

Microsoft Movie Studio Production

Introduction

- The project's primary objective is to generate insights that will enable Microsoft to enter and succeed in the movie industry. To provide useful information that will aid in determining the kind of movies Microsoft should produce, we will employ exploratory data analysis.

Objective

1. Which Movie genres ought Microsoft Movie Studios to prioritize?
2. When should we see these films in theaters?
3. How much money should be set aside for each film's production?
4. Types of films that are currently doing the best at the box office

Questions to answer

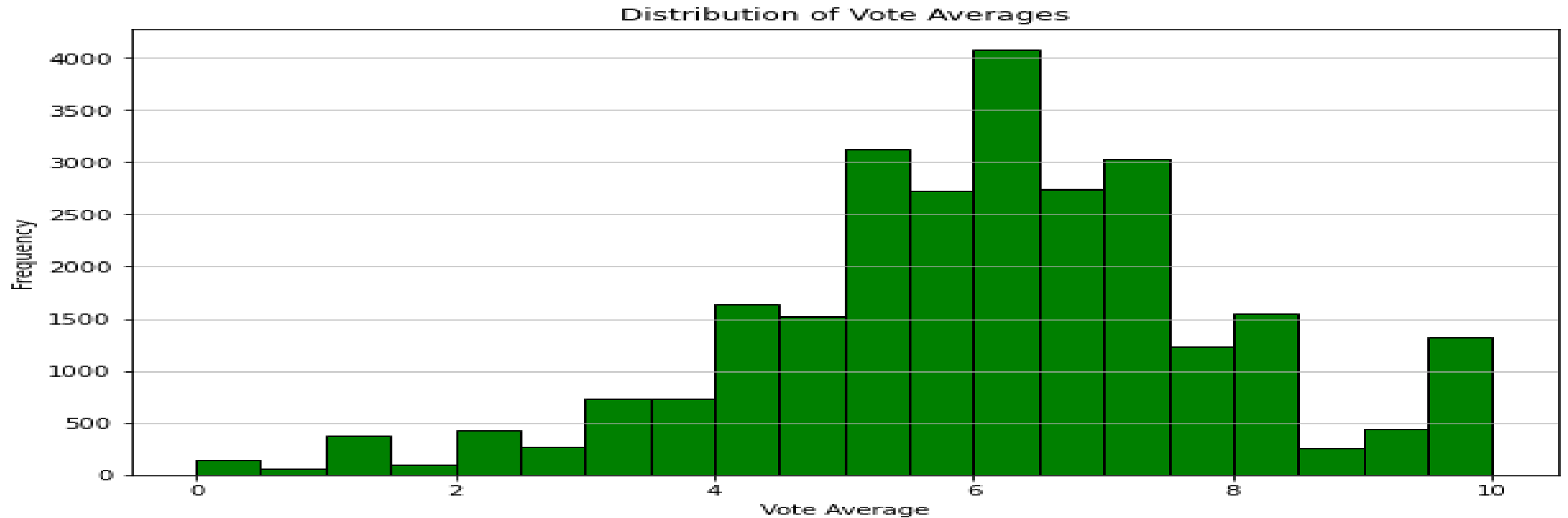
1. How strong is the correlation between a movie's popularity and the number of votes it receives?.
2. Does the relationship between popularity and vote average/vote counts differ across genres or years of release?.
3. What might be the reasons behind the observed relationships between popularity, vote averages, and vote counts?.

The Data

In the folder zippedData are movie datasets from:

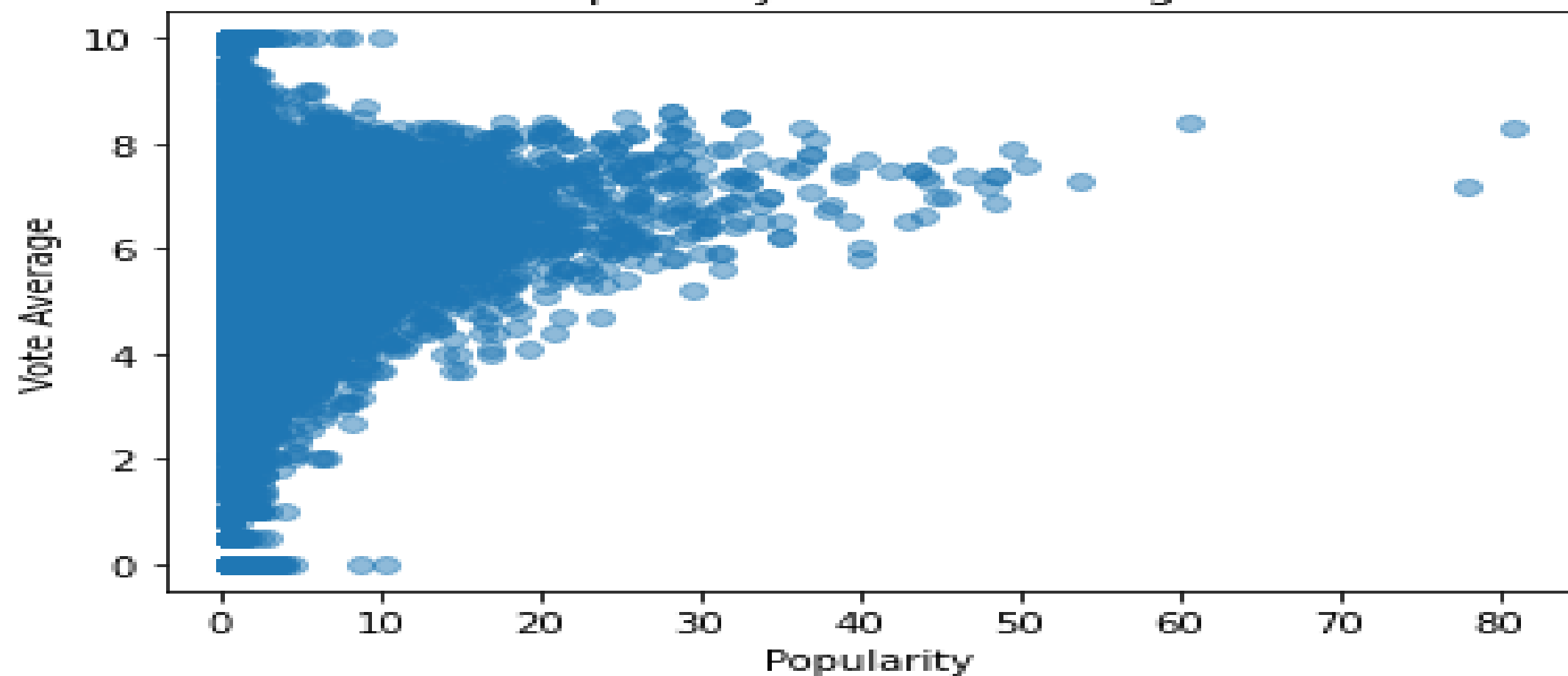
- -Box Office MojoLinks(bom.movie_gross.csv)
- MDDBLinks(im.db)
- Rotten TomatoesLinks(rt.movie_info.tsv)
- TheMovieDBLinks(tmdb.movies.csv)
- The Numbers(tn.movie_budgets.csv)

Data Analysis and Recommendations

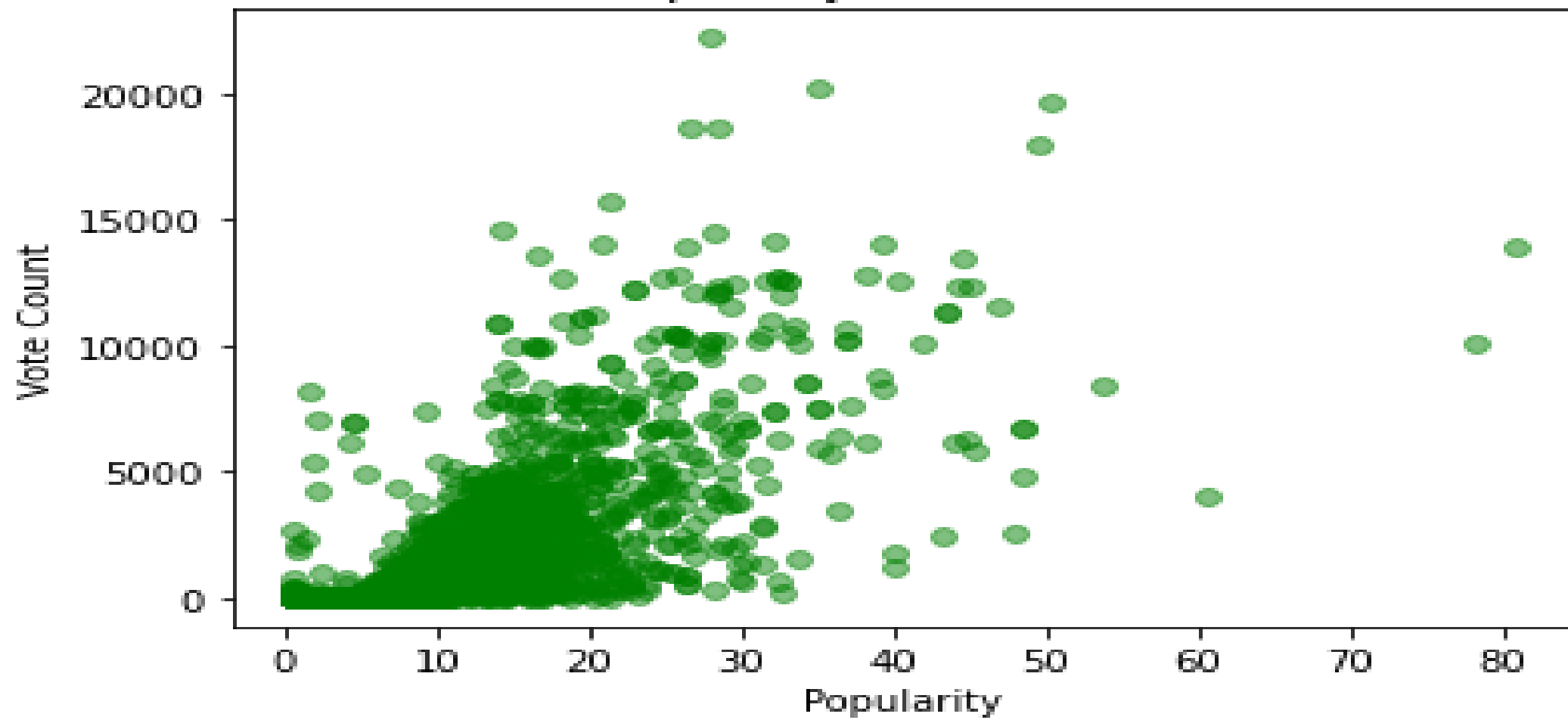


The visualization showing the distribution of vote averages for movies. This histogram illustrates how the vote averages are distributed across the dataset, with the majority of movies receiving vote averages in the middle range.

Popularity vs Vote Average

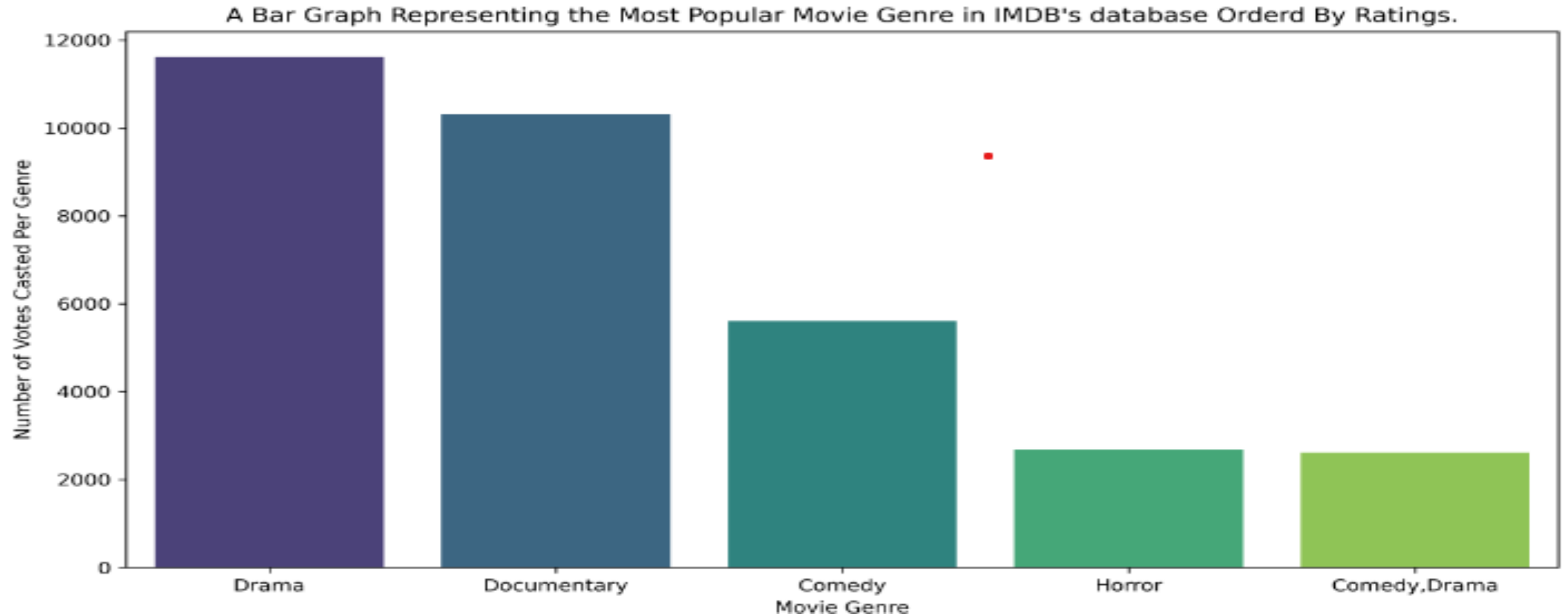


Popularity vs vote Count



These scatter plots visualize the relationships between the movies' popularity and their vote averages, as well as popularity and vote counts. The first plot shows how popularity correlates with vote average, while the second plot illustrates the relationship between popularity and the number of votes a movie receives.

Bar Graph: Illustrates the popularity of various movie genres based on the number of votes. A higher number of votes may indicate a larger audience for that genre.



Conclusion

Based on data research performed on several data sources, the most popular and highly rated movie genres are drama, comedy, and documentaries.

Recommendation

1. Microsoft should come up with movies that incorporate drama and comedy.
2. Microsoft should come up with a strong marketing strategy since popularity increases the ratings and profits.