1. Project Title and Overview

Marketing Campaign Analysis (SQL Case Study)
Tool: PostgreSQL (pgAdmin 4)
Dataset: Kaggle – Marketing Campaign Performance

Objective:
To analyze marketing spend effectiveness, campaign performance, and audience behavior using SQL.
We calculated key marketing metrics (ROMI, CPC, CAC, AOV, etc.) and identified which platforms, audiences, and dates performed best.

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2. Key Business Questions

1. What was the **overall Return on Marketing Investment (ROMI)?**
2. Which **platforms** performed best?
3. Which **target types (audiences)** generated the highest returns?
4. How did performance differ between **weekdays and weekends**?
5. On which **dates** did we achieve peak conversions and revenue?
6. Which **combinations of platform + audience** were most effective?

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3. Key Metrics Calculated

Metric	Formula	Description
ROMI	(Revenue - Spend) / Spend	Return on marketing investment
CPC	Spend / Clicks	Cost per Click
CPL	Spend / Leads	Cost per Lead
CAC	Spend / Orders	Customer Acquisition Cost
AOV	Revenue / Orders	Average Order Value
CTR	Clicks / Impressions	Click-through Rate
Conv. 1	Leads / Clicks	Visitor → Lead conversion
Conv. 2	Orders / Leads	Lead → Order conversion
Profit	Revenue - Spend	Net Profit from campaign

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4. Overall Marketing Performance

Metric	Value (₹)
Total Spend	3,05,90,879.82
Total Revenue	4,28,89,366.00
Profit	1,22,98,486.18
Overall ROMI	**0.4**

For every ₹1 spent, ₹1.40 was earned — overall positive return.

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5. Performance by Platform

Platform	ROMI	Total Spend	Total Revenue	Avg CAC	Avg AOV
YouTube	**2.77**	4.06M	15.31M	2,090	8,047
Instagram	0.4	7.88M	11.02M	3,480	4,402
Banner	0.22	5.03M	6.15M	3,072	3,889
Google	0.07	3.46M	3.70M	4,177	5,360
Facebook	**-0.34**	10.17M	6.70M	5,655	4,004

Insight:

- YouTube was the most efficient platform (ROMI 2.77).
- Facebook showed negative returns and needs optimization or reallocation.

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6. Performance by Target Type

Target Type	ROMI	Total Revenue	Total Spend	Avg CAC	Avg AOV
Blogger	**1.54**	21.12M	8.30M	2,996	6,593
Retargeting	1.01	0.54M	0.27M	2,121	4,984
Hot	0.84	2.21M	1.20M	4,295	7,937
Tier 1	0.35	6.94M	5.13M	4,407	5,414
Tier 2	-0.28	4.13M	5.76M	4,911	3,543
Lookalike	**-0.89**	0.30M	2.64M	8,422	1,062

Insight:

- Blogger and Retargeting audiences performed best.
- Tier 2 and Lookalike audiences showed poor ROI and high CAC.

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7. Weekday vs Weekend Performance

Day Type	ROMI	Avg CAC	Avg AOV	Total Revenue	Total Spend
Weekday	**0.43**	4,202.93	4,711.48	31.22M	22.39M
Weekend	0.34	4,268.06	4,784.85	11.67M	8.20M

Weekdays were slightly more efficient (higher ROMI), while weekends generated higher order values.

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8. Daily ROMI Trends (February 2021)

ROMI ranged between **0.11** and **0.95**.
Peak days: **Feb 3, Feb 11, Feb 26**
Low days: **Feb 10, Feb 16–18**

Insight: Mid-month decline suggests **campaign fatigue** or **budget shift**.

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9. Platform + Target Type Combination Insights

Platform	Target Type	ROMI
YouTube + Blogger	**2.77**	Best-performing combination
Facebook + Retargeting	1.01	Effective remarketing
Google + Hot	0.84	Strong conversion intent
Facebook + Lookalike	**-0.89**	Worst performer

Winning Combo: YouTube + Blogger
Losing Combo: Facebook + Lookalike

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10. Business Recommendations

Focus Area	Recommended Action
Budget Allocation	Shift 20–30% of Facebook budget to YouTube
Audience Focus	Prioritize Blogger & Retargeting audiences
Campaign Optimization	Continue YouTube, Instagram (Tier 1), Google (Hot)
Reduce Spend On	Facebook Lookalike, Tier 2, Wide
Scheduling	Focus spend on Weekdays for better efficiency

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11. Tools Used

- **Database:** PostgreSQL (pgAdmin 4)
- **Language:** SQL (views, case statements, aggregations)
- **Environment:** pgAdmin Query Tool
- **Dataset:** Kaggle Marketing Campaign Dataset

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12. Author

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