CAPSTONE EDA PROJECT

On

PLAY STORE APPs REVIEW ANALYSIS

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PLAY STORE APPs REVIEW ANALYSIS

Why review analysis is important?

Play Store place a greater level of importance on ratings and reviews than ever before. Apps with higher ratings and reviews rank high in search. If an app ranks high then there's a better chance of it being found and downloaded. The more downloads the more it will be kept high in the rankings

App Market is set to grow 20% by 2023

Datasets

Two datasets are provided

1. Basic Information
2. User Review

It consist of 13 columns: *App, Category, Rating, Review, Size, Installs, Type, Price, Content, Rating, Genres, Last Update, Current Ver,* and *Android Ver* and *with 10841 Rows.*

Overview Of Analysis

Data Cleaning

Understand the structure of the dataset and clean data before analysis

Data Exploration

Uncover initial patterns, characteristics, and points of interest using visual exploration

Data Visualization

Data visualization using Python visualization libraries like Matplotlib, Seaborn.

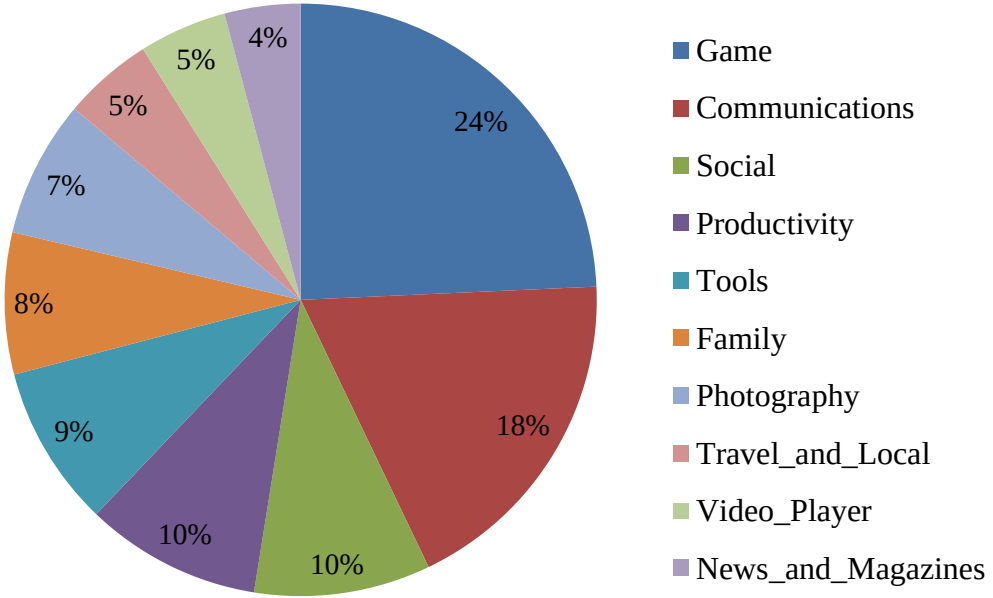
Problem Statement

1. Find out the app category which application has been installed maximum number of times.
2. What are the factors affecting the maximum downloads?
3. Exploring the top 5 highest rated free and paid apps.
4. Exploring the average rating for each category.
5. Understanding the sentiment polarity of the users.

Data Visualization

Top Installed Apps By Category

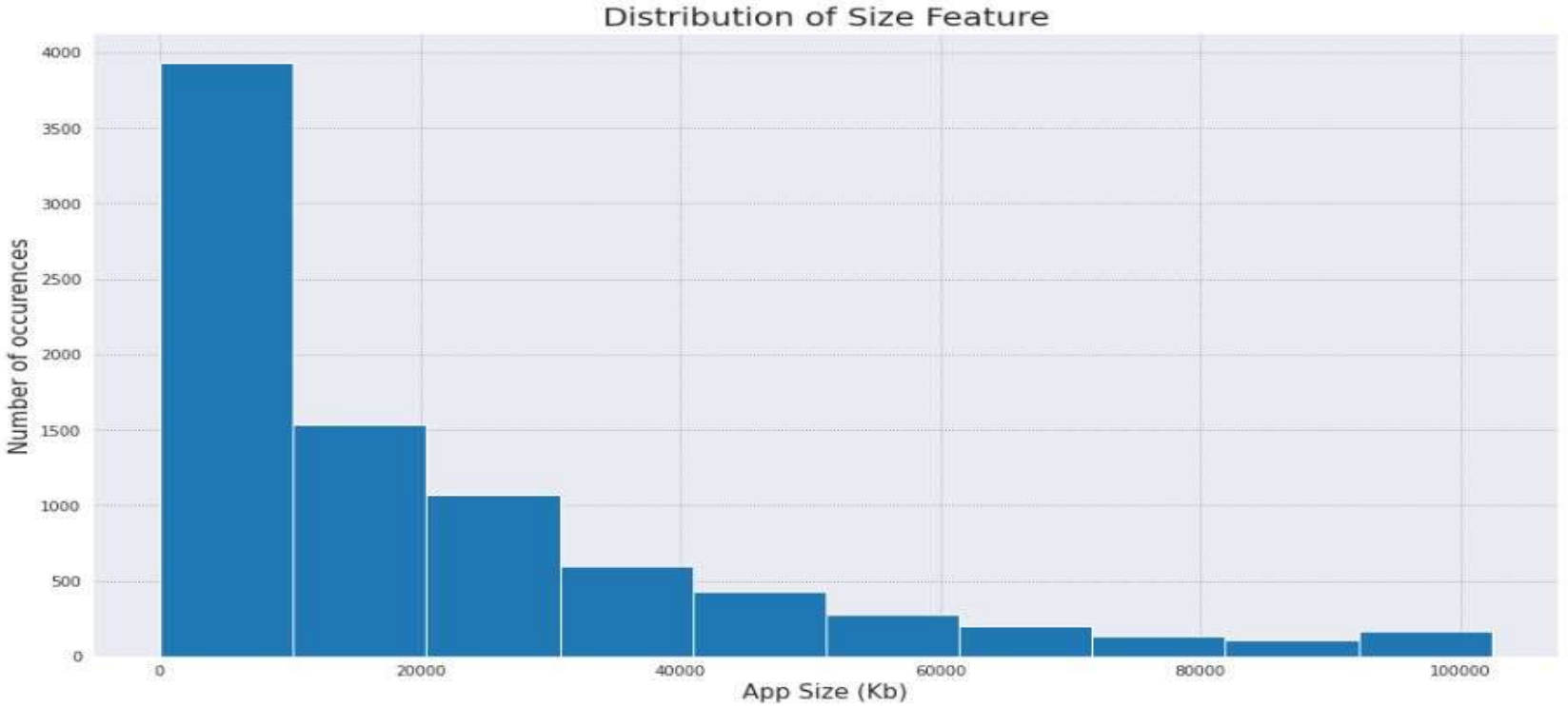
- Game, Communication, Social, Productivity, Tools, Family, Photography, News & Magazines, Travel & Local, Video Players are untapped free app categories
- High Installs because of a high underlying demand



GAME category apps has been installed maximum number of times

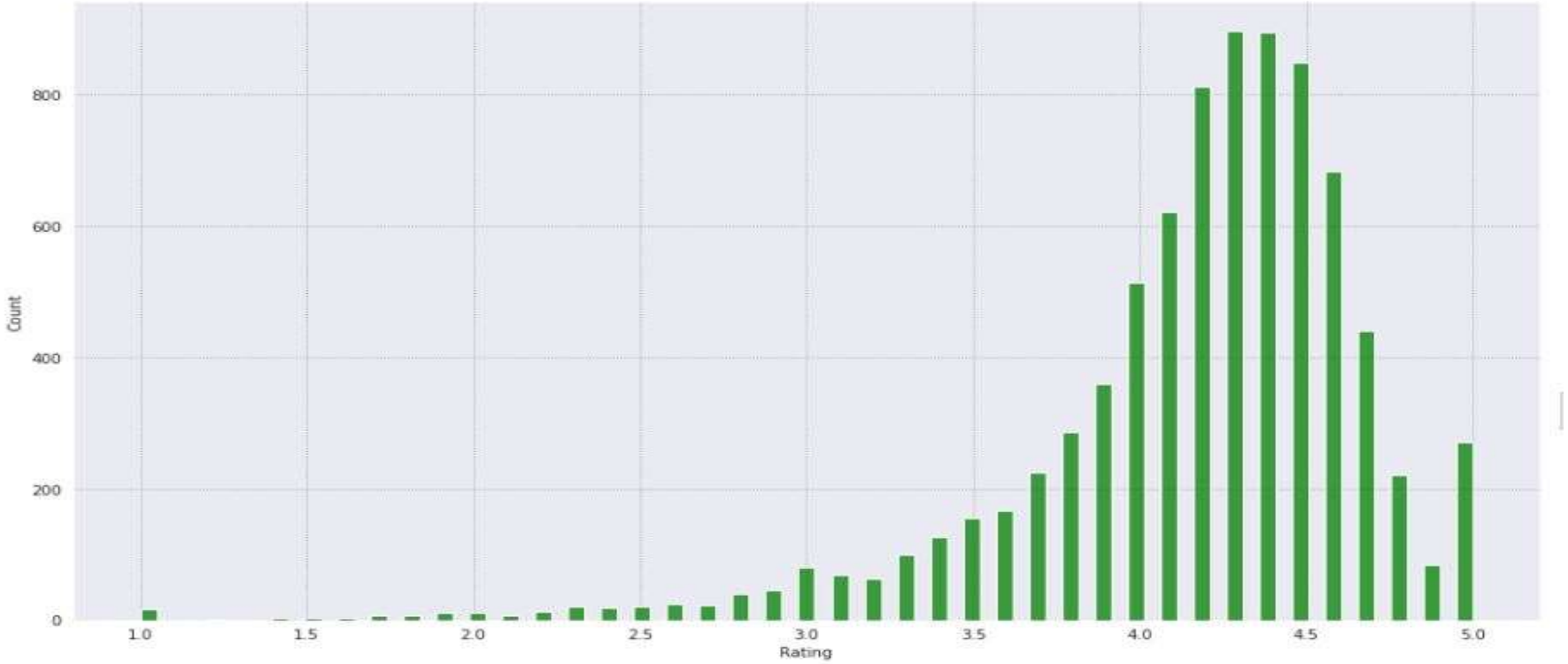
Factors Affecting Maximum Number Of Downloads

- The size of app indirectly proportional to No. of Installation.
- If the size of app is less than or equal to 10MB then there is high chance to install that application.



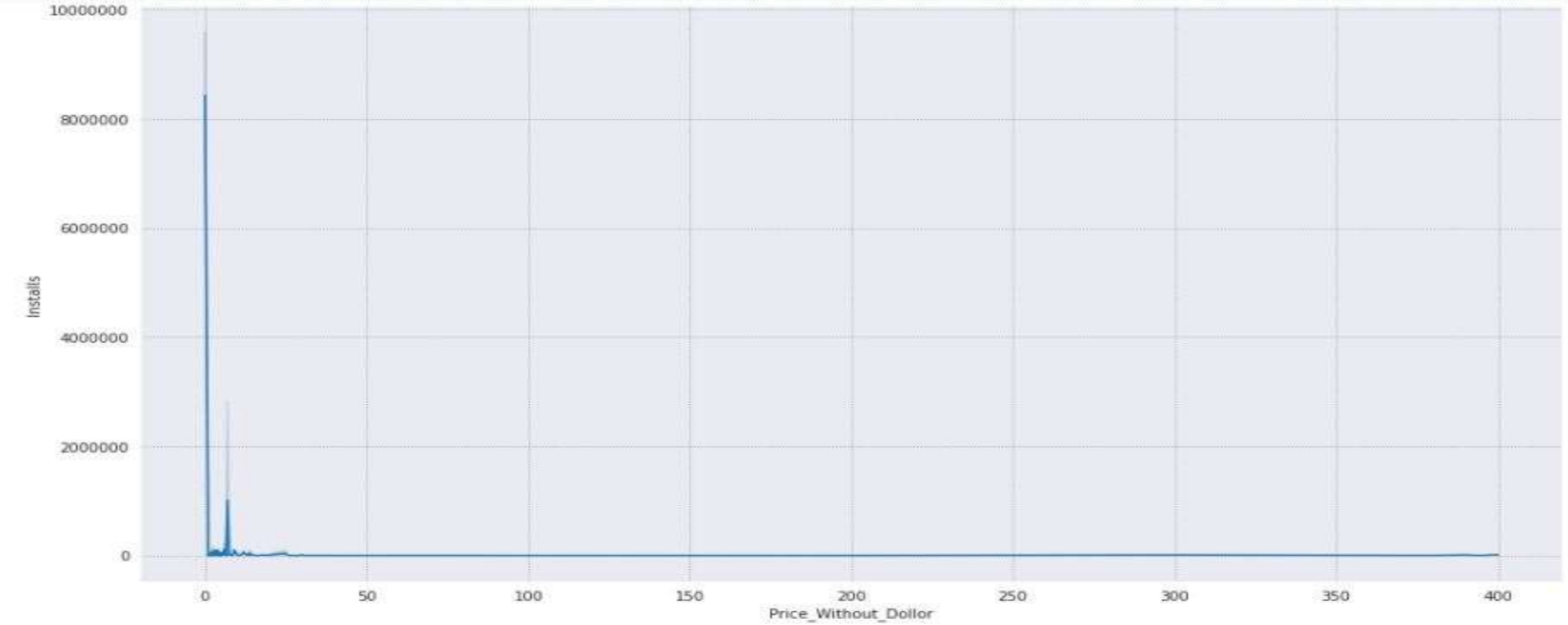
Impact of Rating to Number of Installations

The maximum number of downloads are roughly between 4.0 to 4.6 ratings

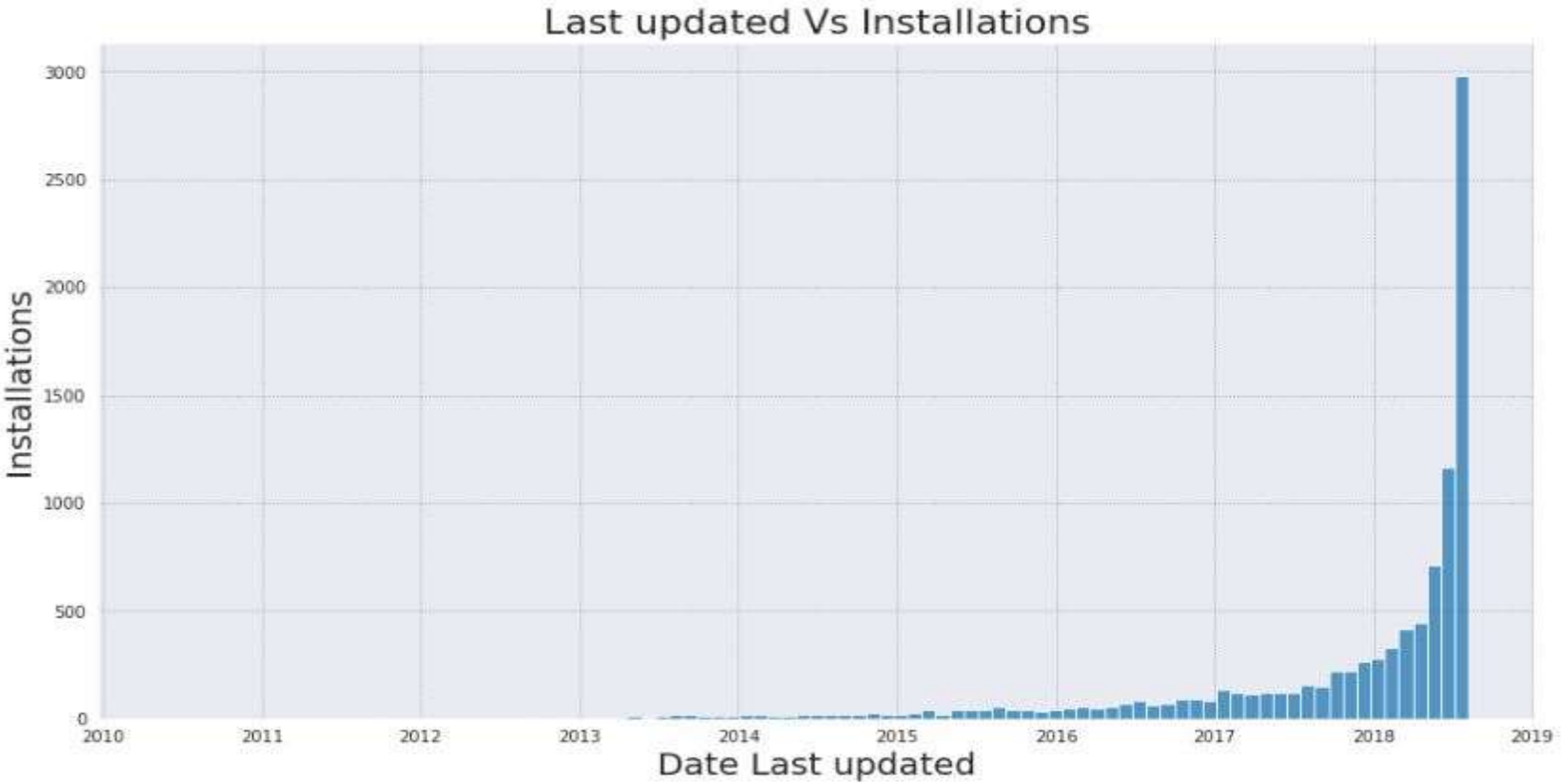


Price-Installations correlation

- If the app is free to use then there is high probability to install.
- Paid apps are less likely to be installed.
- For the paid apps category maximum Installations are upto 20 dollars only.



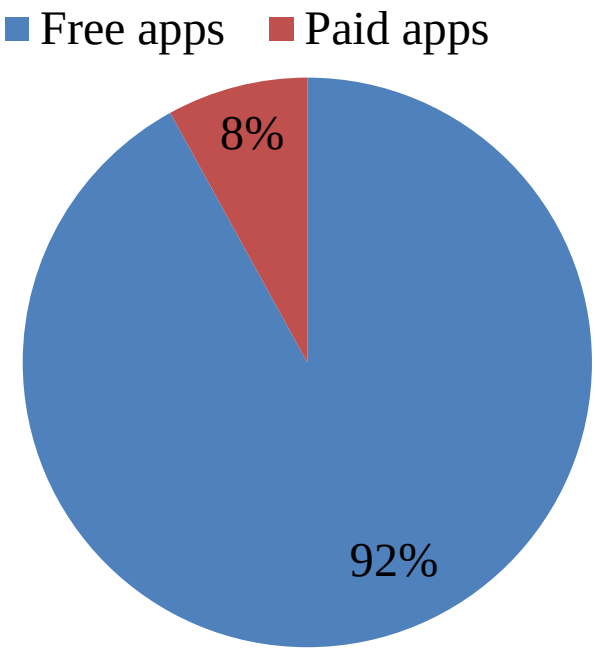
- If app developers are updating their app regularly then there is high chance to install.
- As you can see in histogram, developer should give updates more frequently.



Free vs Paid Apps

92%

of apps on play store **are free to download** and rest are paid



Top 5 Highest Rated Paid and Free Apps:

Top 5 Highest Rated Free Apps

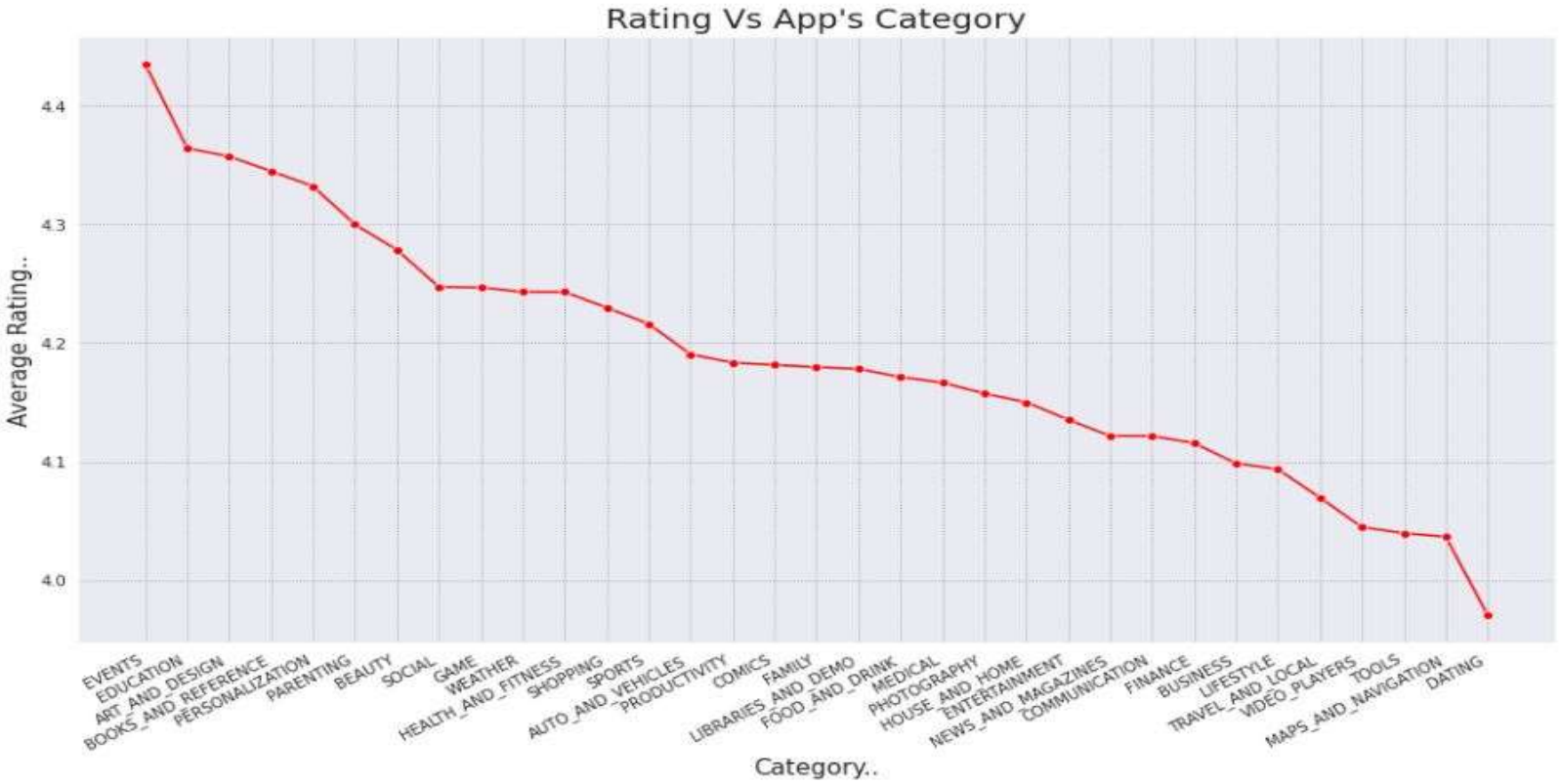
- DF Glue Board
- CN Resident
- CL Strength
- Color CL
- CP Trivia

Top 5 Highest Rated Paid Apps

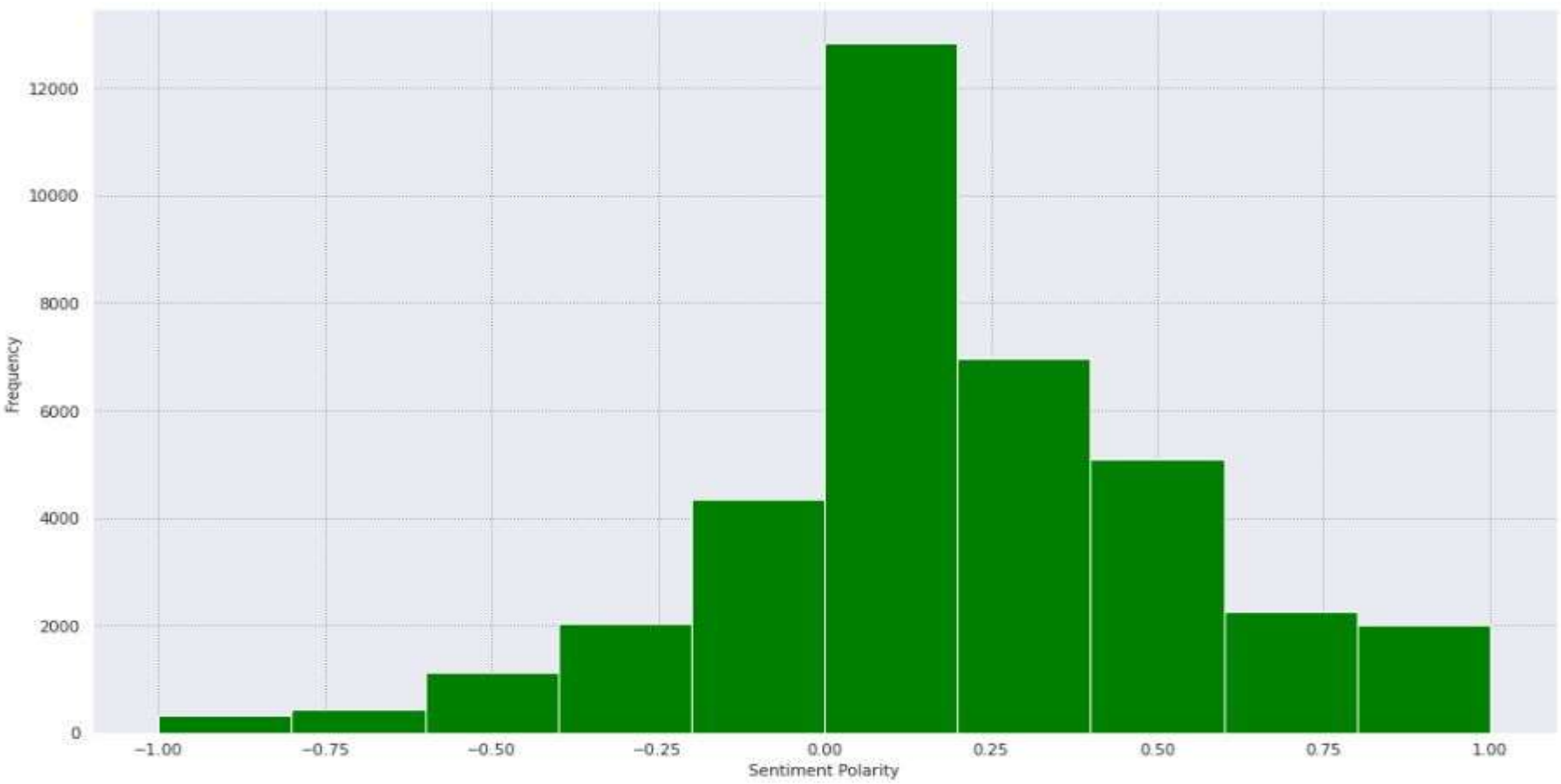
✓USMLE Step 2 CK Flashcards
✓211:CK
✓30WPM Amateur ham radio Koch CW Morse code tra...
✓Morse Player
✓AC DC Power Monitor

Average Rating For Each Category

EVENT category has the maximum number of average rating.



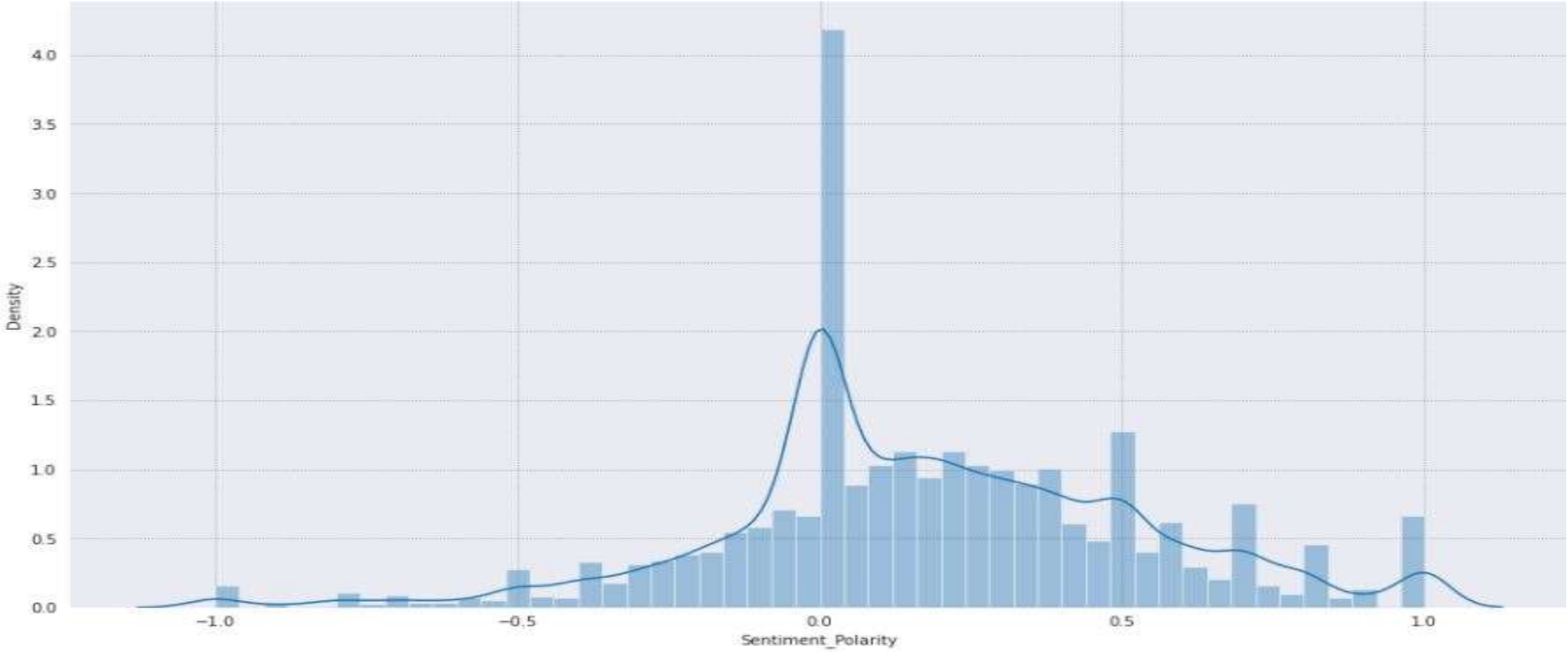
Sentiment Polarity Of Users



• Maximum Apps around 40000 apps reviews Sentiment polarity lies between 0.0 to .18 (**Neutral to towards Positive**)

• Around 3000 apps reviews Sentiment Polarity lies between -1 to 0.0 means About 3000 apps have **negative sentiment polarity**.

• Mostly Apps Sentiment polarity lie between **-0.47 to +0.8**



Summary

Size

- Highly rated apps were optimally sized between 2MB to 40 MB
- Paid apps with specific functionality were lighter

Price

- Free apps outperform paid apps
- If an app is paid, the likelihood of it being popular is higher if it's priced under $10

Rating

- Positive relation between installs and rating.
- However, highly installed apps are not always highly rated.

Review

- Issues like loading time and positive features like usability were revealed by sentiment analysis.

Conclusion

Results we got as per our analysis :

• **GAME** category has the most number of downloads and ratings, and **EVENT** category has the maximum number of average rating.
• The size and free/paid apps category affected the maximum number of downloads.
• Users prefer to pay for apps that are light-weighted. As app size get larger conversion rate decreases.

Q&A

Thank You