### Movie Box Office Success Analysis

Vincent Welsh July 20, 2021



### Summary:

The descriptive analysis of the data sets containing thousands of movies and their associated data reveal strategies to increase gross revenue when in the early stages of movie production.

- Impose a large budget to increase the gross revenue, but don't rely on the budget alone.
- Make a movie that is 120-180 minutes long.
- Reach for a PG-13 rated movie.

# Outline

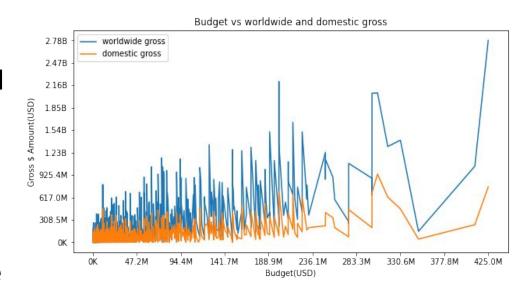
- Business Problem
- Data & Methods
- Results
- Conclusions

## **Business Problem**

- Enter an unfamiliar industry
- Produce profitable media

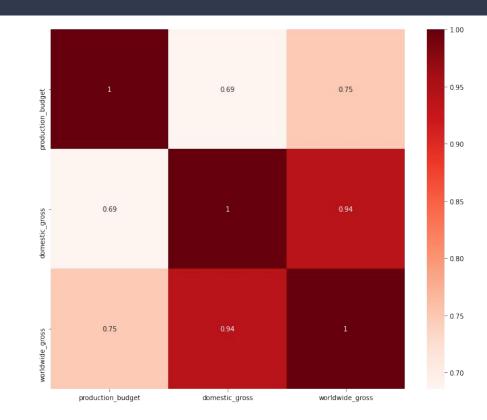
#### Data & Methods

- The datasets include thousands of movies ranging from 1962 all the way to future films scheduled up to 2026. The data I curated consists of 3796 unique movie titles.
- Includes titles,dates, domestic and worldwide profits, budget, rating, runtime (minutes), release date, crew/studio information.



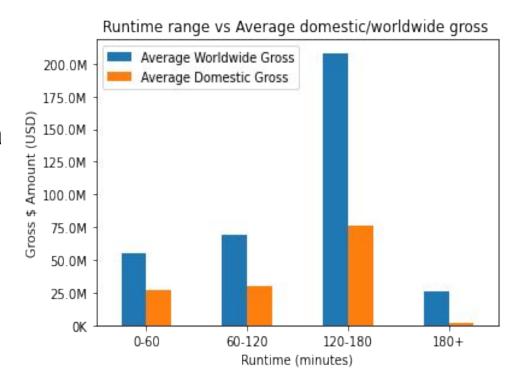
#### Results

- There is a strong correlation between production budget and worldwide gross and a moderate correlation between budget and domestic gross.
- Important Note: a higher budget does by no means guarantee a higher gross.



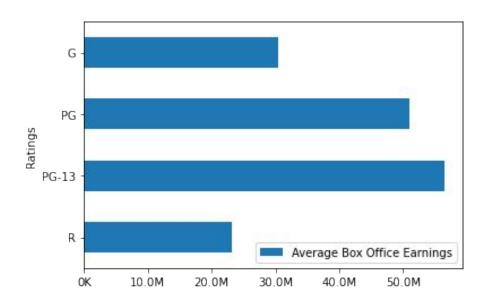
#### Results

 Having a length of 120-180 minutes is more likely to produce a higher worldwide and domestic gross.



### Results

 Family friendly movies output a higher average box office earnings.



### Conclusions

- Expect gross revenue to reflect production budget
- Plan a movie that is 120-180 minutes long
- Don't release the movie until a rating of PG-13 is achieved

#### **Next Steps:**

- Find the relationship between critic ratings and box office. This
  understanding could help in knowing necessary steps to present movies to
  critics or if they are necessary at all.
- Modely movie success bases on the names of actors involved. This analysis could provide insight into which actors are the most profitable.

#### Thank You

Email: <u>jvincentwelsh99@hotmail.com</u>

Github: @Eucalyptusss

LinkedIn: www.linkedin.com/in/vincent-404