

Microsoft Movie Needs: Analysis & Recommendations



Lorela Blaka

Eric Denbin

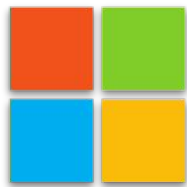
Jesse Markowitz

August 2021

Outline

1. Summary
2. Business Problems
3. Data & Methods
4. Results
5. Recommendations

Summary



Data from IMDB and The Numbers

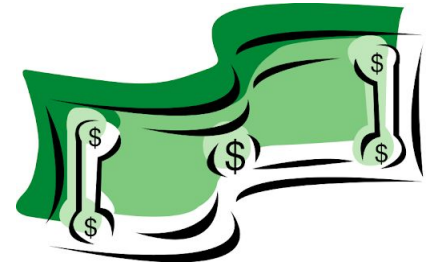
Recommendations:

- ▷ Optimal budget range is \$100 million–\$300 million
- ▷ Release movies in May, June, and October
- ▷ Prioritize dramas and comedies



Business Problems

- ▷ What is the **optimal budget range**?
- ▷ When should movies be released to ensure **positive ROI**?
- ▷ Which **genres** are the most successful?



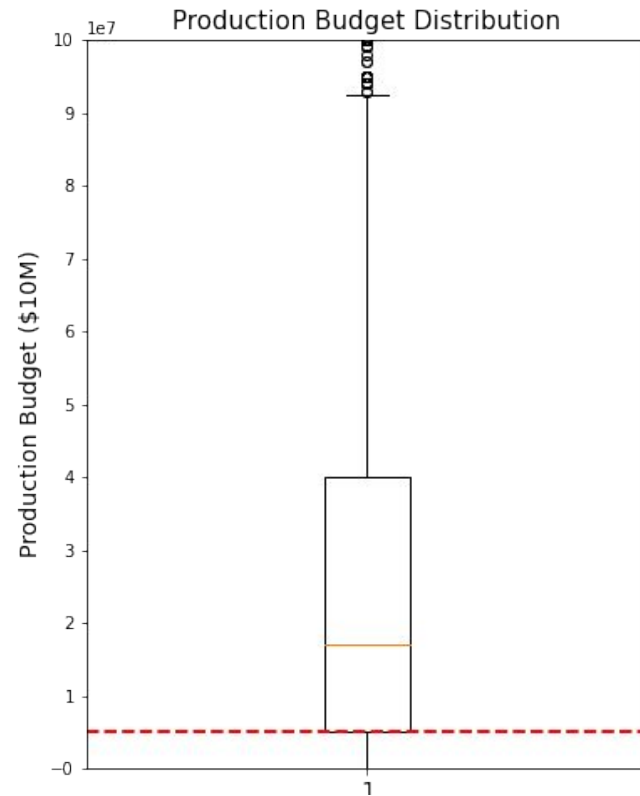
Data & Methods

- ▷ Historical financial data from The Numbers (1915-2019)
- ▷ Genre data from IMDB (2010-2019)
- ▷ Metric:

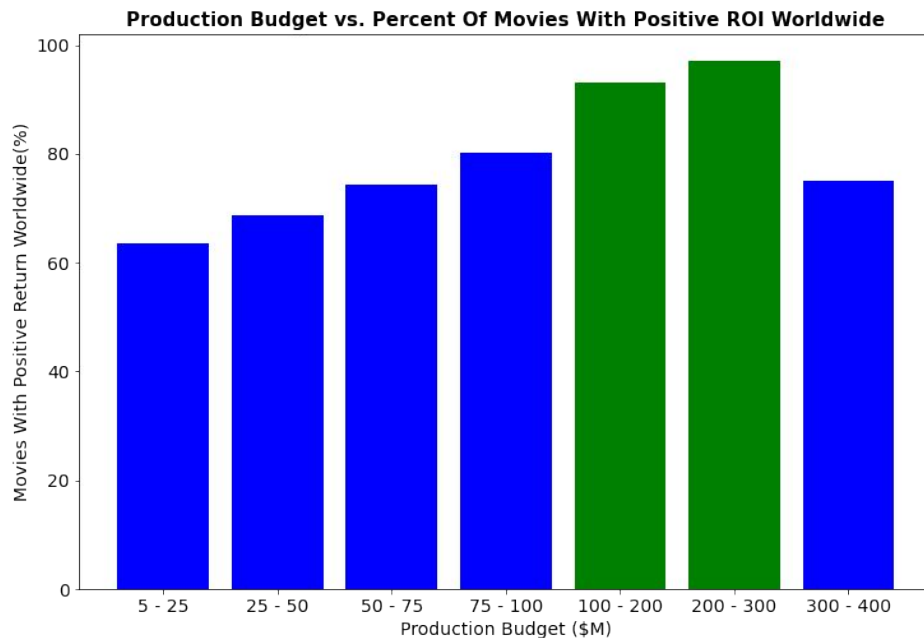
$$ROI = \frac{(Gross\ Revenue - Production\ Budget)}{Production\ Budget}$$

Relevant Movies

- ▷ Defined as:
- Released before 2020
 - Revenue > \$0
 - Budget >= \$5M
(above 25th percentile)



Results: ROI and Budget

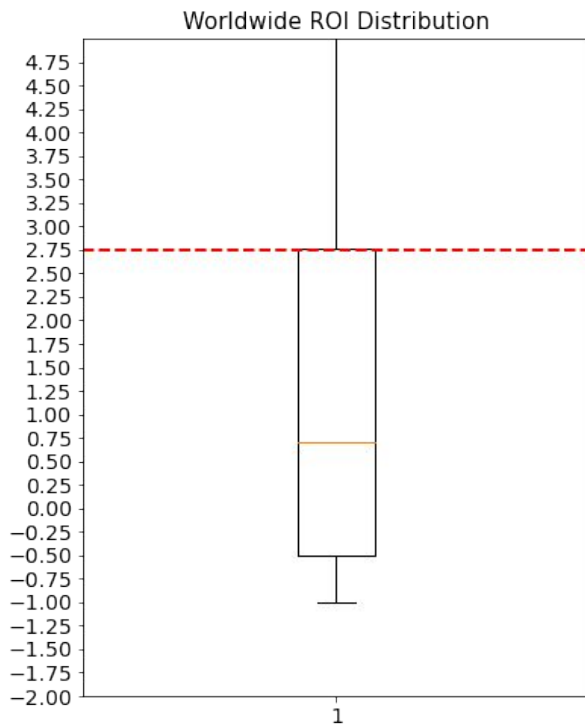


- Percentage of movies with positive ROI increases with production budget
- Peak in the \$200m - \$300m budget range

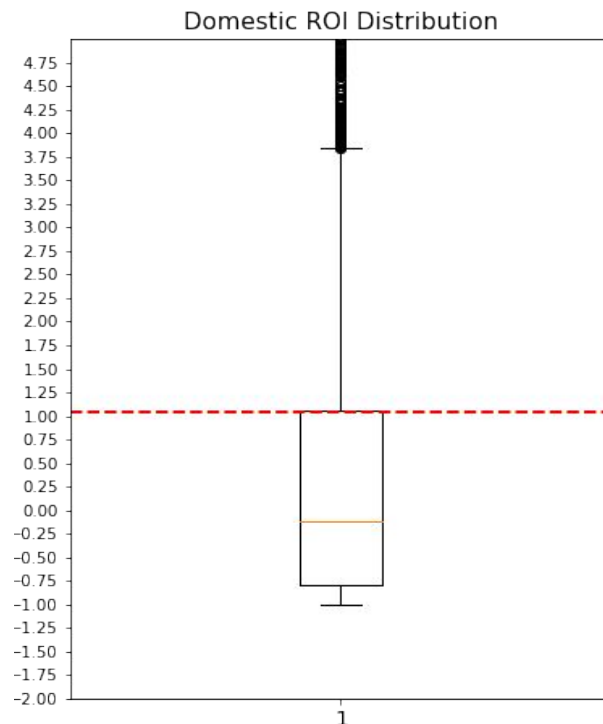
Top movies

▷ Defined as:

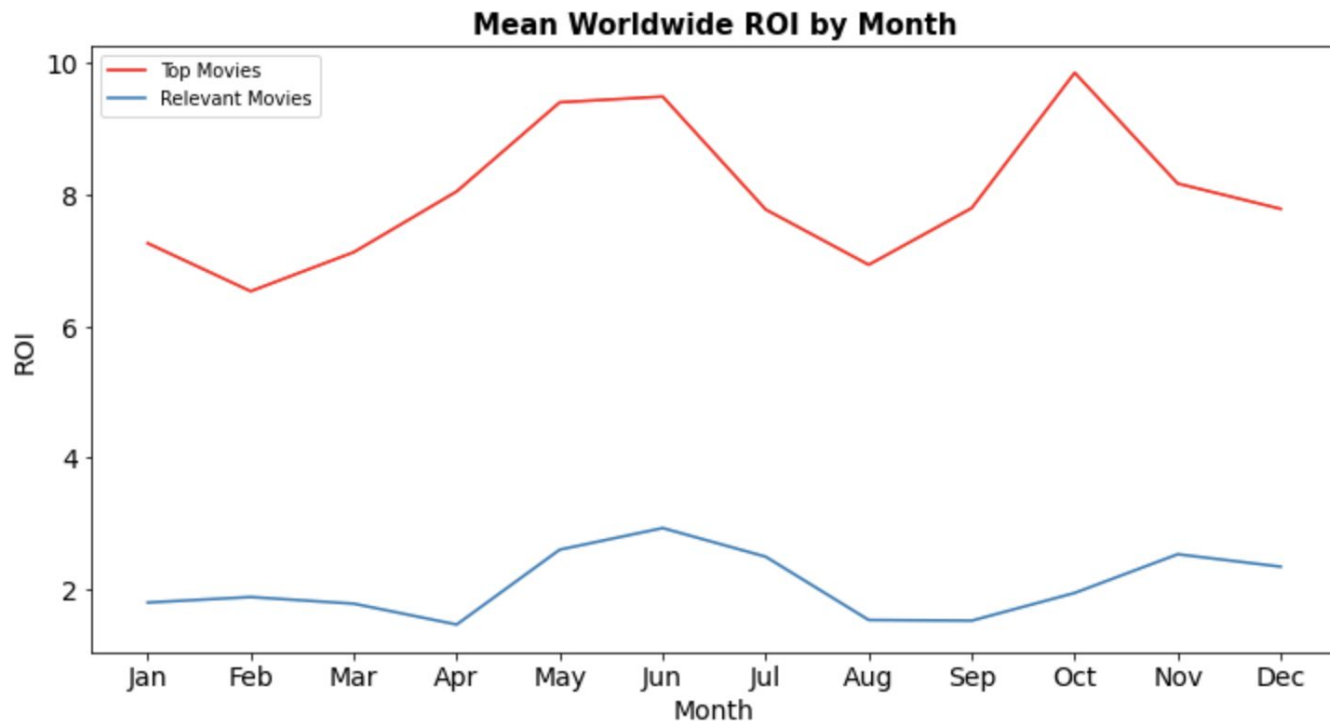
- Worldwide ROI > 2.75



- Domestic ROI > 1.05

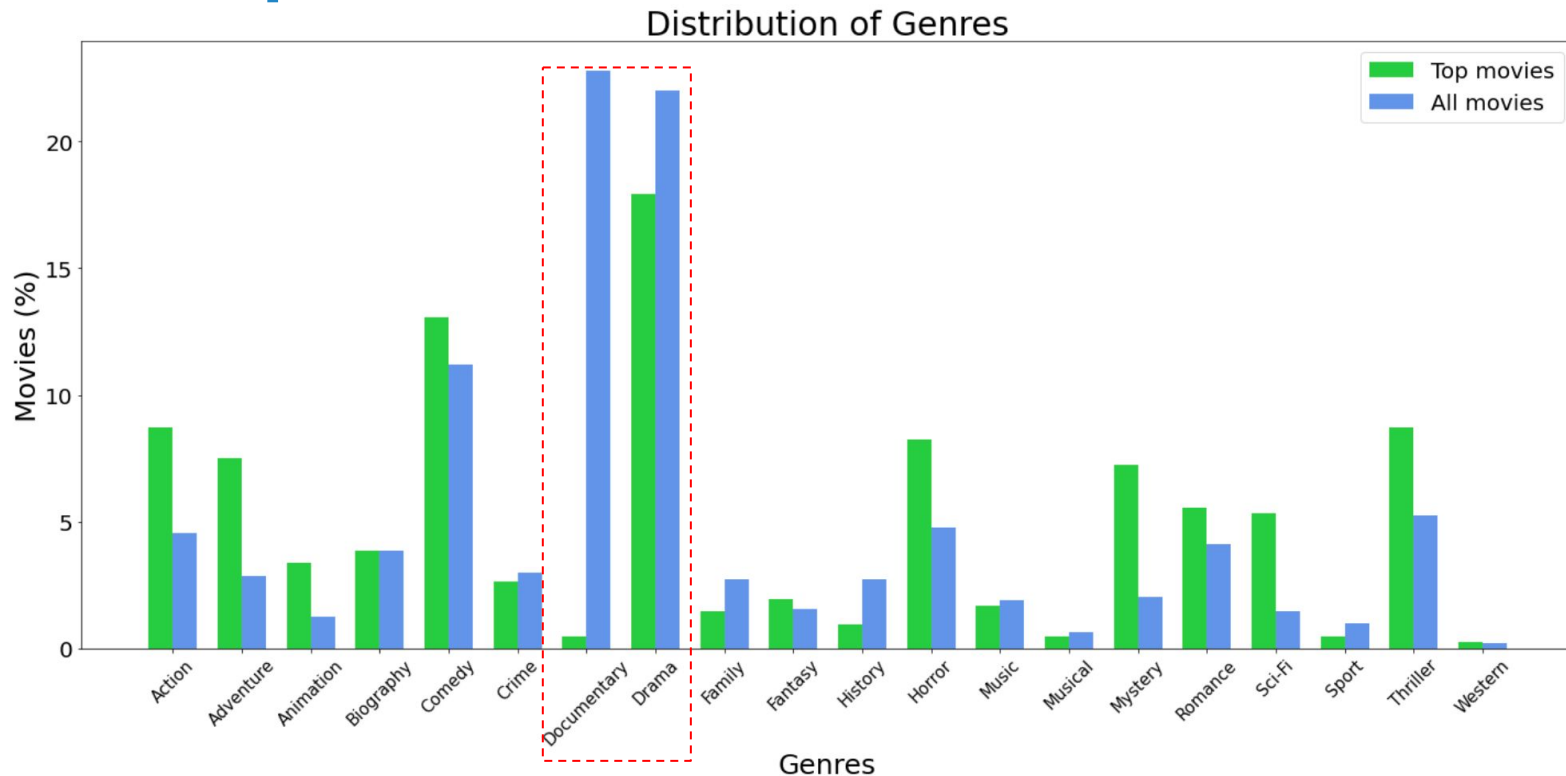


Results: ROI by Month



- Highest mean Worldwide ROI in May, June, and October
- Top and relevant movies

Results: Top Movie Genres



- Dramas and comedies most common among successful movies
- Documentaries frequently produced, but rarely financially successful

Recommendations

- ▷ Optimal budget range is \$100 million–\$300 million for the best chance of a positive ROI
- ▷ Maximize ROI by releasing movies in May, June, and October
- ▷ Prioritize production of dramas and comedies

Next steps:

- ▷ ROI by month with number of movies released (i.e when is the market flooded?)
- ▷ ROI by genre over time (i.e is there a spike in winter because of Christmas movies?)
- ▷ Genre popularity over time to identify trends by month, year and historically

Thank you!



Lorela Blaka

EMAIL:
lblaka@gmail.com

GITHUB:
@lblaka

LINKEDIN:
<https://www.linkedin.com/in/lorela-blaka/>



Eric Denbin

EMAIL:
ericdnbn@gmail.com

GITHUB:
@ericdnbn

LINKEDIN:
<https://www.linkedin.com/in/eric-denbin-289a31115/>



Jesse Markowitz

EMAIL:
jess.markowitz@gmail.com

GITHUB:
@jmarkowi

LINKEDIN:
www.linkedin.com/in/jmarkowi

Appendix

