



# Sentiment Mining Project

## INTRODUCTION

This project analyses public opinion about Apple's iPhone ecosystem using Reddit discussions from r/iPhone. Because the iPhone 17 lineup and the iOS 26 update were released within the past month, most highly active posts naturally focused on user experiences, issues, and reactions to these new releases. The goal of this study is to understand how people feel about the new iPhone models, how they are responding to the iOS 26 update, and what concerns or positive experiences are most commonly expressed. Using R for data collection and preprocessing, and Tableau for visualisation, the project identifies sentiment patterns and key topics dominating recent conversations about Apple's products.

## DATA OVERVIEW

More than twenty thousand comments were collected from top r/iPhone threads using R packages such as `RedditExtractoR`, `tidytext`, and `tidyverse`. The data includes user comments, timestamps, and thread URLs from the most active posts in the last month, making it highly relevant to the current iPhone 17 and iOS 26 launch period. After downloading the raw discussions, the text was cleaned, tokenised, and processed into multiple structured CSV files, including datasets for word tokens and sentiment-labelled words. This allowed us to run sentiment analysis using the Bing and NRC lexicons and generate visualisations that highlight public opinion, frequent discussion topics, and the issues that new users are reporting.

## VISUALISATIONS

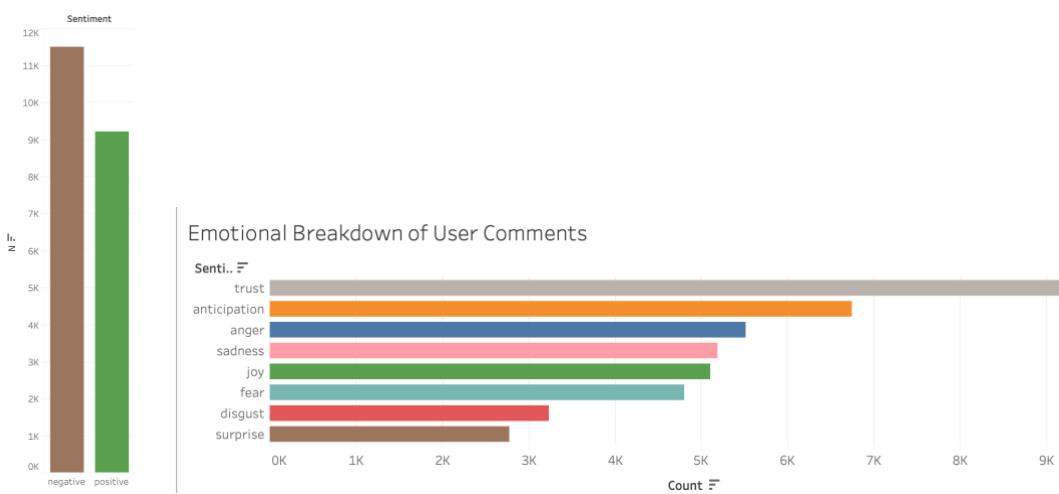


Figure 1. Overall Sentiment Distribution

Figure 2. Emotional Breakdown of User Comments (NRC Lexicon)

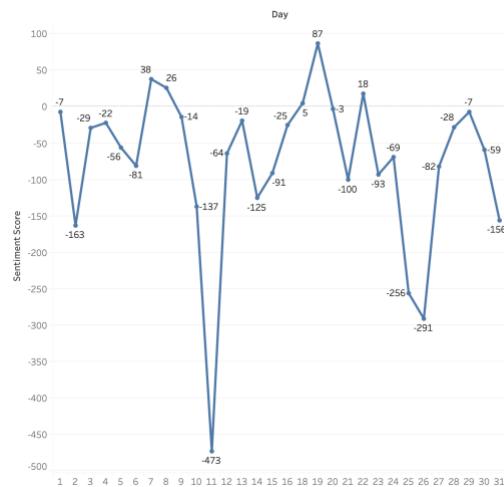


Figure 3. Daily Sentiment Score Trend

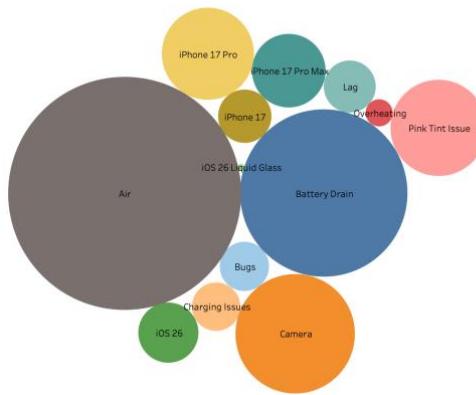


Figure 4. Topic Popularity Bubble Chart

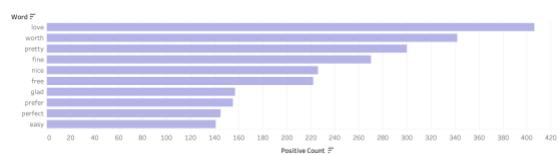
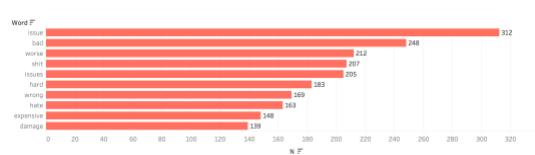


Figure 5 & 6. Top Positive and Negative Words



## FINDINGS & INSIGHTS

Analysis of more than 15,000 Reddit comments shows a clear pattern in how users reacted to the iPhone 17 lineup and the iOS 26 update during the release month. Overall sentiment leaned more negative than positive, as seen in (Figure 1), indicating that users were generally more frustrated than impressed. However, the difference was not extreme many users still shared positive experiences, meaning the reaction wasn't entirely one-sided. The sentiment trend in (Figure 2) shows large negative spikes around discussions of iOS 26 Liquid Glass, which became one of the most criticized changes this year. Many users expressed disappointment because expectations were extremely high for both iOS 26 and the new iPhone models, based on months of leaks and early reviews.

Emotional tone analysis (Figure 3) also reflects this mixed reaction. Emotions like *fear*, *anger*, and *sadness* appear strongly due to battery drain, screen tint, lag, and bugs. At the same time, emotions such as *joy* and *trust* show up because some users genuinely liked the new performance, design, and cameras. The strongest positive words (Figure 5) show what people appreciated (*love*, *worth*, *fine*, *nice*), while the negative words (Figure 6) explain the frustration (*issue*, *bad*, *worse*, *shit*). Together, these results show that the new iPhones are not universally hated people like them, but the problems during launch overshadowed the excitement.

The most important insights come from understanding *what* people talked about the most. Topic-frequency patterns in (Figure 4) show that "iPhone Air" was the most referenced device mainly because of its new ultra-thin design, which led to many discussions about battery drain, durability, and overheating. Other major issues include pink tint colour shifts (especially on the orange Pro models), camera inconsistencies, charging problems, lag, bugs, and general performance

complaints. Among the phones, the iPhone 17 Pro was discussed the most (flagship hype), followed by the Pro Max, and then the base iPhone 17, which many users felt had minimal upgrades this year. Overall, the data suggests that early adopters were excited, but the conversation quickly shifted toward concerns and troubleshooting especially around iOS 26 and the new hardware changes.

## **CONCLUSION**

Overall, the analysis shows that the iPhone 17 release cycle was met with more criticism than excitement among Reddit users. Despite Apple introducing major design and software changes this year, many users were disappointed with the results especially the new Liquid Glass interface and the extremely thin “iPhone Air,” which generated the highest volume of complaints. Issues such as battery drain, overheating, lag, pink-tint displays, and various iOS 26 bugs further contributed to the negative sentiment and pushed conversations towards troubleshooting rather than excitement about new features. While Apple still maintains a strong loyal user base and continues to deliver high performance and ecosystem advantages, this particular launch cycle triggered more frustration than usual. The sentiment patterns suggest that users expected far more refinement from both the hardware and the software, and that the gap between expectations and reality was especially visible in early-adopter feedback. As reflected throughout the collected data, this release stands out as one of the more divisive iPhone launches, with initial enthusiasm overshadowed by widespread user dissatisfaction.

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### **1. What does the other information in the social media data say about the product?**

Beyond basic sentiment counts, the data clearly shows that users discuss Apple with high expectations and strong emotional involvement. Most comments revolve around practical issues battery drain, overheating, lag, bugs, charging problems, and pink-tint displays which indicates that users care deeply about performance and stability right after upgrading. The large volume of iPhone Air and iOS 26 Liquid Glass discussions shows that design changes and new features triggered confusion and mixed reactions. Overall, the extra information in the comments reflects a user base that likes Apple but is openly frustrated with the problems appearing in the first month of the new release.

### **2. Can you integrate contemporary information to explain what is happening?**

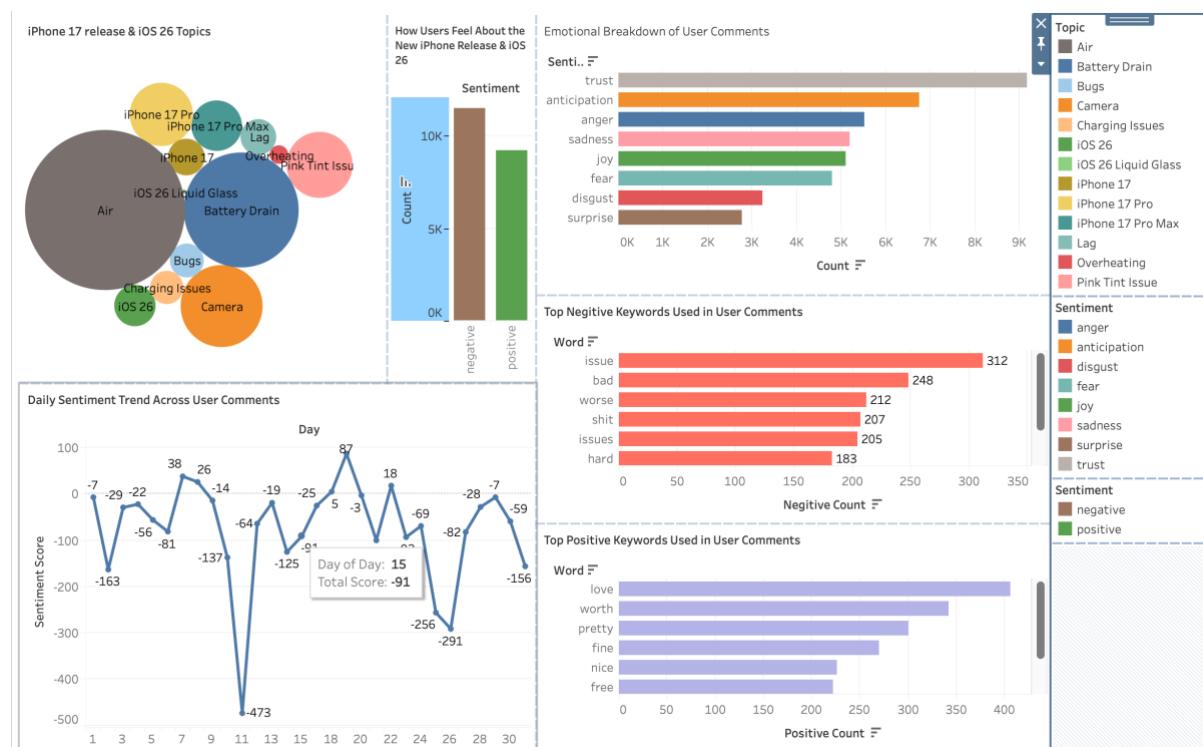
All the negativity and issue-heavy discussions match the timing of the data, which was scraped immediately after the launch of the iPhone 17 lineup and iOS 26. Because most comments mention “after I updated,” “on my new 17 Pro,” or “since installing iOS 26,” it’s clear the problems are tied directly to the fresh release cycle. Our sentiment-by-day data also shows drops on days when specific issues (like battery drain and Liquid Glass confusion) suddenly became popular. So the timing of the dataset itself already explains the surge of complaints this is the typical reaction wave that happens right after a major Apple hardware and software launch.

### **3. Can you demonstrate differences between your studied company and competitors?**

The Reddit comments also reveal how users view Apple compared to competitors like Google and Samsung. Many users directly compare the iPhone 17 and iOS 26 experience with Android devices, especially the Pixel lineup. Some posts mention that the iPhone Air design looks similar to Google’s

Pixel 10 Pro, while others compare Gmail vs Apple Mail, Google Photos vs iCloud, or Android customization vs Apple's simplicity. Several users switching from Android share that iOS feels smoother, more polished, and more secure, praising features like the ecosystem, privacy, AppleCare support, and overall reliability. At the same time, frustrated users sometimes reference Samsung's Flip and Fold devices, pointing out that Samsung experiments with bold designs like Flip, Fold and Ultra while Apple tends to stay conservative. Overall, the data shows that even when users mention competitors, it is usually to highlight why they switched to Apple or what they miss, reinforcing that Apple is still seen as the more stable, premium, and refined choice even if the iPhone 17 release faced many complaints.

## DASHBOARD



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