

# WHAT MAKES A GOOD GAME?

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## MISSION

To combine video game reviews with plot summaries and gameplay information, and use natural language processing techniques to predict critical reception



DATA

THE REAL STUFF

# BUILDING OUR DATASET

## METACRITIC

Professional reviews

User reviews

ESRB Ratings

## WIKIPEDIA

Plot summaries

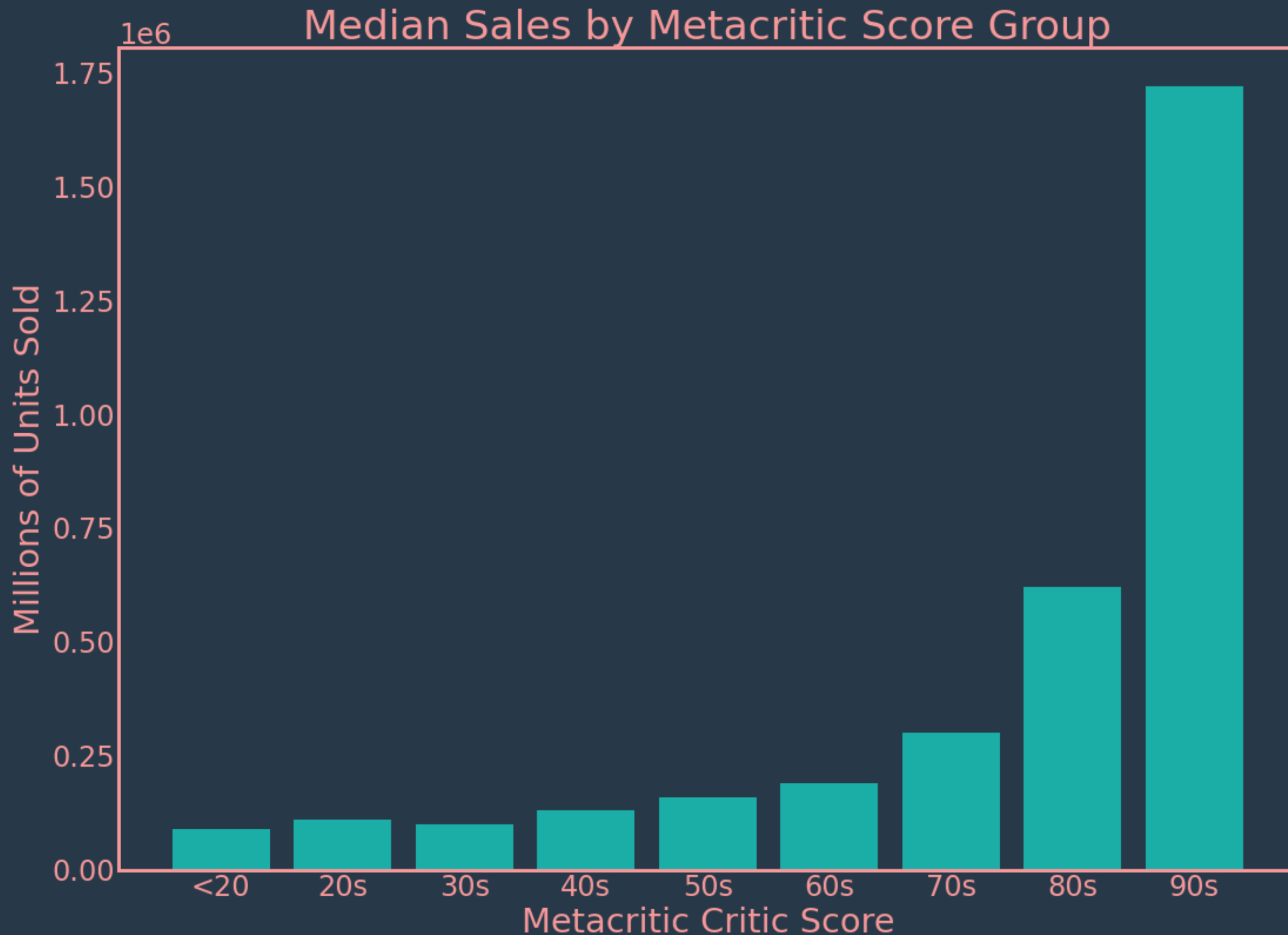
Gameplay details

## VGCHARTZ

Global/regional sales

Release dates

5100+ complete entries



TARGETING  
CRITIC  
SCORES

**WHO CARES?**

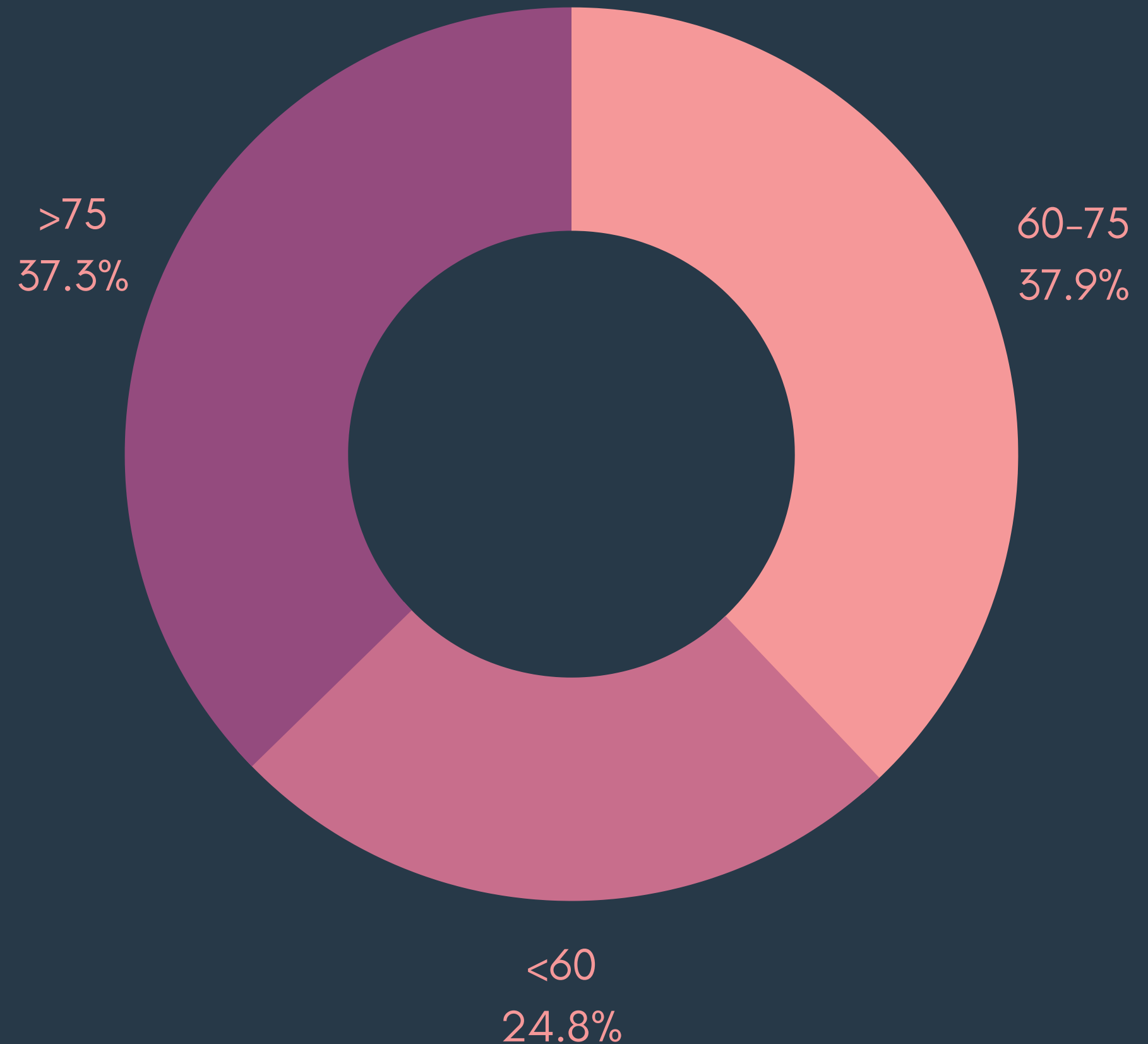
You care!

Higher critic scores  
will raise your global  
sales potential

# MAKING CLASSES

We turn our problem  
into a classification  
by binning the review  
scores into three  
classes of success

GAMES BY RATING CLASS



# Text Processing



## LEMMATIZATION

Reducing words to their roots



## VECTORIZATION

Turning the game descriptions into numerical data

## High TF-IDF

heroes  
moon  
empire  
character  
original  
super  
creation  
legendary  
combat



# MODELING

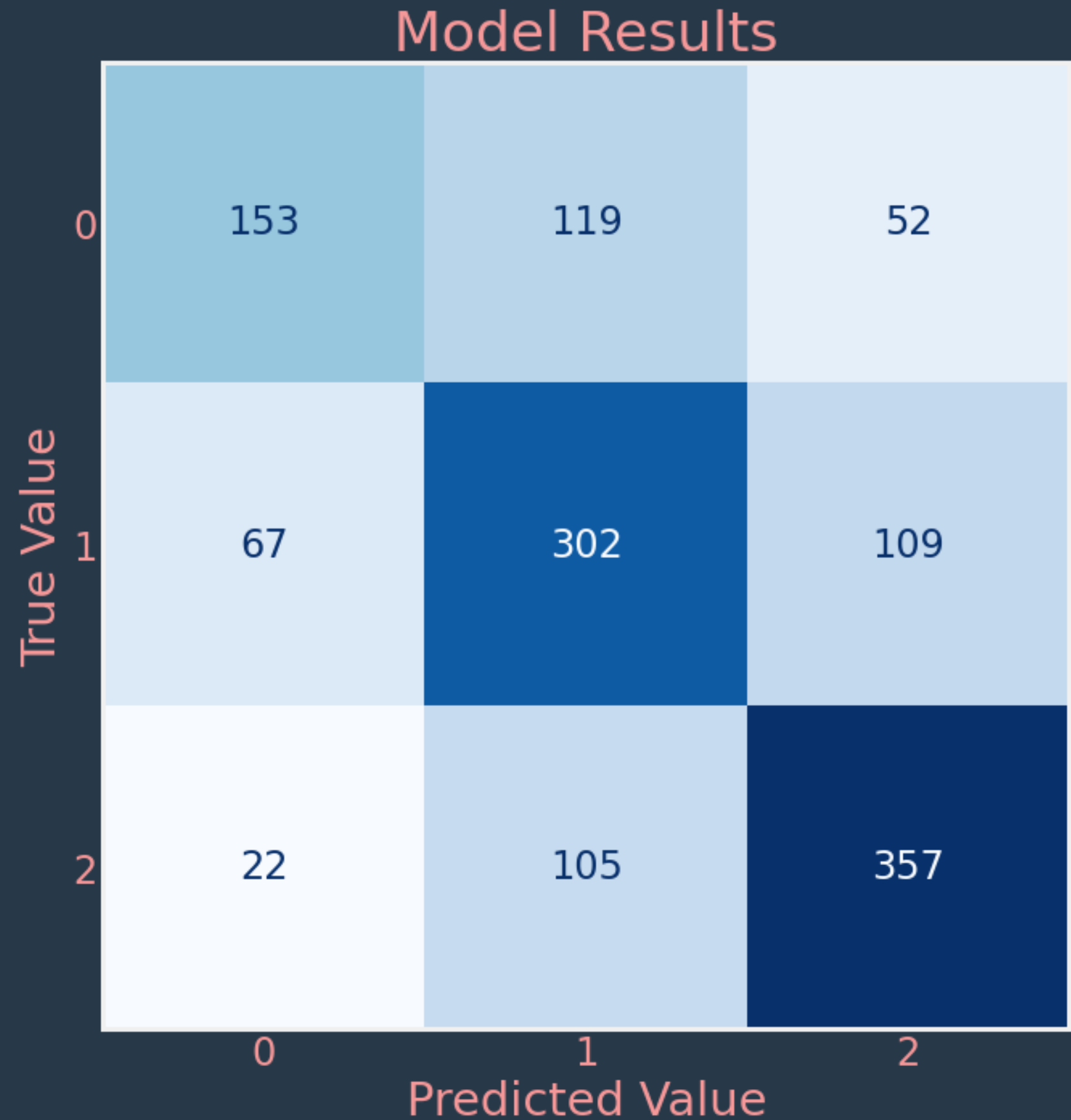
THE GOOD STUFF



## THE MODEL SO FAR

- Random Forest Classifier
- Balanced class weight
- Has high variance

65% accuracy



## FEATURE ENGINEERING

- Better text preprocessing
- Explore document normalization

## ALGORITHM CHOICE

- Research more focused algorithms
- Make XGBoost work on my computer

## DEPLOYMENT

- Develop a web application
- Design recommender system



FUTUREWORK

# Contact Info



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GITHUB

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