**CREDIT CARD WEEKLY ANALYSIS REPORT**

**(By Nirnay singh)**

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**Project Overview**

**The goal of this project is to develop an interactive and comprehensive credit card dashboard that uncover trends and provide actionable insights to improve customer service and reduce operational risks. Through descriptive and predictive analysis, the project aims to deliver meaningful patterns and predictions to enhance financial decision-making processes and enabling stakeholders to monitor and analyze the credit card operations effectively.**

Download Data

GitHub link: https://github.com/Nirnays03/Credit\_Card\_Analysis\_Dashboard

**Import Data to SQL database**

**1)Prepare CSV file**

**2) SQL Query to create and import data from csv files:**

**- a) Create a database**

**CREATE DATABASE ccdb;**

**Create cc\_detail table**

CREATE TABLE cc\_detail1 (

Client\_Num INT,

Card\_Category VARCHAR(20),

Annual\_Fees INT,

Activation\_30\_Days INT,

Customer\_Acq\_Cost INT,

Week\_Start\_Date DATE,

Week\_Num VARCHAR(20),

Qtr VARCHAR(10),

current\_year INT,

Credit\_Limit DECIMAL(10,2),

Total\_Revolving\_Bal INT,

Total\_Trans\_Amt INT,

Total\_Trans\_Ct INT,

Avg\_Utilization\_Ratio DECIMAL(10,3),

Use\_Chip VARCHAR(10),

Exp\_Type VARCHAR(50),

Interest\_Earned DECIMAL(10,3),

Delinquent\_Acc VARCHAR(5) );

**-- Create cc\_detail1 table**

CREATE TABLE cust\_detail1 (

Client\_Num INT,

Customer\_Age INT,

Gender VARCHAR(5),

Dependent\_Count INT,

Education\_Level VARCHAR(50),

Marital\_Status VARCHAR(20),

State\_cd VARCHAR(50),

Zipcode VARCHAR(20),

Car\_Owner VARCHAR(5),

House\_Owner VARCHAR(5),

Personal\_Loan VARCHAR(5),

Contact VARCHAR(50),

Customer\_Job VARCHAR(50),

Income INT,

Cust\_Satisfaction\_Score INT );

**-- 3. Copy csv data into SQL (remember to update the file name and file location in below query)**

-- copy cc\_detail1 table

COPY cc\_detail1

FROM 'C:\credit\_card.csv'

DELIMITER ','

CSV HEADER;

-- copy cust\_detail1 table

COPY cust\_detail1

FROM 'C:\customer.csv'

DELIMITER ','

CSV HEADER;

**-- 4. Insert additional data into SQL, using same COPY function**

**-- copy additional data (week-53) in cc\_detail1 table**

COPY cc\_detail1

FROM 'C:\cc\_add.csv'

DELIMITER ','

CSV HEADER;

**-- copy additional data (week-53) in cust\_detail1 table (remember to update the file name and file location in below query)**

COPY cust\_detail1

FROM 'C:\cust\_add.csv'

DELIMITER ','

CSV HEADER;

**DAX QUERIES**

**Age\_Group** = SWITCH(

    TRUE(),

    'public cust\_detail1'[customer\_age]<30,"20-30",

    'public cust\_detail1'[customer\_age]>=30 && 'public cust\_detail1'[customer\_age]<40,"30-40",

    'public cust\_detail1'[customer\_age]>=40 && 'public cust\_detail1'[customer\_age]<50,"40-50",

    'public cust\_detail1'[customer\_age]>=50 && 'public cust\_detail1'[customer\_age]<60,"50-60",

    'public cust\_detail1'[customer\_age]>+60,"60+",

    "unknown")

**Income\_Group** = SWITCH(

    TRUE(),

    'public cust\_detail1'[income]<30000,"low",

    'public cust\_detail1'[income]>=30000 && 'public cust\_detail1'[income]<70000,"mid",

    'public cust\_detail1'[income]>=70000,"high",

    "unknown"

    )

**revenue** = 'public cc\_detail1'[total\_trans\_amt]+'public cc\_detail1'[interest\_earned]+'public cc\_detail1'[annual\_fees]

**weeknum2** = WEEKNUM('public cc\_detail1'[week\_start\_date])

**wow\_revenue** = DIVIDE(([current\_week\_revenue]-[previous\_week\_revenue]),[previous\_week\_revenue])

**current\_week\_revenue** = CALCULATE(

    SUM('public cc\_detail1'[revenue]),

     FILTER(ALL('public cc\_detail1'),

    'public cc\_detail1'[weeknum2]=MAX('public cc\_detail1'[weeknum2])))

**previous\_week\_revenue** = CALCULATE(

    SUM('public cc\_detail1'[revenue]),

     FILTER(ALL('public cc\_detail1'),

    'public cc\_detail1'[weeknum2]=MAX('public cc\_detail1'[weeknum2])-1))

**Project Insights- Latest Week (31st dec)**

**WoW change:**

• Revenue increased by 28.8%,

• Total Transaction Amt & Count increased by 35.03% & 3.39%

• Customer count increased by 12.80%.

**Overview YTD:**

• Overall revenue is 57M

• Total interest is 8M

• Total transaction amount is 46M

• Customer acquisition cost is 991k.

• Customer satisfaction score is 33k.

• Total clients are 10.29k .

• Male customers are contributing more in revenue 31M, female26M

• Blue & Silver credit card are contributing to 93% to overall trans.

• TX, NY & CA is contributing to 68%

• Overall Activation rate is 57.5%

• Overall Delinquent rate is 6.06%

* The most delinquent job category is self employed i.e 1.66%.
* The least delinquent category is retirees i.e 0.61%.

**Summary**

**Credit card financial dashboard using Power BI**

• Developed an interactive dashboard using transaction and customer data from a SQL database, to provide real-time insights.

• Streamlined data processing & analysis to monitor key performance metrics and trends.

• Shared actionable insights with stakeholders based on dashboard findings to support decision-making processes.

• The dashboard reveals positive trends in transaction growth and customer engagement, with increasing online activity and high-value spending segments driving revenue

• By implementing the outlined recommendations, the organization can enhance profitability, improve customer satisfaction, and strengthen its operational capabilities.