



Movie Studio Data Analysis

By Jack Locke

Summary

Assessing box office performances for movies:

Measurement of success:

- Gross ROI

What the stakeholder can control:

- Genres
- Release Dates by Month
- Directors

Outline

- Business Problem
- Data Understanding
- Limitations
- Results
- Conclusion
- Next Steps

Business Problem

- Company starting a new movie studio
- Goal: What movie attributes lead to success
 - Genres, release dates, and directors
- Successful box office performance → profitable returns
 - Gross ROI
- Data from box office release

Data Understanding

Two datasets:

- IMDB database
 - Data on genres, directors, and release date
 - 160,000 movies
- Movie Budget file
 - Data on release date, production budget, revenue
 - 5,800 movies

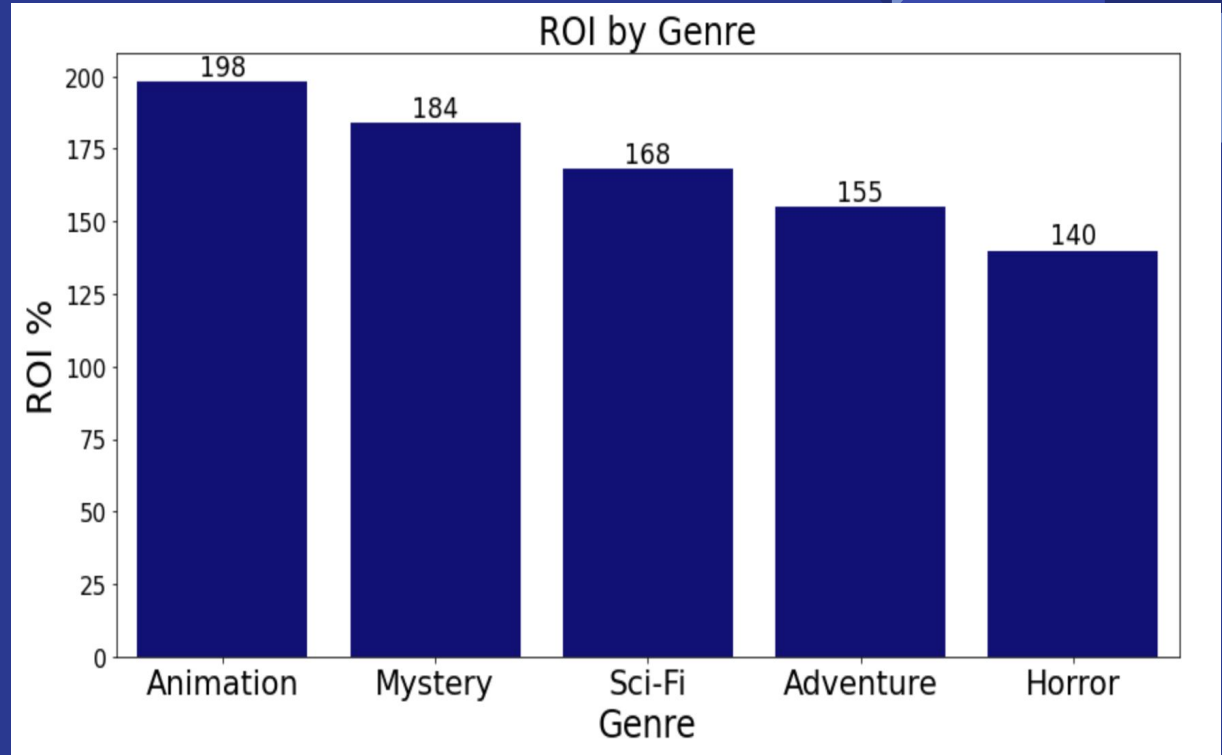
Limitations

- Account for more movies → why they saw the movie
- Additional costs and revenue post box office
- Patterns/trends
- High representation
- Recommend future actions

Result 1

Genre vs. ROI:

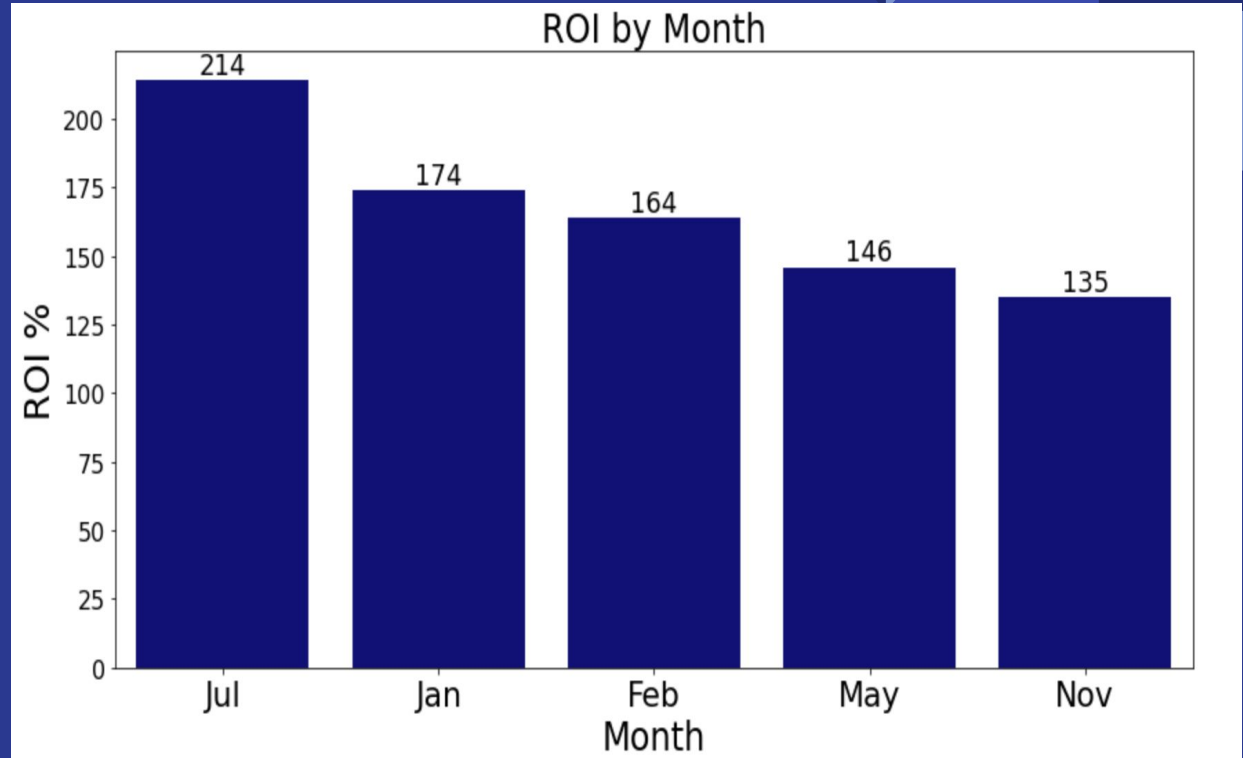
- Individualized
- Recommendations:
 - Animated
 - Mystery
 - Sci-Fi
 - Adventure
 - Horror



Result 2

Month vs. ROI:

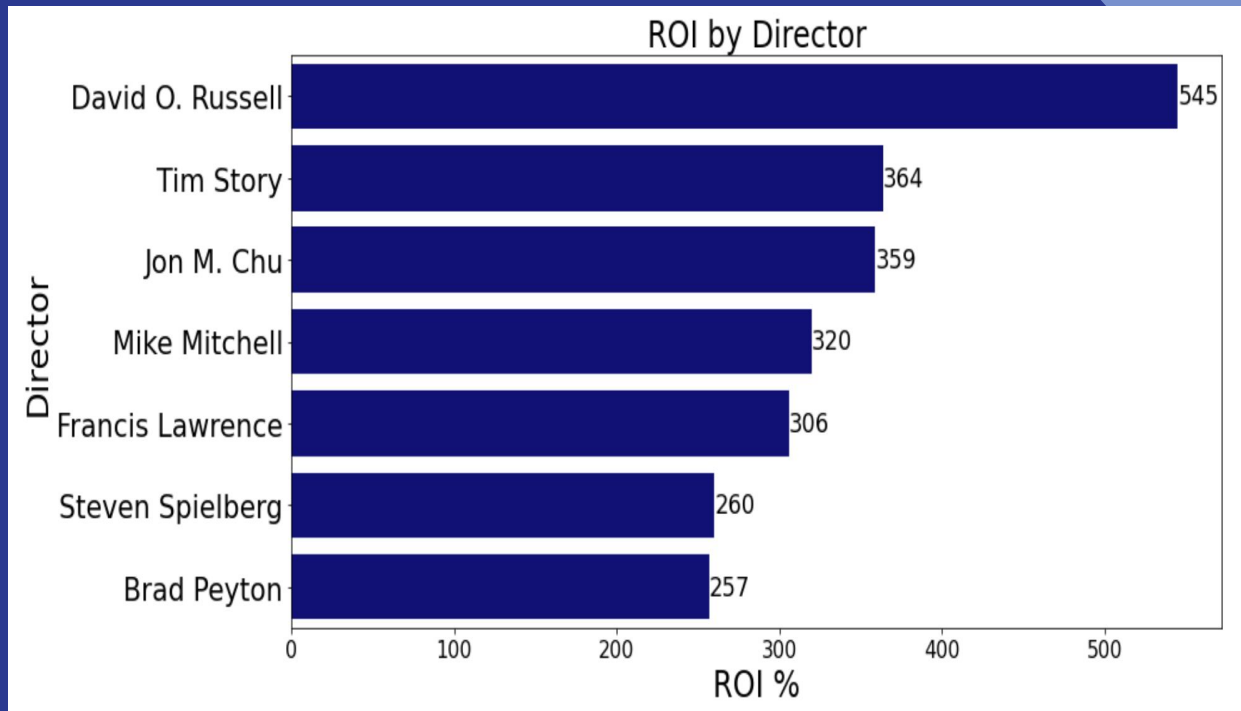
- Recommendations:
 - July
 - January
 - February
 - May
 - November



Result 3

Directors vs. ROI:

- Recommendations:
 - David O. Russell
 - Tim Story
 - Jon M Chu
 - Mike Mitchell
 - Francis Lawrence
 - Steven Spielberg
 - Brad Peyton



Conclusion

- Box office performance
- Performance → Profitable returns
- Limitations
- Genre vs. ROI
 - Animation, Mystery, Sci-Fi, Adventure, Horror
- Month vs. ROI
 - July, January, February, May, November
- Director vs. ROI
 - David O. Russell, Tim Story, Jon M. Chu, Mike Mitchell, Francis Lawrence, Steven Spielberg, Brad Peyton

Next Steps

Data Enrichment:

- Why they saw the movie → more data on genre, release dates, and directors
- Costs not accounted for
- Post-box office performance Data:
 - Additional post-production costs
 - Additional revenue
 - Streaming costs/revenue
- Gross ROI → Net ROI



Questions

Thank you

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