),"31-40",  
IF(AND(Customers[Customer\_Age]>=41,Customers[Customer\_Age]<=50),"41-50",  
IF(AND(Customers[Customer\_Age]>=51,Customers[Customer\_Age]<=60),"51-60",  
IF(Customers[Customer\_Age]>60,"60+")))))

Revenue = Credit\_card\_transactions[Annual\_Fees] + Credit\_card\_transactions[Total\_Trans\_Amt] + Credit\_card\_transactions[Interest\_Earned]

## Measures

Total\_revenue = sum(Credit\_card\_transactions[Revenue])

Total\_cutomers = count(Customers[Client\_ID])

Total\_delinquent = CALCULATE(COUNT(Customers[Client\_ID]),Credit\_card\_transactions[Delinquent\_Acc]=1)

%\_delinquent = DIVIDE(CALCULATE(COUNT(Credit\_card\_transactions[Delinquent\_Acc]),Credit\_card\_transactions[Delinquent\_Acc]=1),count(Credit\_card\_transactions[Delinquent\_Acc]))

Previous\_Year\_Revenue = CALCULATE([Total\_revenue],  
SAMEPERIODLASTYEAR('Date'[Date]))

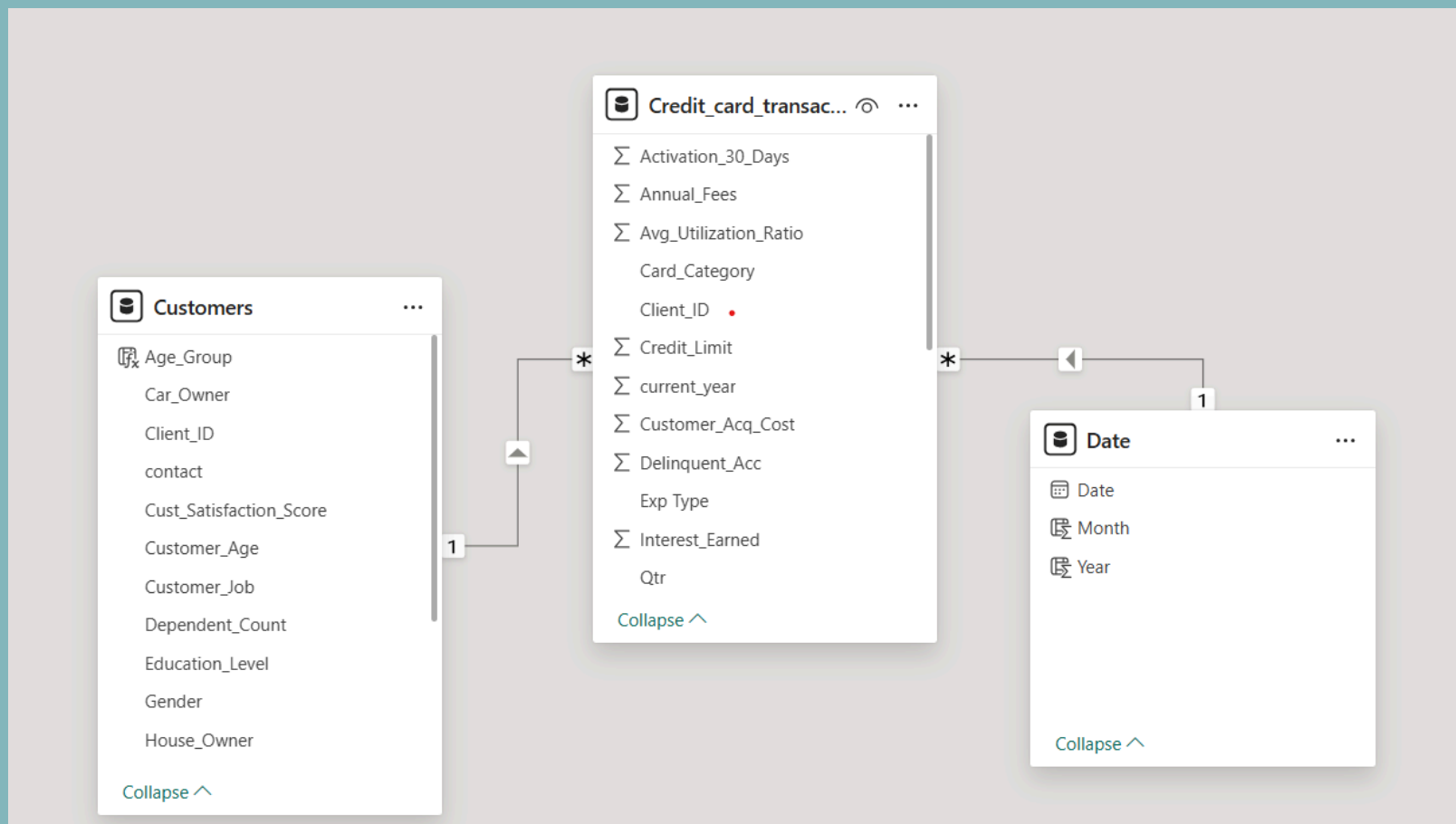
Ytd\_revenue = TOTALYTD([Total\_revenue],'Date'[Date])

## Calculated Table

Date = CALENDAR(min(Credit\_card\_transactions[Week\_Start\_Date]),max(Credit\_card\_transactions[Week\_Start\_Date]))



# Data Model



# Credit Card Transaction Report

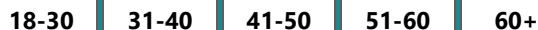
Gender



Delinquent Acc



Age Group



Total Revenue

386.0M

Total Transactions

3M

Total Customers

10.29...

Average Income

57.1K

Satisfaction Score

3.19

93.96%

%\_non\_deli...

6.04%

%\_delinqu...

Income\_Group

low Medium High

Qtr



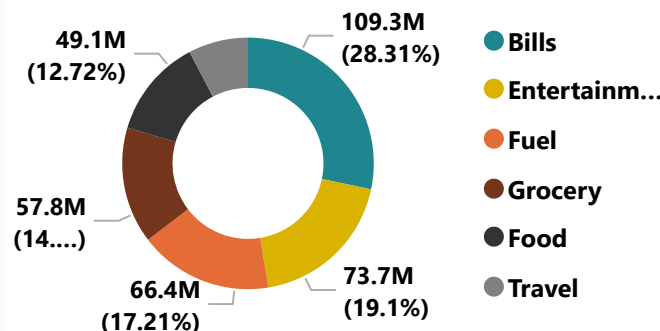
Year	Previous_Year_Revenue	Total_revenue	Annual_Growth_Margin
------	-----------------------	---------------	----------------------

2021		56659404.4	
2022	56659404.4	92005683.9	62.38%
2023	92005683.9	91777162.9	-0.25%
2024	91777162.9	90948497.9	-0.90%
2025	54712052.9	54598636.9	-0.21%

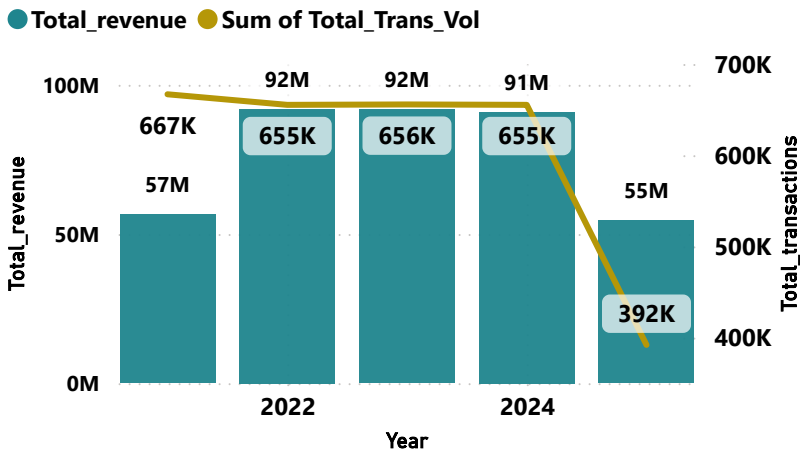
Card_Category	Total_revenue	Sum of Interest_Earned	Interest_%_of_total_revenue
---------------	---------------	------------------------	-----------------------------

Blue	345317676.7	3,06,91,067.68	8.89%
Silver	27402310.8	37,53,039.75	13.70%
Gold	9482725.2	17,46,409.17	18.42%
Platinum	3786673.4	7,66,623.38	20.25%
Total	385989386.0	3,69,57,139.98	9.57%

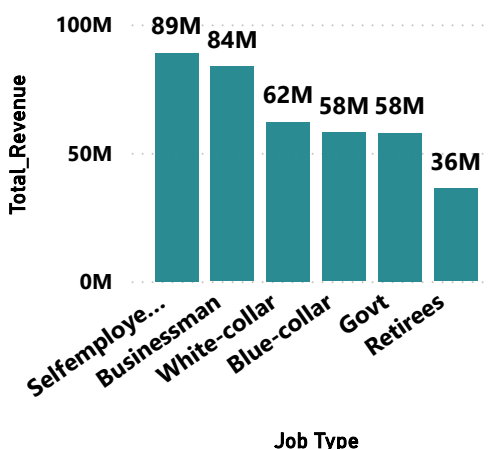
Revenue by Expenditure Type



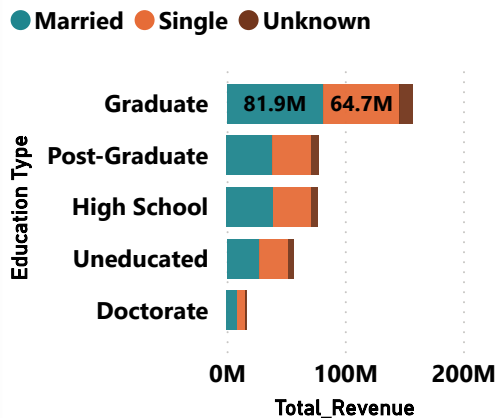
Revenue and Total Transactions by Year



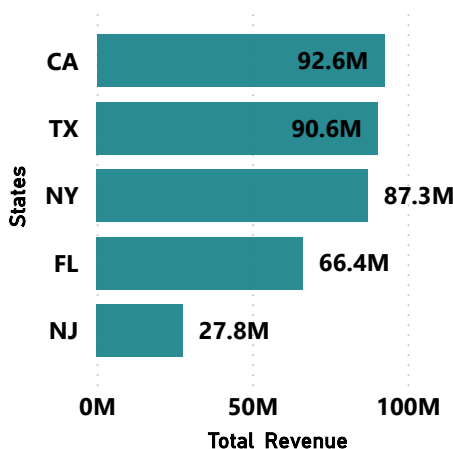
Revenue by Job Type



Revenue by Education Level and Marital Status



Revenue by States





## Insights



### Overall Performance

- 💰 **Total Revenue:** \$386M from **3M transactions** by **10.29K customers**
- 📈 **Annual Growth:** Strong rise in 2022 (+62.38%), then small declines in 2023–2025 (~-0.2% to -0.9%)
- 💳 **Interest Income:** \$36.96M (~9.57% of revenue)
- 🏠 **Fee Income:** \$14M from transactions
- 😊 **Average Satisfaction Score:** 3.19






### Customer Demographics

- 👩 Female customers contribute \$212.9M vs. 👨 Male \$172.9M (females slightly higher satisfaction)
- 🎯 **Age 41–50** group generates the highest revenue
- 💼 **Income Group:** High & low-income segments contribute ~69% of total revenue
- 🎓 **Education:** Graduates & post-graduates contribute ~60%
- 💍 **Marital Status:** Married customers generate ~50% of sales
- 🏢 **Job Type:** Self-employed, businessmen, and white-collar workers make up ~60% of revenue





## Insights



### Product & Spending Patterns

-  **Card Usage:** Blue & Silver credit cards account for ~96% of all transactions
-  **Top Spending Categories:** Bills, Entertainment, and Food (~60% of revenue)
-  **Lowest Spending Categories:** Grocery & Travel

### Geographic Distribution







-  **Top States:** CA, TX, NY generate ~70% of revenue
-  **Lowest Revenue States:** OH, NE, OR

### Risk & Engagement

-  **Delinquency Rate:** 6.04% overall; highest among self-employed females
-  **Card Activation Rate** – 57.38% of customers activate their credit card within the first month after it is issued by the company.



## Recommendations

-  **Focus on High-Value Segments** — Target campaigns at age 41–50, female customers, and high-income earners.
-  **Upsell Premium Cards** — Offer benefits to shift Blue/Silver users to Gold/Platinum tiers.
-  **Geographic Optimization** — Strengthen presence in California, Texas, New York; develop growth strategies for Ohio, Nebraska, Oregon.
-  **Spend-Boost Promotions** — Expand offers in Bills, Entertainment, and Food; create incentives for Grocery and Travel.
-  **Delinquency Mitigation** — Introduce repayment plans and reminders for high-risk segments (self-employed females).
-  **Reverse Revenue Decline** — Launch retention offers and credit usage benefits to recover post-2022 drop.