

# Microsoft Movie Studio Analysis

Insights into movie trends

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A perspective view of a movie theater with rows of red seats facing a large white screen. The screen displays the text "COMING SOON" in a bold, dark blue, sans-serif font. The theater walls are dark, and the screen is brightly lit, creating a glow around its edges.

**COMING SOON**

The background of the slide features a light gray brick wall texture. Overlaid on this are several black film strips with white sprocket holes, arranged in a crisscrossing, overlapping pattern that adds a cinematic feel to the design.

## Motivation

Provide Microsoft with a greater understanding of how to launch a successful movie studio. We will accomplish this by analyzing the types and characteristics of films that have performed well in theaters. This will give Microsoft the ability to produce high grossing and top-rated movies thus providing the tools to build a well known and highly regarded movie studio.



## Data

- A combination of two Rotten Tomatoes datasets containing information on movie ratings and genres.
  - This file has 33517 movie ratings from 20 different genres each containing ratings ranging from 0 to 5.
- A dataset from The Numbers that has details on film release dates, production budgets along with their domestic and worldwide gross.
  - Has information on 4387 movies with release dates ranging from 2000 to 2019.

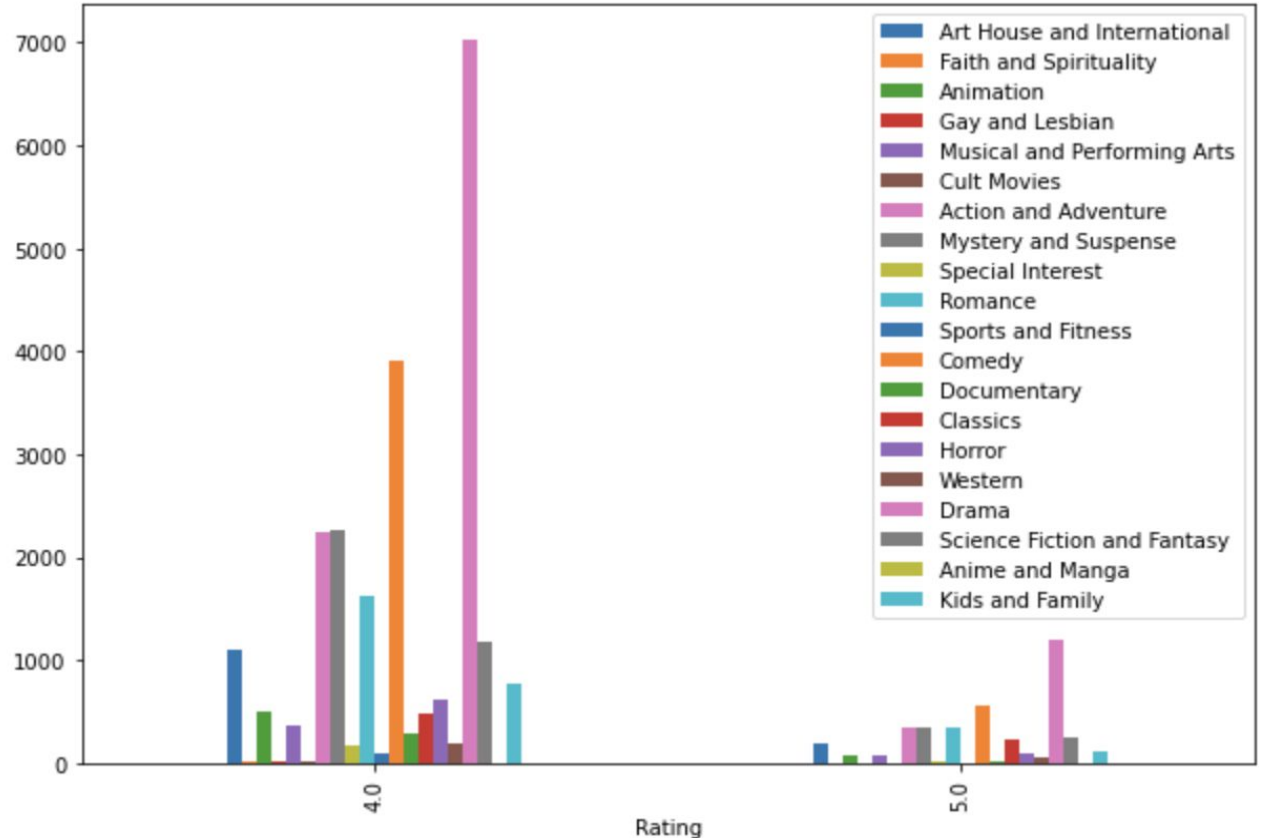
Number of high ratings: 11855

Which  
genres are  
the most  
popular?

Rotten

OR

Fresh

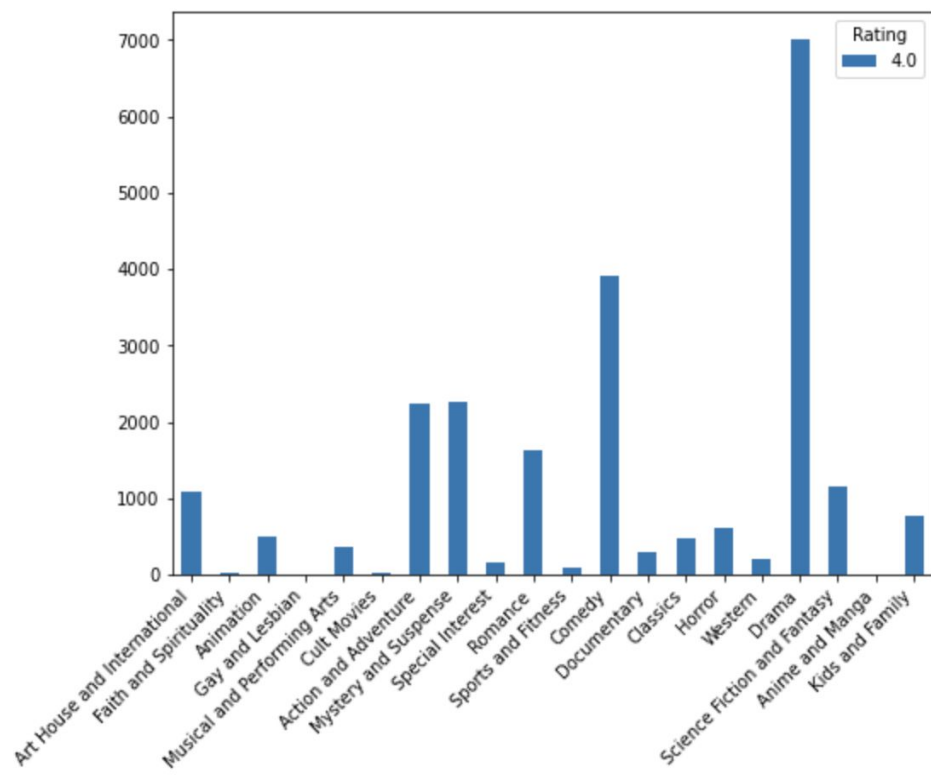
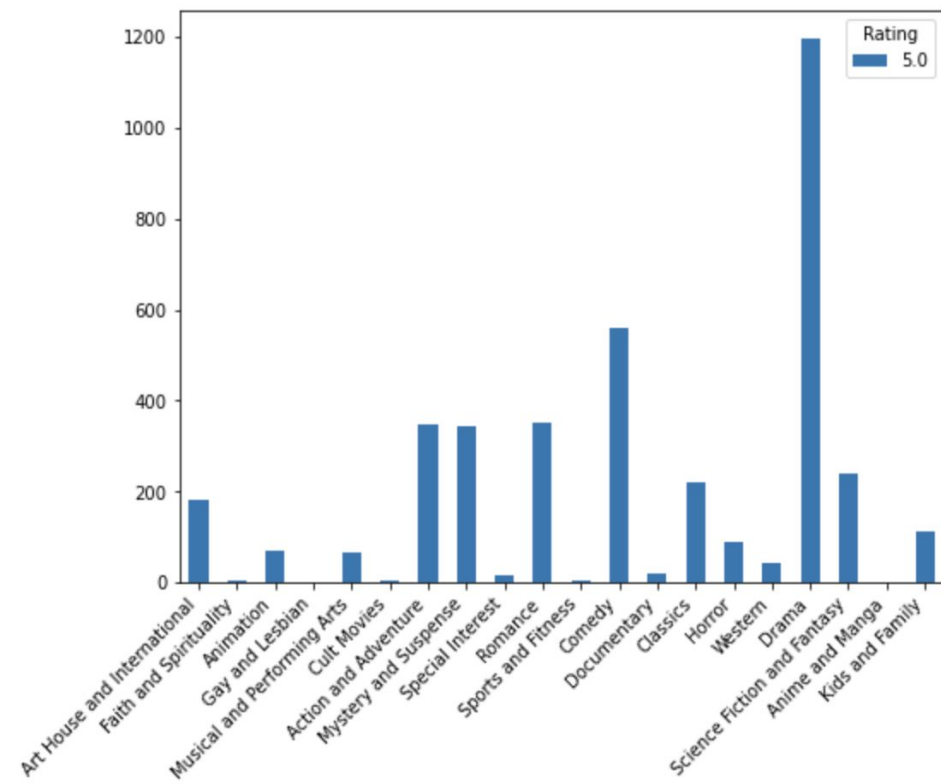


# Looking Closer at top ratings



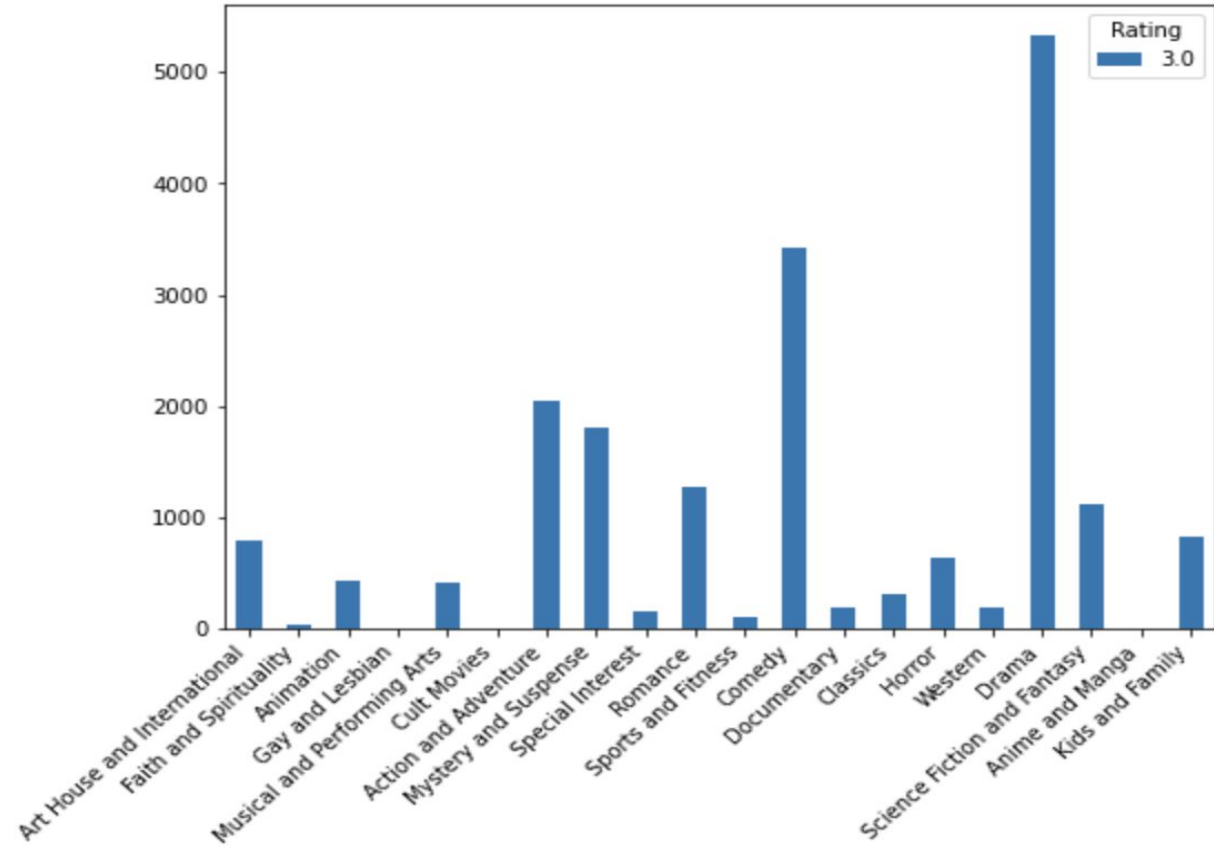
Number of 5 ratings: 1653

Number of 4 ratings: 10202



Number of ratings of 3: 8543

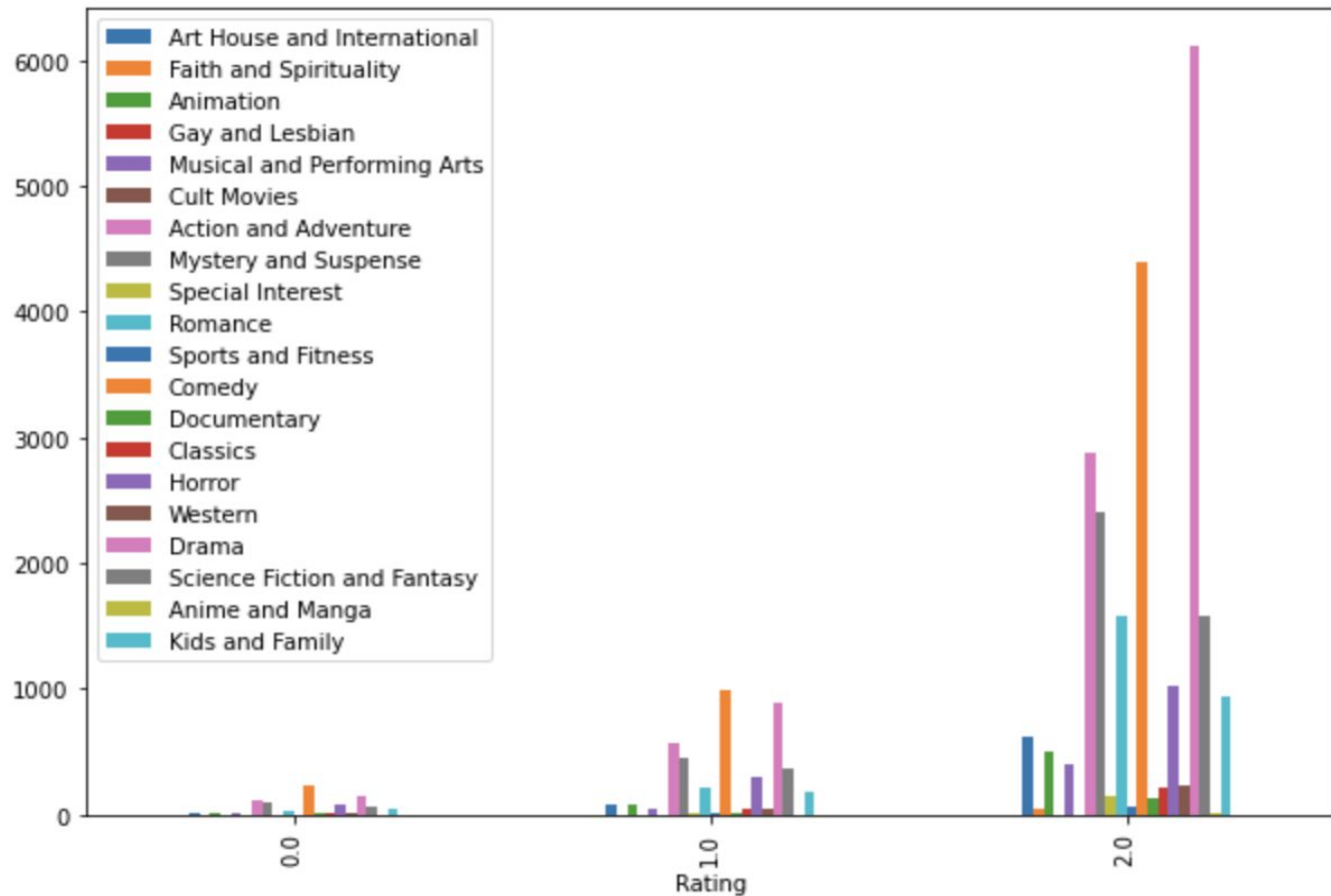
## Average ratings



Number of low ratings: 13173

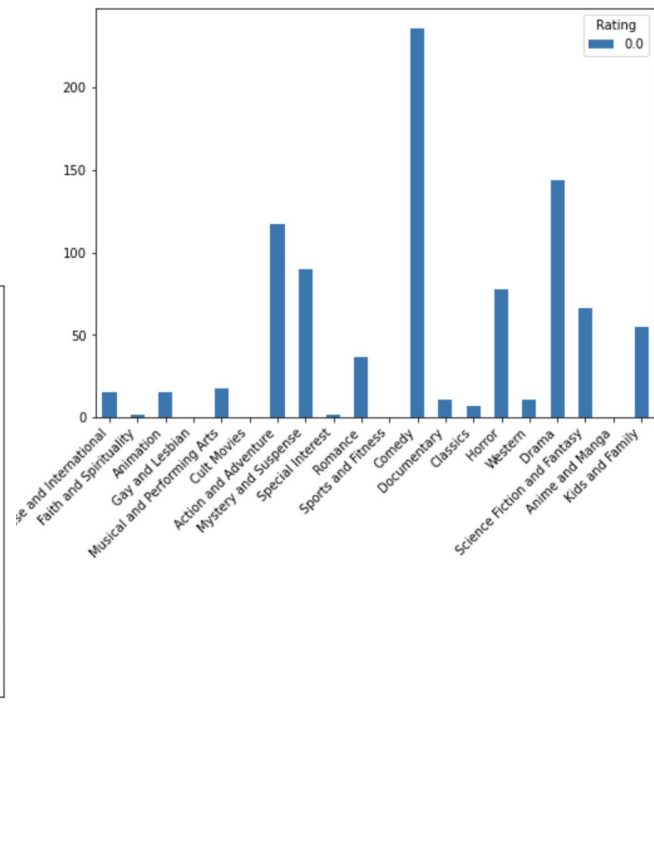
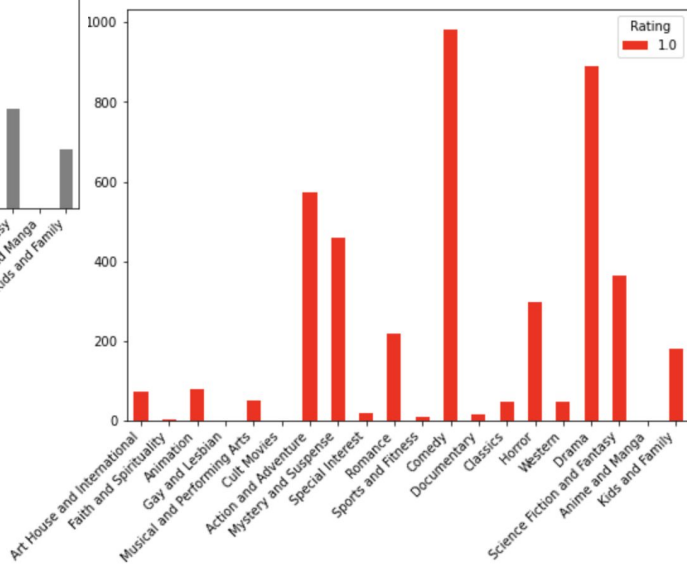
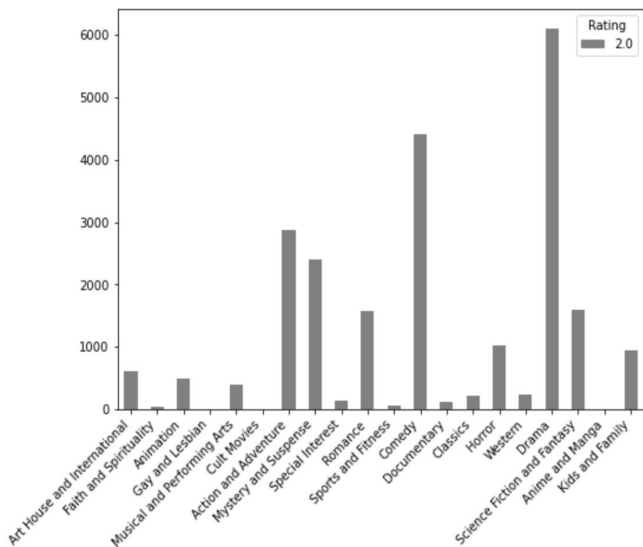
## Low Ratings

*Splat!*





# A closer look at low ratings

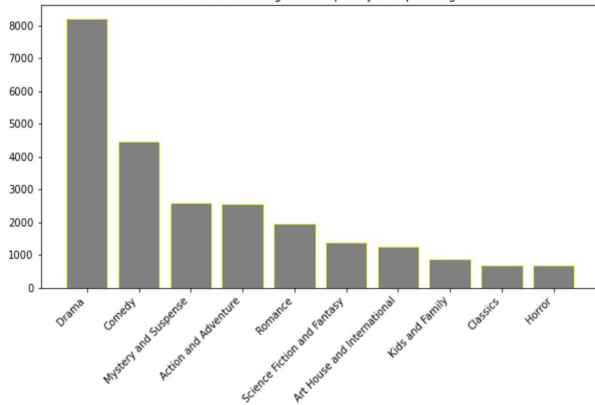




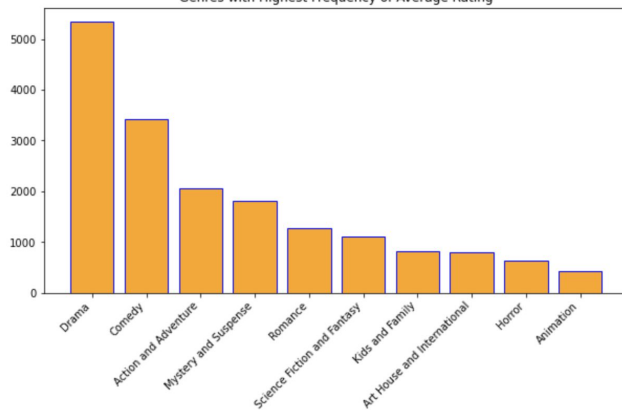
# Top Ten Genres with the Most Ratings in any Category



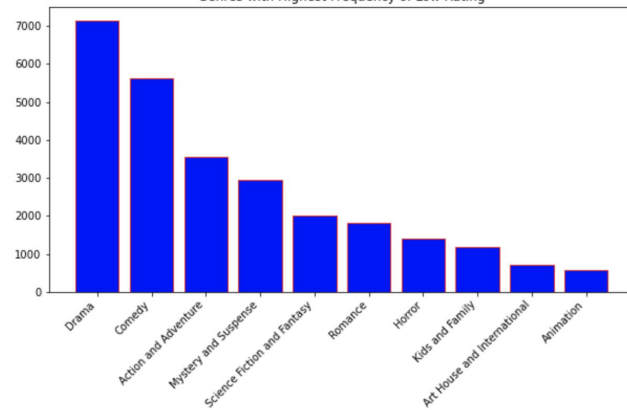
Genres with Highest Frequency of Top Rating



Genres with Highest Frequency of Average Rating



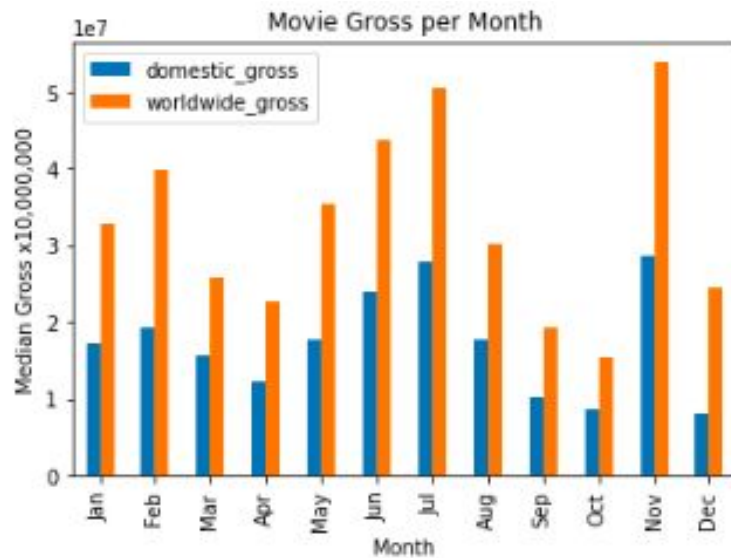
Genres with Highest Frequency of Low Rating



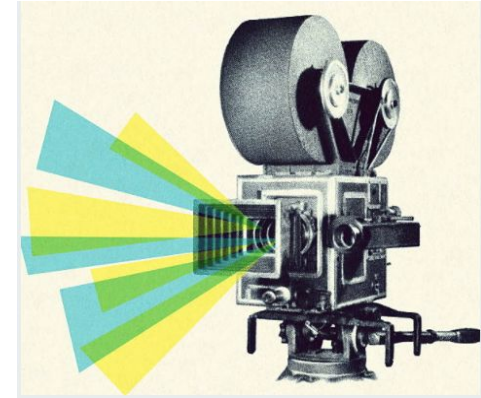
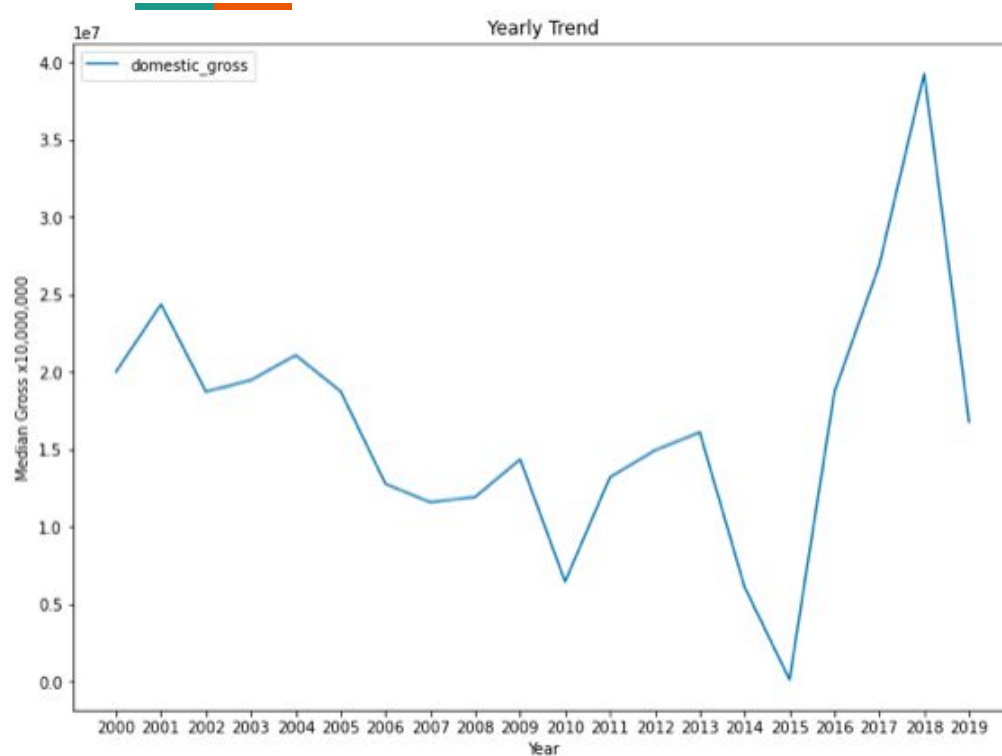


## When is the best time to release movies?

We narrowed down the months which have consistently brought in the highest box office sales to June, July and November with February and May coming second to these.



# What are the yearly trends telling us?



In order to provide valuable insights and help Microsoft create a successful movie studio we think it is important to know the direction in which the industry is heading. This will allow us to anticipate the coming changes and make the necessary adjustments.



## Conclusion

Our business recommendations:

- Ten most rated genres indicate a clear path as to which films are most viewed and therefore which type of films to initially release to invigorate the public to watch the studio's releases.
- Five least rated genres specify which categories to avoid when building the prestige and viewership of the studio.
- Aim to release movies during the peak months i.e June, July and November
- In addition to releasing movies in theaters, also consider releasing to streaming services to cater to a larger audience.



## Limitations/Next Steps

Some limitations of our data:

- Need more relevant data - only includes up to 2019
- There is no data about the viewers rating movies

Other interesting questions/topics:

- How has this pandemic changed the ways movies are produced i.e changes in budgets and how they're released?
- What caused the spike in 2017 and 2018?
- Can investigate more into streaming services



# Acknowledgements

Resources:

- <https://www.rottentomatoes.com/>
- <https://www.the-numbers.com/>

GitHub repo:

- [https://github.com/ksalcedo/microsoft\\_movie\\_analysis/tree/main](https://github.com/ksalcedo/microsoft_movie_analysis/tree/main)