

Data Insights for Microsoft's New Movie Studio

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Background Study

- Microsoft sees all the big companies creating original video content and they want to get in on the fun. They have decided to create a new movie studio, but they don't know anything about creating movies.

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Objectives

- Explore what type of films are doing the best in the box office currently.
- Come up with actionable insights .

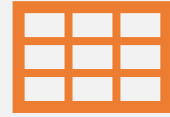


Data Understanding

- We will explore the IMDB dataset, The Numbers dataset and the BOM datasets to leverage data insights of the most popular movie genres, budgets, ratings, box office earnings and other additional factors.



Data Cleaning



There were no duplicates in the datasets.



Financial columns were converted to float to avoid numerical errors.



Missing values were handled categorically depending on the relevance of the data, i.e. using mean, mode and dropping rows.

IMDB data set



I took the first 20 datasets in the im.db data frame and worked with them.



The most loved genre of movies by the viewers was the Action, Adventure, Sci-fi genre.

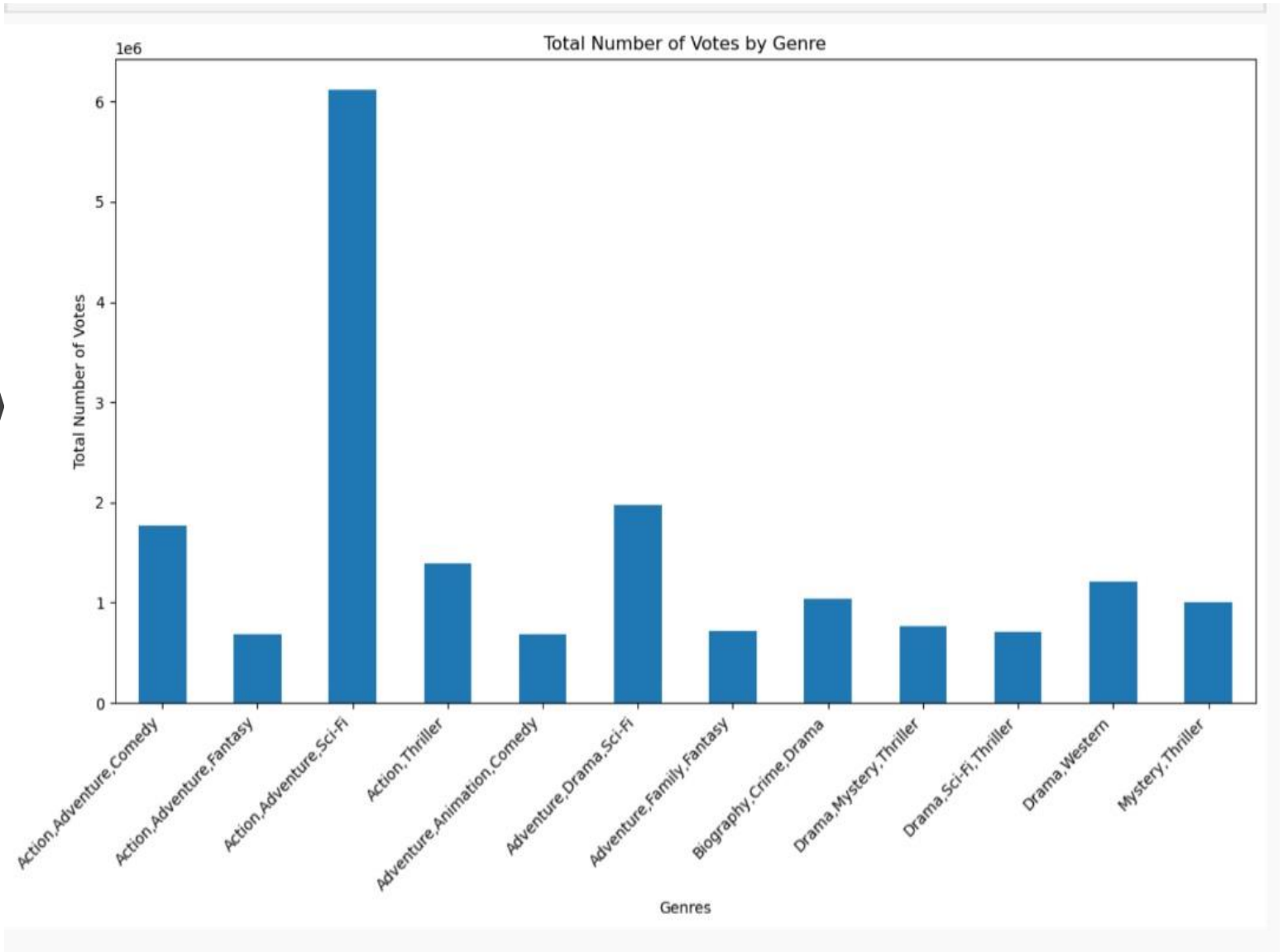


A total of 1,841,066 viewers loved movies in this genre and it was with a rating of 8.8



Drama, Music genre was the least liked by the viewers with a total of 680,116

Total Number of Votes by Genre

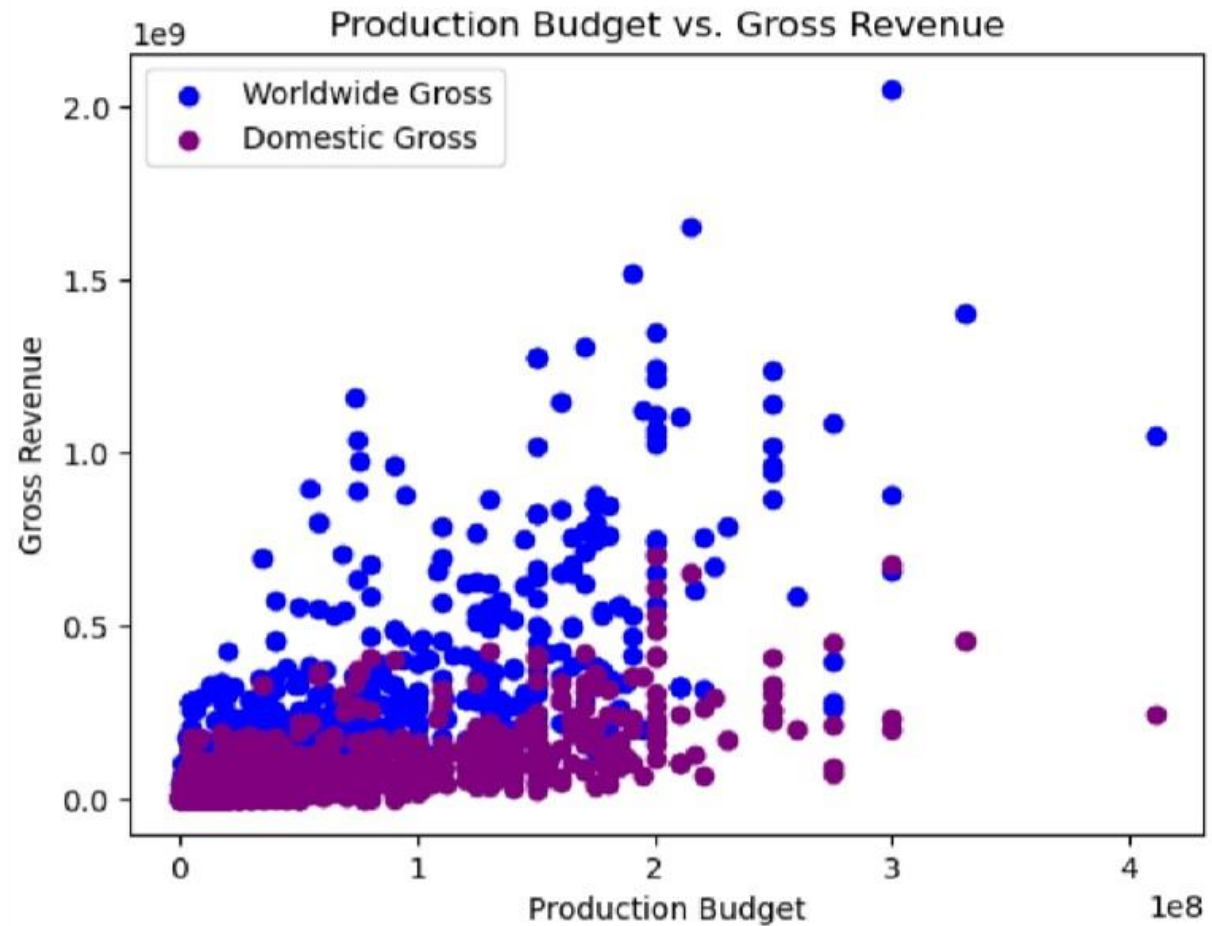


BOM and TN datasets

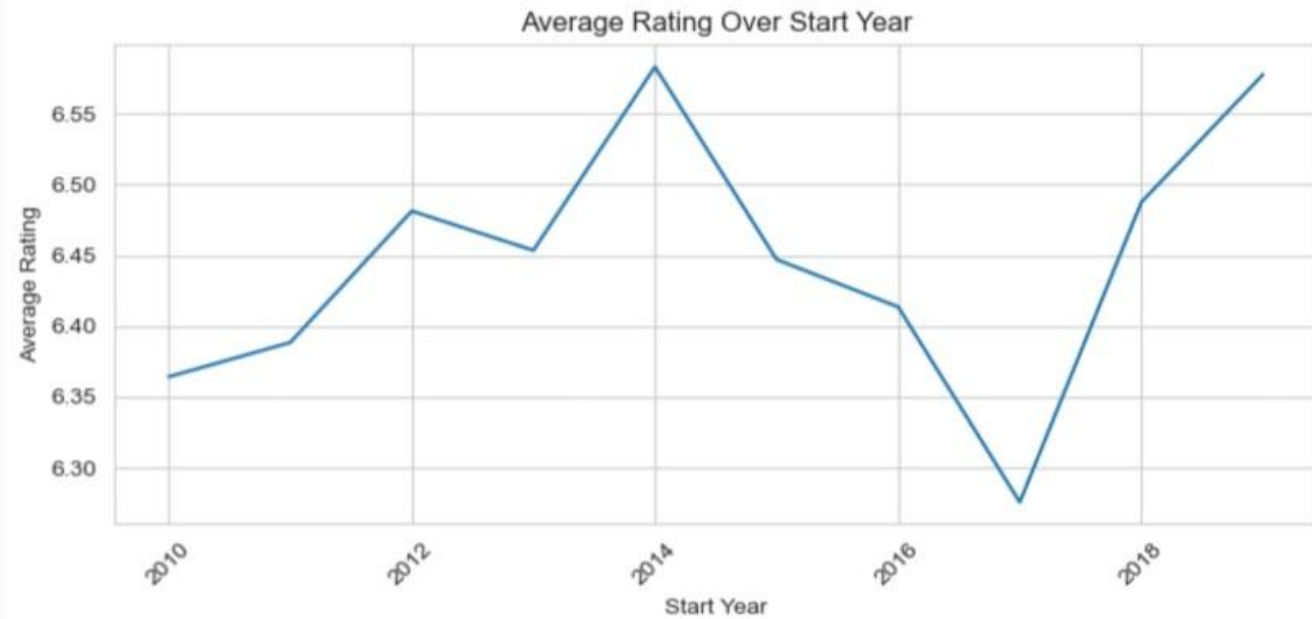
- Explored gross earnings in the BOM dataset and production budget in the TN datasets.



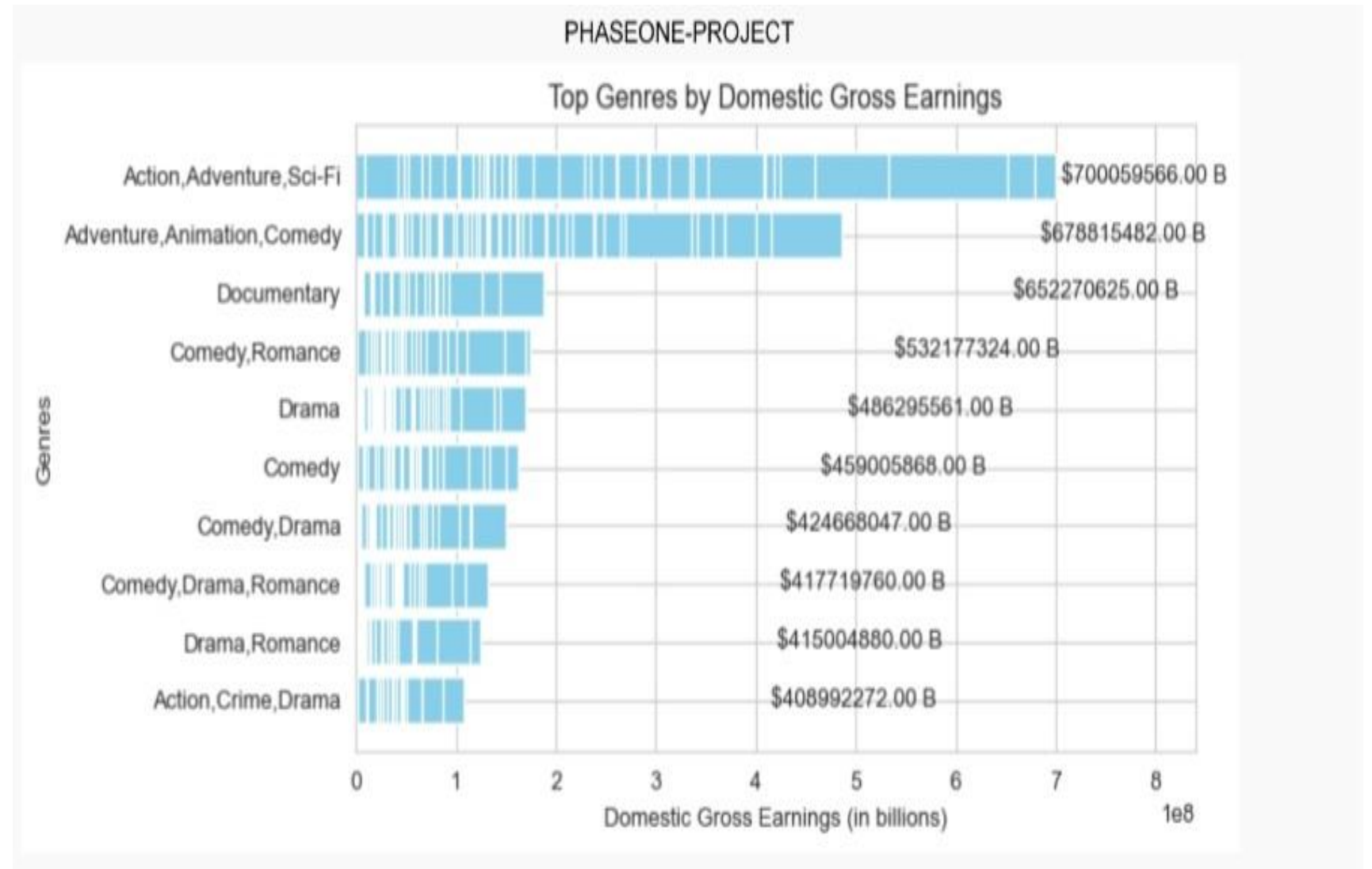
Production budget vs Gross Revenue



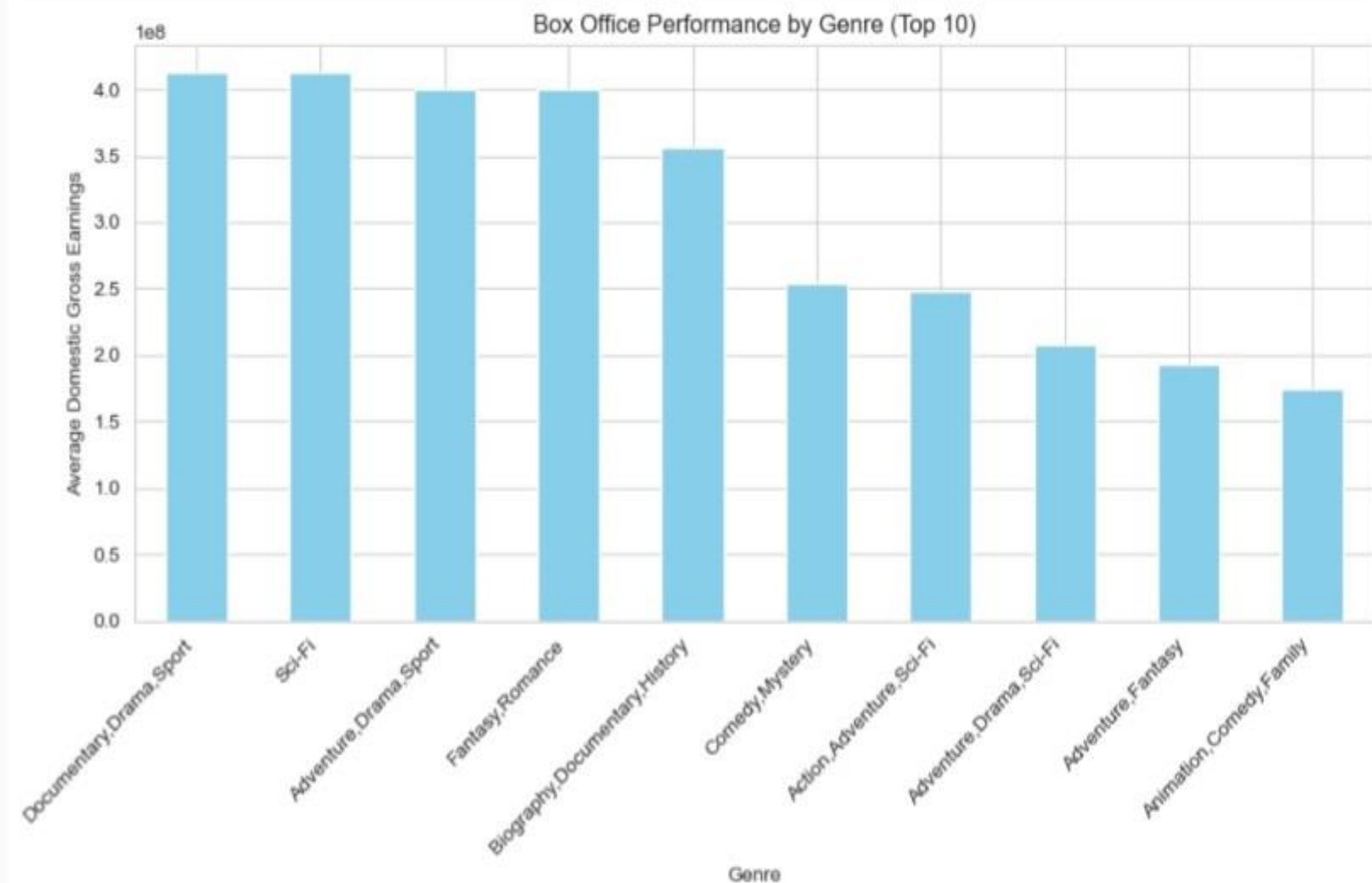
In addition, I
compute the
Average Rating
over start year.



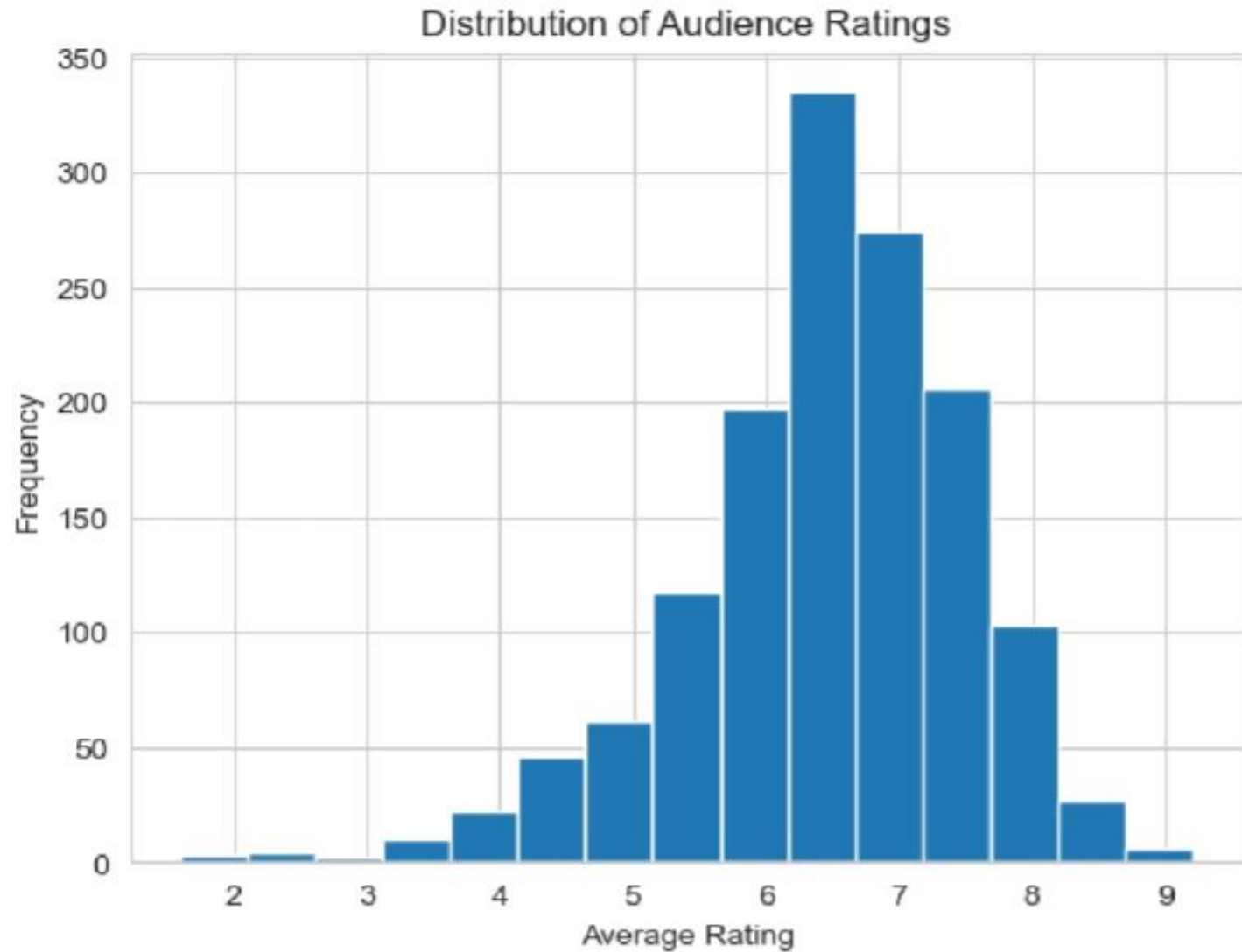
To get clear
insights on
genres and
their domestic
earnings .



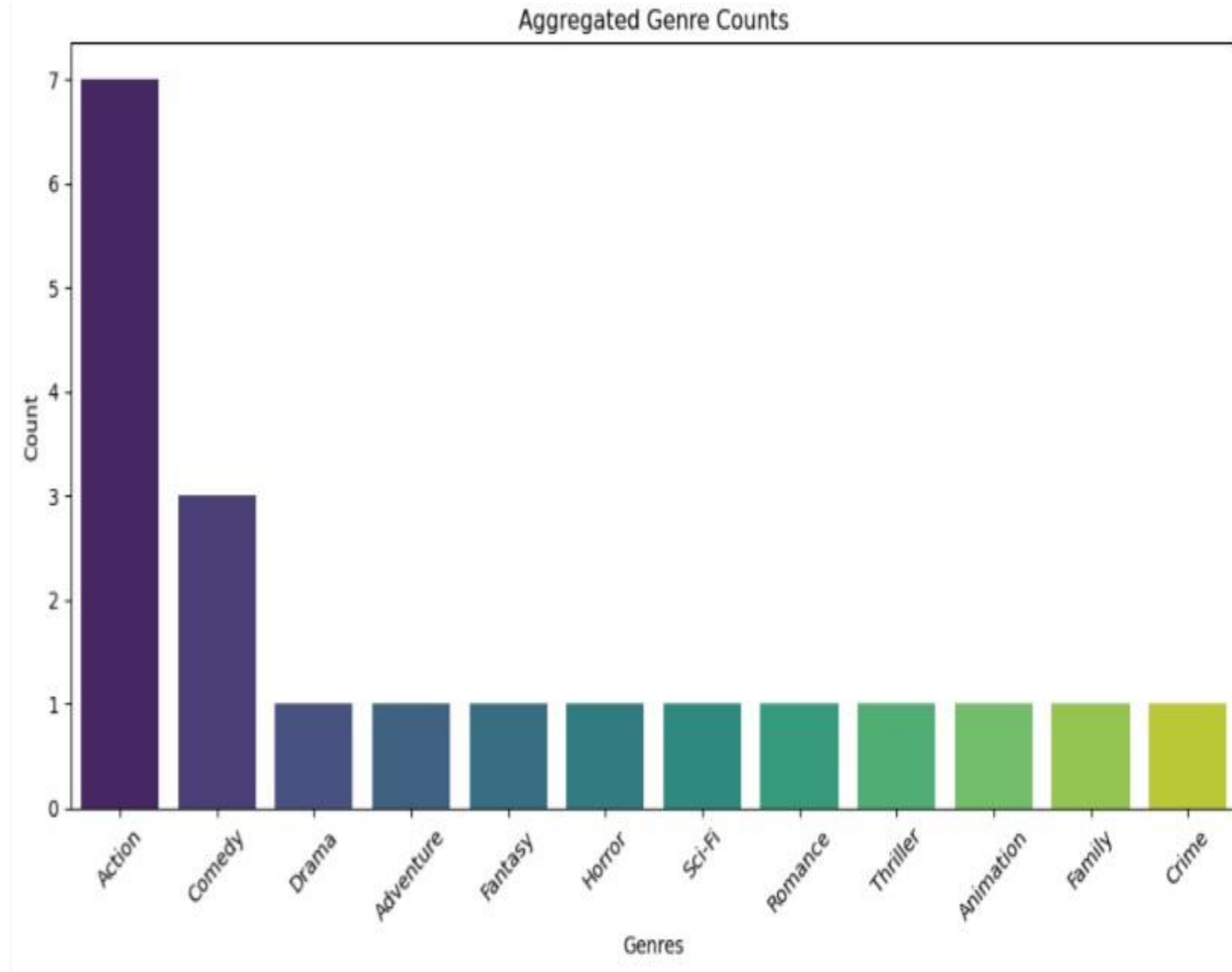
I analyzed
the box
office
performance
by genre.



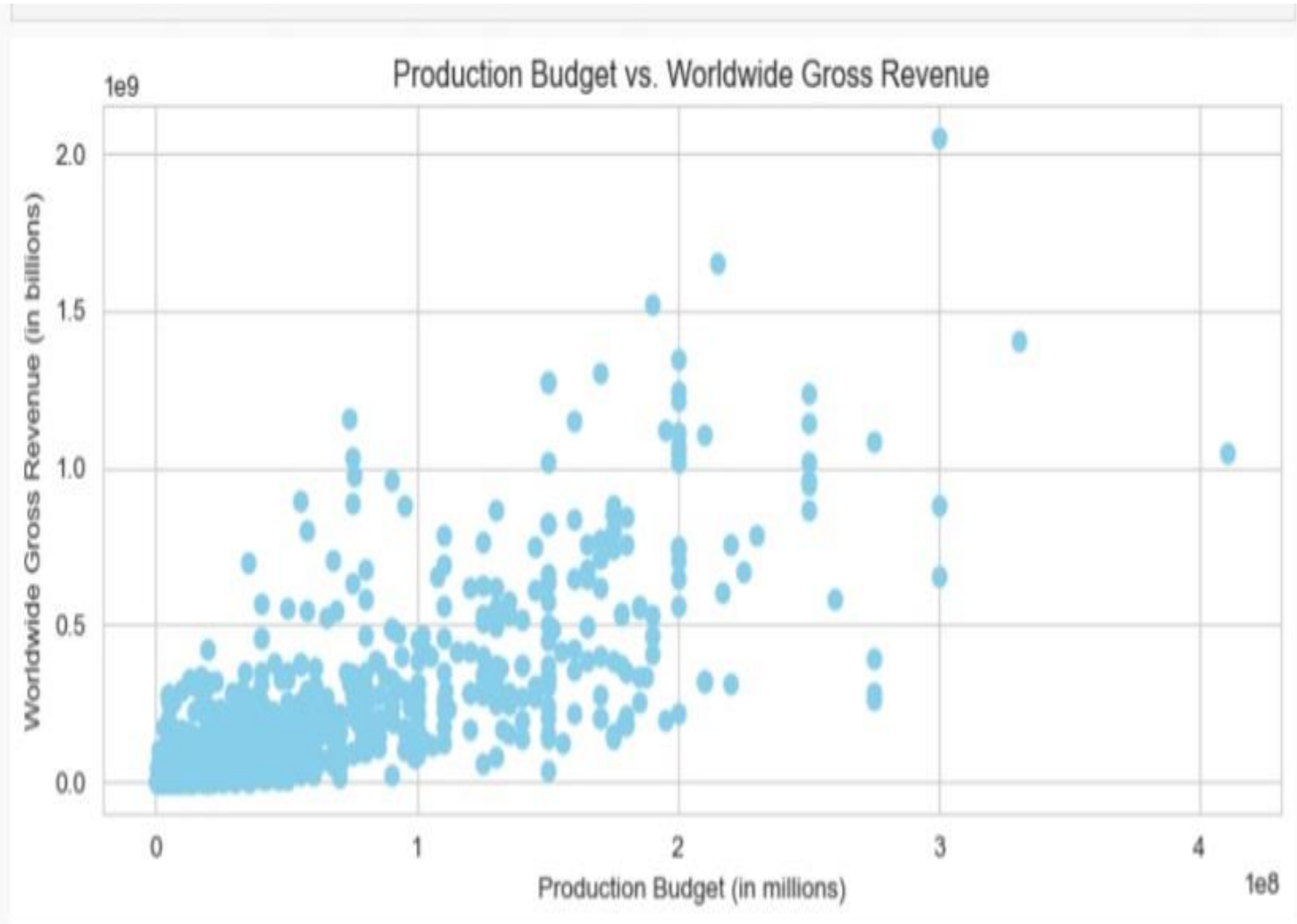
I computed
average ratings
and frequency to
get the
distribution of
audience ratings.



For additional insights, I got the genre by counts to explore most viewed genres.



Computed a scatter plot to show the correlation between worldwide gross and production budget



Conclusion

- In conclusion, Microsoft should go ahead and start the new movie studio.
- It is an investment that shows high potential of growth and income earnings.



Recommendation

- After the analysis, I recommend:
- Microsoft's new movie studio should strive to create action, adventure, sci-fi movies. It's a genre that can have a wide reach across many different audiences and captivate with its mix of engaging characters, thrilling set-pieces and general sense of escapism.
- These movies should not only be released to the domestic country but also worldwide, because the gross earned by foreign countries is more compared to when the movie is only released domestically.
- High Production budget is relevant to increase gross income.
- Audience ratings of movie genres can help create genres that are audiences preferences and also identify Niches in films that can be improved.
- Focus on the trends and patterns in releasing genres to maximize on profits.



THANK YOU