

AMAZON PHONE REVIEW ANALYSIS

By Priyanshi

BACKGROUND



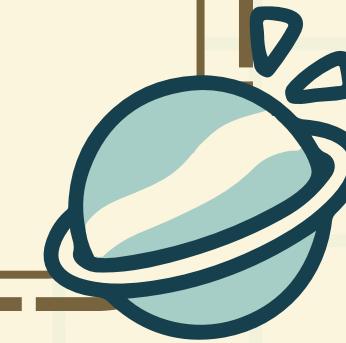
The **mobile phone** market is very competitive, and customers depend on online ratings and reviews before buying a device. Using the Kaggle dataset, which includes **brand, price, ratings, and reviews**, we can easily study trends, compare brands, and understand customer preferences. This structured data allows clear and systematic analysis.

PROBLEM STATEMENT



Although the dataset is structured, brands lack clear insights into customer satisfaction, rating patterns, sentiment distribution, and price-rating relationships. The challenge is to analyze ratings, reviews, and brand-wise performance to identify **strengths, weaknesses, and improvement areas**. Understanding customer sentiment is essential for making informed business and product decisions.

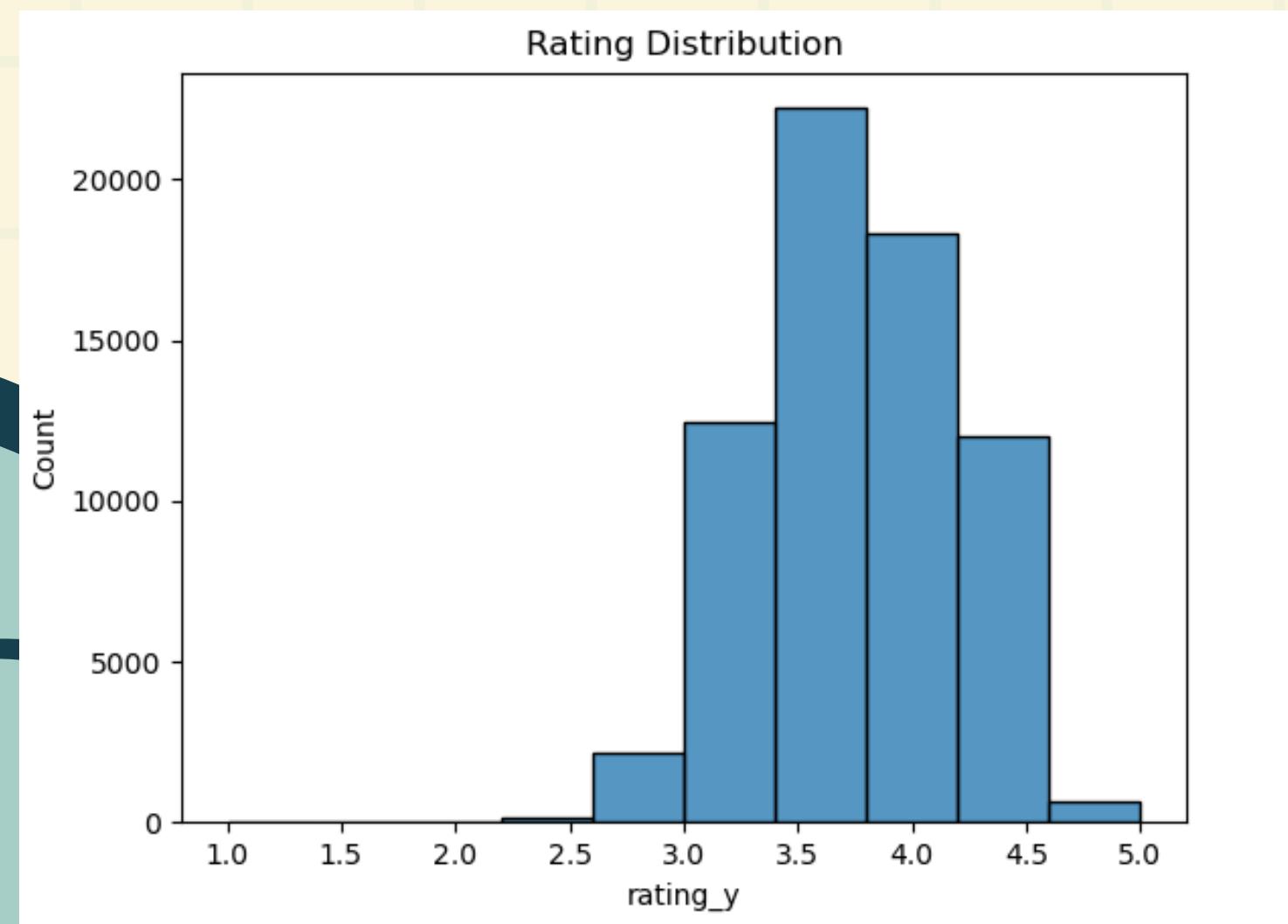
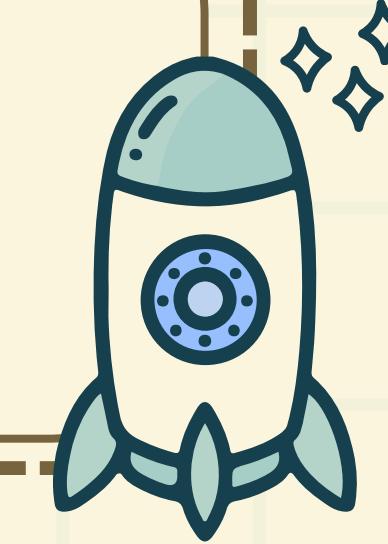
OBJECTIVE



The objective is to perform complete exploratory data analysis, visualization and sentiment analysis on mobile reviews. This includes understanding rating distribution, analyzing brand performance, examining price-rating relationships, identifying customer sentiment, and finding trends over time. The goal is to deliver actionable insights that support business and product decisions.

INSIGHTS

RATING DISTRIBUTION



The most common rating people gave this phone was **3.5 stars**. A lot of people were pretty happy too, giving **4 stars**. It seems most customers feel just okay to good .

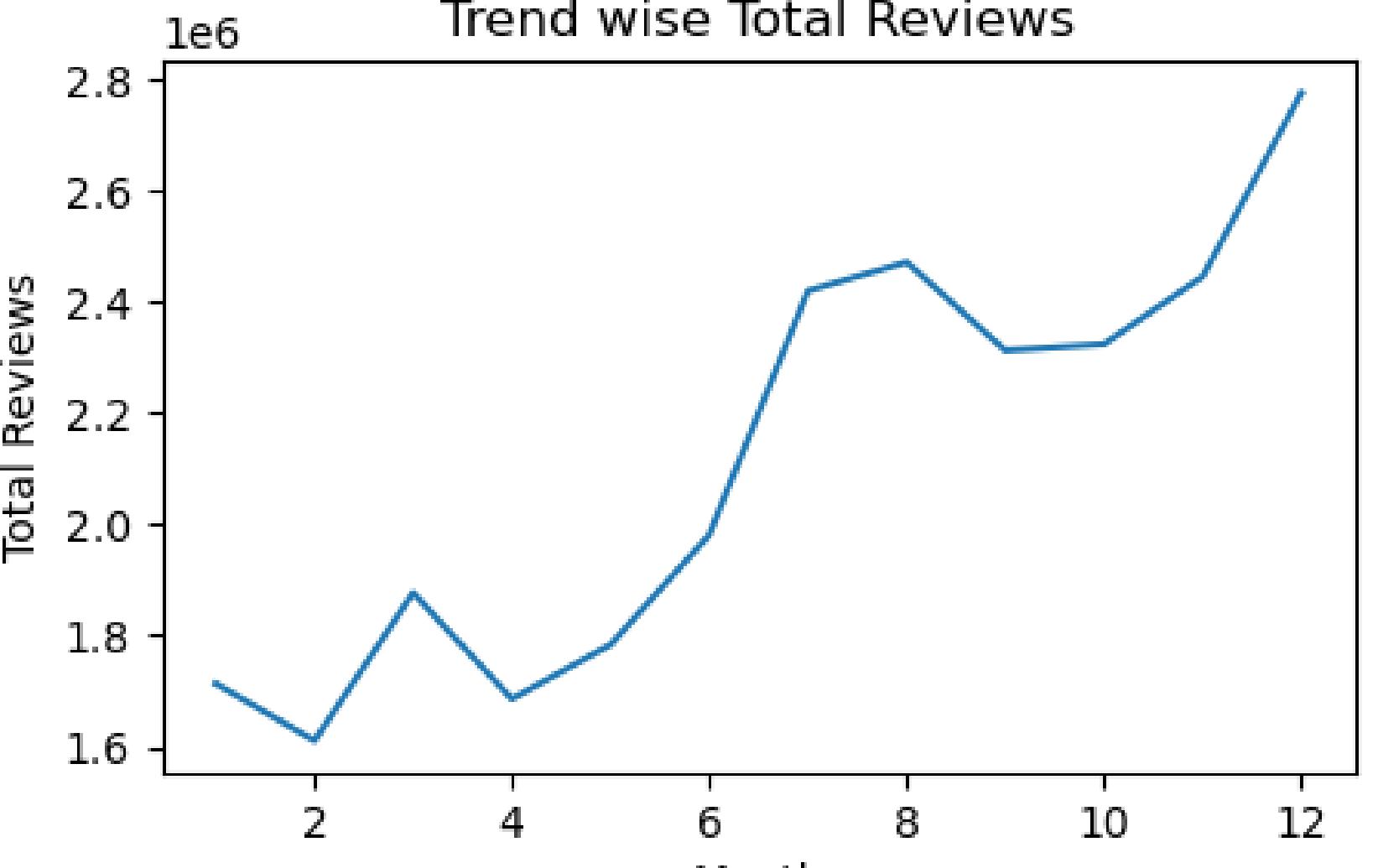
PRICE VS RATING



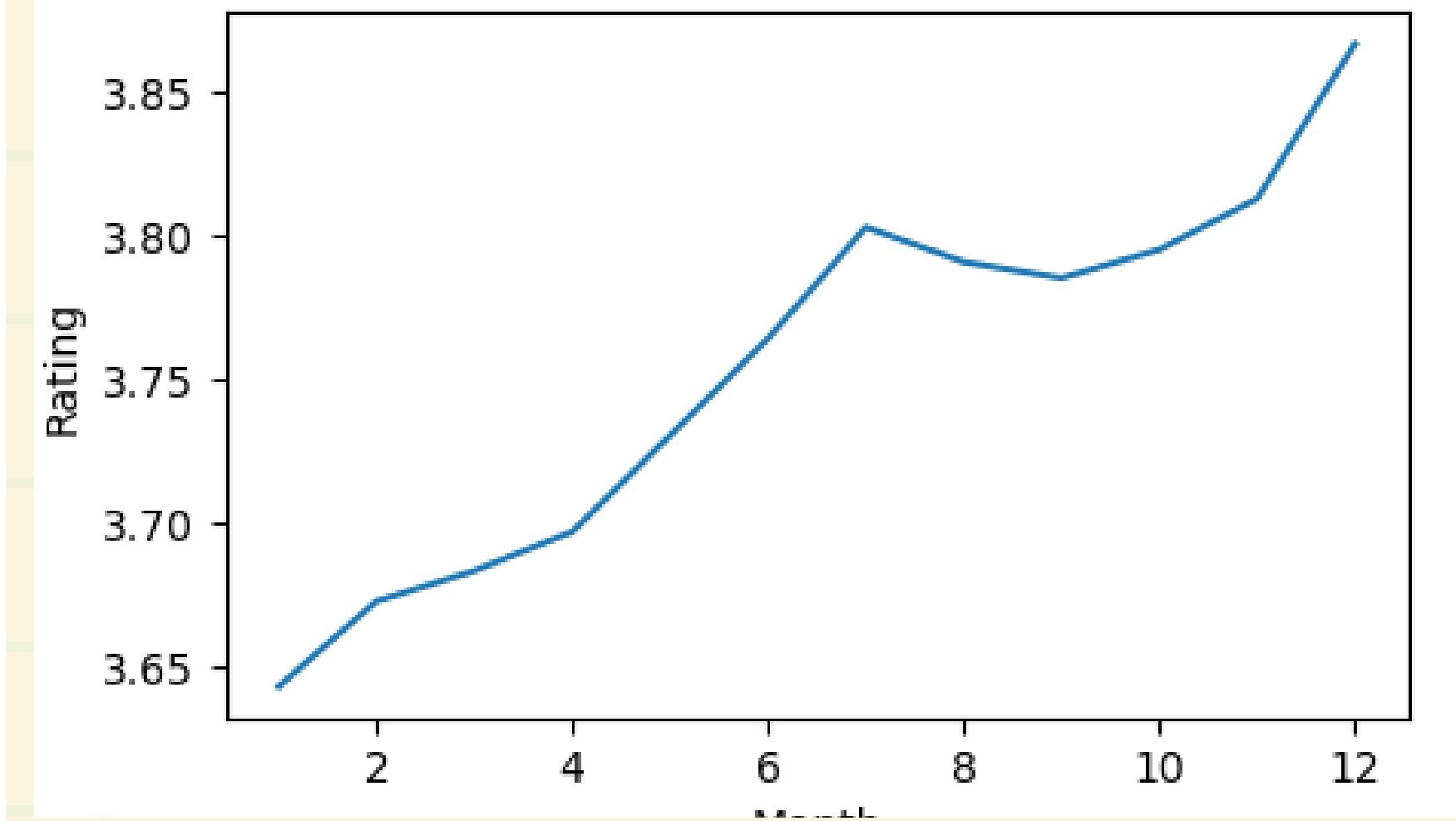
Price does not strongly influence rating. Both **low-cost** and **high-cost** phones can achieve high ratings. Customer satisfaction depends more on features, performance, brand trust, and user experience rather than price.

TREND WISE RATING AND TOTAL REVIEWS

Trend wise Total Reviews

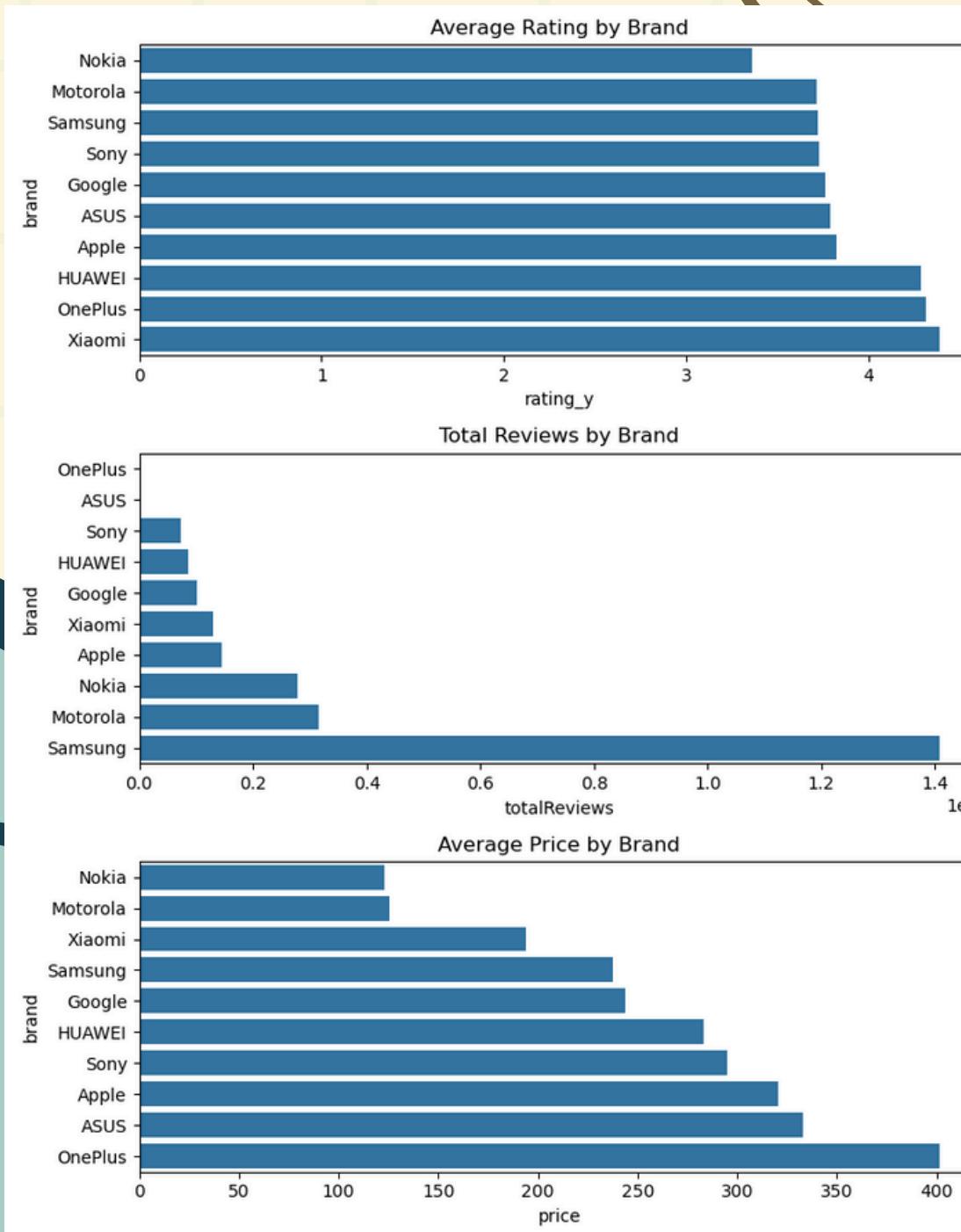


Trend wise Rating



- Both **rating & reviews rise sharply in December**, indicating high customer satisfaction and high purchase volume.
- The **mid-year period (May–August)** is also strong for reviews but shows **mixed satisfaction** (small rating dip).
- Early-year (Jan–Apr) is the **slowest period** for both customer engagement and satisfaction.

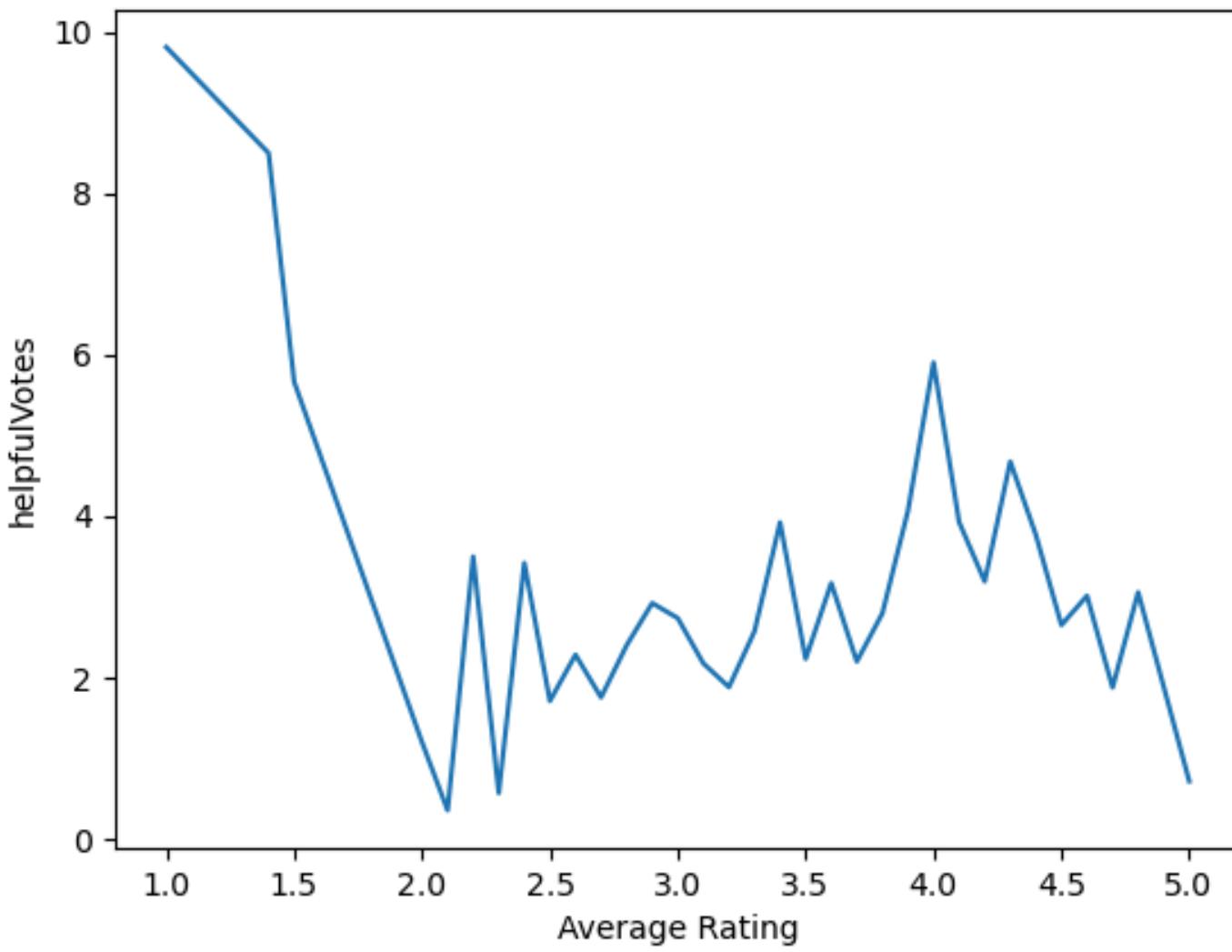
AVG RATING, REVIEWS, PRICE BY BRAND



- Samsung leads the market with the **highest number of customer reviews**, indicating strong sales and brand presence.
- **Xiaomi** provides the best customer **satisfaction** at the **lowest price**, making it the top value brand.
- **OnePlus** and **Apple** are premium brands with high prices and strong ratings but limited customer volume.
- Nokia shows low ratings even at low prices, suggesting quality or feature issues.
- Overall, **brands offering high performance** at competitive pricing (Xiaomi, OnePlus) receive better ratings, while market leaders like Samsung rely on brand trust and wide availability.

VOTE WISE RATING

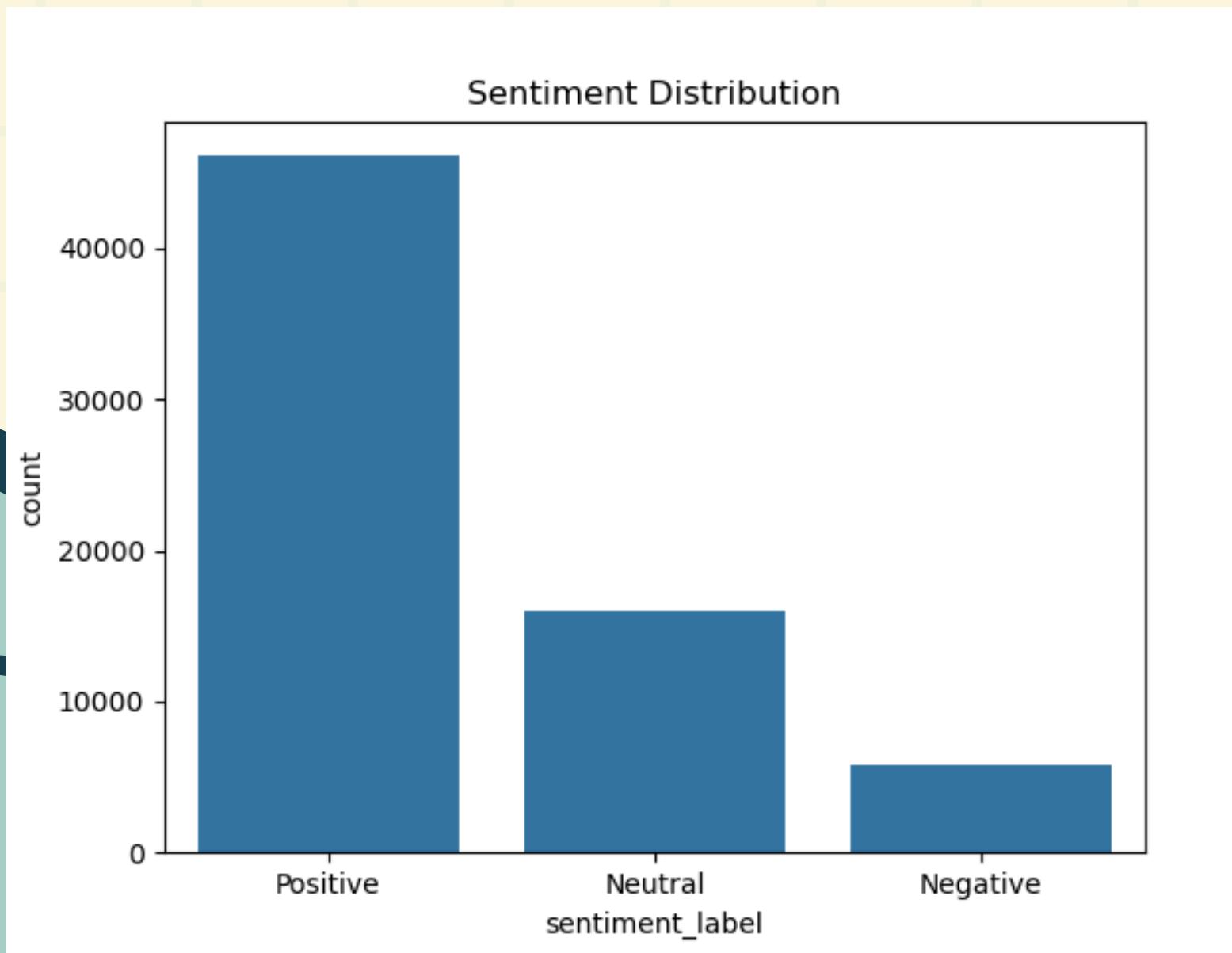
Votes Rating wise



Helpful votes are **highest for low-rated reviews**, indicating customers trust critical feedback more. This means customers pay more attention to **critical or negative feedback** when making purchase decisions. These reviews highlight key areas such as battery issues, device lag, camera quality concerns, or heating problems – making them highly valuable for both buyers and brands.

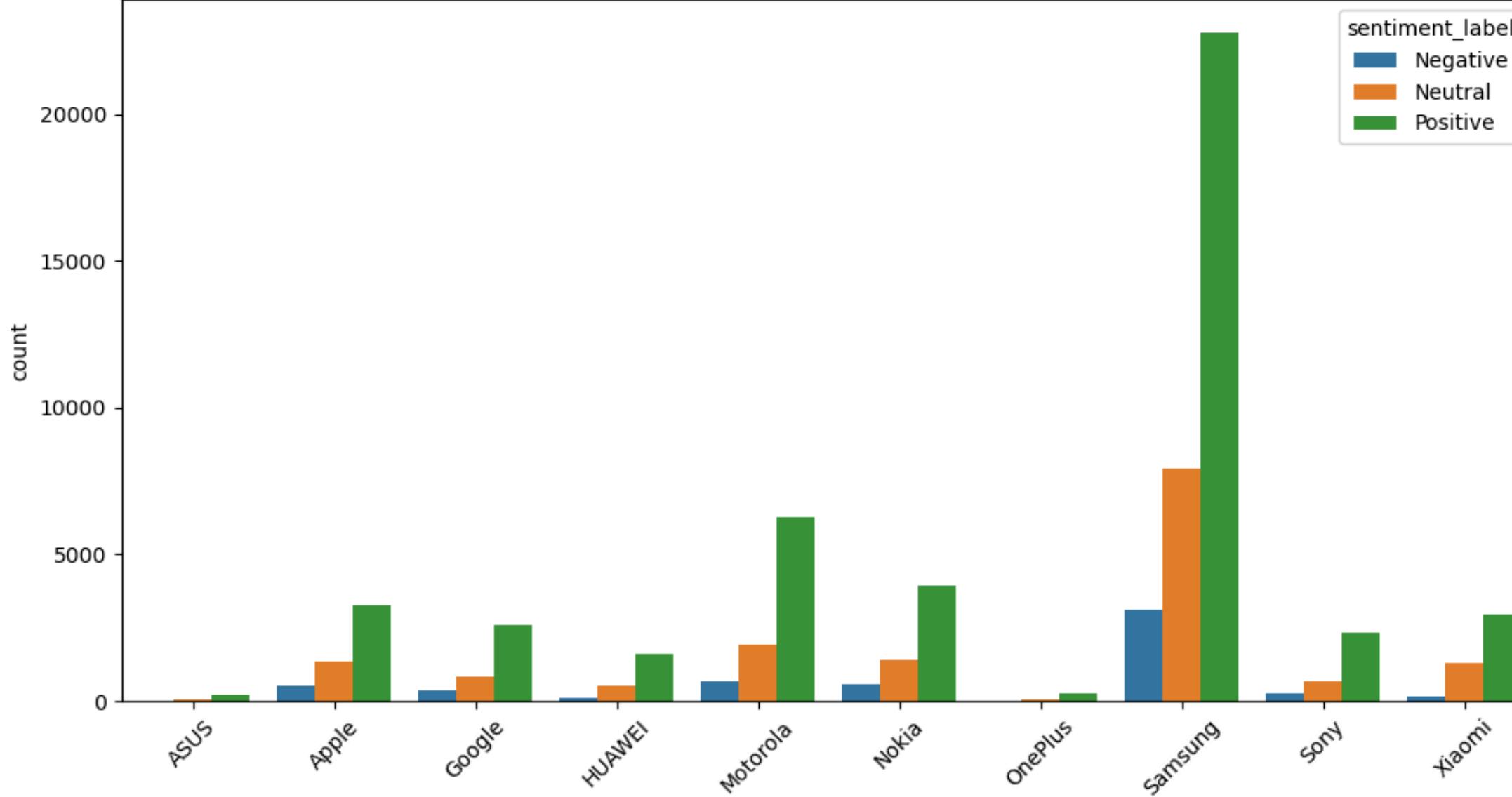
SENTIMENT DISTRIBUTION

Positive sentiment dominates overall, reflecting strong customer satisfaction across brands.
Negative sentiment is relatively small but concentrated in certain brands, highlighting areas for improvement.



BRAND WISE SENTIMENT DISTRIBUTION

Brand-wise Sentiment Distribution



Samsung shows the largest number of positive reviews, reinforcing its market trust and widespread adoption

BUSINESS RECOMMENDATIONS

1. Mid-range phones get the best ratings and highest demand.
Launch more models in this price segment.
2. If customers praise camera, performance, or design, brands should use these strengths in ads to attract buyers.
3. Many negative reviews come from poor after-sales service.
Better service will reduce complaints and increase trust.
4. Months with high review activity show high customer interest.
Brands should use these months for promotions or new launches.

CONCLUSION



This project analyzed smartphone reviews using ratings, prices, sentiments, and brand-level patterns. Insights show that **customer satisfaction does not depend** on price—both budget and premium phones receive **high ratings**. Brands with higher review volume maintain stronger visibility. Sentiment analysis revealed that most reviews are **positive**, reflecting good market acceptance. Monthly **trends indicate growing customer engagement**. Overall, product quality, performance, and user experience drive customer satisfaction more than pricing or brand popularity.

THANK YOU

