

"Social media sentiment Analysis"

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Introduction

What is Sentiment Analysis?

Sentiment analysis is a method within natural language processing that identifies and analyzes the emotional tone or mood conveyed in textual data, categorizing it as positive, negative, or neutral.

Why It Matters?

- Understanding customer emotions
- Impact on brand reputation



Data Overview



Data Sources

Facebook, Twitter,
Instagram, LinkedIn



Data Metrics

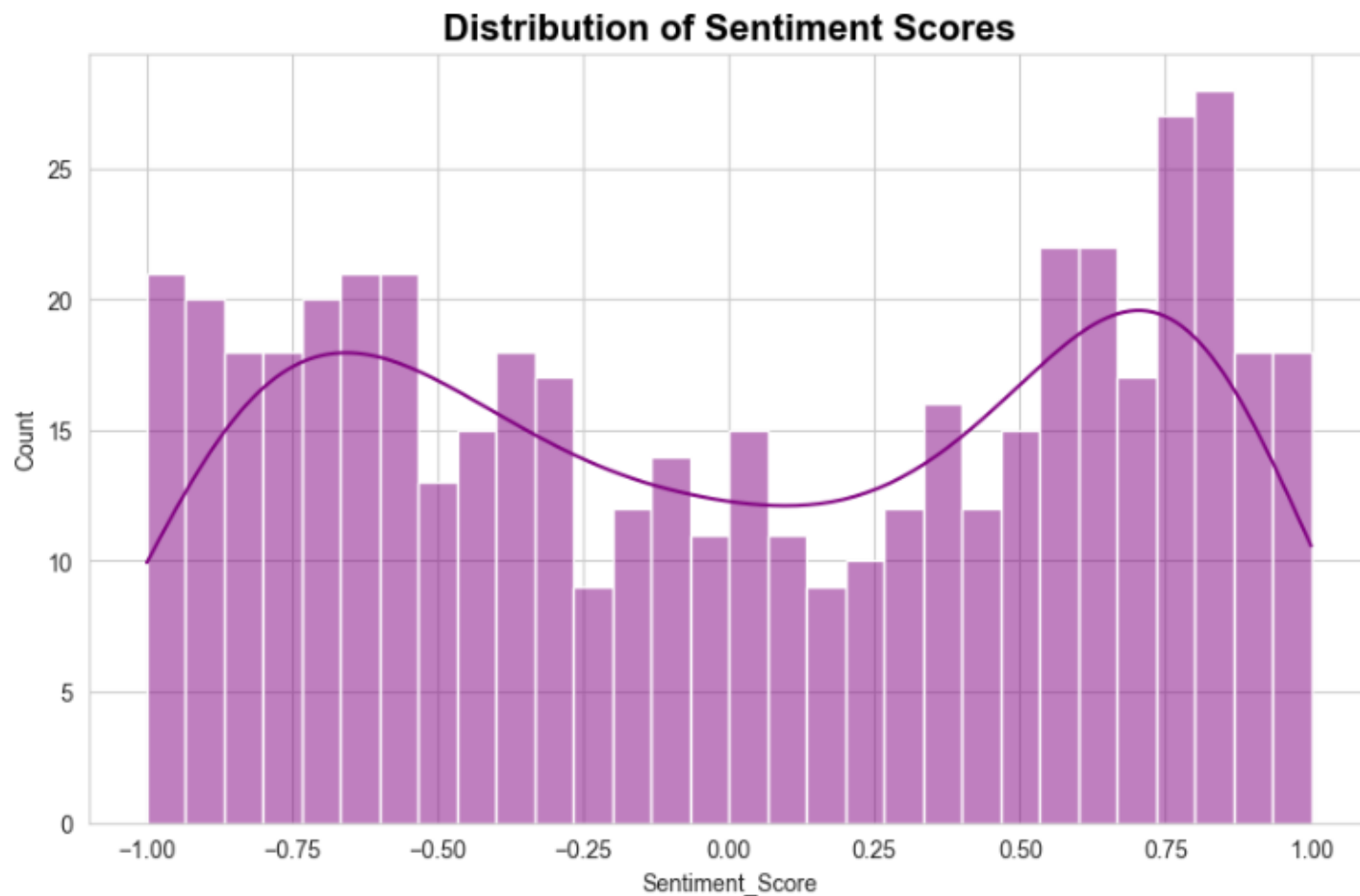
- Sentiment scores
- Posting trends
- Platform popularity



Objectives

- Analyze sentiment trends
- Compare sentiment across platforms
- Identify posting patterns

Sentiment Score Distribution



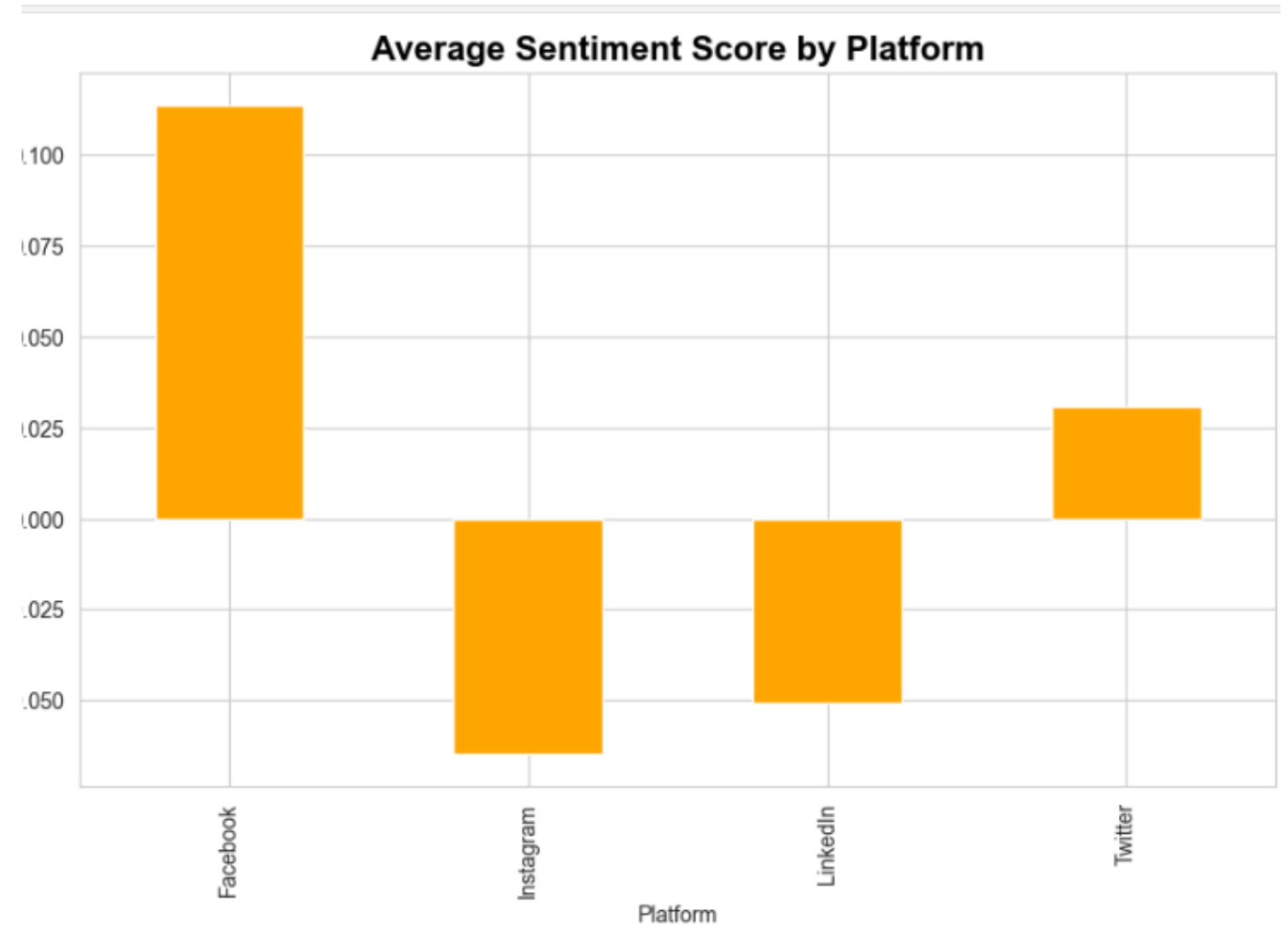
The sentiment scores are spread across a wide range, indicating diverse user opinions. There are peaks in both negative and positive sentiments, with a balanced frequency of neutral sentiments. The curve suggests that extreme sentiments (both positive and negative) are more frequent than neutral ones.



Sentiment Score by Platform

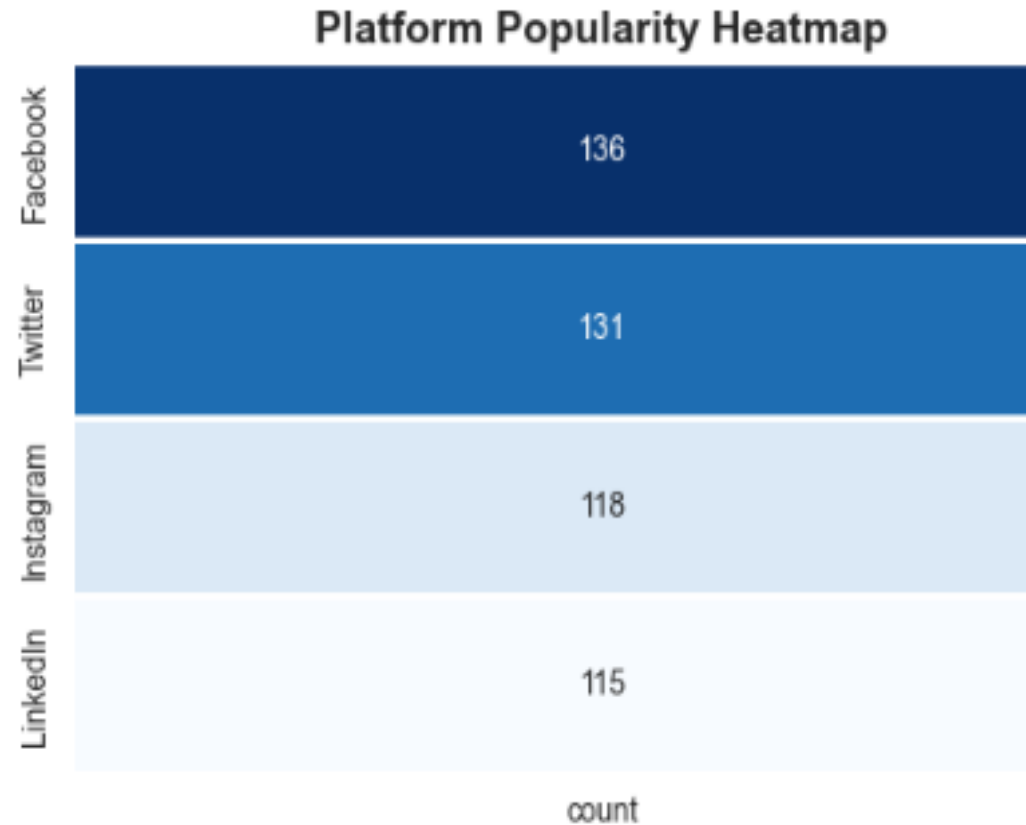
Insights

- Which platform has the highest positive/negative sentiment?
- Platform comparison

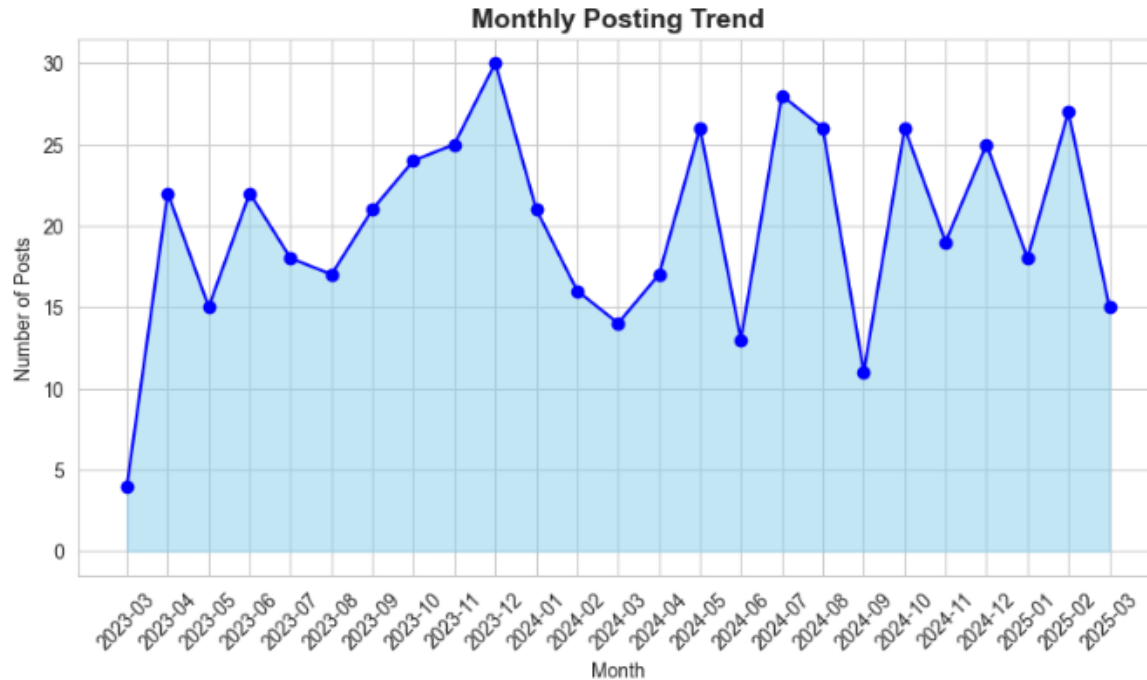


Platform Popularity Analysis

The analysis of platform popularity reveals that Facebook has the highest number of posts, followed closely by Twitter. Instagram and LinkedIn have relatively lower engagement compared to the top two platforms. This suggests that Facebook and Twitter are the most active platforms for user interactions, discussions, and content sharing. The high engagement on these platforms could be due to their broad user base, ease of content dissemination, and frequent interactions through likes, shares, and comments. In contrast, LinkedIn, being a more professional network, has fewer posts but likely more industry-specific discussions. Instagram's lower count may indicate that users prefer visual content over frequent text-based postings. Understanding these trends can help businesses and marketers strategize content distribution and engagement efforts more effectively.



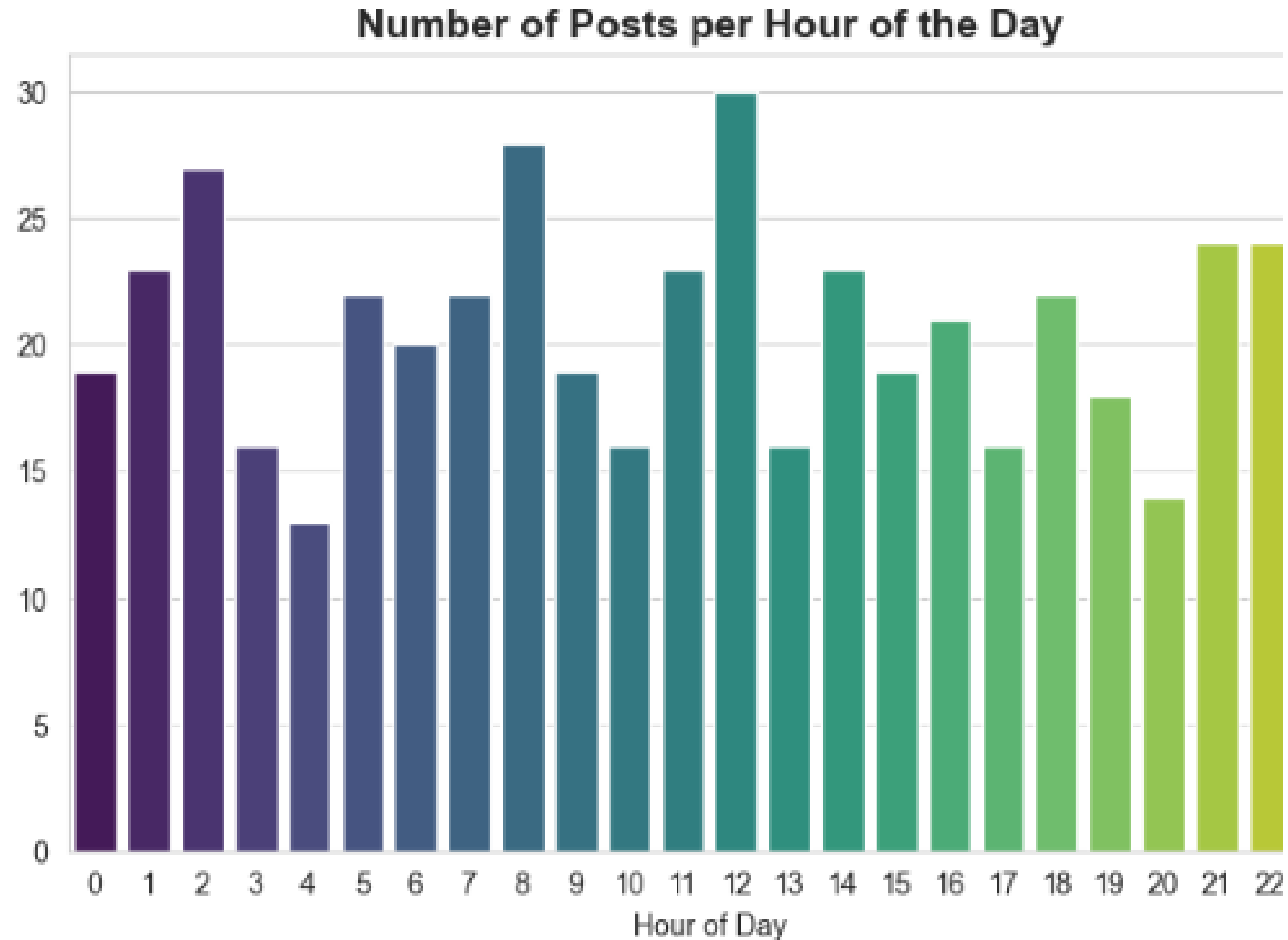
Monthly Posting Trend



The analysis of monthly posting trends highlights noticeable fluctuations in user activity over time. Posting frequency varies across different months, with certain periods experiencing peaks in engagement while others see a decline. The highest posting activity is observed around the end of the year, possibly due to holiday seasons, promotional campaigns, or increased social media usage during festive periods. Conversely, some months show a dip in posts, which could be attributed to seasonal trends, reduced online activity, or shifts in user interests.

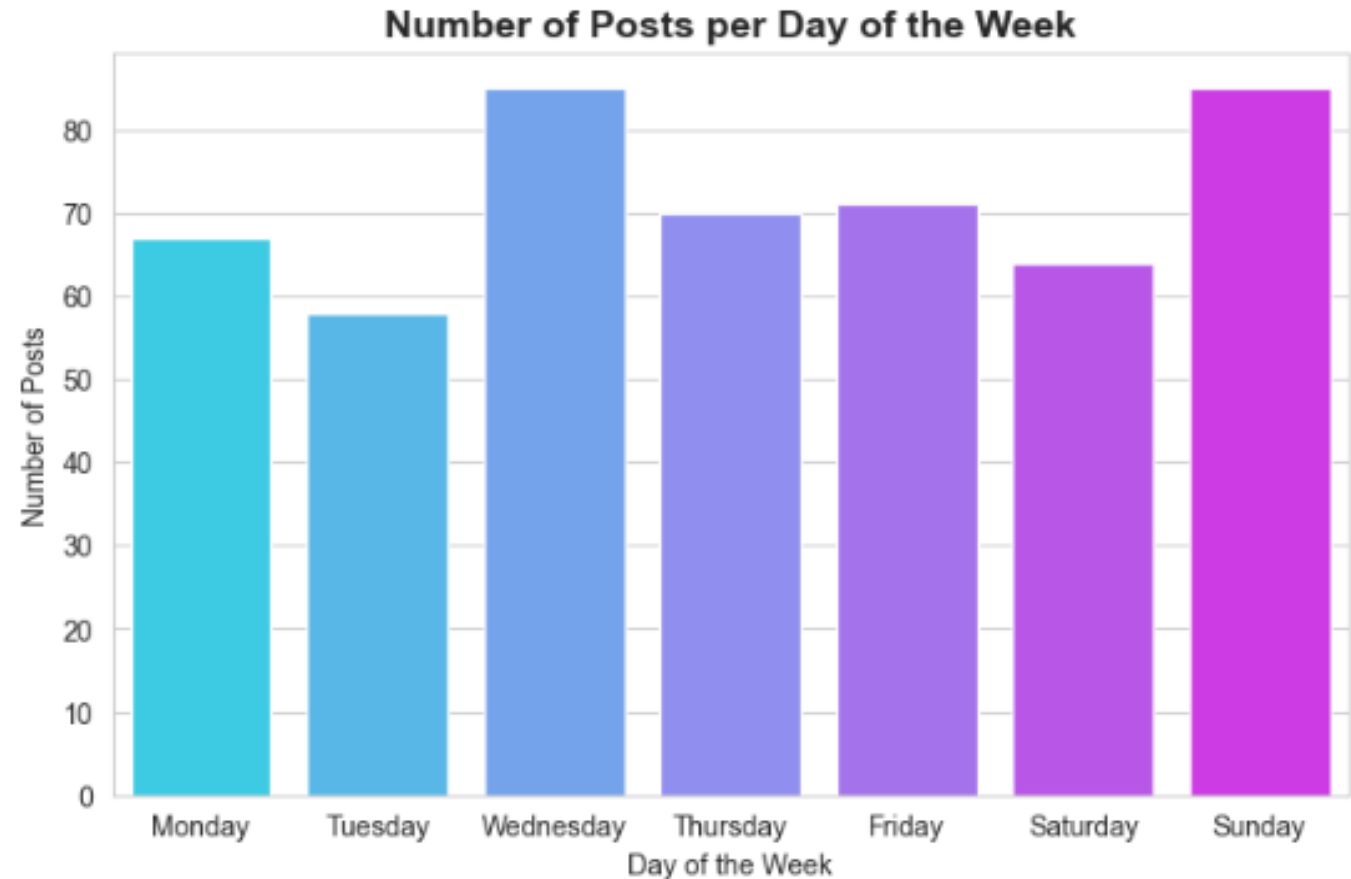
Posting Behavior by Hour

The analysis of posting behavior by hour reveals distinct patterns in user activity throughout the day. The data shows that posting frequency is higher during certain peak hours, particularly in the late morning and early afternoon, with a noticeable spike around 12 PM to 1 PM. This suggests that users are most active during their lunch breaks or mid-day breaks, making it an ideal time for content to reach a larger audience. Additionally, engagement remains relatively high in the evening hours, particularly between 8 PM and 11 PM, when users are likely unwinding and browsing social media.



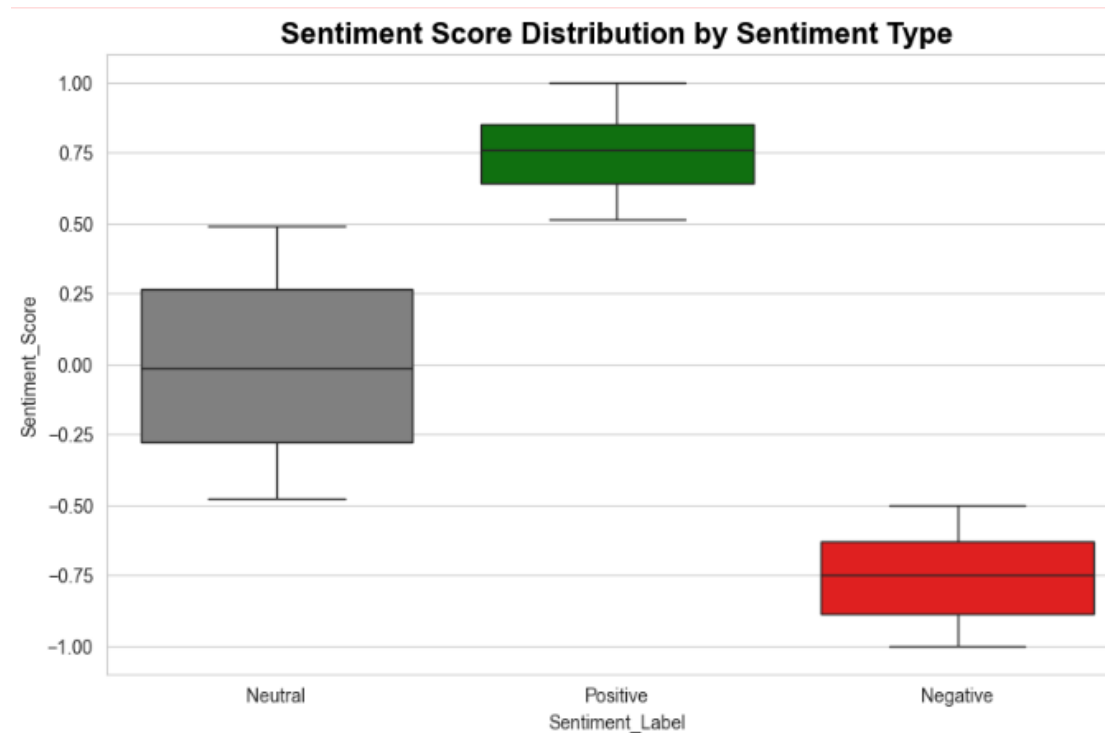
Number of Posts per Day of the Week

Posting activity peaks on Wednesday and Sunday, indicating higher user engagement on these days. Monday and Saturday also show relatively high activity, whereas Tuesday has the lowest number of posts. Businesses can leverage this information to schedule their content effectively. This pattern suggests that mid-week and weekend posts may receive more attention and engagement from users, making these the ideal days for impactful social media campaigns.



Sentiment Score Distribution by Sentiment Type

Sentiment analysis categorizes posts into positive, neutral, and negative sentiments. The majority of neutral posts fall within a balanced range, while positive posts have significantly higher sentiment scores, and negative posts exhibit strong downward trends. This analysis highlights the distribution and intensity of emotions expressed by users.



Key Insights & Recommendations

- **Findings:**
 - Facebook sees the highest engagement, making it a key platform for brand interactions.
 - Sentiment trends vary by platform, with Instagram and LinkedIn experiencing more negative sentiment.
 - Posting behavior fluctuates, with higher engagement on Wednesdays and Sundays and peak activity hours during midday and evenings.



Thank You

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