

# Analysis & Recommendations for Microsoft's New Movie Studio

---

Nicole Michaud  
April 2, 2023

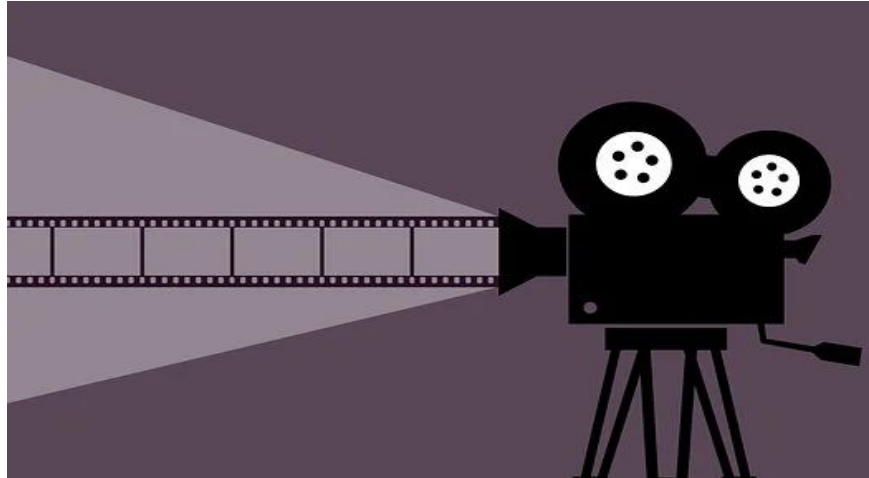
# Overview

Microsoft wants to create their own original video content through their new movie studio! Analysis of movie data from multiple sources leads to these recommendations for way in which this new endeavor may be as successful as possible:

- Focus on creating movies that are in the drama, comedy, action or thriller genres (or a combination)
- Allocate an appropriate production budget to their movies, ideally greater than \$50 million dollars
- Focus some of the budget on hiring a well-known director to attract more attention to the movie

# Relevant questions for business problem

- What genres of movies are profiting highest?
- Do movies with higher production budgets also receive higher profits?
- When hiring for the new movie studio, what types of professionals should be prioritized in order to gain the most attention for the new movie?

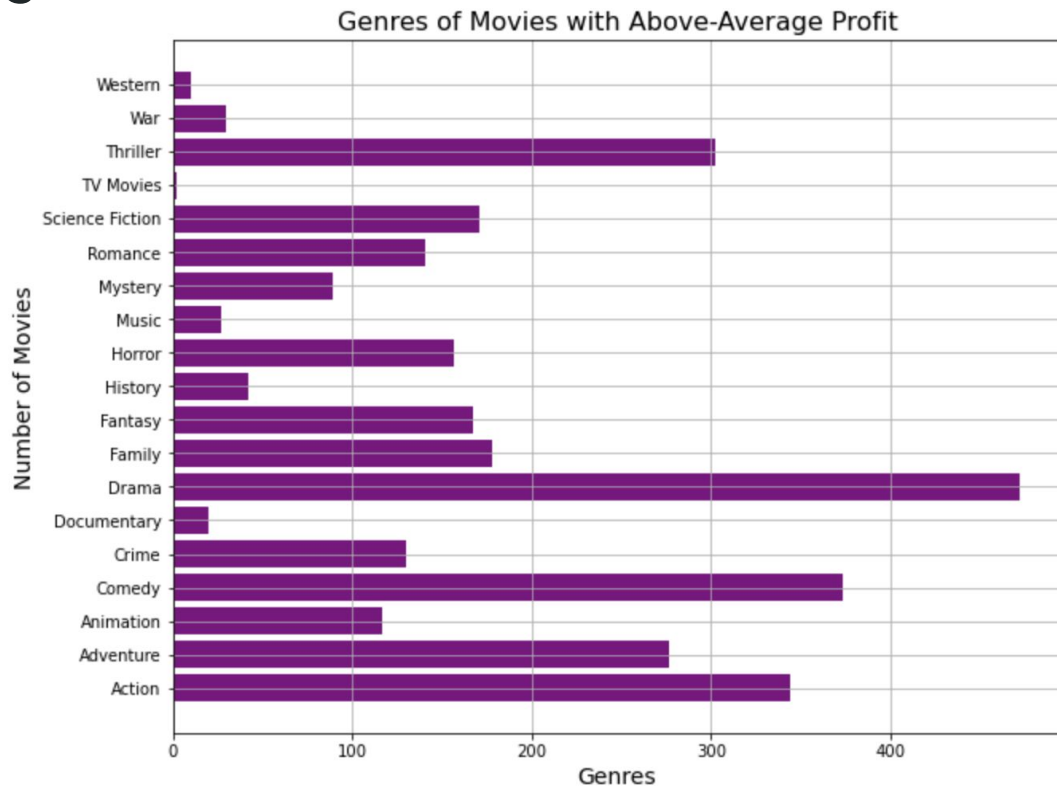


# Data Used

- I utilized data from three sources.
  - The dataset from IMDB in the form of an SQL database contained many different tables, I used the ones called movie\_basics, which contained the basic information of all the movies in the database, known\_for, which showed the people that each movie was known for by their person\_id, and persons, which provided the names and primary professions for each person that a movie was known for.
  - The dataset from TheMovieDB (TMDB) provided information for a large number of movies, including their genre codes.
  - The dataset from The Numbers (TN) provided the production budgets and worldwide gross for movies, which I then used to calculate profit.

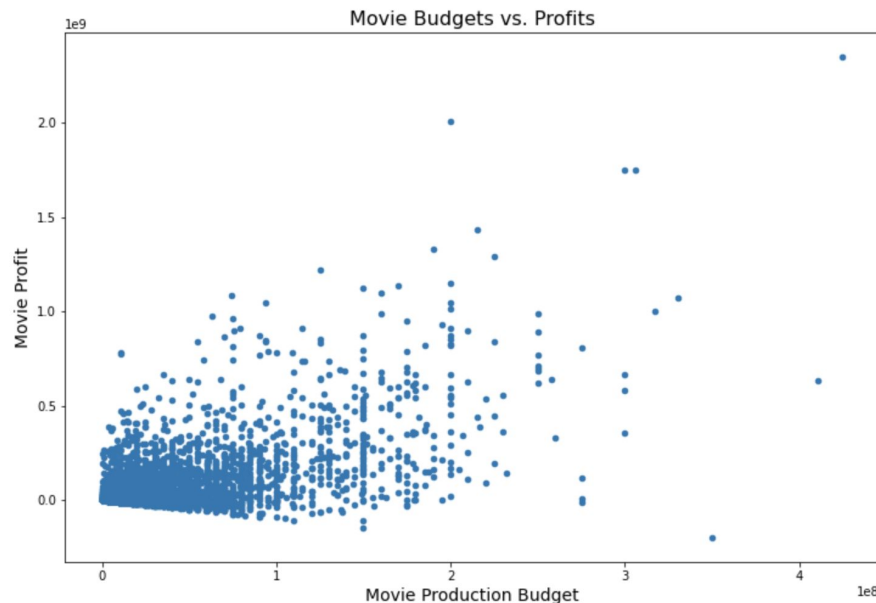
# Methods & Data analysis

- Data sourced from TMDb providing genre codes was joined with data from TN that was used to calculate profit (worldwide gross - production budget). Using only the data for movies with over the median amount of profit, the number of movies for each genre category were compared.
- This showed the most common genres in the higher-profiting movies were drama, comedy, action, and thriller.



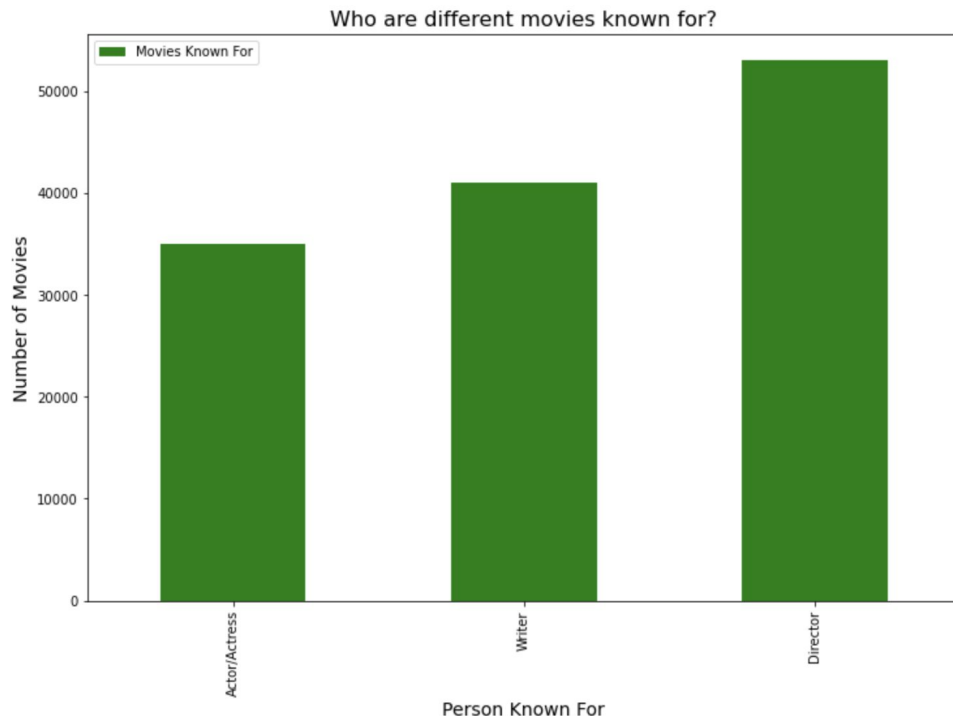
# Methods & Data Analysis

- From the dataset sourced from TN, the production budget for movies was compared to the profit (worldwide gross - production budget) to see if movies with a higher budget were also more profitable.
- For the movies in the TN database, the majority of movies still had a low budget (less than \$100,000,000) and a low profit (less than \$500,000,000). However, the ones that had a higher budget did also earn higher profits on average.



# Methods & Data Analysis

- Data sourced from the IMDB database on movies and the people they were known for, along with those people's primary professions, was compared to see whether more movies were known for an actor or actress, a writer, or a director.
- Of the movies in the IMDB database that were known for either an actor/actress, writer, or director, they were most often known for a director, and least often known for an actor or actress.



# Recommendations

- Based on the analysis of the data examined in this project, in order to have the best chances of success in their new movie endeavor, Microsoft should:
  - Focus on creating movies that are in the drama, comedy, action or thriller genres (or a combination)
  - Allocate an appropriate production budget to their movies, ideally greater than 200,000,000 dollars
  - Focus some of the budget on hiring a well-known director to attract more attention to the movie



# Next Steps

- There are many more aspects that could be explored in order to provide additional insights to Microsoft for how they can make their new movie studio as successful as possible.
  - Further analyses could be conducted to compare the numbers of movie genres for high profit movies for how many there were total - some movies may be more common in general and therefore are already more likely to be common among more profitable movies.
  - These same factors analyzed in this project could be compared across the different datasets (i.e. do the movies in IMDB have the same most common genres as the ones in the other datasets?)
  - Many other features of the data could be explored, such as how long the movies showed for in theatres, the region(s) they were released in, and more.
  - The data used for this project is from a many-year time span. To show more current trends specifically, further analysis could compare same factors for only recent years (i.e. the last 5 years) to see if the trends change any in recent years.

# Thank You!

- Any questions?
- Contact:
  - Nicole Michaud
  - LinkedIn: [www.linkedin.com/in/nicole-michaud2](https://www.linkedin.com/in/nicole-michaud2)

