Movie Industry Analysis

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Summary

Descriptive Analysis of the movie industry reveals useful information for Microsoft on what kind of movies are doing the best currently in world. Based on the following analysis, Microsoft can build up a strategy for creating their own movies that will be profitable and popular.

Outline

- Business Problem
- Data & Methods
- Results
- Conclusion
- Further Analysis

Business Problem

- Produce movies that have popular genres and high rate of profits
- See if rating is correlated to runtime of the movie
- Find the most profitable time to release the movies
- Choose the right content rate for movies to produce

Data & Methods

Datasets are provided from the following sources:

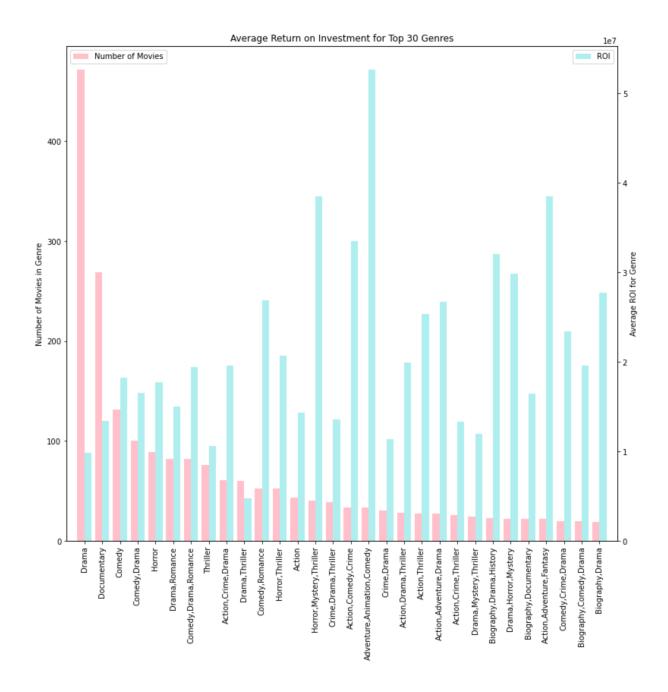
- IMDB
- Box Office Mojo
- The Number movie Budgets
- Rotten Tomatoes

Data & Methods

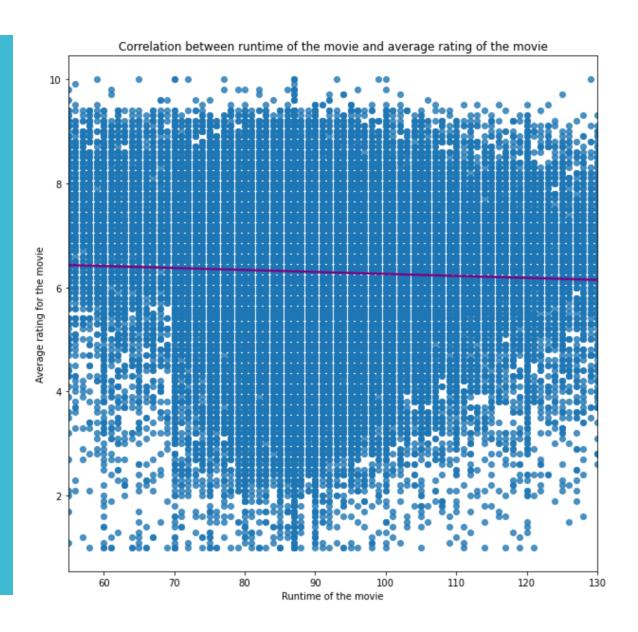
The Project uses descriptive analysis method, like distribution and bar graphs, statistical functions. This method helps to filter out less meaningful information and compare performance of films across different data sources.

Out of 30 Top genres the most profitable ones are "Adventure, Animation, Comedy", "Horror, Mystery, Thriller", "Action, Adventure, Fantasy" and "Action, Comedy, Crime" genres.

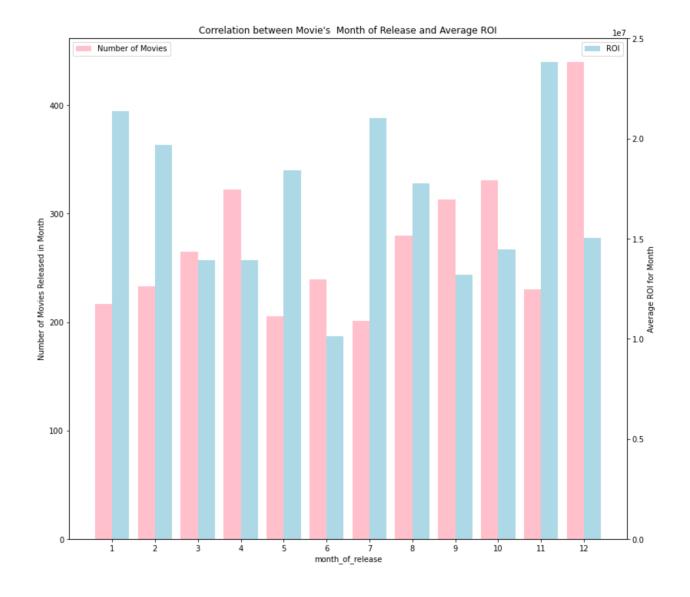
The most produced genres are "Drama", "Documentary" and "Comedy" while having low return on investment.



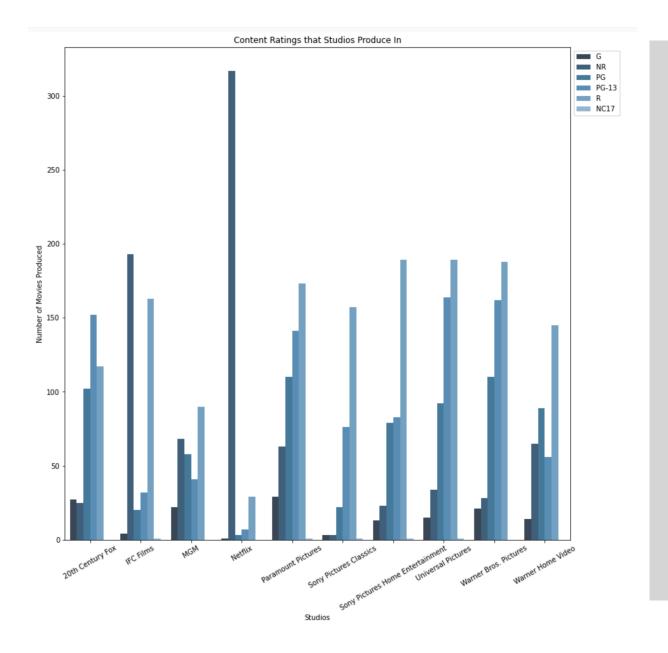
The calculation of correlation between average rating and runtime of the movie, shows that these two datasets are not related.



The most profitable months for movie releasing are January, February, July and November. During these months tickets sales are high, because of the holiday season, whereas in June and September are the least profitable times. The largest number of movies are released in December.



The most common content rating is "R" rating, which is movies for audience older than 17. The least produced ones are "G"-General Audience and "PG" - Parental Guidance Suggested. Large number of movies by "Netflix" have not been rated("NR" - not rated).



Conclusion

- It would be the most profitable for Microsoft to make movies in "Adventure, Animation, Comedy", "Horror, Mystery, Thriller", "Action, Adventure, Fantasy" and "Action, Comedy, Crime" genres.
- When producing movies, do not give extra attention to runtime, because the ratings are not correlated with length of movie.
- The most profitable months for movie release are January,
 February, July and November. Also, it is recommended to avoid releasing in June and September, since profits are low during these times and December has the highest number of releases.
- It is suggested to choose **the most popular content rating**, such that "R" to follow the top studios or choose **the least produced one** as a niche and have less competition.

Further Analysis

Modeling following analysis could give more detailed insights to Microsoft about the industry:

- Study of relation between average rating and actors in the movie could be helpful to strategize the casting for the moving
- Comparing the profits from domestic gross and worldwide gross will help to focus on proper audience and market
- Analysis of movies based on critics rating and directors, will help to identify which directors get the highest ratings from critics.