Microsoft Entering the Movie Industry

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Summary

Entering a new industry, Microsoft needs to minimize risks of financial losses through:

Finding which genres of movies perform well in the box office and receive the most public attention

Finding which MPA (Motion Picture Association) rating is able to generate the most box office revenue

Outline

1. Business Problem
2. Data & Methods
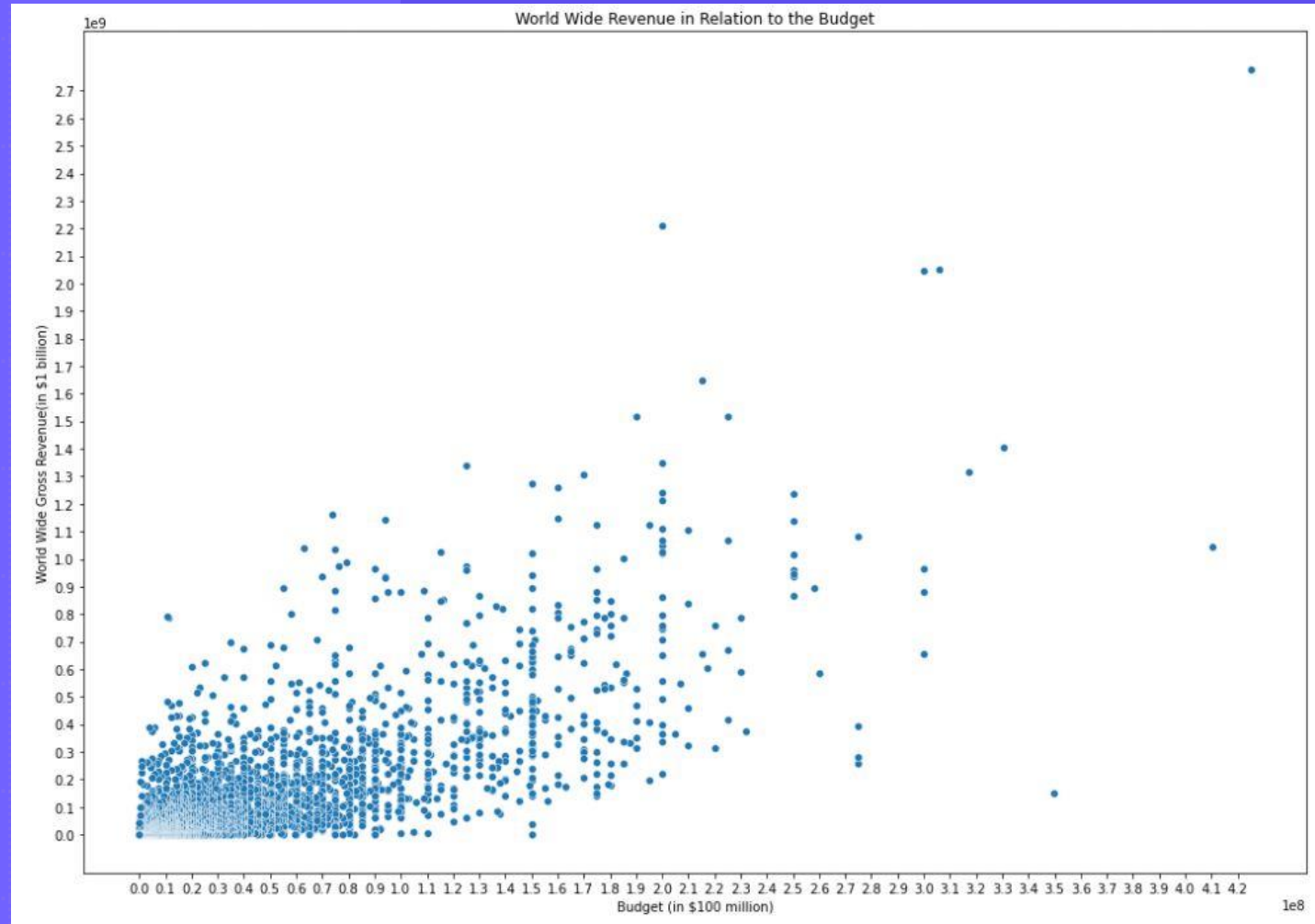3. Results
4. Conclusions

Business Problem

- Microsoft has little to no experience in the film industry.

- Microsoft may face big financial losses if the film does not do well, as well as create a negative expectation for its future films
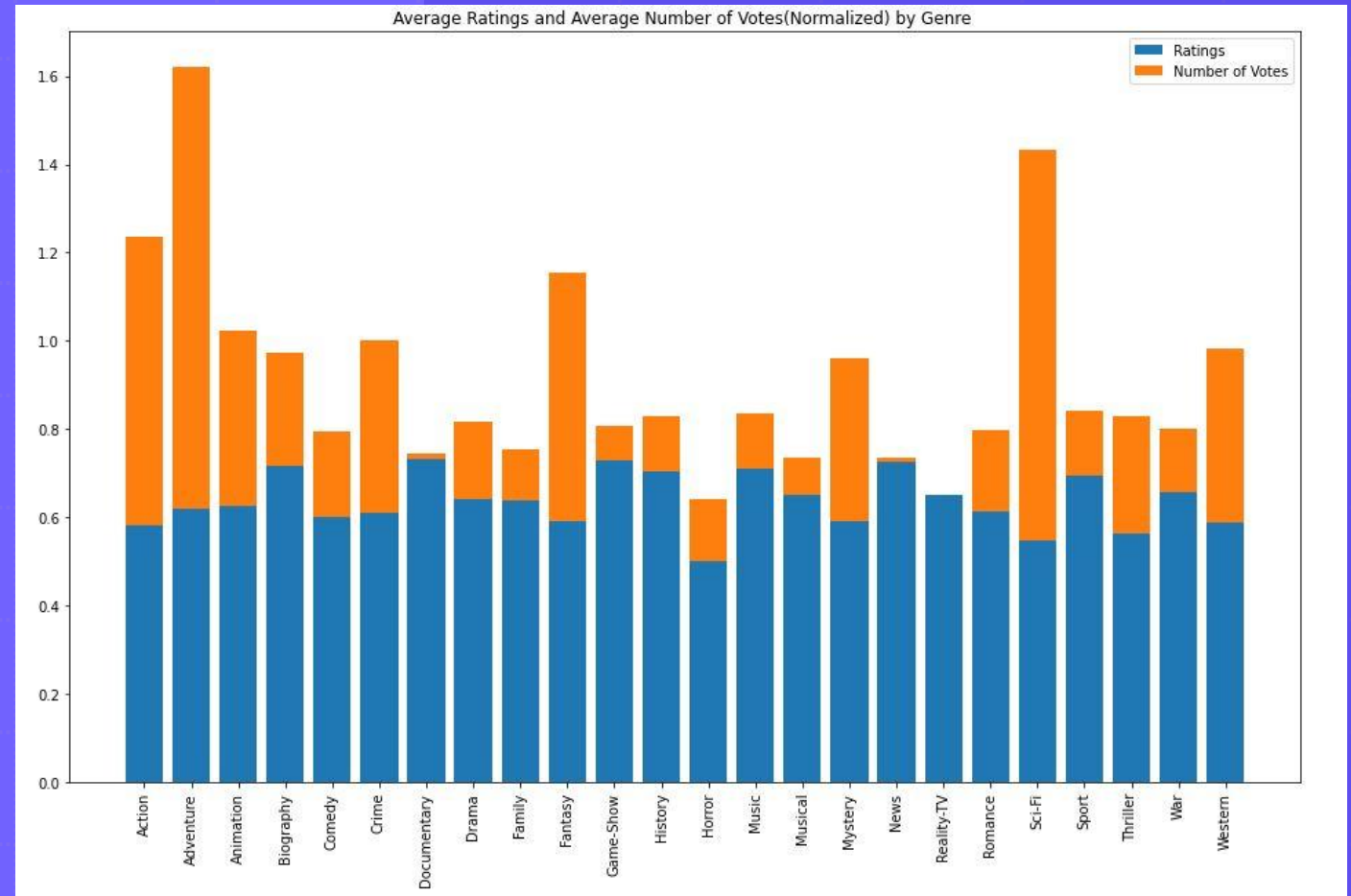
Data & Methods

- IMDB title basics and IMDB title ratings were used and joined on the 'tconst' variable. From these, I was able to give each genre a mean consumers' rating and the number of consumers' votes.

- I was able to obtain each genre's performance in the box office through the Rotten Tomatoes' movie info data frame and the relationship between a movie's budget and the global gross revenue from the numbers' data set
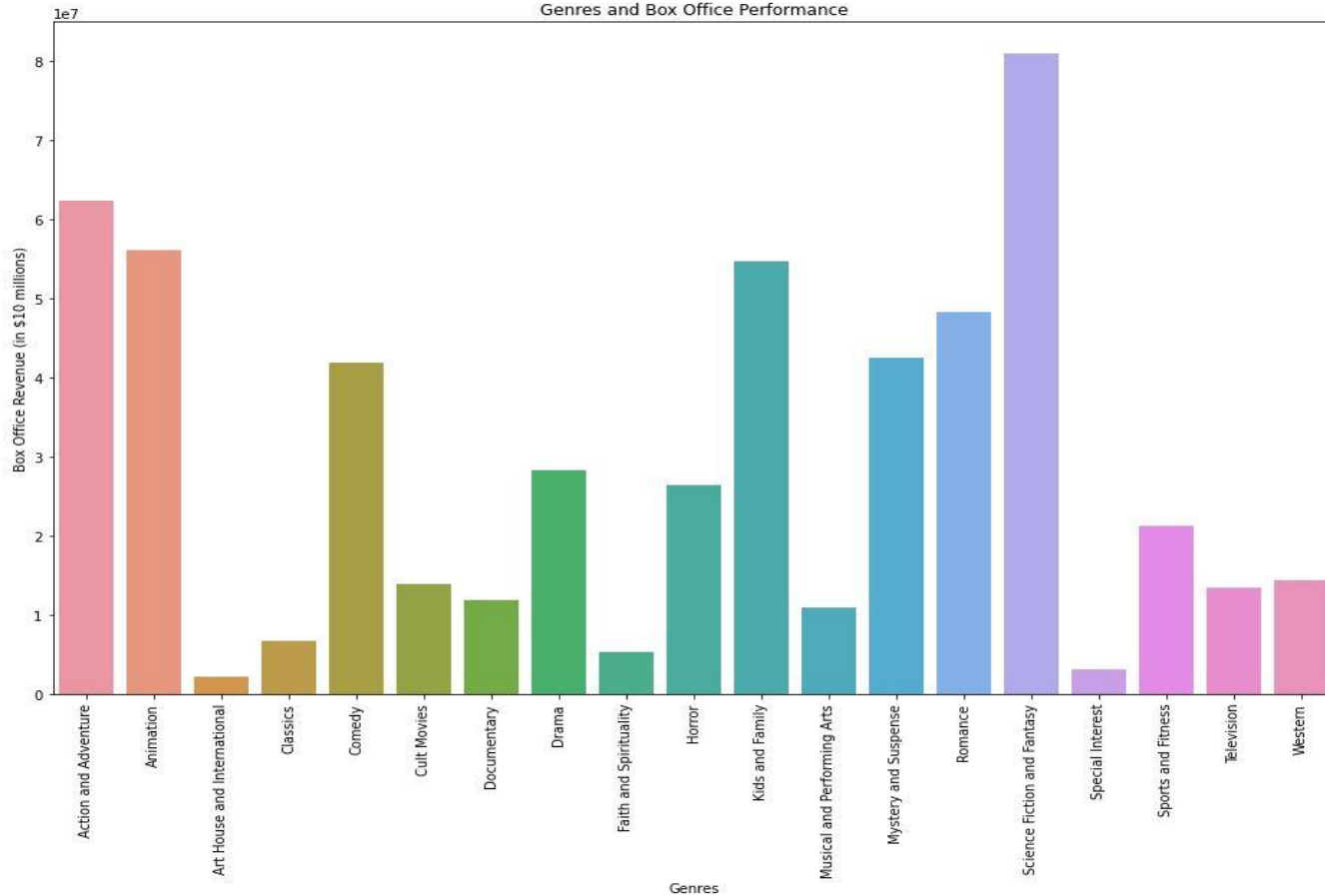

World Wide Revenue in Relation to the Budget

Results

- Action, Adventure, and Sci-Fi genres received the most public attention

Average Ratings and Average Number of Votes(Normalized) by Genre
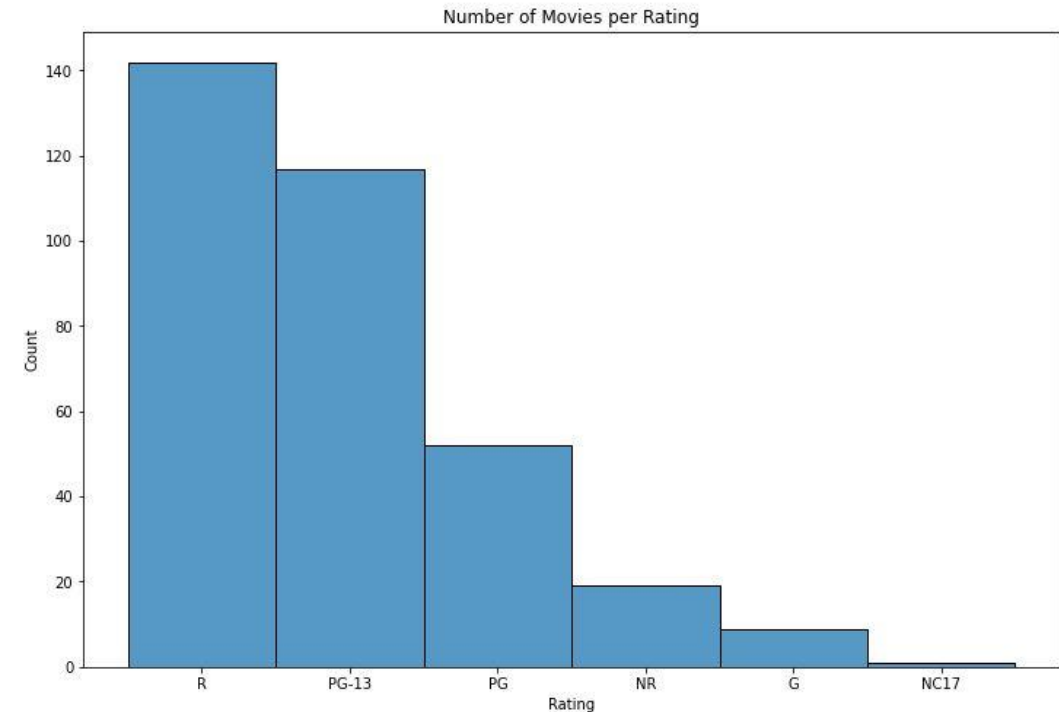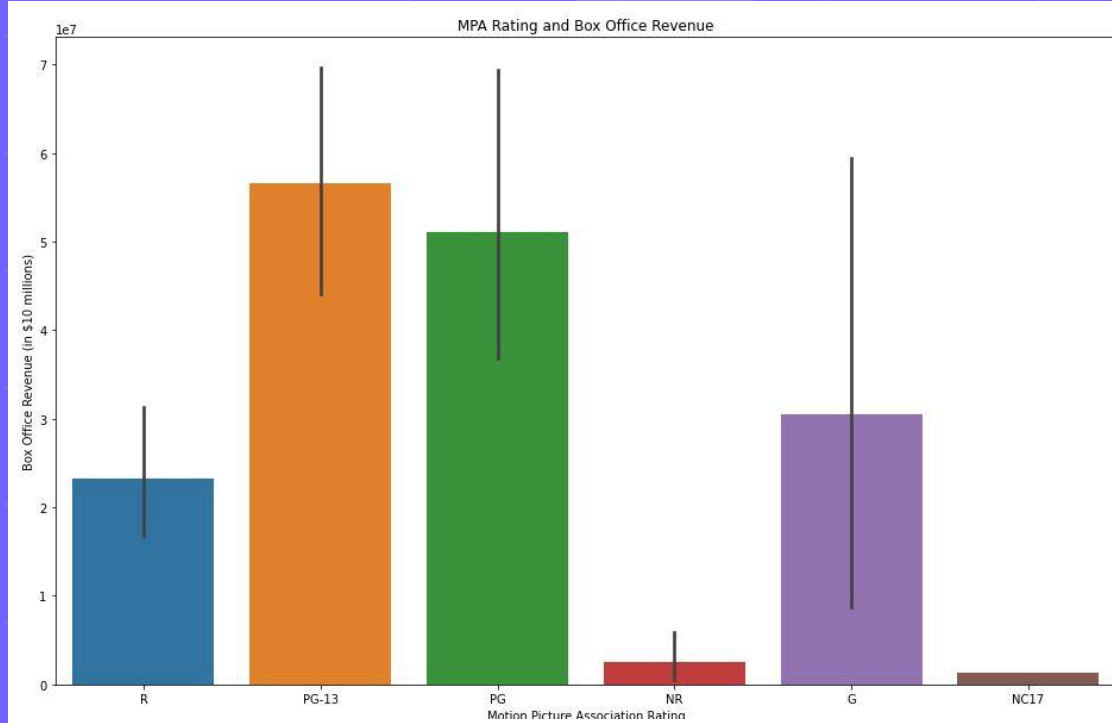
Results

Genres and Box Office Performance

- Sci-Fi and Fantasy, Action and Adventure, and Animation/ Kid and Family genres performed the best in the box office.

- Animation and the Kid and Family genres were grouped together because most films that were in these genre categories had both of these genres.

Results

- In terms of the MPA ratings, PG-13 movies performed the best followed by PG movies

- Some PG rated movies performed as well as top earning PG-13 movies; however, there is a wide fluctuation of earnings for PG movies. This fluctuation is much larger in G rated movies.

Conclusions

- Recommended Genres: Action and Adventure, Kids and Family/Animation, Sci-Fi and Fantasy, and Romance genres performed the best in the box office. Although Sci-fi and Fantasy had many popular movie franchises that boosted its overall box office revenue; however, data seems to show general public has interest in this genre. Action and Adventure is a more approachable genre that was able to generate the second most box office revenue. This analysis coupled the Kids and Family genre with the Animation genre as most of these movies had both genres.

- Recommended MPA Rating: According to the datasets used in this analysis, movies that were rated PG and PG-13 were able to generate the most box office revenue. Movies rated PG-13 were able to generate the most box office revenue of around $60 million on average followed by PG movies which earned slightly less than $50 million on average.

- Genres to Avoid: Unless Microsoft is dedicated to pure cinematography, it should avoid the Art House and International genre. Other genres such as Faith and Spirituality, Classics, and Musical and Performing Arts also performed poorly in terms of box office revenue.

- MPA Ratings to Avoid: Movies rated R, NR, or NC17 performed poorly in the box office. It can be assumed this is because many movie goers include children. Creating G rated movies is also not recommended as the range of box office earnings is the greatest of all MPA ratings.

Next Steps

- Some favorite/popular actresses/actors and/or directors could help boost public's interest in a movie: Many actresses/actors as well as directors have built a reputation of creating enjoyable movies. Collecting data about individual actresses/actors and directors may help deduce the types of movies that Microsoft should create.

- Streaming services may outperform movie theaters and maybe a better indicator of a movie's performance: As COVID-19 has influenced majority of the world's daily lives, including those of movie goers, streaming services have taken a more dominant role for movie enthusiasts. Microsoft may need to look more into the data collected from such streaming services in order to get a better representation of the public's movie preferences.

- Movie budgeting needs more insights: As mentioned before, movies had a variety of budgeting as well as a variety of global gross revenue. Microsoft may need more data on how these budgets were spent on movies that outperformed its counter-parts with similar budgets.

THANK YOU

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