

# Social Media Marketing Campaign Report

## 1. Project Objective

The objective of this project is to analyse the performance of various social media marketing campaigns. The focus is on understanding trends in clicks, ROI, engagement, and acquisition cost, helping the marketing team make data-driven decisions on budget allocation, channel preference, and audience targeting.

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## 2. Dataset Overview

The dataset contains detailed records of **15,001** social media campaigns. Key fields include:

- Campaign ID, Date,
- Target Audience
- Age
- Gender
- Campaign Goal
- Channel Used
- Customer Segment
- Location
- Clicks
- Impressions
- Engagement Score
- Acquisition Cost
- ROI
- Net Profit

Each row represents a unique campaign execution.

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### 3. Data Cleaning Steps

- Removed **duplicate records** to ensure data integrity.
- Cleaned the Target Audience column:
  - Split it into two new columns: **Gender** and **Age Group**.
  - For entries labelled "All", assigned **both genders** and **all age groups**.
- Cleaned the campaign goal column by removing unwanted characters like \* and \$.
- Cleaned the duration column by separating **number of days** and removing text like "days".
- Cleaned the ROI column by removing hidden characters and converting values to numeric.
- Created a calculated column for **Net Profit** using the formula:
  - $\text{Net Profit} = \text{ROI} \times \text{Acquisition Cost}$
- Created a calculated column for **Clicks per Day** using the formula:
  - $\text{Clicks/Day} = \text{Clicks} \div \text{Duration}$

These steps ensured the data was accurate, structured, and ready for meaningful analysis.

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### 4. Data Analysis & Visualizations

#### **Q1: What is the overall performance by Campaign Goal?**

- **Columns Used:** Campaign Goal, Clicks, Impressions, Acquisition Cost, ROI, Net Profit
- **Functions Applied:** SUM (Clicks, Impressions, Cost), AVERAGE (ROI), Calculated Net Profit

#### **Insights:**

- "Increase Sales" and "Brand Awareness" are the most frequent and cost intensive.
- "Product Launch" shows higher ROI compared to other goals.

## **Q2: Which Channel gives better ROI and Engagement?**

- **Columns Used:** Channel Used, ROI, Engagement Score
- **Functions Applied:** AVERAGE ROI and Engagement grouped by channel

### **Insights:**

- Instagram and YouTube provide higher average ROI.
- Instagram also shows strong engagement rates.

## **Q3: Total Acquisition Cost by Location**

- **Columns Used:** Location, Acquisition Cost
- **Function Applied:** SUM

### **Insights:**

- New York and Austin incur the highest total acquisition costs.
- Smaller cities show more cost efficiency in some segments.

## **Q4: Clicks and Impressions Over Time**

- **Columns Used:** Month, Clicks, Impressions
- **Function Applied:** SUM

### **Insights:**

- Campaign clicks and impressions increased steadily from March to November.
- Peak activity is observed in mid-year, aligning with seasonal trends.

## **Q5: Average Clicks Per Month by Target Audience**

- **Columns Used:** Month, Target Audience, Clicks
- **Function Applied:** AVERAGE

**Insights:**

- Women 25–34 and Men 18–24 consistently receive higher average clicks.

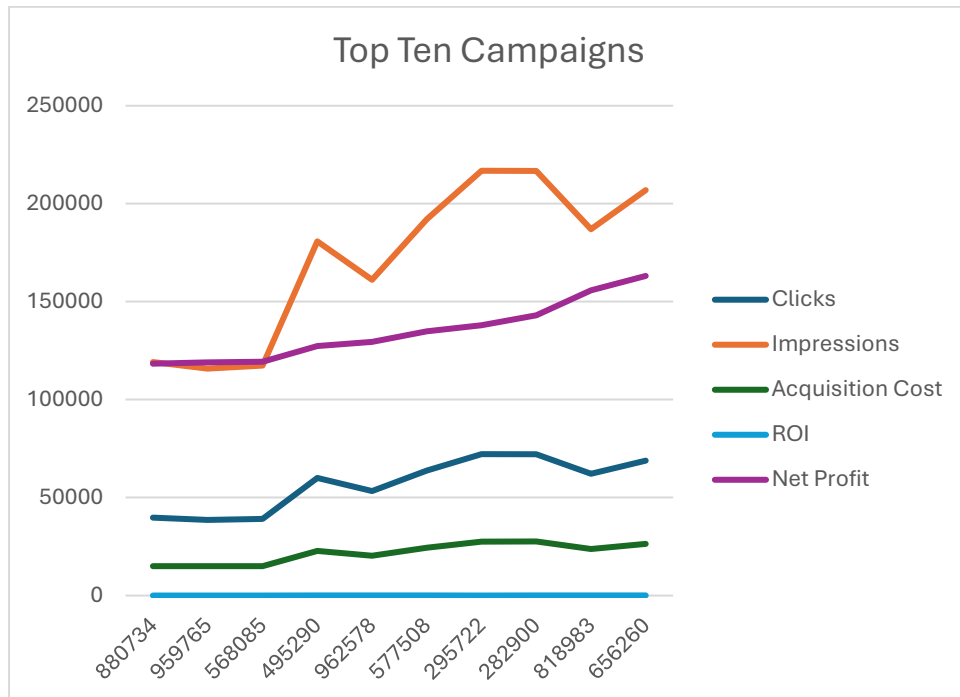
**Q6: Locations with Highest Engagement at Lowest Cost**

- **Columns Used:** Location, Engagement Score, Acquisition Cost
- **Functions:** AVERAGE

**Insights:**

- Miami and Las Vegas achieve high engagement scores at relatively low average acquisition costs.

## TOP 10 CAMPAIGNS OVERVIEW



Campaign ID	Clicks	Impressions	Acquisition Cost	ROI	Net Profit
880734	39744	119242	15000	7.89	118,350
959765	38594	115836	15000	7.93	118,950
568085	39137	117445	15000	7.96	119,400
495290	60023	180832	22745.4	5.17	127,387
962578	53386	161170	20260.62	6.48	129,533
577508	63820	192077	24407.99	5.34	134,831
295722	72174	216821	27471.83	4.96	137,926
282900	72154	216761	27611.77	5.01	142,998
818983	62089	186949	23681.83	6.45	155,756
656260	68852	206982	26340.05	6.16	163,138
Grand Total	569973	1714115	217519.49	6.05	1,348,269

## **5. Recommendations**

1. **Focus budget on Instagram and YouTube** due to their high ROI and engagement.
2. **Prioritize product launches** on platforms that historically show strong returns.
3. **Target young adults (18-34)** more frequently for better click-through performance.
4. **Consider reallocating budget from high-cost cities (like NY)** to more efficient ones (like Miami).
5. **Plan major campaigns around mid-year** when audience engagement is highest.