

MICROSOFT MOVIE ANALYSIS

OVERVIEW

- ▶ 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. I am charged with exploring what types of films are currently doing the best at the box office.
- ▶ I 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.

Business understanding.

The primary objective is to explore the landscape of the movie industry and identify the types of films that are currently performing exceptionally well at the box office.

I formulated some questions to guide me in order to identify the type of films doing well.

Here are the questions:

- 1) Which movies are the most profitable?
- 2) Which movie genre are most commonly produced?
- 3) Which is the best time to release a movie?

Data understanding

This section provides an overview of the data sources and key attributes that will be used in the exploratory data analysis (EDA) to gain insights into successful movie genres and box office performance.

The data sources I used include:

- ❖ Bomovies
- ❖ Rt.movie_info.tsv
- ❖ Rt.reviews.tsv
- ❖ tn.movie_budget.csv

Data Analysis

I analyzed various factors such as movie genres, budgets, profits and release dates. I aim to provide actionable insights to assist Microsoft's new movie studio in deciding what type of films to create

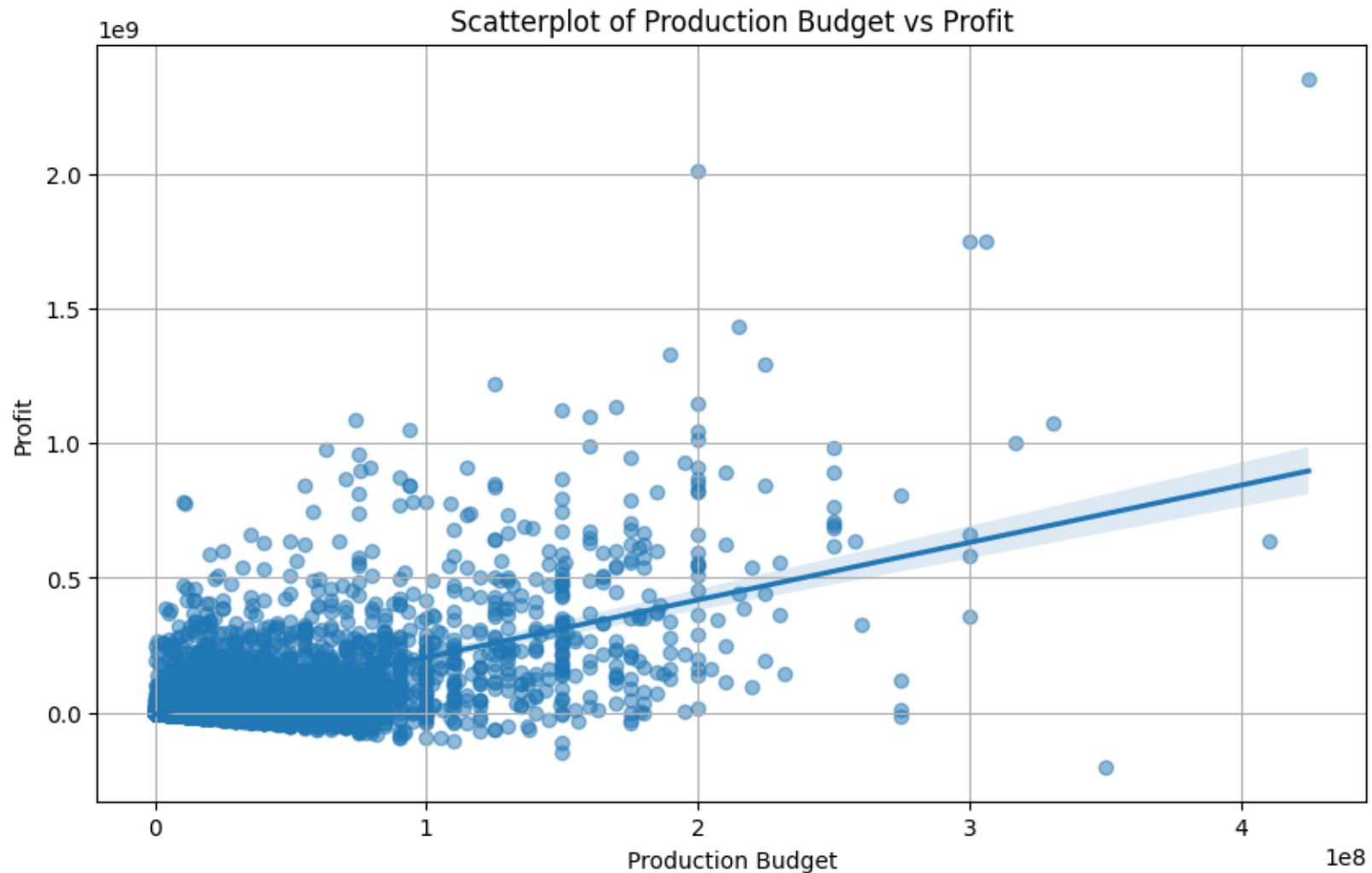
Performed data cleaning- To check for missing values, remove duplicates and ensure consistency in the dataset.

Performed Exploratory Data Analysis- Computed the summary statistics for relevant metrics such as budget and profits.

Data visualization

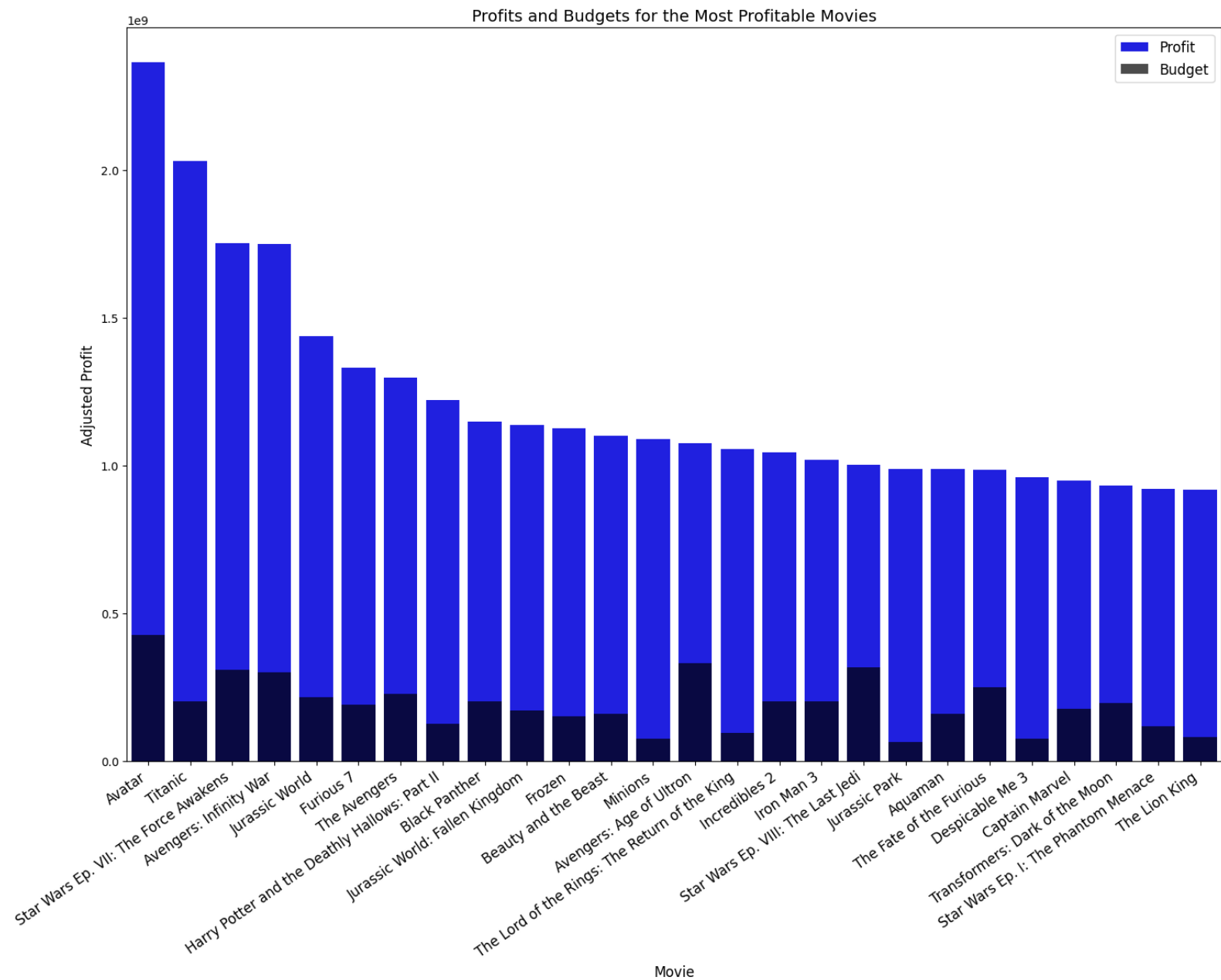
I investigated the relationship between movie budgets and box office profits to determine if there's a correlation between higher budgets and higher profits.

Here is a scatterplot.

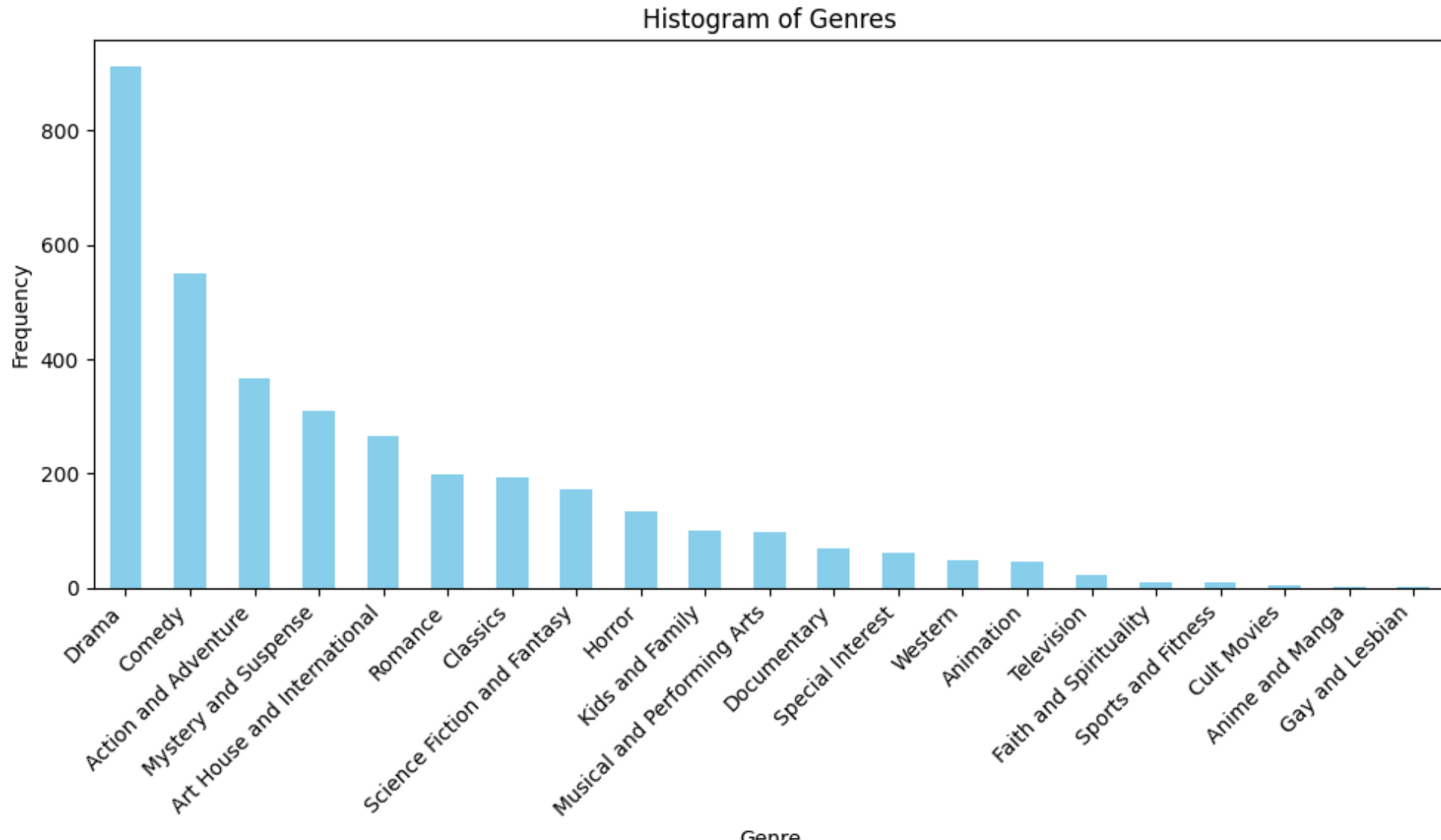


In the scatter plot, There is a positive correlation between the production budget and profit hence this means that increase in production budget may lead to increase in profit.

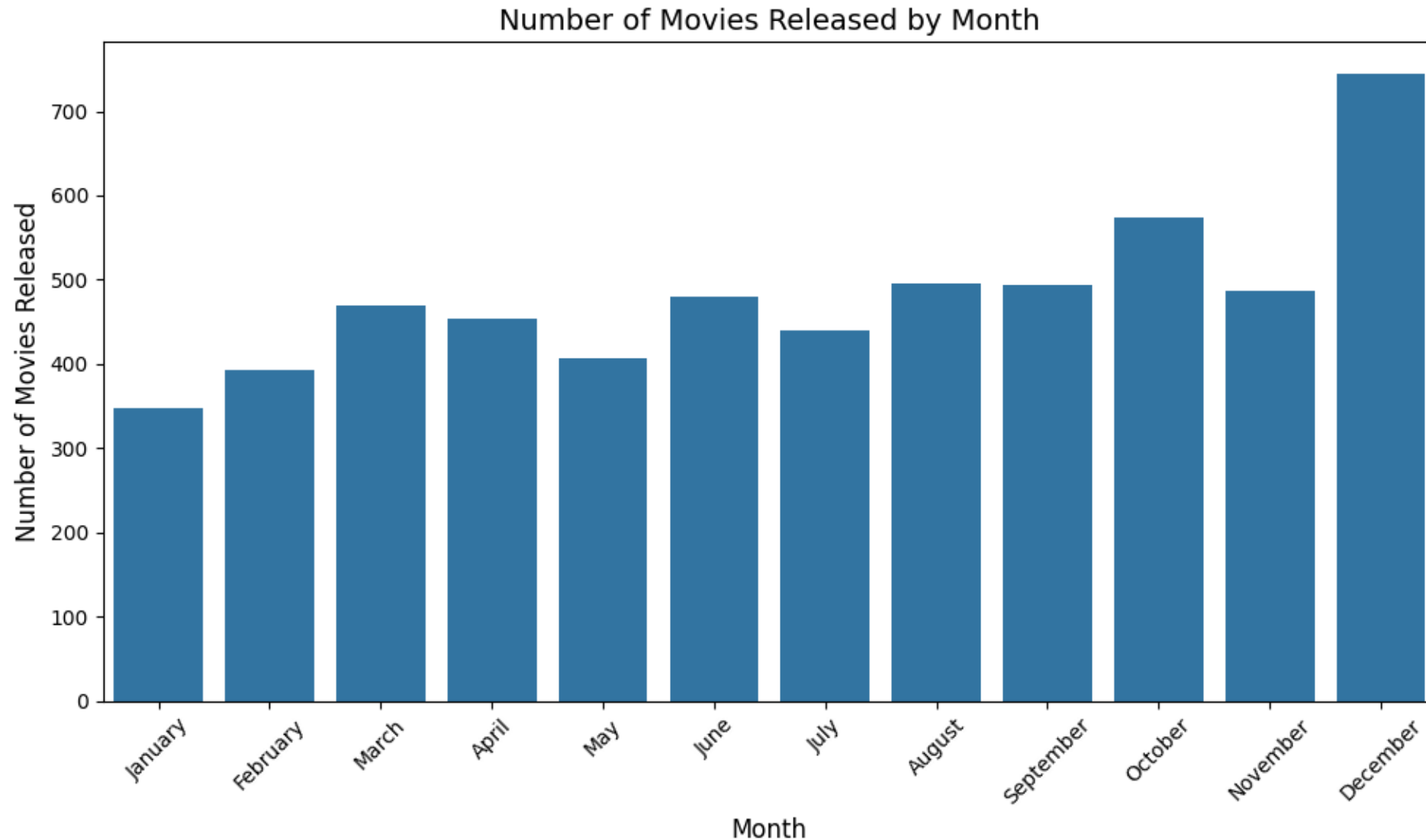
To view the profitable movies, here is a plot



I used a histogram to get the commonly produced movies



Which is the best time to release a movie- I explored the distribution of movie releases over different months and identified trends or patterns regarding the timing of successful movie releases.



Recommendations

1. Focus on high performing genres- Action, adventure, drama, and comedy movies have been successful in the box office. Consider investing in these genres to attract a broad audience and maximize box office revenue.
2. Prioritize quality over quantity. Allocate resources to produce high-quality films with compelling narratives, talented casts, and cutting-edge visual effects. Increase in production budget will lead to higher profits.
3. Strategic release plan- Consider releasing movies around October and December when audience demand is high. Strategic release planning can optimize ticket sales and maximize exposure for Microsoft's movies.

THANK YOU
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