Meta Ad Performance Dataset

About the Data:

This dataset represents **Meta Ads Performance Data**, covering campaigns, ads, user demographics, and ad interaction events. It is modelled how **Facebook/Instagram (Meta)** ad platforms capture data.

The purpose of this dataset is to **analyse advertising performance**, optimize targeting, and measure **ROI (Return on Investment)** through KPIs such as:

- Impressions (how often ads are seen)
- Clicks (engagement with ads)
- Purchases (conversions)
- CPM, CPC, CTR, and ROAS (efficiency metrics)
- Audience insights (demographics, location, interests)

This dataset is ideal for building a **Power BI Dashboard** to evaluate campaign effectiveness, budget utilization, and user engagement patterns.

KPIs & Definitions:

KPI	Definition	Formula
Impressions	Number of times ads were displayed.	Count of event_type = Impression
Clicks	Number of times users clicked ads.	Count of event_type = Click
Shares	Number of times ads were shared.	Count of event_type = Share
Comments	Number of user comments on ads.	Count of event_type = Comment
Purchases	Number of purchases made after seeing ads	Count of event_type = Purchase
Engagements	Total interactions (Clicks + Shares + Comments).	Clicks + Shares + Comments
CTR (Click Through Rate)	% of impressions that resulted in clicks	(Clicks ÷ Impressions) × 100

Engagement Rate	% of impressions that resulted in engagements	(Engagements ÷ Impressions) × 100
Conversion Rate	% of clicks that resulted in purchases.	(Purchases ÷ Clicks) × 100
Purchase Rate	% of impressions that resulted in purchases.	(Purchases ÷ Impressions) × 100
Total Budget	Total spend allocated to campaigns.	Sum of campaigns.total_budget
Avg. Budget per Campaign	Average budget allocation per campaign.	Total Budget ÷ Campaign Count

Charts Requirements:

1. **Target Gender – Donut Chart**

- A donut chart will visualize performance split by target gender (from the ads table).
- Identify which gender segment contributes most to the selected metric.

2. **Target Age Group – Bar Chart**

- A bar chart will show engagement across age groups defined in the ads table.
- Highlight which age group is most responsive to campaigns.

3. **Country – Map**

- A map visualization will display performance by country (from the users table).
- Provide a geographic view of campaign reach and engagement.

4. **Hourly Trend – Area Chart**

- An area chart will show activity by hour of day (from ad_events[time_of_day]).
- Understand user activity patterns throughout the day.

5. **Ad Type – Matrix**

- A matrix visualization will show the selected metric across ad types and possibly break down further by platform (Facebook vs Instagram).
- Compare performance across ad formats and platforms side by side.