Business Requirements Document (BRD)

Meta Ad Performance Analysis

1. Business Objective

The business requires a **performance tracking report** for advertising campaigns running **on Facebook and Instagram**.

The report will provide visibility into:

- **Campaign reach**
- **Engagement**
- **Conversions**
- **Budget utilization**

This solution will enable the marketing team to:

- **Identify the most effective platform (Facebook vs Instagram**)
- **Track campaign ROI and optimize budget allocation**
- **Understand audience engagement patterns**

2. Scope of the Report

In Scope

- Campaigns running on **Facebook and Instagram** only
- Paid advertisements only

Out of Scope

- Other platforms (e.g., Messenger, Audience Network)
- Organic engagement (non-paid activity excluded)

3. KPIs & Definitions

KPI	Definition	Formula	Business Use
Impressions	Number of times ads were displayed	Count of event_type = Impression	Measure reach
Clicks	Number of times users clicked ads	Count of event_type = Click	Measure engagement intent
Shares	Number of times ads were shared	Count of event_type = Share	Measure viral engagement

Comments	Number of user comments on ads	Count of event_type = Comment	User sentiment & feedback
Purchases	Number of purchases made after viewing ads	Count of event_type = Purchase	Measure conversions
Engagements	Clicks + Shares + Comments	Clicks + Shares + Comments	Measure engagement volume
CTR	% of impressions that resulted in clicks	(Clicks ÷ Impressions) × 100	Measure ad effectiveness
Engagement Rate	% of impressions that resulted in engagements	(Engagements ÷ Impressions) × 100	Measure overall ad appeal
Conversion Rate	% of clicks that resulted in purchases	(Purchases ÷ Clicks) × 100	Measure funnel efficiency
Purchase Rate	% of impressions that resulted in purchases	(Purchases ÷ Impressions) × 100	Measure conversion from reach
Total Budget	Total spend allocated to campaigns	Sum of campaigns.total_budget	Cost analysis
Average Budget per Campaign	Average budget per campaign	Total Budget ÷ Campaign Count	Budget distribution

4. Chart Requirements

1. Target Gender – Donut Chart

Visualizes performance split **by target gender**.
Metric displayed changes dynamically.
Purpose: Identify highest contributing gender segment.

2. Target Age Group – Bar Chart

Shows engagement **across age groups**.
Each bar represents one age group.
Purpose: Highlight most responsive age group.

3. Country – Map

Displays **performance by country**.
Bubble size or color intensity represents selected metric.
Purpose: Geographic performance view.

4. Calendar Month – Calendar Heat Map

Displays monthly performance.
Darker shades indicate higher activity.
Purpose: Detect seasonal trends and peak months.

5. Weekly Trend – Stacked Column Chart

A stacked column chart will **display weekly performance trends**.

X-axis: Week Number.
Stacks: Ad Type.
Y-axis: Selected metric.
Purpose: Compare ad type contribution over weeks.

6. Hourly Trend – Area Chart

An area chart will **show activity by hour of day** (from ad_events[time_of_day]).

X-axis: Hour (0–23).
Y-axis: Selected metric.
Purpose: Understand user activity patterns during the day.

7. Ad Type – Matrix

A matrix visualization will show the selected metric **across ad types** and possibly break down further by platform (Facebook vs Instagram).

Rows: Ad Types.
Columns: Platform or campaign dimensions.
Values: Selected metric.
Purpose: Side-by-side performance comparison.