

Title: Exploring Box Office Success: Insights for Microsoft's Movie Studio

Introduction:

I will be presenting the results of an exploratory data analysis (EDA) aimed at providing actionable insights for Microsoft's new movie studio. Microsoft has decided to venture into the movie industry but lacks expertise in the filmmaking process. My objective is to analyze the current movie market and identify the characteristics of successful films, so Microsoft can make data-driven decisions about the types of movies they should produce.

Data Sources: For this analysis, I collected movie datasets from various sources, including Box Office Mojo and IMDB. The key datasets used are `imdb.title.basics`, `imdb.title.ratings`, and `bom.movie_gross`.

Question to consider and Answer:

1. Which is the most recurring movie in terms of genre to determine the successful genre
2. Which is the best performing studio in domestic, foreign and the combined gross
3. Does the runtime affect the rating of the movies

Approach:

Data Collection: I obtained relevant movie datasets from different sources and prepared them for analysis.

Data Cleaning: I addressed missing values, and formatted the data for consistency.

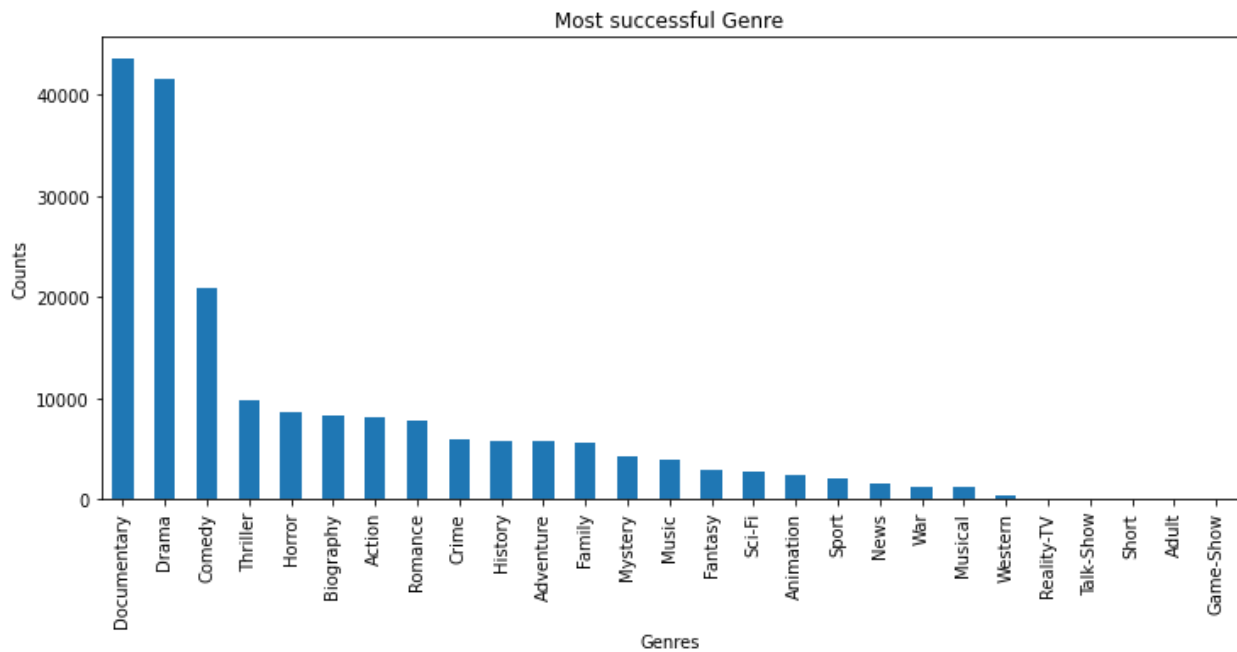
Data Integration: I merged relevant columns from different datasets to create a comprehensive dataset for analysis.

Exploratory Data Analysis: I performed various visualizations and statistical analyses to explore movie genres, ratings, revenue, and other attributes.

Key Findings:

Most Successful Genres: Documentary, Drama, comedy, Thriller and Horror genres are the top-performing genres at the box office.

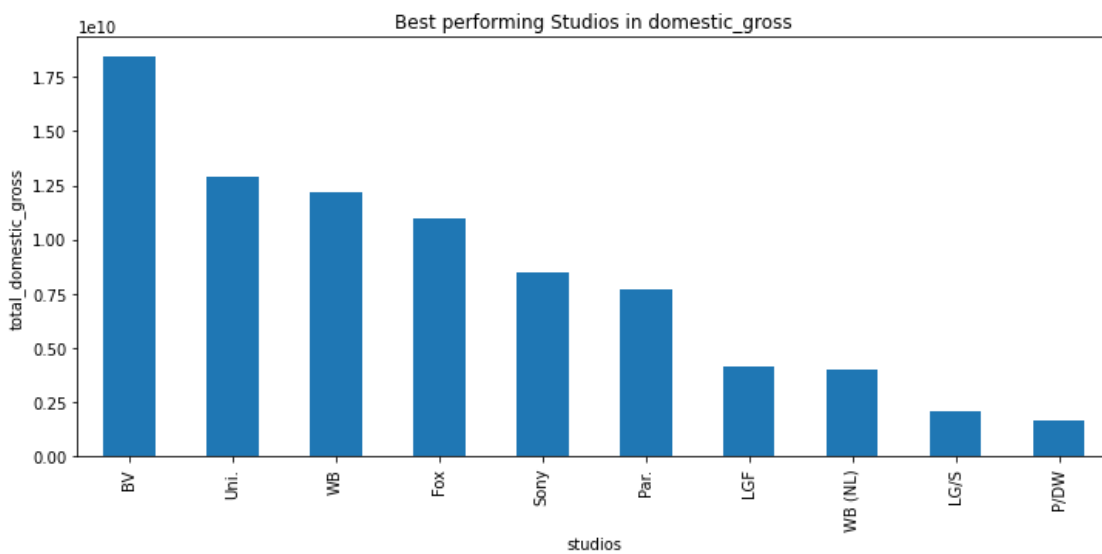
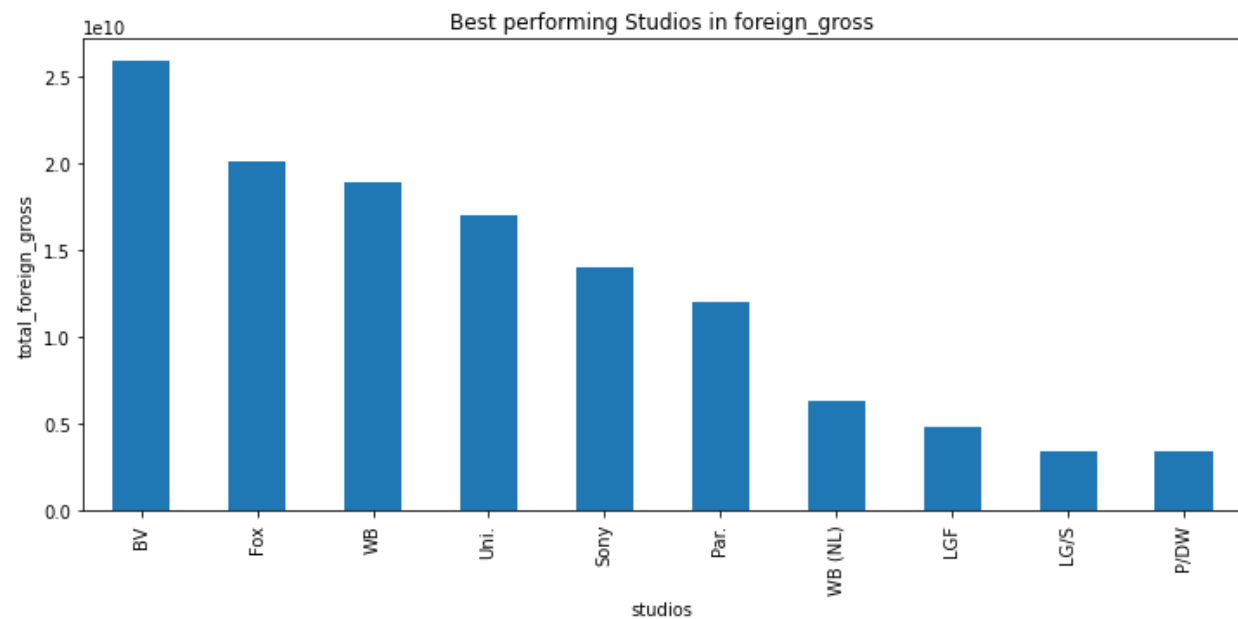
Below is a bar graph showing the most successful genre. You will not that game show is the least popular movie.



- In relation to revenue, high box office revenue is positively correlated with high sales. This is evident as shown in the bar graph above that documentary is the leading in sales.

Domestic vs. Worldwide(Foreign) Revenue:

The majority of movie revenue comes from worldwide markets, that is indicated as foreign gross. This indicates the importance of global appeal.



Movie Ratings:

Higher-rated movies tend to have better box office performance.

Recommendations: Based on my analysis, I recommend the following strategies for Microsoft's movie studio:

- Focus on High-Performing Genres as shown above.
- Invest in Documentary, Drama and comedy, as they have a higher chance of success at the box office.
- Prioritize Quality: Emphasize producing high-quality movies that receive positive ratings from audiences.
- International Market Consideration: Tailor movie content to have global appeal to maximize revenue from worldwide markets.

Conclusion:

In conclusion, our exploratory data analysis provides valuable insights for Microsoft's movie studio. By leveraging the success factors identified, Microsoft can confidently produce films with a higher likelihood of box office success. Adopting a data-driven approach will enhance decision-making, making Microsoft's entry into the film industry a successful and profitable venture.

Microsoft should also research more on how it can differentiate itself from the competitor in the market.

On the other other hand Microsoft can partner with the highest performing studios to create movies.