

An Analysis of Box office movies

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Problem Statement

Microsoft sees all the big companies creating original video content and they want to get in on the fun. They have decided to create a new movie studio, but they don't know anything about creating movies. You are charged with exploring what types of films are currently doing the best at the box office. You must then translate those findings into actionable insights that the head of Microsoft's new movie studio can use to help decide what type of films to create.

Development Process

Data sourcing

Combining given datasets from IMDB and rotten tomatoes that contain information about box office movies. The analysis also employs use of an API to help fill missing values of movie genres and movie gross revenues

Data understanding

Performing functions to the dataset to help find connections in the data and identify useful variables.

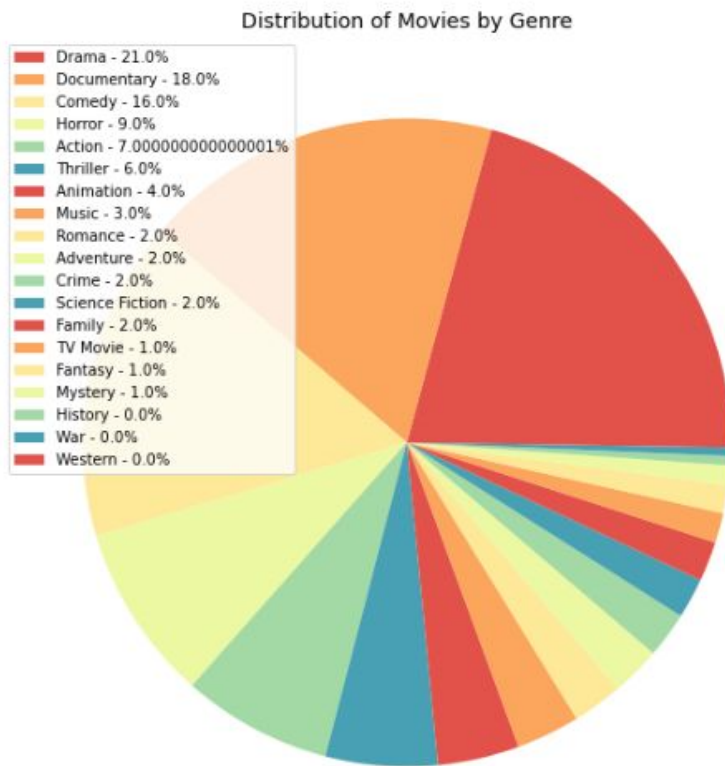
Data Analysis

Combining variables and using relevant visualizations to display their relationship and to understand gain insights from the analysis.

Findings

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Movie Genre Popularity at the Box Office



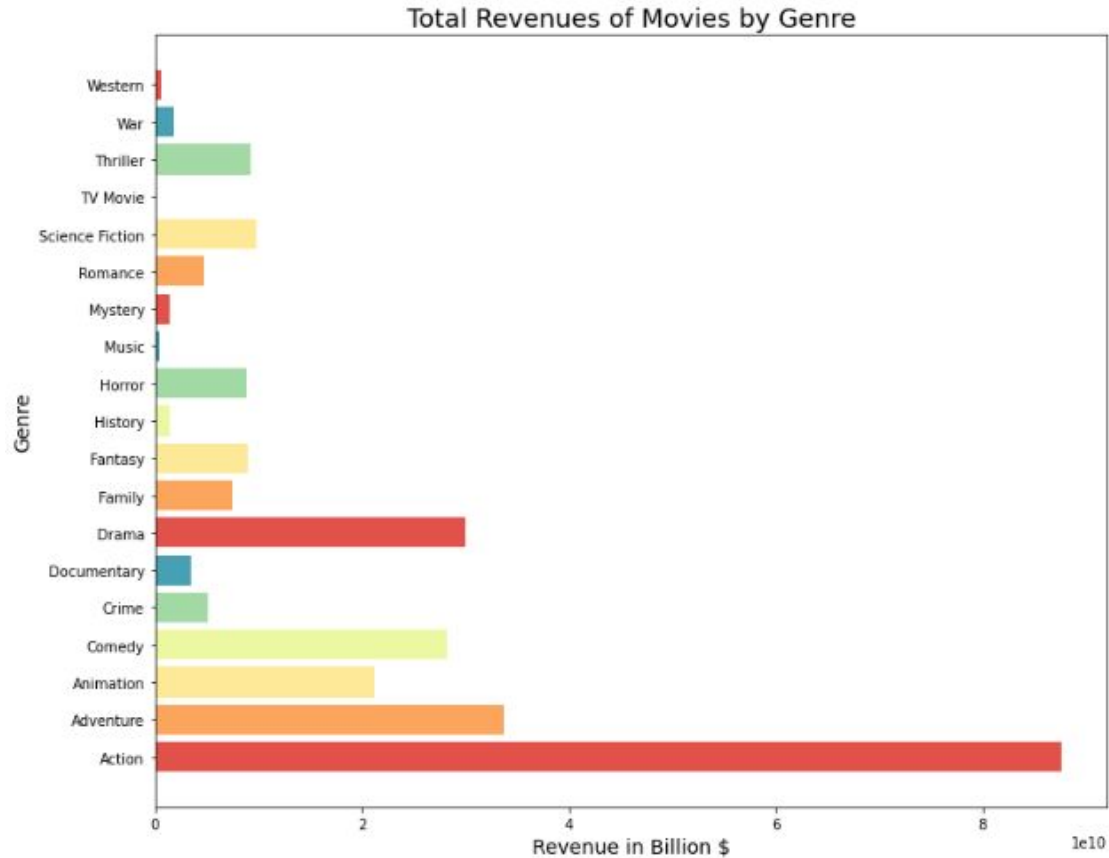
The most produced movie categories / genres:

1. Drama
2. Documentary
3. Comedy
4. Horror
5. Action

Least produced movie categories / genres:

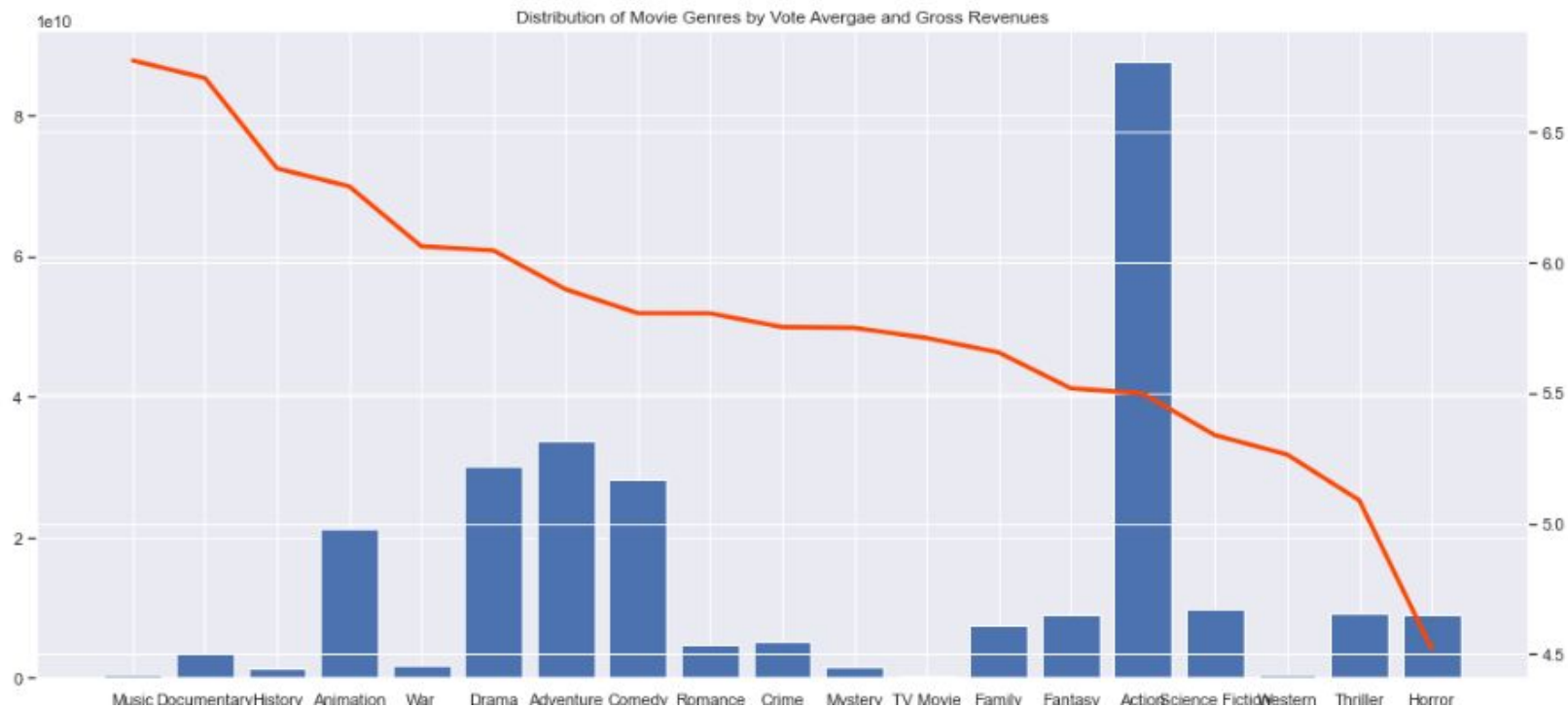
1. Music
2. Western
3. TV Movie
4. Mystery
5. War

Gross Revenues by Movie Genres

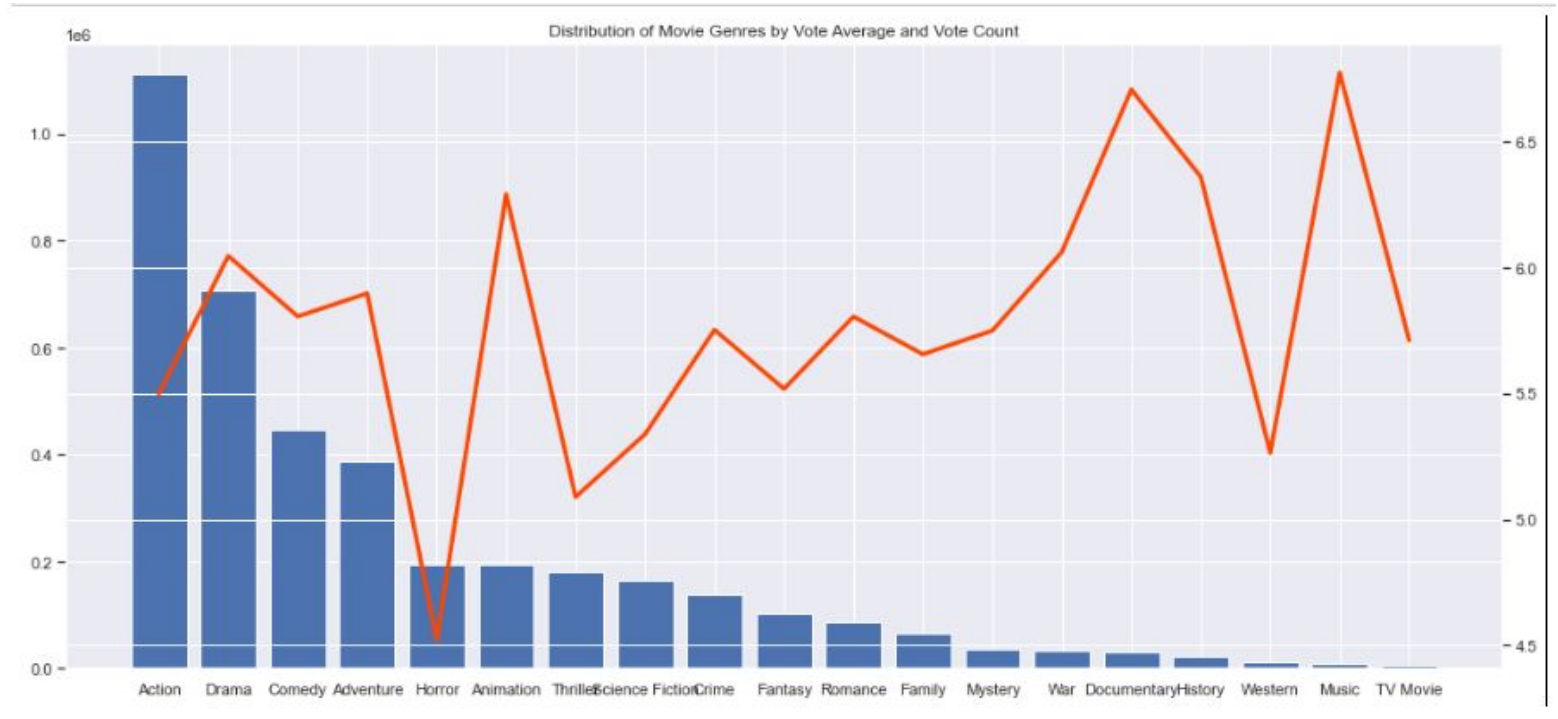


1. Action movies by far generate the highest revenues at the box office followed by Adventure , Drama and Comedy movies.
2. Western , Musicals and Tv movie categories generate the least revenues.

Comparison of Genres according to Votes and revenues

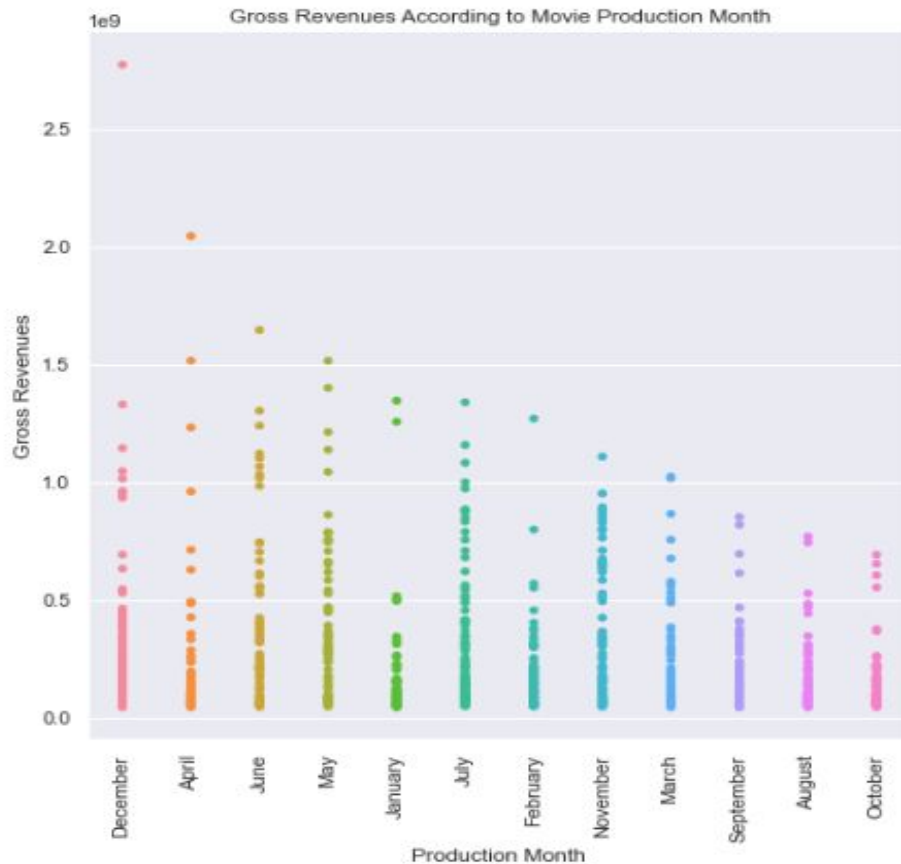


Comparison of Vote Count and Average Ratings by genre



1. The rating of a movie has no direct impact on the revenue it generates at the box office. The analysis show that movies that were highly rated did not generate the highest gross revenues while movies with relatively average ratings performed very well at the box office.
2. The popularity of a movie has significant influence on its box office performance. The popularity of a movie in this analysis is represented by the vote counts on the various movie websites.

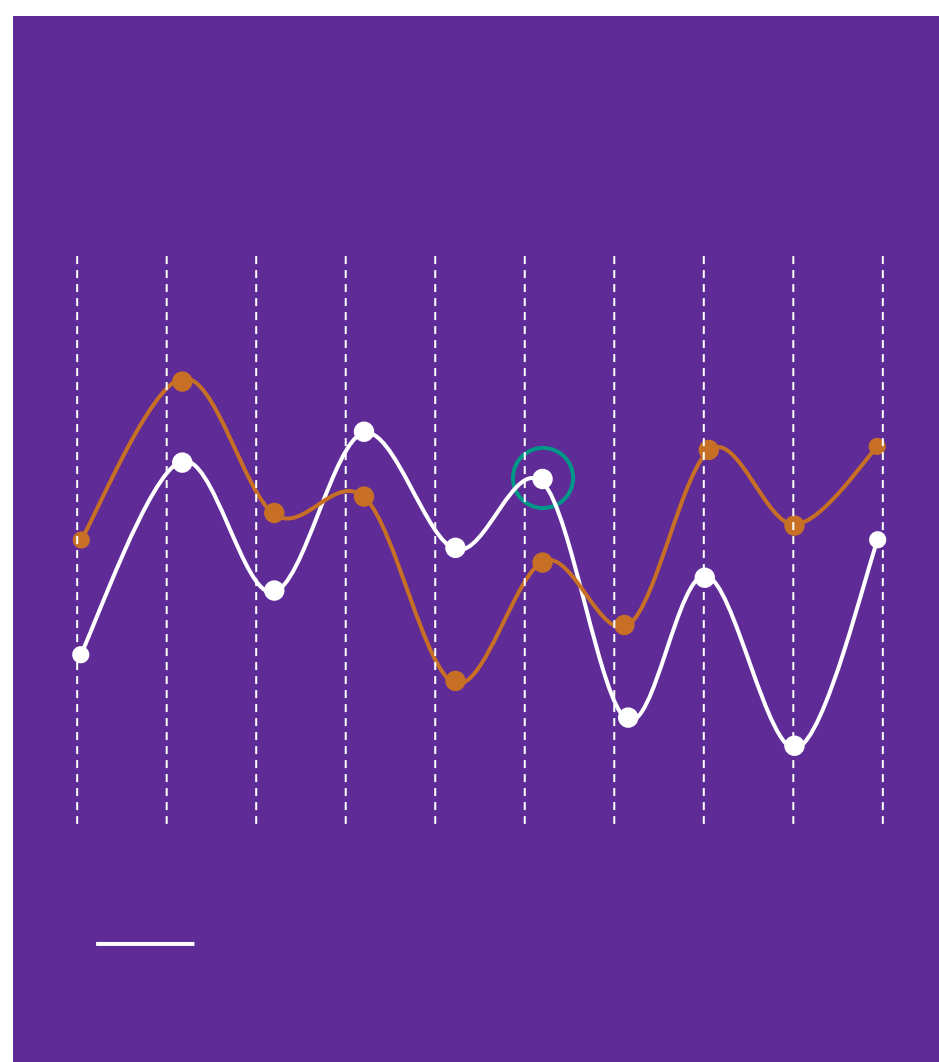
Movie Release Dates



The analysis shows that movies released in certain months Performed better at the box office compared to others .

The best performing months were months were December, April ,June and May while the lesser performing months were October , August , September, March.

Recommendations



Based on the findings of my analysis, I recommend the following to Microsoft

1. Focus movie production on particular genres/ categories.

The analysis shows that some genres perform very well at the box office compared to others such as westerns which perform the worst.

Such genres are Drama, Adventure , Comedy and Action. The genres popularity is significant to movie performance as audiences develop tastes and preferences for movies based on other movies from similar genres and are therefore more likely to go watch movies based on this similarity.

2. **Allocate resources for marketing**

The popularity of a movie has a significantly higher effect on its popularity than its rating. The findings of this analysis show that movies with high ratings did not necessarily generate high revenues. However, there was a positive relationship between the vote counts and the revenue.

A high vote counts symbolizes popularity and that people who have watches the movie are engaging in conversations either on social media sites or movie review sites. This helps to reach even bigger audiences by creating interest in people who have not watched the movie.

3. To release movies during specific months.

The analysis shows that box office movies perform best during specific months such as December , April , June and May . Some of the most popular movies which also generate very high revenues such as the Fast and Furious franchise that has a total of 8 movies so far had their release dates as below:

1. Fast and Furious 1 - 22nd June 2001
2. Fast and Furious 2 - 6th June 2003
3. Fast and Furious 3 - 6th June 2003
4. Fast and Furious 4 - 12th March 2009
5. Fast and Furious 5 - 29th April 2011
6. Fast and Furious 6 - 24th May 2013
7. Fast and Furious 7 - 2nd April 2015
8. Fast and Furious 8 - 12th April 2017
9. Fast and Furious 9 - 25th June 2021

Future Plans

1. To analyze other factors that could affect movie performance at the box office such as audience ratings, production companies as well as key personnel such as directors, actors and writers.