phase 1 project

Overview

The objective of this analysis is to examine historical data on movies, understand why some movies perform better than others, and recommend the best types of movies for MICROSOFT's new studio to produce in order to increase business returns and profitability.
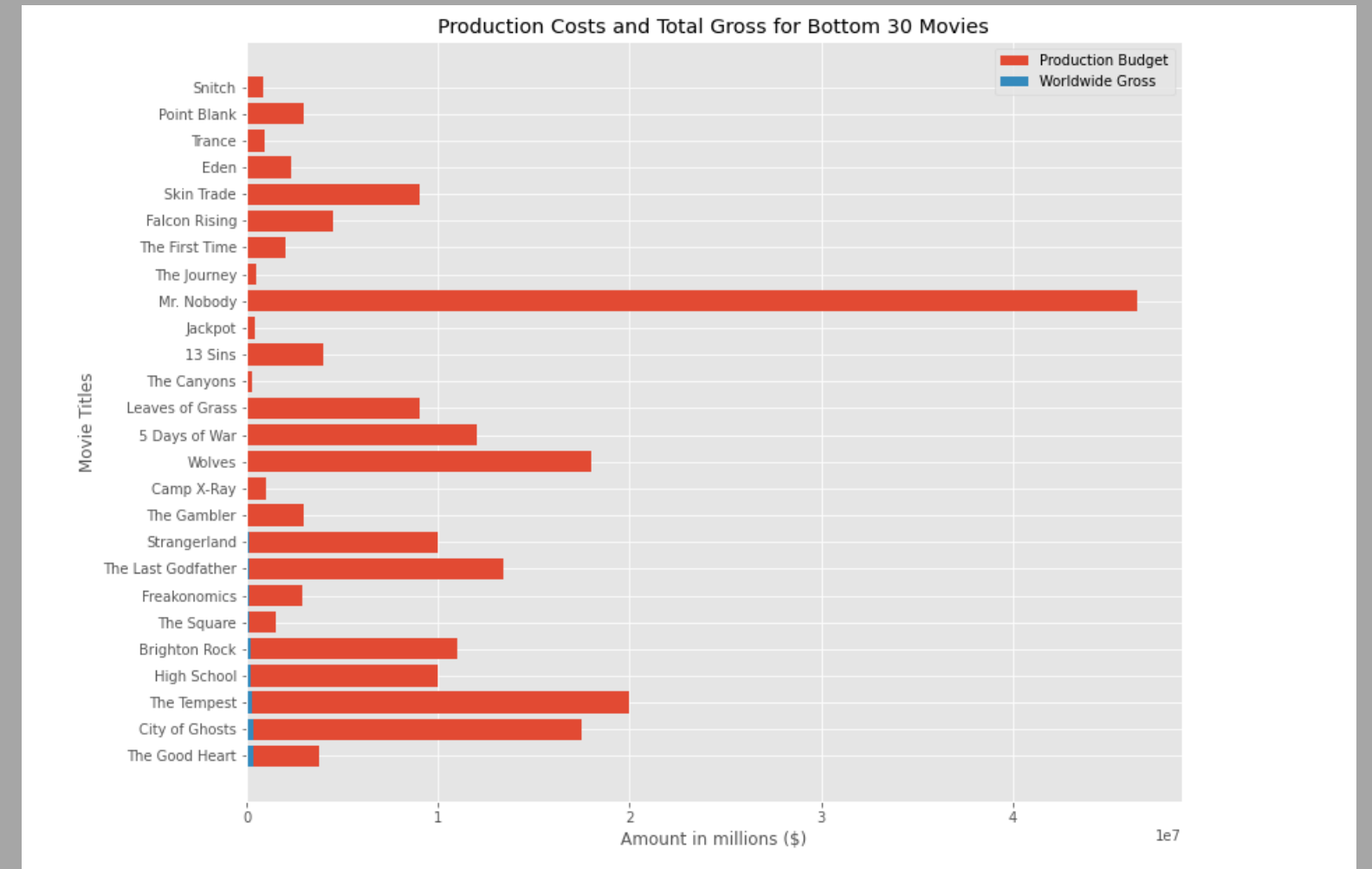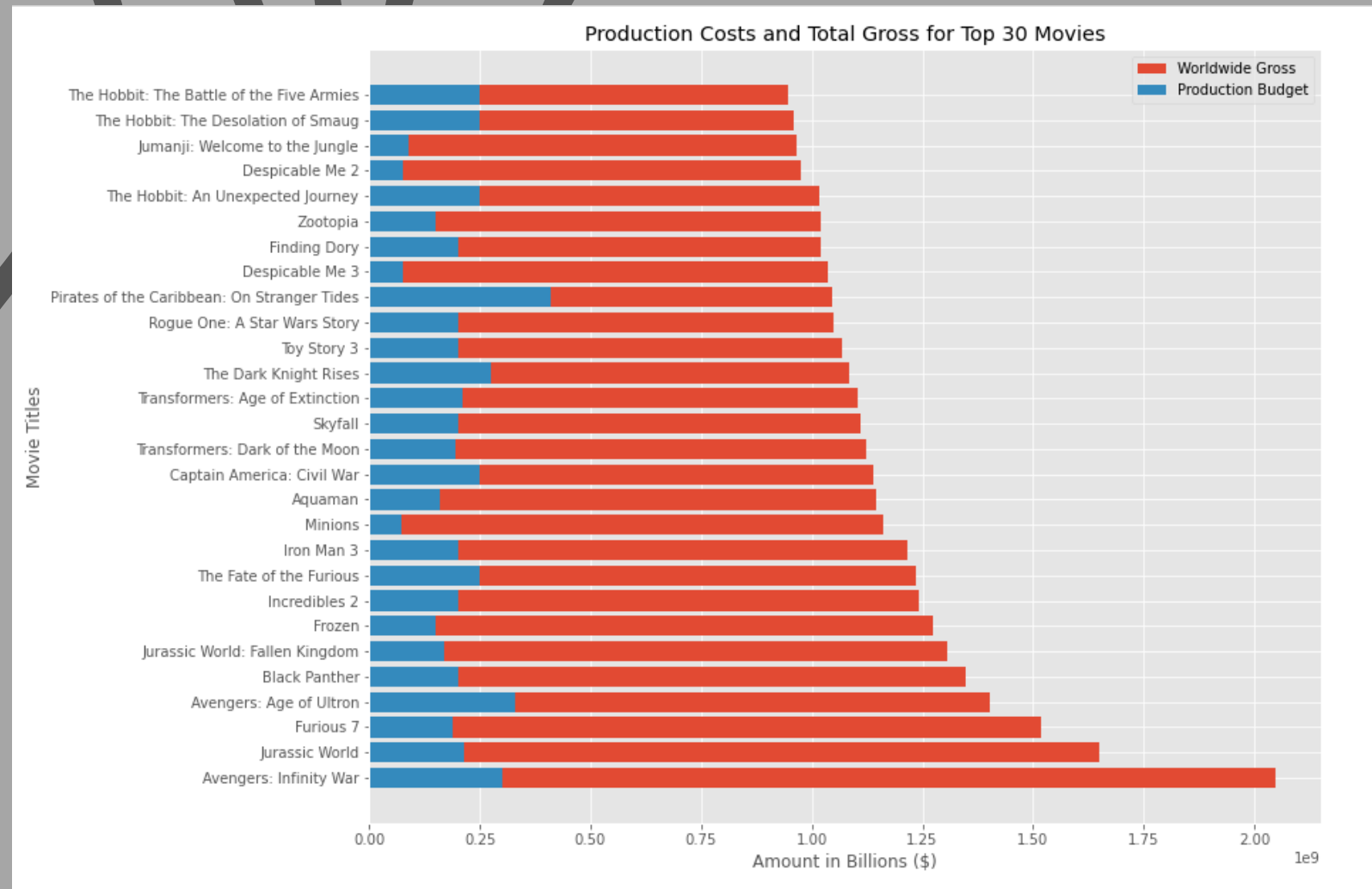
Business Understanding

To ensure the success of MICROSOFT's new film studio, it's essential to focus on producing profitable films. This would benefit shareholders, employees, and viewers by increasing profits, ensuring job security, and providing consistently good films.

Data Understanding

Data from TheMovieDB, The Numbers, and Box Office Mojo are used to analyze the film industry's performance, successful movie genres, and reasons for their success. Three datasets, tn.movie.budgets.csv, bom.movie_gross.csv, and tmdb_movies.csv, provide information on production budgets, movie genres, gross earnings, and release dates, which help determine movie performance, successful genre combinations, and how production costs and release dates affect movie success.
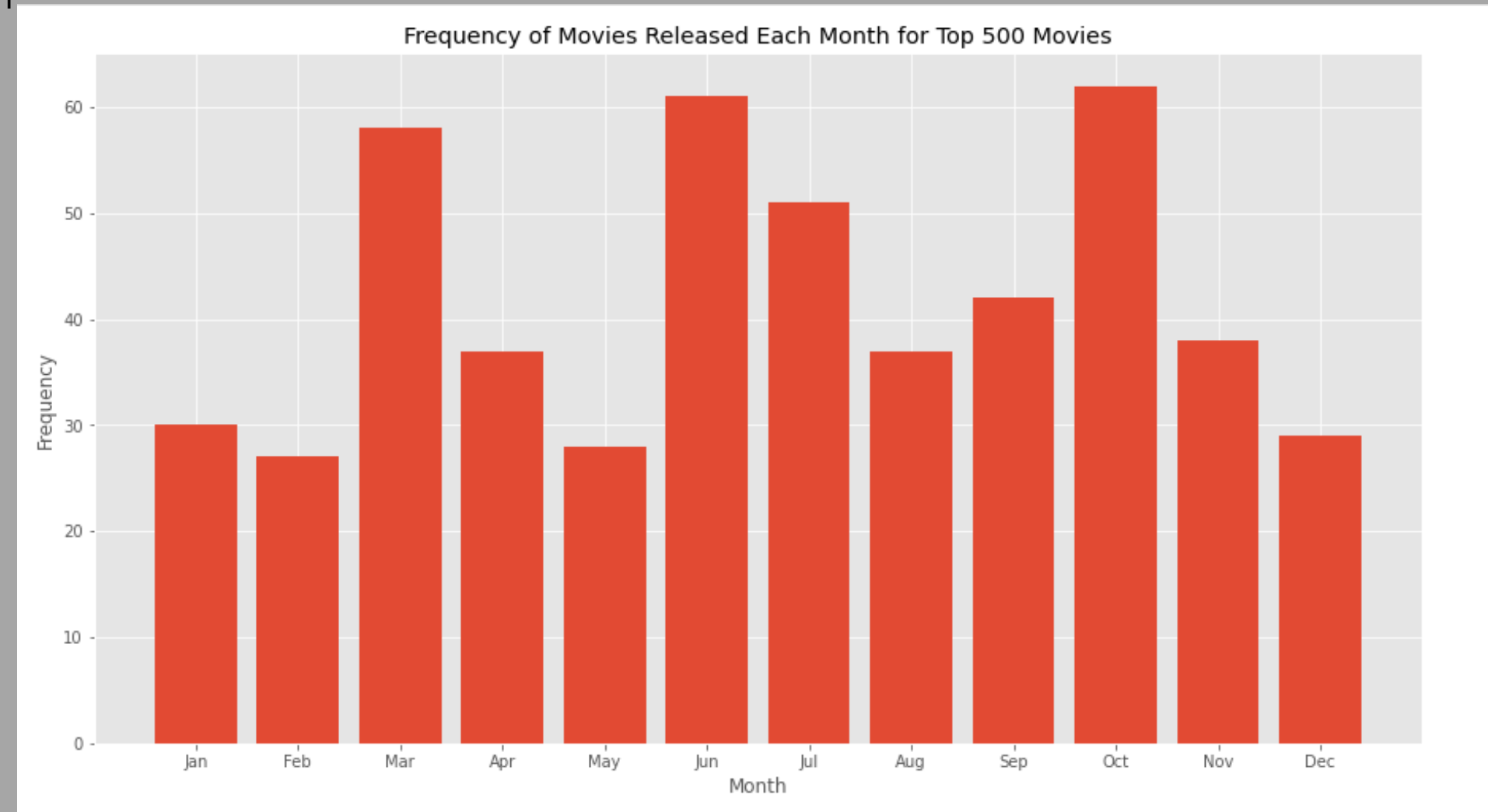
Production Budget vs Box Office figures

Production Costs and Total Gross for Top 30 Movies

Production Costs and Total Gross for Bottom 30 Movies

Analysis of the top 30 movies shows no correlation between production budget and box office success, with the highest grossing movie having similar production budgets to most others in the list. However, the bottom 30 movies cost more in production but generate little revenue, suggesting that spending less than $50 million may result in less profitability. While individual charts show minimal correlation, analyzing them together suggests that good investment is necessary to ensure profitability.
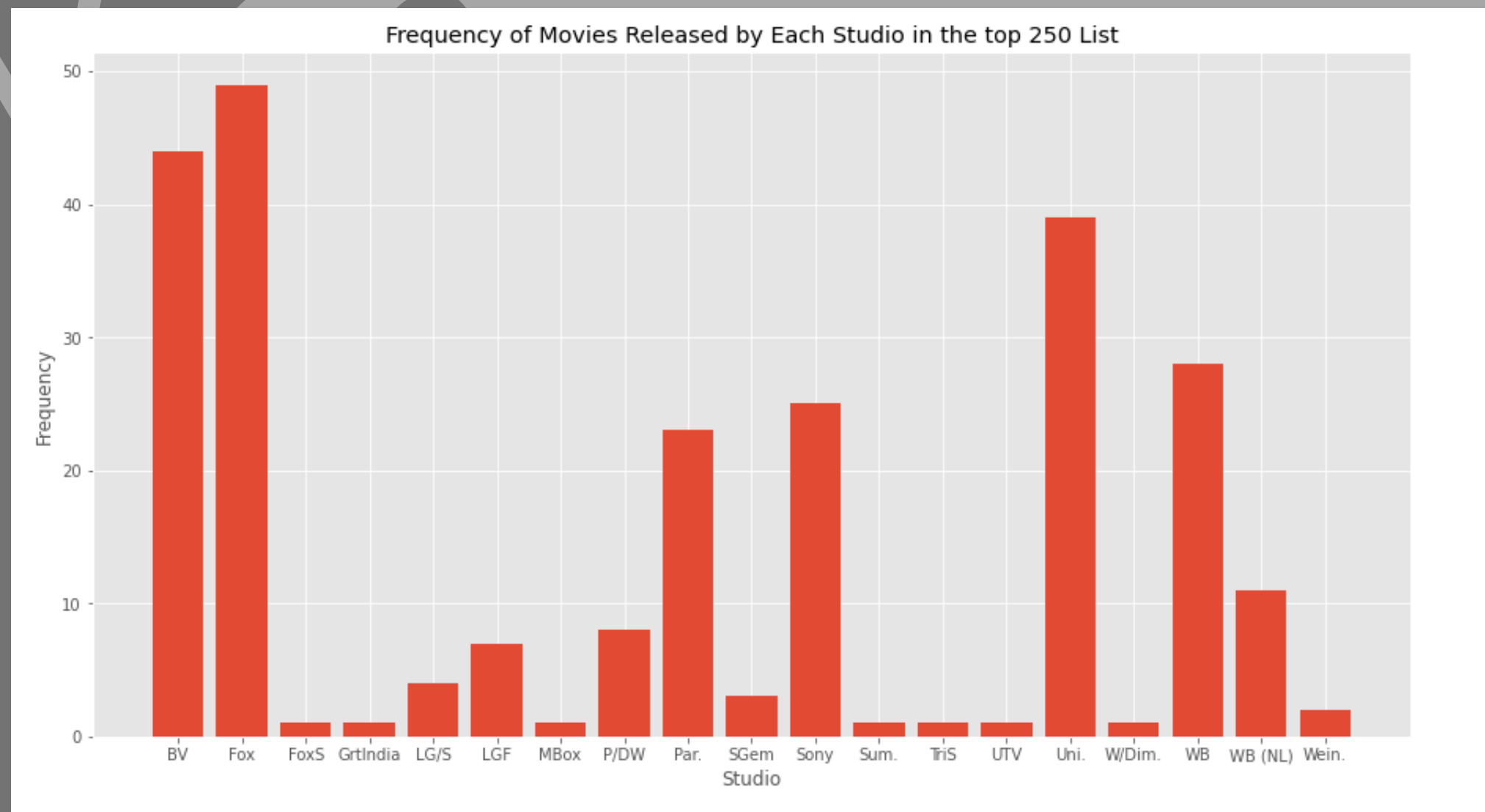
Monthly Release Dates for the top 100 Movies

The highest number of movies in the top 500 list were released in March and April, June and July, and September, October, and November, indicating that these months may be more profitable for movie releases. Other factors, such as weather, may also influence people to watch movies more during these months, particularly in June and July when many parts of the world experience colder climates.
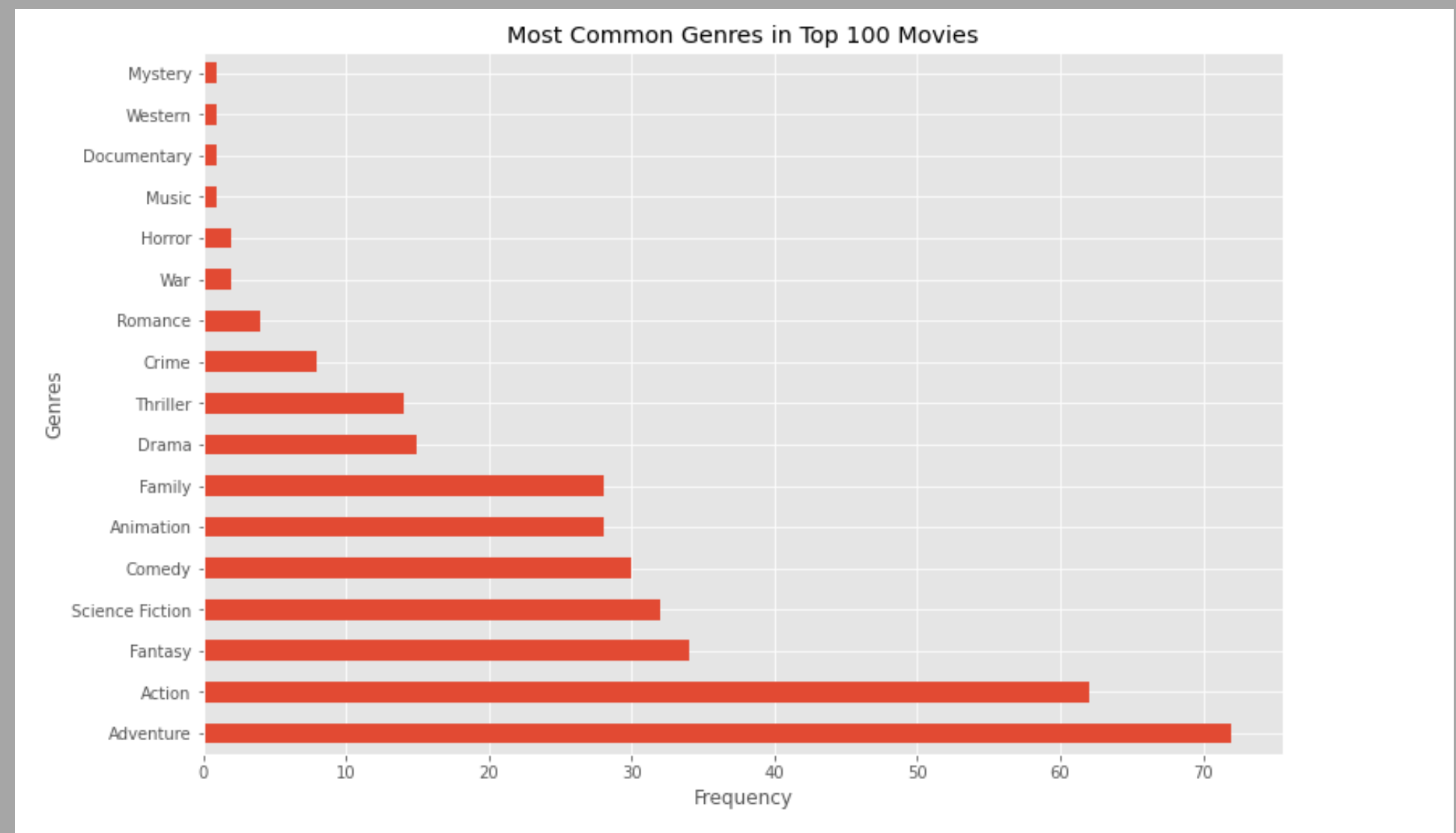

Frequency of Movies Released Each Month for Top 500 Movies

Studios with the Highest number of Movies in Top 250 List

"Can't ask for a better apparel retailer to buy from! Not only do they offer the most trendy jackets and t-shirts, but their garment materials are also equally impeccable."

Frequency of Movies Released by Each Studio in the top 250 List

Most Common Genres in Highest Grossing Films

The horizontal bar chart shows that Adventure is the most common genre in the top 100 highest grossing movies, followed by Action, Fantasy, and Science Fiction. Focusing on these genres and combining them could provide a viable opportunity for capturing the global film market.

Most Common Genres in Top 100 Movies

Conclusion and Recommendation

In summary, the analysis suggests that Microsoft's new movie studio should focus on producing movies that align with the adventure, action, fantasy, science fiction, and comedy genres, with a priority on adventure. Additionally, partnering with established production studios such as Warner Bros, Fox, Universal Studios, and Walt Disney Studio Pictures could increase the chances of success. While considering production costs and release months may also be helpful, they are of lower priority. By leveraging these strategic actions, Microsoft's new studio may be better positioned to capture the global film market.