



MOVIES

OVERVIEW

WHAT AFFECTS THE
POPULARITY
&
PROFITABILITY
OF A MOVIE?



DATA
SOURCES

- Box Office Mojo
- IMDB
- Rotten Tomatoes
- TheMovieDB.org



1

Runtime

Top 100 Movies

Mean Runtime : 121.34 minutes
Median Runtime : 121.50 minutes

Bottom 100 Movies

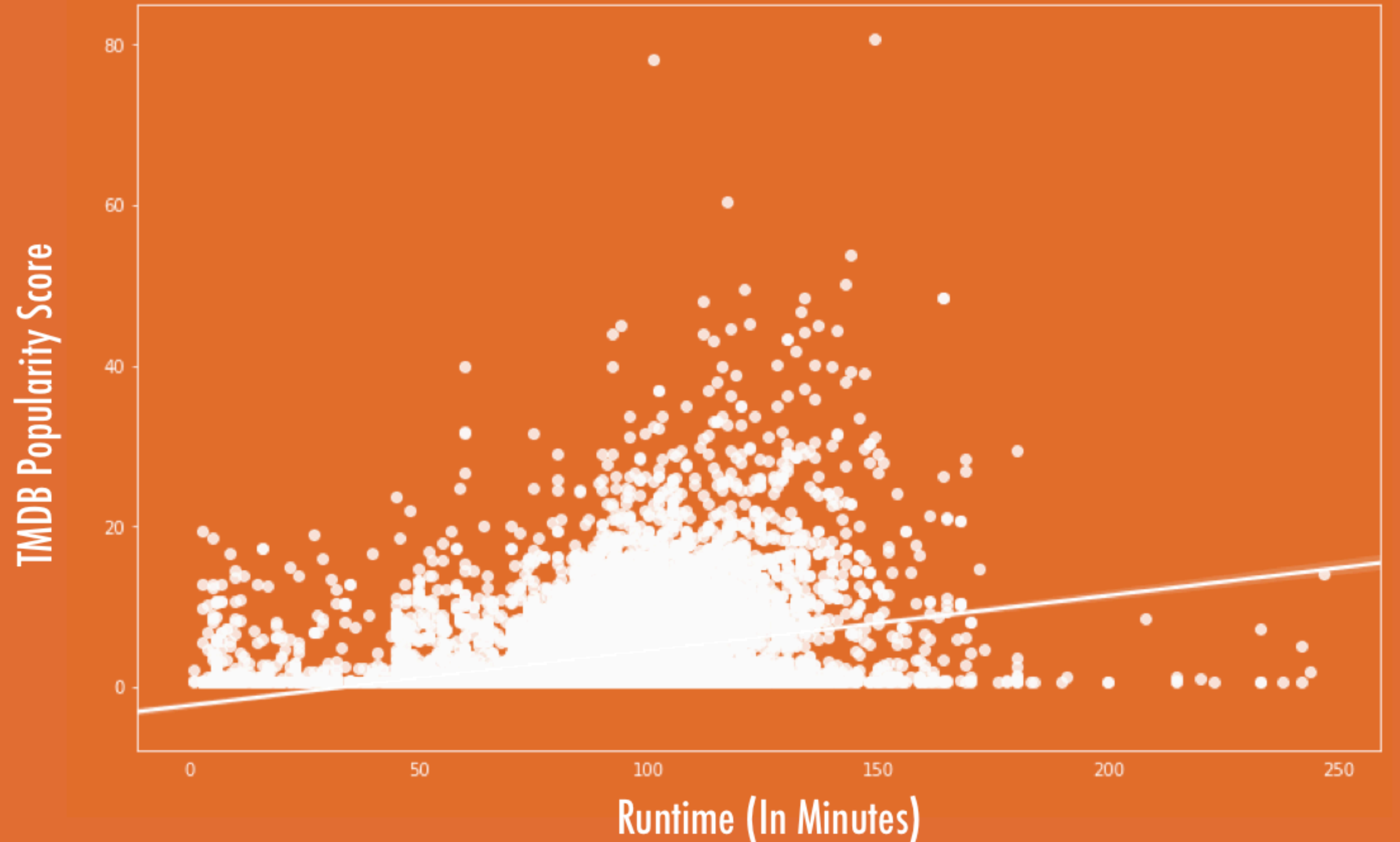
Mean Runtime : 86.43 minutes
Median Runtime : 88.00 minutes

Conclusion?

With a correlation coefficient less than .5 , runtime and popularity are not necessarily closely tied.

However, looking at the mean and median for the most popular and least popular movies, it might be a good idea to produce a movie closer to 2 hours long.

Runtime v. Popularity



Correlation Coefficient: 0.2772

Top 100 Movies

Mean Runtime : 117.17 minutes

Median Runtime : 122.00 minutes

Bottom 100 Movies

Mean Runtime : 90.18 minutes

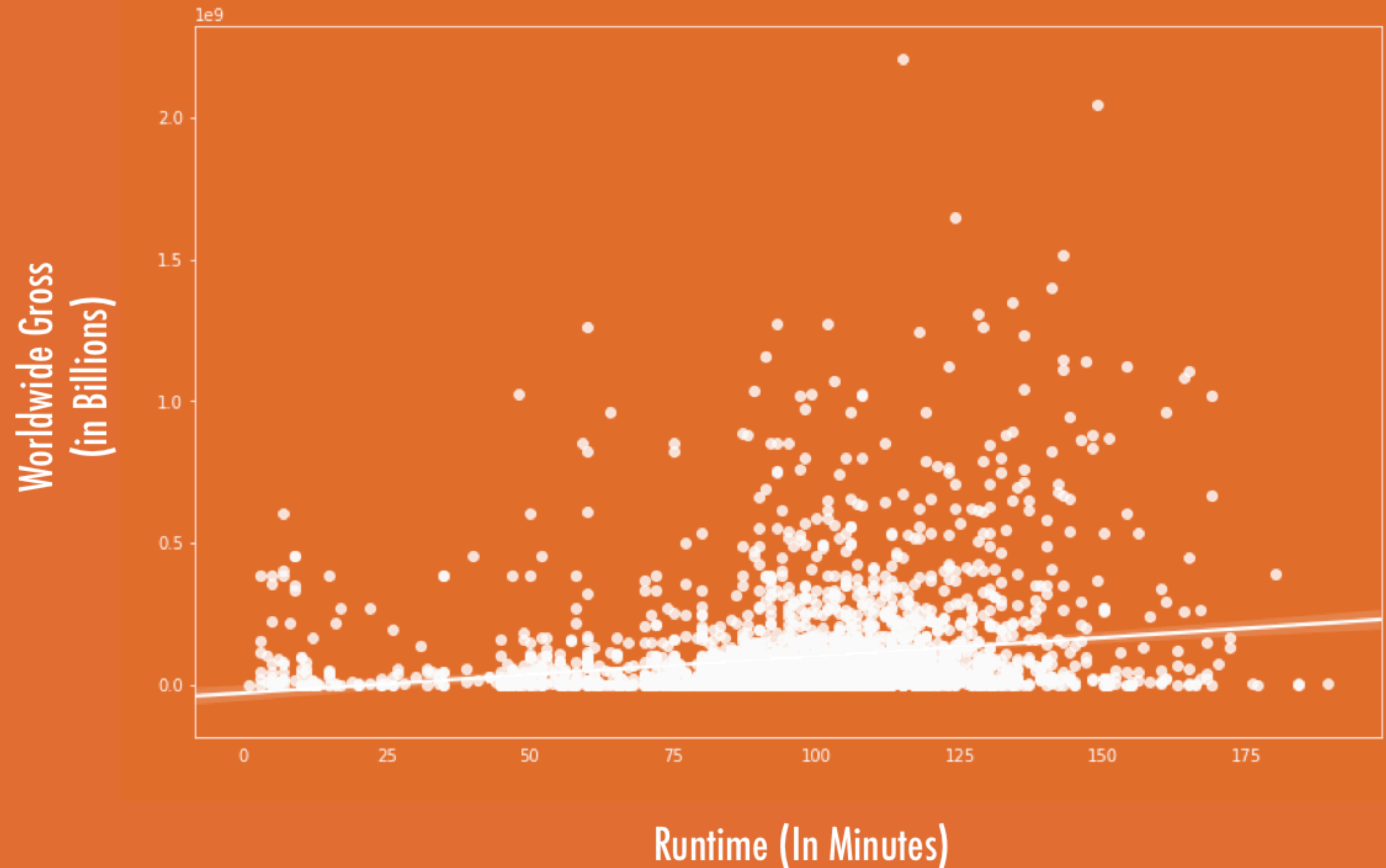
Median Runtime : 93.00 minutes

Conclusion?

Runtime and worldwide gross are correlated even less than popularity and worldwide gross.

However, I still think this is an interesting metric and useful to point out the average runtimes of the highest grossing movies v. the lowest grossing movies.

Runtime v. Worldwide Gross



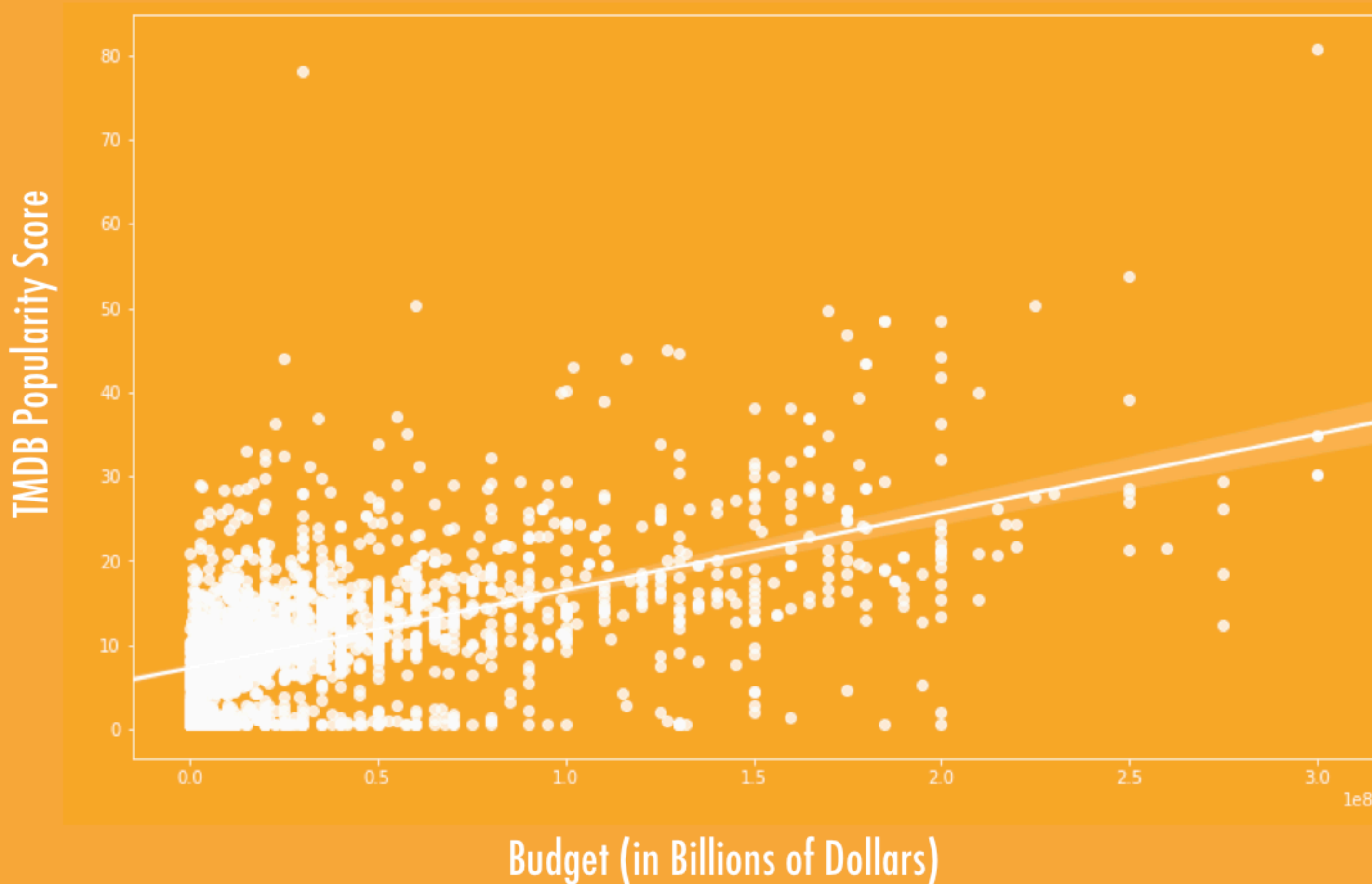
Correlation Coefficient: 0.1845



2

Budget

Budget v. Popularity



Correlation Coefficient: 0.5636

Top 200 Movies

Mean Budget : \$114.72 m
Median Budget : \$106.00 m

Bottom 200 Movies

Mean Budget : \$21.65 m
Median Budget : \$5.95 m

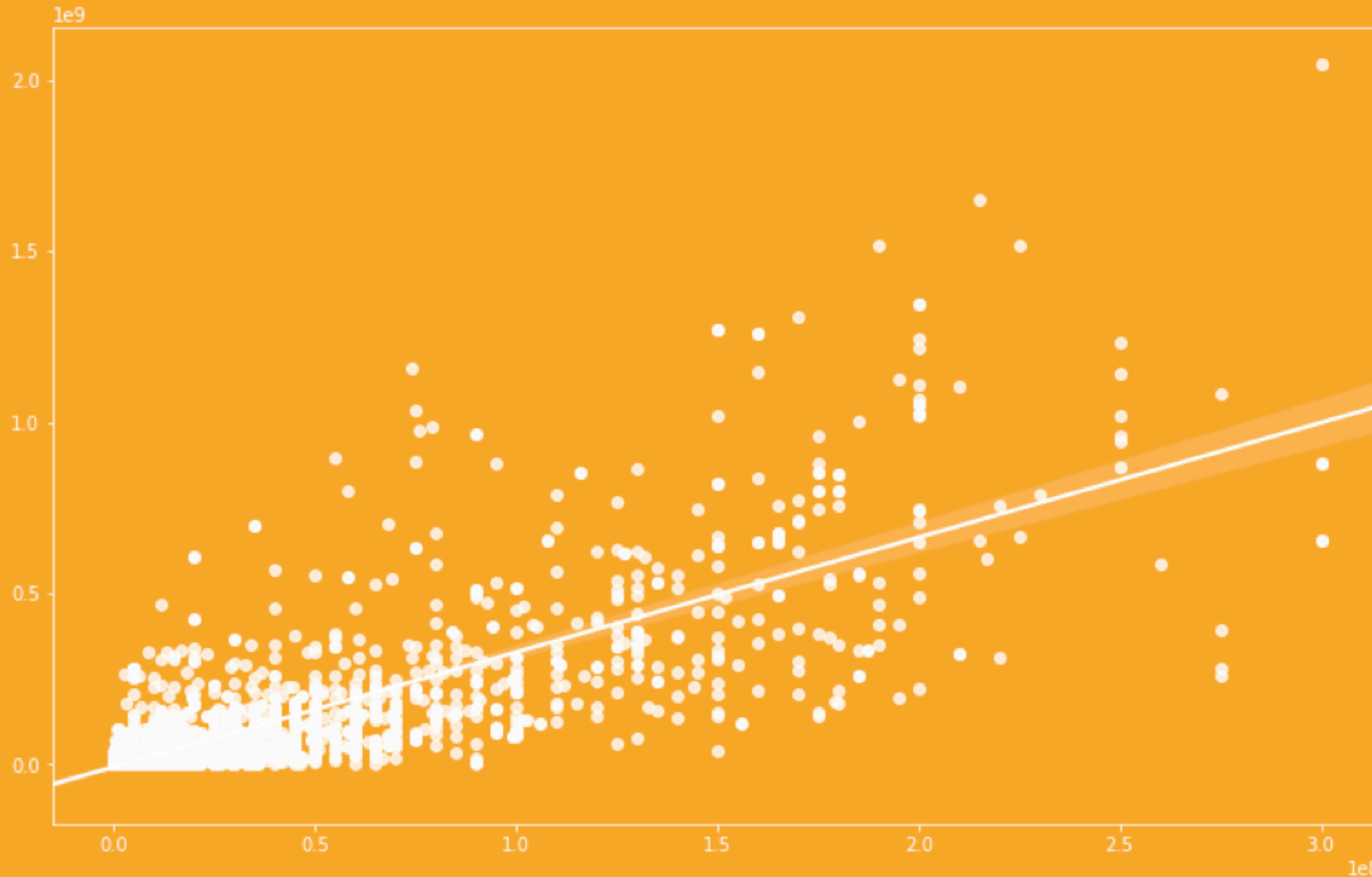
Conclusion?

The results are clear: get a bigger budget.

Budget and popularity have a fairly strong correlation and there is a significant difference between the budgets for the most popular and least popular films.

Budget v. Worldwide Gross

Worldwide Gross
(in Billions)



Budget (in Billions of Dollars)

Correlation Coefficient: 0.7865

Top 200 Movies

Mean Budget : \$144.86 m
Median Budget : \$150.00 m

Bottom 200 Movies

Mean Budget : \$4.46 m
Median Budget : \$1.80 m

Conclusion?

This reiterates my previous point - you truly have to spend money to make money.

With a correlation coefficient of .7865 , these two factors are closely linked.

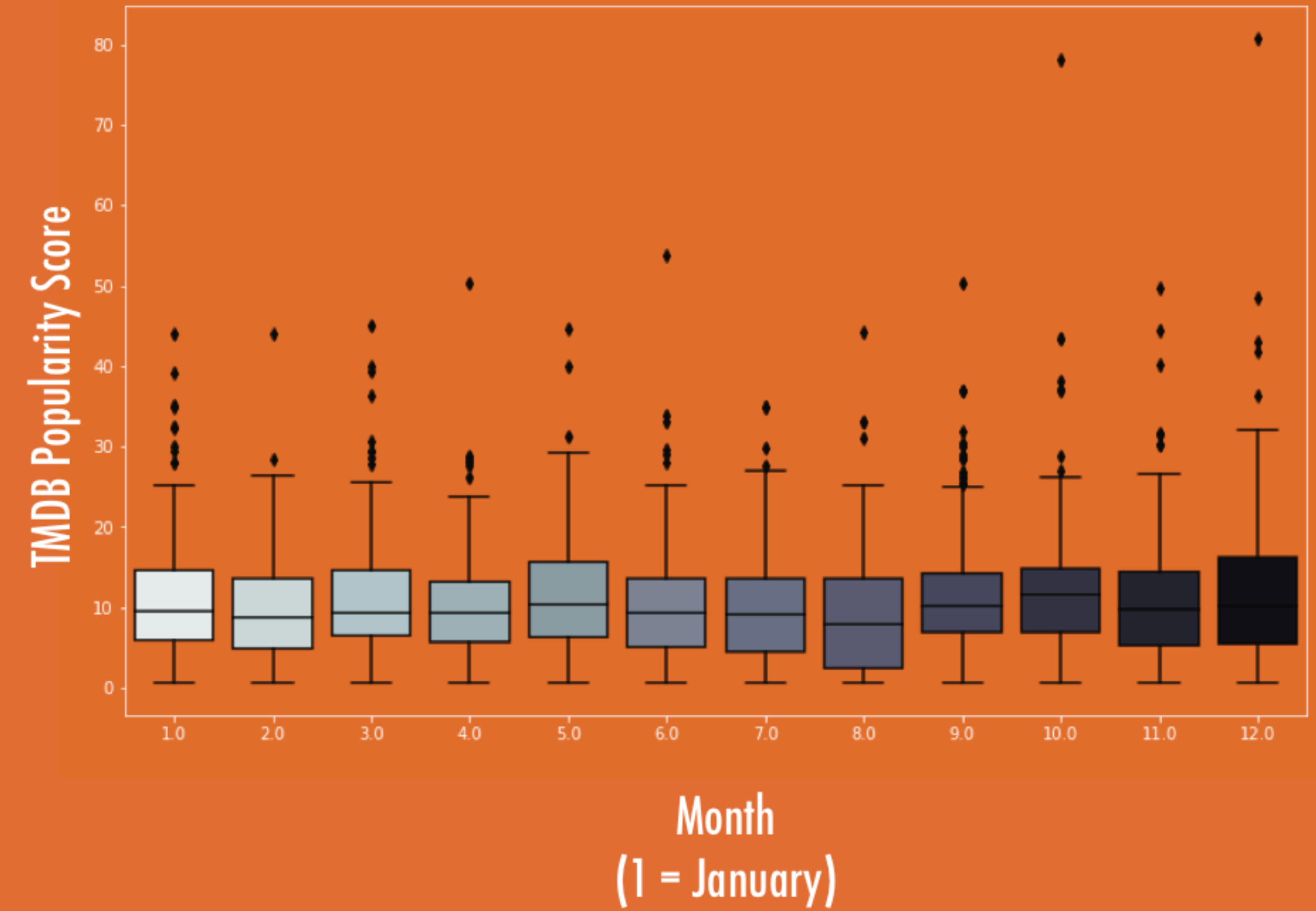
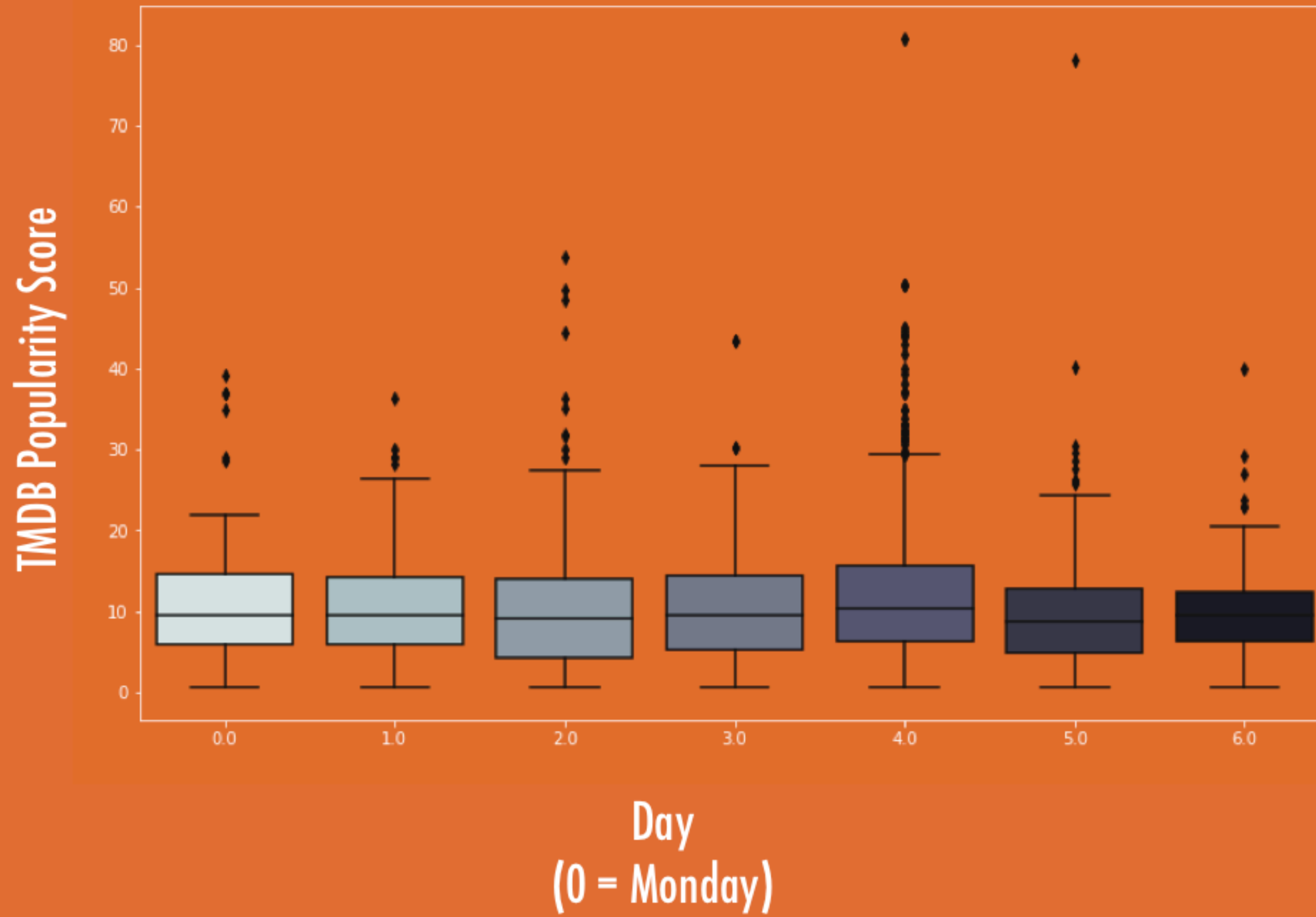
Also check the differences in budgets for the highest grossing films v. the lowest grossing.



3

Day / Month
of Release

Popularity



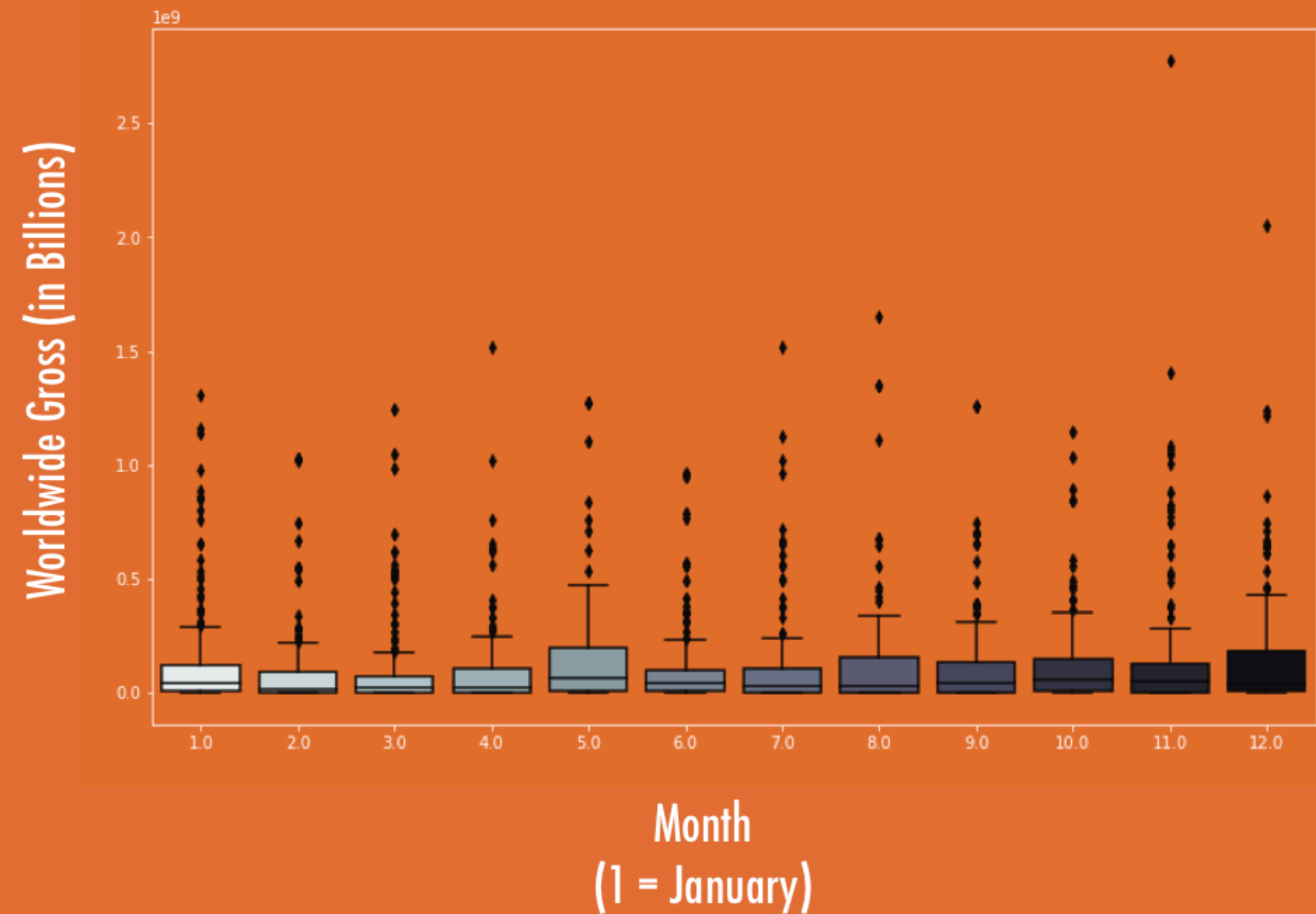
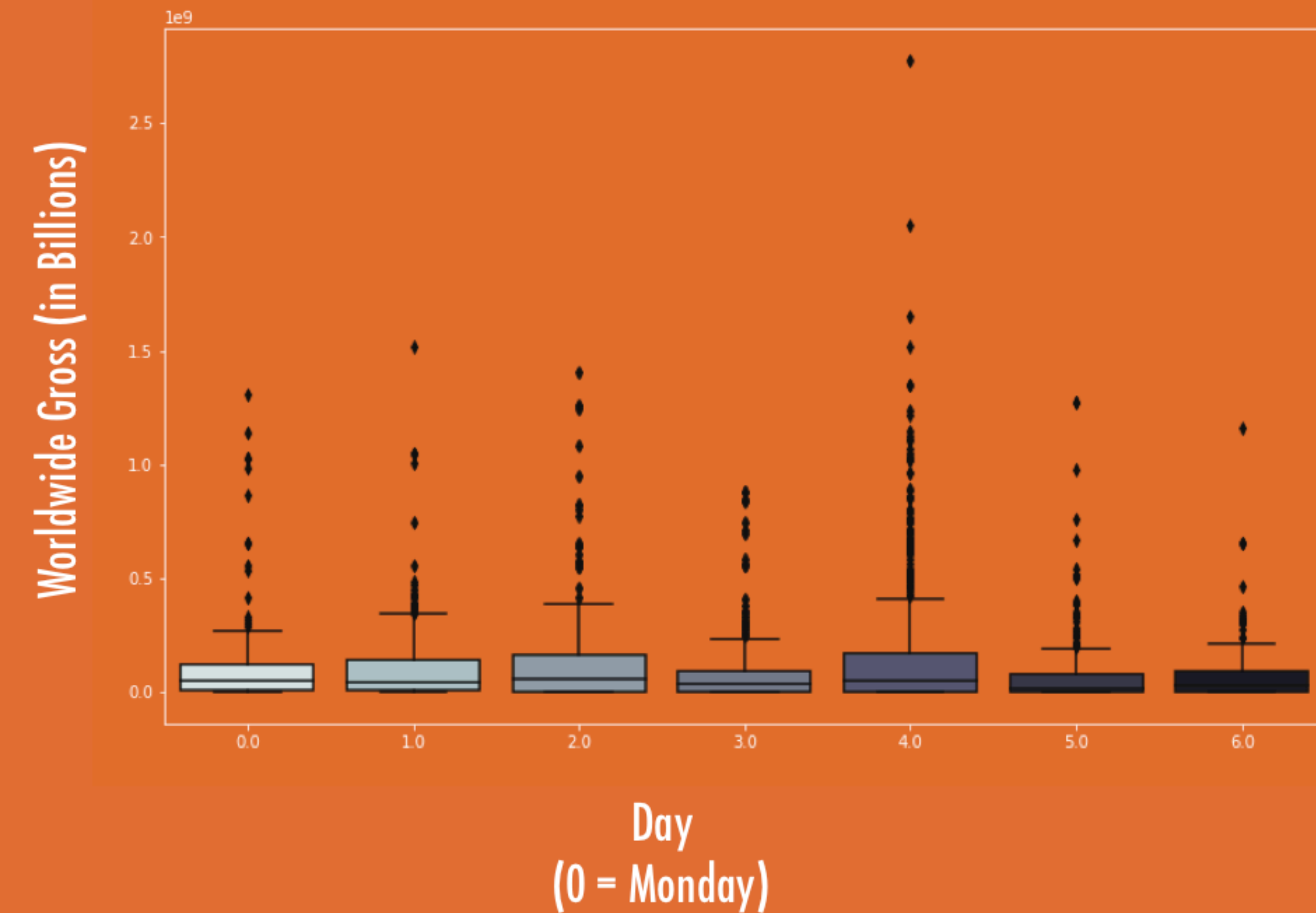
MEANS

Monday: 10.650	Thursday: 10.343
Tuesday: 10.225	Friday: 12.003
Wednesday: 11.101	Saturday: 9.675
	Sunday: 9.742

MEANS

January: 10.628	April: 10.006	July: 10.108	October: 11.857
February: 9.671	May: 11.381	August: 9.543	November: 10.737
March: 11.008	June: 10.149	September: 11.575	December: 12.601

Worldwide Gross



MEANS

Monday: 129.7m	Thursday: 111.5m
Tuesday: 102.3m	Friday: 164.3m
Wednesday: 161.5m	Saturday: 77.3m
	Sunday: 81.9m

MEANS

January: 116.7m	April: 97.1m	July: 138.1m	October: 118.3m
February: 107.2m	May: 152.2m	August: 154.7m	November: 158.3m
March: 103.9m	June: 102.7m	September: 116.8m	December: 164.3m



4

Genre

Top 5 Genres

Action: 78

Adventure: 76

Drama: 43

Fantasy: 37

Sci-Fi: 33

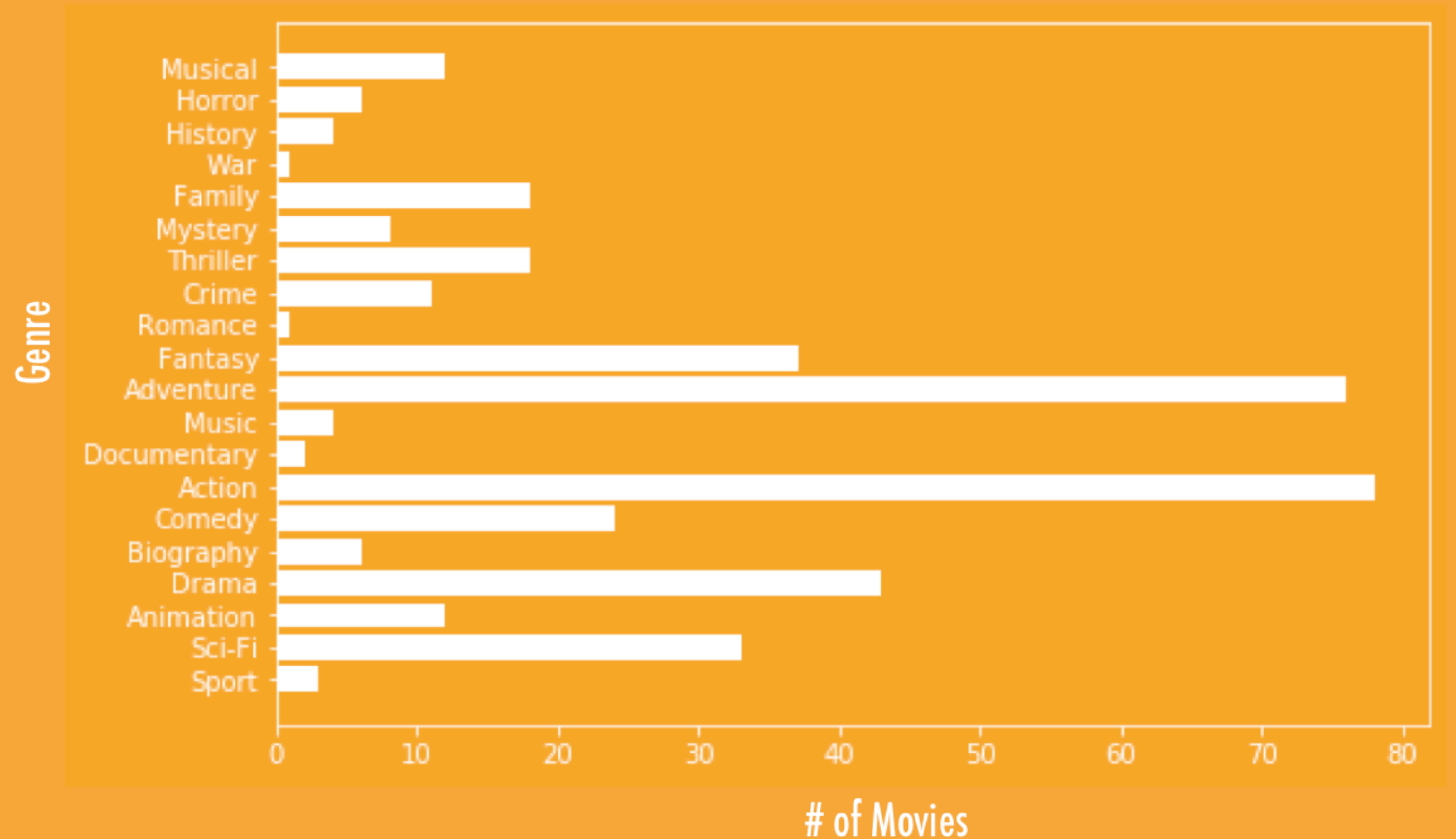
Conclusion?

People love serious movies!

Want something that is almost guaranteed to be popular? Make an action-packed, adventure-filled, drama fantasy that takes place in space.

Star Wars, anyone?

Genre Counts for Top 150 Popular Movies*



* Total will be greater than 150 due to movies being categorized into more than one genre

Top 5 Genres

Adventure: 96

Action: 64

Sci-Fi: 36

Comedy: 36

Fantasy: 32

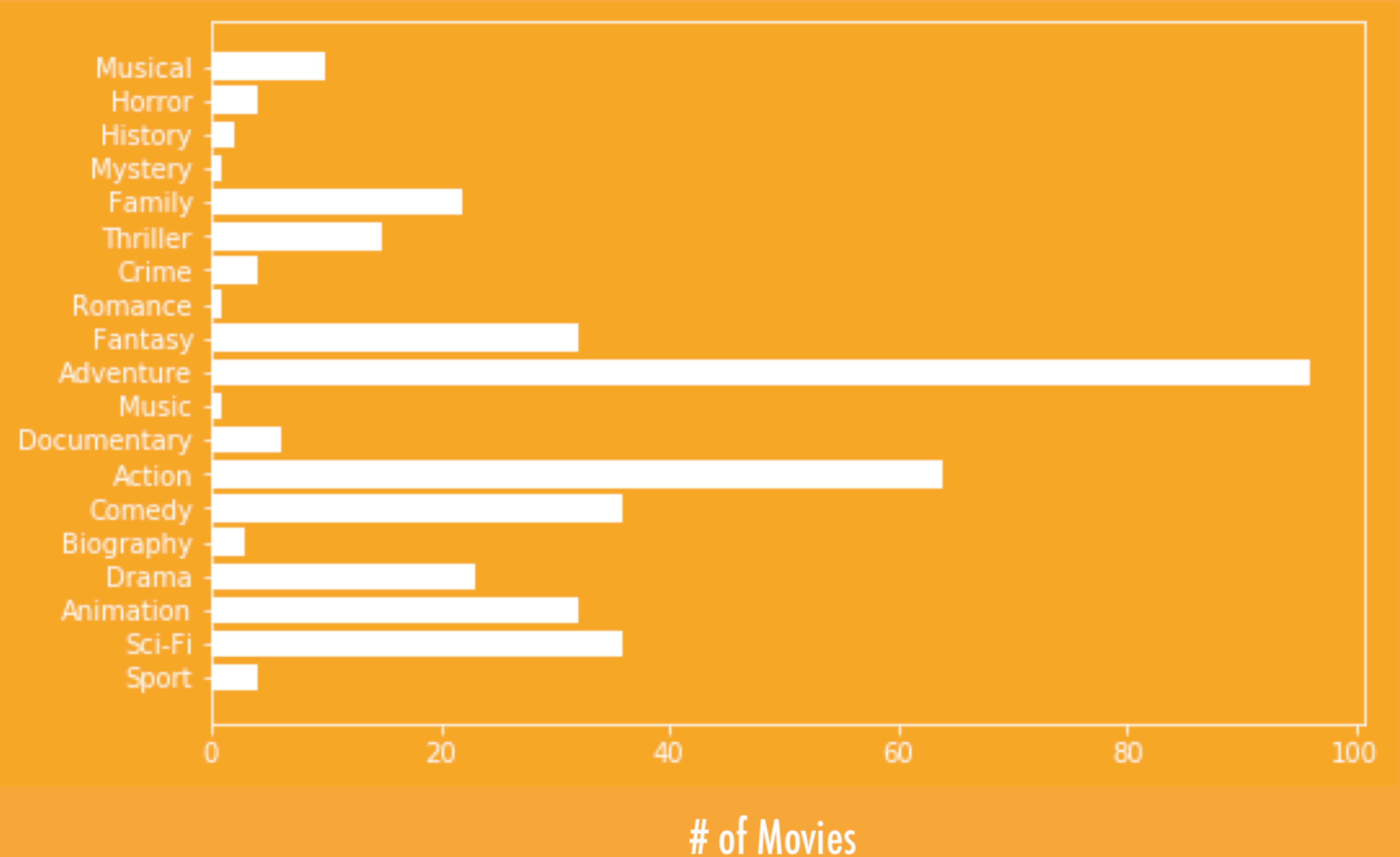
Conclusion?

We get a slightly different story when looking at the top 150 grossing movies.

The overall theme still supports Adventure/Action films but now we have the genre of Comedy introduced.

Genre Counts for Top 150 Grossing Movies*

Worldwide Gross
(in Billions)



* Total will be greater than 150 due to movies being categorized into more than one genre

CONCLUSION



The two most important factors to consider when making a new movie?

Budget & Genre.

Movies require significant investment if you want a significant return.

Also consider making a movie in the highest grossing, most popular genres: Action, Adventure, Sci-Fi, and Fantasy.



The next interesting factor you should pay attention to is the release day and release month.

Not all weekend days are created equal.

Friday is the best performing release day by far and you should actively avoid releasing a movie on Saturday or Sunday.

Also consider the highest grossing months: Dec., Nov., Aug., and May.



Lastly - keep an eye on your runtime.

While there was a fairly low correlation coefficient between runtime and popularity/gross, the top movies trended closer to 2 hours long while the bottom movies were closer to 1.5 hours.

FUTURE ANALYSIS

- Sentiment analysis on reviews from the top/bottom movies
 - Can look for key words on what people liked/disliked the most
- Best performing actors/directors
 - Look for highest ROI - balancing name recognition with budget



**THANK
YOU**