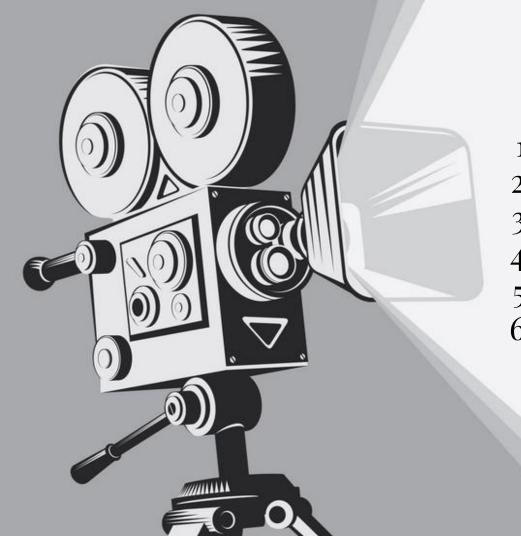


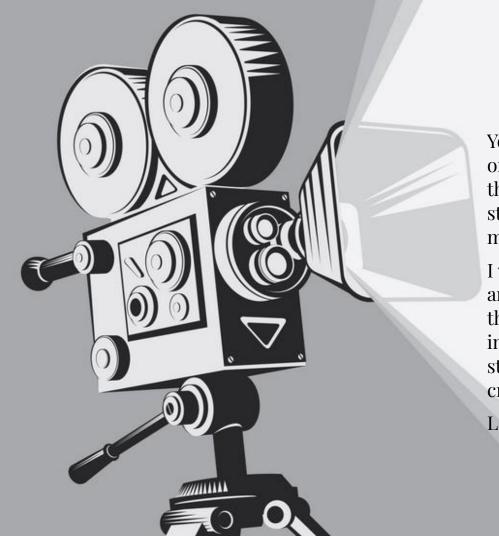
# MICROSOFT MOVIE ANALYSIS

By Ivy N. Njoroge



#### **OUTLINE**

- ı. Business Problem
- 2. Business Understanding
  - 3. Data Understanding
- 4. Data Analysis
- 5. Recommendations
- 6. Next Steps

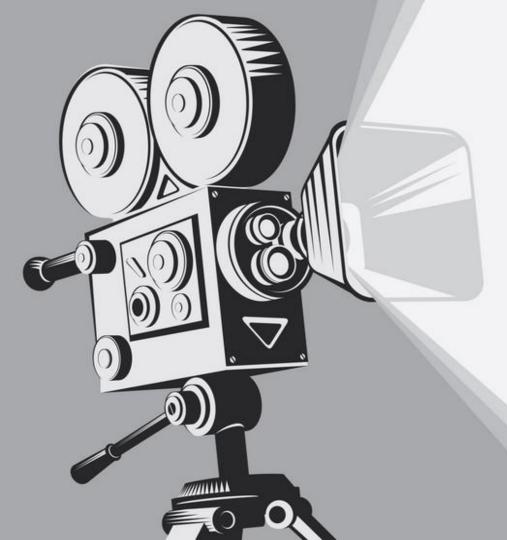


#### **Business Problem**

Your company sees all the big companies creating original video content and they want to get in on the fun. You have decided to create a new movie studio, but don't know anything about creating movies. That's where I come in!

I was charged with exploring what types of films are currently doing the best at the box office. I then translated those findings into actionable insights that the head of Microsoft's new movie studio can use to help decide what type of films to create.

Let's have a look!

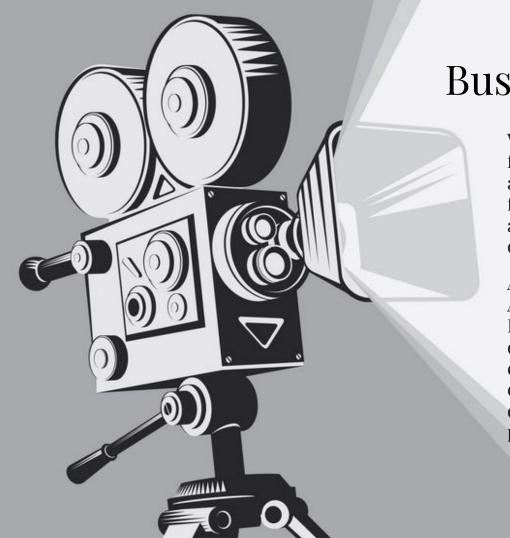


Some of the factors I looked at include:

- Movie Genre
- Production Budget
- Directors
- Writers

Additional factors to look at are:

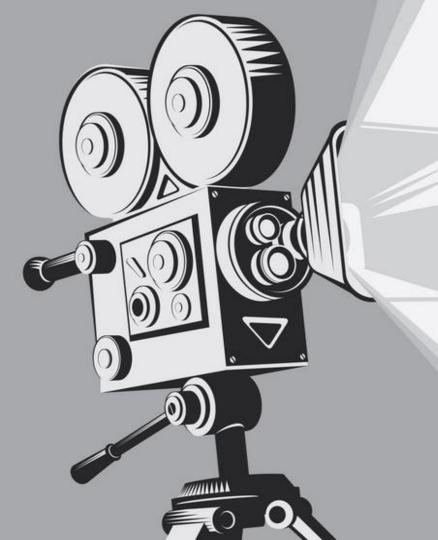
- People's interests
- Brand awareness



**Business Understanding** 

While there's a lot of money to be made in the film industry, the economics of movie-making are far from simple. There's no sure path for a film to turn a profit since factors like brand awareness, production budgets, and the desires of the public come into play.

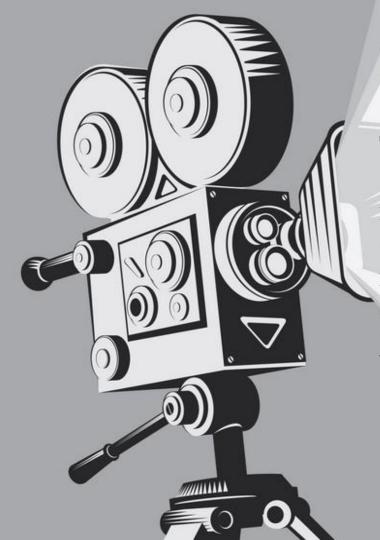
According to the Motion Picture Association of America's (MPAA) Theatrical Market Statistics Report for 2020, the U.S. and Canadian box office came in at \$2.2 billion, down 80% compared to the previous year. Globally, the box office for films hit a low of \$12 billion in 2020, down 72% over 2019 due to the COVID-19 pandemic.



### Data Understanding

For this project, I utilised the following data sources:

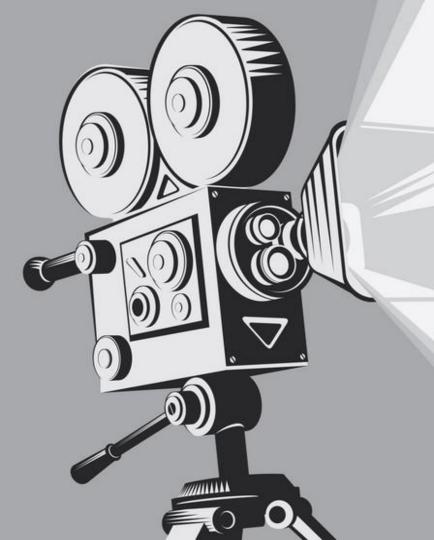
- Box Office Mojo
- IMDB
- Rotten Tomatoes
- TheMovieDB
- The Numbers



## Data Analysis

To provide insights on the new Microsoft movie studio, I extracted data from CSV, TSV and SQL files. I then cleaned up the data to suit my objectives and provided visualizations of my results.

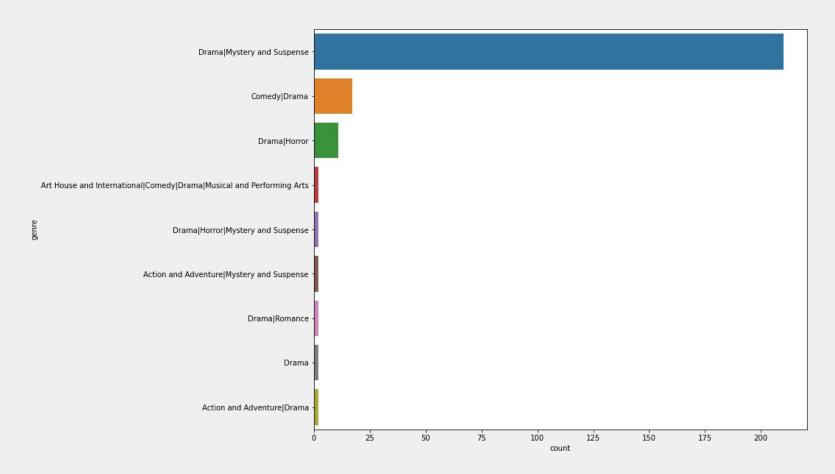
Finally, I made a couple of recommendations that the Microsoft studio team could consider.

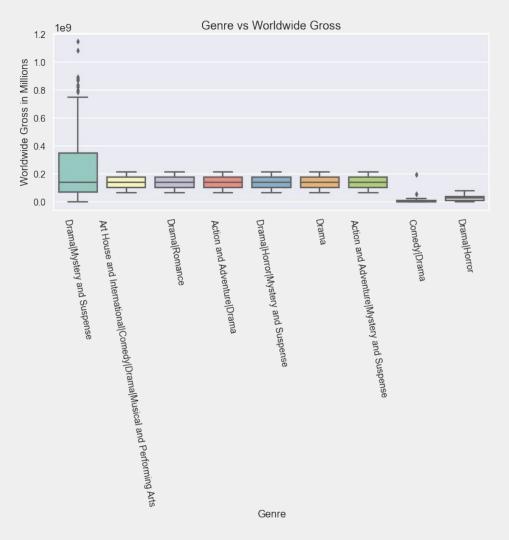


### Questions to answer

- 1. Which genre is the best performing?
- 2. How much money do you need to spend to make a high earning movie? Does the money spent in production influence the profits realized?
- 3. What is the optimum length of a movie?
- 4. When is the best time of year to release a movie?

### Which genre is the best performing?

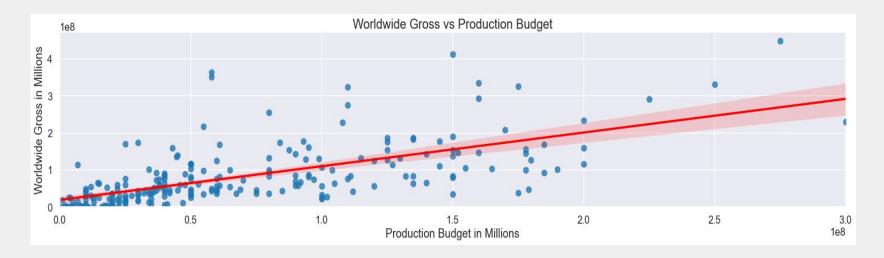




There are a total of 9 genres. The Drama|Mystery and Suspense category took the lead with an upper quartile of 380 million. Outliers in this genre have made more than 1 billion in gross revenue.

It is also important to note that the Drama|Mystery and Suspense genre has the most count.

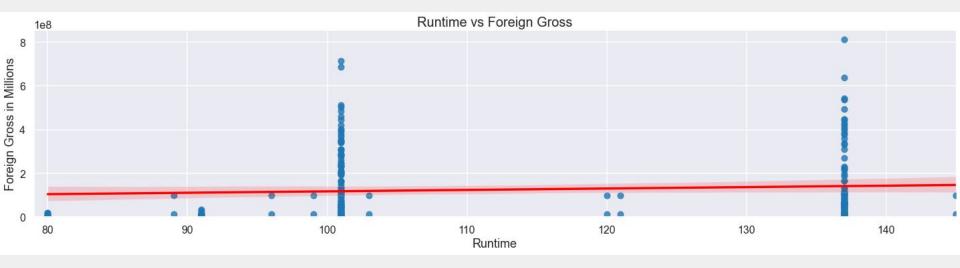
# Does the money spent in production influence the profits realized?



The higher the production budget, the higher the gross revenue. A movie with a production budget of 150 million could make the same in worldwide gross, if not more. However, a movie with a budget of 50 million can only make the same 50 million in worldwide gross.

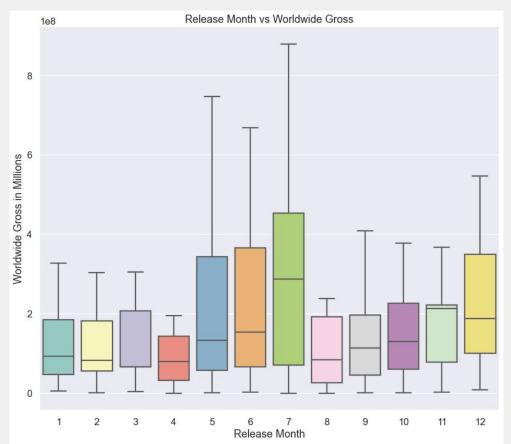
PS: There are some exceptions.

### What is the optimum length of a movie?



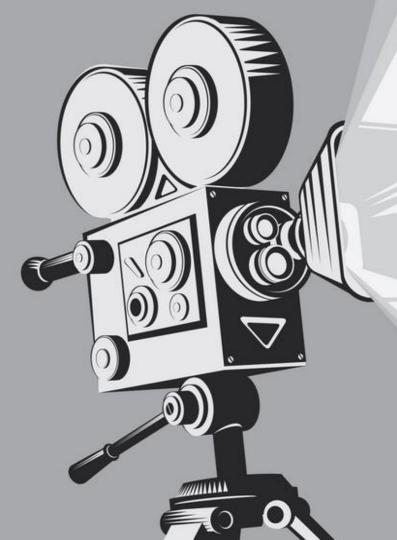
Movies with a longer runtime have a slightly higher foreign gross. For instance, those with a runtime of 101 minutes have the potential to garner a foreign gross of approximately 700 million while those that have 137 minutes could garner approximately 800 million.

### When is the best time of year to release a movie?



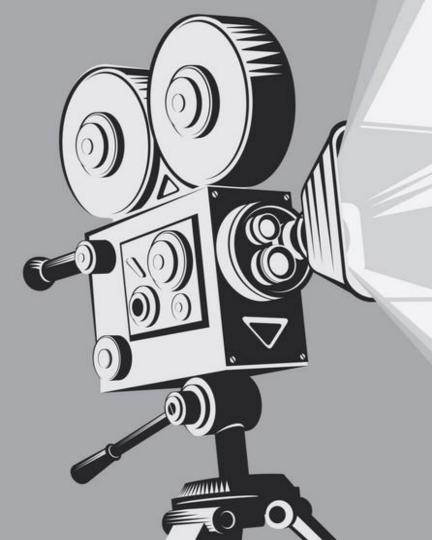
This diagram omits outliers but clearly depicts the month of July as the best time of year to release a movie. July has an upper quartile of 450 million, a median of 300 million and a lower quartile of 100 million. Months like January have an upper quartile of 200 million, which is half that of July.

The other months to consider would be May, June, and December.



# Conclusion and Recommendations

My findings have shown that the more funds a studio invests in their movie production, the more money they are likely to receive as a result. Though there are some outliers, the majority of high-grossing movies for these particular types of movies are ones with higher budgets. Microsoft should therefore invest a lot of money in the production of movies. My analysis also shows that the optimal time to release a movie is in the month of July. Movies released in May, June, July and December also grossed higher compared to other months. The runtime I would recommend would be 137 minutes. I would also definitely recommend producing movies in the Drama Mystery and Suspense genre as they grossed highest by a relatively higher margin.

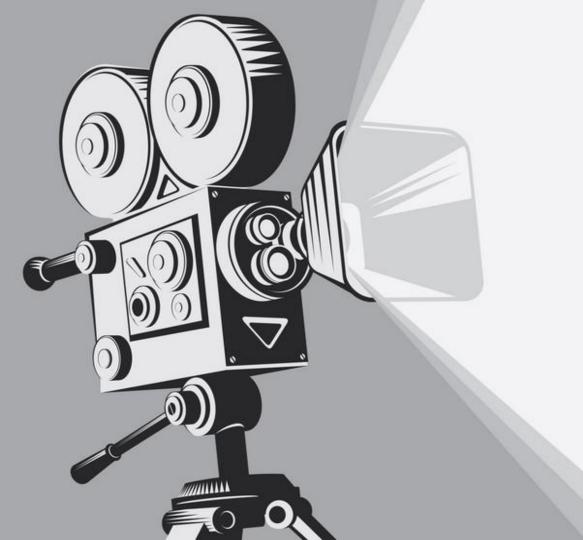


### Next Steps

If the recommendations I made are put to use, I am confident that Microsoft will have a successful break.

In the future, this analysis could be improved by adding additional data as it becomes available.

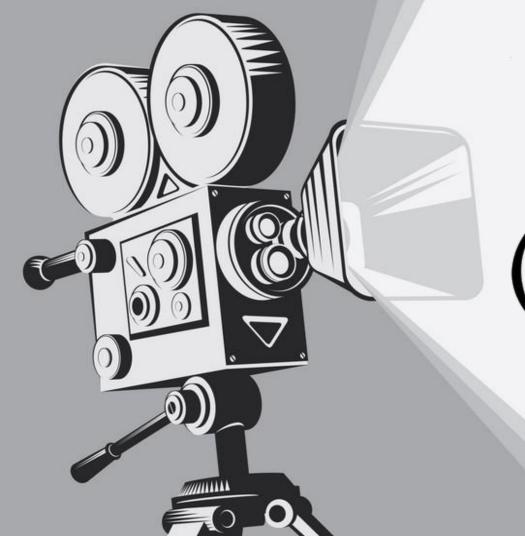
Taxes should also be considered as a factor affecting revenue.



### any questions









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