



# MICROSOFT MOVIE ANALYSIS

# SUMMARY



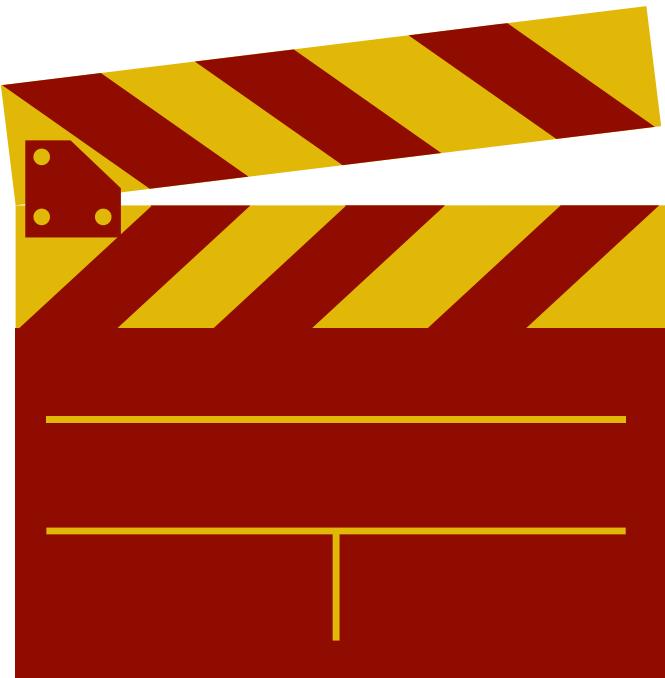
Microsoft seeks to venture into the film industry with a new movie studio despite limited prior experience. To inform its strategy, the project aimed to uncover prevailing film genres, highly rated combinations, and genres with strong audience engagement. The findings reveal that "Documentary" is the most common genre, while top-rated combinations like "Comedy, Documentary, Fantasy" and "Documentary, Family, Musical" offer potential for critical acclaim and audience engagement. "Action-Adventure-Sci-Fi" films stand out for their high audience engagement. The importance of international markets in film success underscores the need for a global approach.

# OUTLINE

- Business Problem
- Data
- Methods
- Results
- Conclusions



# BUSINESS PROBLEM



Microsoft is looking to enter the movie industry by establishing a new movie studio. However, they lack experience and knowledge in creating films. To address this problem, Microsoft needs to identify what types of films are currently performing well at the box office. The primary questions to be answered are:

1. What types of film genres are currently the most common?
2. What are the most highly rated genres?
3. Which genres receive the highest audience engagement?

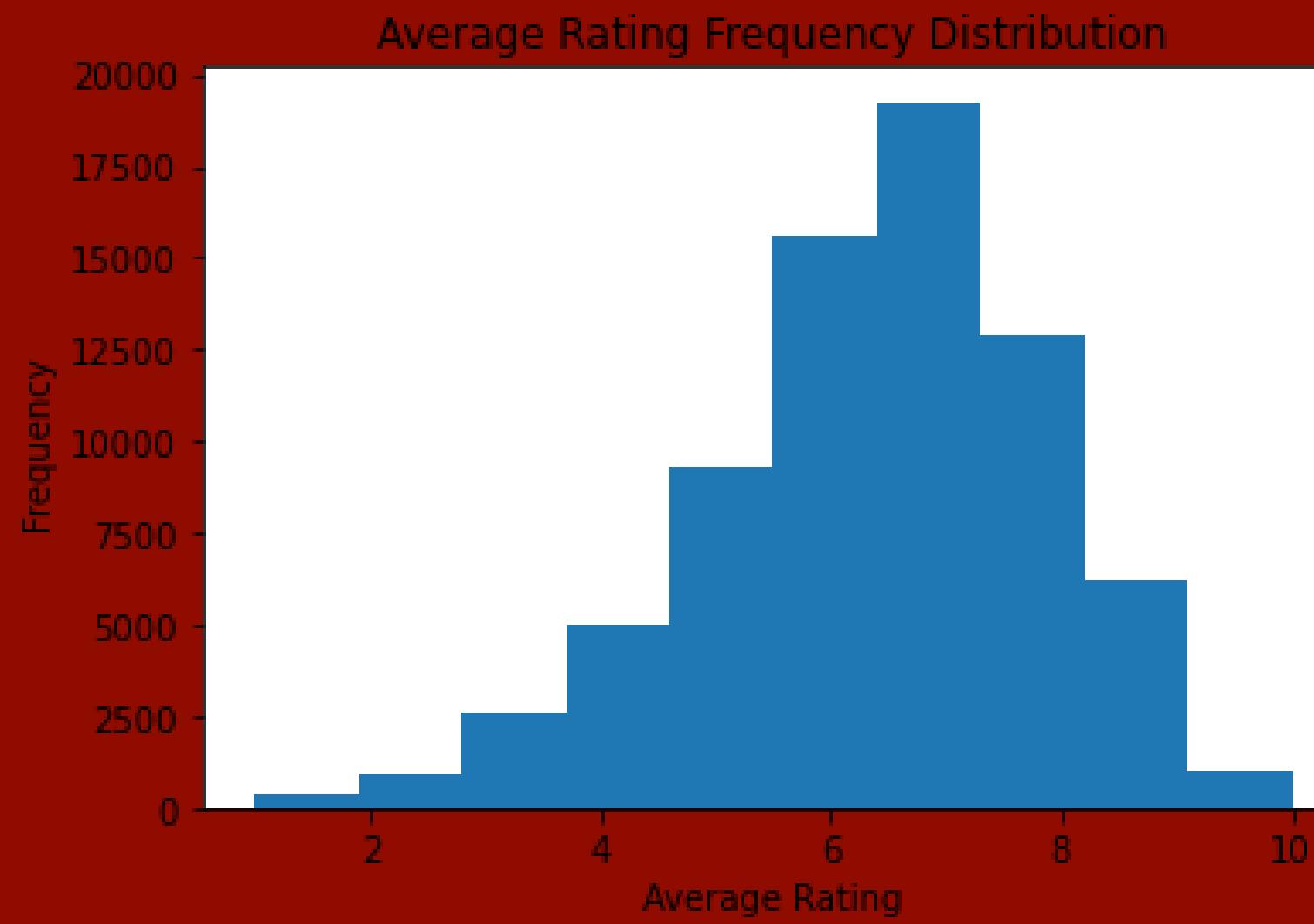
By addressing these questions, Microsoft aims to gain insights into the film market, audience preferences, and successful strategies. This information will help the new movie studio make informed decisions about the types of films to produce and compete effectively in the industry.

# DATA

## SOURCES

IMDB

- Data on movie title, genre, start year, runtime in minutes, average rating and number of votes



Average rating  
Mean = 6.3  
Median = 6.5  
Standard Deviation = 1.4

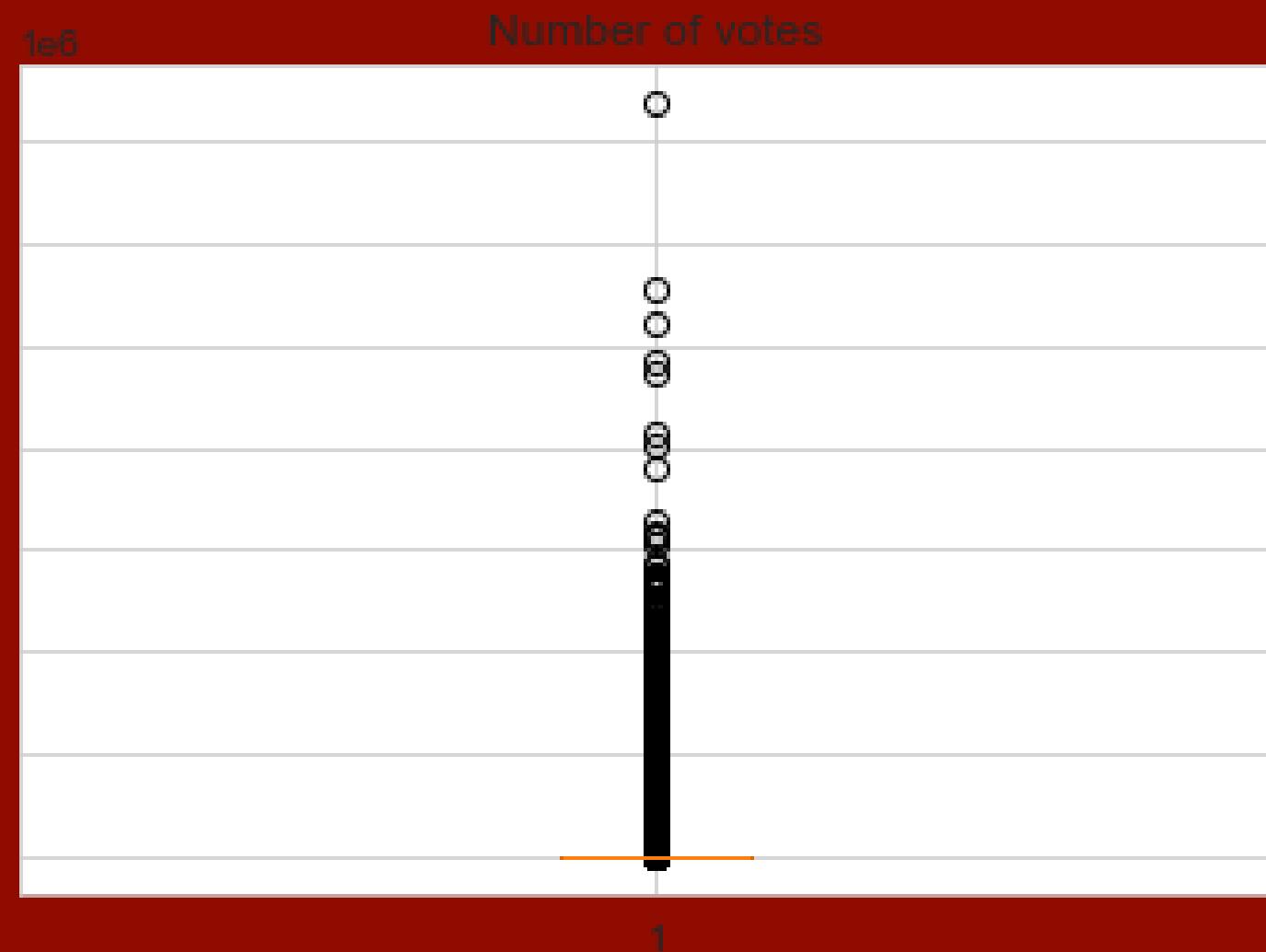
Average rating values have  
a normal distribution

# DATA

## SOURCES

### IMDB

- Data on movie title, genre, start year, runtime in minutes, average rating and number of votes



Number of votes

Mean = 3562.2

Median = 50

Standard Deviation = 3045

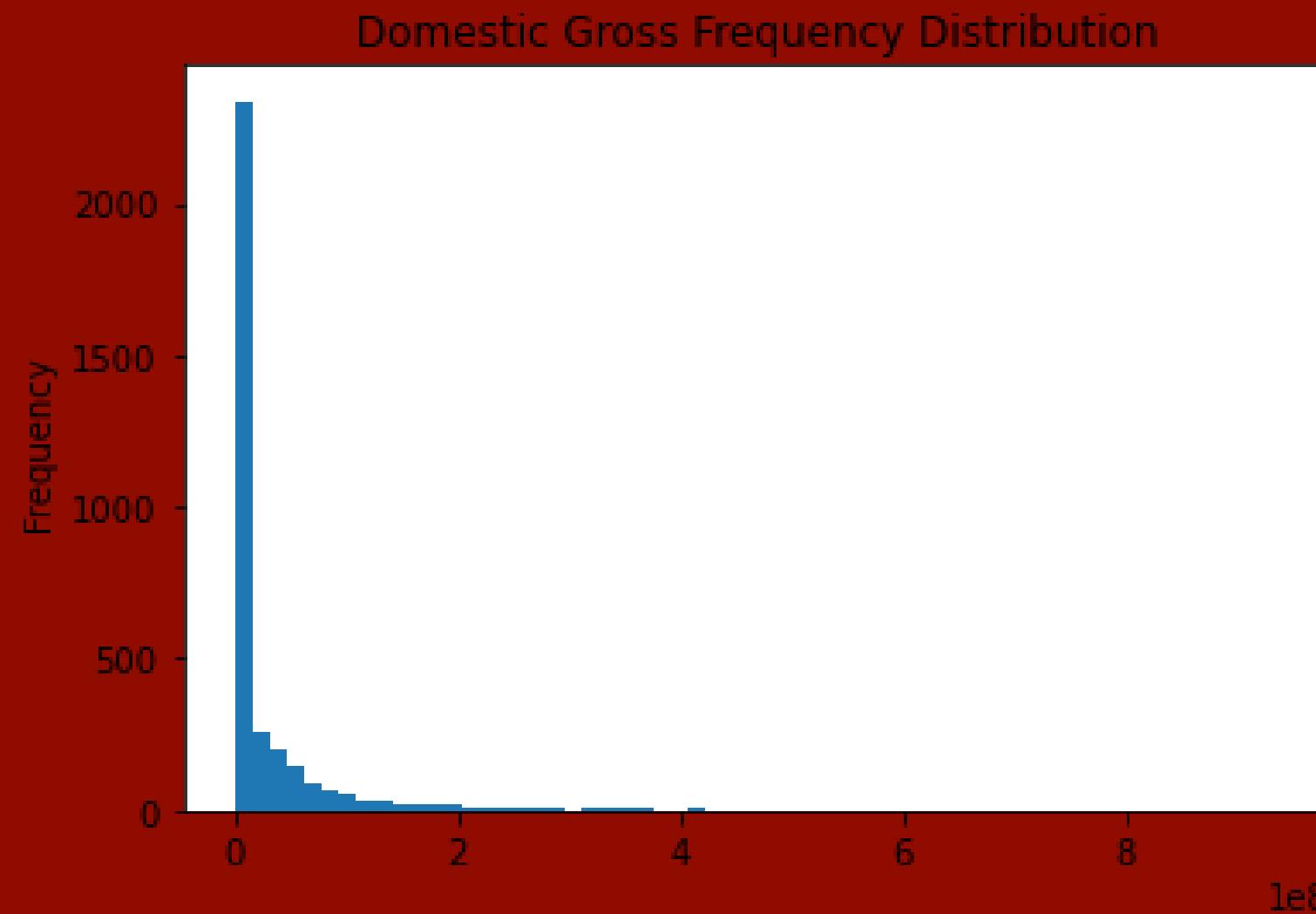
Number of votes has a high degree of variability or outliers

# DATA

## SOURCES

### BOX OFFICE MOJO

- Data on movie title, production studio, domestic gross and foreign gross



Domestic gross

Mean = \$ 28,519,779.62

Median = \$ 1,400.000.0

Standard Deviation=\$6,6750,925.31

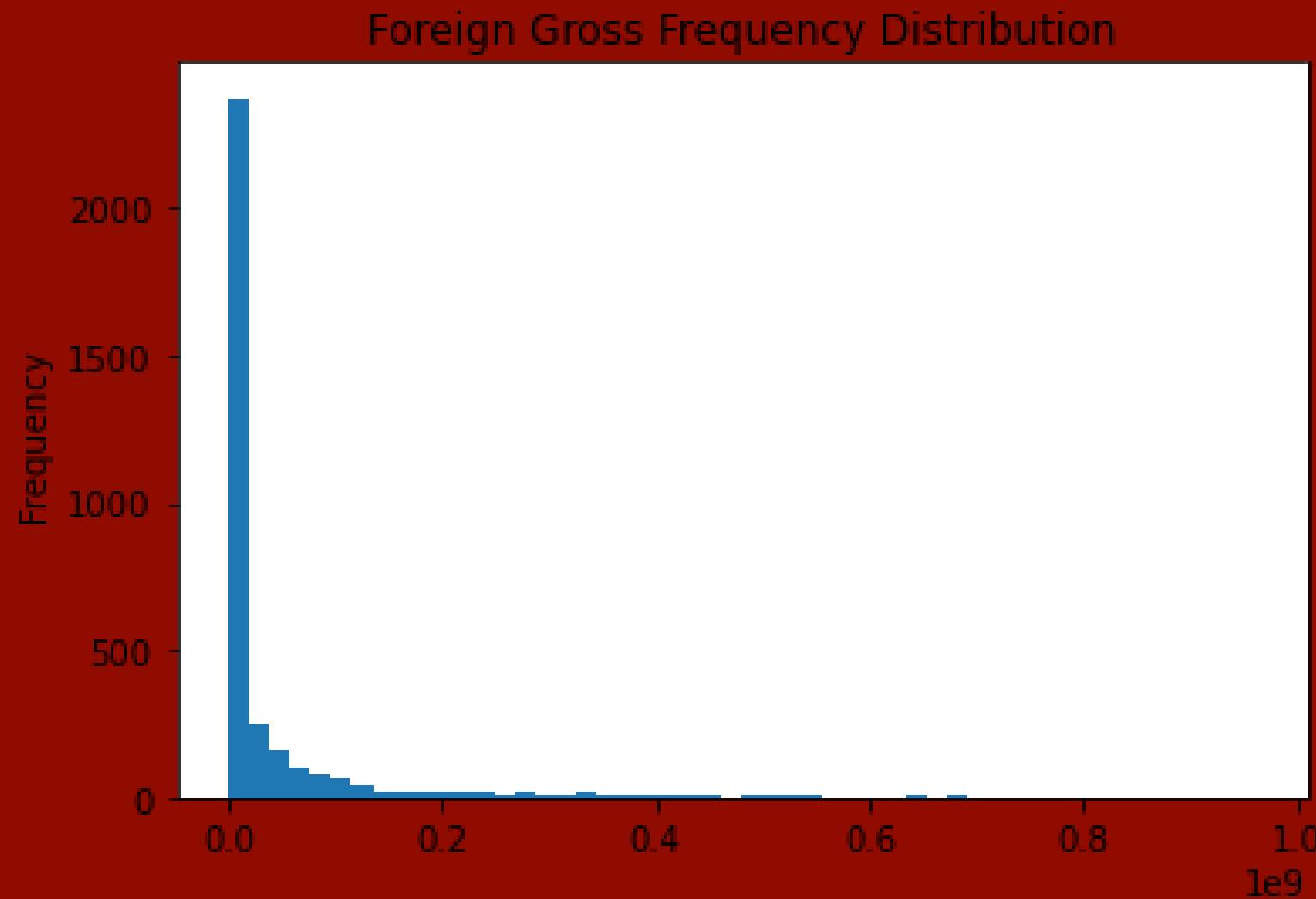
Domestic gross values have a skewed distribution

# DATA

## SOURCES

### BOX OFFICE MOJO

- Data on movie title, production studio, domestic gross and foreign gross



Foreign gross

Mean = \$ 52,483,293.26

Median = \$ 18,700,000.0

Standard

Deviation=\$110,046,149.75

Foreign gross values have a skewed distribution

# METHODS

Missing values were handled by:

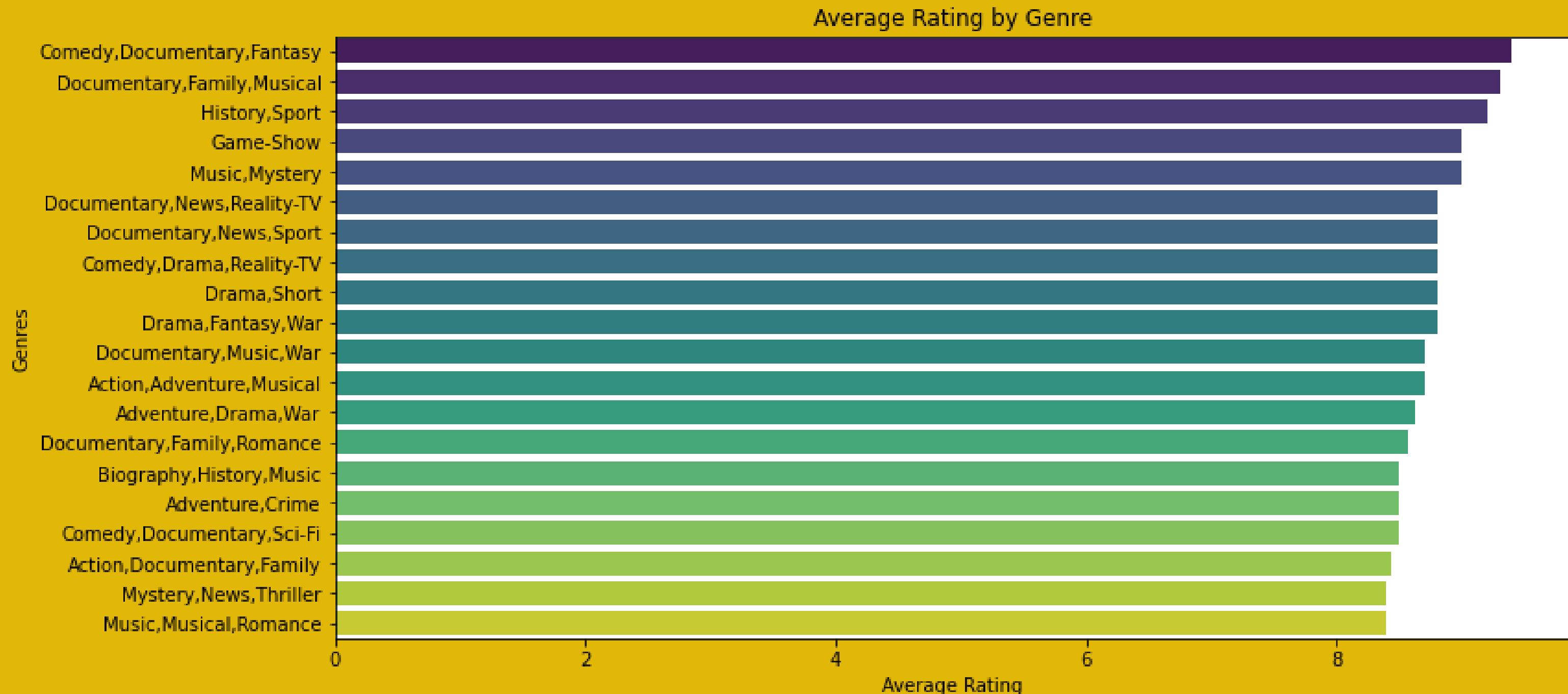
- Dropping rows that contained missing genres
- Imputing median values into missing foreign gross and domestic gross values

Data Aggregation was done by merging two dataframes by their shared key

Other data preparation was done by:

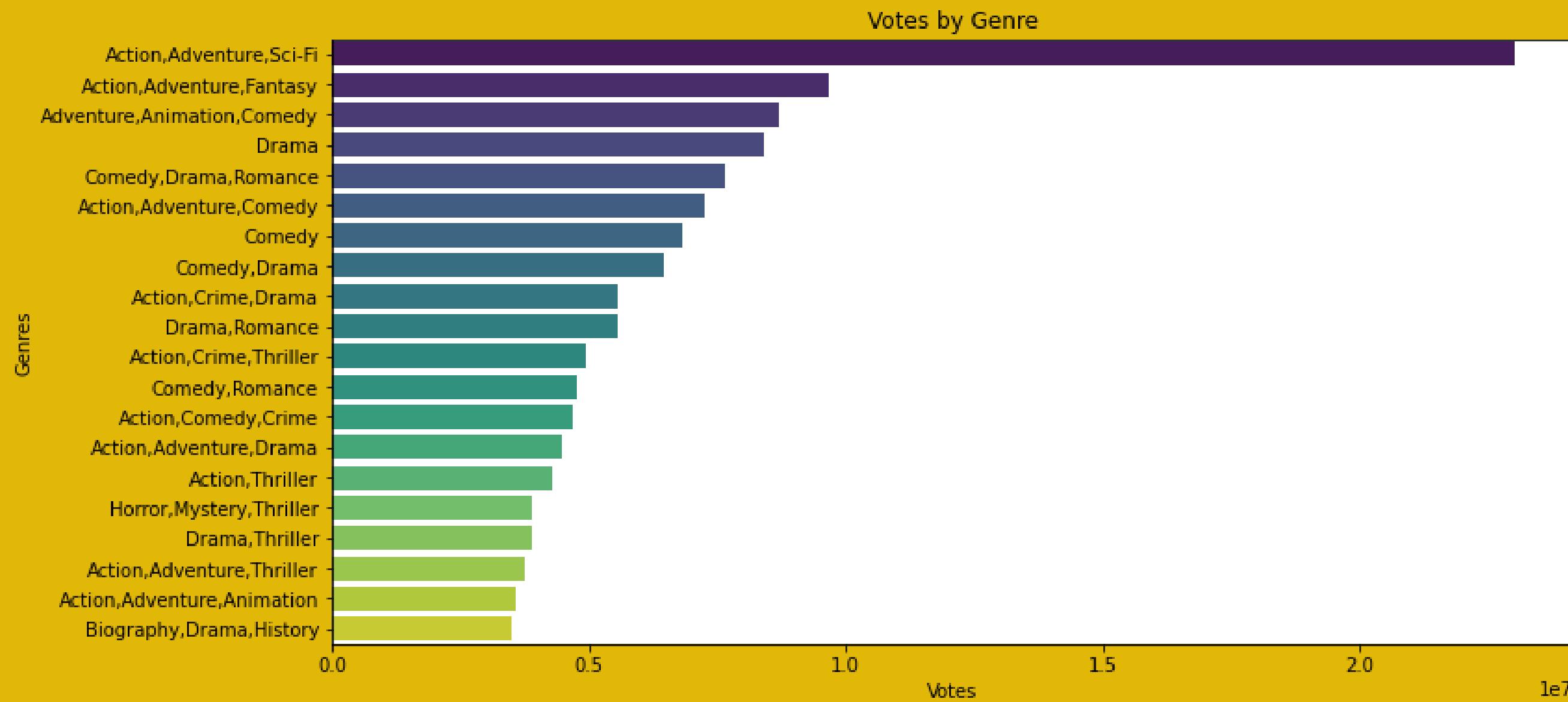
- Converting data types
- Converting to numeric
- Grouping by

# RESULTS



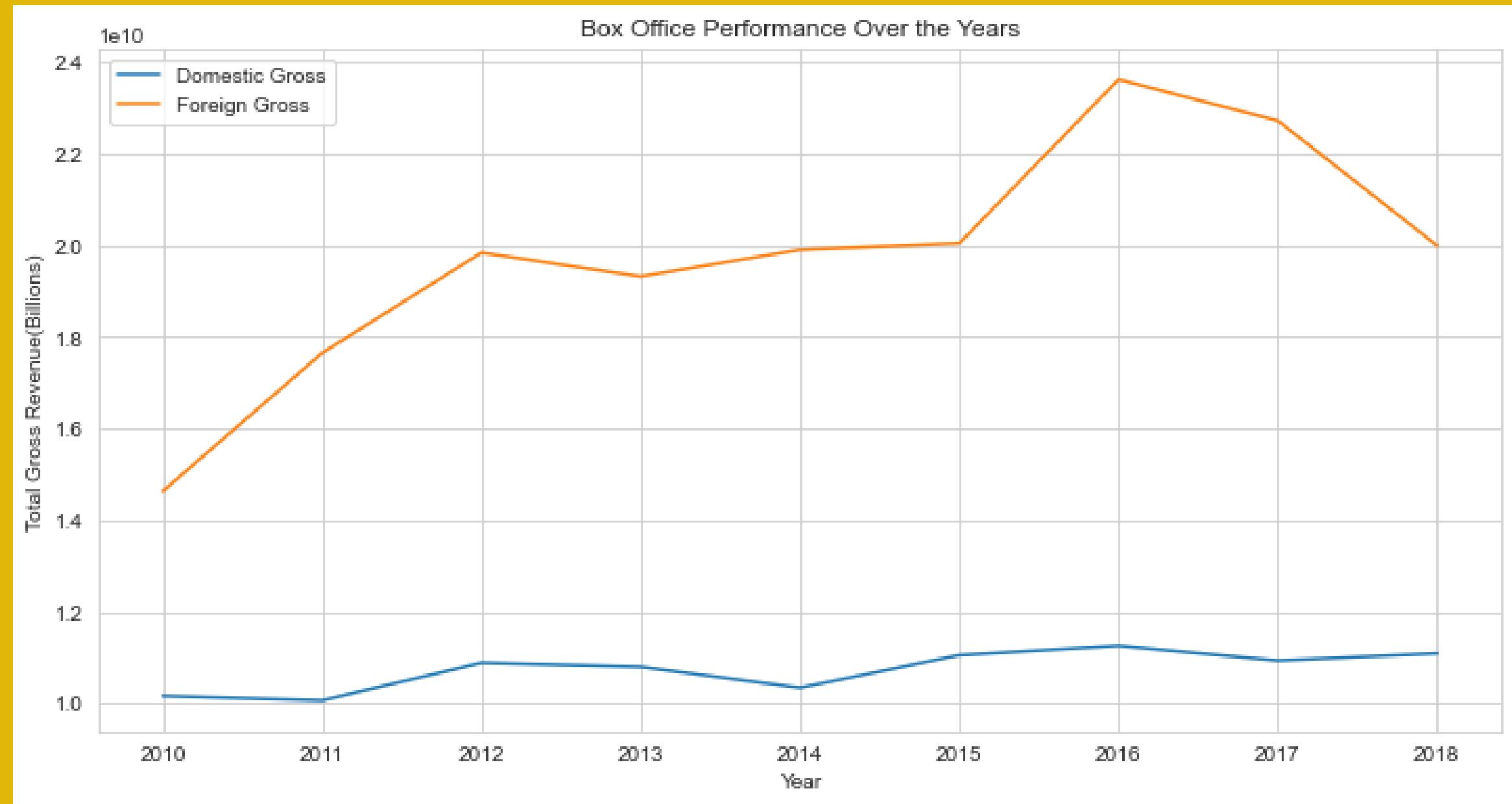
- Documentary is the most common genre with 32,185 films.
- Drama and Comedy follow as the second and third most common genres with 21,486 and 9,177 films, respectively.
- Horror is the fourth most common genre with 4,372 films.

# RESULTS



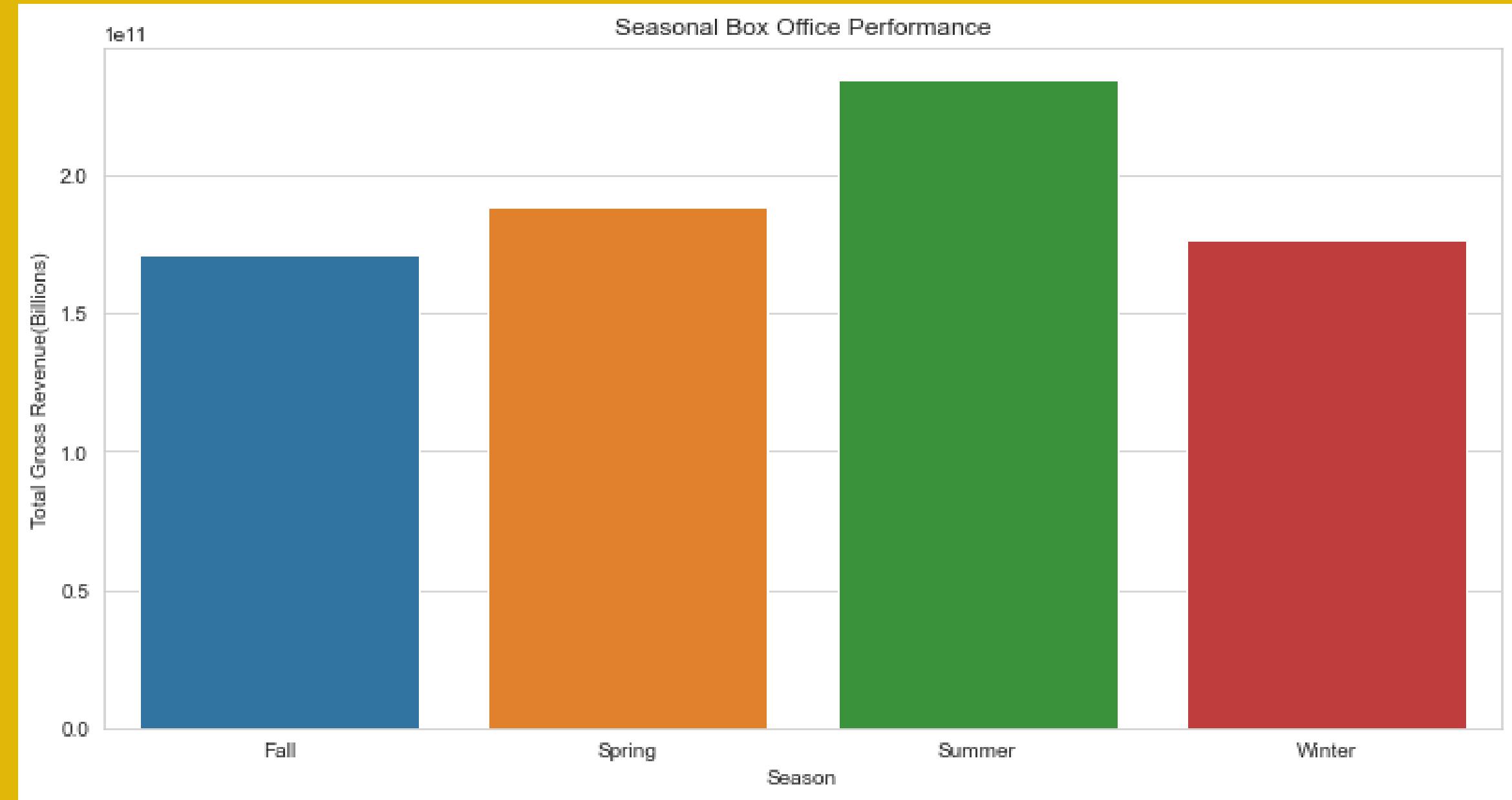
- "Action, Adventure, Sci-Fi" received a total of 23,023,248 votes, making it the most popular genre combination among voters.

# RESULTS



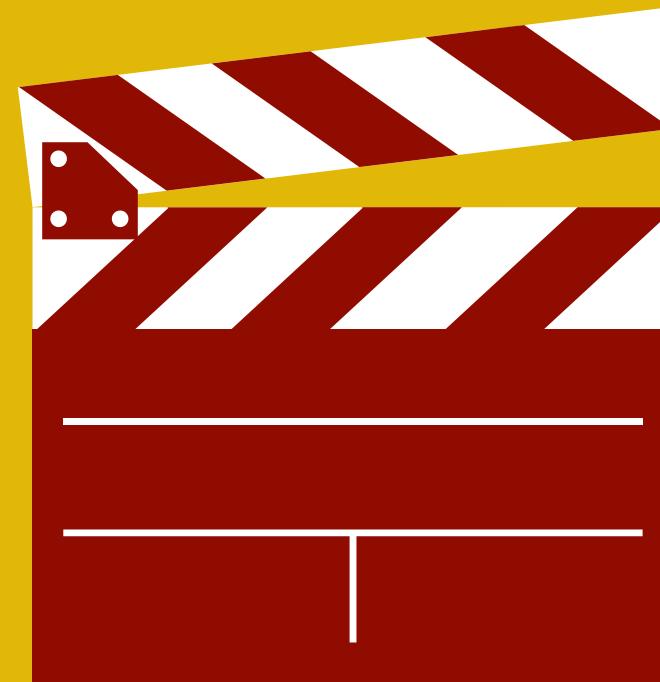
- Foreign gross earnings consistently outperformed domestic gross earning
- The highest combined earnings were observed in 2016, with domestic gross earnings reaching approximately \$11.26 billion and foreign gross earnings at approximately \$23.63 billion.

# RESULTS



- Summer recorded the highest earnings, followed by spring with the second highest earnings, followed by winter then fall

# CONCLUSION



- Documentary is the most prevalent genre
- The top-rated genre combinations include "Comedy, Documentary, Fantasy" and "Documentary, Family, Musical."
- Action-Adventure-Sci-Fi films receive the highest audience engagement.
- International markets play a significant role in a film's overall success.

## LIMITATION

The data provided may not be an accurate representation of the current trends as the film industry keeps evolving

# RECOMMENDATIONS

- Prioritize development and production of high-quality documentary content. Documentary is the most prevalent genre with 32,185 films in the dataset. This indicates a substantial audience interest in real-life stories, historical events, and informative content.
- Consider creating films that combine multiple genres. The top-rated genre combinations include "Comedy, Documentary, Fantasy" and "Documentary, Family, Musical. This approach can result in unique and appealing productions that resonate with a diverse audience.
- Prioritize the production of Action-Adventure-Sci-Fi films. This genre has the highest number of votes, indicating a significant level of interest and engagement from the audience.



# OTHER RECOMMENDATIONS

- Given the substantial increase in foreign gross revenue from 2010 to 2018, international markets play a significant role in a film's overall success. Therefore, the studio should consider tailoring their films to international audiences as well as investing in targeted international marketing, localization, and distribution strategies to further capitalize on the global audience and maximize revenue from foreign markets.
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- Since the summer season generates the highest total gross earnings, the studio should strategically plan the release of their big-budget and highly-anticipated movies during the summer months when the box office tends to perform exceptionally well. This can maximize the studio's revenue potential and capitalize on the season's strong box office performance



**THANK YOU**