



Microsoft Movie Studio Analysis

Hannah Schurman
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Summary

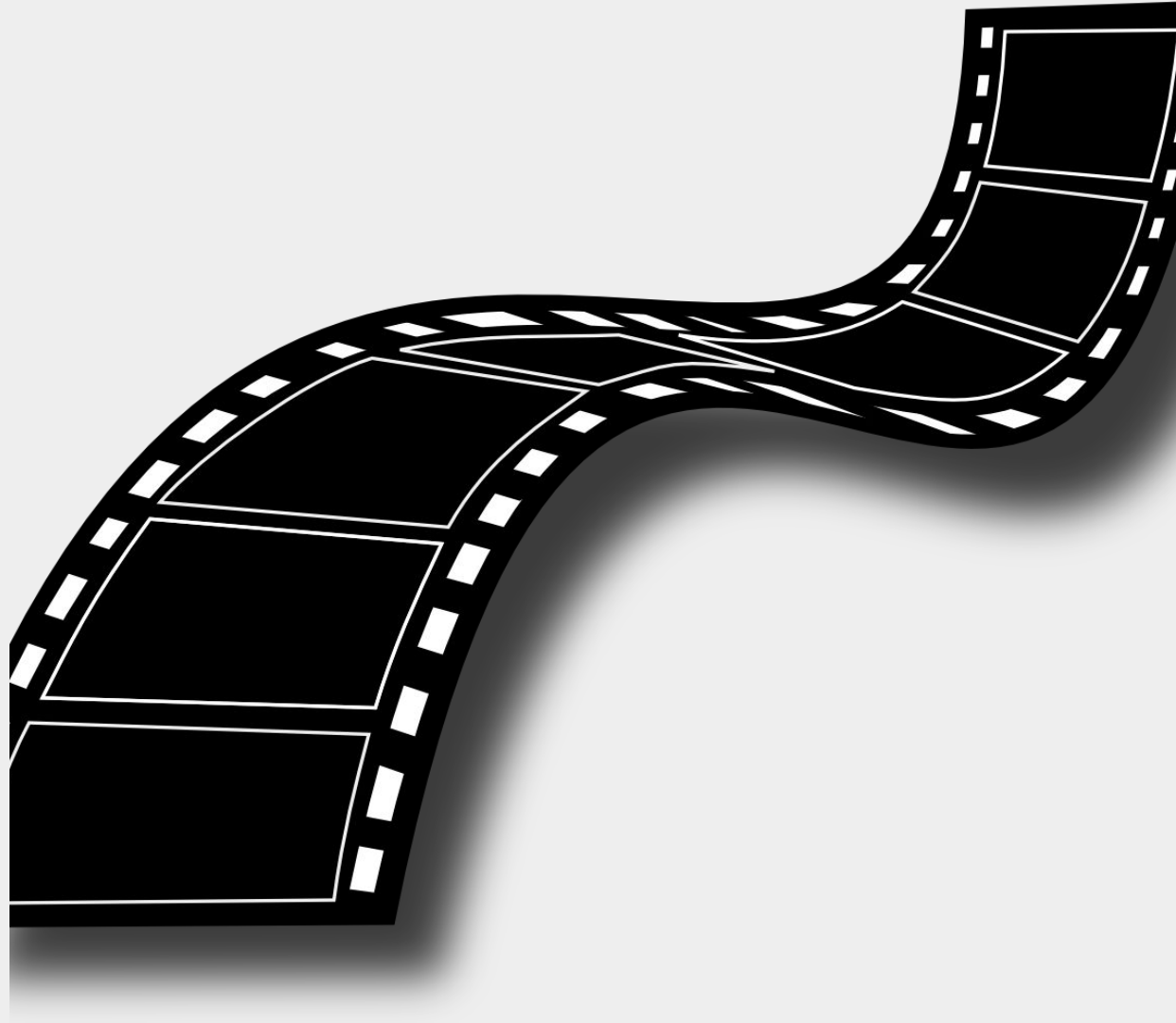
Explore movie analytics from datasets to provide actionable insights for Microsoft's new Movie Studio.

Create a baseline structure which will assist in deciding what factors are important to take into consideration when producing films!



Outline

1. **Business Problem**
2. **Data**
3. **Methods**
4. **Results**
5. **Conclusions**



Business Problem

By analyzing datasets containing information about movie titles, ratings, genres, gross box-office revenue, and directors, we are able to generate a selection of business models for Microsoft's consideration for movie production.

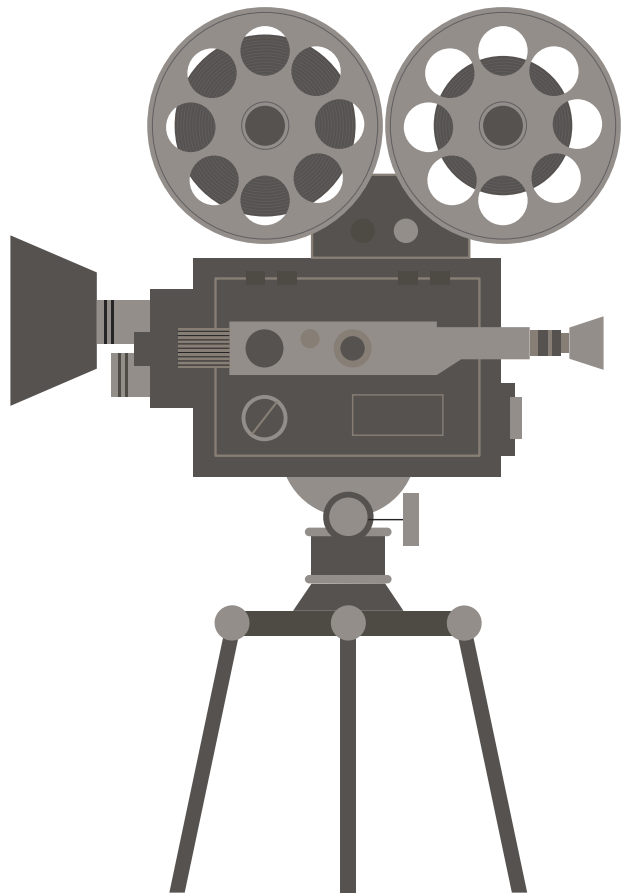
These insights include:

- Genres with highest box office income
- Genres which receive highest critic reviews
- Most common movie rating



Data

- **IMDB:** Datasets include title information and critic ratings. These datasets contained information from about 73,000 movies
- **Rotten Tomato:** Datasets include title information, directors, movie rating, and critic reviews. These datasets contained information from about 1500 movies
- **Box Office Mojo:** Dataset includes movie titles and box-office incomes. This dataset contained information from a little over 3000 movies



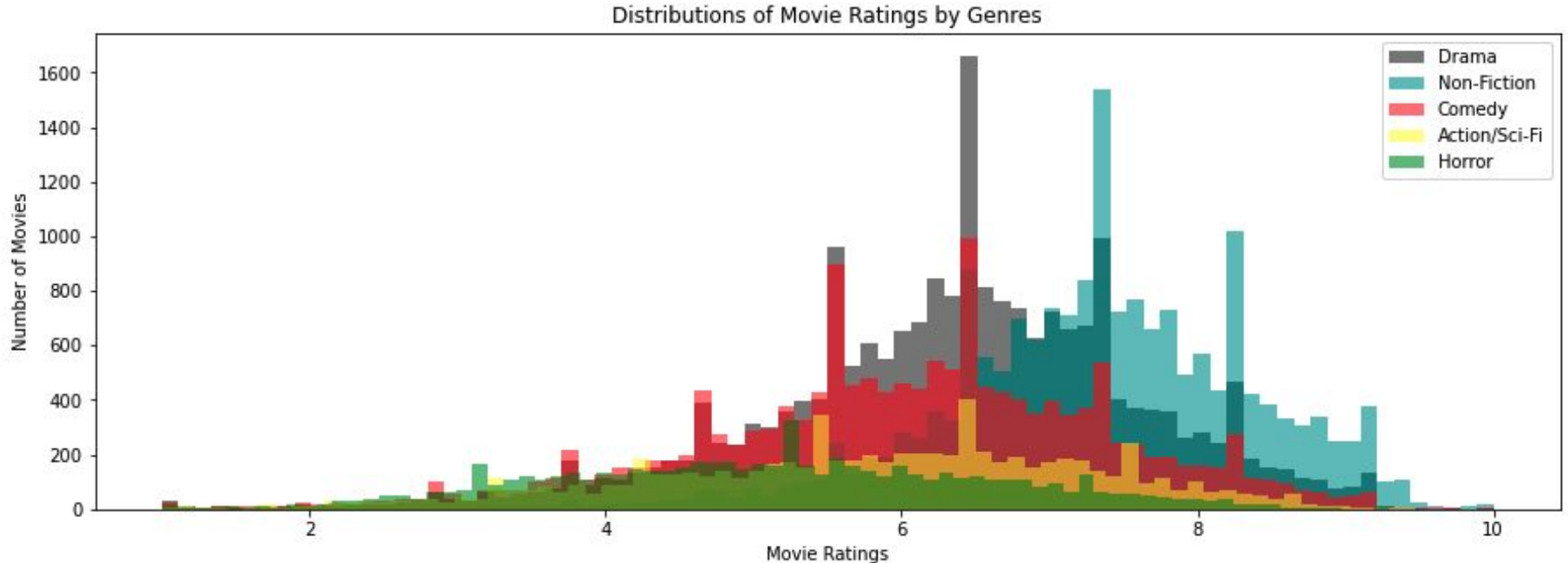


Methods

This project uses exploratory analysis to generate data visualizations which **SPOTLIGHT** concrete business recommendations

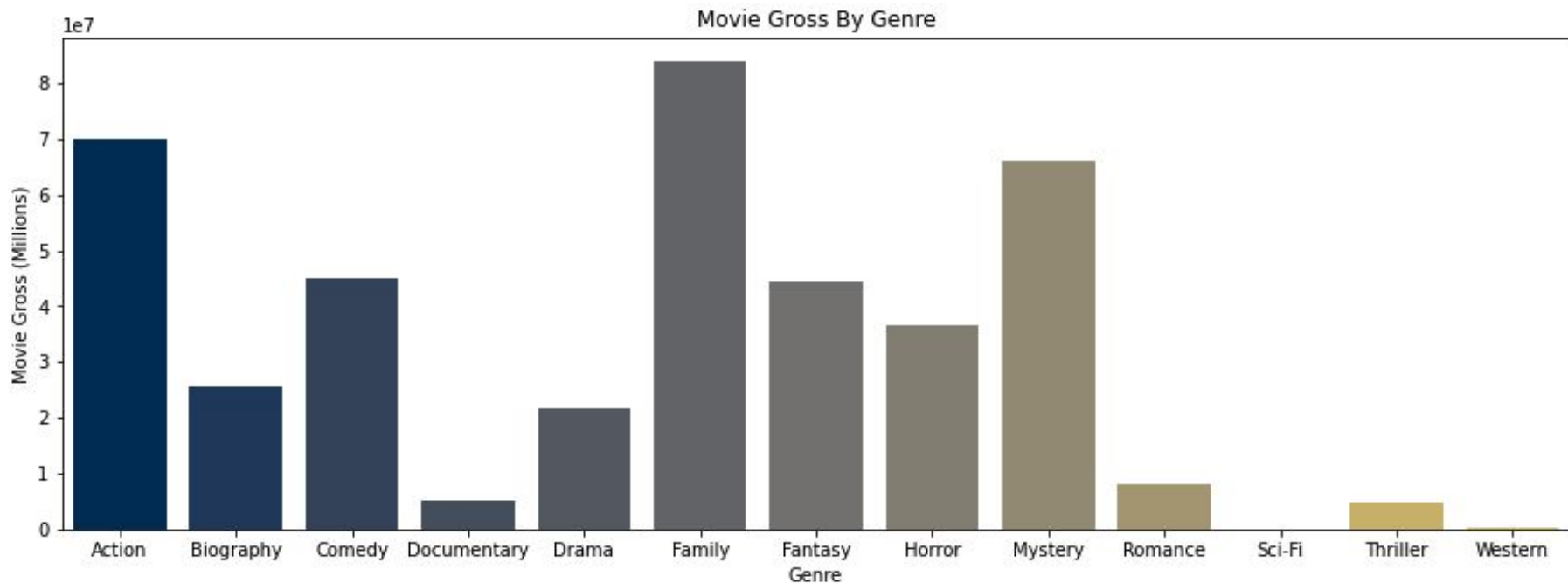
Results

- Non-fiction movies have the highest ratings
- Horror movies have a really spread out distribution of ratings (hit or miss ratings)
- Drama movies have the highest number of movies produced in a tight distribution



Results

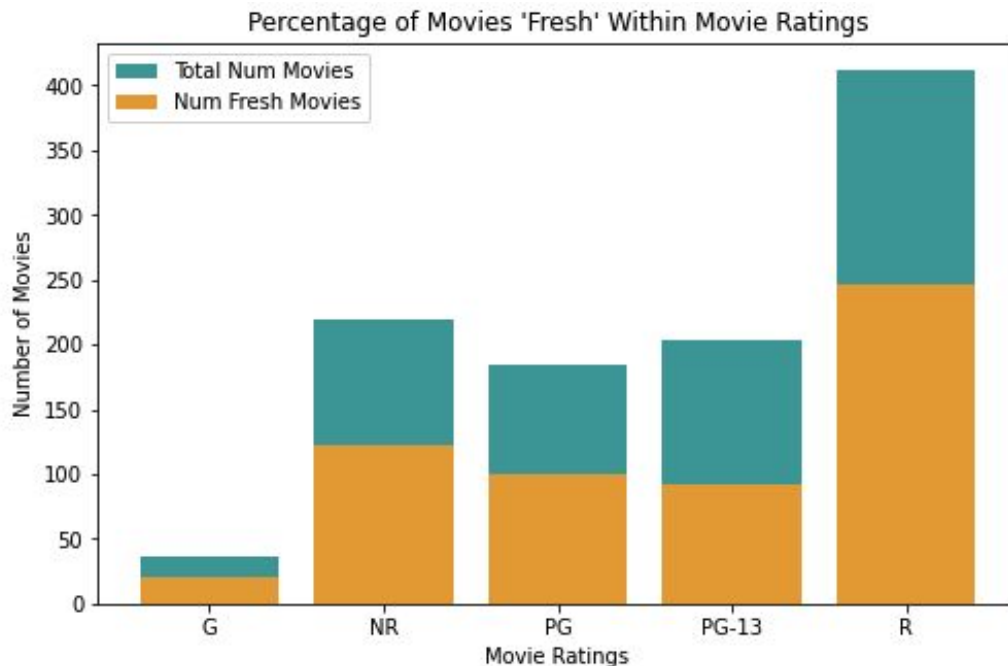
- Family, Action, and Mystery movies have the highest box-office revenue
- Westerns, Sci-Fi*, and Documentaries have a low box-office revenue



Results

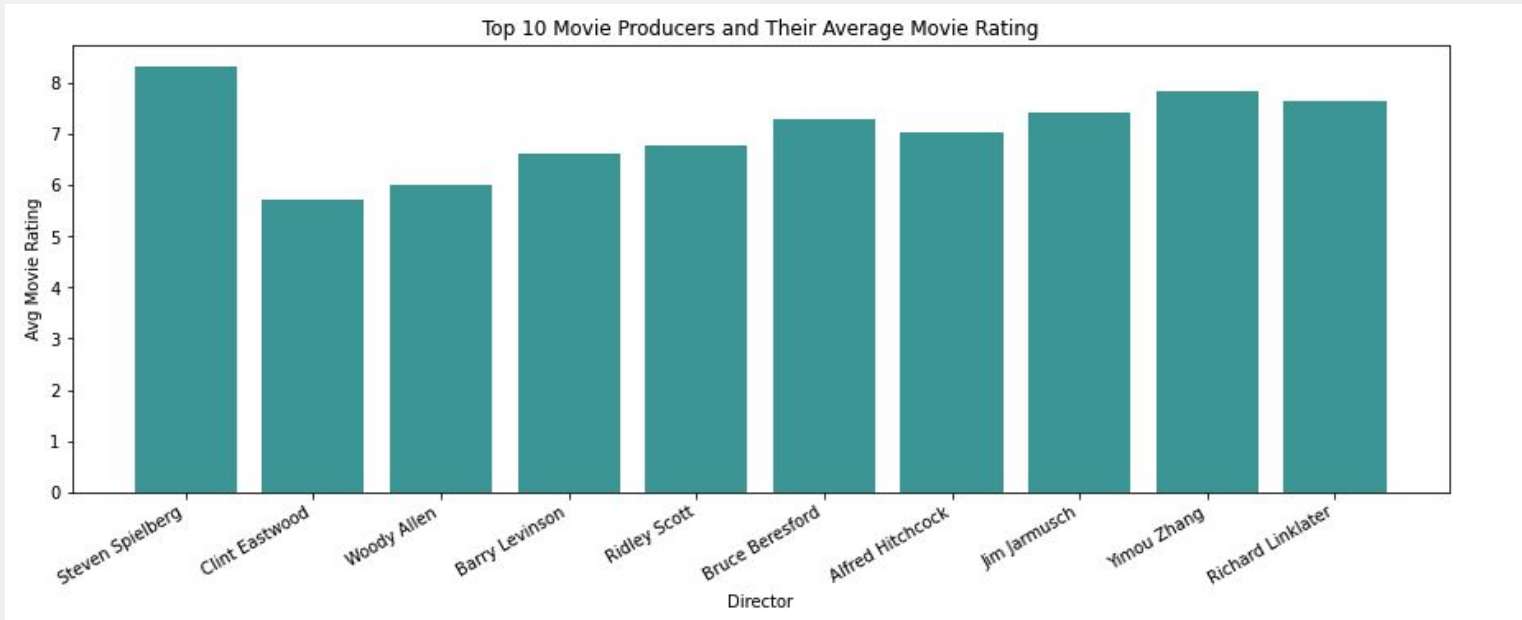
- R rated movies have the highest number of productions
- R rated movies are also the 'freshest'

*'Fresh' determined by if movie got more 'fresh' ratings from critics than 'rotten'



Results (Bonus Graph)

- Steven Spielberg has the highest number of movies directed
- He also has the highest average rating for his movies



Conclusion

This analysis leads to three recommendations for movie productions:

1. Action or Family based on gross box-office income
2. Documentary or Biography based on viewer/critic ratings
3. R rated movie based on overall critic response and number of movies produced

(Bonus would be to get Steven Spielberg to direct the movie, fortunately he directs a lot of Action movies, so this correlates to high gross box-office income as well)



Future Improvements

Who are some of the top up and coming actors? People who have had a recent increase in roles and are expected to continue to thrive

How have the popularities of genres changed over time? Number of movies for each genre over time? Ratings of each genre over time?

*Things to Consider

Because the datasets grouped movies into multiple genres, I believe that some data could have been lost when categorizing the movies into a single genre

For example:

Sci-Fi movies are generally also Action movies, so I believe it's likely that Sci-Fi movies got grouped into the Action category based on the order it appeared in the list



Thank you!



`hannah.schurman1@gmail.com`



`@hannah-schurman`



<https://www.linkedin.com/in/hannah-schurman-706391188/>