

MICROSOFT'S VENTURE INTO THE FILM INDUSTRY



Flatiron Data Science Project

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Overview

Microsoft is establishing a movie studio and is seeking insights into the most successful movie genres. To accomplish this, they are analyzing recent movie data to identify the genres that perform best with audiences.



Outline

- Business Problem
- Data & Methods
- Results
- Conclusions

Business Problem

What criteria are used to determine a movie's success?

- Is it based on its box office return on investment (ROI) or the number of viewers it attracts? Which movie genres tend to be the most successful?
- Which genres have the strongest performance record?
- What is the appropriate investment level for Microsoft to allocate to each genre?



Data

- IMDb, which is one of the most widely used online movie databases, provides the insights.
- Data on movies released between 2010 and 2019 were analyzed.
- The analysis utilized various pieces of information related to each movie, including:
 - its genres
 - the average rating assigned to it by users
 - the number of votes it received.



Methods

What is the reason for considering the number of votes a movie received on IMDb?

A higher vote count indicates a larger viewership for the movie.

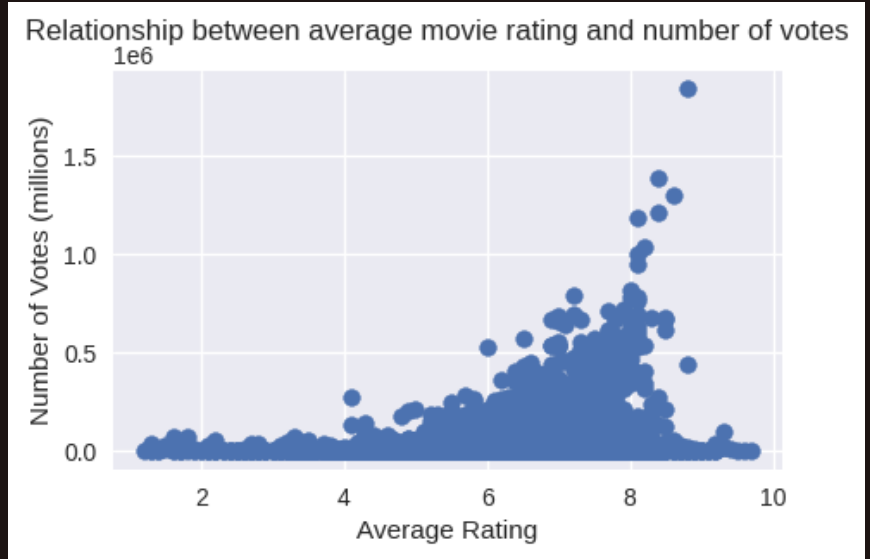
Furthermore, relying solely on box office ROI as a metric for success is arguably antiquated in the era of streaming, as numerous popular, high-budget films are now exclusively released on streaming platforms.



Results

What role does the quality of the movie play in this analysis?

IMDb users assign a score of 1 to 10 to rate movies, and the analysis indicates that a higher vote count corresponds to a higher rating. Stated differently, movies that have a greater number of votes are typically those with better ratings.



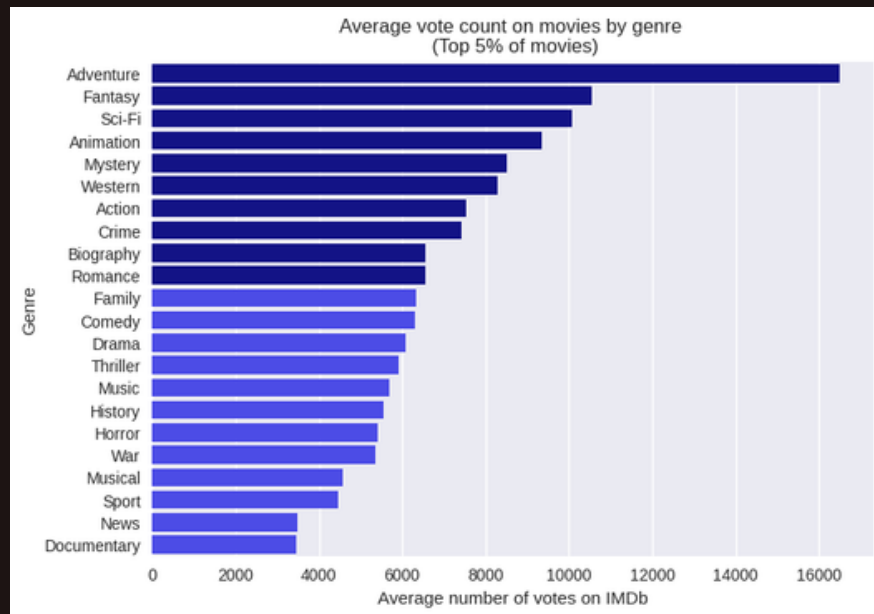
Results

The results are based on ranking movies from highest to lowest vote count. I then isolated the top 10% of movies.

Most successful genres

Among the top 5% of movies, Combinations of these 5 genres perform best:

- Adventure
- Fantasy
- Sci-Fi
- Animation
- Mystery



RESULTS CONT.

The top 5 genres in terms of average number of votes on IMDb are:

- Adventure
- Fantasy
- Sci-Fi
- Animation
- Mystery

Many of the top-ranked movies have a combination of these genres.

Examples



Avengers: Infinity War (2018)

Don Cheadle, Robert Downey Jr., Josh Brolin, Vin Diesel, Paul Bettany, Bradley Cooper,...

[imdb.com](https://www.imdb.com/title/tt4154758/)

Avengers: Infinity War
(Action , Adventure , Sci-fi)



Shutter Island (2010)

Leonardo DiCaprio in Shutter Island
(2010)

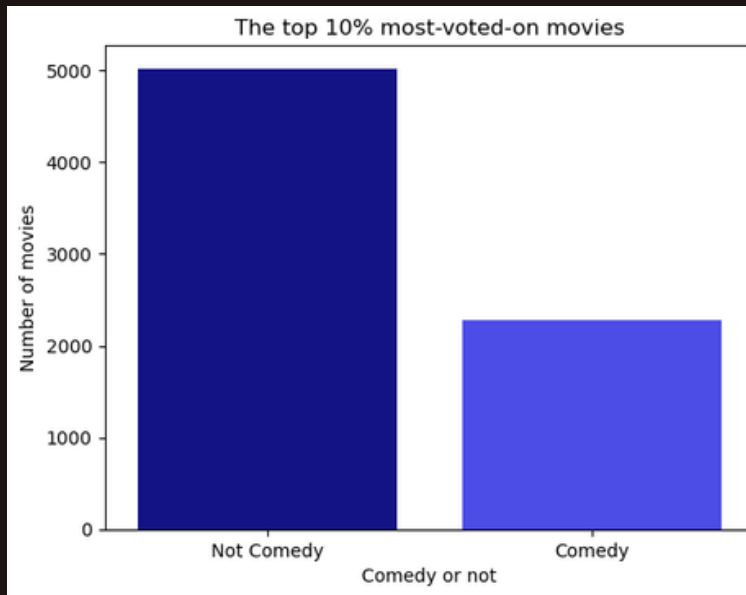
[imdb.com](https://www.imdb.com/title/tt1306384/)

Shutter Island
(Mystery, Thriller)

RESULTS CONT.

Comedies

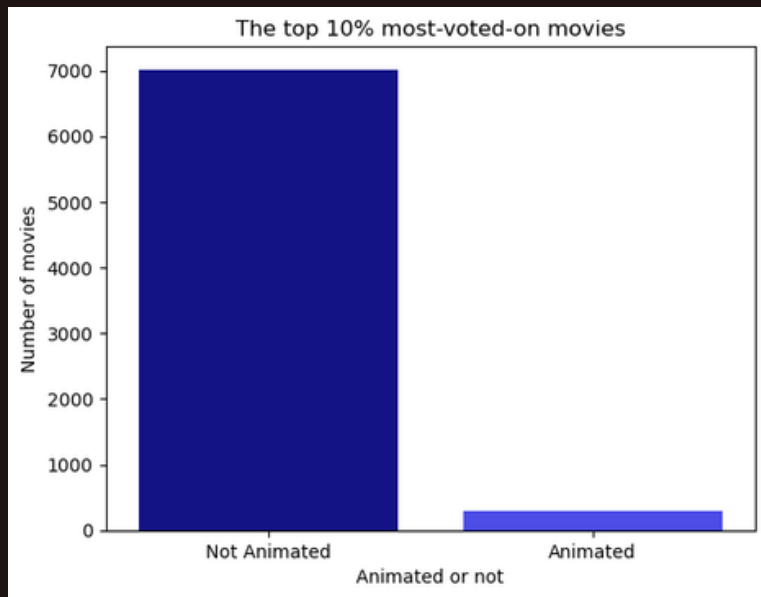
It is worth noting that comedy did not make it into the list of the top 10 genres. Nevertheless, of the films that were ranked highly, 31.22% were comedies.



RESULTS CONT.

Animated movies

Of the top ranked movies, 3.93% are animated.



RECOMMENDATIONS



1. Prioritize movies that incorporate one or more of the following 5 genres:

- Adventure
- Fantasy
- Sci-Fi
- Animation
- Mystery

2. Roughly one-third of the movies produced should fall under the comedy genre.

3. Approximately 4% of the movies produced should be animated.

THANK YOU!

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