

Credit Card Transaction Report

Q4

Q3

Q2

Q1

Week

All

57M

46M

8M

667K

Revenue

Amount

Interest Earned

Count

Gold

Silver

Blue

Platinum

F

M

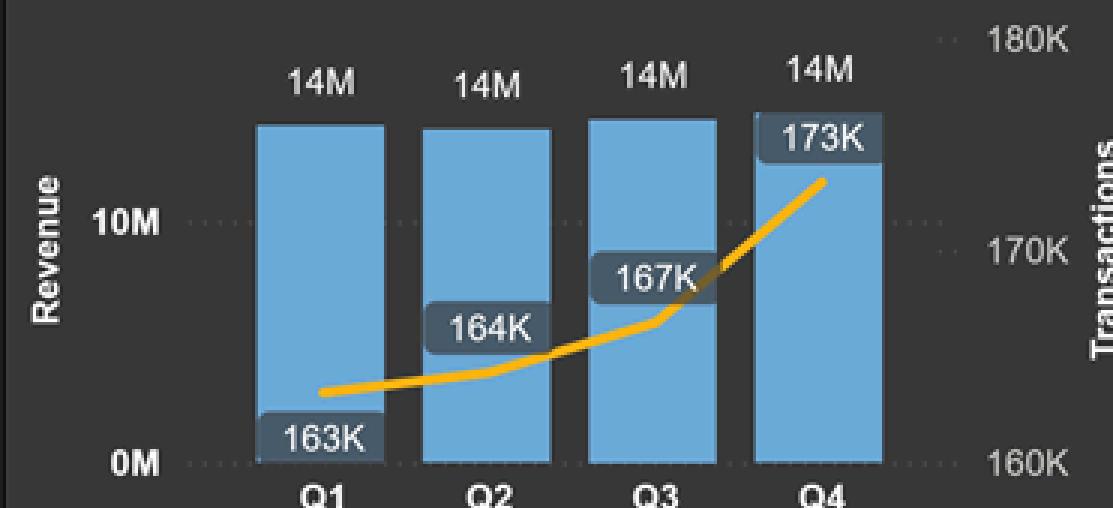
Card Category Revenue Total Transaction Interest Earned

▼

Card Category	Revenue	Total Transaction	Interest Earned
Silver	5659109	4647596	821923
Platinum	1135608	953314	161629
Gold	2533682	2091362	384755
Blue	47188612	37840749	6614173
Total	56517011	45533021	7982480

Revenue Total Transaction

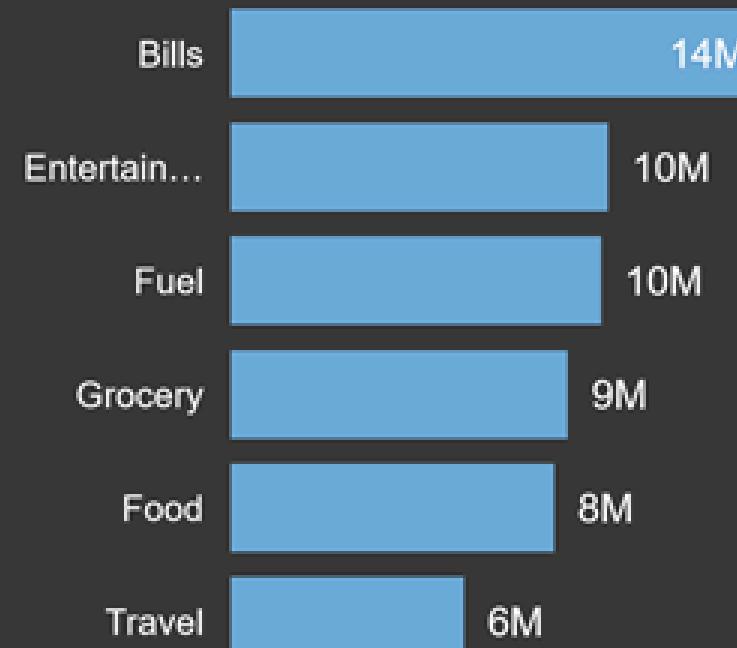
● Sum of Revenue ● Sum of total_trans_ct



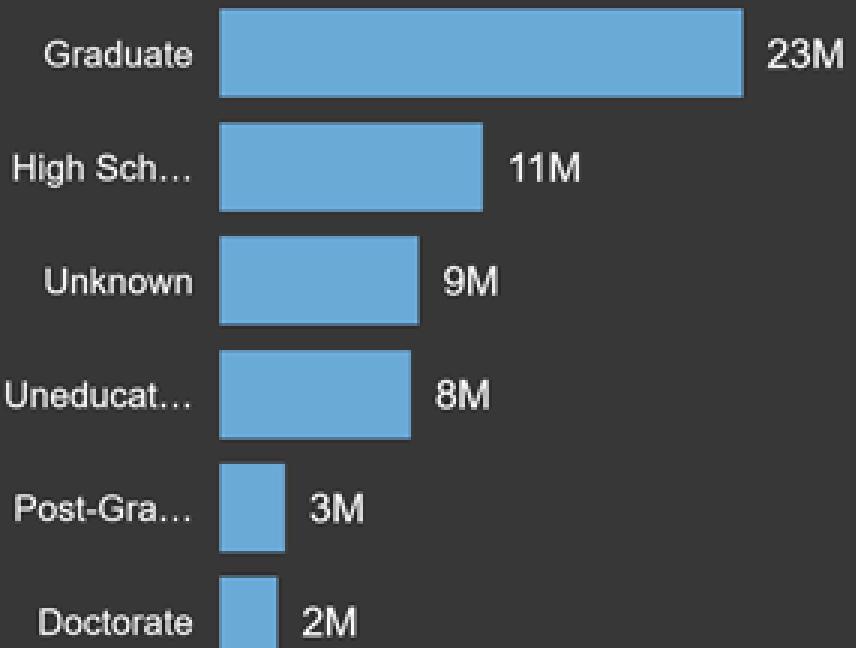
Revenue by Chip Use

Swipe	36M
Chip	17M
Online	4M

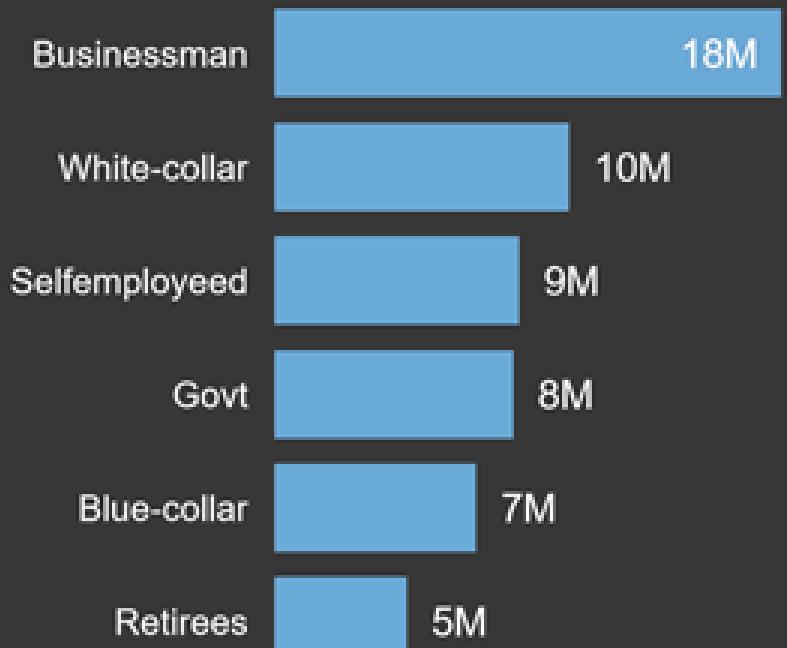
Revenue by Expenditure



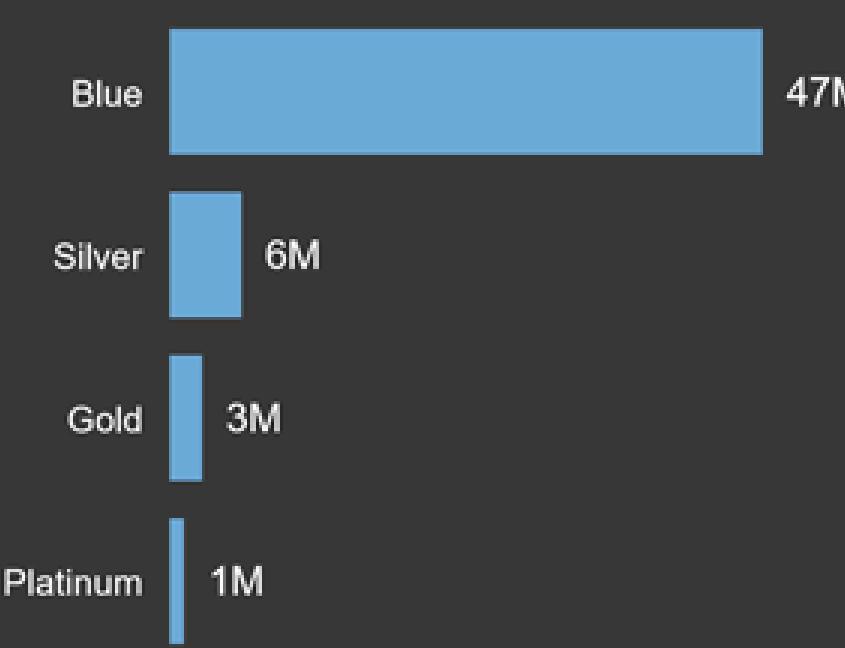
Revenue by Education



Revenue by Customer Job



Revenue by Card Category



Credit Card Customer Report

Q4

Q3

Q2

Q1

Week

All

57M

Revenue

588M

Income

8M

Interest Earned

3.19

CSS

Revenue by Age Group

20-30

30-40

40-50

50-60

60+

M

31M

F

26M

Gold

Silver

Blue

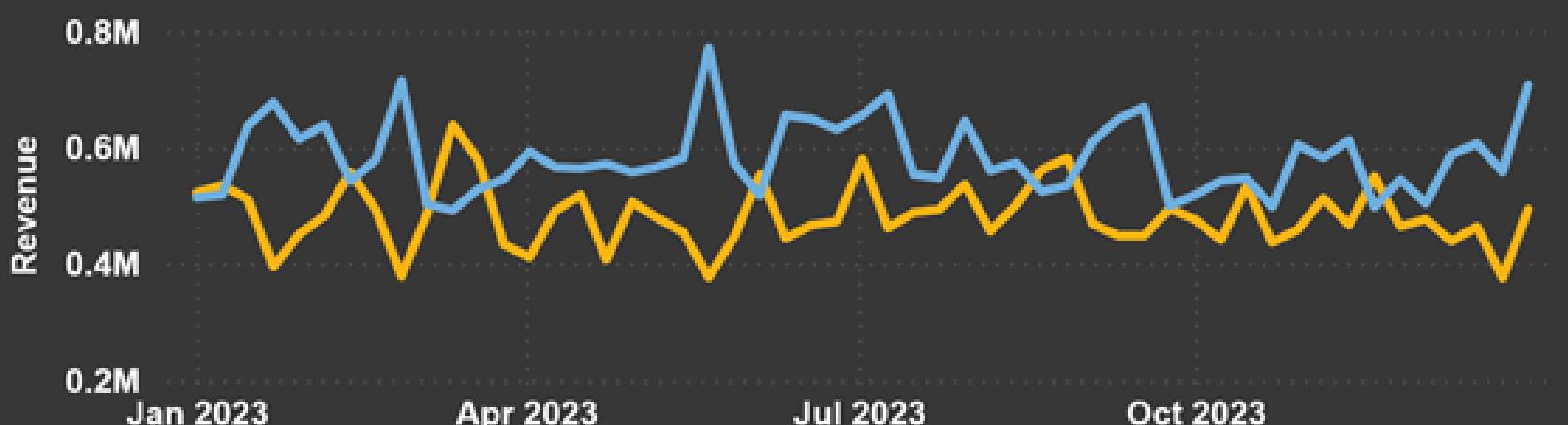
Platinum

Swipe

Online

Chip

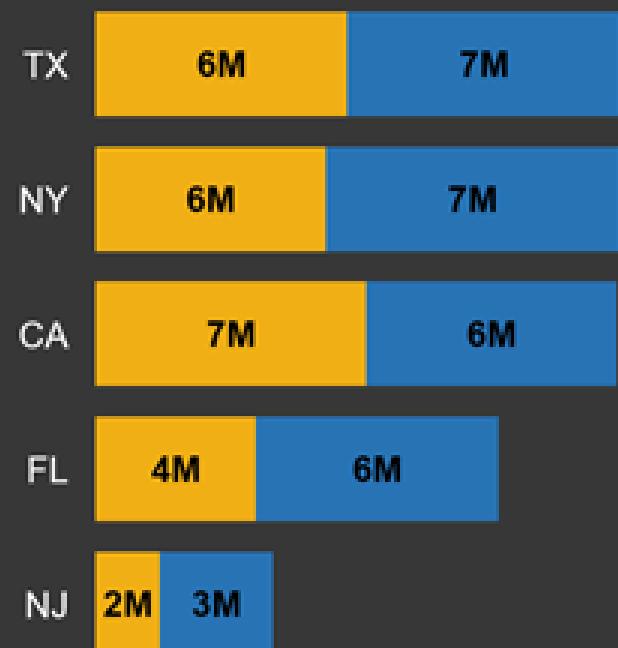
Revenue By Week



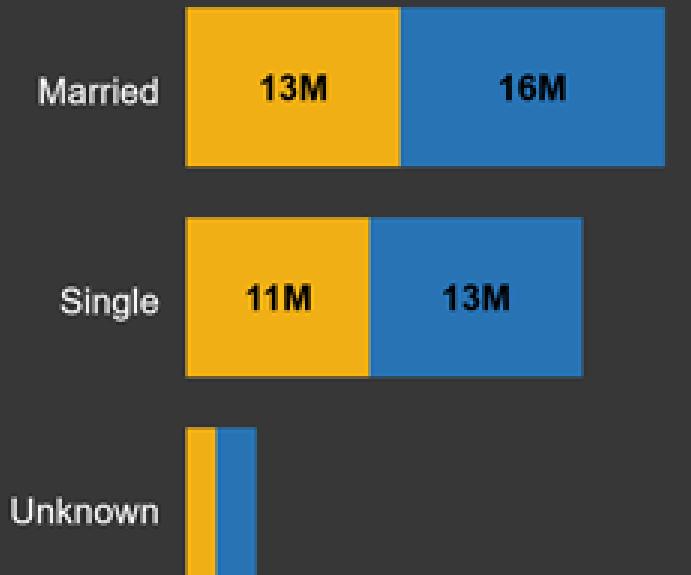
Customer Job Revenue Income Interest earned

Customer Job	Revenue	Income	Interest earned
White-collar	10283124	105618475	1464691
Selfemployed	8542826	77659931	1141510
Retirees	4617448	49619308	641692
Govt	8335534	90834727	1182231
Businessman	17697472	190350431	2584604
Blue-collar	7040606	73516911	967751
Total	56517011	587599783	7982480

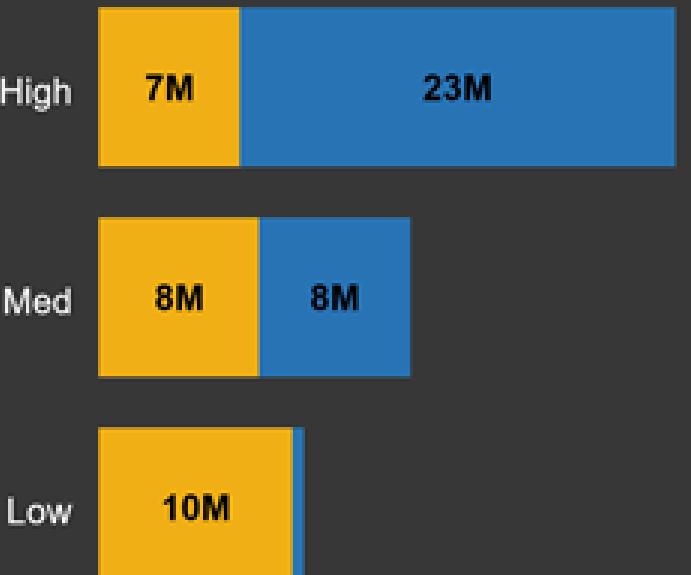
Top 5 States



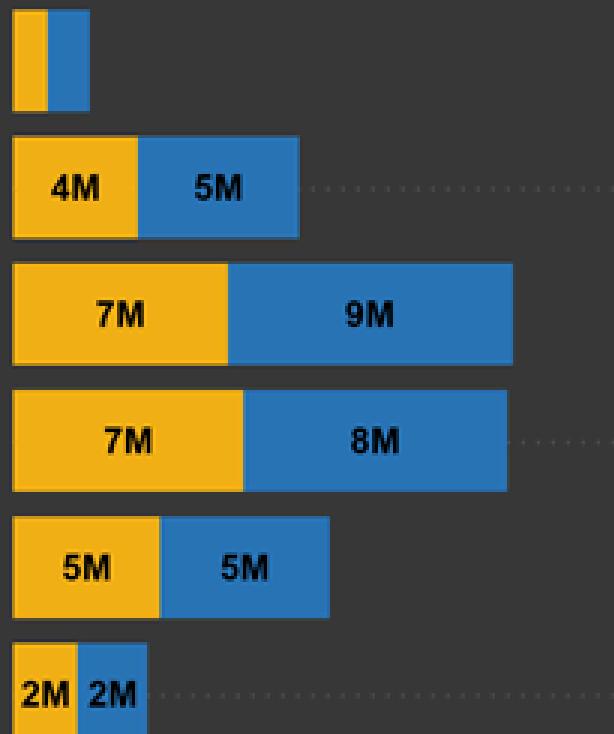
Revenue by Marital Status



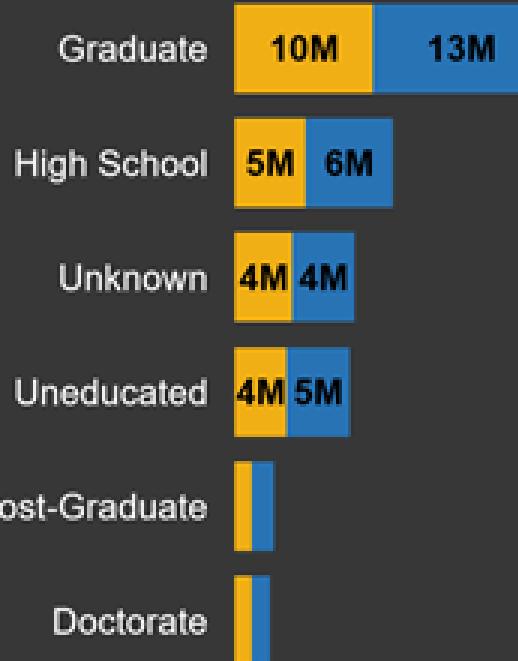
Revenue by Income Group



Revenue by Dependent



Revenue by Education



CREDIT CARD FINANCIAL REPORT

01 January 2023 - 31 December 2023

INTRODUCTION

To develop an interactive and dynamic credit card dashboard that provides real-time insights into key performance metrics and customer behaviors for the year 2023. Initially, the dashboard was built with data from the first 52 weeks, but after completing the initial version, the 53rd week's data was added in SQL. With the Power BI dashboard linked to SQL, a simple refresh seamlessly integrated the new data, keeping the insights up-to-date. This project aims to empower stakeholders with actionable data, enabling them to monitor, analyze, and optimize credit card operations effectively throughout the year.



CONTENTS

DATA CLEAN FROM SQL

CONNECT SQL TO POWER BI

DATA PROCESSING & DAX

INSIGHTS FROM DASHBOARD



DATA CLEAN FROM SQL

- Imported raw data into SQL from CSV files.
- Validated data for accuracy and consistency.
- Standardized and transformed data fields for uniformity.
- Calculated additional fields to enhance analysis.
- Addressed and corrected outliers.
- Prepared clean, structured data for visualization in Power BI.



CONNECT SQL TO POWER BI

- Established a connection between SQL Server and Power BI.
- Imported cleaned and processed data from SQL tables into Power BI.
- Configured data relationships and optimized data models for analysis.
- Enabled seamless data updates by linking Power BI to the SQL database.
- Refreshed Power BI dashboard to automatically include newly added data (e.g., 53rd week).



DATA PROCESSING & DAX QUERIES

- **AgeGroup DAX Query:** Categorizes customers into age groups (20-30, 30-40, 40-50, 50-60, 60+) to facilitate demographic analysis.

```
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" )
```

DATA PROCESSING & DAX QUERIES

- **IncomeGroup DAX Query:** Segments customers' income into Low, Medium, and High brackets, allowing for targeted financial insights.

```
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"  
)
```



DATA PROCESSING & DAX QUERIES

- **Week Number DAX Query:** Calculates the week number from the start date to support time-based analysis.

```
week_num2 = WEEKNUM('public cc_detail'[week_start_date])
```

- **Revenue DAX Query:** Computes total revenue by summing annual fees, transaction amounts, and interest earned, enabling financial performance tracking.

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

DATA PROCESSING & DAX QUERIES

- **Current Week Revenue DAX Query:** Calculates the total revenue for the most recent week, providing up-to-date financial insights.

```
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])))
```

DATA PROCESSING & DAX QUERIES

- **Previous Week Revenue DAX Query:** Computes the total revenue for the previous week, enabling week-over-week performance comparison.

```
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])-1))
```



INSIGHTS

YEAR-TO-DATE (YTD) OVERVIEW:

- **TOTAL REVENUE:** \$57 MILLION FOR THE YEAR.
- **INTEREST EARNED:** \$8 MILLION.
- **TOTAL TRANSACTION AMOUNT:** \$46 MILLION.
- **CUSTOMER BREAKDOWN:** MALE CUSTOMERS CONTRIBUTED \$31 MILLION IN REVENUE, WHILE FEMALE CUSTOMERS CONTRIBUTED \$26 MILLION.
- **CARD TYPE CONTRIBUTIONS:** BLUE AND SILVER CREDIT CARDS ACCOUNTED FOR 93% OF OVERALL TRANSACTIONS.
- **GEOGRAPHIC DISTRIBUTION:** TEXAS (TX), NEW YORK (NY), AND CALIFORNIA (CA) TOGETHER CONTRIBUTED 68% OF THE TOTAL REVENUE.
- **ACTIVATION RATE:** OVERALL ACTIVATION RATE WAS 57.5%.
- **DELINQUENT RATE:** OVERALL DELINQUENCY RATE WAS 6.06%.



INSIGHTS

WEEK 53 (DECEMBER 31, 2023):

- **REVENUE INCREASE:** REVENUE GREW BY 28.8% COMPARED TO THE PREVIOUS WEEK.
- **TRANSACTION METRICS:** TOTAL TRANSACTION AMOUNT AND COUNT ALSO SAW SIGNIFICANT INCREASES.
- **CUSTOMER GROWTH:** THERE WAS AN INCREASE IN THE NUMBER OF CUSTOMERS.

“

THE INSIGHTS SHOW STRONG REVENUE GROWTH AND INCREASED ENGAGEMENT, WITH NOTABLE CONTRIBUTIONS FROM KEY REGIONS AND CARD TYPES. ACTIVATION RATES ARE POSITIVE, BUT THE DELINQUENCY RATE NEEDS ATTENTION.

THANK YOU!

**Thank you for your time and attention. Please
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