Microsoft Movie Studio:
Preliminary Case Study

May 8th, 2020

Project objective:

Using multiple databases, our goal is to identify top performing genres that *Microsoft Studios* should focus on to establish credibility in the film industry.

Understanding the problem

Popularity of Genre

What genres are the most popular for consumers?

Are more popular genres higher grossing?

Does this correlate to the production budget?

Production Investment

What are the mean production budgets and gross per genre?

Does production budget size impact overall gross?

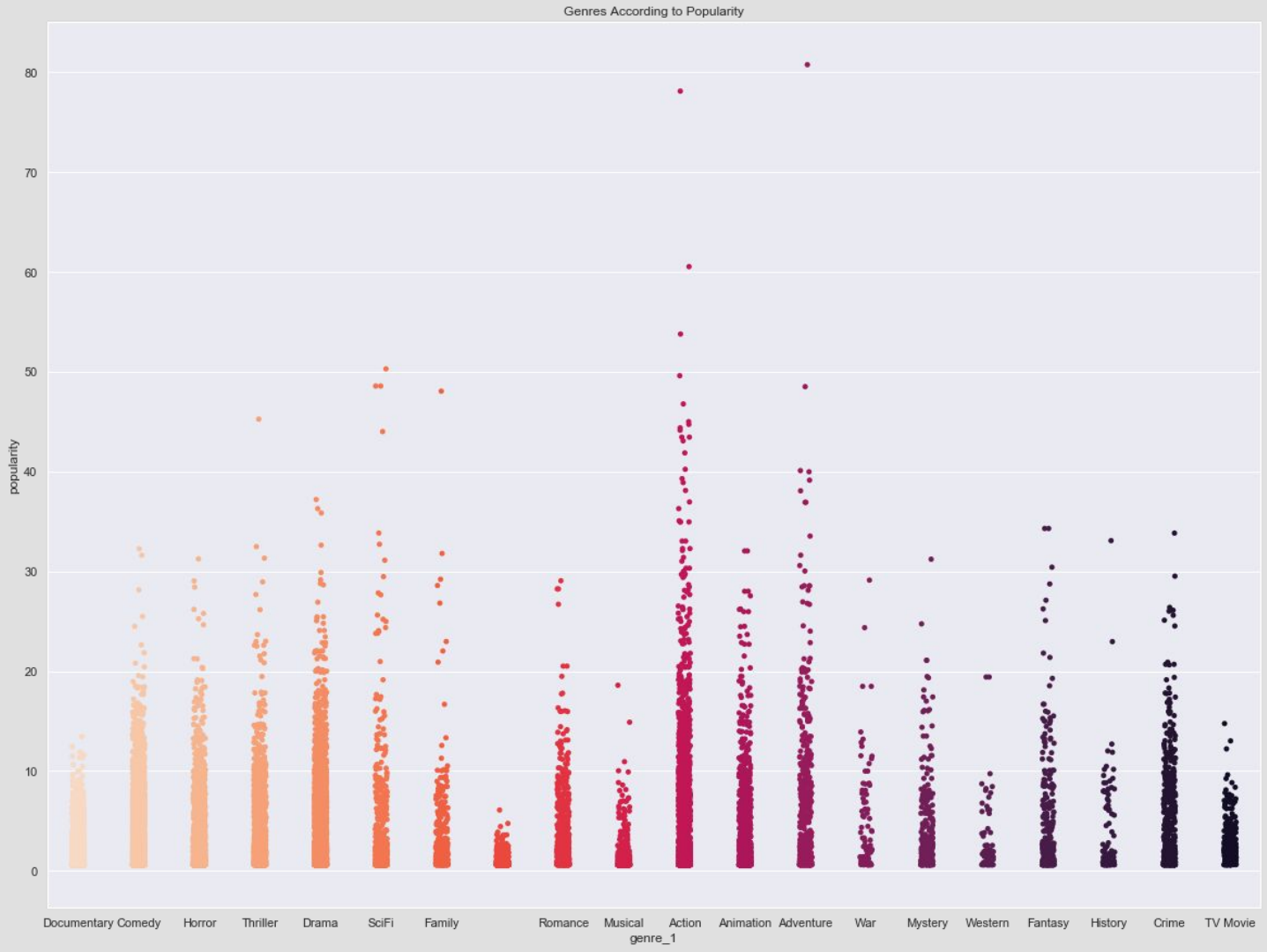
What is the Return of Investment (ROI) per genre?

Crew Size

Does staffing the production with more writers or directors influence profit?

Is there an optimal writer/director ratio for maximizing profitability?

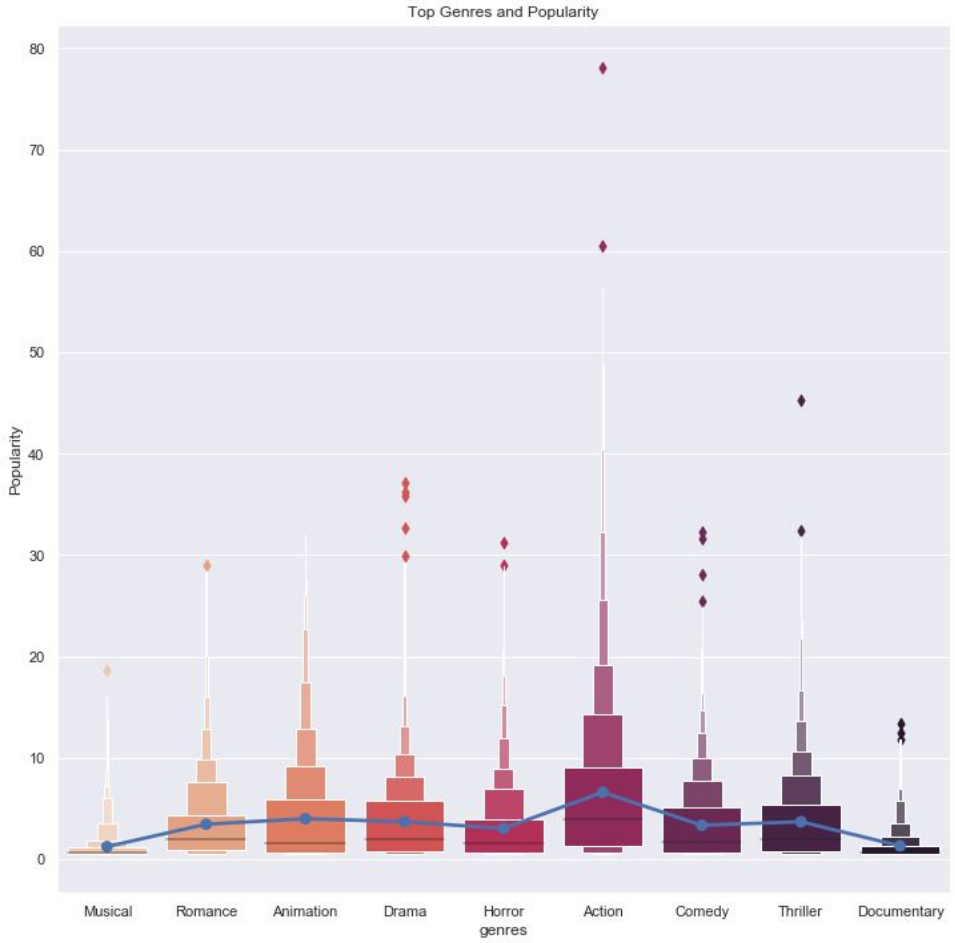
Genre Popularity


Genres According to Popularity
popularity
0
10
20
30
40
50
60
70
80
Documentary
Comedy
Horror
Thriller
Drama
SciFi
Family
Romance
Musical
Action
Animation
Adventure
War
Mystery
Western
Fantasy
History
Crime
TV Movie
genre_1

Using data from *The Movie Database* we compared the genres.

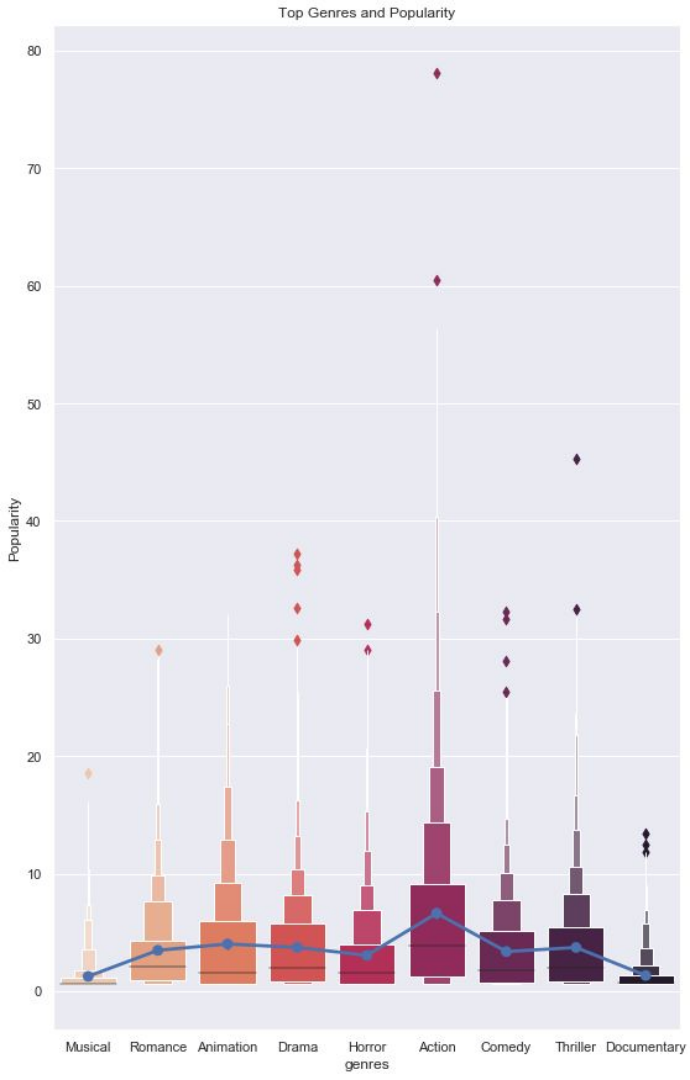
Notable elements:

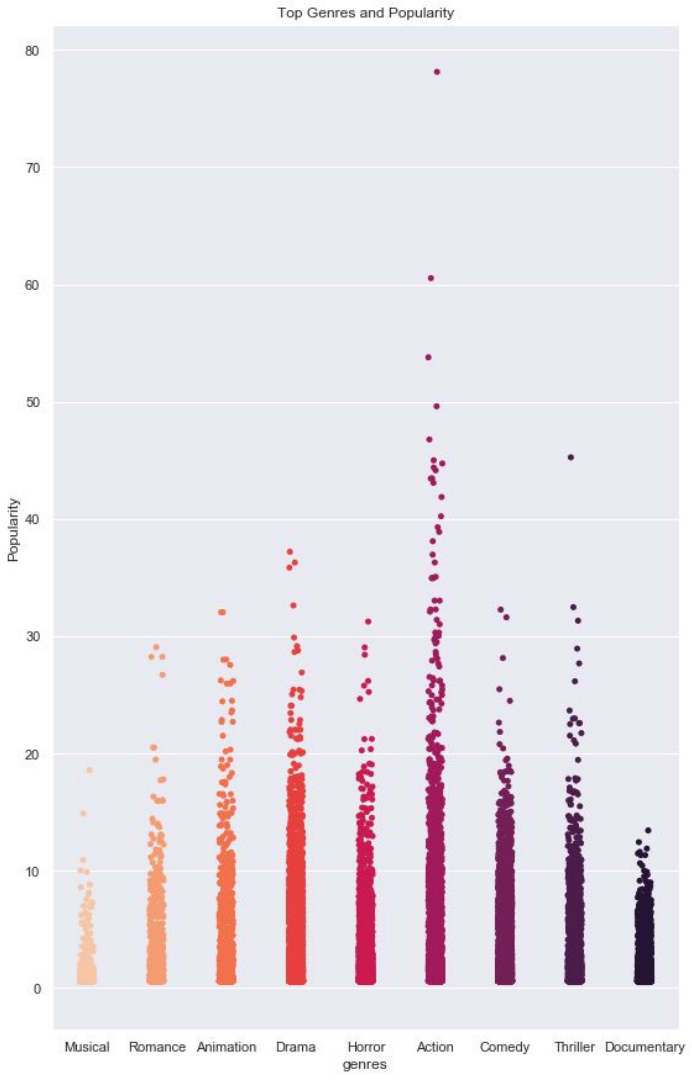
- *The Movie Database* has its own formula for calculating popularity.
  - Daily votes/views
  - # of times favorited
  - Release Date
- We used an API key to retrieve ID key Genre name pairings.
- We used the quantitative popularity data to find the most popular genres.



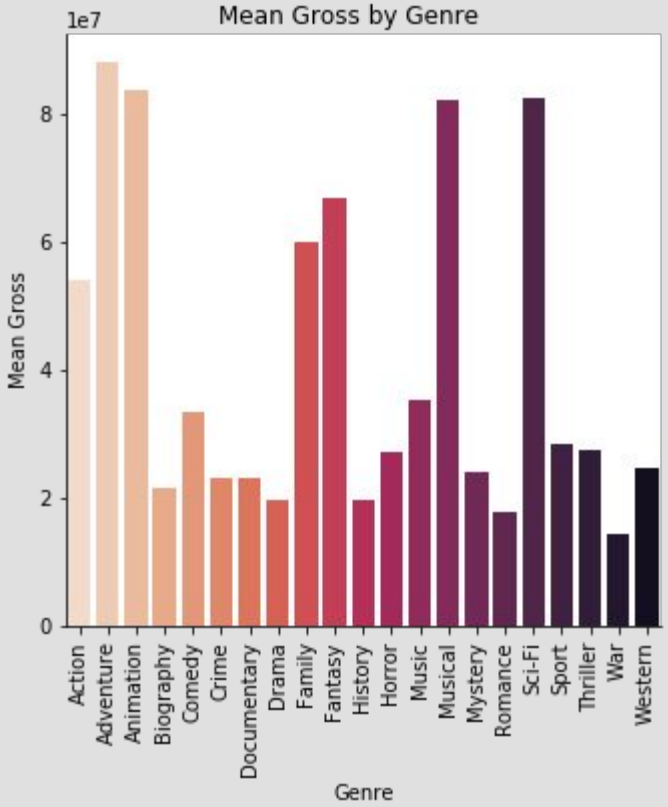
Blue line indicates mean

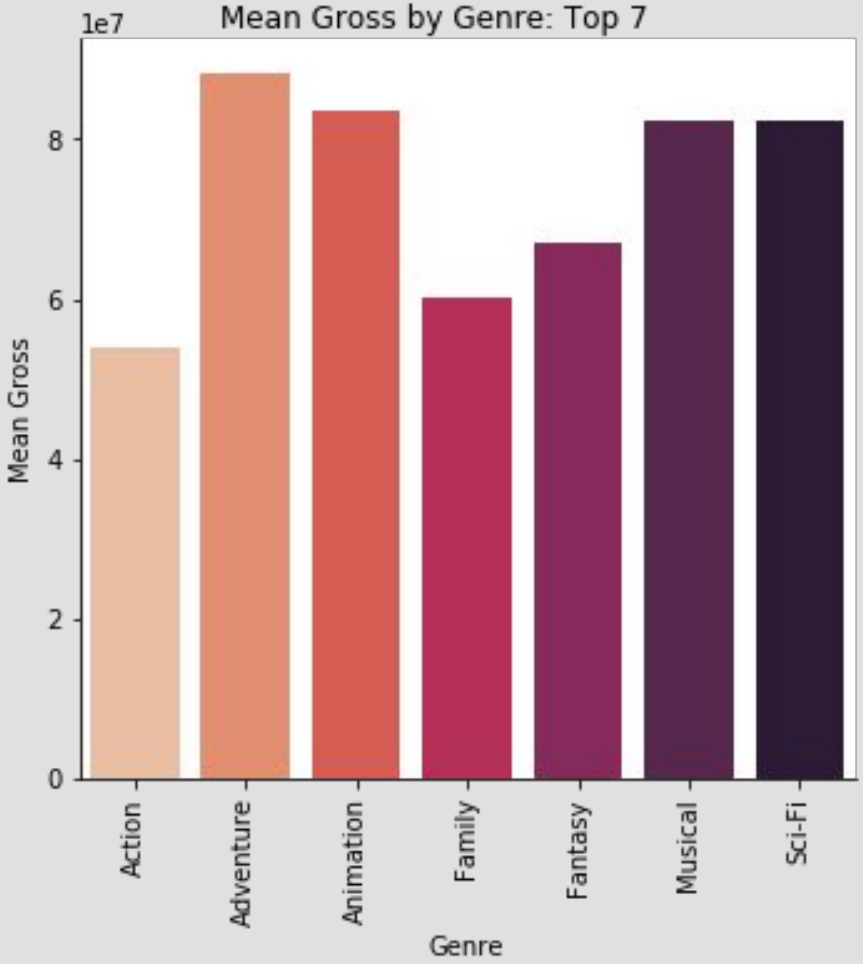
Black line indicates median





Top Grossing Genres

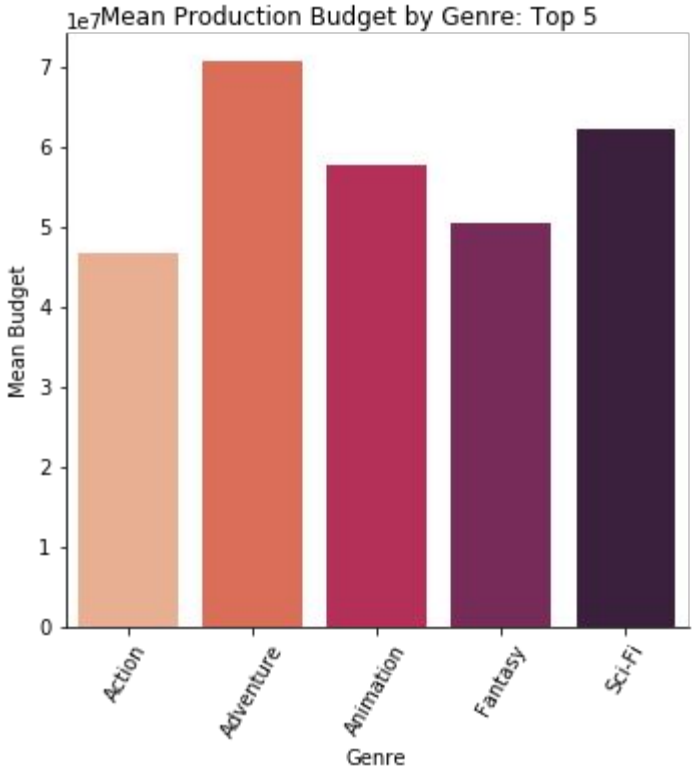

Mean Gross by Genre
1e7
Mean Gross
0
2
4
6
8
Action
Adventure
Animation
Biography
Comedy
Crime
Documentary
Drama
Family
Fantasy
History
Horror
Music
Musical
Mystery
Romance
Sci-Fi
Sport
Thriller
War
Western
Genre

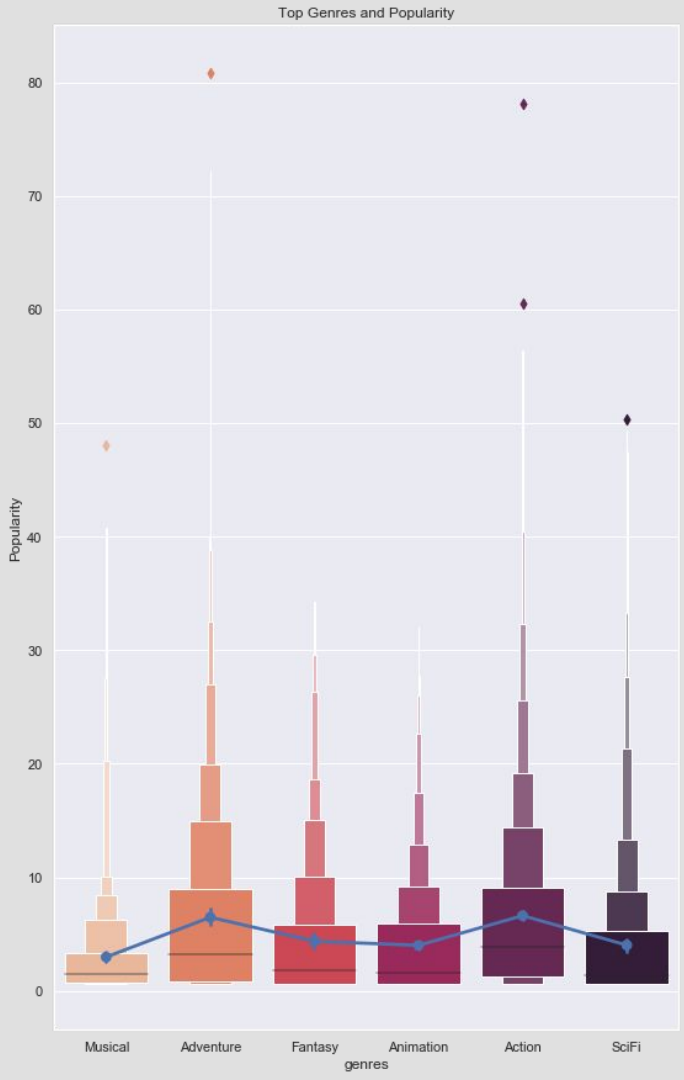

Mean Gross by Genre: Top 7
1e7
Mean Gross
0
2
4
6
8
Action
Adventure
Animation
Family
Fantasy
Musical
Sci-Fi
Genre

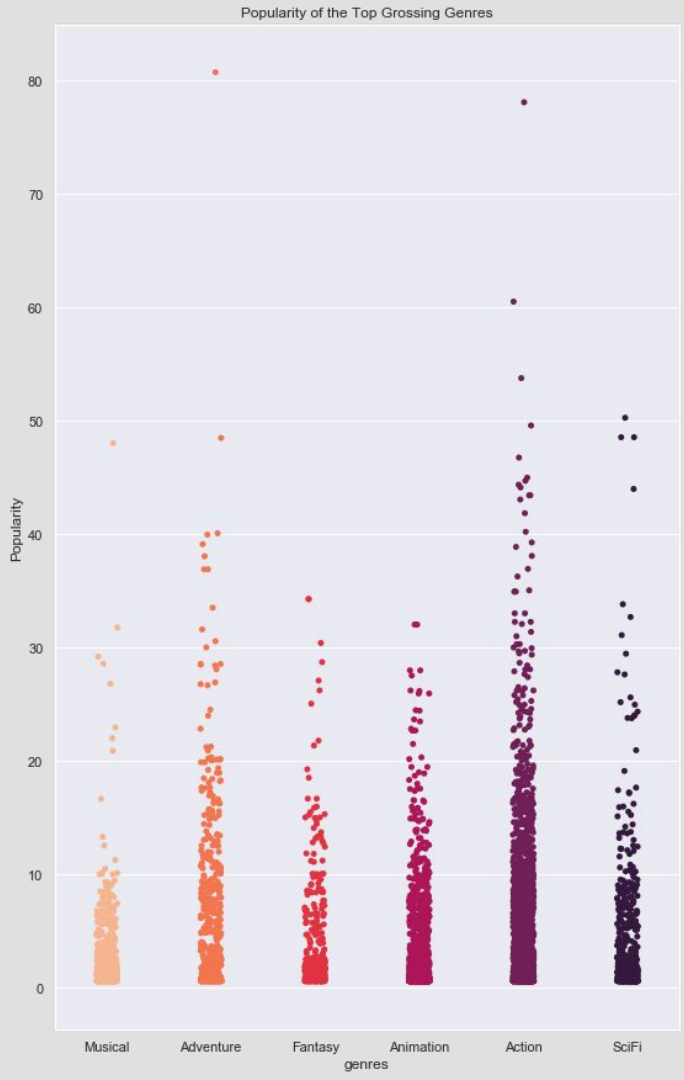
Using data from *IMDB* we compared the production budgets to genre gross.

Notable elements:

- The genres with the 5 highest production budgets all showed themselves as highest grossing.
- Animation Return: 145%.




Top Genres and Popularity
Popularity
0
10
20
30
40
50
60
70
80
Musical
Adventure
Fantasy
Animation
Action
SciFi
genres


Popularity of the Top Grossing Genres
Popularity
0
10
20
30
40
50
60
70
80
Musical
Adventure
Fantasy
Animation
Action
SciFi
genres

Crew Count Analysis

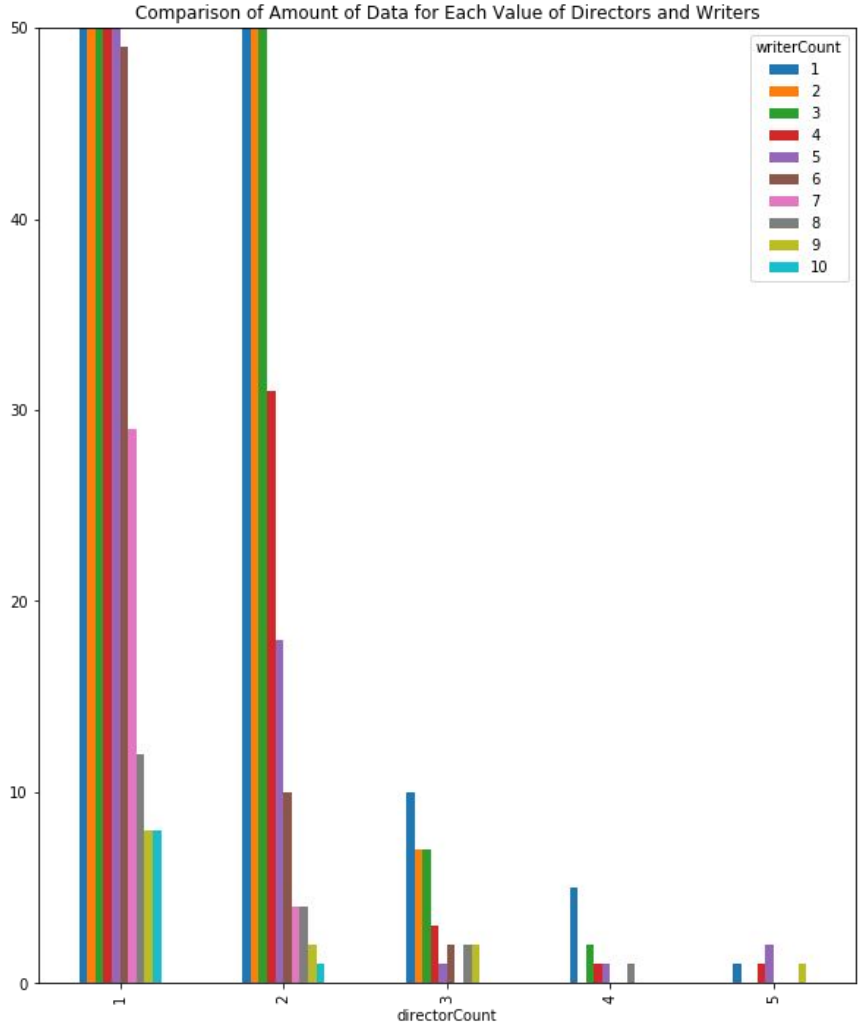
Data Overview

Findings

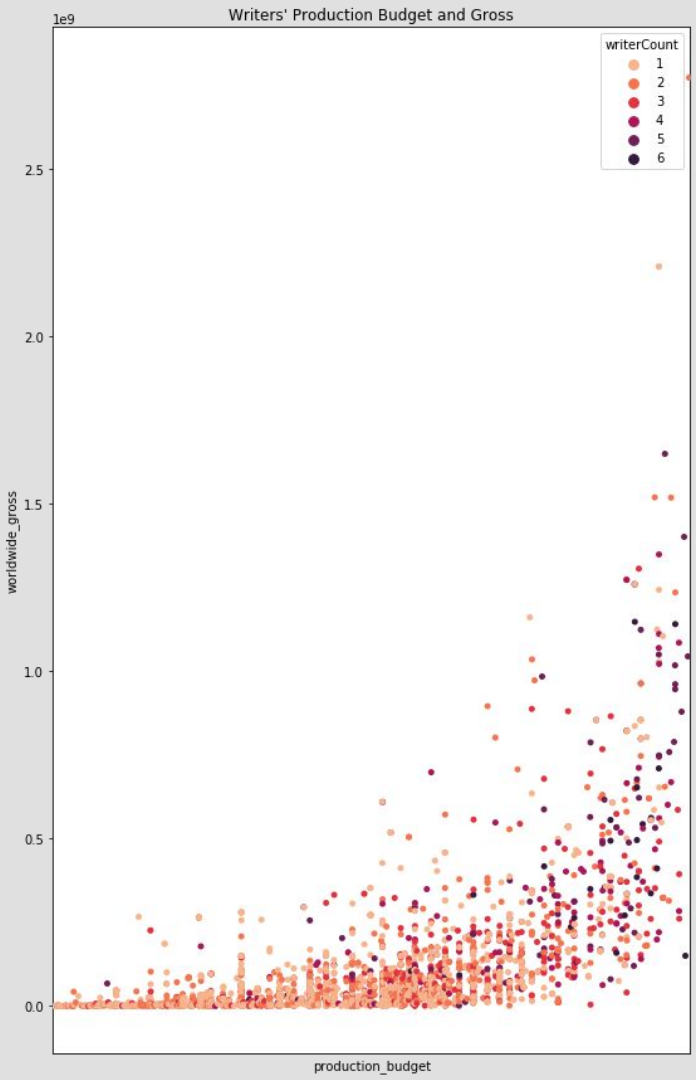
Looking at our data we see that an overwhelming portion of our data represents films with only one director.

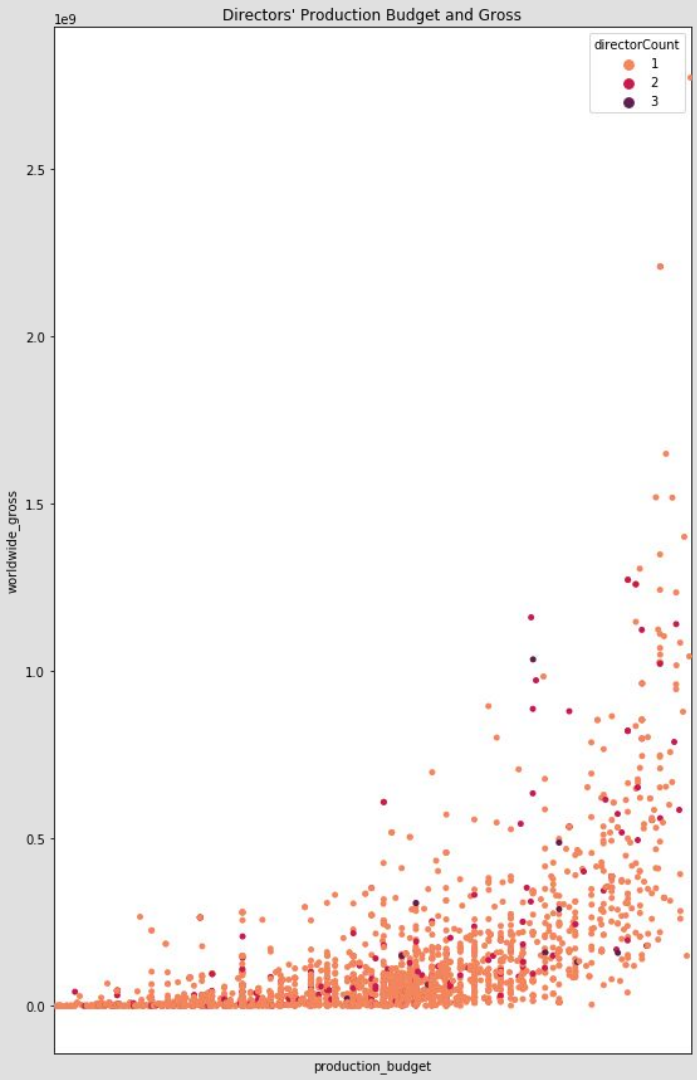
Data Breakdown:

- Films with single directors account for 90.9% of our data
- Combinations of 1-4 writers accounts for over 90% of our data

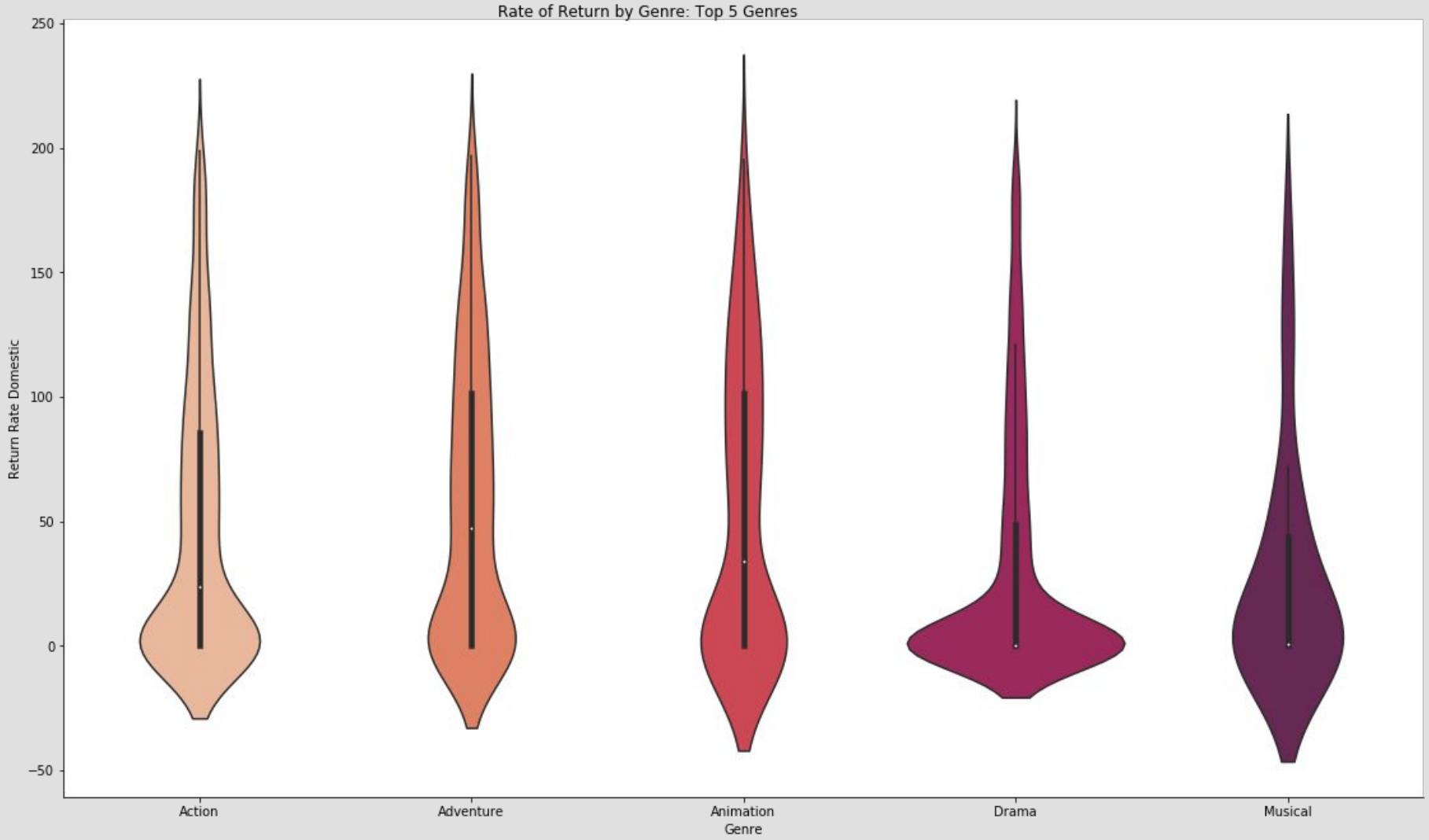


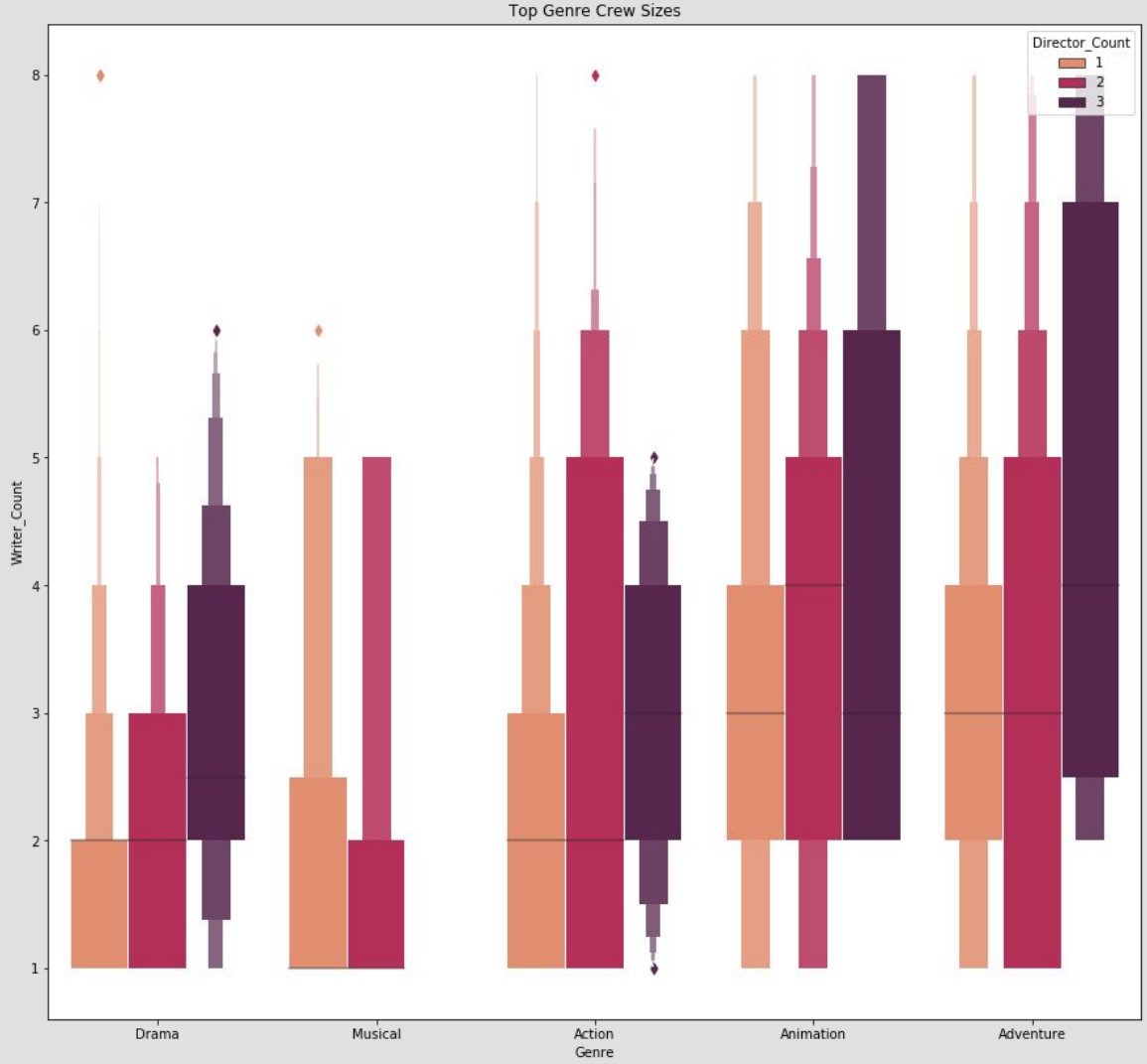
Crew Size Financial Trends


Writers' Production Budget and Gross
1e9
writerCount
1
2
3
4
5
6
2.5
2.0
1.5
1.0
0.5
0.0
worldwide_gross
production_budget


Directors' Production Budget and Gross
1e9
directorCount
1
2
3
2.5
2.0
1.5
1.0
0.5
0.0
worldwide_gross
production_budget

Final Recommendations

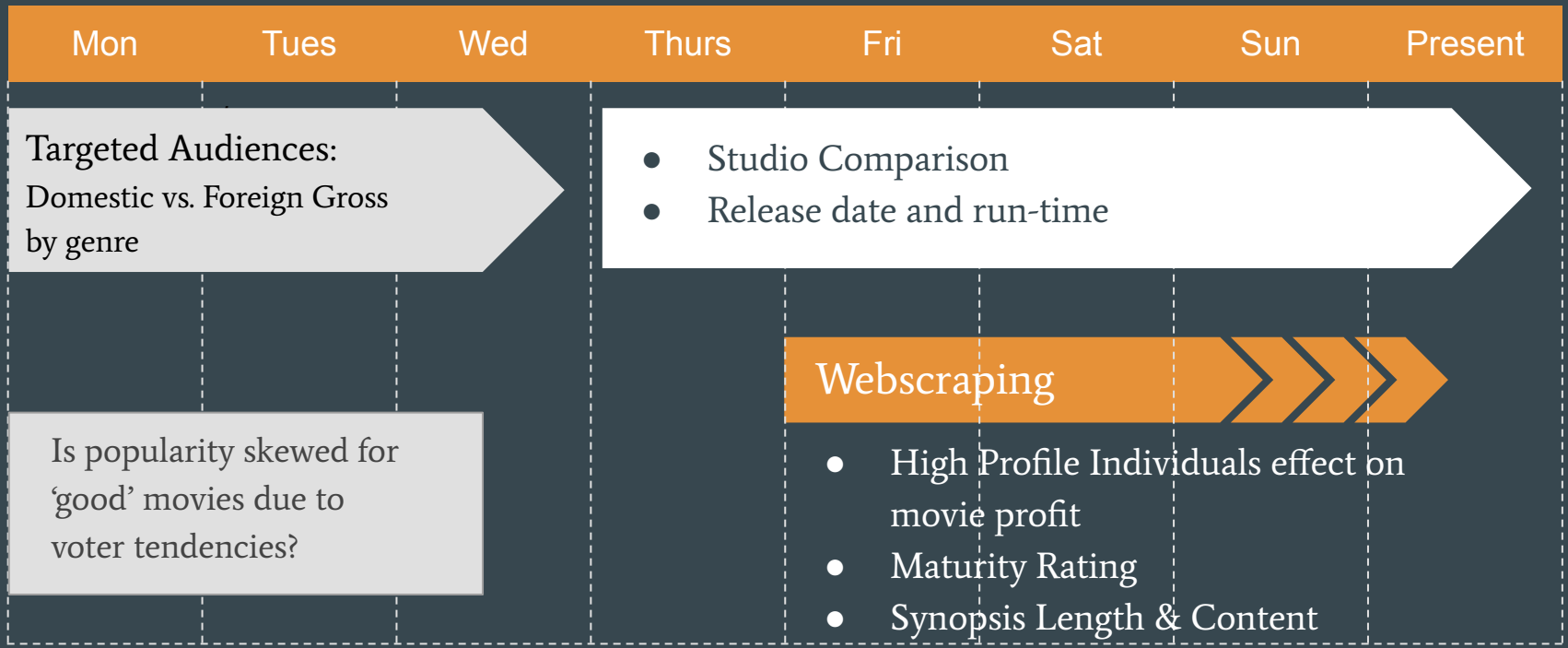

Rate of Return by Genre: Top 5 Genres
Return Rate Domestic
250
200
150
100
50
0
−50
Action
Adventure
Animation
Drama
Musical
Genre


Top Genre Crew Sizes
Director_Count
1
2
3
Writer_Count
8
7
6
5
4
3
2
1
Drama
Musical
Action
Animation
Adventure
Genre

Proposed deliverables

Genre	• Action Genre • High popularity, high ROI (116%)
Mean Financial	• Budget - $46,736,300.00 ○ Gross - $54,043,320.00
Main Crew	• Limit to one Director and 1-3 writers
Secondary	• Adventure - High Grossing - 1 Dir. 2-4 Writers • Animation - High Popularity - 1 Dir. 2-4 Writers

Future Work


Mon
Tues
Wed
Thurs
Fri
Sat
Sun
Present
Targeted Audiences:
Domestic vs. Foreign Gross by genre
Is popularity skewed for 'good' movies due to voter tendencies?
Studio Comparison
Release date and run-time
Webscraping
High Profile Individuals effect on movie profit
Maturity Rating
Synopsis Length & Content

Thank You Slide

Payson Chadrow, CCO

Payson resides in the farmland of Ohio and is responsible for decisions on creative writing and directing.

Kaila Kay, CFO

Kaila is a traveler with no ties to one particular state. She is responsible for finances and budgets.

Leighanna Hooper, CPO

Leighanna is a Detroiter currently living in Sunny Florida, responsible for popularity and PR.