



Microsoft Movie Studio Analysis

By Ashley Eakland

Summary

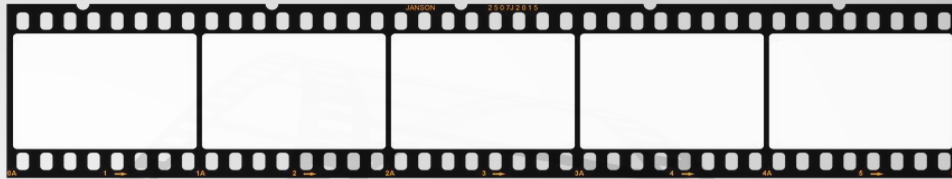


Microsoft is considering opening a movie studio and is seeking input on how best to achieve success in this venture.

My completed analysis will provide insight to promote a successful launch into this new industry.

Outline

- Business Problem
 - *How I see it...*
- Data
 - *What I used...*
- Methods
 - *How I used it...*
- Results
 - *What I found from it...*
- Conclusions
 - *What I am recommending...*



The background of the slide features a large, light gray film reel on the left and a film strip that winds across the right side. The text is overlaid on a semi-transparent white rectangular area.

Business Problem

So you want a piece of the movie-making pie, but you don't know where to start... Who could blame you!

Here are the things you should be considering:

- **Genre**
- **Movie Length**
- **Ratings**

Data

IMDB - well known source for film information - utilized 15000 unique titles from:

- Title Basics dataset of 146,144 items
- Title Ratings dataset of 73,856 title numbers

Box Office Mojo - dedicated to tracking box office revenue in an algorithmic manner - utilized 1000 top domestic titles from:

- Gross Profit Data for 3387 title numbers from both domestic and foreign markets

Methods

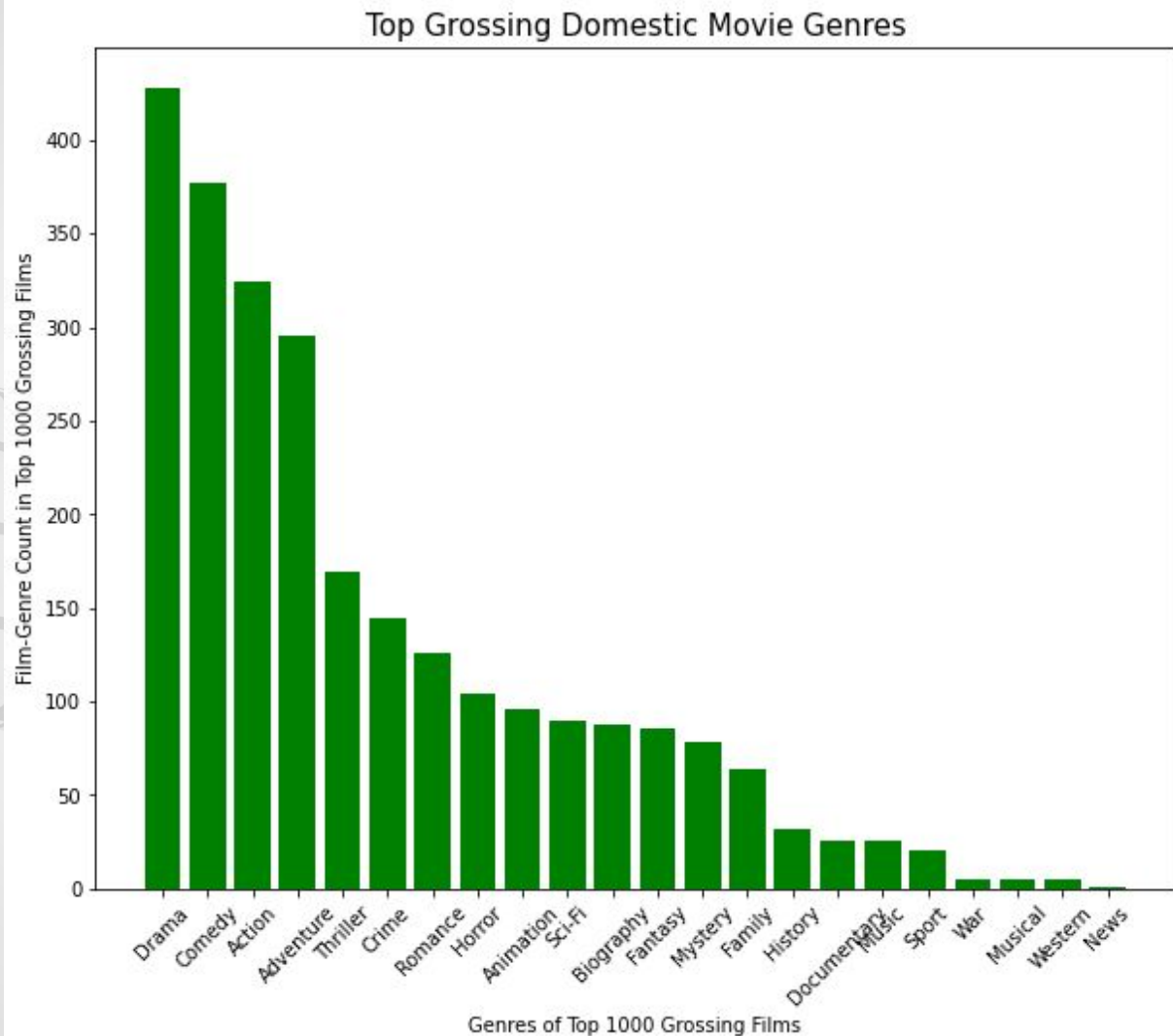


Using exploratory data analysis, statistics, and data visualization, I identified what I believe to be important factors in a films success rate.

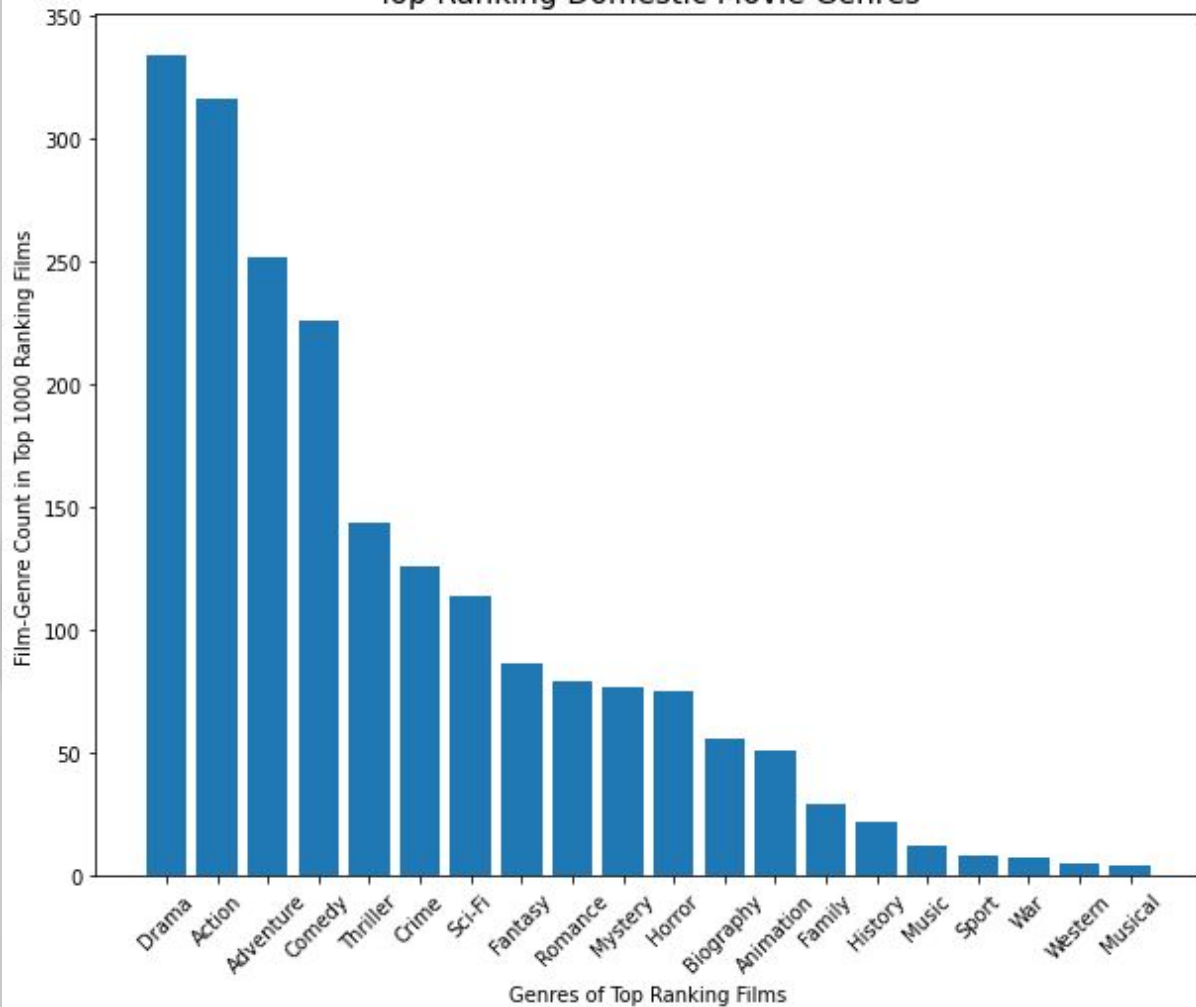
Results

Genres

Genres of the top 1000 films in terms of gross profit are shown here.



Top Ranking Domestic Movie Genres



Results

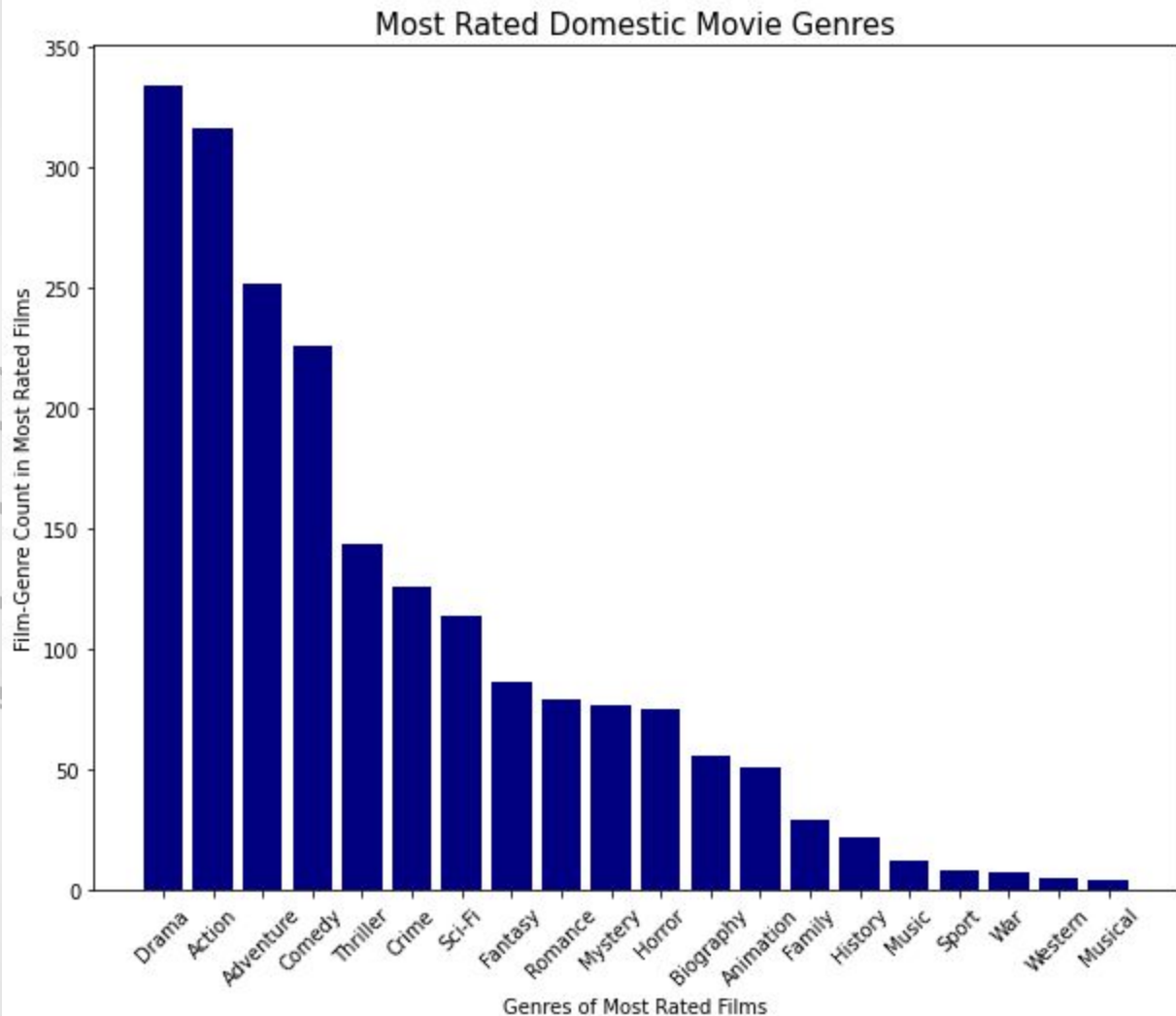
Genres cont.

The 1000 films with the highest average rating have very similar results in terms of genres.

Results

Genres cont.

Lastly, films with the most number of overall ratings are in line with top performing average rating and gross profit genres.

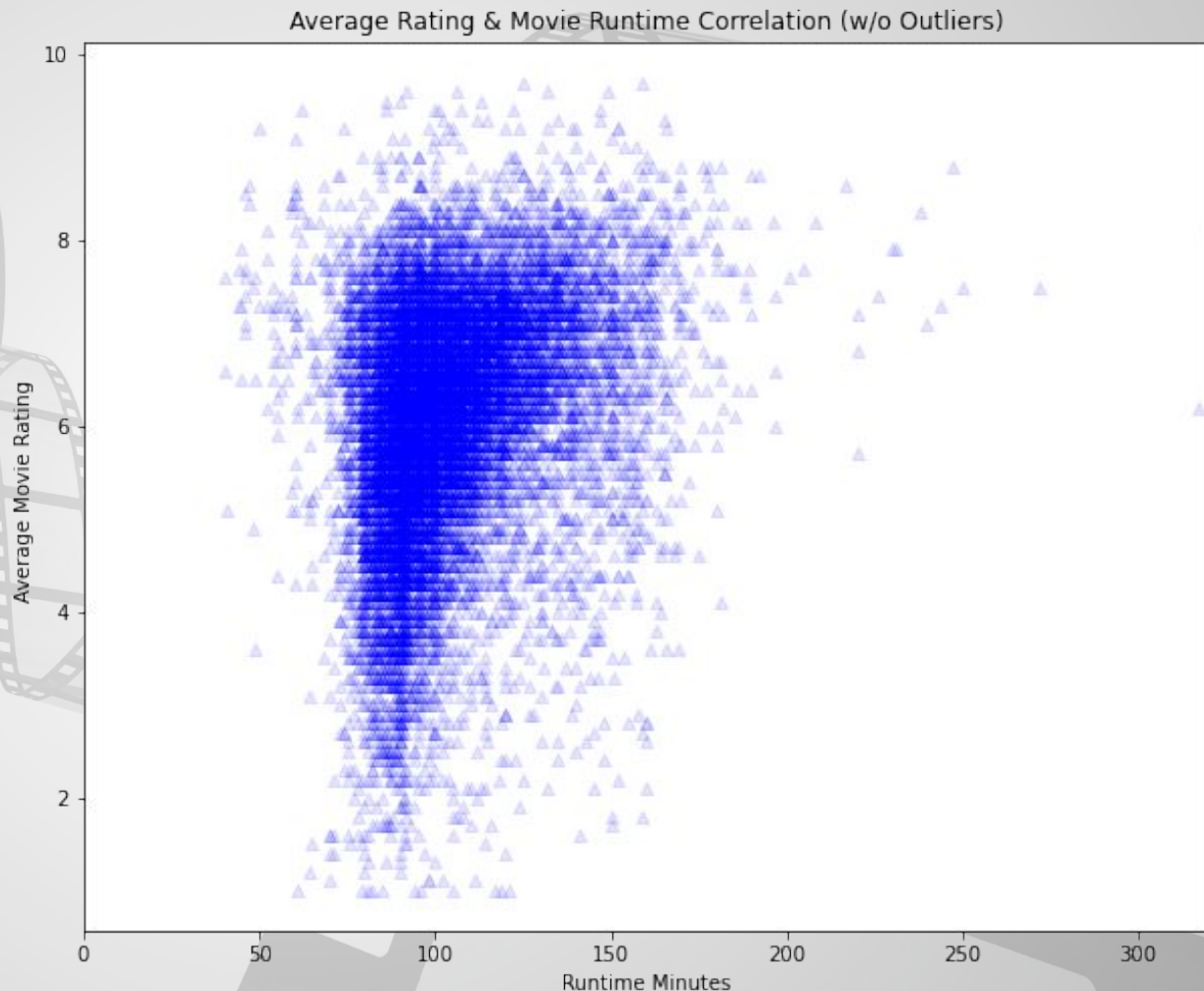


Results

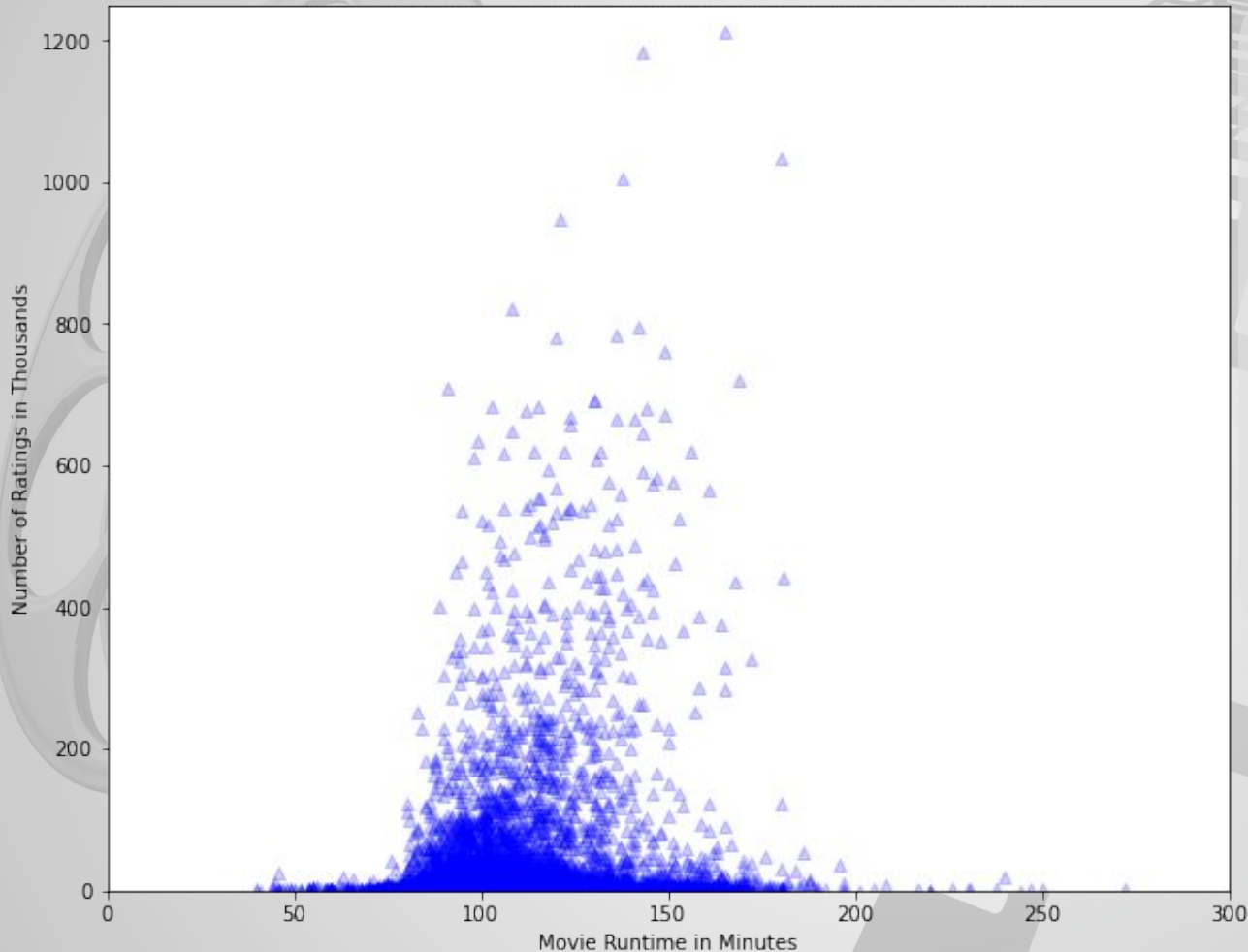
Movie Length

How long should the movie be?

The scatter plot here shows a runtime range for optimal average rating.



Number of Votes & Movie Runtime Correlation (w/o Outliers)



Results

Movie Length cont.

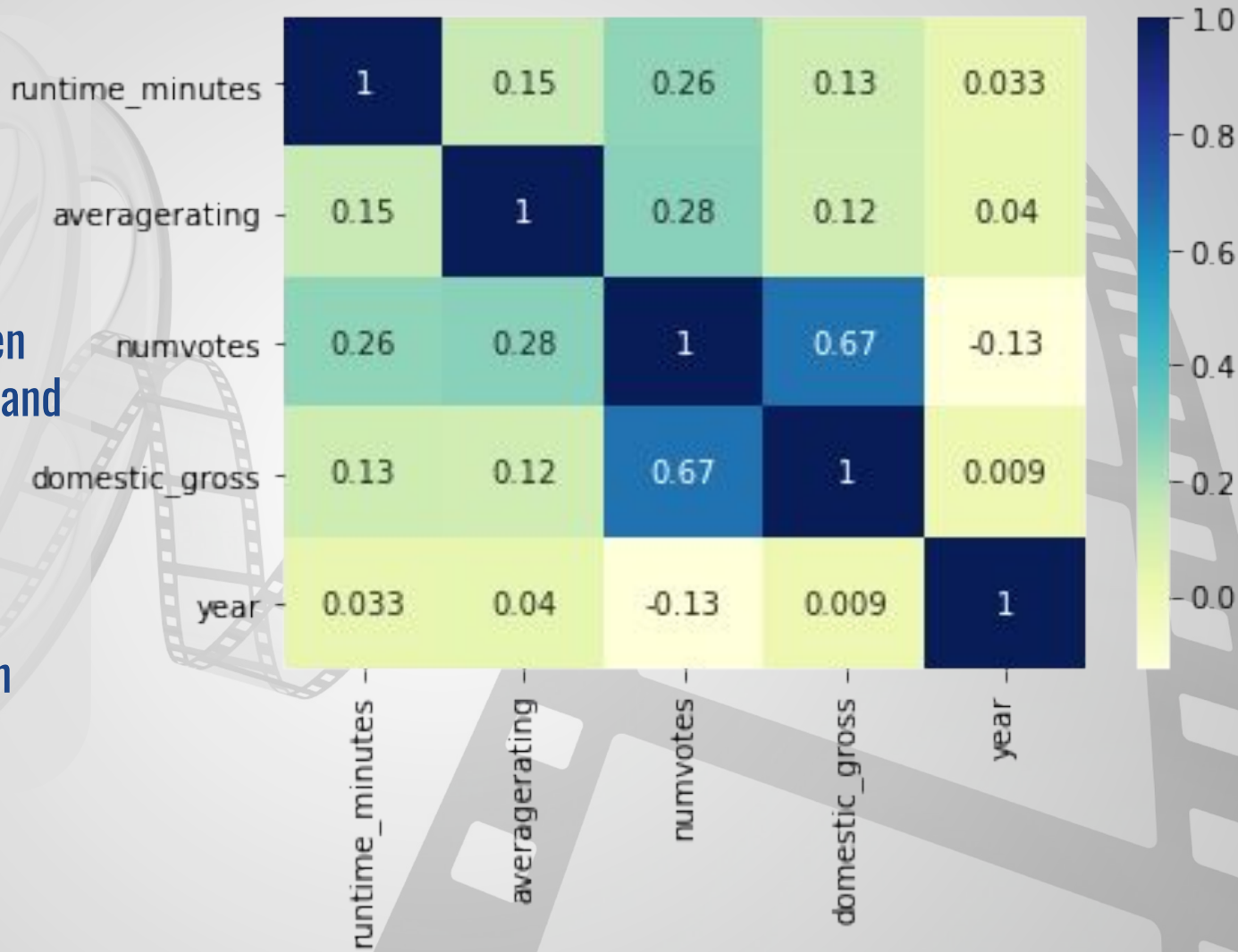
Inline with the average rating correlation, we see clustering around the 100-120 minute mark for overall number of ratings as well.



Results

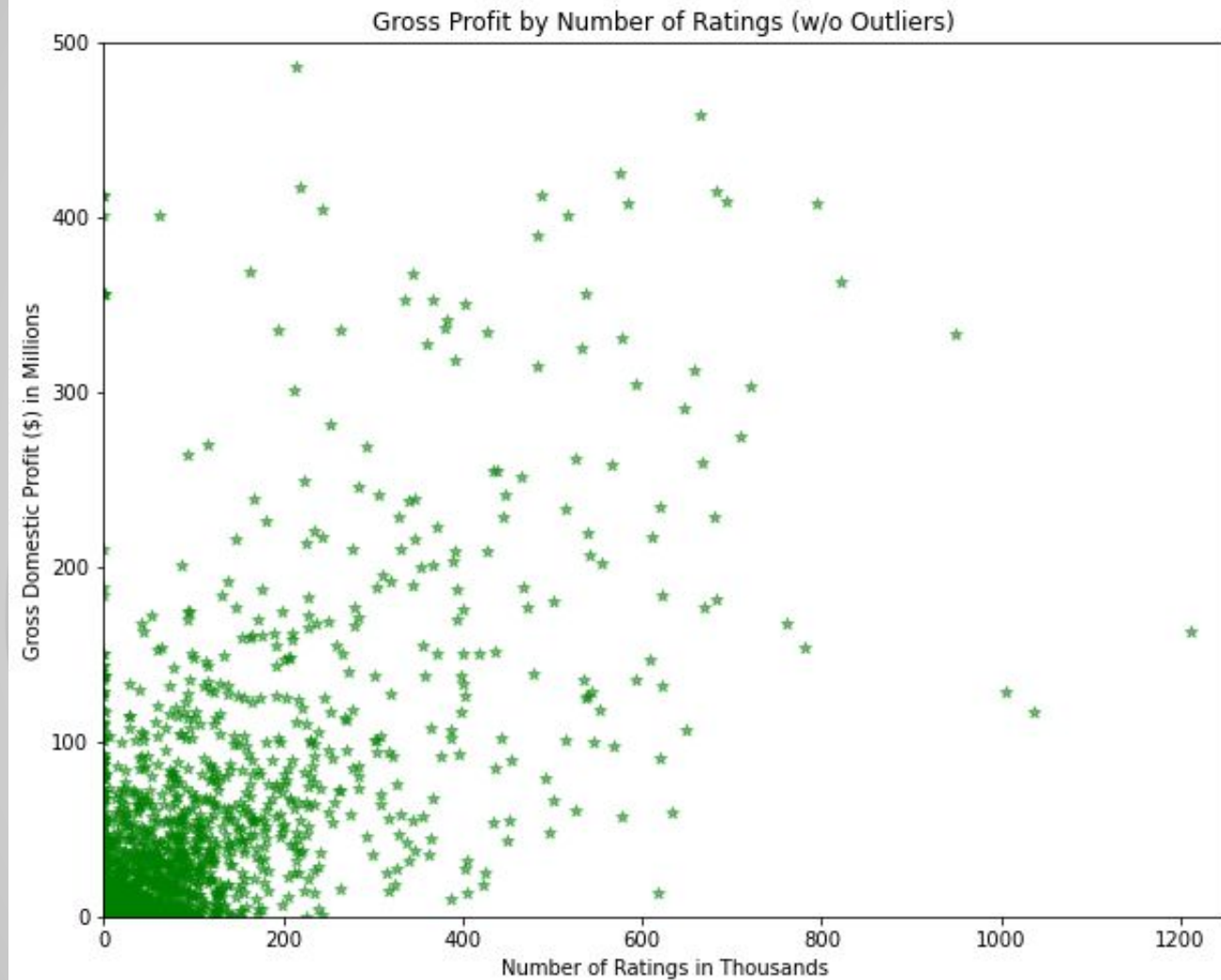
Rating importance

- Strong positive correlation between number of ratings and domestic gross
- Weak positive correlation seen on average rating



Results

Rating importance cont.



In Conclusion...

- Target Adventure, Action, Comedy and Drama genres.
- To maximize ratings, stay around 100 minutes.
- Go for volume.



Limitations of this analysis include:

- *lack of in depth insight into individual genres and their relationships due to code complications causing skewed data*
- *lack of analysis into crew and timing of release due to time constraints - these would be variables worth analysis at a later date*





Thank You!

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