Social Media Campaign Performance Tracker

Power BI Project Summary

# 📌 Project Objective

This Power BI project, completed as part of the Data Science & Analytics Internship with Future Interns, aimed to evaluate the performance of paid Facebook and Instagram ad campaigns using a dataset containing metrics such as impressions, clicks, conversions, spend, demographics, and user interests.

# 🧹 Data Cleaning & Challenges

A major issue was discovered from Row 762 onward in the dataset, where column values were misaligned, and 24% of rows contained null or corrupted values. These were excluded to ensure clean and accurate analysis, retaining only the first 761 valid rows.

# 📈 KPIs & Visualizations

Key KPIs created included Total Spent, ROI %, CTR %, Total Clicks, Total Impressions, Total Conversions, and Approved Conversions.  
  
Visuals:  
- CTR (%) by Age (Bar Chart)  
- Total Spent by Gender (Pie Chart)  
- Impressions vs Clicks by Interest (Line Chart)  
- Campaign ID vs CTR/CPC/CPA (Combo Chart)  
- Clicks > Conversions > Approved Conversions (Funnel Chart)  
- Top Ad IDs by Clicks (Tree Map)

# 🔍 Insights & Recommendations

- Highest CTR seen in age groups 45–49 and 40–44  
- Over 87% of ad spend targeted males  
- Campaign ID 1178 was the best performer, while 1201 underperformed  
- Recommend shifting focus to older age groups and increasing female-targeted budget  
- Suggest A/B testing creatives for underperforming segments

# 🛠 Tools & Skills Applied

- Power BI Desktop  
- Power Query Editor  
- DAX for KPIs  
- Data Modeling  
- Business Acumen for interpretation and recommendations