Does Apple's Fixed iPhone Release Schedule Hurt Its Customer Satisfaction?

An Analysis of Amazon Reviews for the iPhone X

Web Scraping Project

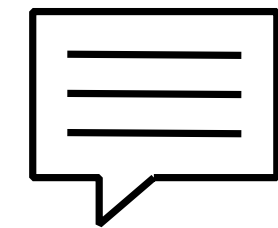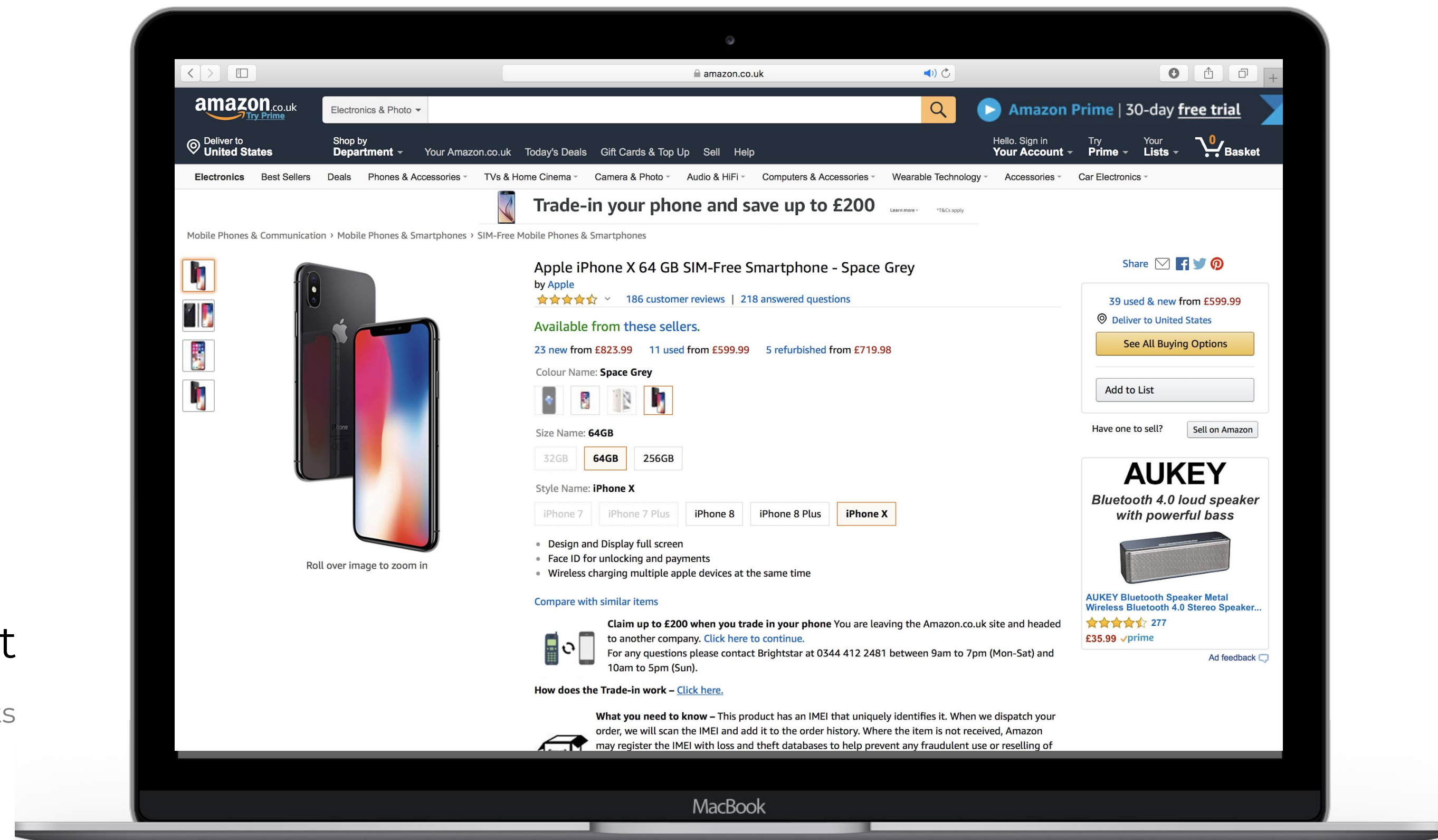Lukas Frei

Scraping amazon.co.uk
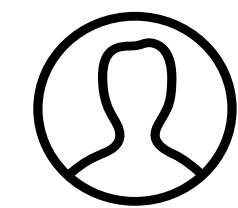
Selenium

Using Selenium to scrape amazon.co.uk

Important Market

Europe one of top 3 markets for the iPhone

Reviews

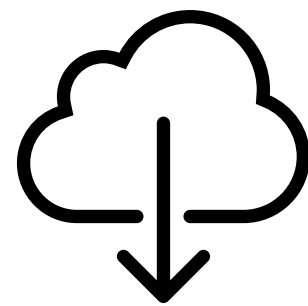Scraping ratings, review titles, review texts, and helpful votes

User Information
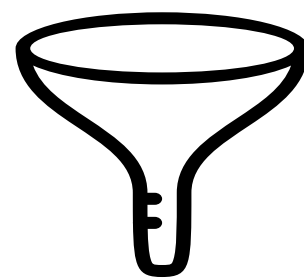
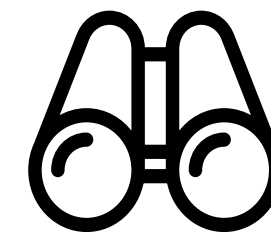amazon.co.uk provides detailed information about users

Web Scraping

Workflow

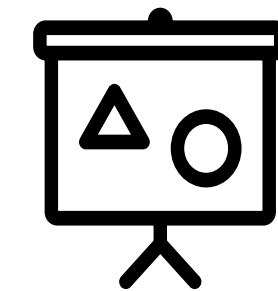Scraping amazon.co.uk utilizing several Python packages

Web Scraping

Selenium

**Filtering &
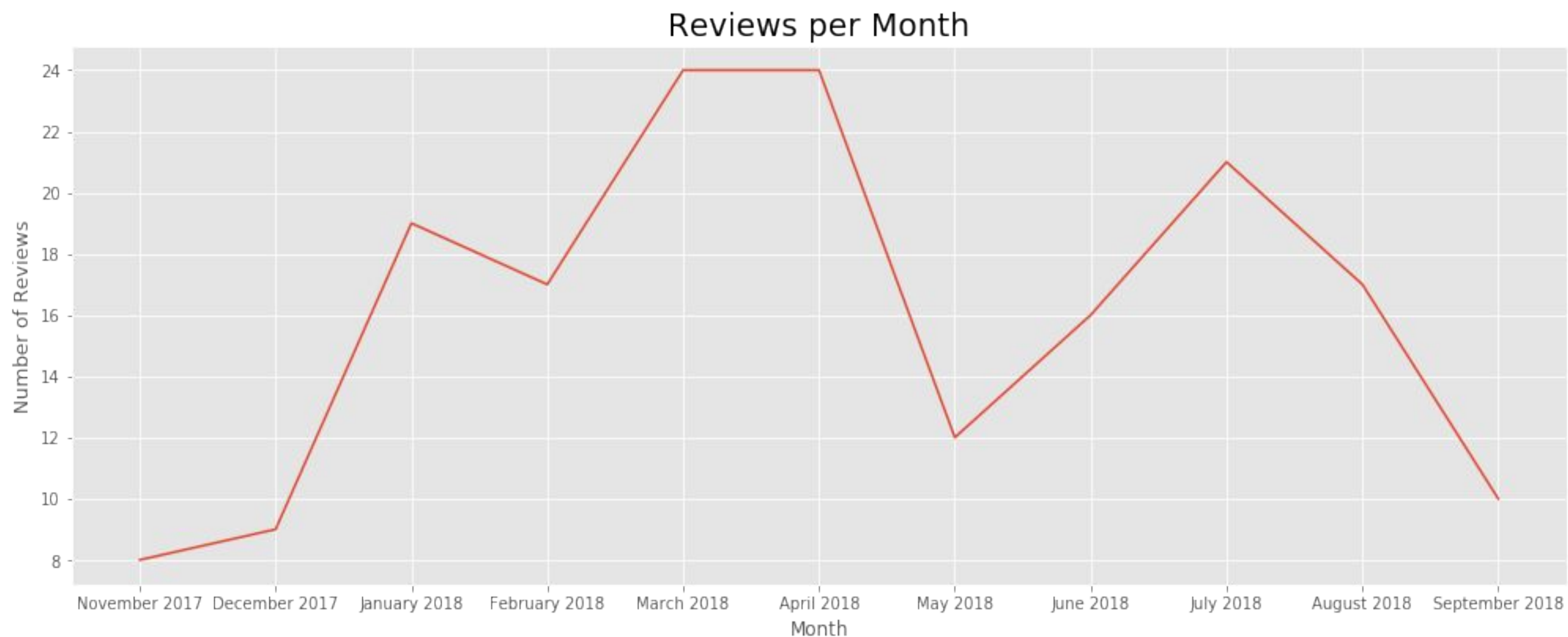Cleaning Data**

Pandas, NumPy, RE

**Data Manipulation
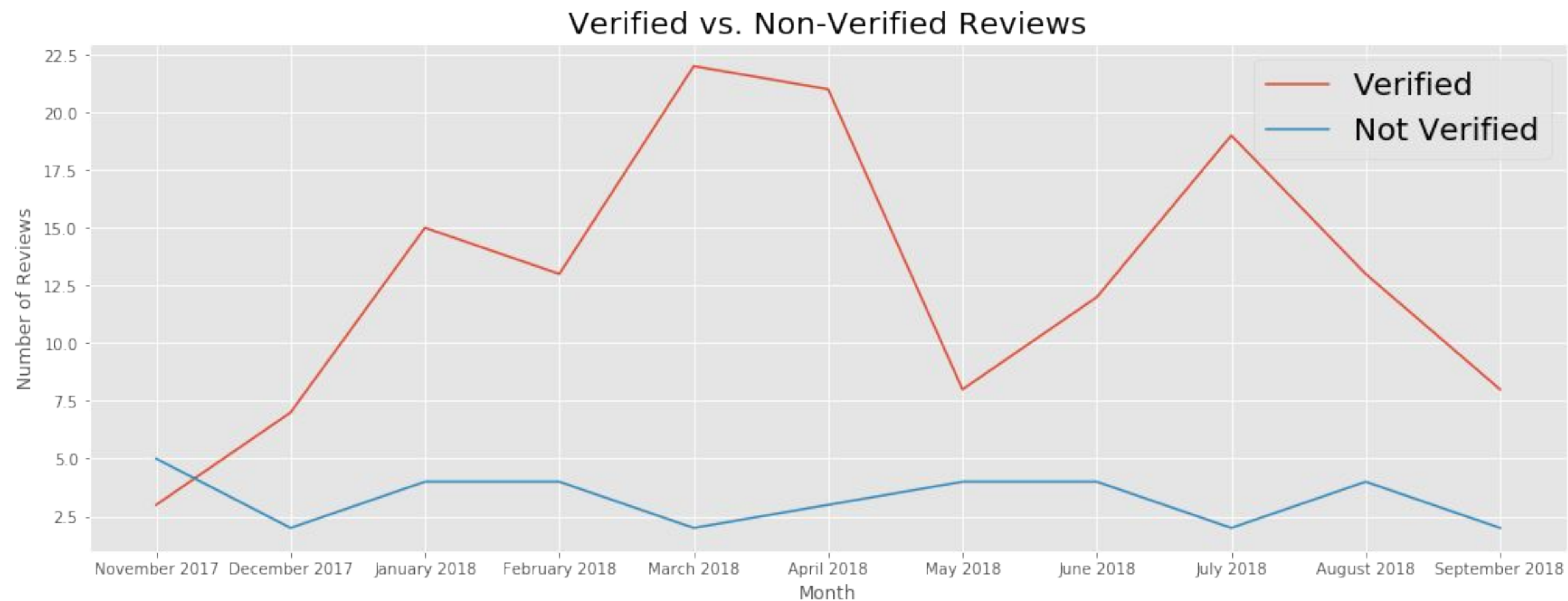& Analysis**

Pandas, NLTK

Data Visualization

Matplotlib, Seaborn, wordcloud

Number of Reviews per Month

Against initial expectations, relatively little reviews after release

Verified vs. Non-Verified Reviews

More verified reviews

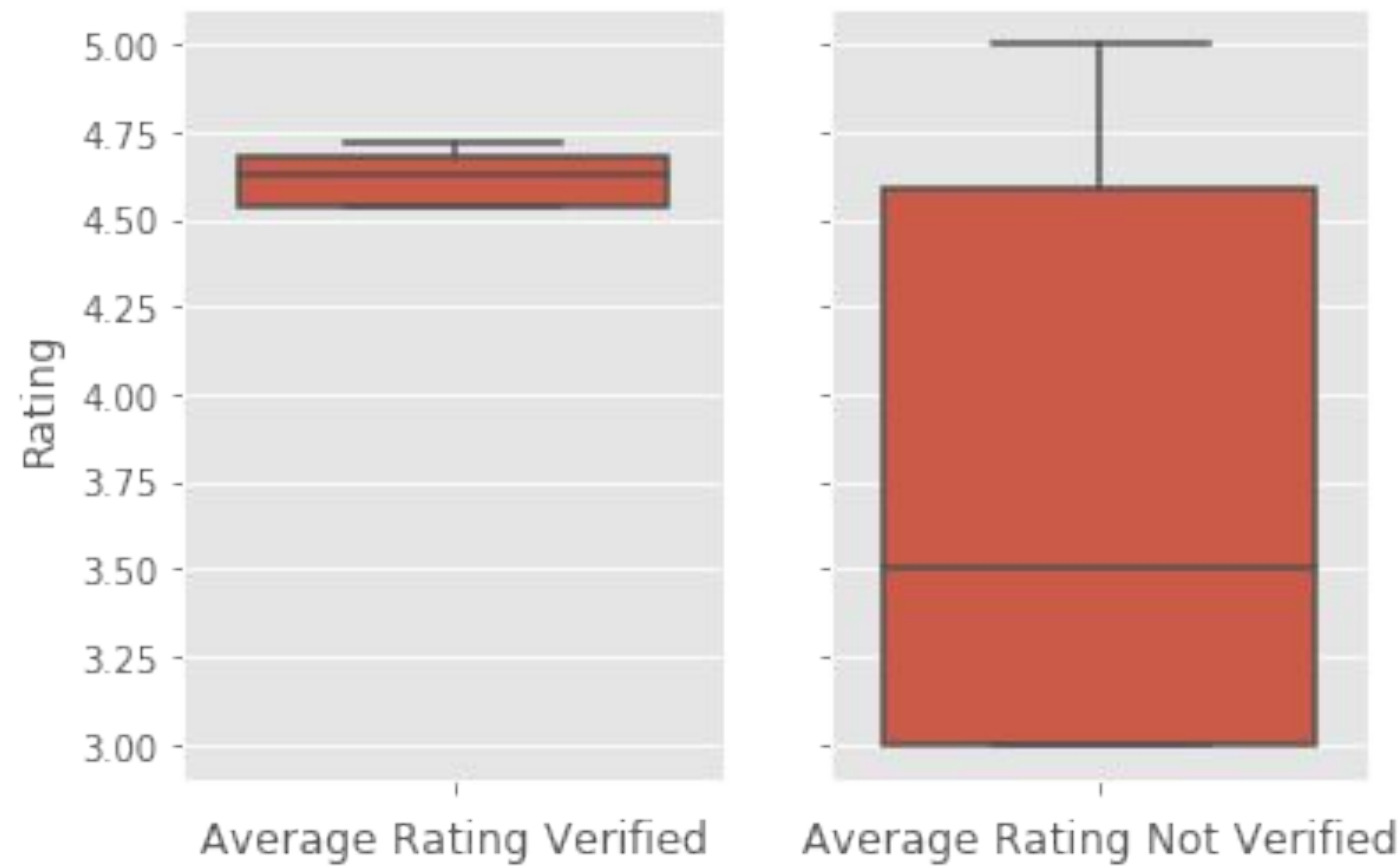Majority of reviews from verified users

Initially more non-verified reviews

Right after the release was the only point at which there were more non-verified reviews

Most reviews in March 2018
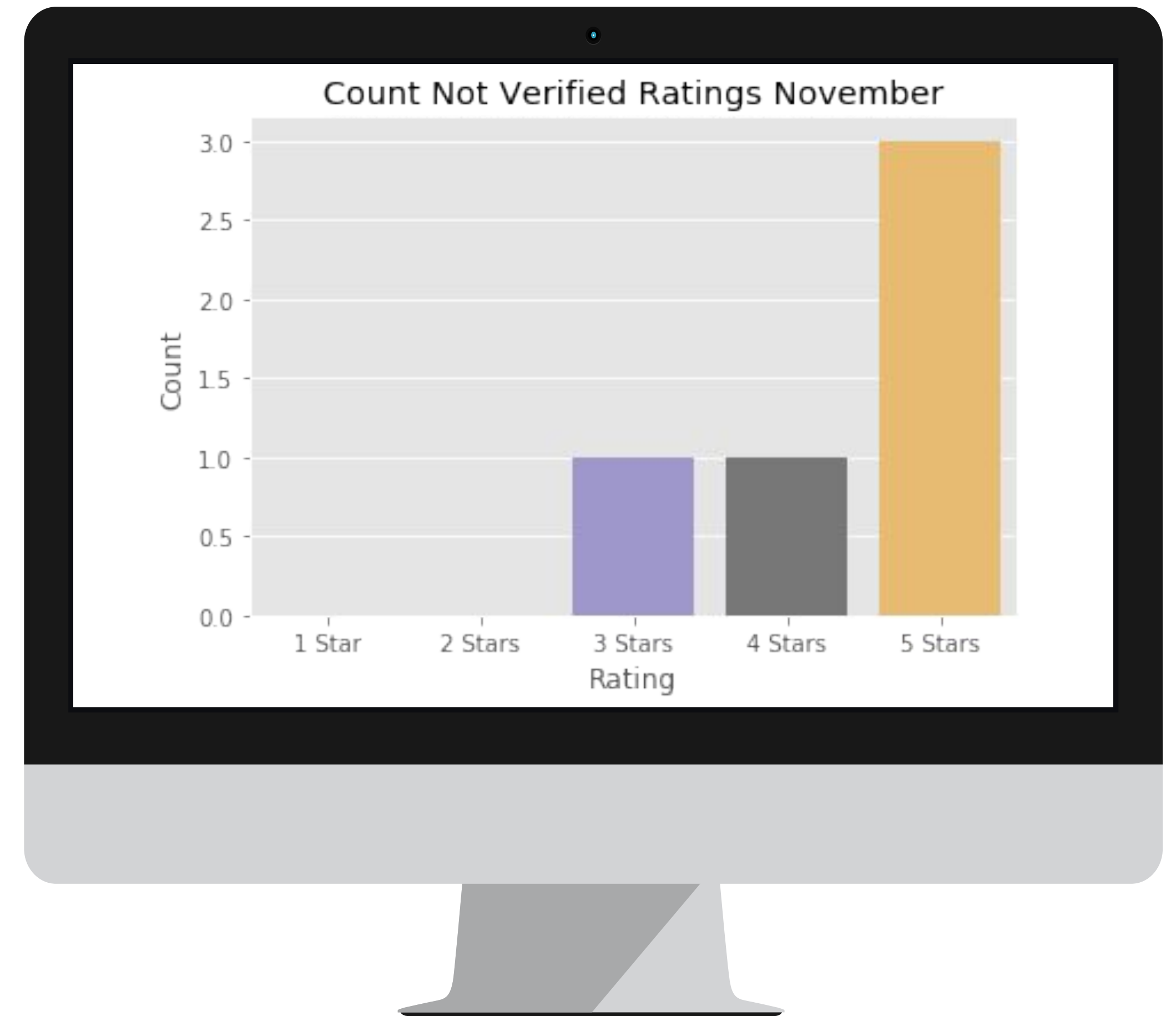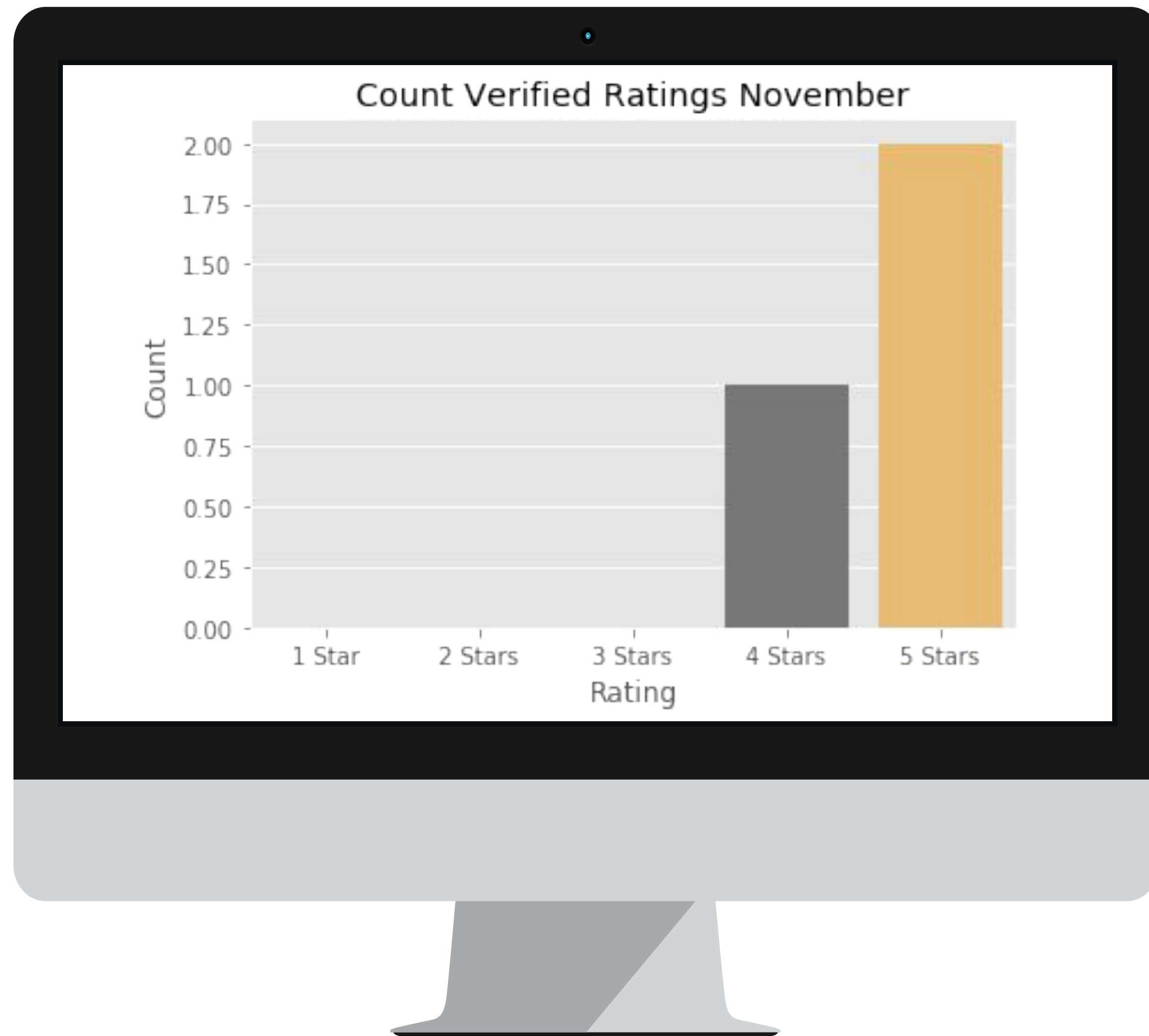
Reverse U-shaped pattern of verified reviews

Boxplot Average Rating Verified vs. Not Verified

Significant Differences between Verified and Unverified Reviews

Verified vs. Unverified Reviews in November 2017

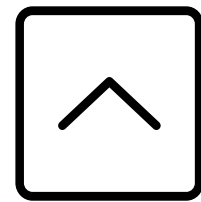# Review Analysis

Overwhelmingly positive

Mostly positive words indicating high customer satisfaction

Fast delivery

Not necessarily important insight for Apple, but for Amazon

Barely dissatisfaction with early bugs

No mentioning of problems with iOS or FaceID

Fake Review Index

Σ of Helpful Votes

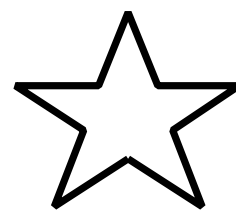If a user gets little helpful votes per review, the reviews are more likely to be fake
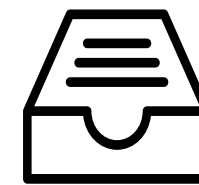
Σ of Reviews

If a user only leaves very little reviews, they are less likely to be an active community member

Review Dates

If a user leaves many reviews on the same day, the reviews are more likely to be fake
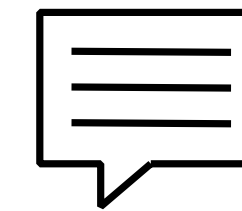
Ratings

If a user only leaves 5 or 1 star reviews, they are more likely to be fake

Review Titles

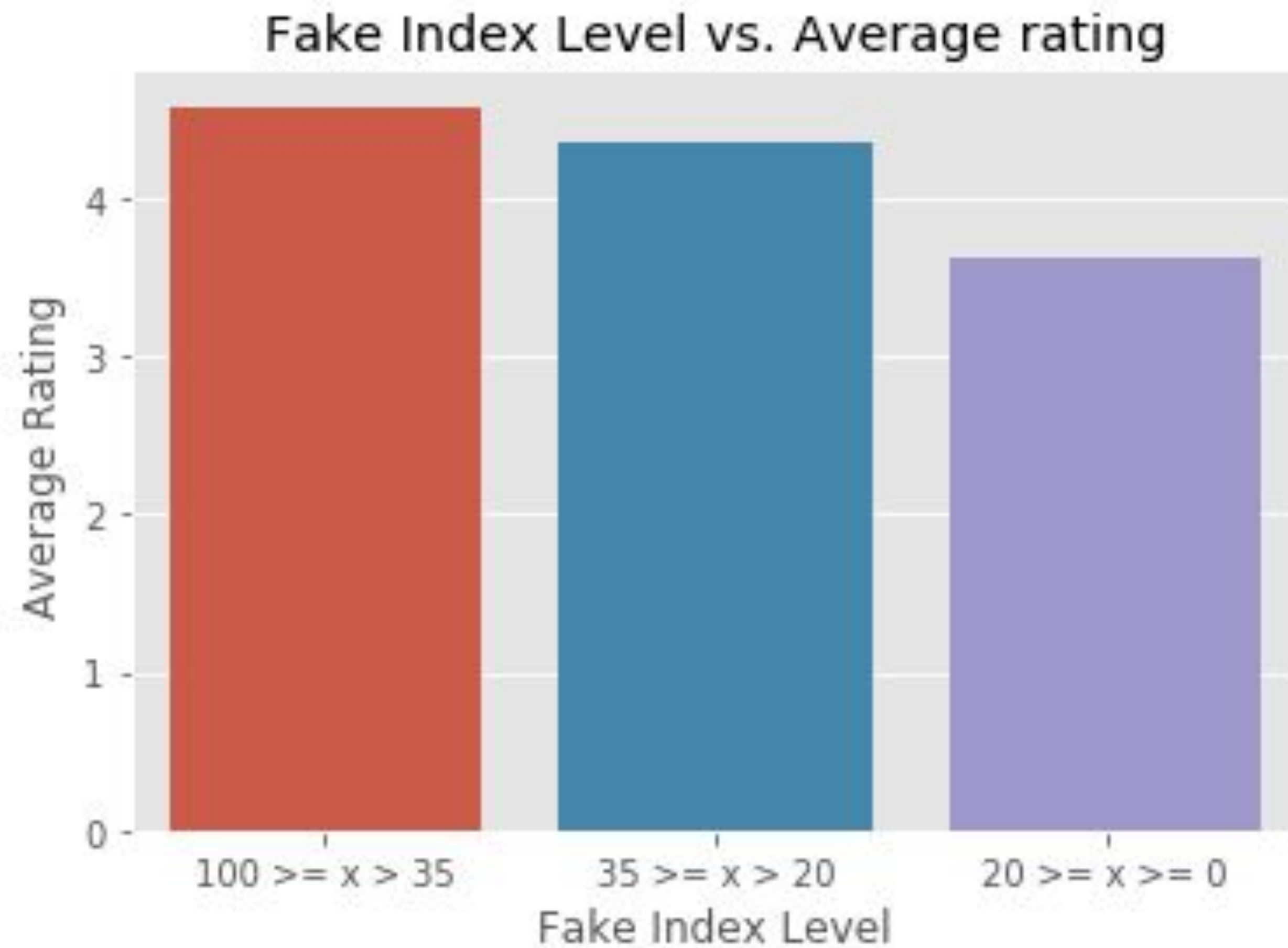If a user uses the same title for multiple reviews, the reviews are more likely to be fake

Review Texts

If a user uses the same text for multiple reviews, the reviews are more likely to be fake

Fake Review Index

Fake Index Level vs. Average rating

Score > 35

Relatively likely to be a fake review

Score between 20 and 35

Grey area

Score Below 20

Unlikely to be a fake review

Conclusion

⊘ **Apple's customer satisfaction is still very high**

At first glance, potential problems resulting from a fixed product development schedule do not seem to impact customer satisfaction

⊘ **Verified reviews consistently higher than unverified reviews**

Indicates that customers are split into clearly separated groups with strong opinions regarding their brand / smartphone of choice

⊘ **"Real" reviews tend to be lower**

Thank you!

Audience questions & answers

Q Have a question? Search for answers

▲
3
votes
▼

Question: Insert question here

Answer: