

# CREDIT CARD FINANCIAL REPORT

Using SQL & Power BI

# PROJECT OVERVIEW

## Project Objective:

- To analyze customer behavior and transaction patterns for credit card services.
- Identify key revenue drivers, customer satisfaction trends, and credit card usage patterns.

## Tools Used:

- PostgreSQL for data storage and querying.
- Power BI for data visualization and reporting.



# STEPS FOR DATA PREPARATION AND IMPORT

1

In SQL, create a new database then prepare CSV files : credit\_card.csv and customer.csv.

2

Create tables in SQL : cc\_detail (credit card details) and cust\_detail (customer details).

3

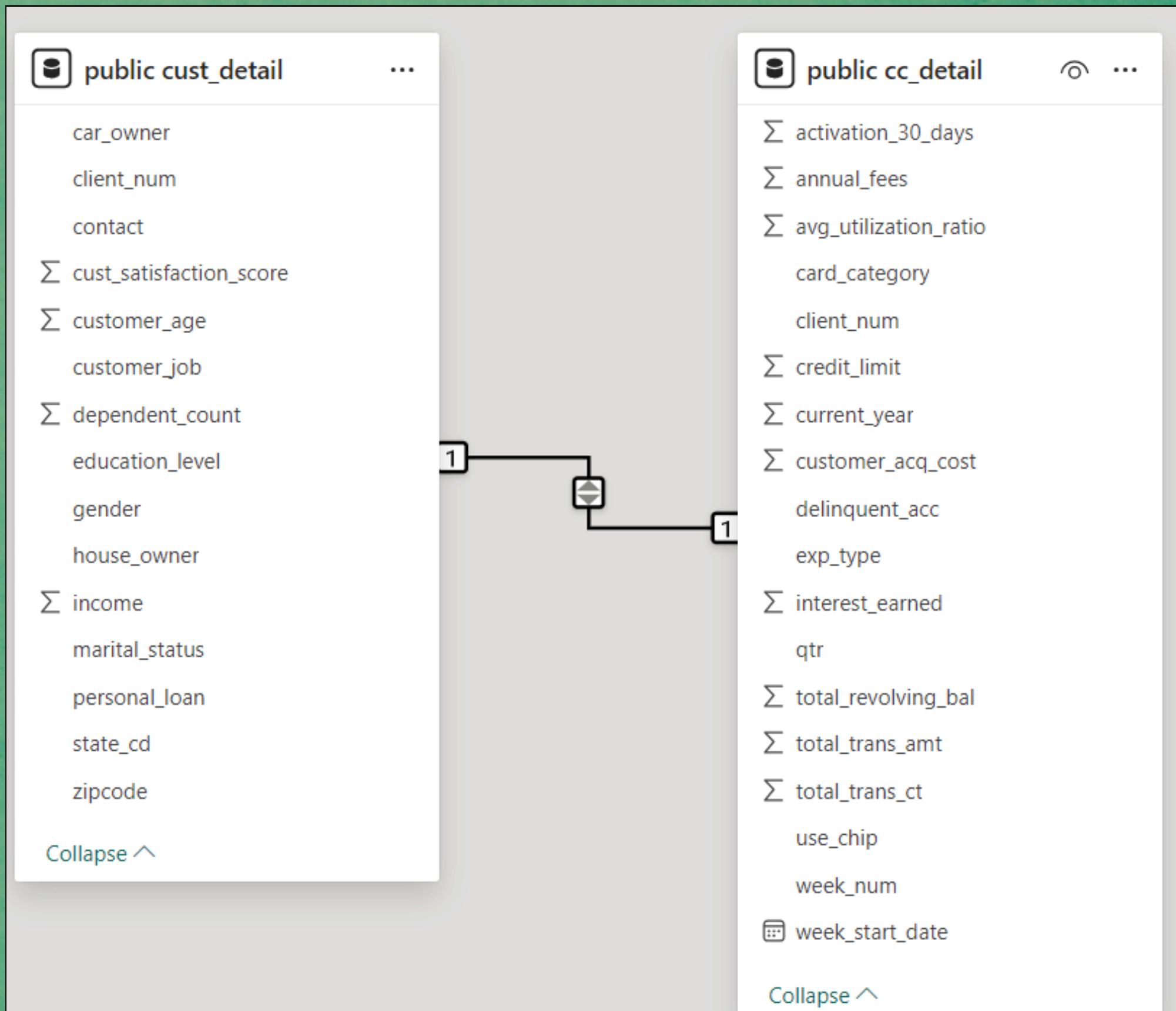
COPY command used to import data from CSV files into PostgreSQL tables.

4

After this using Get Data, load the dataset from PostgreSQL to Power BI.



# MODEL VIEW



# DAX QUERIES AND CALCULATIONS

```
IncomeGroup = SWITCH(  
    TRUE(),  
    'public cust_detail'[income] < 35000, "Low",  
    'public cust_detail'[income] >= 35000 && 'public cust_detail'[income] < 70000, "Med",  
    'public cust_detail'[income] >= 70000, "High",  
    "unknown"  
)
```

```
AgeGroup = SWITCH(  
    TRUE(),  
    'public cust_detail'[customer_age] < 30, "20-30",  
    'public cust_detail'[customer_age] >= 30 && 'public cust_detail'[customer_age] < 40, "30-40",  
    'public cust_detail'[customer_age] >= 40 && 'public cust_detail'[customer_age] < 50, "40-50",  
    'public cust_detail'[customer_age] >= 50 && 'public cust_detail'[customer_age] < 60, "50-60",  
    'public cust_detail'[customer_age] >= 60, "60+",  
    "unknown"  
)
```

# DAX QUERIES AND CALCULATIONS

```
wow_revenue = DIVIDE(([Current_week_Revenue]-[Previous_week_Revenue]),  
[Previous_week_Revenue])
```

```
Revenue = 'public cc_detail'[annual_fees] +  
'public cc_detail'[total_trans_amt] +  
'public cc_detail'[interest_earned]
```

```
Current_week_Revenue = CALCULATE(  
    SUM('public cc_detail'[Revenue]),  
    FILTER(  
        ALL('public cc_detail'),  
        'public cc_detail'[week_num2]= MAX('public cc_detail'[week_num2])))
```

```
Previous_week_Revenue = CALCULATE(  
    SUM('public cc_detail'[Revenue]),  
    FILTER(  
        ALL('public cc_detail'),  
        'public cc_detail'[week_num2]= MAX('public cc_detail'[week_num2])))
```

# Credit Card Transaction Report

Q4 Q3 Q2 Q1

Week Start Date

1/1/2023 12/24/2023

Total Revenue

55M

Txn Amount

45M

Annual Fees

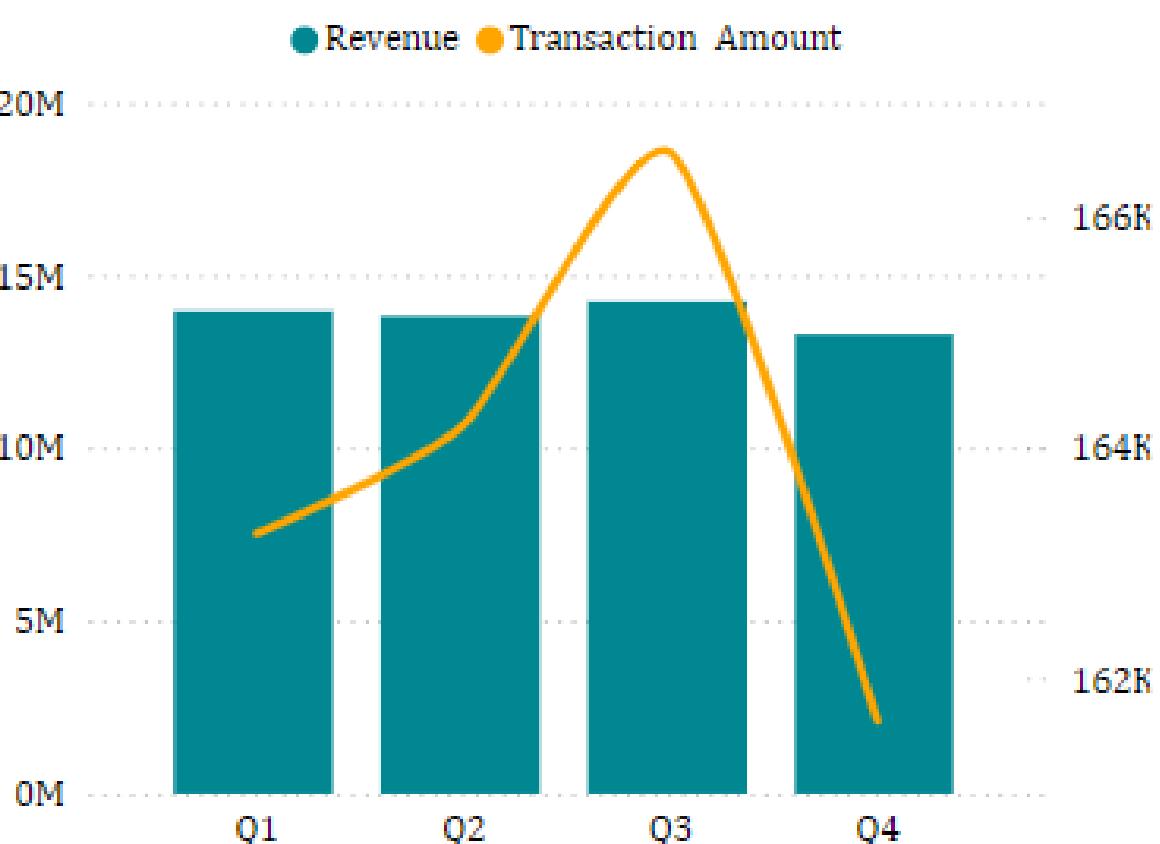
3M

Total Interest

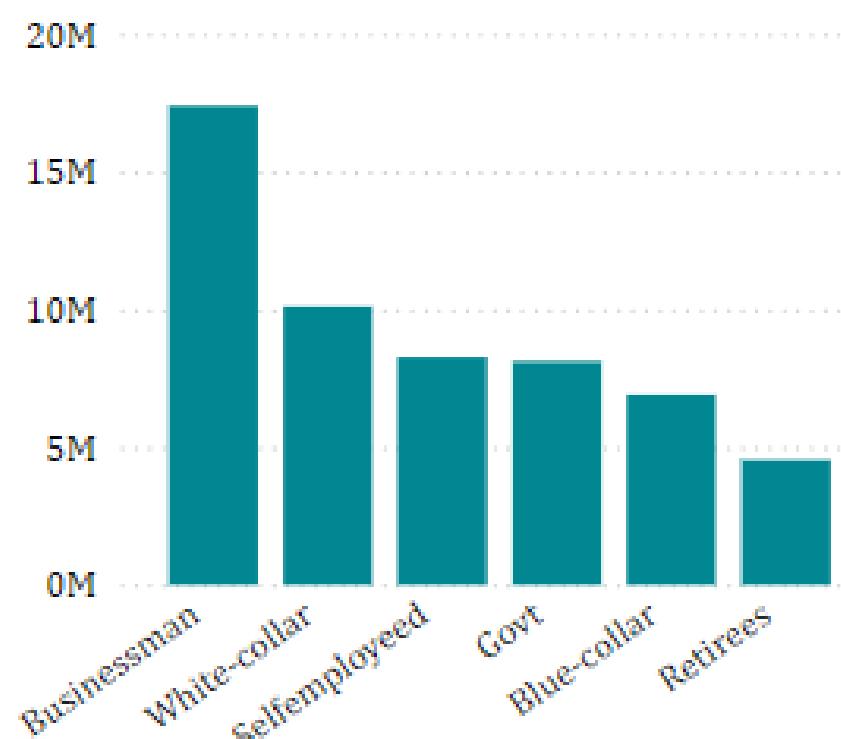
7.8M

Card Category	Revenue	Transaction Amount	Total Interest Earned
Platinum	1,135,608	953,314	161629.1
Gold	2,454,072	2,024,078	373784.2
Silver	5,586,332	4,586,746	812081.3
Blue	46,139,398	36,957,875	6495887.7
<b>Total</b>	<b>55,315,410</b>	<b>44,522,013</b>	<b>7843382.2</b>

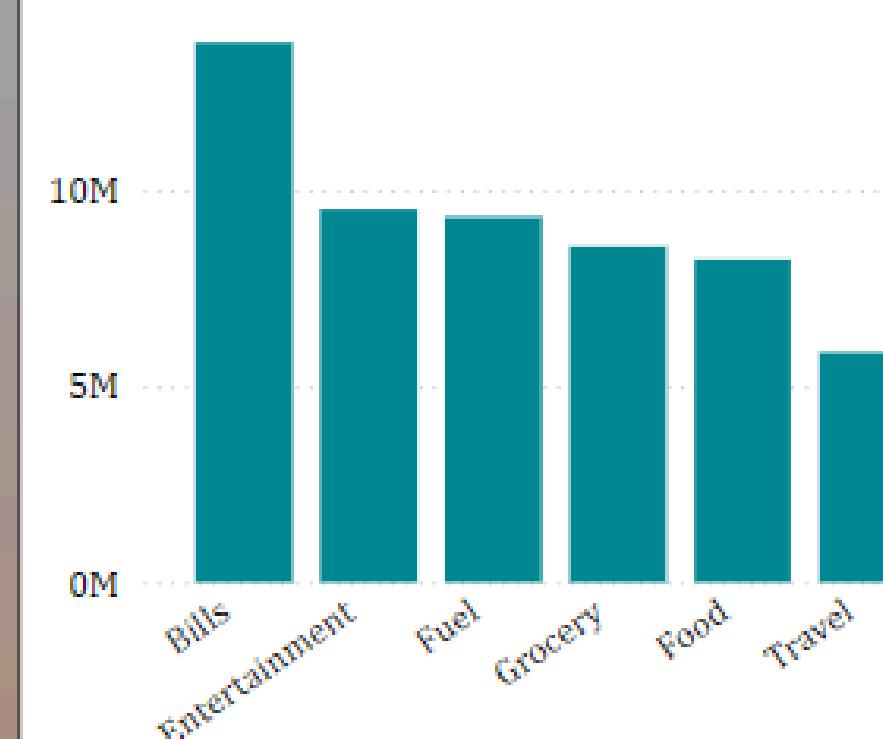
## Qtr Revenue & Total Trans Count



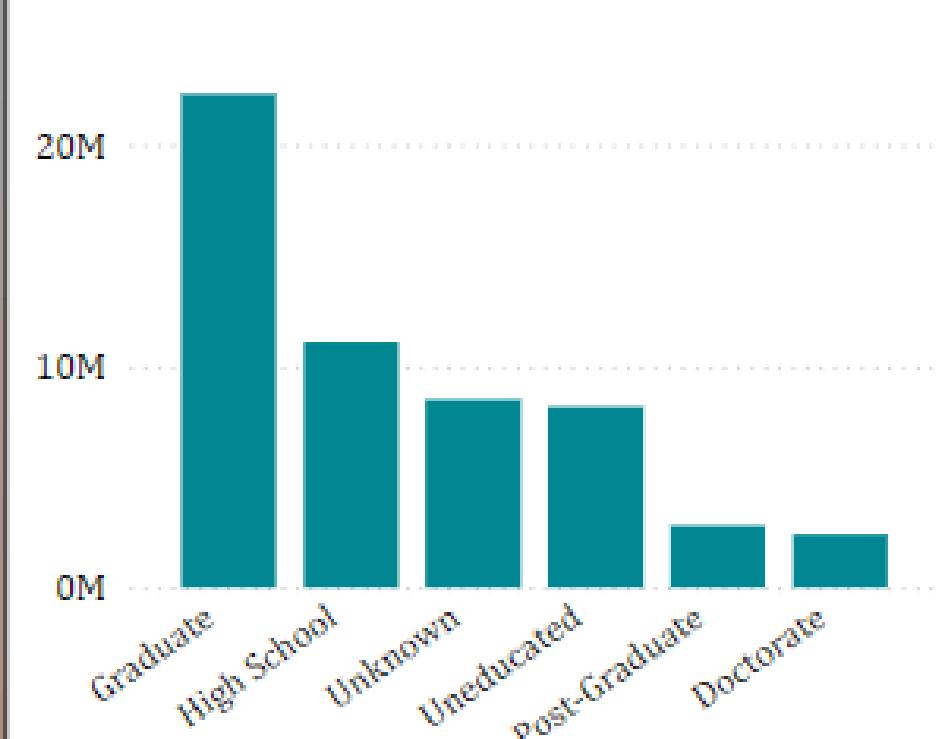
## Revenue by Customer Job



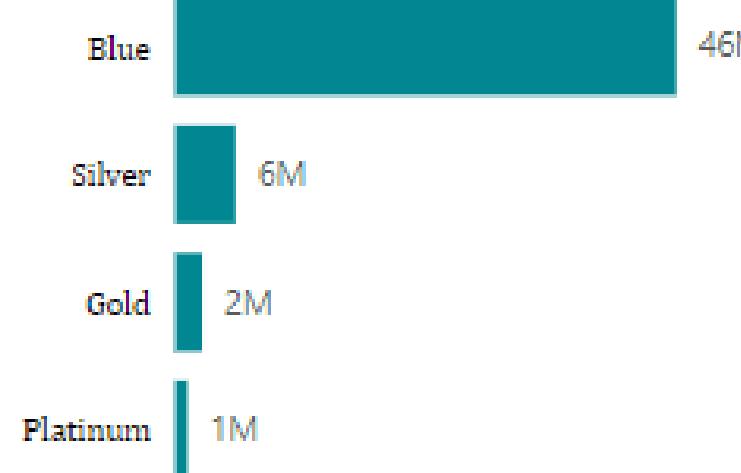
## Revenue by Expenditure Type



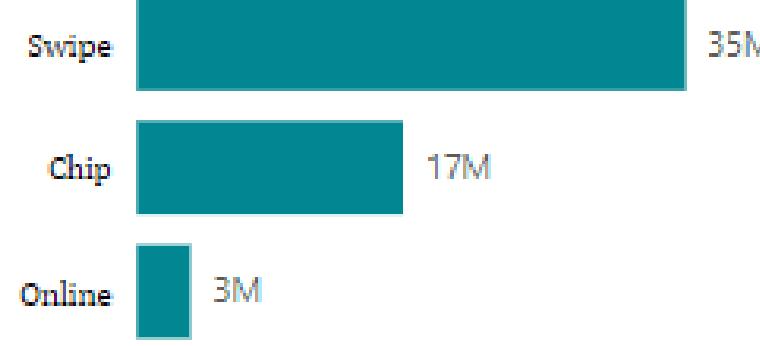
## Revenue by Education



## Revenue by Card Category



## Revenue by Use Chip



# Credit Card Customer Report

Week Start Date

All

Revenue

55M

Total Interest

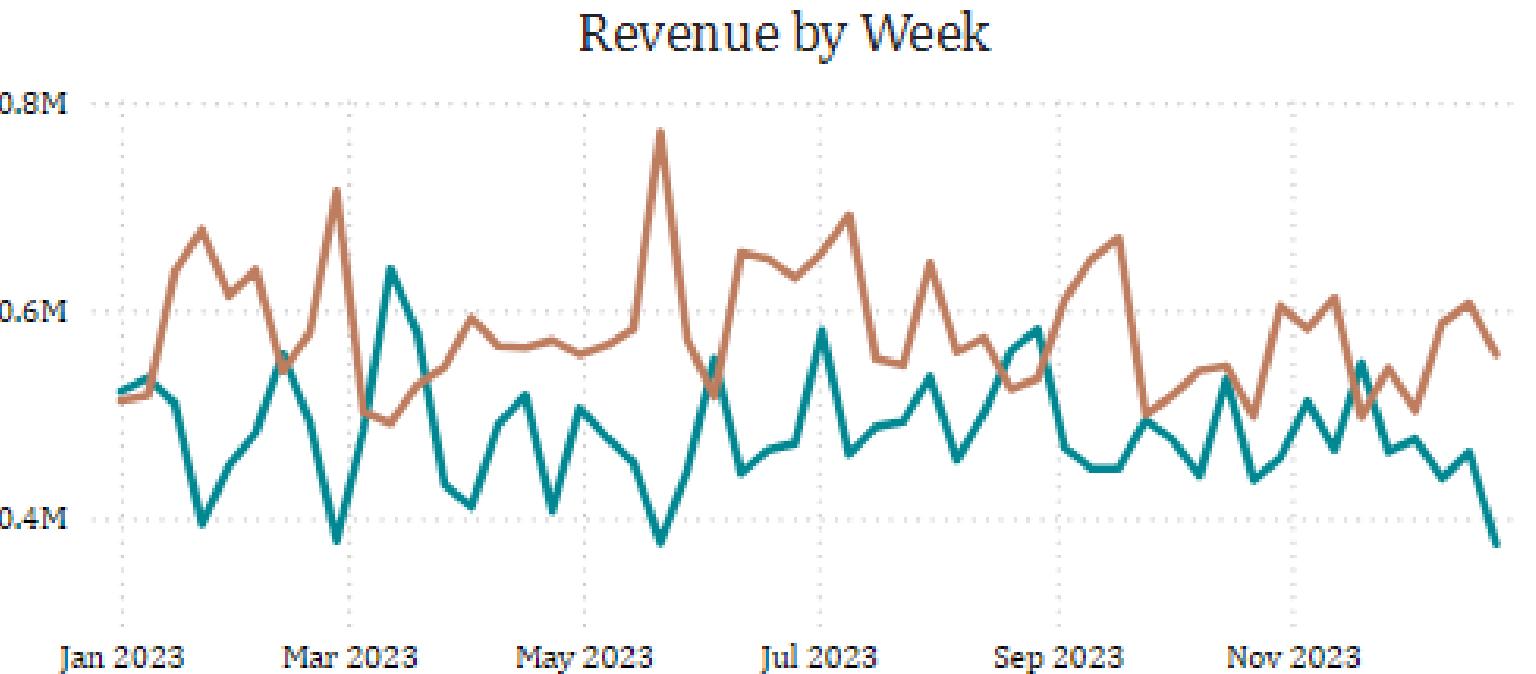
7.8M

Total Income

576M

CSS

3.19



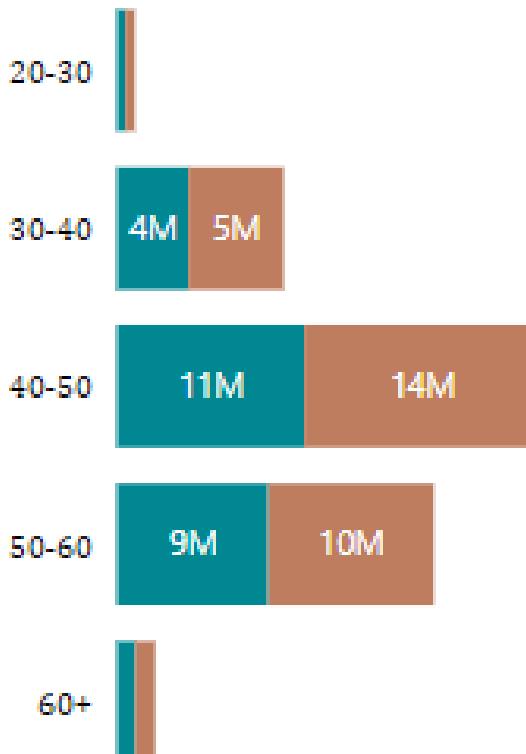
Q4

Q3

Q2

Q1

### Revenue by Age Group



M

30M

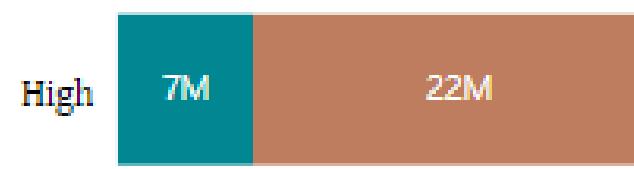
F

25M

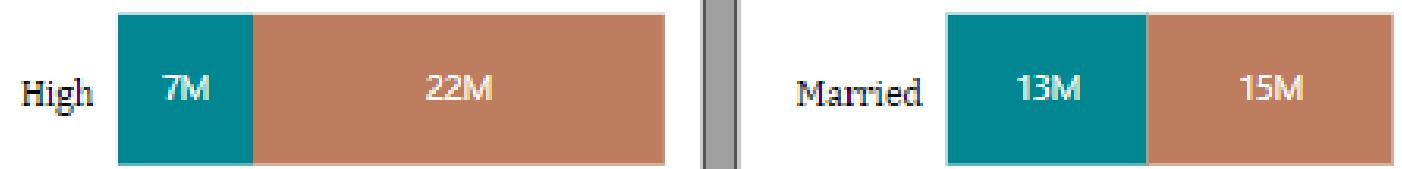
### Customer Job

Customer Job	Revenue	Transaction Amt	Total Income
Retirees	4,535,184	3,623,120	48,675,030
Blue-collar	6,904,279	5,488,838	72,262,158
Govt	8,111,701	6,507,875	88,773,989
Self-employed	8,261,758	6,395,026	75,313,288
White-collar	10,114,656	8,221,742	103,930,055
Businessman	17,387,832	14,285,412	186,959,919
<b>Total</b>	<b>55,315,410</b>	<b>44,522,013</b>	<b>575,914,439</b>

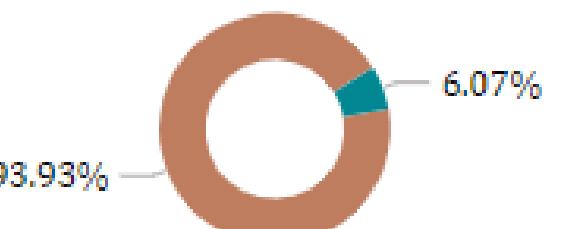
### Salary Group



### Marital Status



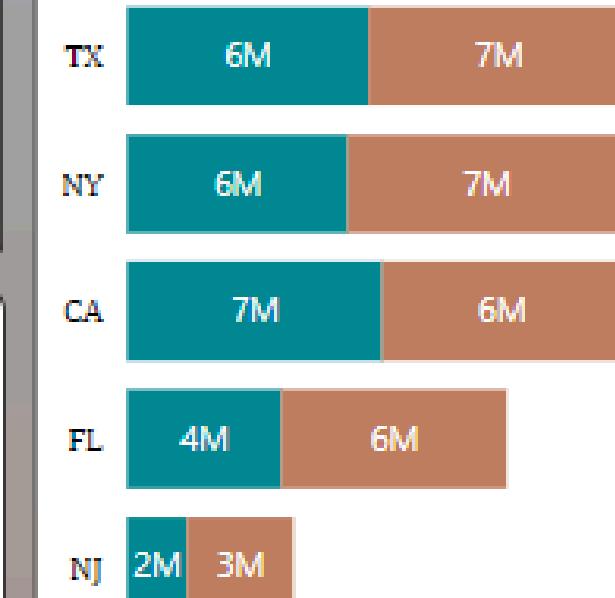
### Delinquent Amount



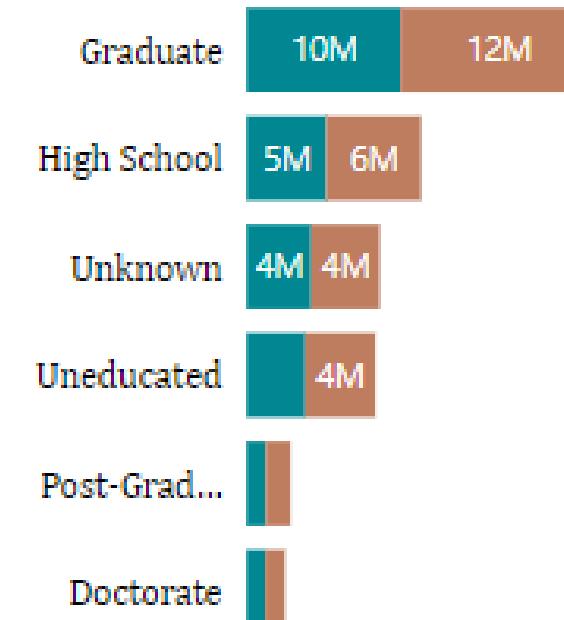
### Activation Amount



### Top 5 States



### Revenue by Education



# INSIGHTS

## Customer Report

- Overall revenue spikes during Q2/Q3, indicating peak spending periods.
- The 50-60 age group, businessmen, and white-collar professionals contribute the most revenue.
- Males, high-income earners, and married individuals generate the majority of revenue.
- Delinquency is low (93.93%), but the activation rate (57.47%) can be improved.
- Texas, New York, and California are the top revenue-generating states.

## Transaction Report

- Blue cards dominate with 46M in revenue and 44M transactions.
- Q2 and Q3 have the highest revenue, reflecting seasonal spending trends.
- Swipe payments are the most common, with potential to increase chip usage.
- Bills, entertainment, and groceries are the top expenditure categories.
- Businessmen, white-collar workers, and graduates contribute the highest revenue

# THANK YOU