

BOX OFFICE ANALYSIS FOR MICROSOFT MOVIE STUDIO

OVERVIEW

Background of the business

Microsoft intends to venture into creating videos. They want to create a new movie studio with no prior experience. They need to understand the current landscape and market of this industry before entering. They need to know the market trends and the patterns in the industry.

Domain of the business

The domain of this business is the film production industry. Microsoft seeks to enter this industry by creating its own movie studio to create videos. They aim to create original video content. In order for them to make informed decisions, they need to understand the market needs, the trend and patterns that govern this industry. will involve doing data analysis related to the budget, genres, revenue and much more.

Business case

Microsoft seeks to successfully enter into the film production industry by creating its own movie studio. Microsoft has seen that many big companies are creating original video content and wants to join in. It seeks to generate revenue through production of films successfully. The challenge is it has no experience nor expertise in this sector. The approach is to conduct data analysis to understand factors that lead to high revenue collection. They will then use the results from the data analysis to make informed decisions on the types of films to focus on and the budget. The expected outcome is producing films with large audiences and generate revenue

BUSINESS UNDERSTANDING

Problem Statement

Microsoft is entering into an industry where it has no prior knowledge or experience in and seeks to understand the best performing films at the box office. It seeks to make the best data-driven decisions and leverage the analysis to make revenue.

The business landscape has different types of genres, it has different budgets, it generates different revenues.

Objectives

- To identify the best performing genres in terms of revenue
- To identify the impact of voting reviews in terms of films performance
- To identify correlation between production budget and box office revenue
- To identify the trends and patterns related to different genres.

DATA UNDERSTANDING

Data Sources: I collected datasets from various sources, including Box Office Mojo, IMDb, and Kaggle.

Data Cleaning: I performed data cleaning to handle missing values and outliers.

Budget Column

Count: There are 5,421 movie budgets in the dataset.

Mean: The average movie budget is approximately \$36,009,170.

Standard Deviation: The standard deviation is approximately \$41,573,370, indicating a wide range of budgets.

Min: The lowest movie budget in the dataset is \$6,000.

Max: The highest movie budget in the dataset is \$356,000,000.

Revenue Column

Count: There are 5,421 movie revenues in the dataset.

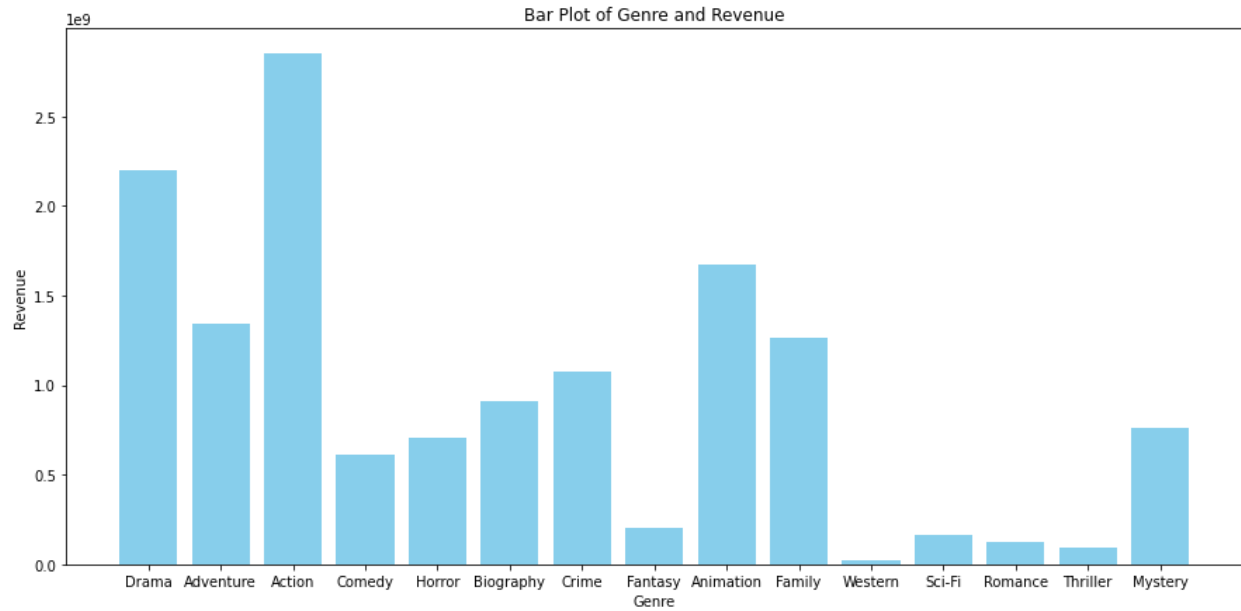
Mean: The average movie revenue is approximately \$103,229,700.

Standard Deviation: The standard deviation is approximately \$187,302,700, indicating a wide range of revenue figures.

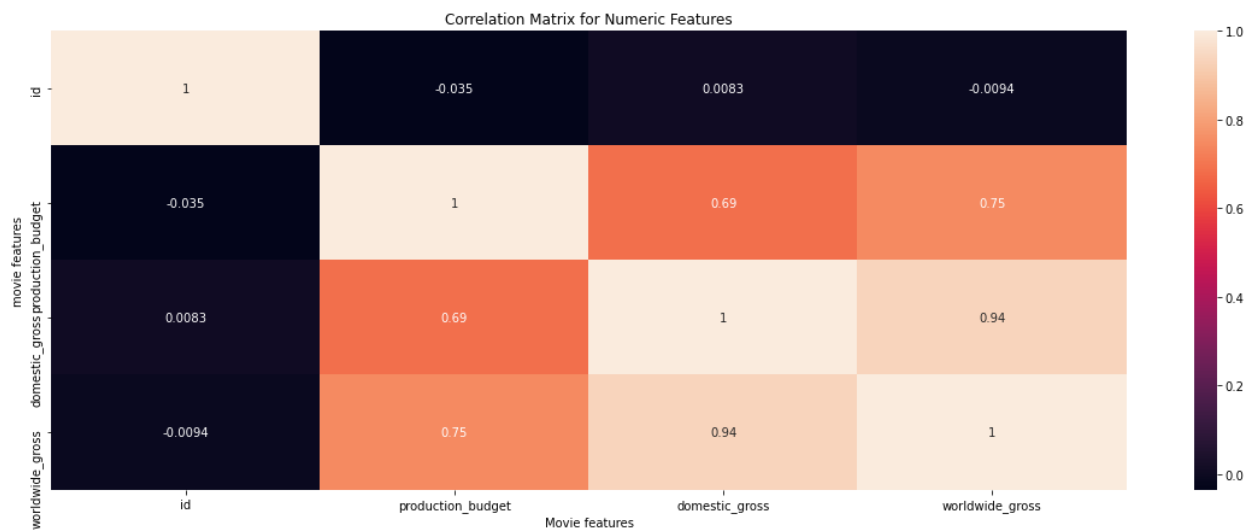
Min: The lowest movie revenue in the dataset is \$309.

Max: The highest movie revenue in the dataset is approximately \$2,847,246,000.

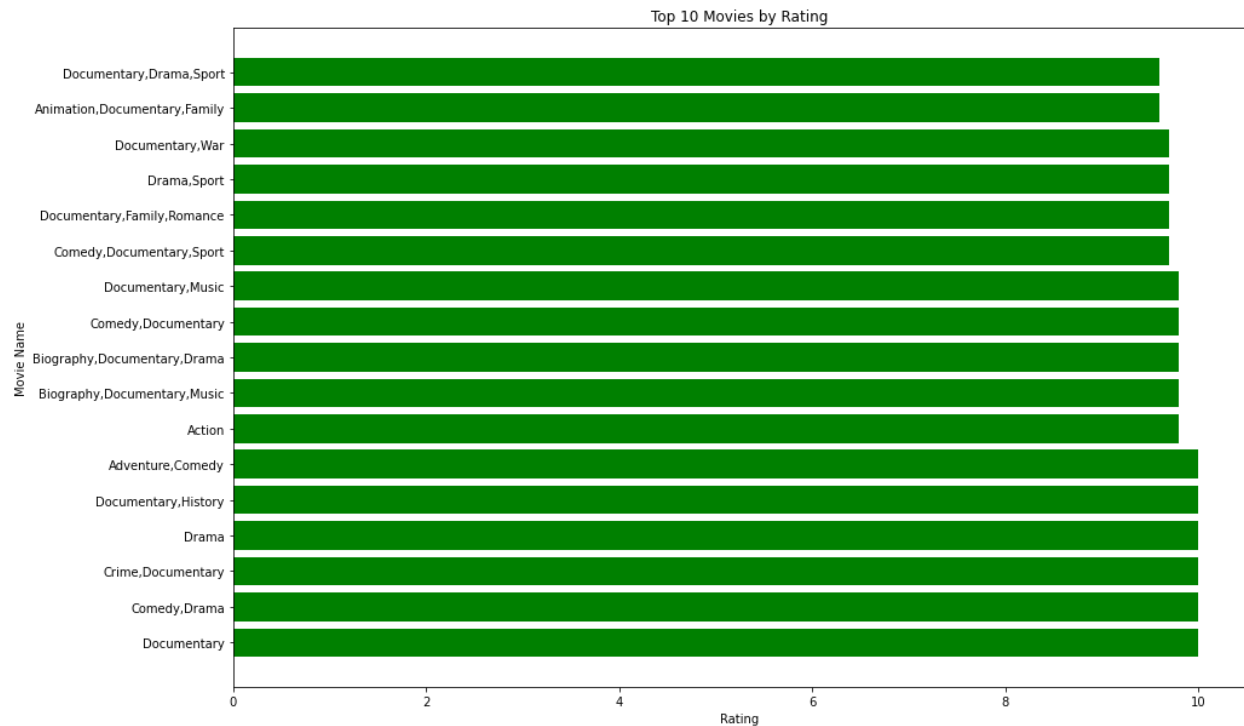
DATA ANALYSIS



- From the bar graph above it is clear that the genre action generates the most revenue.
- It is also clear that the 2nd best performing genre is drama.
- There is also a big difference between the revenue from action and drama.



- From above it is clear that the amount spent on production is highly correlated with the gross amount collected both locally and internationally.
- The higher the production amount, the higher the revenue generated.



- The genre documentary, drama, crime and comedy have the highest engagement in terms of rating

RECOMMENDATIONS

Recommendation 1: Genre Selection

Microsoft should focus on producing the following genres;
 Action, it generates the biggest amount of revenue
 Drama, it generates the 2nd amount in terms of revenue
 Animation.

Recommendation 2: Budget Allocation

Microsoft should allocate a lot of money in their production as we have seen that production is highly correlated with the revenue received. Allocate a competitive budget for each film to maximize revenue potential and production quality.

Recommendation 3: Engagement

Microsoft should focus most of their marketing in this 3 genres as they have most engagement;

The genre documentary, comedy, drama and crime

NEXT STEP

Build a predictive model that targets needs of their customer base by analyzing their demographics-age, income level, gender so as to maximize revenue.