

Tasks to be Performed:

Task 1: Data Preprocessing and Cleaning

- Eliminate duplicate post entries
- Standardize date and platform formats
- Ensure numeric columns (likes, impressions, ad spend, downloads) are correctly formatted
- Split multi-hashtag columns into separate entries

Task 2: Engagement Analysis

Use the “Posts” sheet to:

- Calculate Engagement Rate per platform:
$$(\text{Likes} + \text{Comments} + \text{Shares}) / \text{Impressions}$$
- Identify Top 10 posts by engagement rate
- Create Pivot Table showing:
 - Total Likes, Shares, Comments by Content Type (e.g., Text, Story) and Platform
 - Average Clicks per post by Hashtag
- Highlight Top-performing hashtags using ranking formulas

Task 3: Platform Performance Analysis

- Determine which platform yields highest engagement
- Compare weekly follower growth rates across platforms
- Visualize Ad Spend vs. Engagement using charts
- Recommend focusing on 1–2 platforms or continuing multi-platform justify with data

Task 4: Hashtag & Content Strategy

Identify:

- Most frequent hashtags and average engagement for each
- Compare content types (Text, Story, Reel) performance across platforms
- Recommend optimal content type-platform combinations

Task 5: Campaign Effectiveness

- Compute:
 - Total & average impressions, likes, clicks per campaign
 - Engagement uplift during vs. before campaign
- Evaluate:
 - Campaign with highest ROI (engagement/ad spend)
 - Campaign with strongest follower or app download growth

Task 6: Follower Retention & Loyalty

- Identify week with highest net follower gain
- Moving average chart to analyze follower trends
- Correlation between Ad Spend vs. Follower Growth/App Downloads