

Project Title: Marketing Funnel Performance Analysis: Google vs Meta vs TikTok

Project Objective:

The goal of this project is to analyze and compare the performance of paid marketing campaigns across three major advertising platforms — **Google Ads**, **Meta Ads** (Facebook/Instagram), and **TikTok Ads**. The analysis focuses on understanding how each platform contributes to the customer acquisition funnel and driving business revenue.

Business Problem:

The marketing team of an e-commerce business is investing in multi-platform advertising but is facing uncertainty about:

- Which platform is delivering the best **cost-efficiency**?
- Where to **reallocate budgets** for maximum return?
- How to **optimize performance** across the funnel?

Without clear performance comparisons, there's a risk of over-investing in underperforming platforms and missing ROI opportunities on emerging channels like TikTok.

Key Objectives:

1. **Analyze funnel performance** from impressions → clicks → conversions.
 2. Calculate and compare core KPIs:
 - Click-Through Rate (CTR)
 - Conversion Rate
 - Cost Per Click (CPC)
 - Cost Per Acquisition (CPA)
 - Return on Ad Spend (ROAS)
 3. Deliver **strategic insights** and **budget recommendations** based on performance.
 4. Visualize findings using an **interactive Tableau dashboard** and a **professional presentation**.
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Tools Used:

- **SQL:** Data cleaning, transformation, and metric calculations
 - **Excel:** Exploratory analysis (initial validation)
 - **Tableau:** Dashboard development and visualization
 - **PowerPoint:** Executive-level insight presentation
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Dataset Overview (Mock Data):

The analysis was performed on a simulated dataset structured as follows:

- **campaigns.csv:** Campaign metadata including platform, date range, and budget
- **ad_performance.csv:** Daily performance data (impressions, clicks, conversions, revenue)

Each campaign is tied to a platform and tracked over time to assess performance.

Final Deliverables:

1.  Tableau Dashboard: Platform performance visualization
2.  SQL Scripts: Metric calculations and data joins
3.  PowerPoint Slide Deck: Business-ready insights and recommendations
4.  Executive Summary: Key takeaways and data-backed strategy