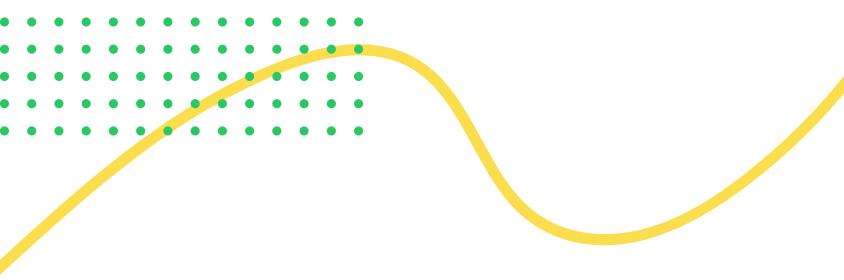




GET IT ON
Google Play

Google Play Store App Rating Models & Predictions

Jan 4, 2024



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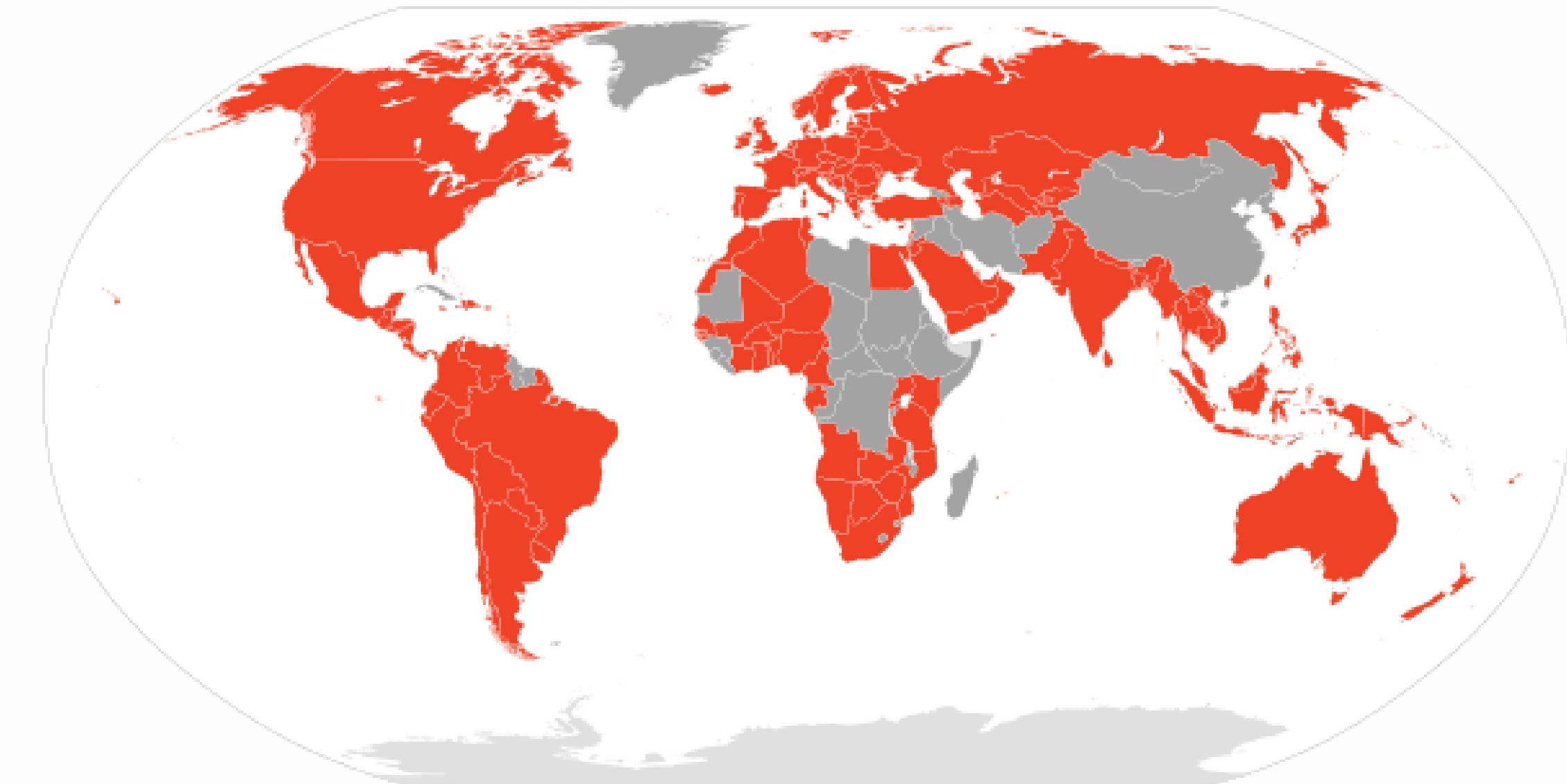
AGENDA



- 1 Business Problem
- 2 Data Overview
- 3 Analysis & Modeling
- 4 Recommendations
- 5 Future Steps

GOOGLE PLAY STORE

- One of the most trusted platforms.
- Originally launched in 2008.
- Hosted 3.5 million apps.



Global availability of Google Play

BOTTOM LINE

- The best model performed 56% accuracy and 98% recall on high rating.
- Category, Downloads , Ads and App Names impact ratings the most.

1

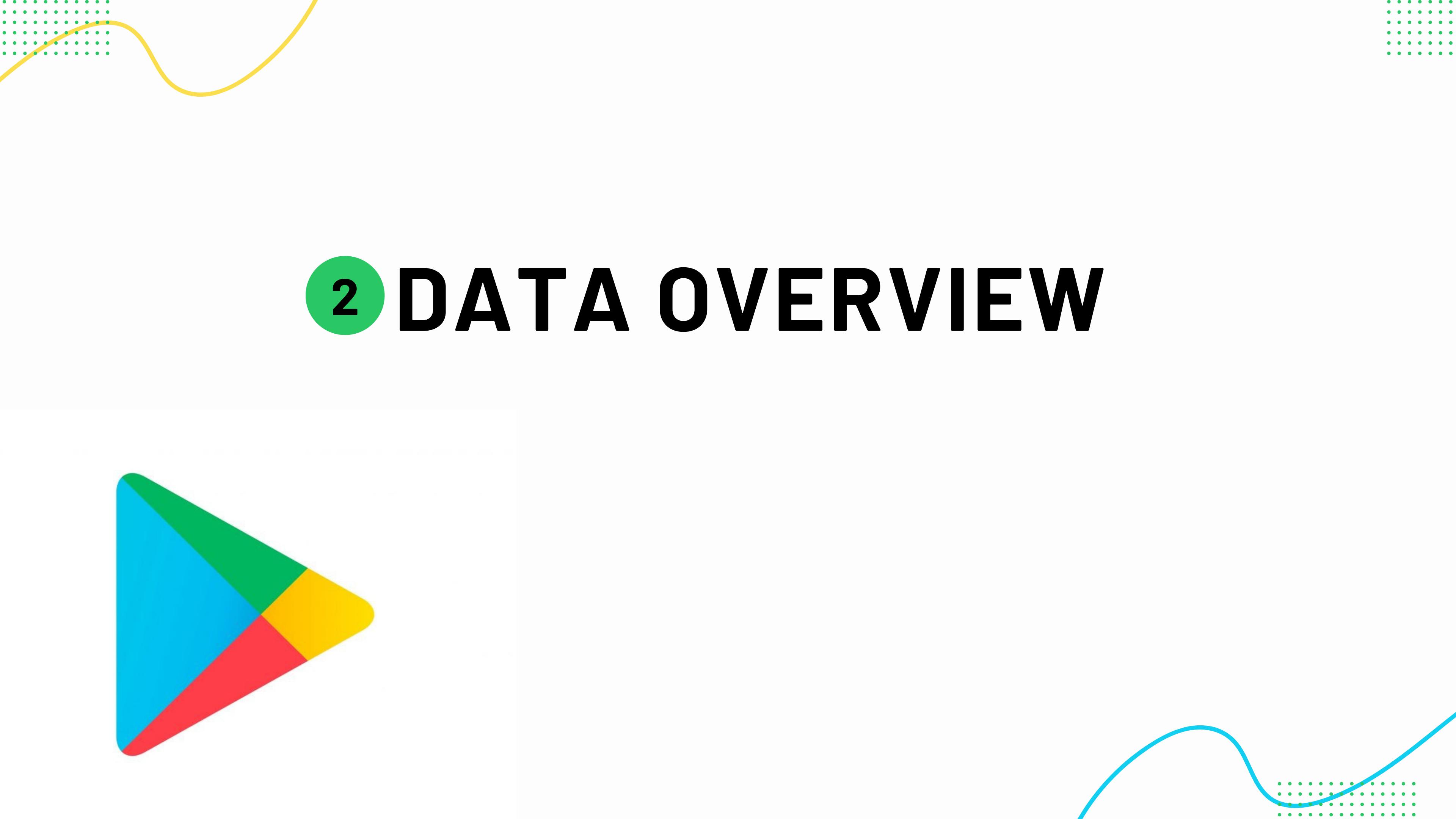
BUSINESS PROBLEM



BUSINESS PROBLEM



01. Analyze the relationship between user ratings and intrinsic factors
02. Find a suitable predictive model to determine user ratings based on Google Play Store app data
03. Introduce rating ranges Low, Medium and High and investigate inter-range differences



2

DATA OVERVIEW



DATA OVERVIEW

Data

- Kaggle
- 2010-2021
- 15k Data points

Filters

- Removed apps with zero ratings
- Categorized ratings as below:
 - High Rating 4.2-5
 - Medium Rating 3.8-4.2
 - Low Rating 1-3.8

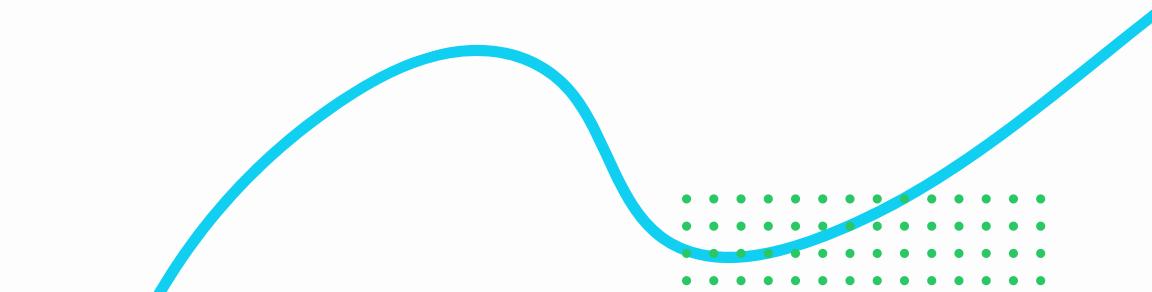
Limitations

- Lack of app prices and in-purchase prices
- Ad display durations
- Imbalanced ratings
- Unclear app rating authenticity

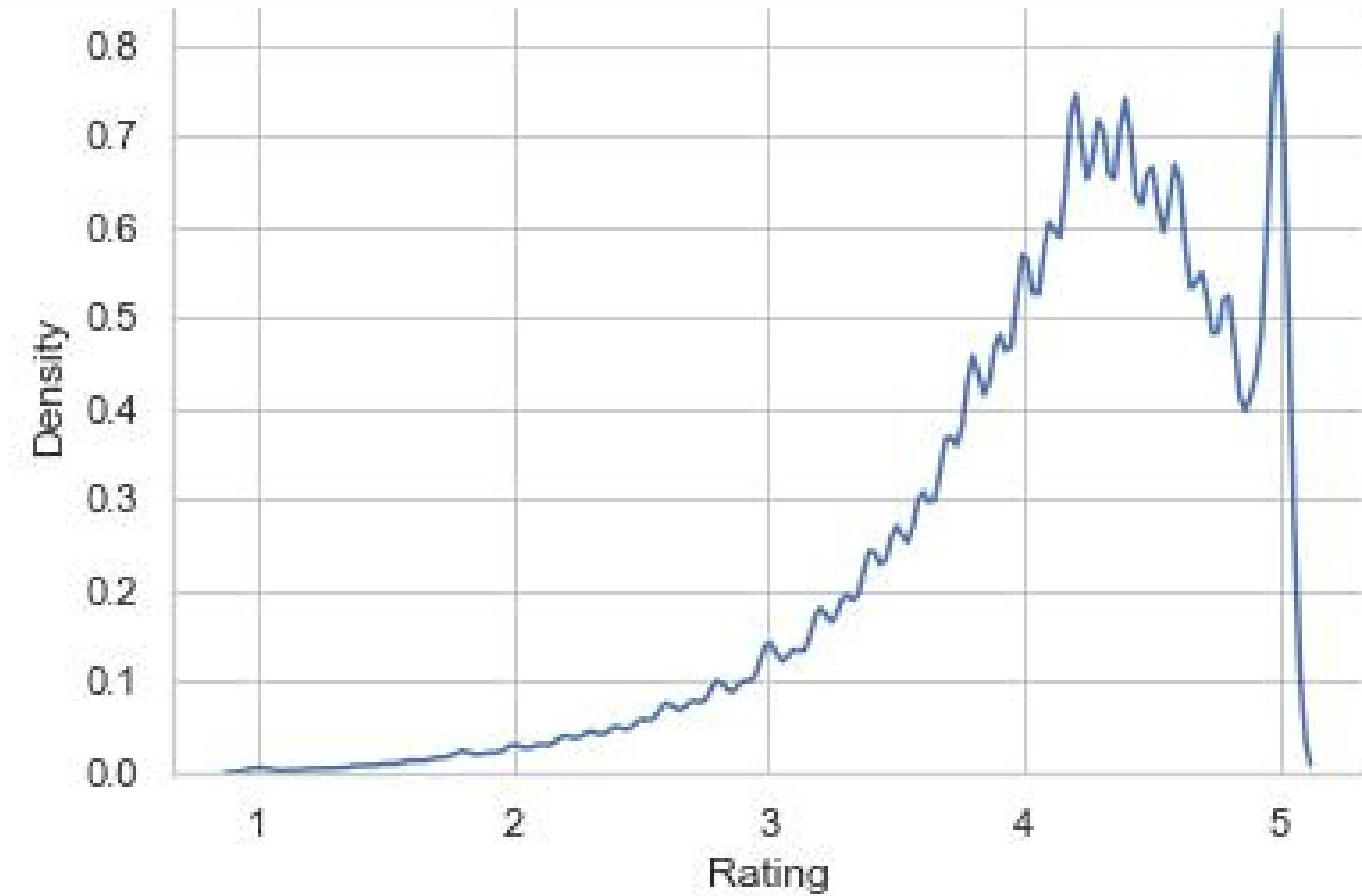


3

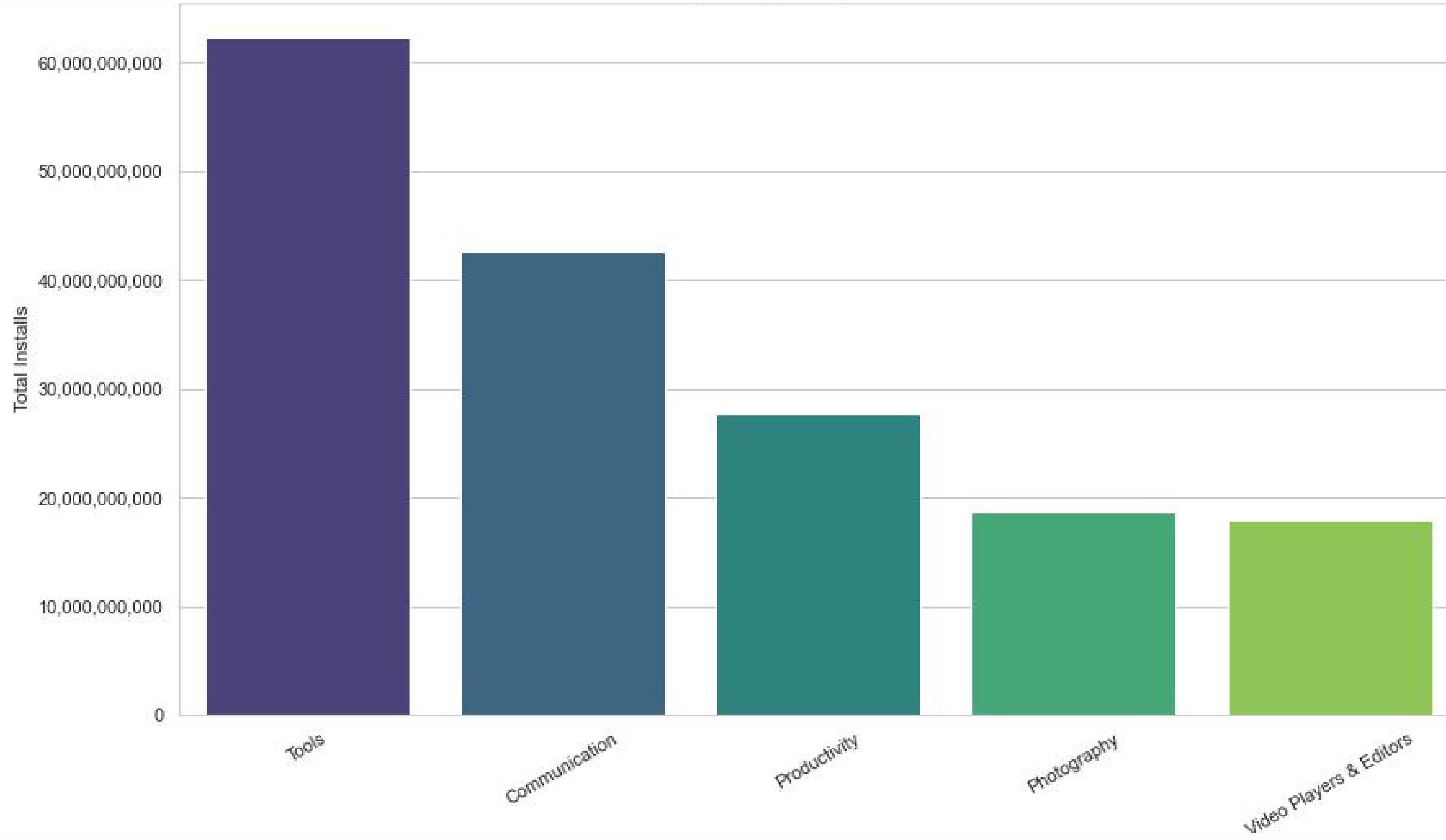
ANALYSIS & MODELING



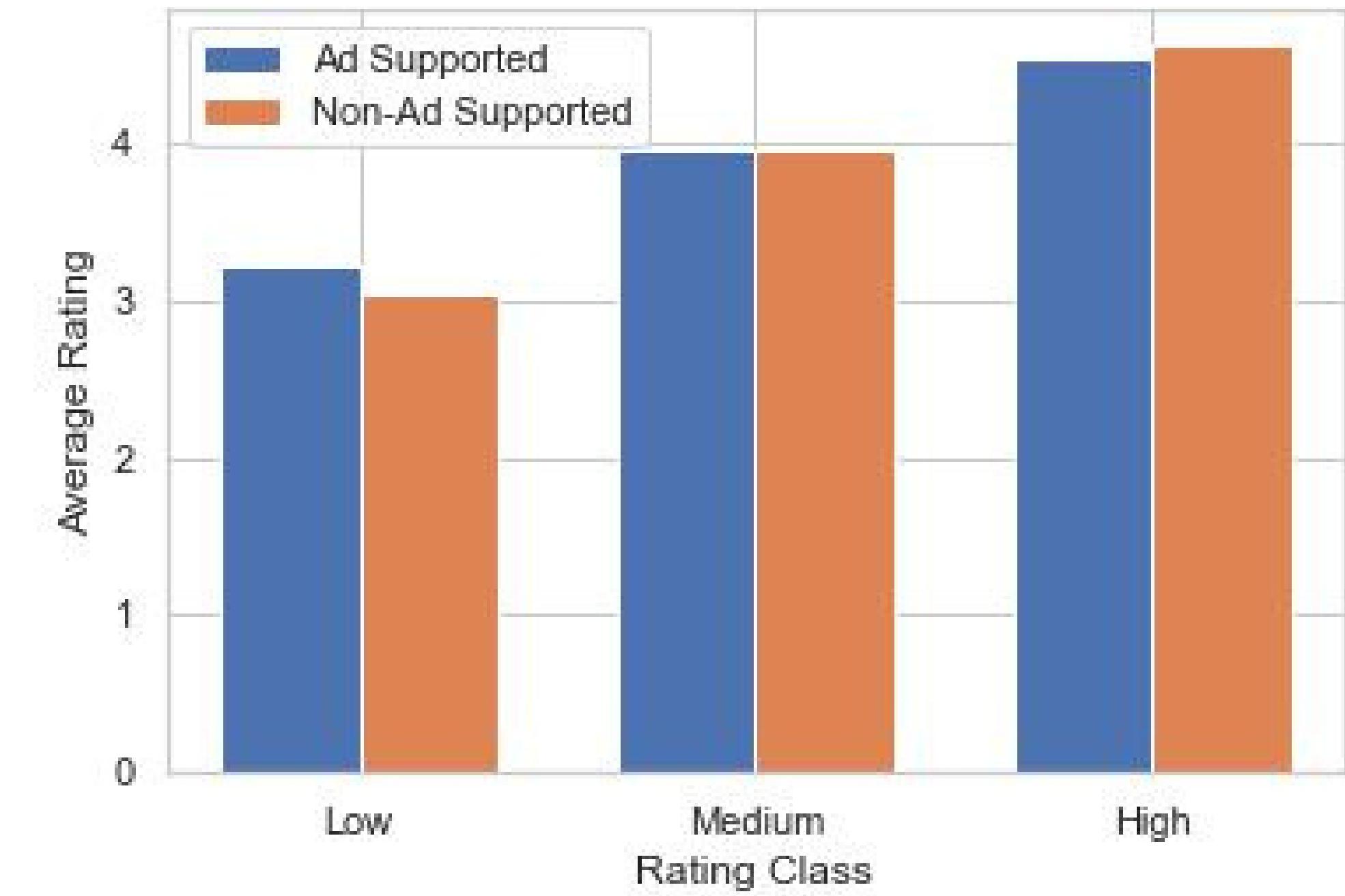
RATINGS AVERAGE ABOVE 4.2



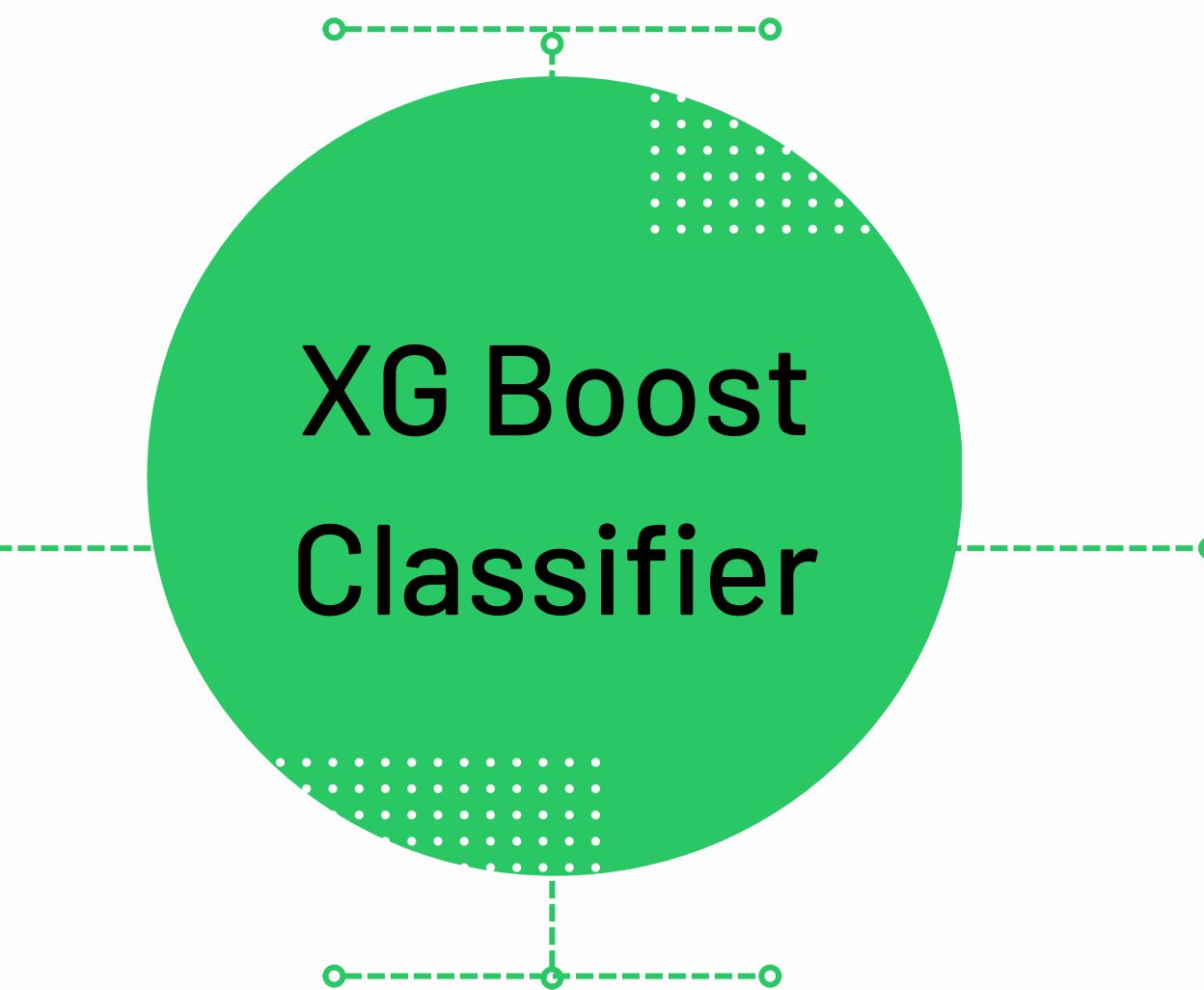
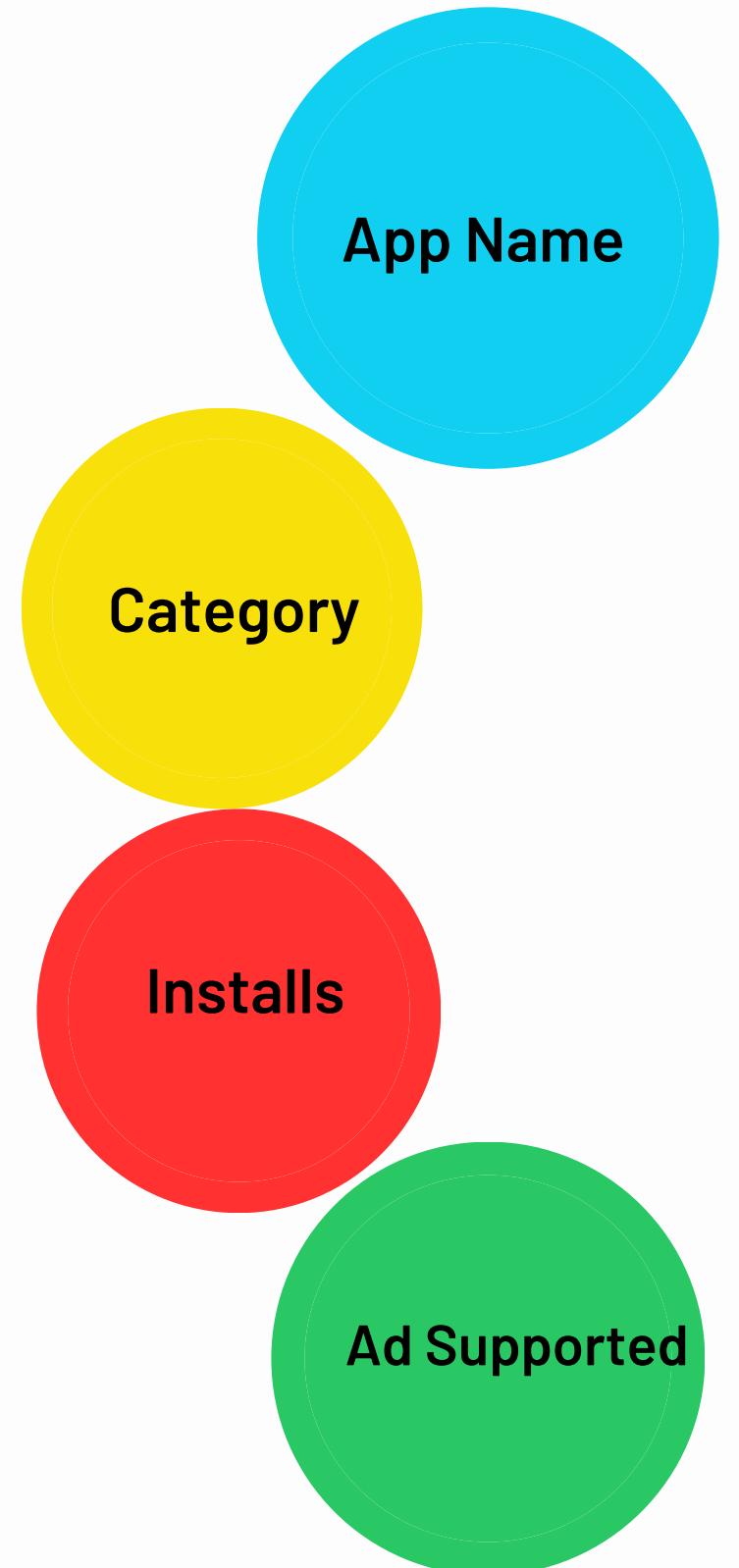
TOTAL INSTALLS BY CATEGORY



AVERAGE RATINGS PER CLASS



MODELING



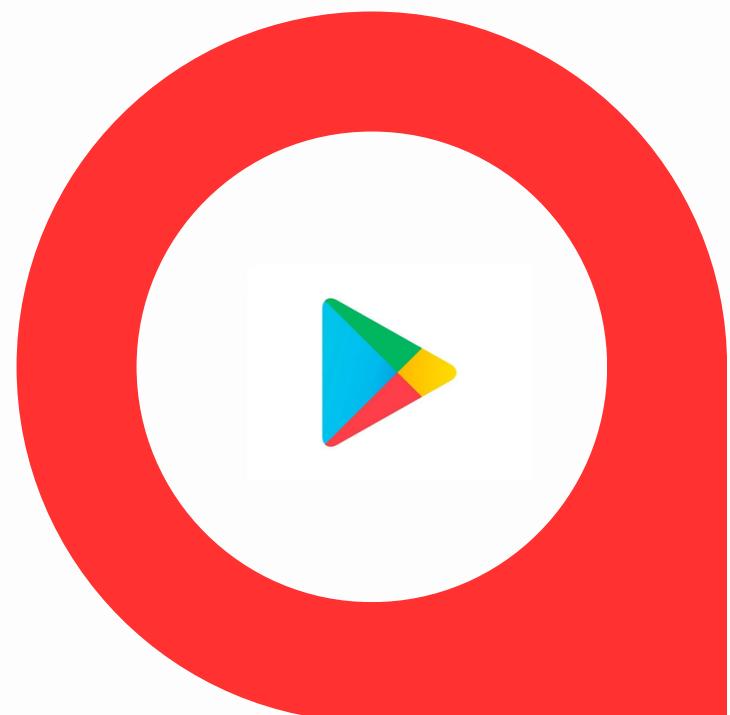
- High Rating 4.2-5
- Medium Rating 3.8-4.2
- Low Rating 1-3.8
- Accuracy 56%
- High Rating Recall 98%

5

RECOMMENDATIONS

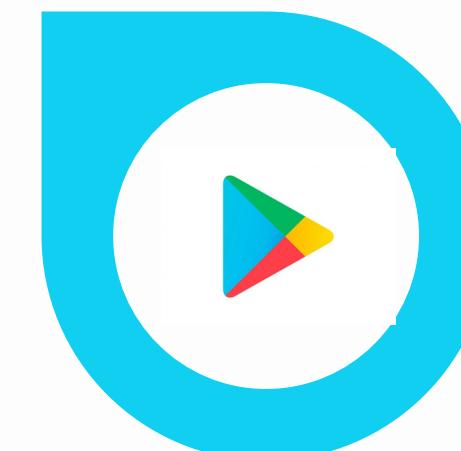
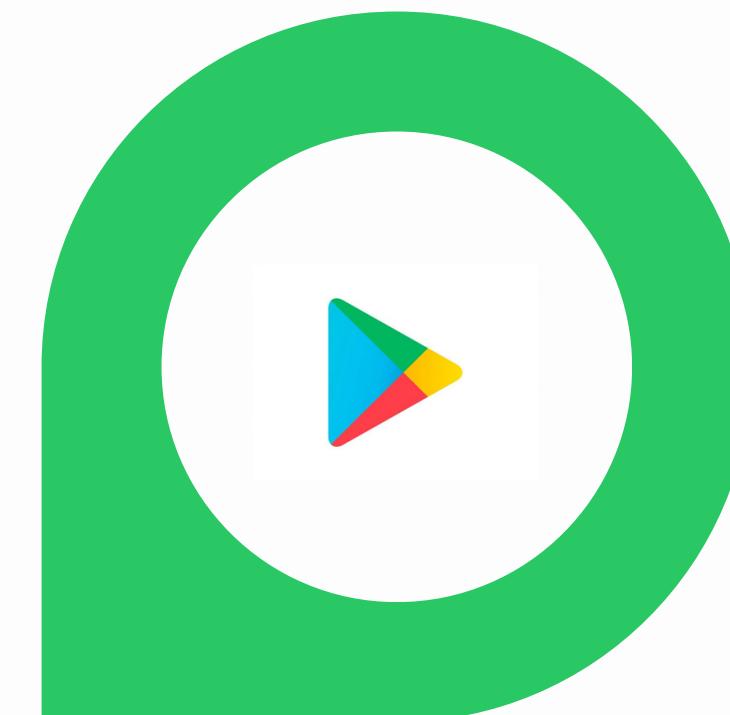
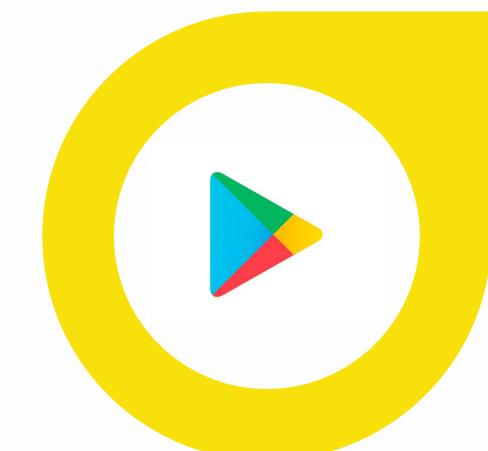
Pick App Name Wisely

Ensure the app name is both search-friendly and memorable



Category Plays an Important Role

Tailor your app to meet the preferences of users within a specific category



Installs

More installs is more likely to increase the higher ratings

Ad Supported

Could be a good source of revenue that doesn't significantly affect ratings

6

FUTURE INSIGHTS

App Prices

Analyze how different pricing tiers may impact user acquisition and overall revenue.

In-App Purchases

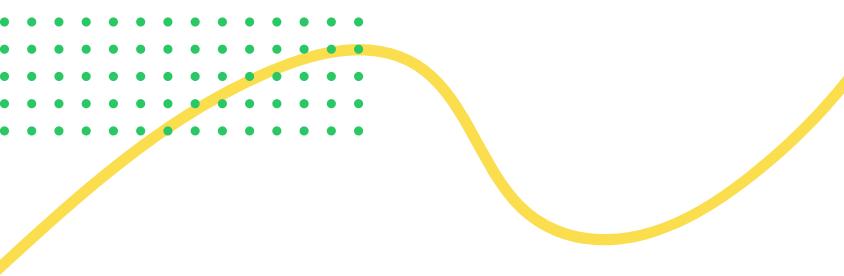
Consider how the availability of in-app purchases influences user engagement and monetization.

User Behavior and Spending Patterns

Considering these factors when launching new products or services in existing markets



THANK YOU!



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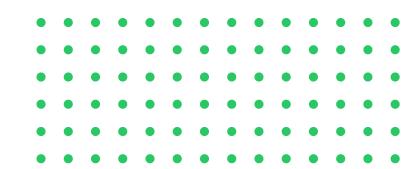
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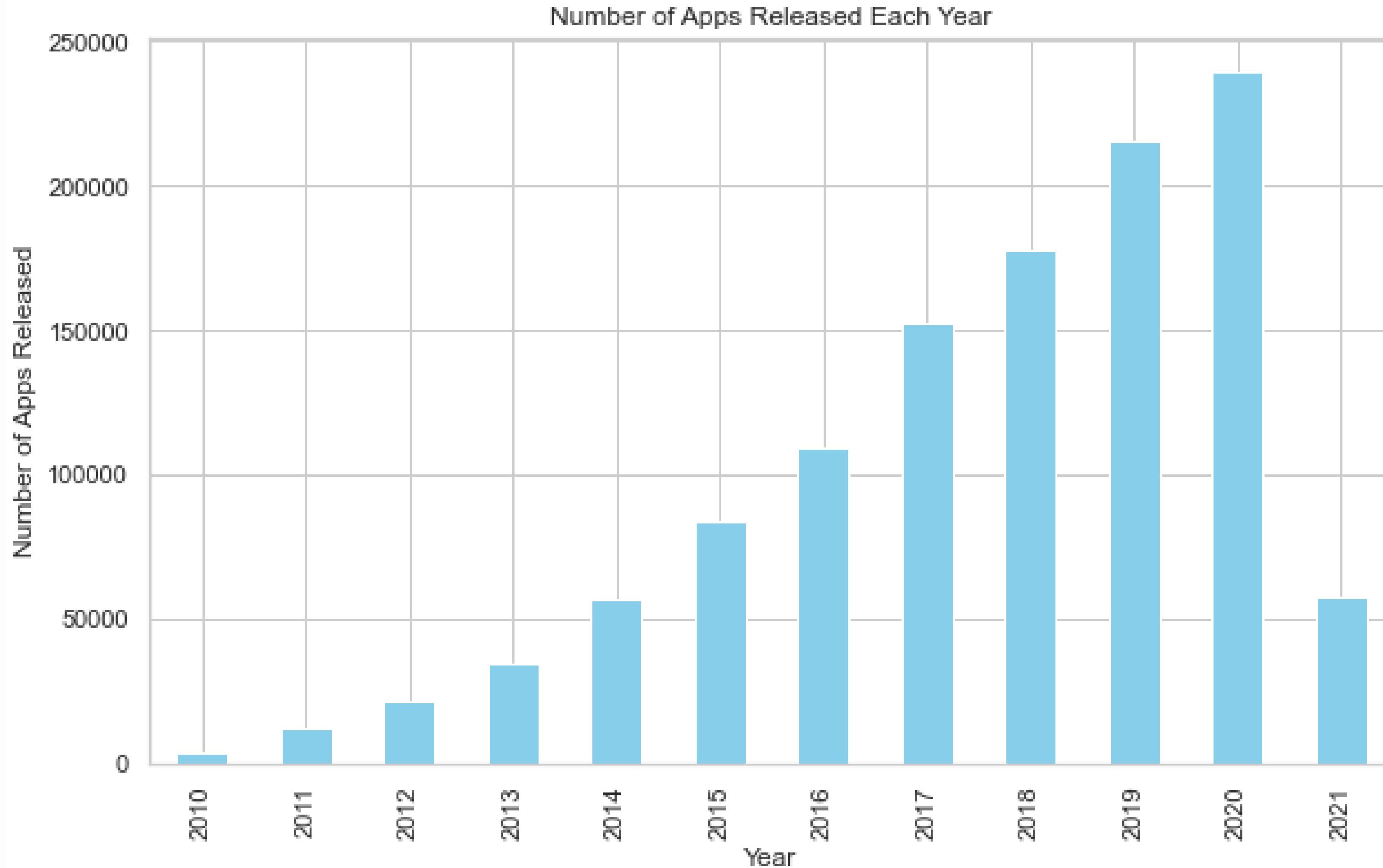
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APPENDIX

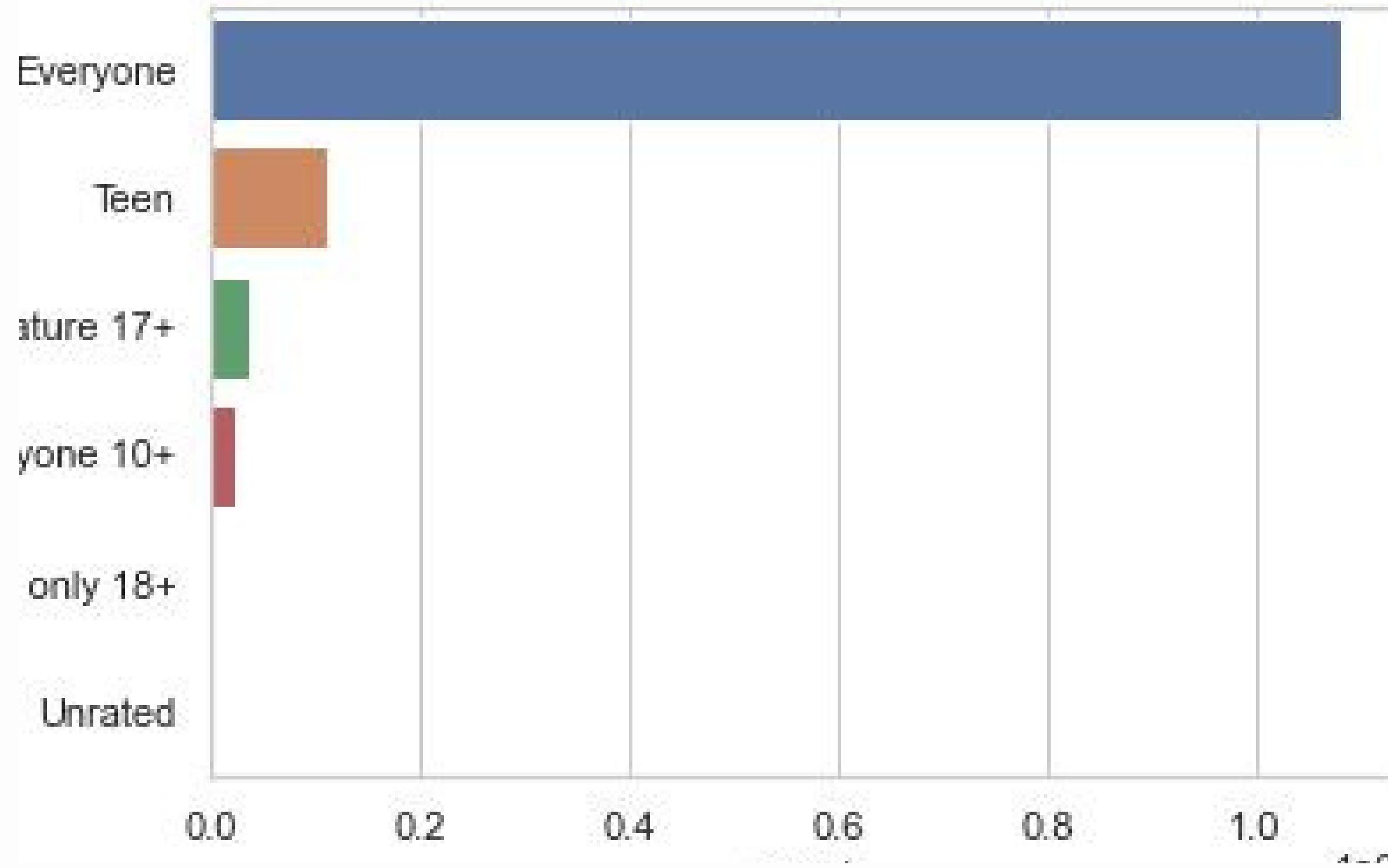


Apps released per year



Content Rating

Content rating with their counts



Free App Ratings

