FINAL SUBMISSION DOCUMENT

Credit Card Financial Weekly Report

Power BI Dashboard Project

Executive Summary

This project focuses on developing two interactive Power BI dashboards to analyse Credit Card Customers and Credit Card Transactions.

The dashboards provide insights into customer demographics, revenue contribution, spending behaviour, and weekly transaction trends.

The solution emphasizes data modelling, DAX calculations, and professional dashboard design with interactive filters.

Project Objective

The objective of this project is to:

- Analyse credit card customer demographics
- Evaluate revenue contribution by different segments
- Identify spending patterns by category
- Perform weekly transaction trend analysis
- Enable dynamic filtering by Gender, Age Group, and Income Group

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Data Overview

Datasets Used:

1. Customer Dataset

- Customer ID
- Gender
- Age
- Income
- Credit Score
- Utilization Ratio

2. Transaction Dataset

- Transaction Date
- Transaction Amount

- Transaction Volume
- Expense Type
- Week Number
- Customer ID

Data Modelling

- Established One-to-Many relationship between Customer and Transaction tables.
- Customer_ID used as primary key.
- Created calculated columns:
    - Age Group
    - Income Group
    - Week Number

Data types were validated and cleaned before modelling.

DAX Measures Implemented

Core Measures

- Total Revenue
- Total Transactions
- Total Customers
- Average Utilization Ratio
- Transactions per Customer
- Current Week Revenue
- Previous Week Revenue
- Weekly Growth %

These measures enable dynamic KPI calculations and trend comparisons.

Dashboard 1 – Credit Card Customer Report

Filters Applied:

- Gender
- Age Group
- Income Group

KPIs Displayed:

- Total Revenue
- Total Customers
- Total Transaction Amount
- Average Utilization

Visual Analysis:

- Revenue by Expense Type
- Revenue by Age Group
- Revenue by Income Group
- Weekly Revenue Trend

Key Insights:

- High-income customers contribute the highest revenue.
- Age group 46–60 generates the most revenue.
- Bills and Entertainment categories dominate spending.

Dashboard 2 – Credit Card Transaction Report

Filters Applied:

- Gender
- Age Group
- Income Group
- Weekly Date Filter

KPIs Displayed:

- Total Transaction Volume
- Total Transaction Amount
- Transactions per Customer
- Weekly Growth %

Visual Analysis:

- Weekly Transaction Trend
- Customer Segmentation (Gender Split)
- Spending Behavior Analysis (Revenue + Transactions by Category)

Key Insights:

- Transaction volume shows seasonal variation.
- Bills category leads both in revenue and volume.
- Travel shows the lowest contribution.
- Weekly performance fluctuates but remains stable overall.

Design & Visualization Approach

- Dark premium banking theme
- Gradient background for professional look
- Left-aligned slicer panel
- KPI cards with shadow effects
- Consistent teal colour scheme
- Clean layout and structured spacing

The design ensures clarity, readability, and executive-level presentation.

Challenges Faced

- Implementing week-over-week revenue comparison
- Managing dual-axis combo chart
- Ensuring consistent visual theme across dashboards
- Optimizing DAX calculations for dynamic filtering

Conclusion

The dashboards provide comprehensive insights into customer behaviour and transaction trends.

This project demonstrates:

- Strong understanding of data modelling
- Advanced DAX calculation skills
- Business insight generation
- Professional dashboard design principles

The final solution meets all stated requirements and provides an interactive analytical experience.

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Tool Used: Power BI, SQL