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

Data Understanding

- 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
- USD values are not adjusted for inflation

Primary Datasets Used:

- Used data from IMDB and The Numbers to avoid redundancy and maximize efficiency.

- <u>IMDB variables of importance</u>: Genre and director information.

- <u>The Numbers variables of importance</u>: Production budget, gross domestic revenue, and gross worldwide revenue.
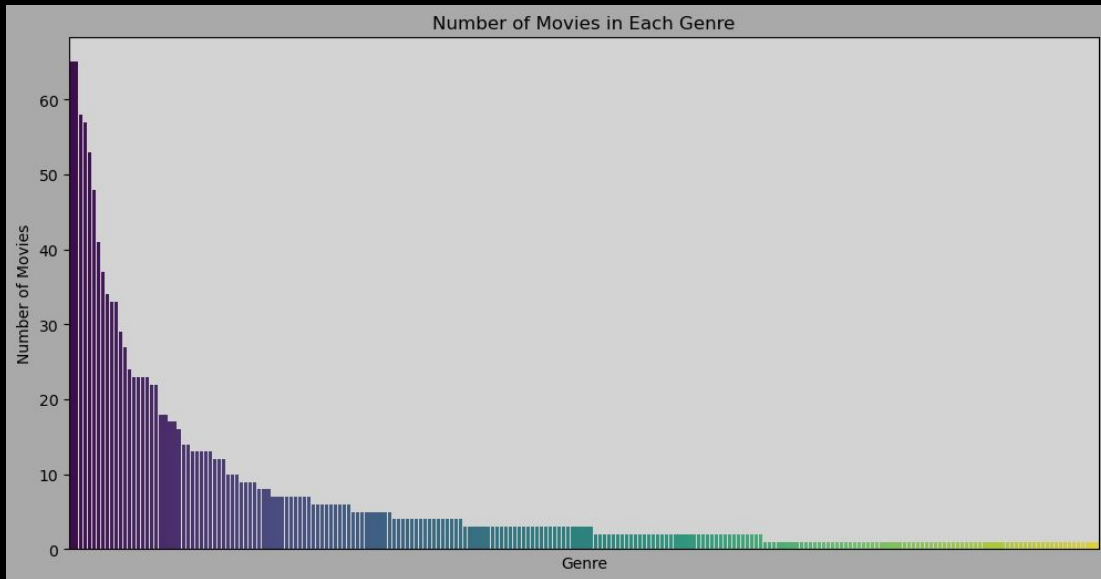
Genres

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

- Adventure|Animation|Comedy
- Drama

```python
# 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
```


Number of Movies in Each Genre

Directors + Money

- Most popular directors
- Compared figures to other films in the genre

For Adventure/Animation/Comedy films,
- Mike Mitchell
  - *Shrek Forever After (2010)*
  - *Trolls (2016)*

For Drama films,
- Alex Kendrick
  - *War Room (2015)*
  - *Courageous (2011)*

Mike Mitchell

Shrek Forever After (2010)
- **Production Budget:** $165,000,000
- **Gross Domestic:** $238,746,787 (**45%** ROI)
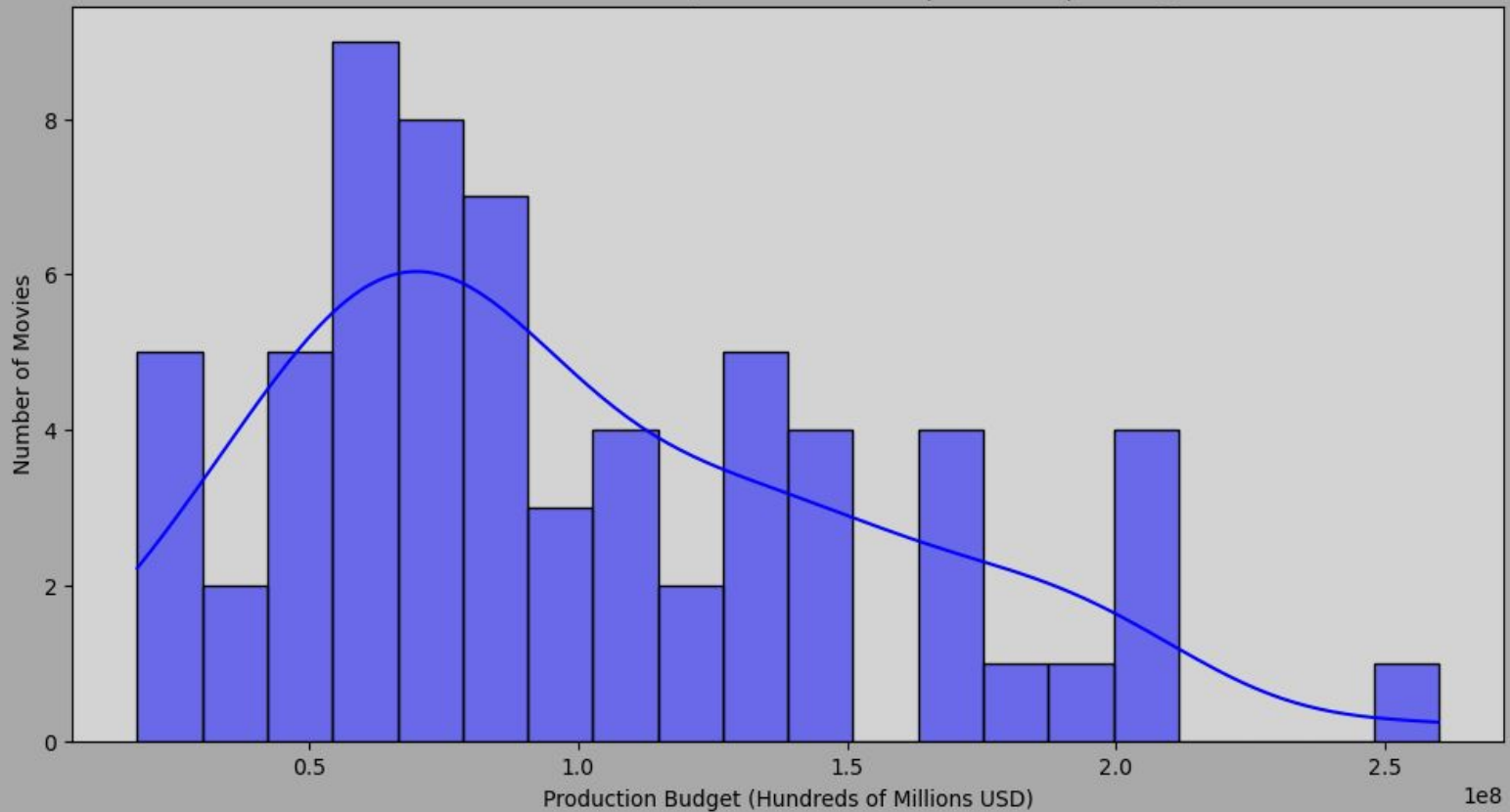- **Gross Worldwide:** $756,244,673 (**358%** ROI)

Trolls (2016)
- **Production Budget:** $125,000,000
- **Gross Domestic:** $153,707,064 (**23%** ROI)
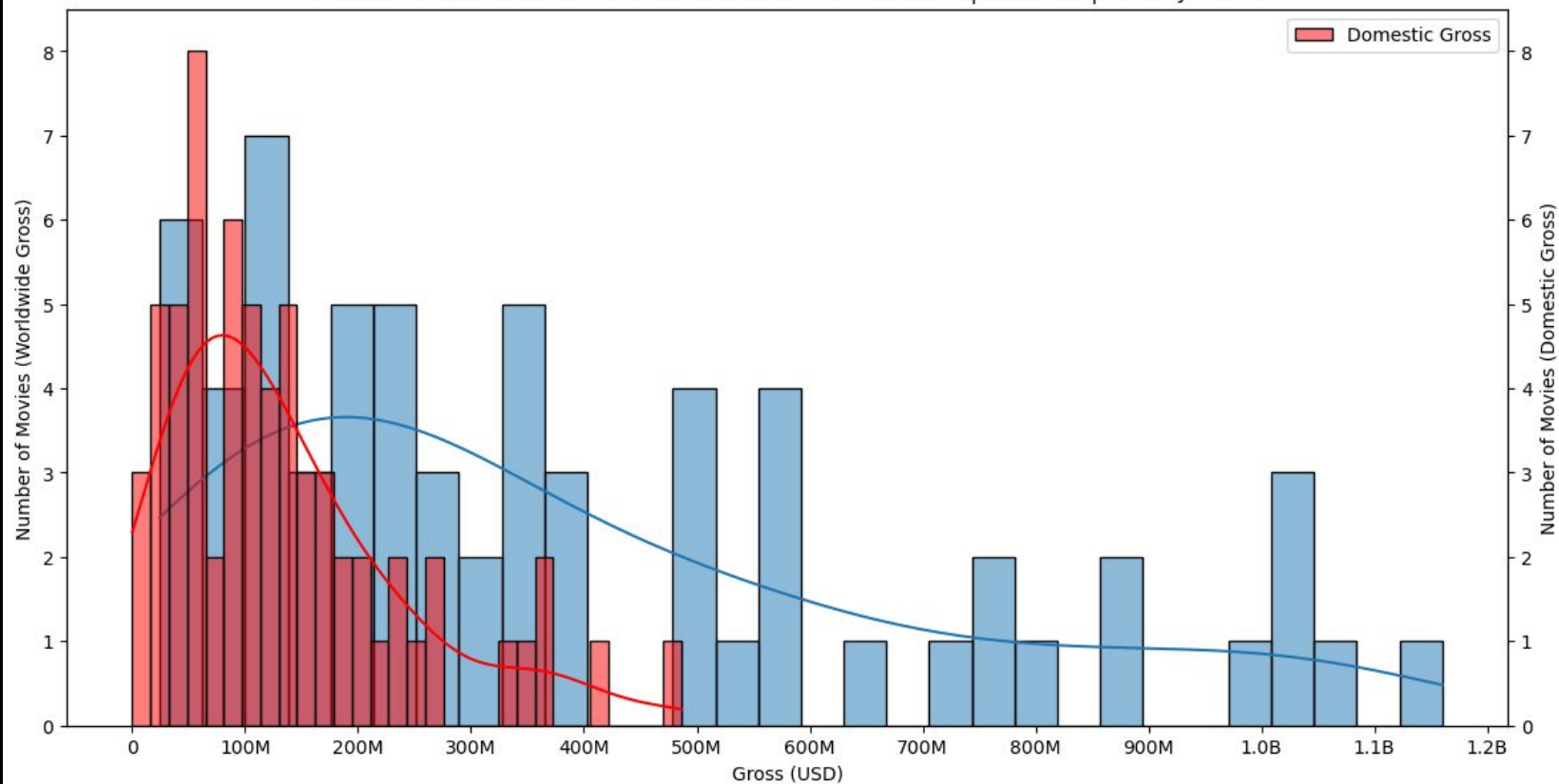- **Gross Worldwide**: $344,150,134 (**175%** ROI)

Genre Averages:
- **Production Budget:** ~$100,000,000
- **Gross Domestic:** ~$134,000,000
- **Gross Worldwide:** ~$381,000,000

Distribution of Production Budgets for Adventure|Animation|Comedy Movies

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

Alex Kendrick

<u>Figures:</u>

War Room (2015)
- **Production Budget:** $3,000,000
- **Gross Domestic:** $67,790,117 (**2160%** ROI)
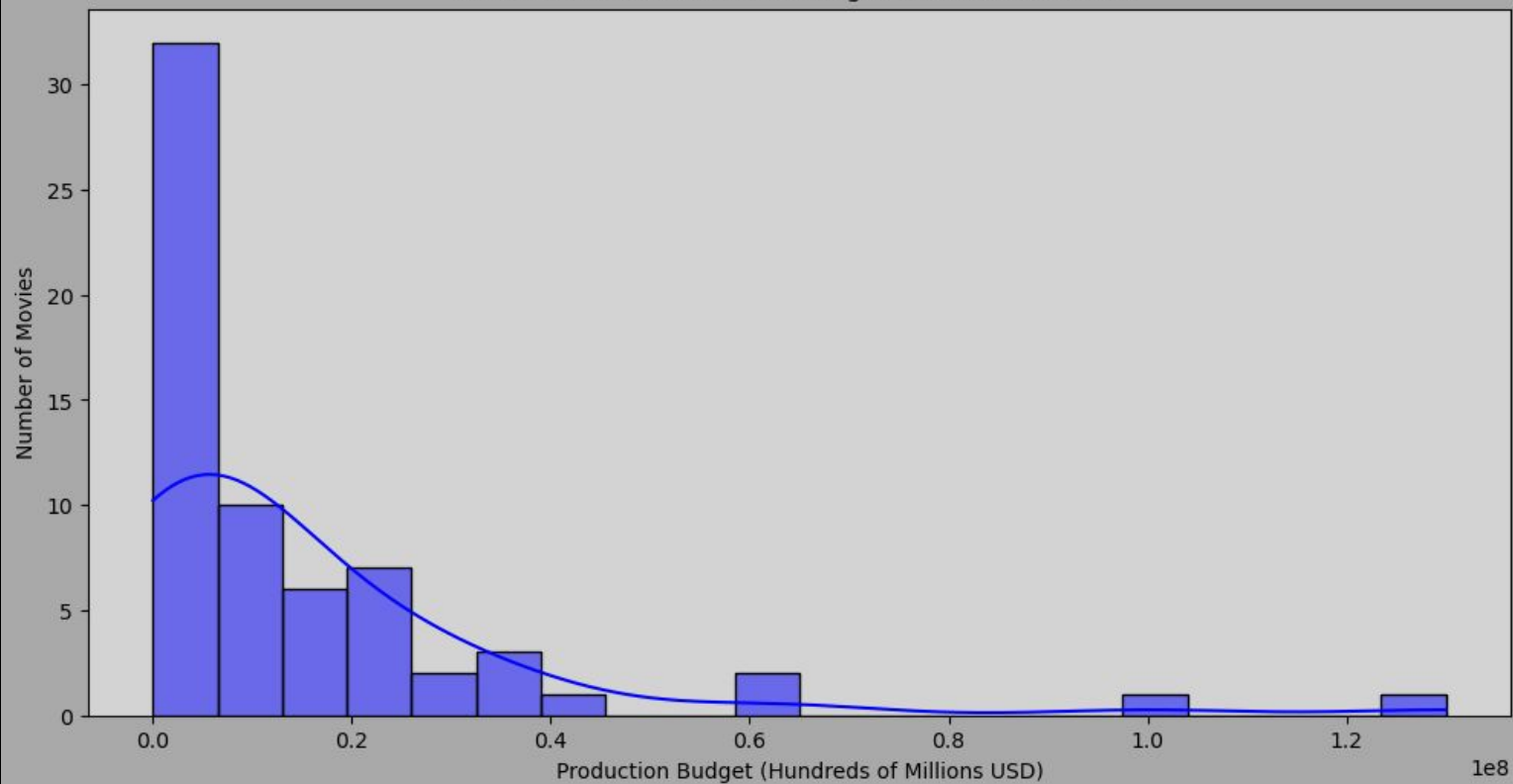- **Gross Worldwide:** $73,975,239 (**2366%** ROI)

Courageous (2011)
- **Production Budget:** $2,000,000
- **Gross Domestic:** $34,522,221 (**1626%** ROI)
- **Gross Worldwide:** $35,185,884 (**1659%** ROI)
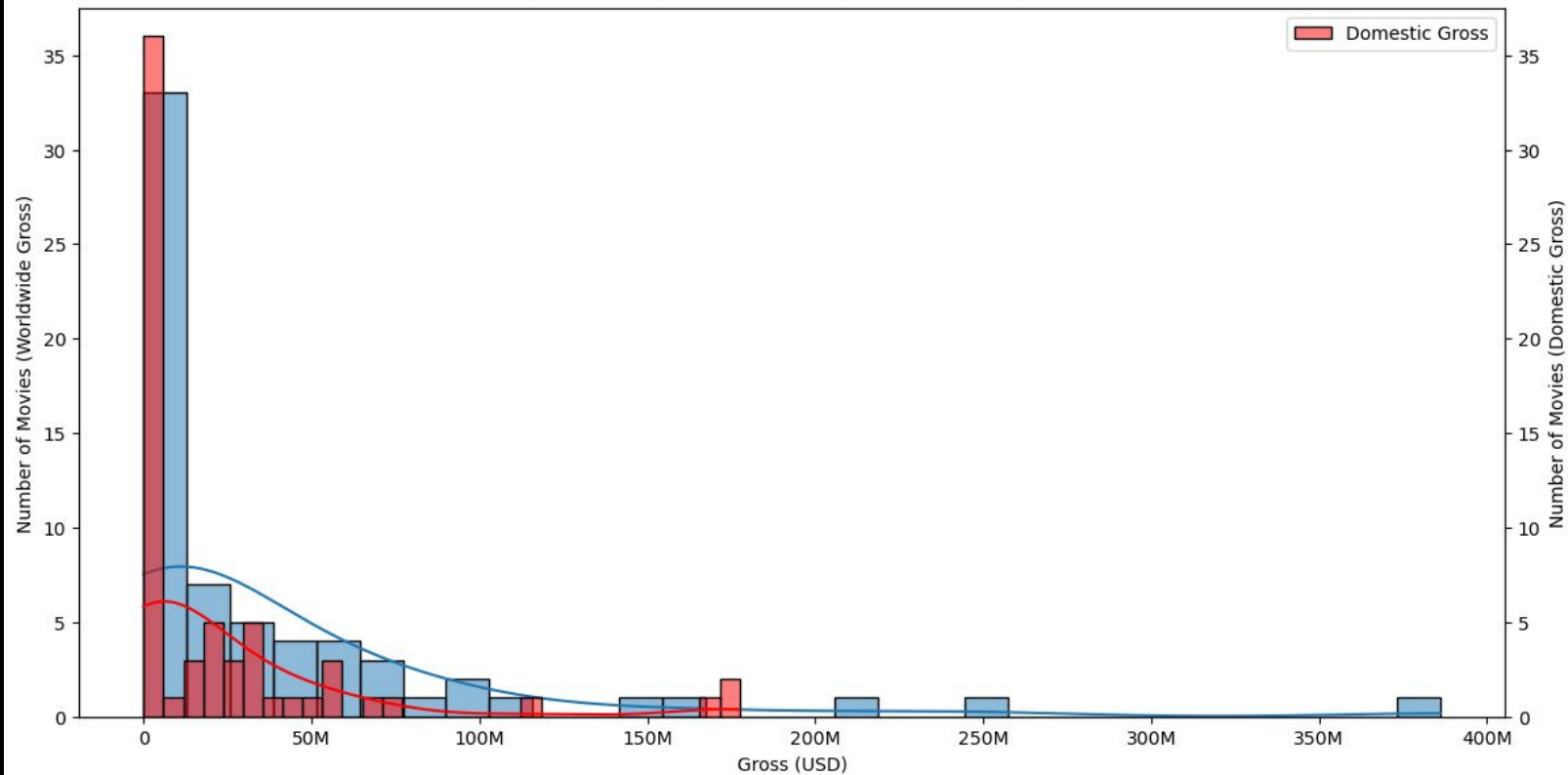
<u>Genre Averages:</u>
- **Production Budget:** ~$15,000,000
- **Gross Domestic:** ~$23,000,000
- **Gross Worldwide:** ~$39,000,000

Distribution of Production Budgets for Drama Movies

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.

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Thank you!