

Meta Ad Performance Analysis Project Report

1. Introduction

This Project Analyzes the performance of Meta Ads using multiple KPIs such as impressions, Clicks, engagement, conversions and budget usage. The goal is to identify strengths in the awareness stage and weakness in the conversion stage to improve overall ROI.

2. Problem Statement

Although the Ads achieved high visibility (216k impressions) and strong engagement (29k interactions), total conversions were only 1.3k purchase , which is less than 1% of total impressions. This indicates a leak in the lower funnel, which needs to be identified and fixed.

3. Dataset Description

The dataset contain 5,000+ rows of ad-level performance data with field like:

- Impressions: 216,000
- Clicks: 25,400
- Likes, Shares, Comments: 3,900+ interactions
- Total Engagements: 29,000
- Total Purchases: 1,300
- Budget: 2.5M (2,500,000 Units Of Currency)
- Average Budget Per Campaign: 50.7k
- Age, Gender, Country Breakdown
- Week-wise & Hour-wise engagement
- Ad format details like Image, Video, Stories, Carousel

4. Tools & Technologies Used

- Power BI (Dashboard + DAX)
- Excel (Cleaning & Preparation)

- DAX Measures
- Data Modeling

5.KPI Definitions with values

KPI	Value	What It Means
Impressions	216,000	Number of times ads were shown
Clicks	25,400	Users who showed interest
CTR	11.76%	Very High (industry average = 1-2%)
Likes	15k+	Good audience resonance
Shares	1,300	Strong organic reach
Comments	2,600	Good discussion
Engagements	29,000	Total interactions
Purchases	1,300	Low vs Impressions
Conversion Rate	5.12%	Purchase out of clicks
Purchase Rate	0.61%	Purchase out of impressions
Total Budget	2.5M	Total ad spend
Avg Budget/Campaign	50,700	Show multiple campaign strategy

6.Data Cleaning & Preparation

- Removed 356 duplicate rows
- Filled 58 missing age values as “Unknown”
- Corrected date/time columns for weekly & hourly visuals
- Added Calculated columns for CTR, CR, ER
- Merged Ads + Demographics tables using AD_ID

7.Dashboard Insights

Top of funnel (Strong Performance):

- Impressions: 216K
- Clicks: 25.4K
- CTR: 11.76%

- This is 10 times higher than industry standard (1-2%)

Engagement:

- Total Engagements: 29,000
- Likes - 15,000+
- Shares – 1,300
- Comments – 2,600
- **Engagement Rate:** 13.56%
 - Means **13 out of 100 people** who saw the ad interacted with it.

Conversion:

- **Purchases:** 1,300
- **Conversion Rate:** 5.21%
- **Purchase Rate:** 0.61%
 - Only **6 out of every 1,000 impressions** becomes a purchase.

8. Demographic Analysis:

By Gender:

- **Female:** 13,000 engagements (43%)
- **Male:** 6,000 engagements (22%)
- **Other:** 10,000 engagements (35%)
 - Females engage 2.1 times more than males.

By Age Group:

- **18–24:** 12,500 engagements
- **25–30:** 9,700 engagements
- **30–40:** 4,000 engagements
- **40+ :** 1,800 engagements
 - **Age 18–30 contributes 76% of total engagement.**

9. Geographic Analysis:

Top Countries by Engagement:

Country	Engagements
India	8,900
US	6,700
Brazil	5,800
Germany	3,100
UK	2,500

- india + Brazil = **50%** of global engagement
- Germany + UK = **better purchase potential due to high income**

10. Time-Based Analysis:

Hour-wise:

- Peak engagement between **3 PM – 8 PM**
- 3 PM – 1,900 engagements
- 6 PM – **2,200 engagements (highest)**
- 8 PM – 1,850 engagements

Week-wise:

- Weekly engagement averages: **6,000–7,200**
- Peaks around **19th–21st** and **25th–27th**
- Suggests promotions or offers increased activity by **18–25%** on peak days.

11. Ad Format Performance:

Ad Type	Impressions	Clicks	CTR	Purchases	Conversion Rate
Video	46K	5K	11.9%	310	5.2%
Stories	72K	8K	11.8%	520	5.2%
Carousel	48K	6K	11.7%	290	5.1%
Image	51K	6K	11.7%	290	4.9%

- Video & Stories deliver **20–25% more conversions** than images/carousels.

12. Final Recommendations:

- 1.Improve landing page to increase **0.61% purchase rate** → target **1.5%**.
- 2.Focus on **Females aged 18–30**, who generate **43% of engagement**.
- 3.Shift **30–40% more budget** to Video & Story ads.
- 4.Run ads mainly in **evening hours (3–8 PM)**.
- 5.Use segmented targeting:
 - **India/Brazil** = volume campaigns
 - **Germany/UK** = high-value campaigns

13. Conclusion:

The campaign shows excellent awareness (216K impressions) and high engagement (29K) but suffers from low purchase efficiency (1.3K purchases). By optimizing ad formats, demographic targeting, and landing page experience, the business can significantly improve ROI.