# Marketing Campaign Performance Dashboard

## Project Overview

This project focuses on building an interactive Power BI dashboard to analyze marketing campaign performance. The dashboard tracks critical KPIs such as Customer Acquisition Cost (CAC), Return on Marketing Investment (ROMI), and Click Through Rate (CTR) across multiple marketing channels.

## Tools and Technologies

- Power BI  
- SQL  
- Python (for ETL simulation)  
- Excel

## Process

1. Prepared a raw marketing dataset with unstructured, missing, and inconsistent data.

2. Cleaned the dataset using Power Query:

- Removed special characters

- Handled missing values

- Converted data types

- Removed duplicates

3. Created DAX measures to calculate KPIs:

- CAC = Total Cost / Total Customers Acquired

- ROMI = (Revenue - Marketing Cost) / Marketing Cost

- CTR (%) = (Total Clicks / Total Impressions) \* 100

- Total Campaigns = DISTINCTCOUNT(Campaign Name)

4. Built visualizations including:

- KPI Cards for CAC, ROMI, CTR (%), and Total Campaigns

- Bar Chart for CAC by Marketing Channel

- Line Chart for CTR (%) trend over time

- Pie Chart for Cost distribution by channel

- Table for detailed campaign performance

- Slicers for Marketing Channel and Campaign Date

- Conditional formatting for high CAC and low CTR (%)

## Business Impact

The dashboard enhances ROI visibility, allows stakeholders to monitor cost efficiency, and provides real-time insights for better budget allocation and strategic marketing decisions.