# Quarantine & Chill

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An introductory film analysis in the days of COVID-19

#### Data

To perform this analysis I utilized data from the following sources:

- IMBD
- TMBD
- Rotten Tomatoes
- Wikipedia/Netflix

## Methodology

- One-way t-test
- Pearson's Correlation
- Mean

#### Questions

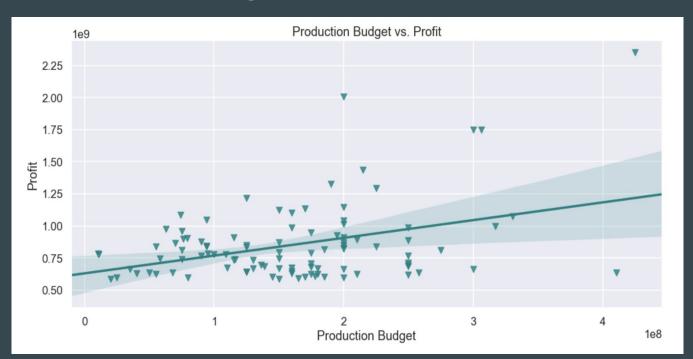
- 1. What are the top 100 profiting box office films?
- 2. How do genre, feature length, production budget, and release date affect profit?
- 3. What information can be gathered about Netflix original films?
- 4. How do genre, feature length, and release date of Netflix original films compare to the top 100 profiting box office films?

## The Top 100 Profiting Box-Office Films

To give some context to these films, here are the top ten.

- 1. Avatar
- 2. Titanic
- 3. Avengers: Infinity War
- 4. Star Wars Episode VIII: The Force Awakens
- Jurassic World
- 6. Fast & Furious 7
- 7. The Avengers
- 8. Black Panther
- 9. Jurassic World: Fallen Kingdom
- 10. Frozen

#### **Production Budget**



R:-value: 0.38

Mean Profit: \$850,396,016

Mean Production Budget: \$159, 522,000

Mean Worldwide Gross: \$1,009,918,016

Smallest Budget in Top 100: \$10,500,000

Conclusion: A higher production budget is correlated with a higher profit.

#### Release Date

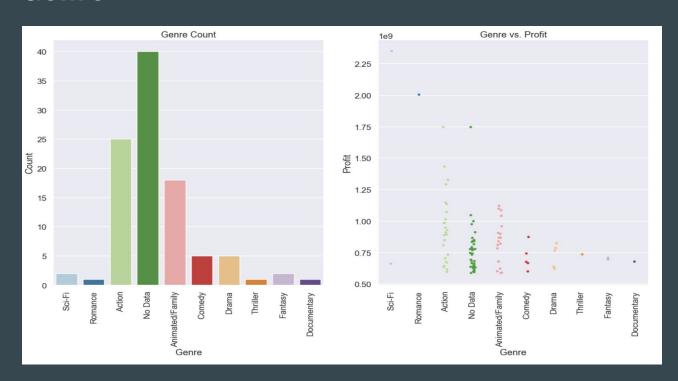


The months: May, August, and November were significantly below average profiting.

Highest average profit per month: April, December, June

Conclusion: The release date of a film matters.

#### Genre

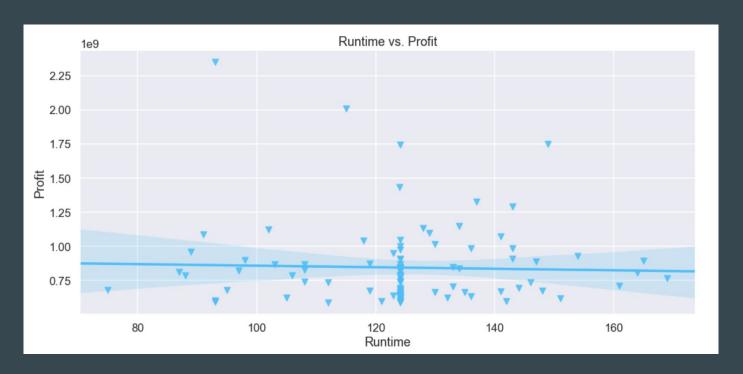


The genres drama, comedy, and fantasy were significantly lower than the average profit by genre.

Highest average profit per genre: Romance, Sci Fi, Action

**Conclusion: The genre of the film matters.** 

#### Runtime

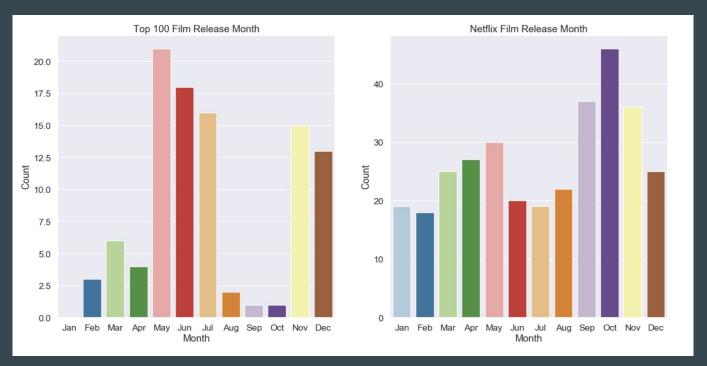


R:-value: -0.03

Mean runtime: 2 hr 4 min

Conclusion: Runtime isn't highly impactful.

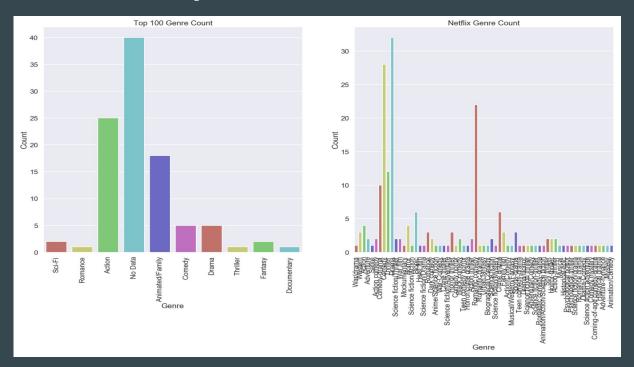
## Netflix Comparison - Release Date & Runtime



Not Pictured:
Mean runtime
Netflix Originals
32 minutes shorter
than top 100

Conclusion: There are significant differences in the characteristics of Netflix films vs. Box-Office films

#### **Netflix Comparison - Genre**



Note: Standardization of genre categories would greatly improve the salience of this analysis.

Conclusion: There are significant differences in the characteristics of Netflix films vs. Box-Office films

#### Recommendations

- Further investigation!
  - Further investigate direct streaming film production budgets
  - Create a standardized way to measure "profit" of individual productions within a streaming service
  - Create a standardized way to categorize genre
  - Fill in missing data for more accurate analysis
  - Further investigate film viewership during the quarantine

#### Recommendations for myself

- Use an SQL database to compile the csv files from the start
- Use several different ipynbs to document the process
- Make a more extensive plan of the analysis prior to executing
- Continue to review dataframe manipulation (concat, merge, etc.) and data visualization techniques

# Cheers!