CREDIT CARD

WEEKLY
STATUS REPORT

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Project Objective:

To analyze the performance and trends related to credit card usage among various customer segments. The reports provide insights into revenue generation, customer demographics, transaction types, and card categories.

End-to-End Data Integration: From CSV to Power BI

❑ **Prepare the CSV File**: Generate a CSV file with the required data.

❑ **Create SQL Tables**: Define and create the necessary SQL tables.

❑ **Import CSV File into SQL Tables**: Load the data from the CSV file into the SQL tables.

❑ **Import SQL Tables into Power BI**: Connect Power BI to the SQL database and import the data for visualization and analysis.

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")
```

DAX Queries

- IncomeGroup =
  ```
  SWITCH(TRUE(),'customer'[Income]<30000,"Low",'customer'[Income]>=30000 &&
  'customer'[Income]<65000,"Medium",'customer'[Income]>=65000,"High","Unknown")
  ```

- Week_Num2 = WEEKNUM(credit_card[Week_Start_Date])

DAX Queries

- Revenue =
  credit_card[Annual_Fees]+credit_card[Total_Trans_Amt]+credit_card[Interest_Earned]

- Current_week_Revenue =
  CALCULATE(SUM('credit_card'[Revenue]),FILTER(ALL('credit_card'),'credit_card'[Week_Num2]=MAX('credit_card'[Week_Num2])))

DAX Queries

- `Previous_week_Revenue =`
  `CALCULATE(SUM('credit_card'[Revenue]),FILTER(ALL('credit_card'),'credit_card'[Week_Num2]=MAX('credit_card'[Week_Num2])-1))`

Key Features:

Credit Card Customer Report

▶ **Revenue by Income Group**:

- ❑ High-income group generates the most revenue, followed by medium and low-income groups.

- ❑ Total revenue: $57M.

- ❑ Interest earned: $8M.

- ❑ Total income: $588M.

Key Features:

▶ **Revenue by Customer Job**:

   ❑ Businessmen lead with $17.7M in revenue, followed by white-collar professionals, self-employed, government employees, blue-collar workers, and retirees.

▶ **Satisfaction Score**:

   ❑ The overall customer satisfaction score is 3.19.

▶ **Revenue by Gender:**

   ❑ Male customers contribute $31M, while female customers contribute $26M.

Key Features:

▶ **Revenue by Week**:

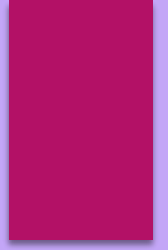 ❑ Revenue trends are analyzed weekly from January 2023 to October 2023.

▶ **Revenue by Age Group**:

  ❑ Major revenue contributions come from the 30-40 and 40-50 age groups.

▶ **Revenue by Dependent Count**:

  ❑ Customers with no dependents contribute the highest revenue.

Key Features:

▶ **Revenue by Customer Education:**

  ❑ Graduates and those with higher education generate significant revenue.

▶ **Revenue by State**:

  ❑ Top contributing states: Texas (TX), New York (NY), California (CA), Florida (FL), New Jersey (NJ).

▶ **Revenue by Marital Status**:

  ❑ Married customers generate more revenue compared to single customers.

Key Features:

Credit Card Transaction Report

▶ **Quarterly Revenue and Transaction Count**:

- ❑ Consistent quarterly revenue around $14M to $14.5M.

- ❑ Transaction volume varies slightly between quarters, ranging from 163K to 173K transactions.

▶ **Revenue by Expenditure Type**:

- ❑ Bills and entertainment top the list, followed by fuel, groceries, food, and travel.

Key Features:

▶ **Revenue by Customer Job**:

❑ Similar trends to the customer report, with businessmen generating the highest revenue.

▶ **Revenue by Card Category**:

❑ Blue cards generate the highest revenue ($47M), followed by Silver, Gold, and Platinum cards.

▶ **Revenue by Transaction Method**:

❑ Swiping transactions contribute the most ($36M), followed by chip and online transactions.

Key Features:

- **Revenue and Transaction Volume by Card Category**:
  - ❑ Detailed breakdown of revenue, transaction amount, and interest earned by each card category.

Project Insights:

▶ **High Revenue Generating Segments**:

  ❑ Businessmen and high-income groups are the primary contributors to revenue.

  ❑ Significant revenue from Texas, New York, California, Florida, and New Jersey.

▶ **Customer Satisfaction**:

  ❑ The overall satisfaction score indicates room for improvement to enhance customer experience.

Project Insights:

▶ **Transaction Trends**:

❑ Consistent revenue across quarters suggests stable credit card usage.

❑ Preference for swipe transactions indicates potential for promoting contactless and online payments.

▶ **Expenditure Patterns**:

❑ Bills and entertainment are major expenditure types, indicating possible areas for targeted promotions and offers.

▶ **Card Category Performance**:

❑ Blue cards dominate the market, suggesting a focus on promoting higher-tier cards like Silver, Gold, and Platinum.

Data Summary:

- **Total Revenue**: $57M
- **Total Interest Earned**: $8M
- **Total Income**: $588M
- **Total Transaction Volume**: 667K
- **Top Revenue by Job**: Businessmen ($17.7M)
- **Top Revenue by State**: Texas

Conclusion:

The analysis provides a comprehensive view of credit card usage, highlighting key revenue segments, customer demographics, and spending patterns. These insights can be utilized to drive targeted marketing strategies, improve customer satisfaction, and enhance overall business performance.