



# Predicting Steam Games User Count

By: Myrna Grace Calip

# Table of Contents

**01**

**Overview**

**04**

**Models**

**02**

**Business Value**

**05**

**Conclusion**

**03**

**Data**

**06**

**Future Work**

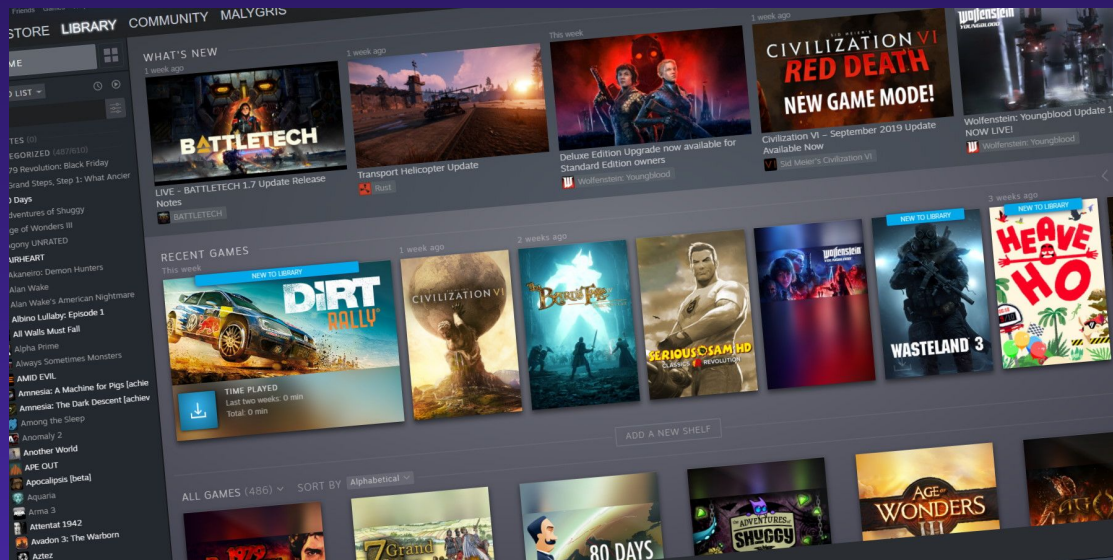


- Game Distribution Platform
- Released in 2003 by Valve
- Offers 50,000+ games
- Games varies from AAA to Indie



# Business Value

Goal: Provide game developers and publishers insights on which game features influences high user count on Steam.



# Data Overview



## Data Extracted from:

- steamspy
- steamworks
- NikDavid  
Kaggle  
Dataset

## Prepare:

- Extracted: 6000 games
- Clean, Preprocess, Feature Engineer: 5489 games
- Columns: 467

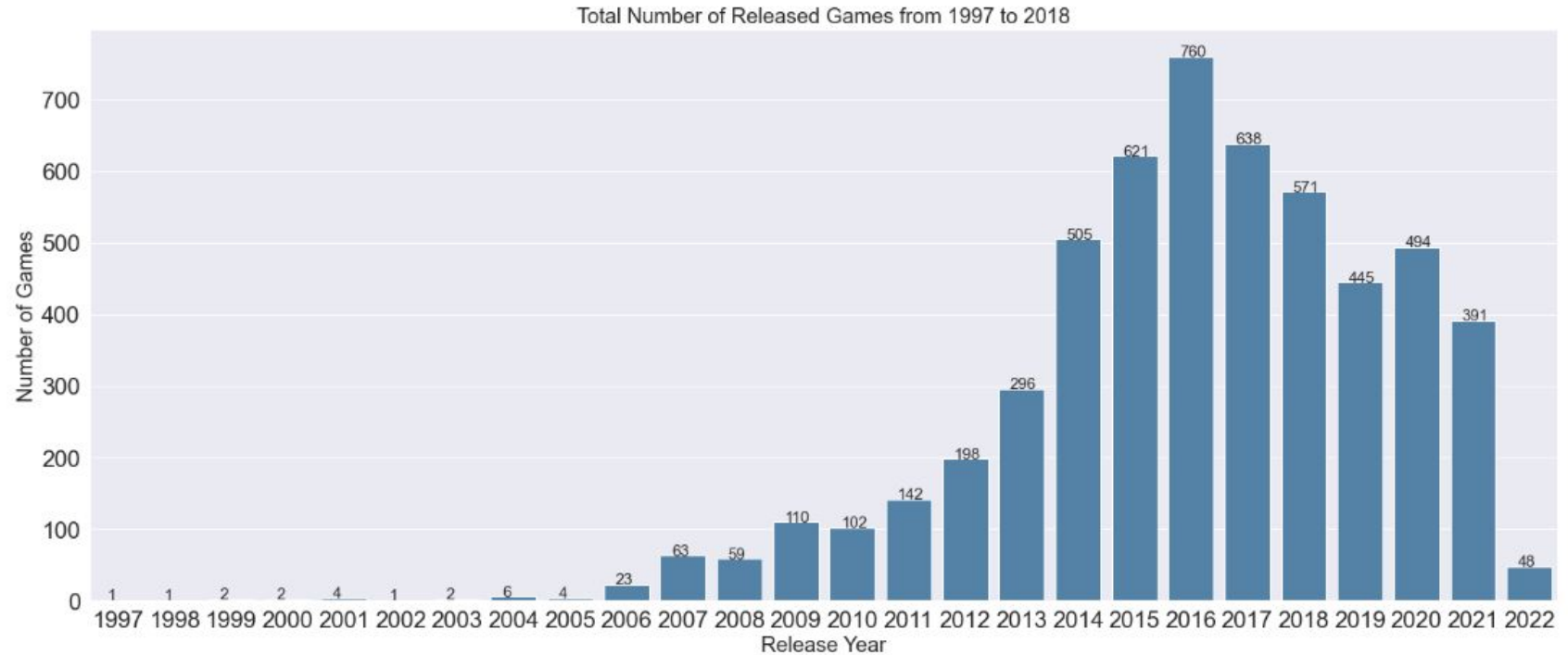
## Target: Usercount

- Binomial Classification  
Threshold: 500K
- Logistic Regression
- Decision Tree
- Random Forest
- XGBoost

**steamspy**  
know your games



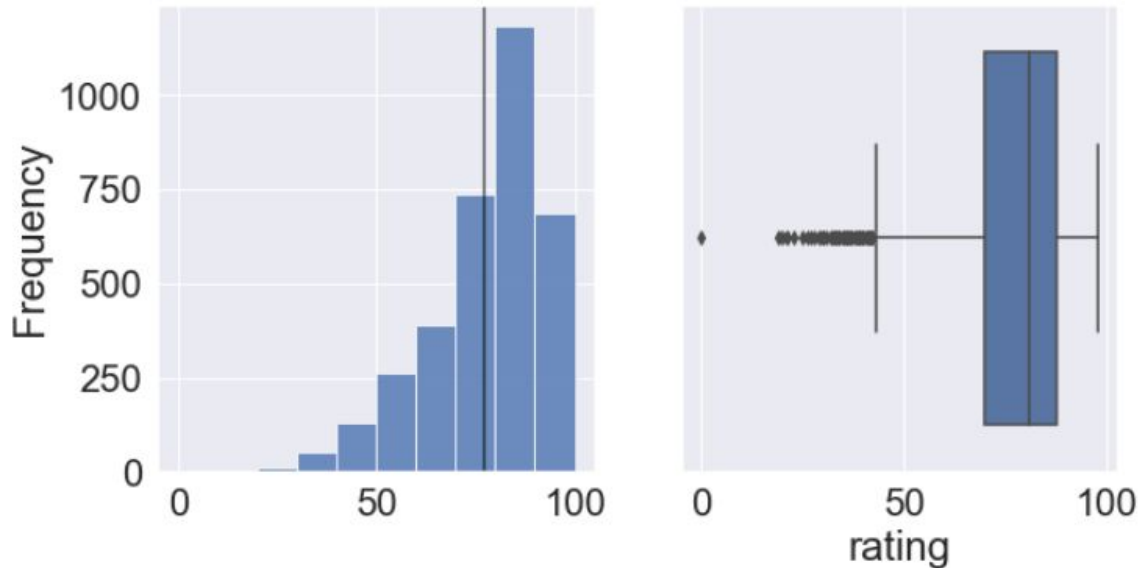
# Total Number of Games Released



# Distribution of Rating Score for Games with 500k+ Owners

Mean: 77%

Distribution of Rating Scores for Games with 500,000+ Owners



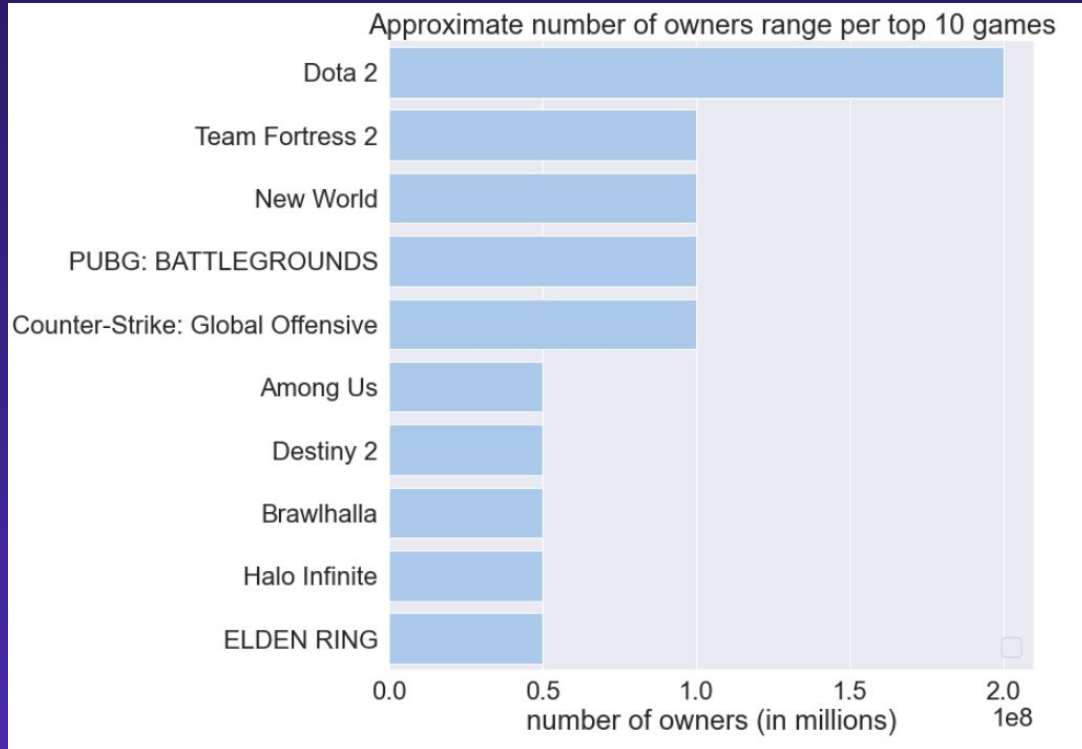
Mean rating: 77.20%

# Which game currently has the highest user count?

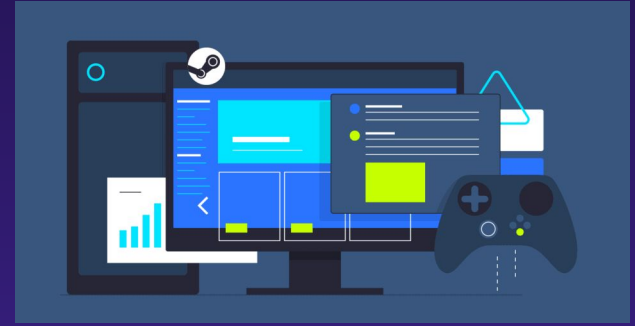
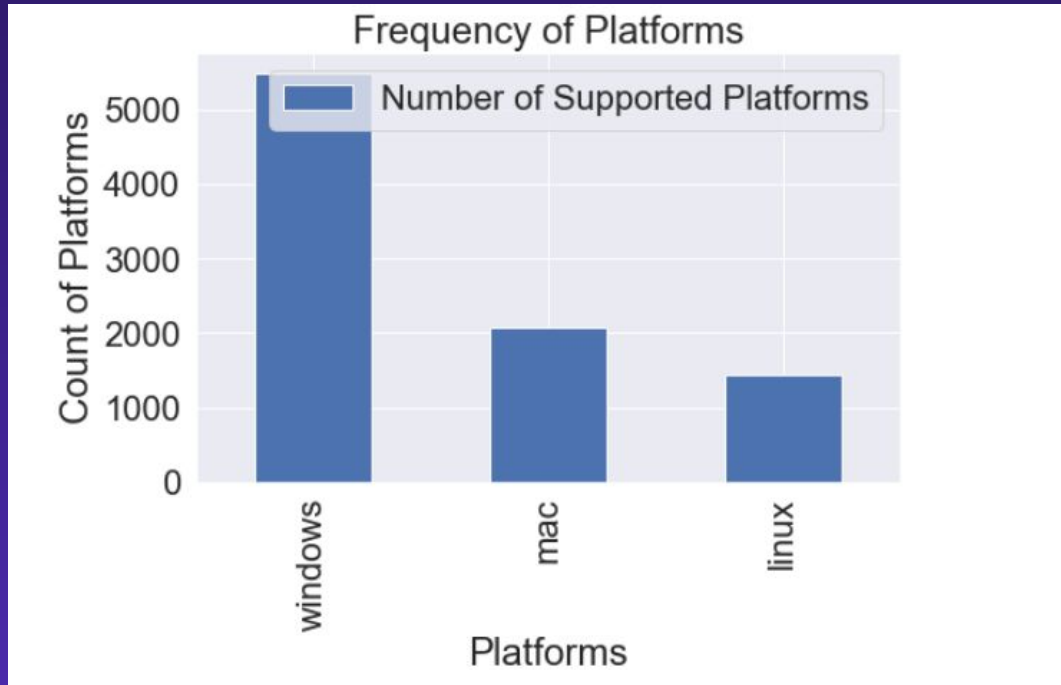




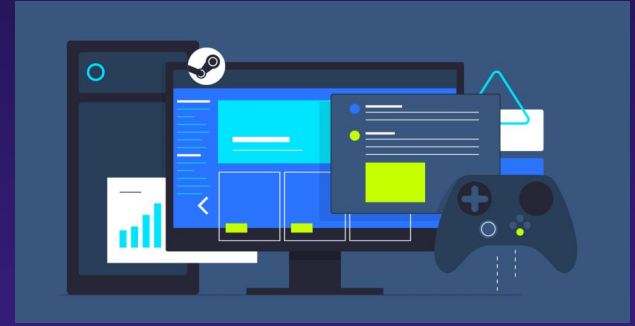
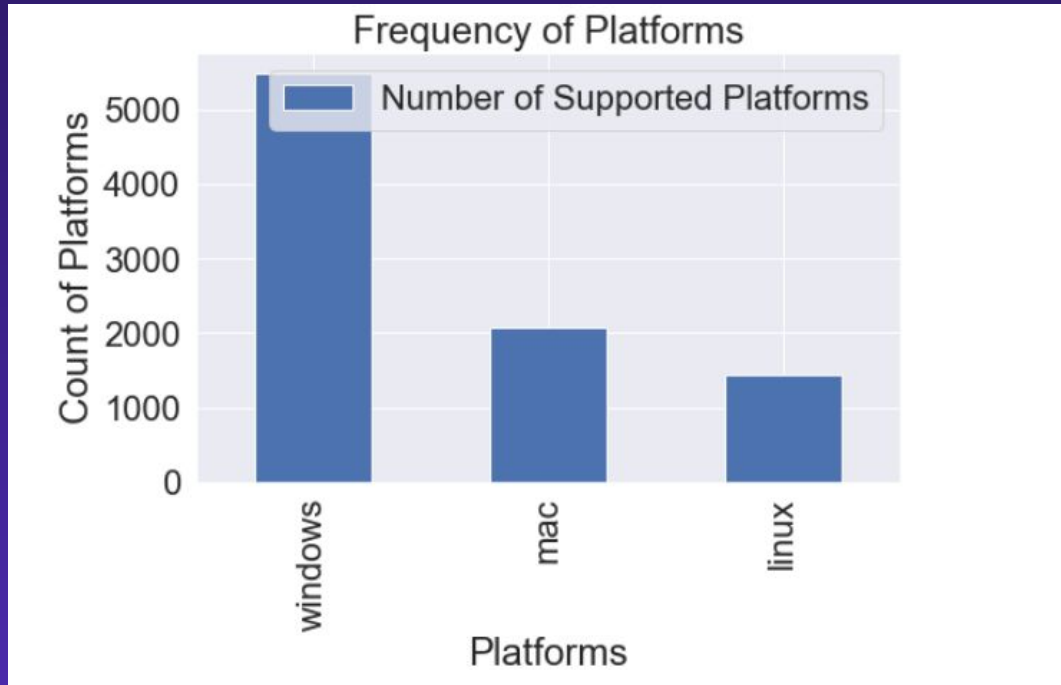
# Answer: Dota 2!



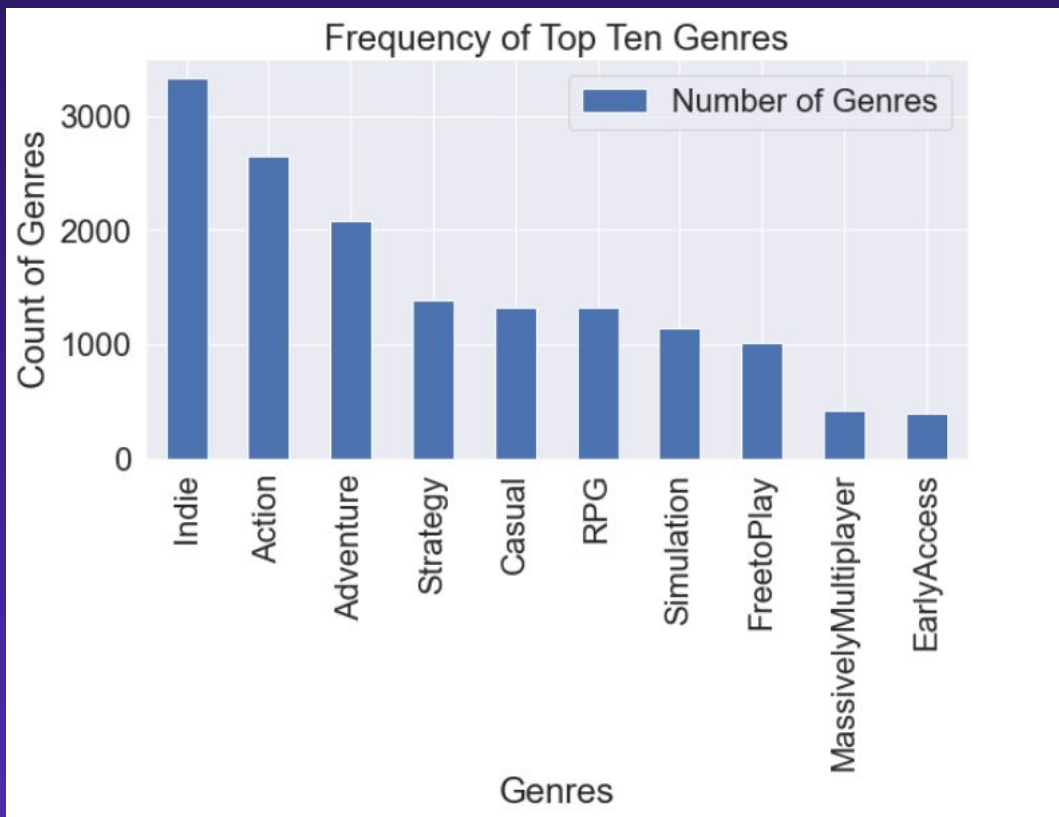
# Most used Platform for Steam Games



# Most used Platform for Steam Games



# Top Genres on Steam



# Model Results

## Logistic Regression

- Test AUC Score: 78%
- F1 Score: 72%



## Tuned XGBoost

- Test AUC Score: 73%
- F1-Score: 71%



## Tuned Random Forest

- Test AUC Score: 75%
- F1 Score: 75%



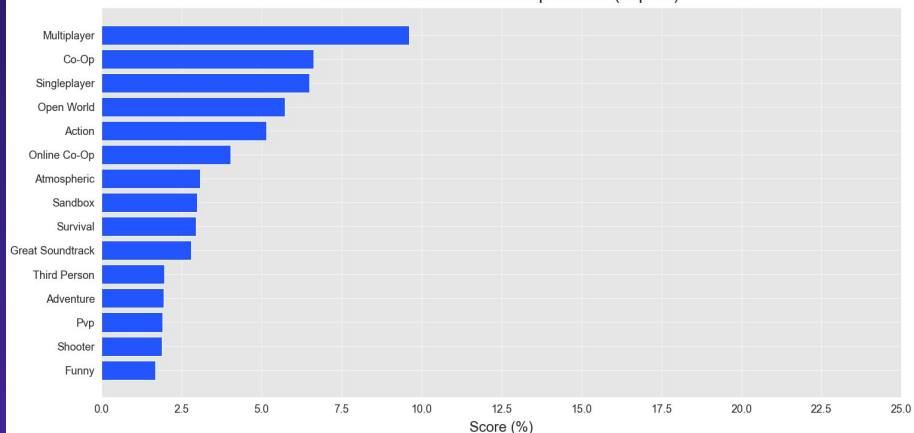
## Decision Tree

- Test AUC Score: 68%
- F1 Score: 67%

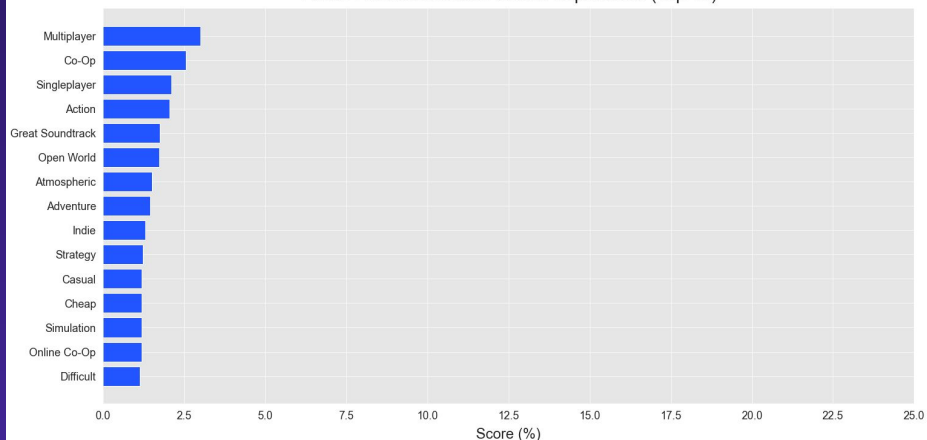
# Conclusion - Feature Importance



Random Forest Feature Importance (Top 10)



Tuned Random Forest Feature Importance (Top 10)



# Future Work



- **Use different targets to predict popular Steam Games**
- **Game Review Sentiment Analysis**
- **Linear Regression on Game Revenue**
- **NLP System Requirements**

# Thanks!

---



Do you have any questions?

Email: [myrnagrace@gmail.com](mailto:myrnagrace@gmail.com)

GitHub: <https://github.com/myrnagrace>

**CREDITS:** This presentation template was created by **Slidesgo**, including icons by **Flaticon** and infographics & images by **Freepik**

