

Echelon Studios Movie Analysis

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Summary

Exploratory analysis of movie datasets from IMDB and The Numbers, attributing factors to a movie's success and failure.

These factors include:

- **Release Year** (e.g. 2010 - 2018)
- **Genre** (e.g. Comedy, Drama, Comedy/Romance, etc.)
- **Director**
- **Money** (gross domestic/worldwide revenue, return on investment, budgeting, etc.)

01

Business Problem

Echelon Studios sees its competitors producing successful movies and wants to do the same. But, they need to know the factors that attribute to a movie's success.

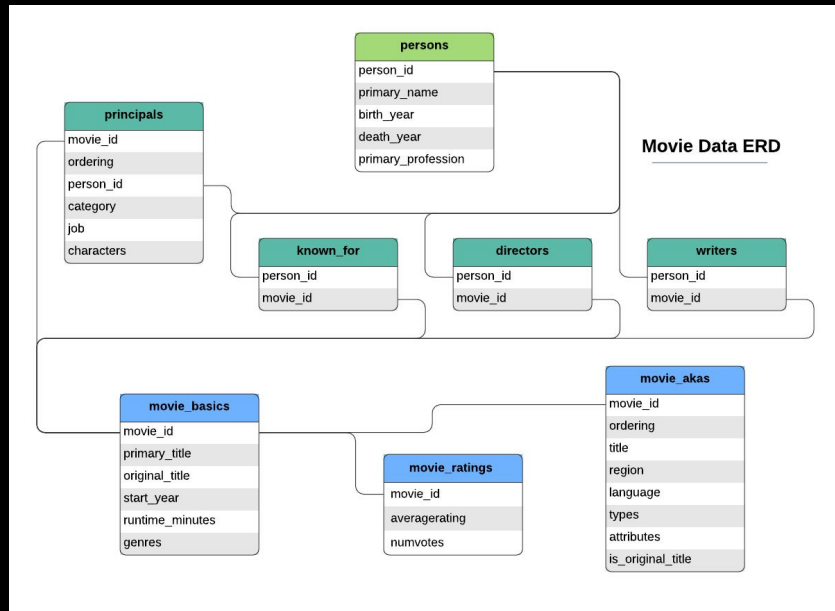


02

The Data

Primary Datasets Used:

There were multiple datasets provided. To avoid repeated data and to maximize efficiency, I only used the information contained in the IMDB database, along with the data from The Numbers.



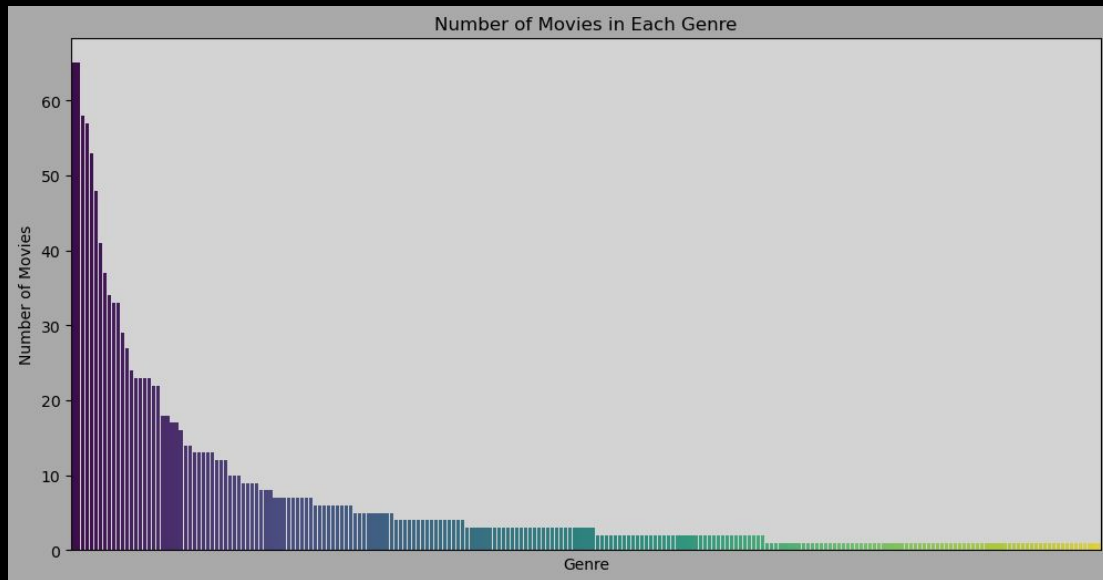
Genres

With about 230 different genres to choose from, I based my search on the three most popular in order to filter the data effectively.

- Adventure|Animation|Comedy
- Drama
- Comedy|Drama|Romance

```
# Extract the top 3 most frequent movie genres from genre_counts
top_genres = genre_counts.head(3)
top_genres
```

```
genres
Adventure|Animation|Comedy    65
Drama                        65
Comedy|Drama|Romance          58
Name: count, dtype: int64
```



Directors + Money

The next step I took was looking at the most popular directors within those three genres. From there, I compared their figures (e.g., production budget, gross revenue) to those of other movies within the genre.

For Adventure/Animation/Comedy films, Mike Mitchell is a popular director, having directed films like *Shrek Forever After* and *Trolls*.

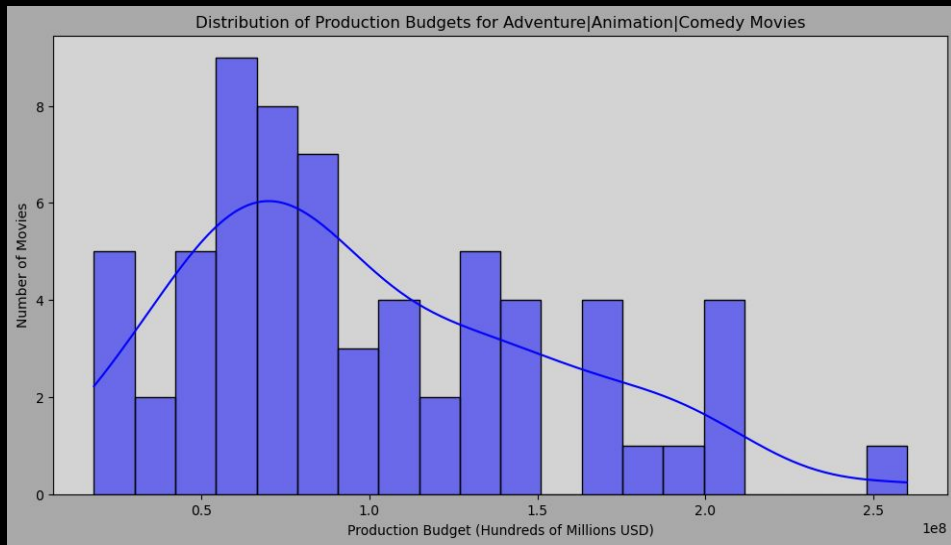
Figures:

Shrek Forever After (2010)

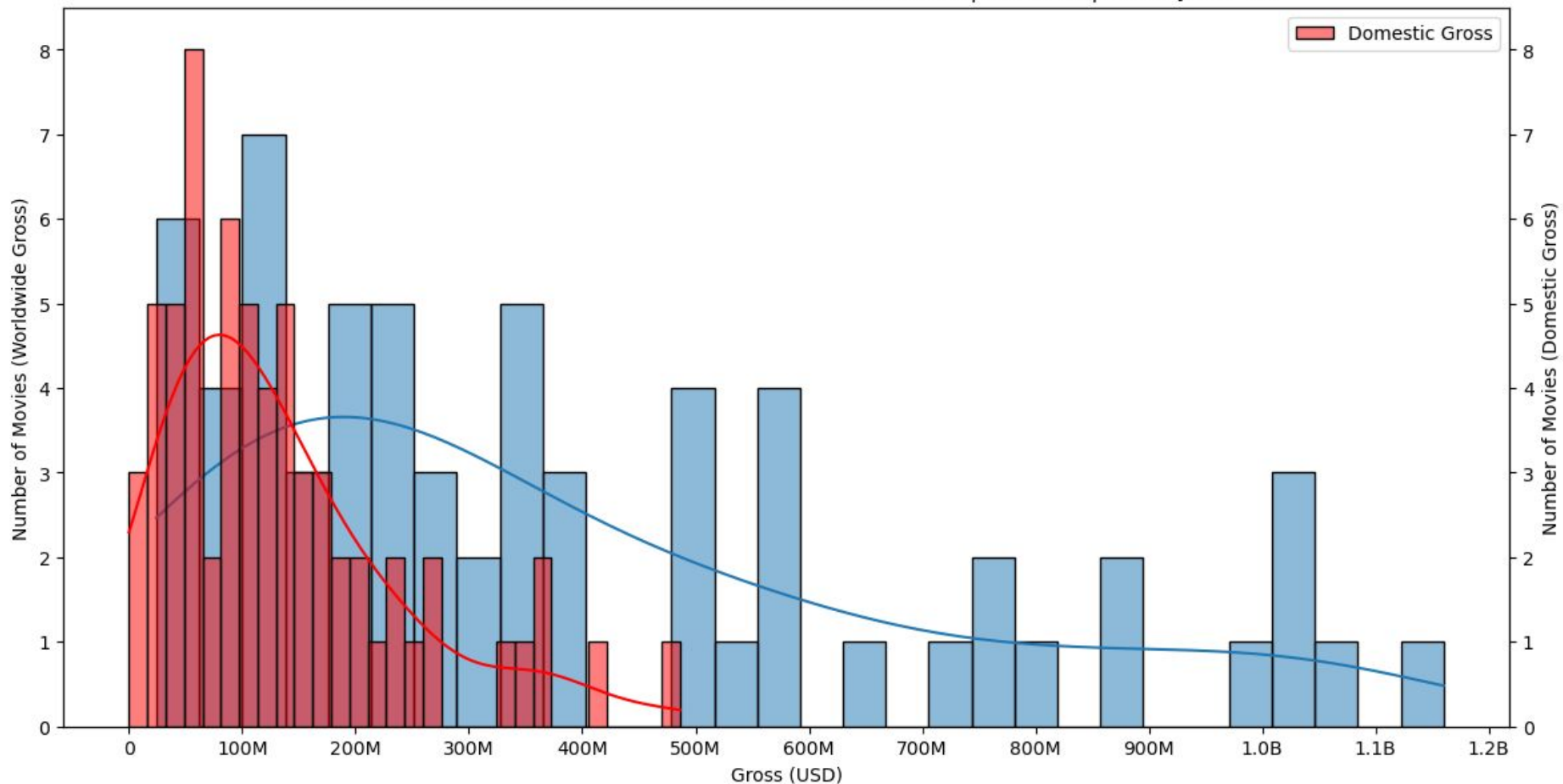
- **Production Budget:** \$165,000,000
- **Gross Domestic:** \$238,746,787 (**45%** ROI)
- **Worldwide Domestic:** \$756,244,673 (**358%** ROI)

Trolls (2016)

- **Production Budget:** \$125,000,000
- **Gross Domestic:** \$153,707,064 (**23%** ROI)
- **Worldwide Domestic:** \$344,150,134 (**175%** ROI)



Distribution of Domestic and Worldwide Gross for Adventure|Animation|Comedy Movies



Directors + Money

One of the more popular directors for Drama films is Alex Kendrick, directing movies like *War Room* and *Courageous*.

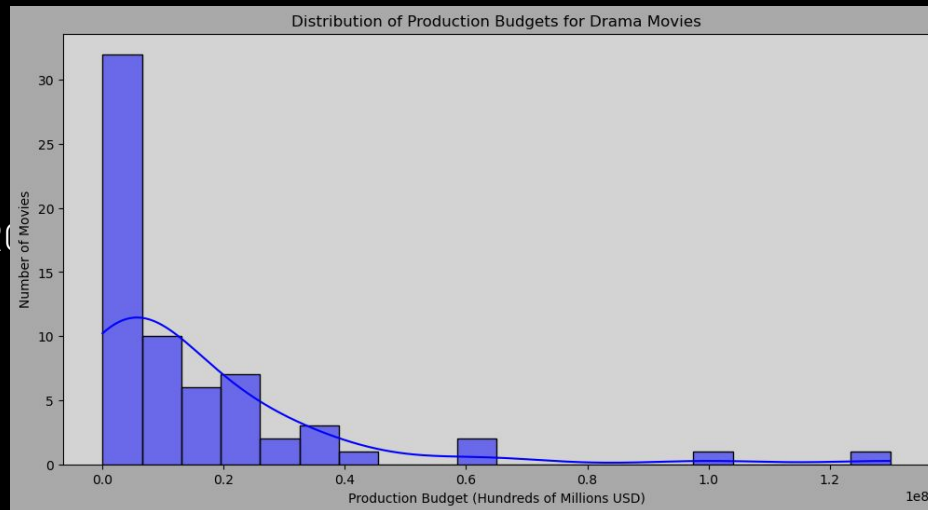
Figures:

War Room (2015)

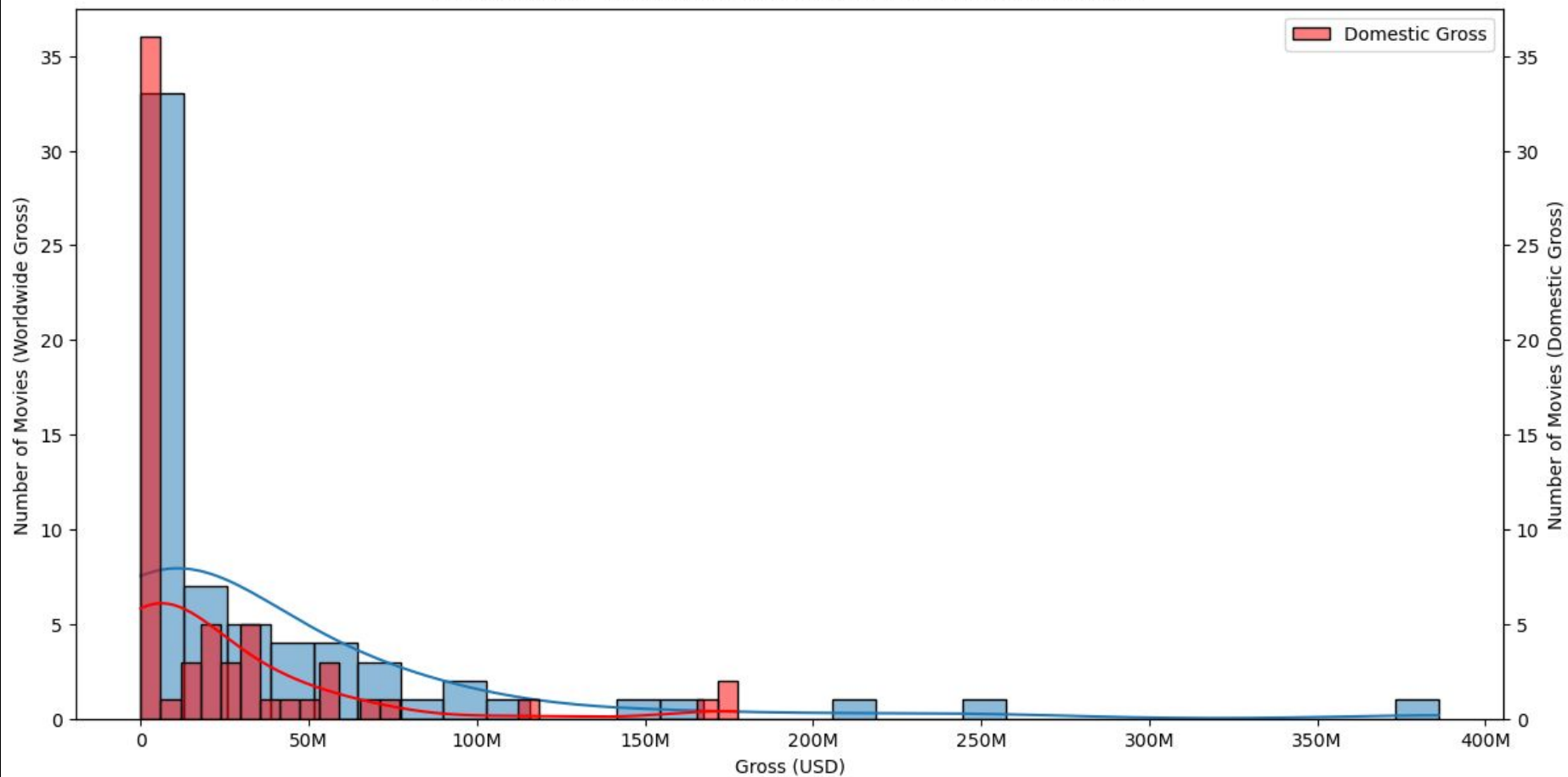
- **Production Budget:** \$3,000,000
- **Gross Domestic:** \$67,790,117 (**2160%** ROI)
- **Worldwide Domestic:** \$73,975,239 (**2366%** ROI)

Courageous (2011)

- **Production Budget:** \$2,000,000
- **Gross Domestic:** \$34,522,221 (**1626%** ROI)
- **Gross Worldwide:** \$35,185,884 (**1659%** ROI)



Distribution of Domestic and Worldwide Gross for Drama Movies



03

Recommendations

1. For the most success, produce an Adventure/Animation/Comedy or Drama film.
2. For a highly popular and grossing film, hire Mike Mitchell to direct an Adventure/Animation/Comedy film.
3. For the most return on investment, hire Alex Kendrick to direct a Drama film.

Conclusion + Final Notes

- This data does have bias
 - Movies produced in 2010 have had more time to accumulate money than movies produced in 2015
- These figures are only as recent as 2018

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Thank you!