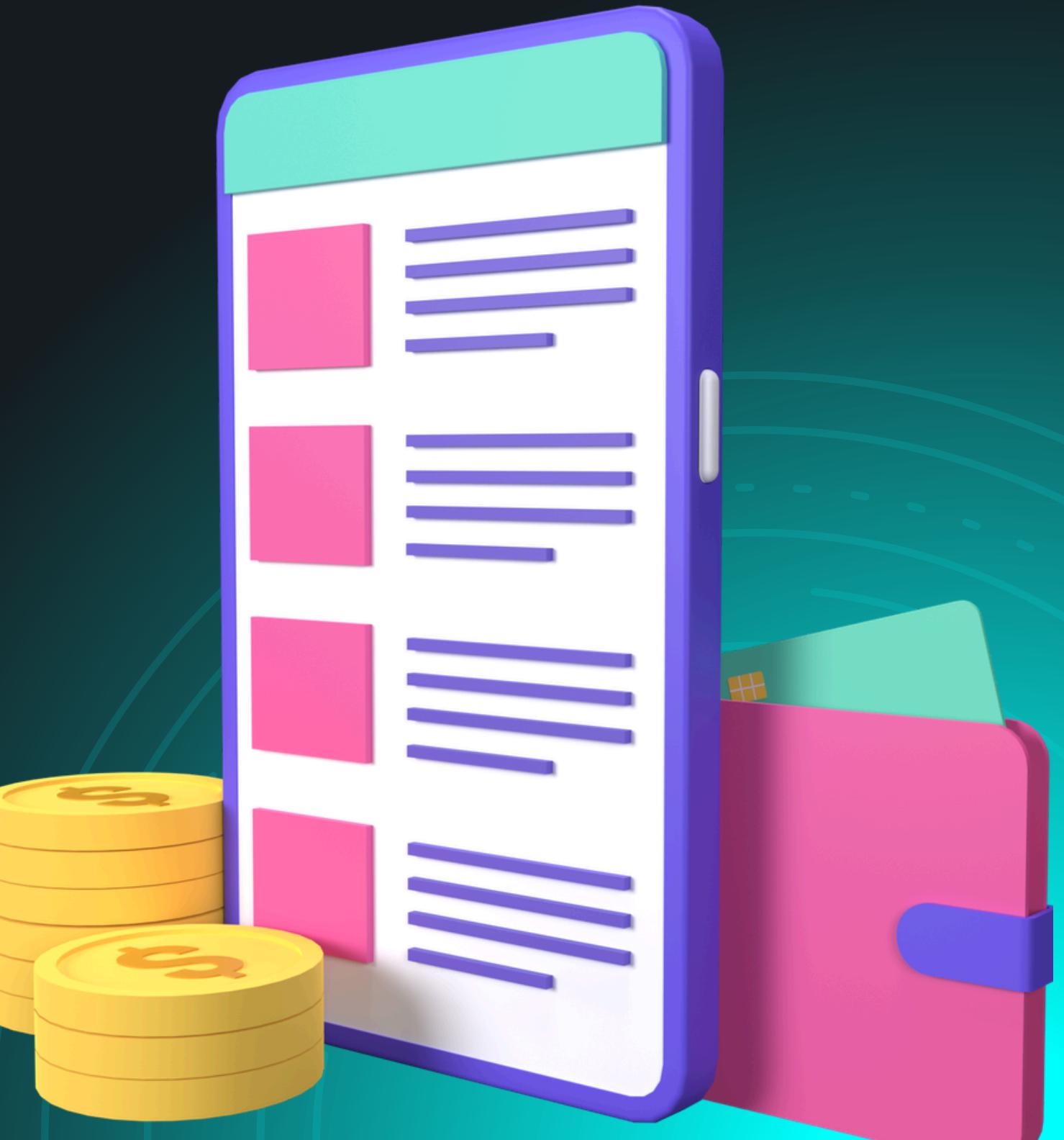


Power BI Analytics Dashboard Project:

Credit Card Weekly Status Report



Project Objective

The objective of this project was to create an interactive Power BI reporting solution to provide real-time insights into credit card operations. The dashboard allows stakeholders to monitor key performance indicators (KPIs) such as revenue, transaction volumes, and customer demographics to drive strategic business decisions.



Dashboard Structure

The project is divided into two comprehensive views:

1. Transaction Dashboard: Provides a macro view of financial performance. It tracks total revenue, interest, and transaction counts, with breakdowns by card type (Blue, Silver, Gold, Platinum) and expenditure categories (e.g., Bills, Entertainment, Fuel).

2. Customer Dashboard: Focuses on the "who" behind the transactions. It segments customers by age, gender, education, and income level to identify the most profitable demographics.



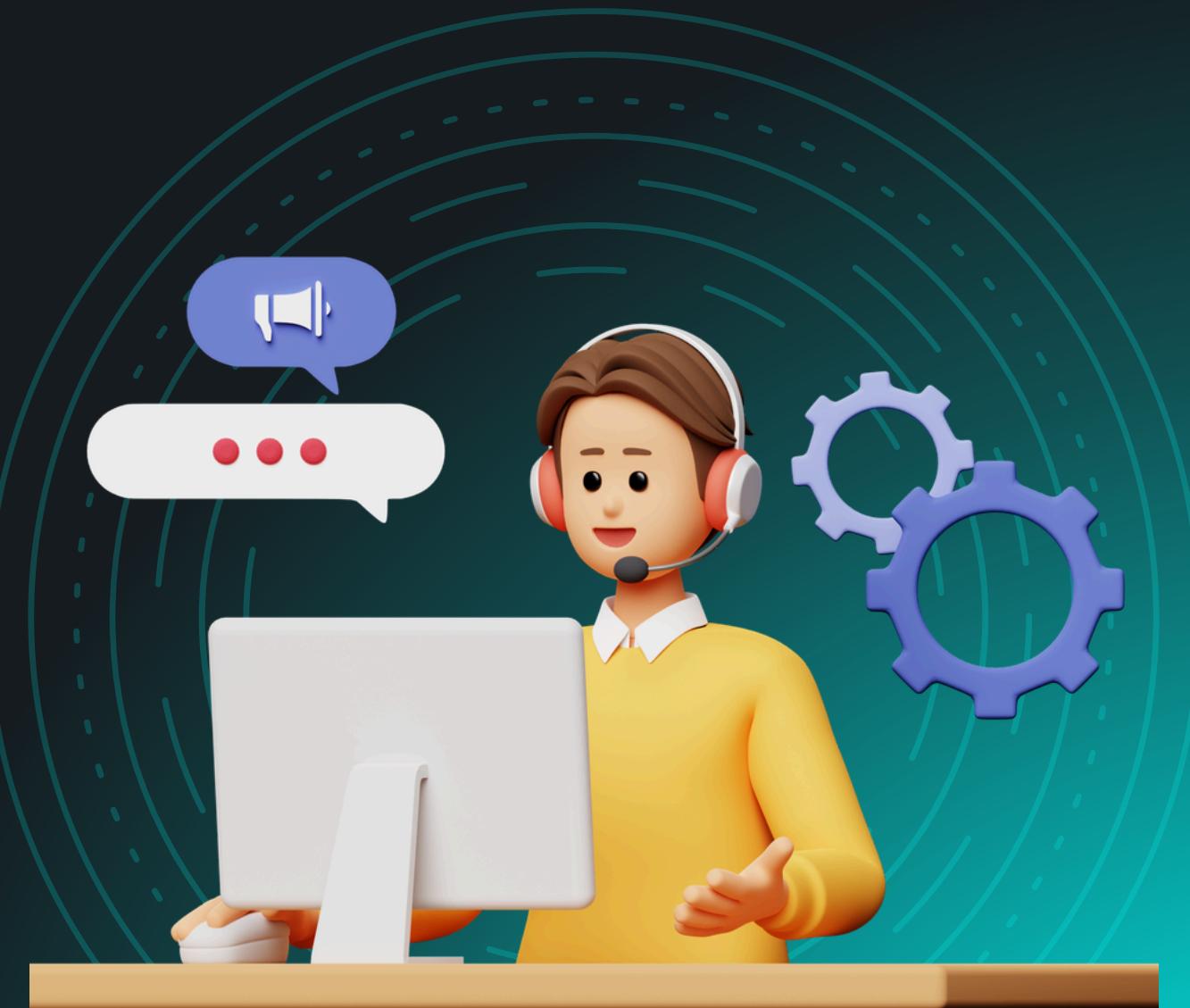
Technical Approach

1. ETL & Data Cleaning (Power Query):

- Imported raw datasets (CSV/Excel) directly into Power BI.
- Performed data profiling to identify nulls and inconsistencies.
- Created age groups (e.g., 20-30, 30-40) and income tiers.
- Applied data type formatting and replaced values to ensure data accuracy.

2. **Data Modeling:** Developed a cohesive data model by establishing relationships between the Customer and CreditCard tables.

3. **DAX Measures:** Developed sophisticated DAX formulas to calculate business-critical metrics:



DAX Queries

```
AgeGroup = SWITCH(  
    TRUE(),  
    'customer'[Customer_Age] < 30, "20-30",  
    'customer'[Customer_Age] >= 30 && 'customer'[Customer_Age] < 40, "30-40",  
    'customer'[Customer_Age] >= 40 && 'customer'[Customer_Age] < 50, "40-50",  
    'customer'[Customer_Age] >= 50 && 'customer'[Customer_Age] < 60, "50-60",  
    'customer'[Customer_Age] >= 60, "60+",  
    "unknown"  
)  
  
IncomeGroup = SWITCH(  
    TRUE(),  
    'customer'[Income] < 35000, "Low",  
    'customer'[Income] >= 35000 && 'customer'[Income] < 70000, "Med",  
    'customer'[Income] >= 70000, "High",  
    "unknown"  
)
```



DAX Queries

```
WoW_Revenue = DIVIDE(([Curr_Week_Revenue] - [Previous_Week_Revenue]), [Previous_Week_Revenue])
```

```
Week_Num2 = WEEKNUM('CreditCard'[Week_Start_Date])
```

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

```
Curr_Week_Revenue = CALCULATE(  
    SUM('CreditCard'[Revenue]),  
    FILTER(  
        ALL('CreditCard'),  
        'CreditCard'[Week_Num2] = MAX('CreditCard'[Week_Num2])))
```

```
Previous_Week_Revenue = CALCULATE(  
    SUM('CreditCard'[Revenue]),  
    FILTER(  
        ALL('CreditCard'),  
        'CreditCard'[week_num2] = MAX('CreditCard'[week_num2])-1))
```



Project Insights - Week 53 (31st Dec)

WoW change:

- Revenue increased by 28.8%,
- Total Transaction Amt & Count increased by 35.1% & 3.39%
- Customer count increased by 8.9%

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%

