

Movie Genre Trends: An Exploratory Analysis

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Overview

- The purpose of the project is to analyze movie trends over the course of 10 years
- The importance of this project is to learn consumer(viewer) behavior in the movie distribution industry so as to provide quality movies and also make it easier to offer precise recommendations
- Objectives of this project are:
 - analyze audience preference
 -
 - highlight trends in the industry
 -
 - forecast the future trajectory of the industry

Methodology

- The data sets used were collected from the IMDB database and BOM.Movie Gross csv
- The collected data was cleaned using python programming language, specifically the pandas module
- The visualization and statistical analysis were done with pandas module and seaborn

Results and Findings

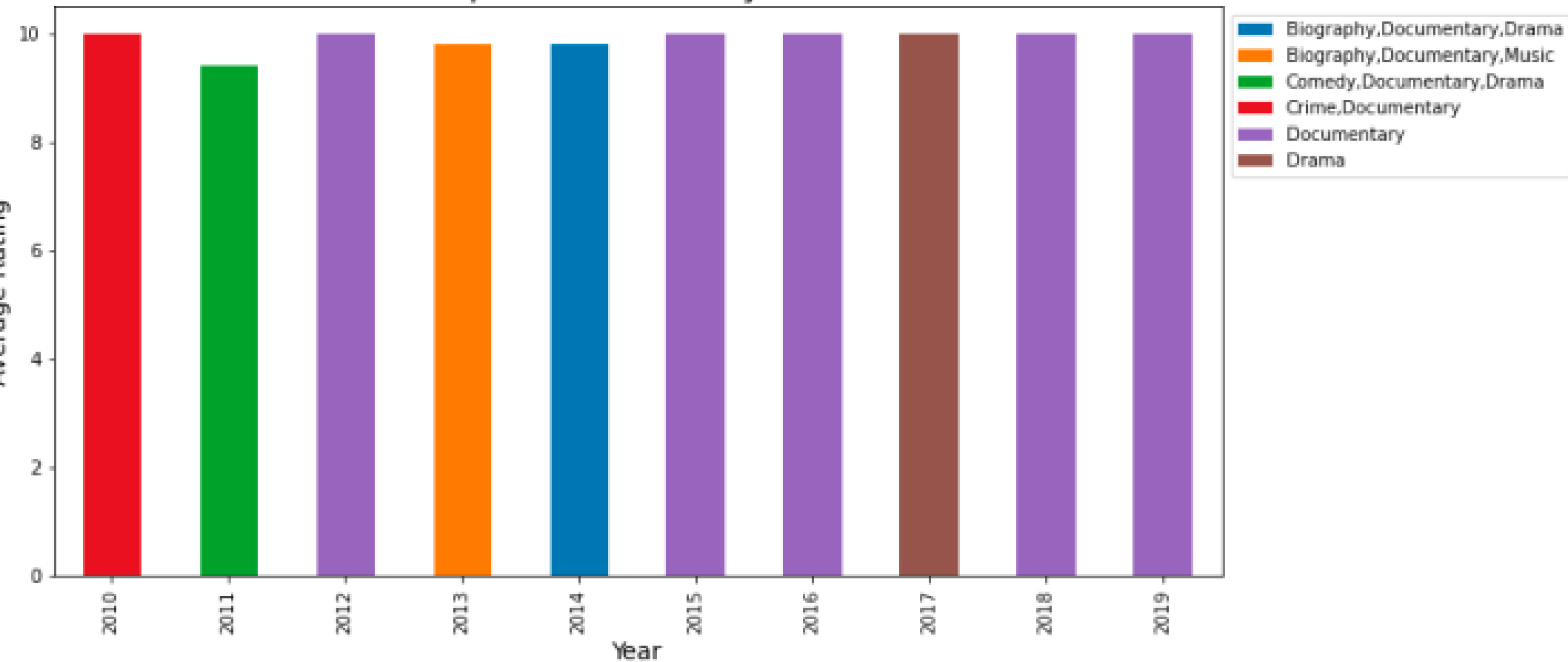
- According to our findings, the following is a table showing the top 10 rated genres and their average ratings

	Genre	Rating
0	Documentary	10.0
1	Comedy,Drama	10.0
2	Crime,Documentary	10.0
3	Drama	10.0
4	Documentary,History	10.0
5	Adventure,Comedy	10.0
6	Drama	9.9
7	Documentary	9.9
8	Documentary	9.8
9	Action	9.8

- An analysis was done to determine which genres had the highest rating each year for a period of 10 years. The following data frame was highlighted

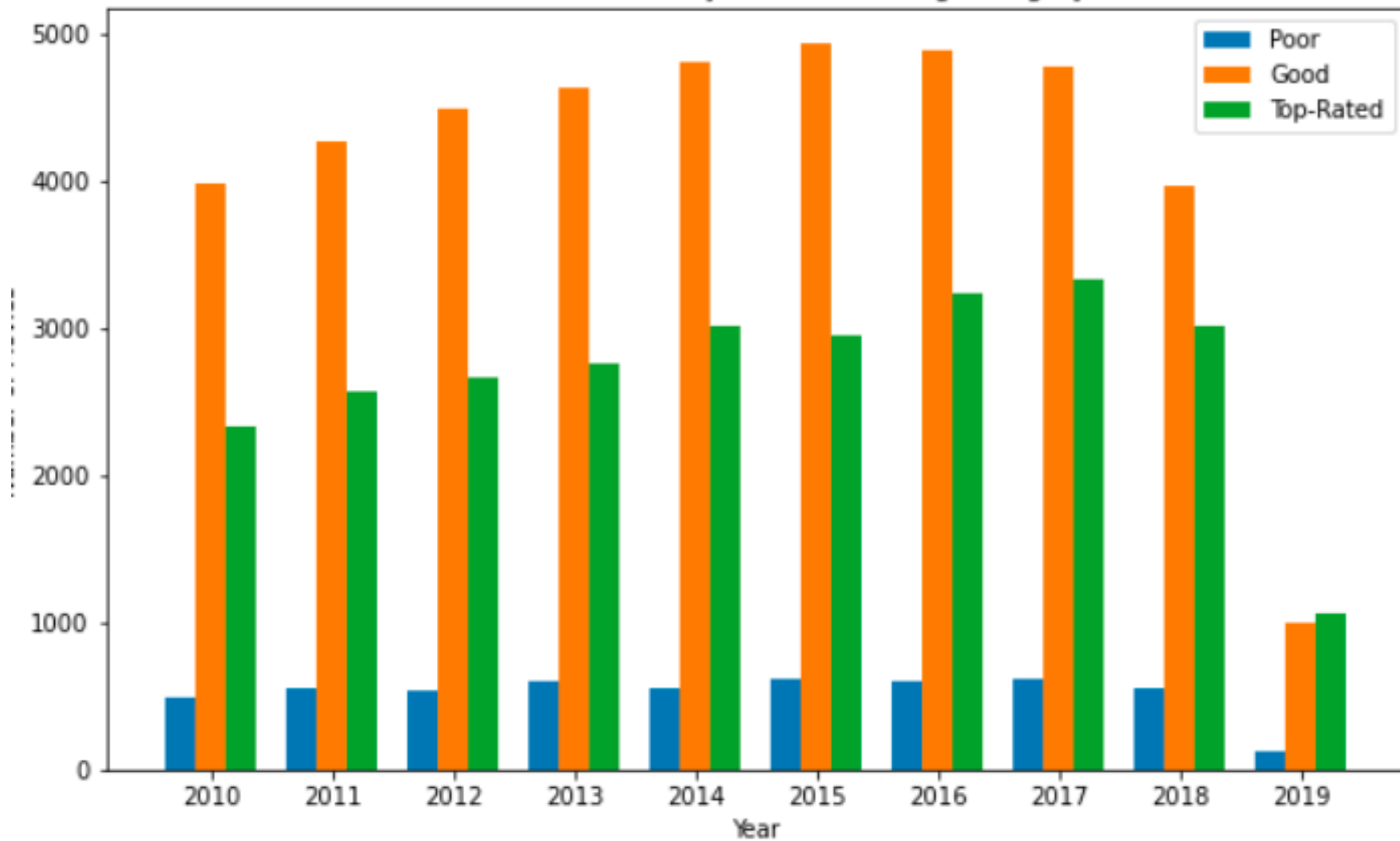
	Year	Genre	Rating
0	2019	Documentary	10.0
1	2018	Documentary	10.0
2	2017	Drama	10.0
3	2016	Documentary	10.0
4	2015	Documentary	10.0
5	2014	Biography,Documentary,Drama	9.8
6	2013	Biography,Documentary,Music	9.8
7	2012	Documentary	10.0
8	2011	Comedy,Documentary,Drama	9.4
9	2010	Crime,Documentary	10.0

Top Rated Genres by Year



- The following rating levels determined where each movie was categorized
 - - Rating of 0 - 3.99 = Poor
 - - Rating of 4 - 6.99 = Good
 - - Rating of 7 - 10 = Top-Rated
- We created a bar chart that shows the count of movies in each category for each year using the provided data.

Number of Movies by Year and Rating Category

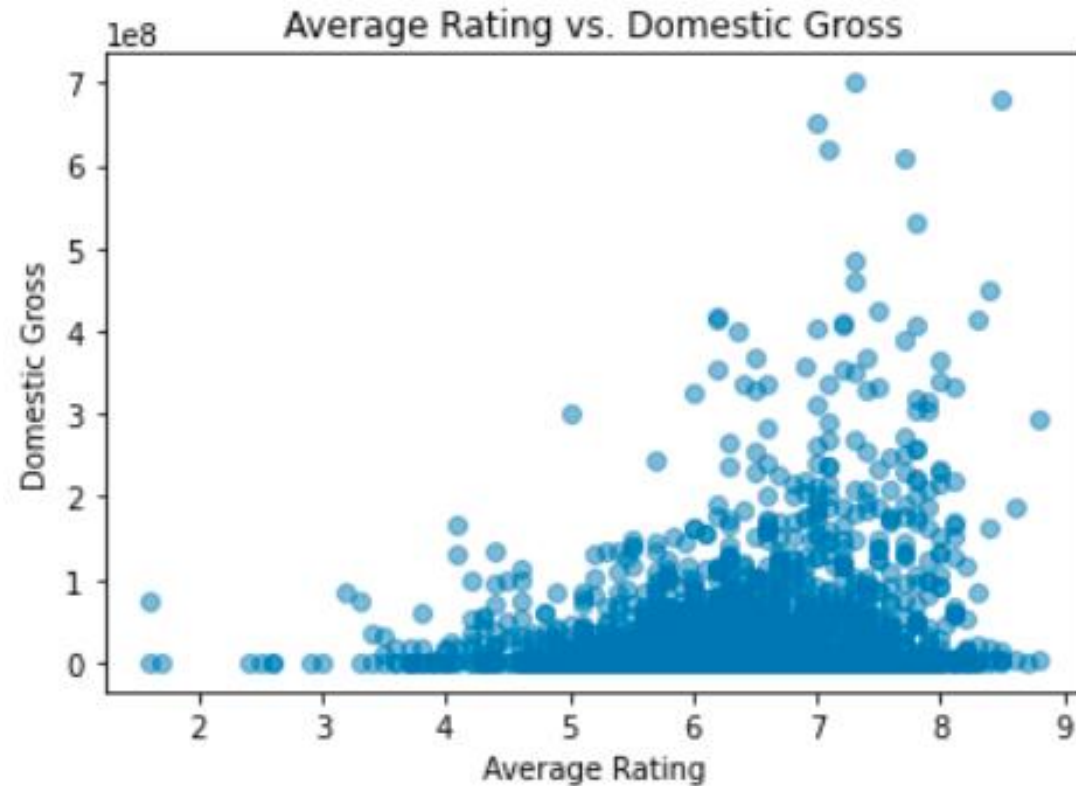


Now, assuming that the vote count represents the percentage of watched movies, we can say that the movies with the least vote count have the lowest views while movies with highest vote count has the most views
We got data of vote_count (views) and used that data

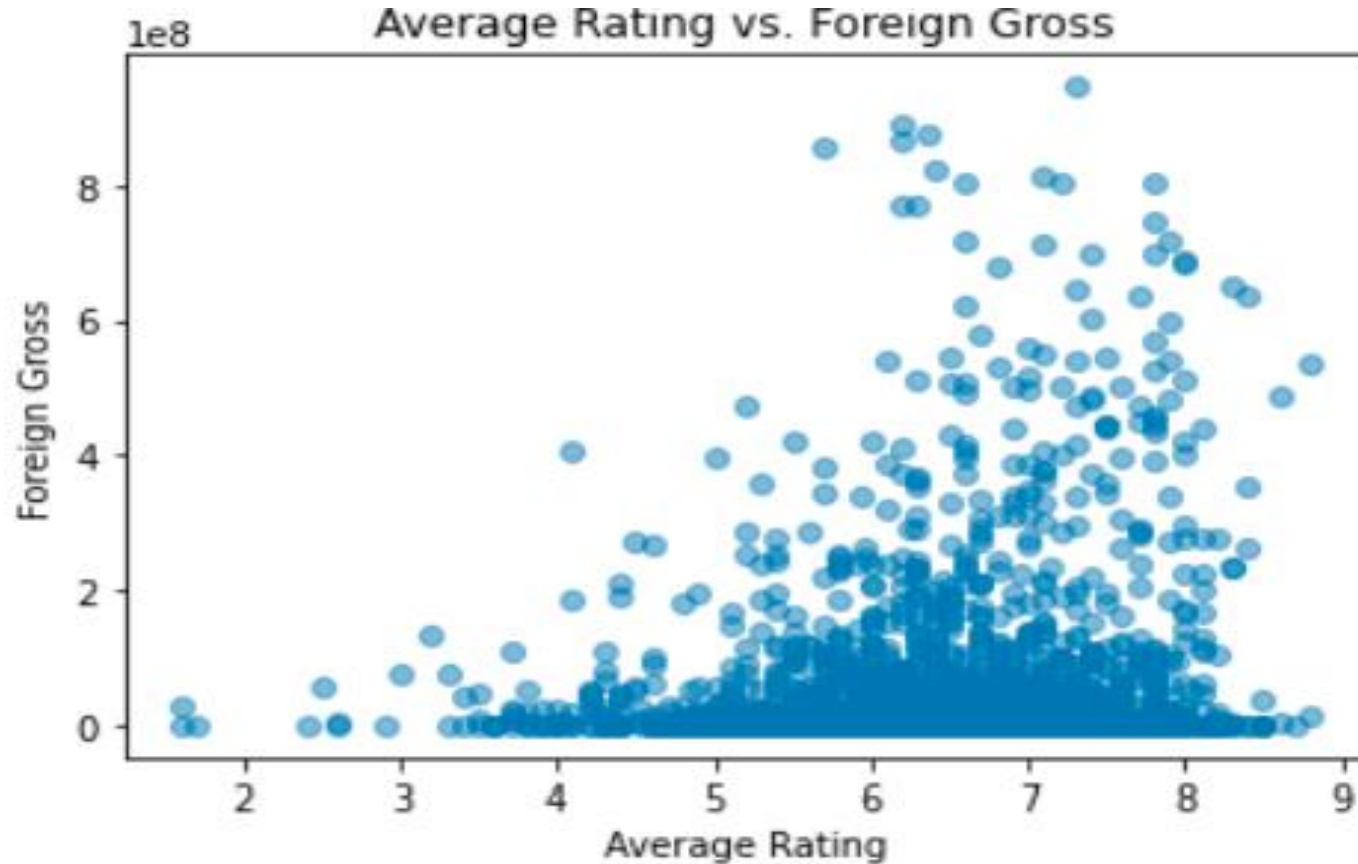
Below is a list of the top 10 most viewed movies

	Title	Year	Genre	Votes
1	Inception	2010	Action,Adventure,Sci-Fi	1841066
2	The Dark Knight Rises	2012	Action,Thriller	1387769
3	Interstellar	2014	Adventure,Drama,Sci-Fi	1299334
4	Django Unchained	2012	Drama,Western	1211405
5	The Avengers	2012	Action,Adventure,Sci-Fi	1183655
6	The Wolf of Wall Street	2013	Biography,Crime,Drama	1035358
7	Shutter Island	2010	Mystery,Thriller	1005960
8	Guardians of the Galaxy	2014	Action,Adventure,Comedy	948394
9	Deadpool	2016	Action,Adventure,Comedy	820847
10	The Hunger Games	2012	Action,Adventure,Sci-Fi	795227

Relationship Between Average Rating and Domestic Gross

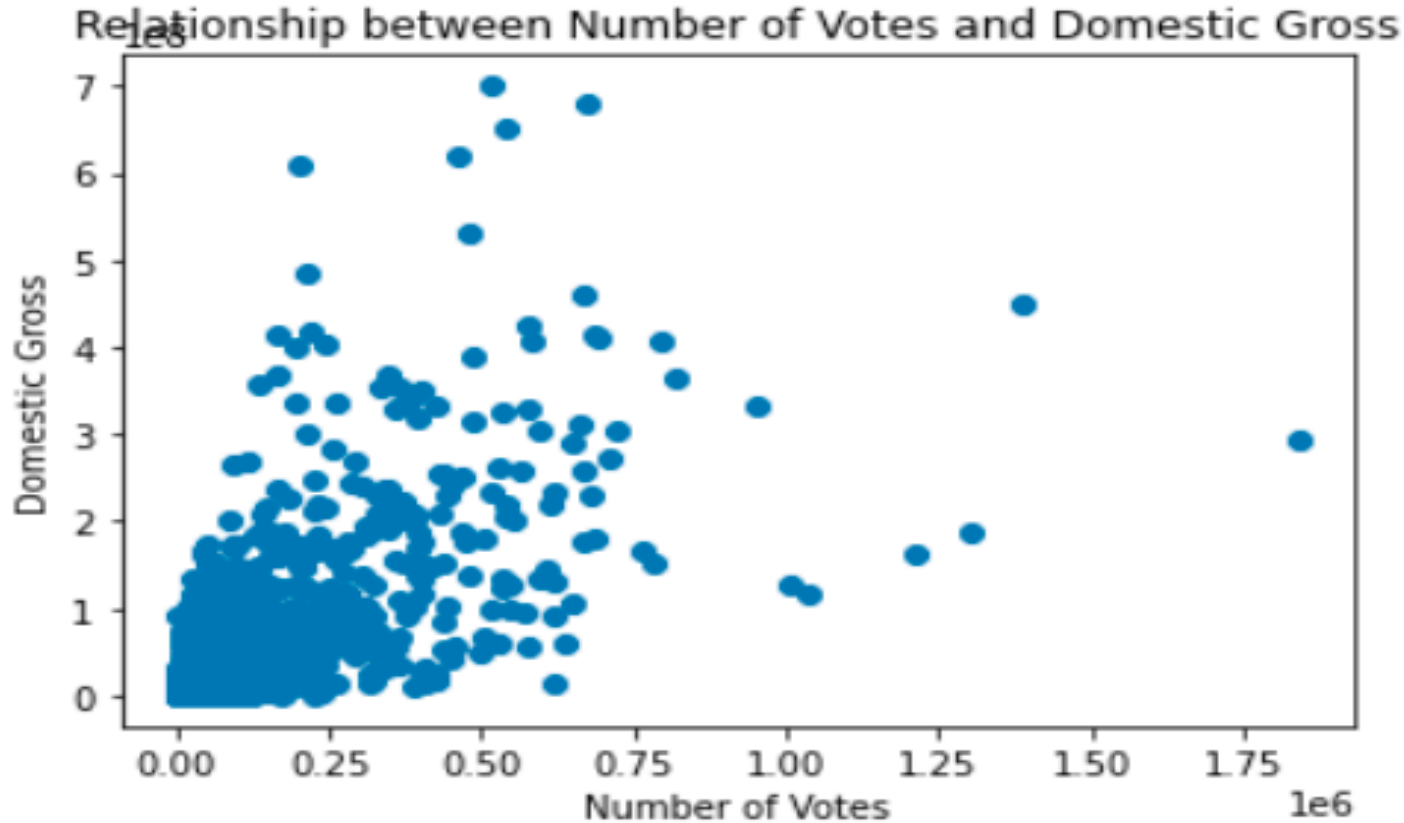


Relationship Between Average Rating and Foreign Gross

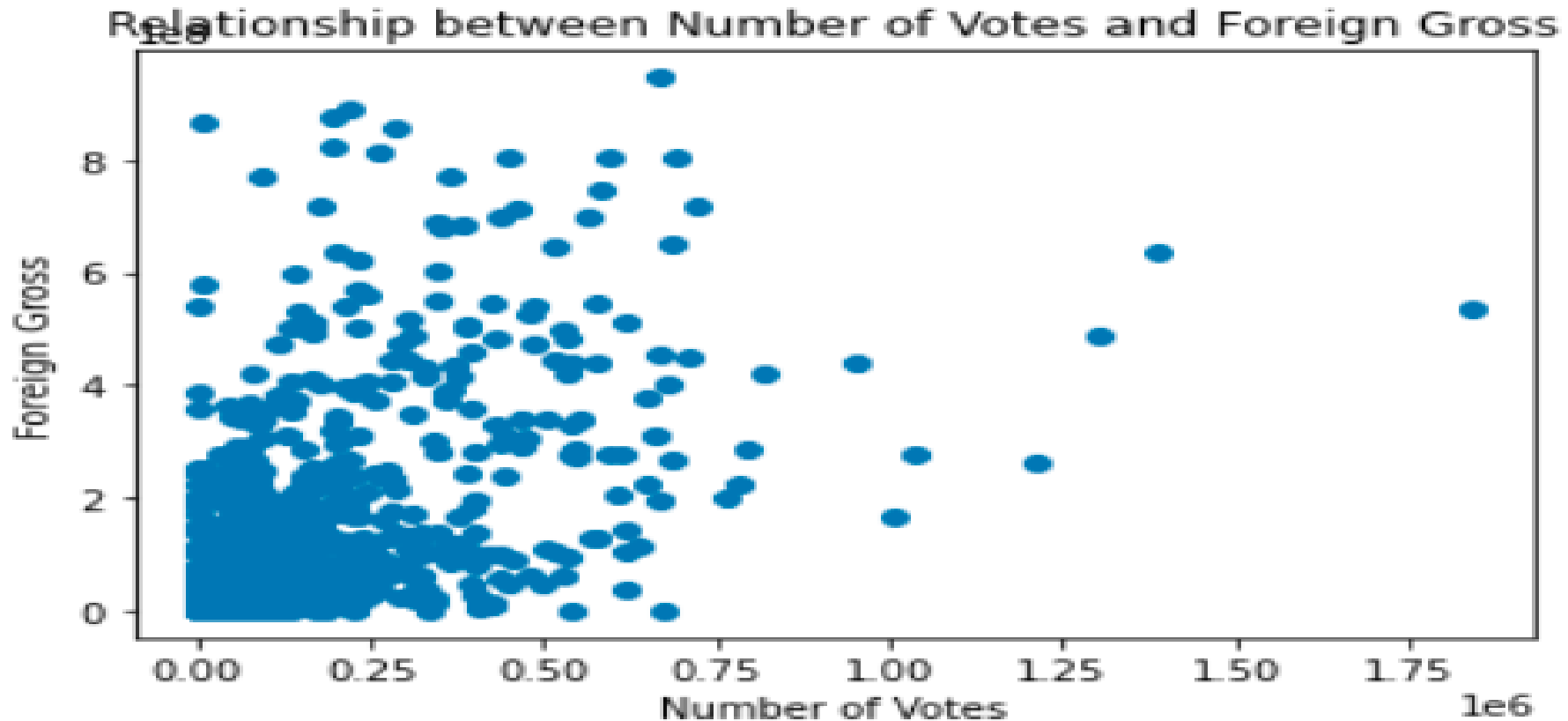


- According to the above representations, we concluded that the higher a movie is rated, the better it sells.
- This shows that people tend to buy/stream highly rated movies more.
- Rating will affect how a movie sells both locally and internationally
- Next, we looked at how engagements (represented by vote count as it shows how many people have
- engaged with the movie)
- affects or relates to the sale of the movie.

Relationship Between Vote Count and Domestic Gross



Relationship Between Vote Count and Foreign Gross



- According to the representations above, we concluded that there is no significant effect between viewers engagement and movie sales.
- What really matters is the average rating that the movie will get.

Relationship Between Movie Genres and Gross Sales

- According to our findings we have seen that the top 10 genres with the highest sales are
 - 1. Action,Adventure,Sci-Fi
 - 2. Adventure,Animation,Comedy
 - 3. Action,Adventure,Fantasy
 - 4. Action,Adventure,Comedy
 - 5. Action,Adventure,Animation
 - 6. Action,Adventure,Thriller
 - 7. Action,Adventure,Drama8. Comedy
 - 9. Action,Thriller
 - 10. Action,Crime,Thriller

Conclusion

- According to the annalysis done on movie genre trends, we concluded that various factors affect viewers behaviour when it comes to buying and watching movies.
- Some of these factors are:
 - Movie rating
 - Genre
 - Year of release
 - Movie reviews

Recommendation

- Our analysis suggests that movie producers should pay attention to the year of release, as
- viewers tend to prefer more recent movies. Producers should, therefore, strive to keep their content fresh and relevant to current trends.
- Overall, the key to success in the movie industry is to produce high-quality movies that appeal to viewers' preferences and to effectively market those movies to a wider audience.
- By considering these factors, movie producers can increase their chances of producing successful movies and building a loyal fan base