

# Microsoft Movie Studio

Exploring movie data

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# Outline

- Business Problem
- Data
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- Results
- Conclusions

# the Business Problem

Microsoft plans to establish a movie studio, and needs recommendations for what type of movies to make. This analysis attempts to answer the following questions in order to provide guidance to ensure profitability and commercial success:

1. What are the highest grossing movie genres
2. Which genre of movies have a higher average rating?
3. What is the relationship between the average rating and the gross income?
4. What is the domestic gross and foreign gross income by start year of the movies?

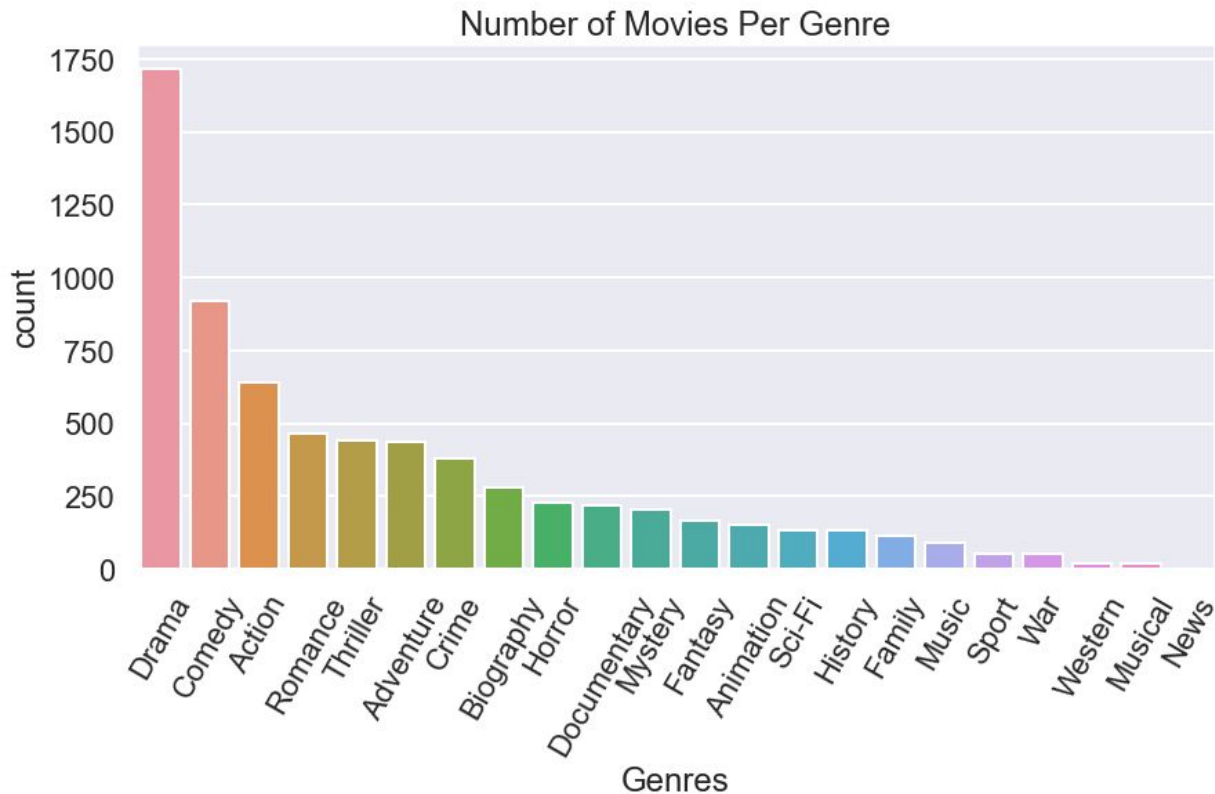
# Data

- Merged data from IMDB and Box office Mojo.
- Analyzed used budgets and revenue to calculate gross profit and return on investment
- Measured historical performance by release month, genre and film studio
- Dataset contains 2,299 unique films between 2020-1971 categorized in 21 different genres

# Box Office Mojo



# Visualizations

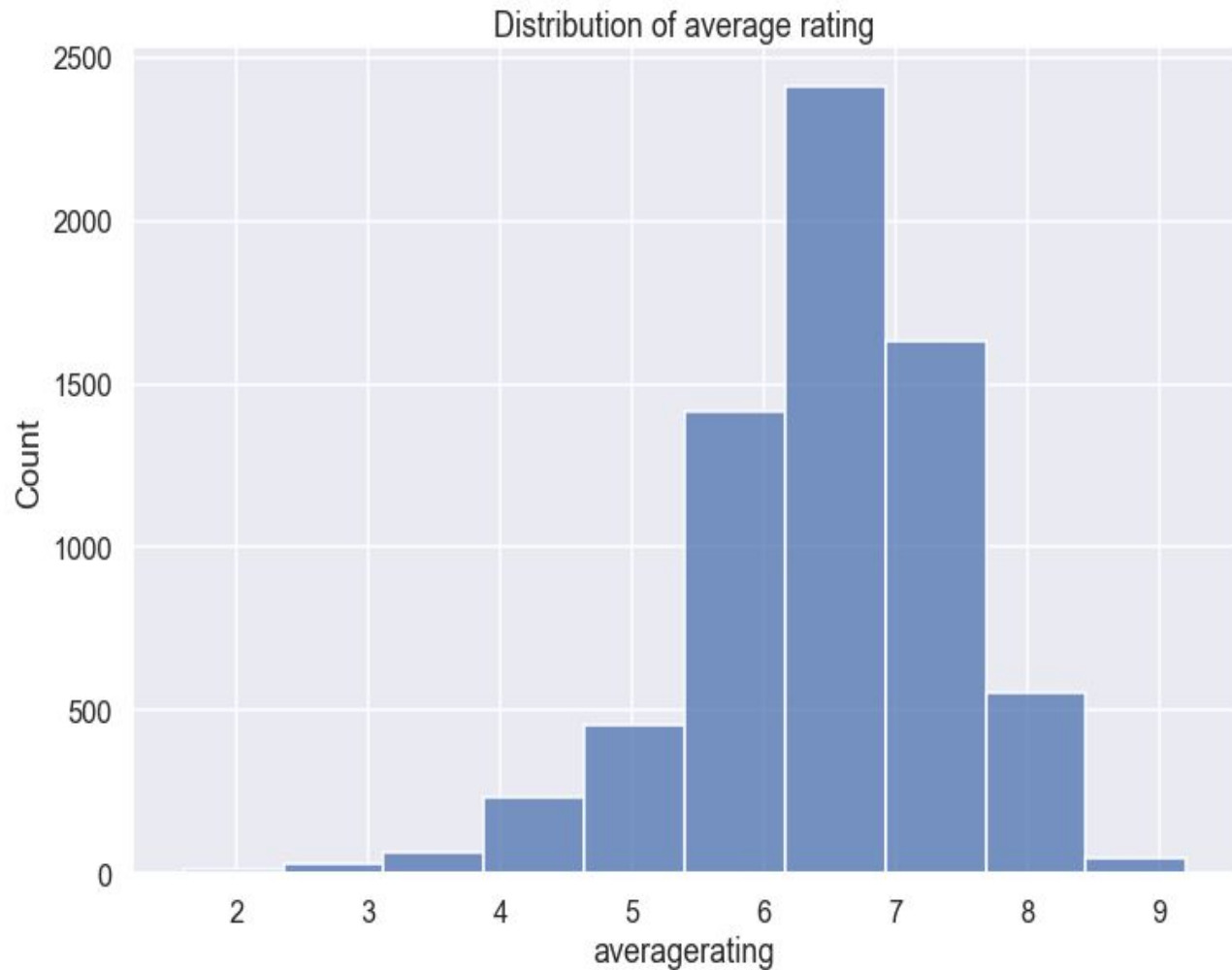


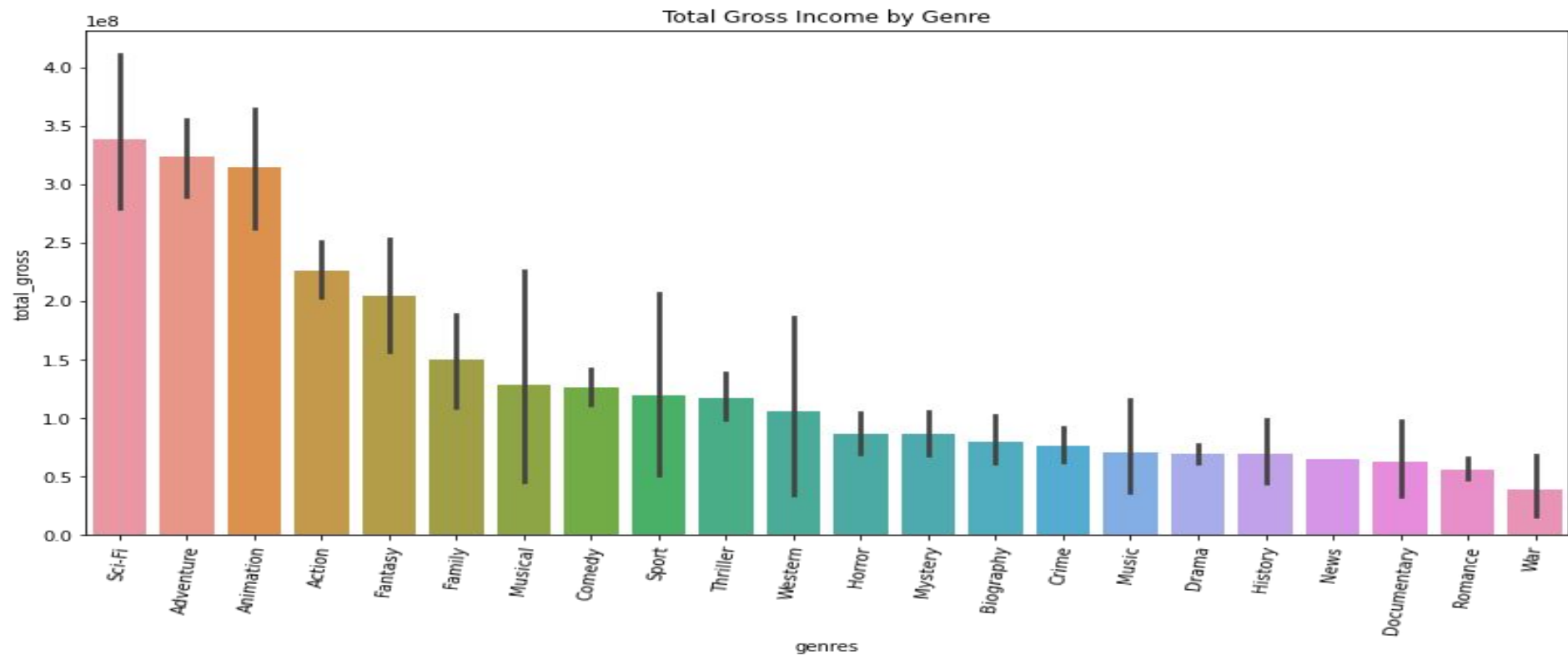
Drama, comedy, and action are the most prevalent genres among the released movies.

Genres with the fewest movies are war, western, musical, and news. These genres are more specialized, focusing on specific themes or storylines

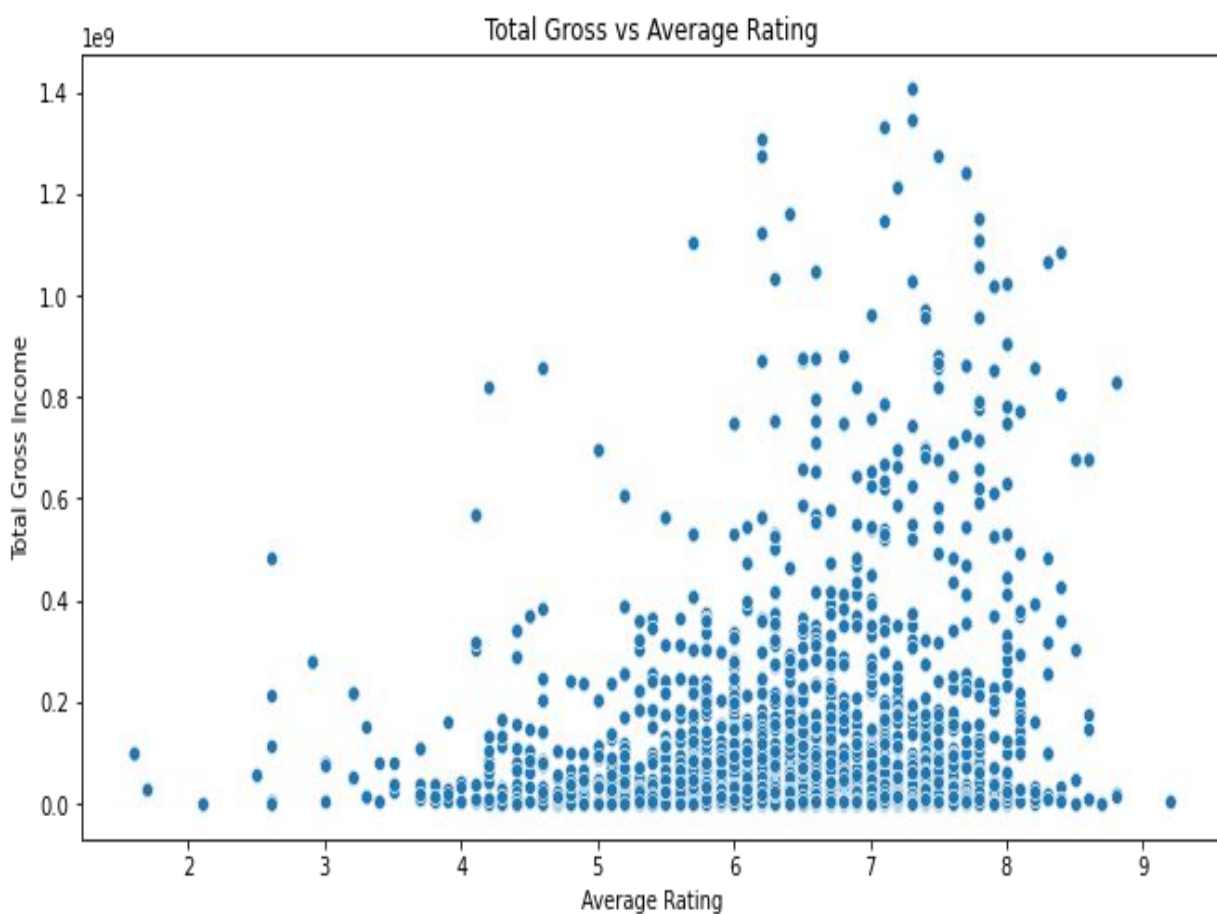
The difference in heights between the bars, which correspond to the average ratings, is relatively small.

Documentary, biography, and sport genres exhibit the highest average ratings, whereas family, thriller, and horror genres showcase the lowest average ratings.





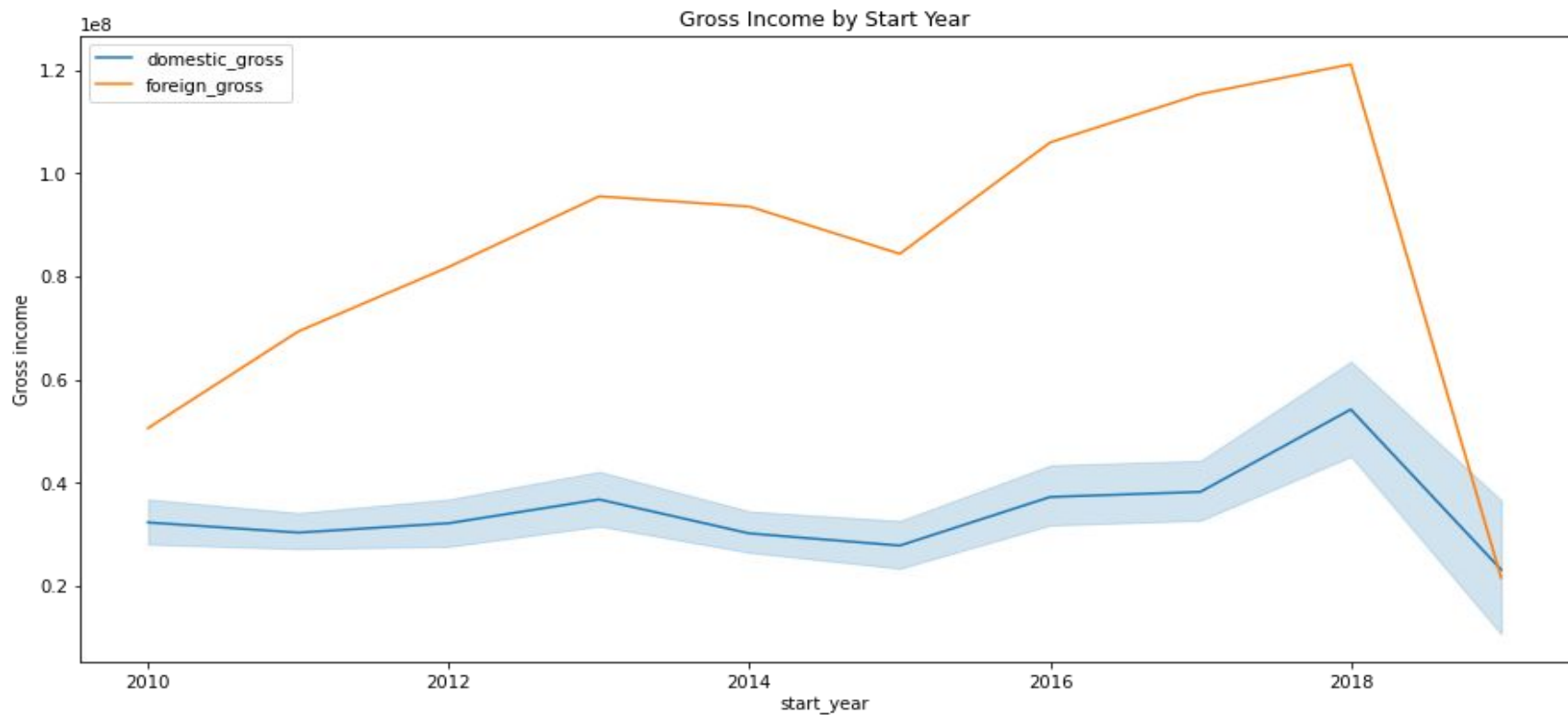
Box office Mojo tracks theatrical box office earnings. The genres with the highest income are Sci-Fi, adventure, animation and action while the genres with the lowest income are romance, documentary and war.



The correlation between the total gross income and the average rating is not evident.

However, it is apparent that movies with an average rating below 4 tend to have a lower total gross income.





Over the years, it has been observed that the foreign gross income of movies tends to surpass their domestic gross income upon release. The movies released in 2018 achieved the highest foreign and domestic gross incomes. However, the gross incomes experienced a sharp decline for movies released in 2019, reaching their lowest point during that year.

# Conclusions and recommendations

In this project, I have analyzed, cleaned, and interpreted data to provide recommendations on the types of movies Microsoft should consider producing for the launch of their new movie studio.

The main criteria utilized to assess success in this endeavor are the 'total gross sales,' which encompass both the domestic box office gross and the foreign box office gross.

The genres of movie with the highest total gross sales are Sci-Fi ,Adventure,Animation

The most prevalent genres among the released movies are drama, comedy, and action. - Based on the available dataset, the popularity and success of a genre can be determined by considering either the genre's average rating or its total gross income.

- Documentary, biography, and sport genres have the highest average rating, while Sci-Fi, adventure, animation, and action genres have the highest total gross income. Interestingly, despite having the highest average rating, documentary and biography genres generate very low income. There appears to be no clear relationship between total gross income and average rating.

- To maximize returns on their investment, Microsoft should focus on genres with the highest total gross income, namely Sci-Fi, adventure, animation, and action. These genres seem to attract a wide audience, leading to significant theatrical box office earnings.

# Future Work

- Additional investigation is necessary to identify the most optimal time of the year for releasing movies of specific genres.
- It would be advantageous to explore whether increasing the production, development, marketing, and advertising budgets of a movie proportionally impacts the total gross income of its genre. This analysis could aid in predicting profits based on the budget allocated.
- Apart from theatre earnings, studios generate revenue from various sources such as home entertainment sales, rentals, television rights, product placement fees, and streaming services. Collecting data on these revenue streams and comparing them with theatre earnings is crucial for a better analysis of a movie's overall financial performance.

Thank You!