



# MICROSOFT MOVIE ANALYSIS

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# Project Overview

- Microsoft Corporation wants to create a new movie studio.
- Based on the datasets from IMDB and Box Office Mojo, recommendations are made on the types of films that Microsoft needs to explore.
- The metrics used to determine the success and popularity of a genre are the total gross incomes and the average rating of the genre.

# Problem Statement

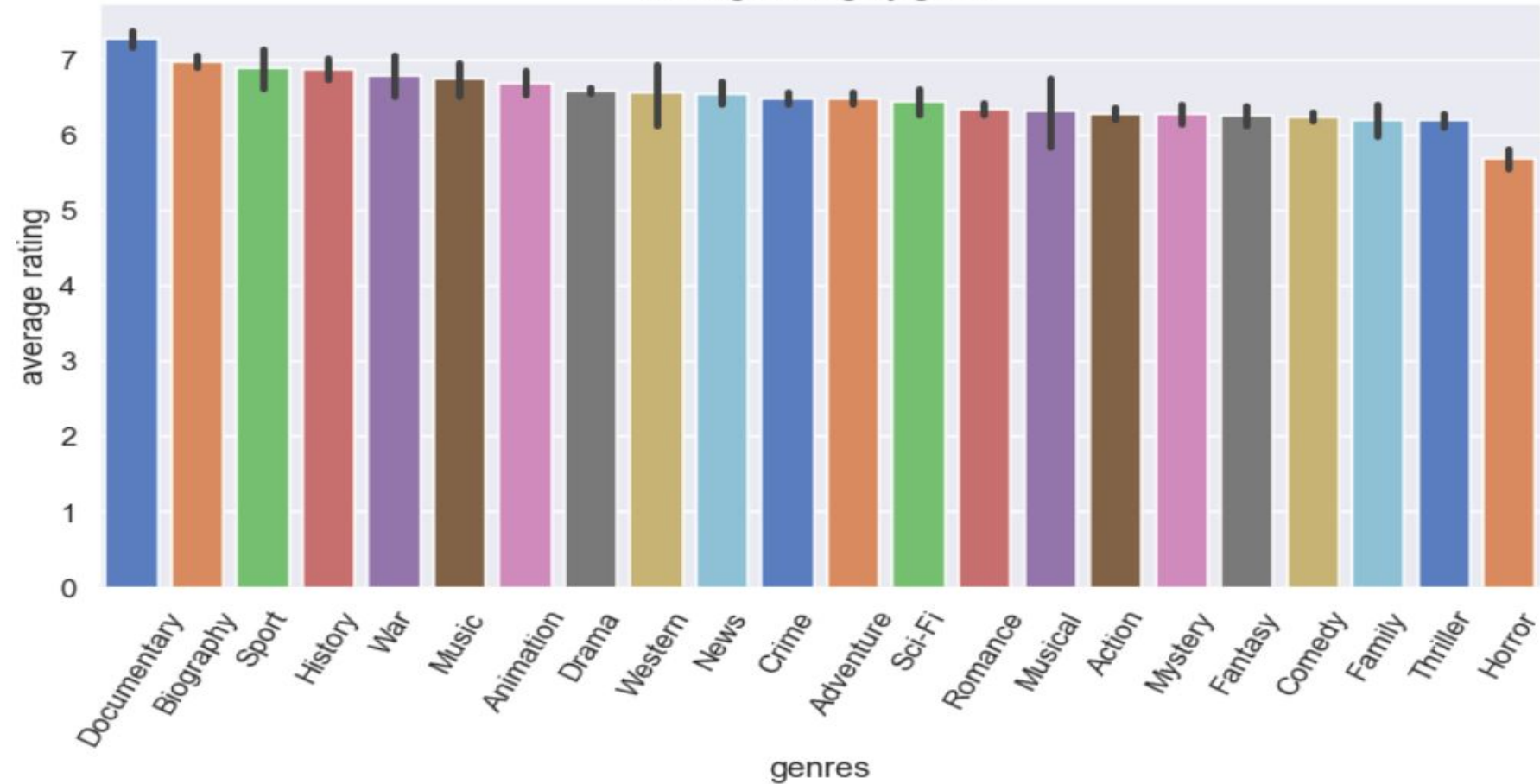
- Microsoft wants to participate in the creation of original video content, but they don't know anything about creating movies.
- This analysis mainly explores what types of films are currently doing the best at the box office.
- The findings of this exploratory data analysis generate actionable insights that the head of Microsoft's new movie studio can use to help decide what type of films to create.

# Solution

- The movie genres will be investigated to determine those with the highest gross income and highest average rating.
- To understand more about these metrics, data will be evaluated to see if there is a relationship between the average rating and the gross income.
- Finally, the domestic gross and foreign gross income will be looked into based on the start year of the movies.

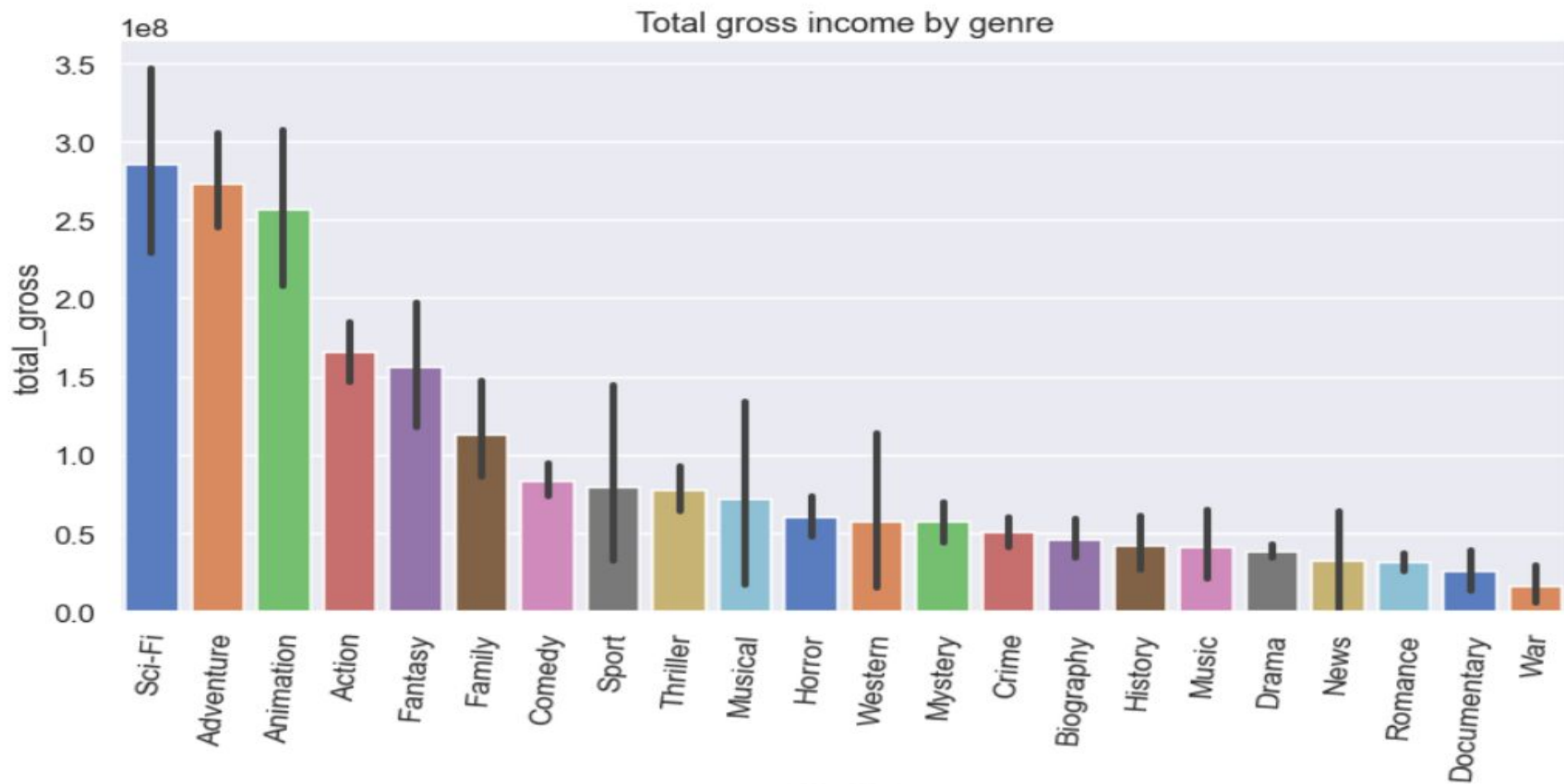
# Data Visualizations

Average rating by genre



- The difference between the heights of the bars, which represent the average rating, is quite small.
- Documentary, biography and sport have the highest average rating while family, thriller and horror have the lowest average rating.

# Total gross income by genre

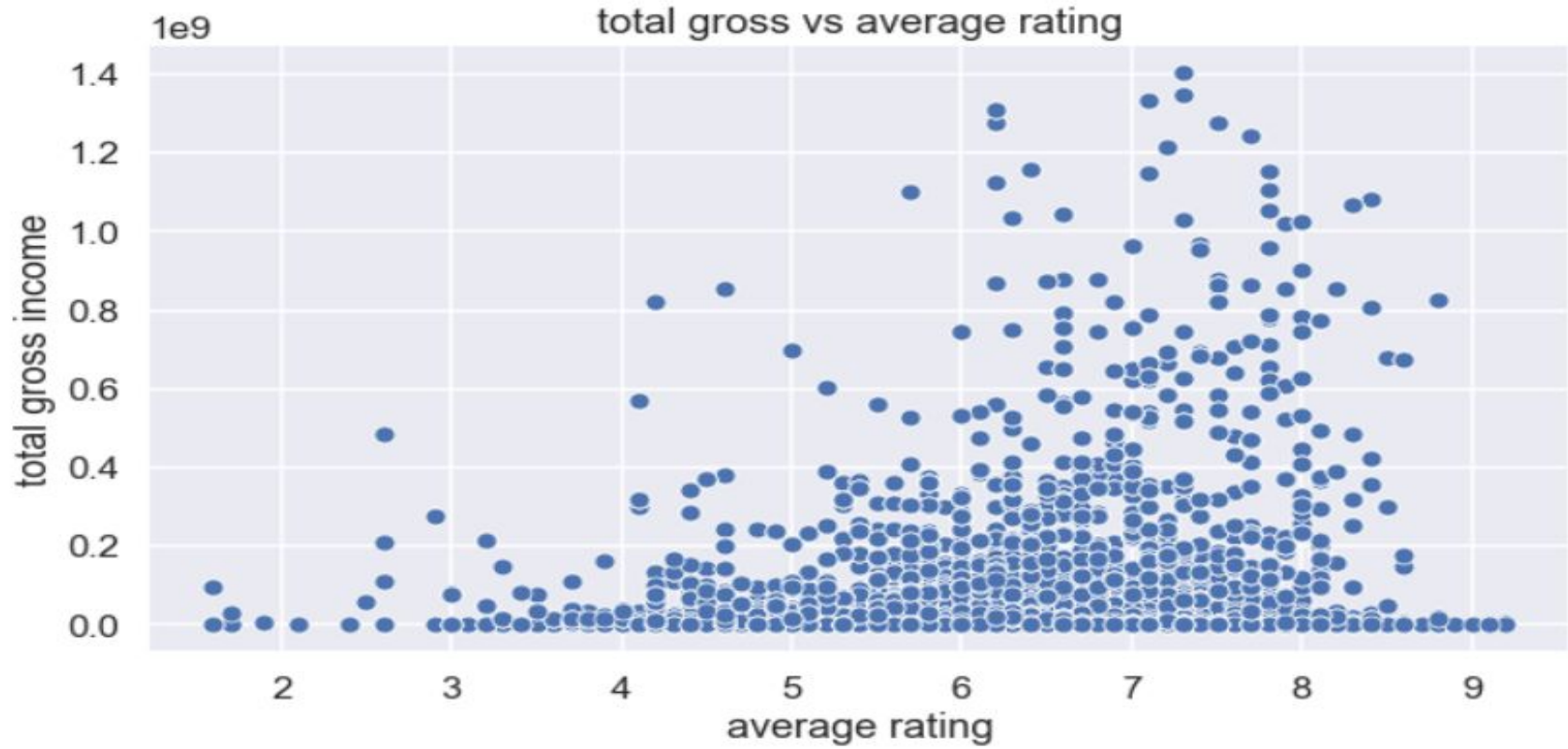


- Box office Mojo tracks theatrical box office earnings.
- Additional sources of revenue, such as home entertainment sales and rentals, television rights, product placement fees are not included.
- The genres with the highest income are Sci-Fi, adventure, animation and action while the genres with the lowest income are romance, documentary and war.

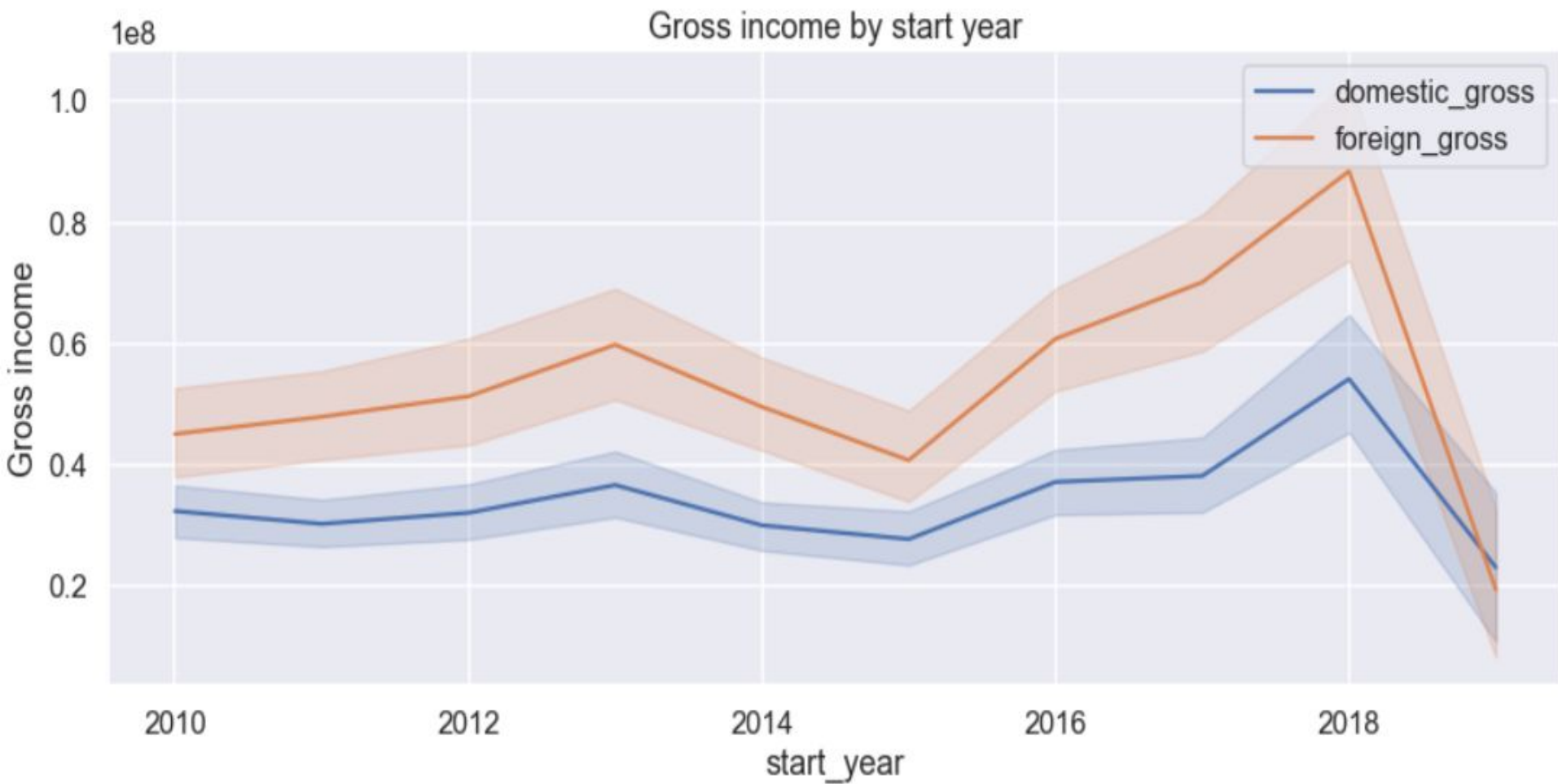


## Relationship between total gross and average rating

There is no clear relationship between the total gross income and the average rating. However, movies with a low average rating of below 4 have a low total gross income.



# Gross income by start year



- Throughout the years, the foreign gross is often higher than the domestic gross income when a movie is released.
- Movies that were released in 2018 had the highest foreign gross and domestic gross income. The gross incomes then drastically dropped to their lowest for movies that were released in 2019. This is probably because most people preferred to utilize streaming services rather than go to the theatres.

# Conclusions and Recommendations

- Documentary, biography and sport have the highest average rating while Sci-Fi, adventure, animation and action have the highest total gross income.
- There is no clear relationship between the total gross income and the average rating.
- Microsoft should consider focusing on genres with the highest total gross income in order to get higher returns on their investment. These genres are Sci-Fi, adventure, animation and action.
- Due to the drastic drop in the gross from theatrical earnings for movies released in 2019, Microsoft should look into other sources of revenue and invest in them.

## Future work

- Further research should be done to determine the best time of the year to release a movie of a certain genre.
- It is beneficial to predict the profits based on the production, development, marketing, and advertising budgets of the movie
- Data should be collected about other sources of revenue, such as television rights, product placement fees and streaming services, and compared to the revenue from the theatre earnings.



Thank You!