



Microsoft Film Analysis

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Summary

Descriptive analysis of film data to develop a strategy for Microsoft's new movie studio

- Budget
- Release month
- Genre recommendations
- Hiring recommendations

Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

Business Problem

Microsoft wishes to start their own movie studio and are new to the film industry. Analysis attempts to answer the following questions:

- How much to spend on a movie?
- When to release a movie?
- What genres have the highest return on investment?
- Which actors and directors bring the most value to a movie?

Data

The Numbers

- Budget and gross information by film title
- 5782 films, dating back to 1916

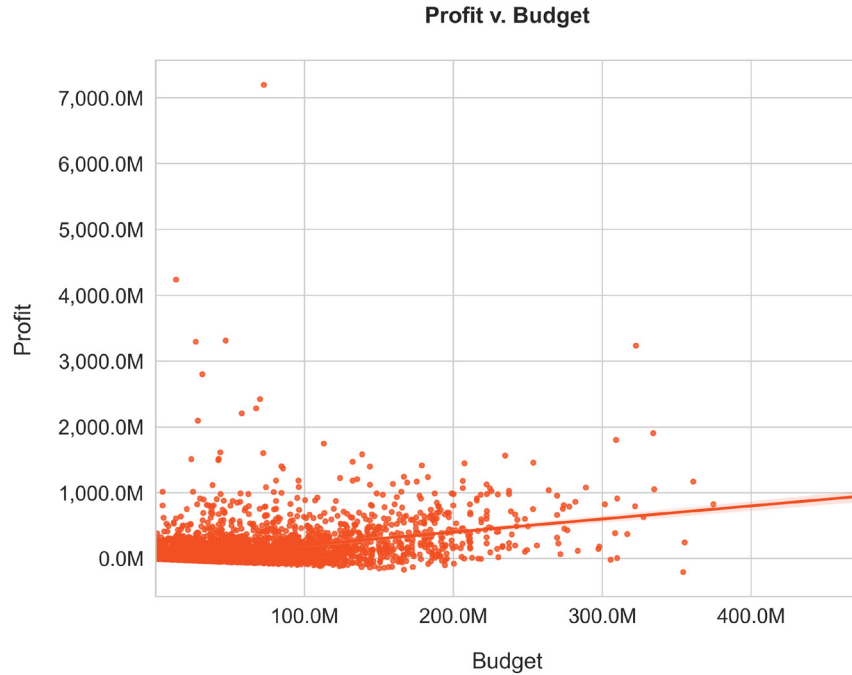
IMDB

- Genres
- Living actors and directors
- Films dating back to 2000

Methods

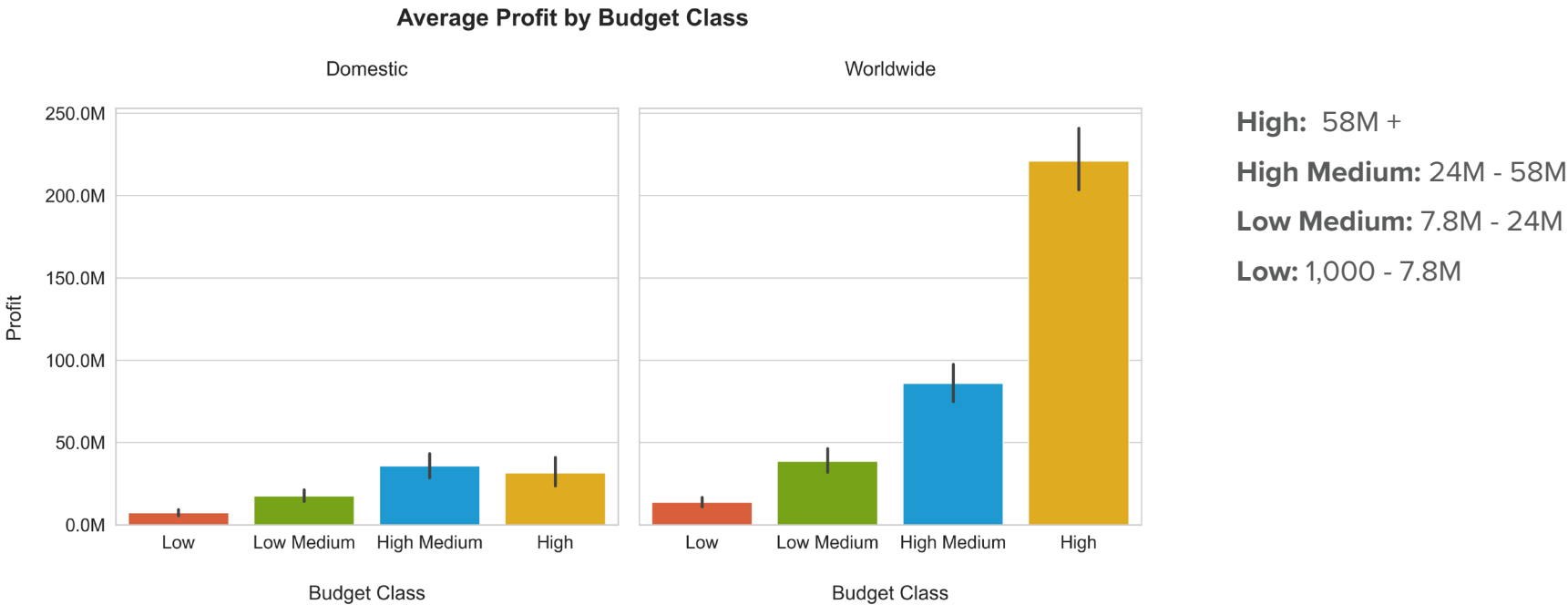
- Adjust for inflation
- Create budget classes
- Create new variables to assess performance: ROI (return on investment), profit
- Eliminate low budget class (7.8 million and under) + films released before 2000
- Find relationships between ROI and other variables: release month, genre, cast/crew

Results: Budget



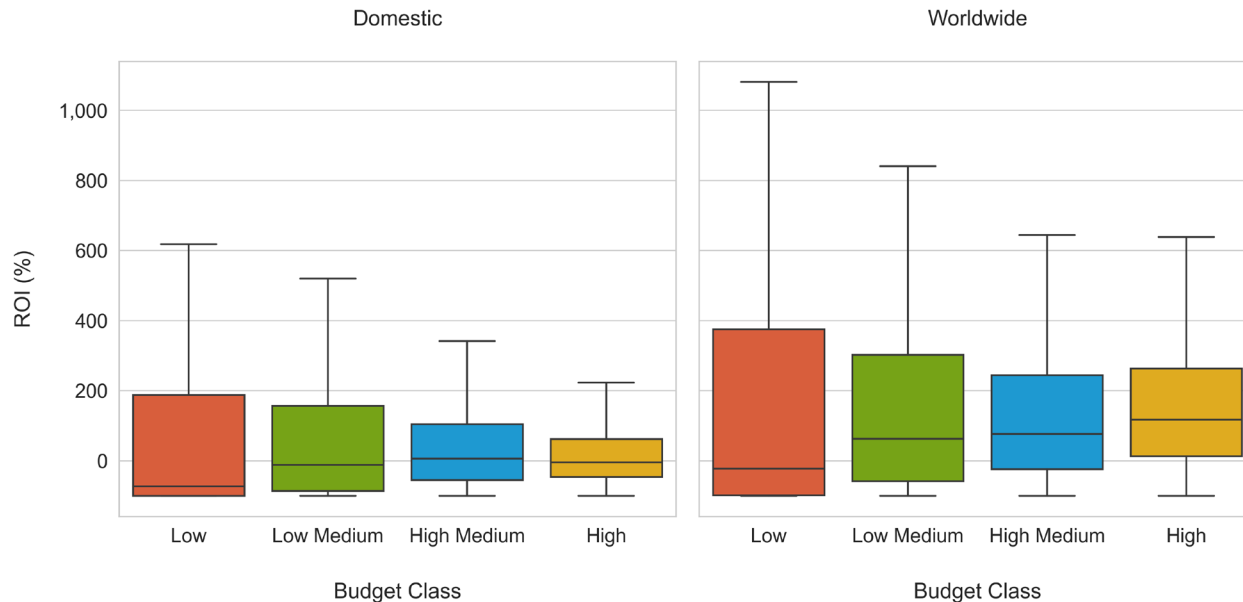
- Positive relationship between money spent and money made

Results: Budget



Results: Budget

ROI by Budget Class



High: 58M +

High Medium: 24M - 58M

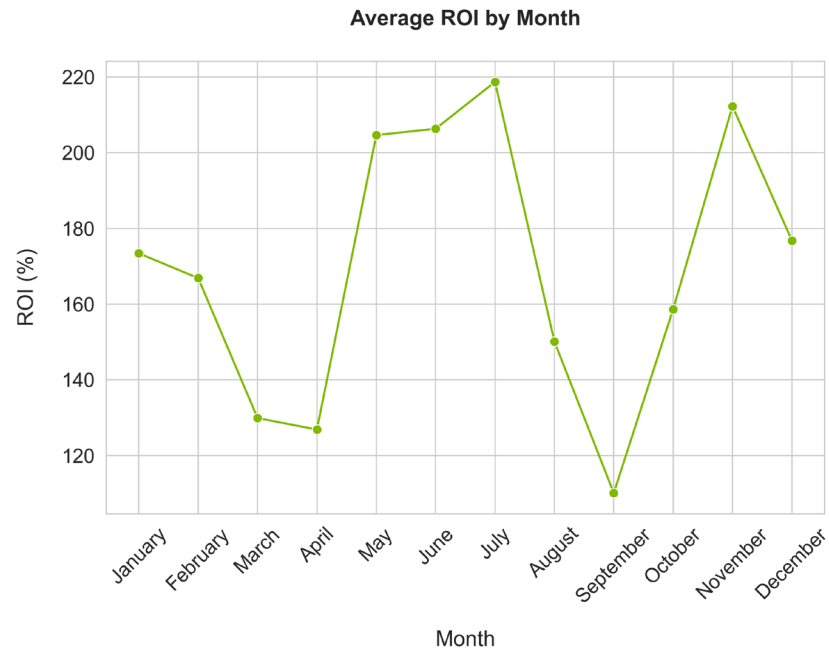
Low Medium: 7.8M - 24M

Low: 1,000 - 7.8M

Results: Budget

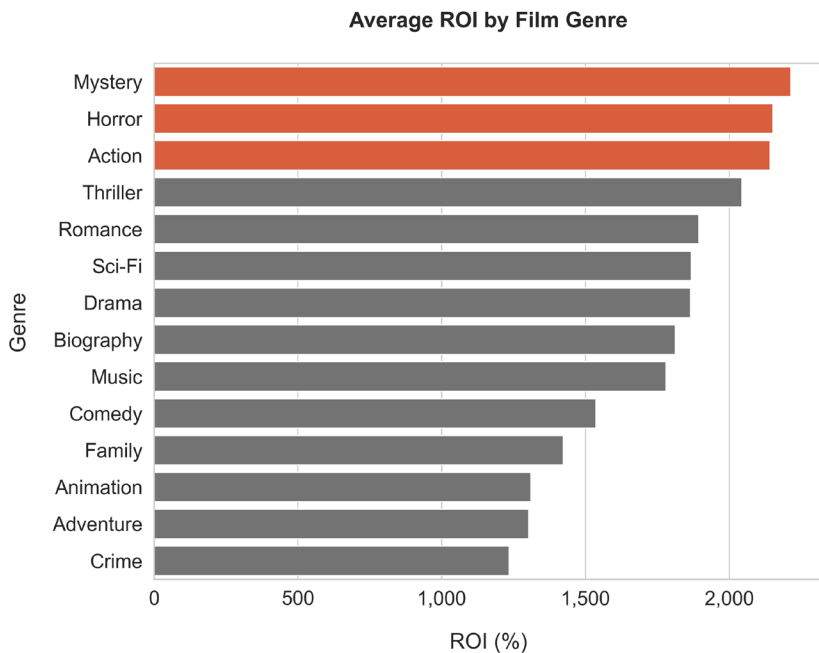
- High Medium budget to start (24M - 58M), especially for domestic releases
- Consider High/Studio budgets in the future (58M +) to rake in profits
- Low budget class dropped from analyses to follow

Results: Release Month



- Summer: May - July
- Fall: November

Results: Genres

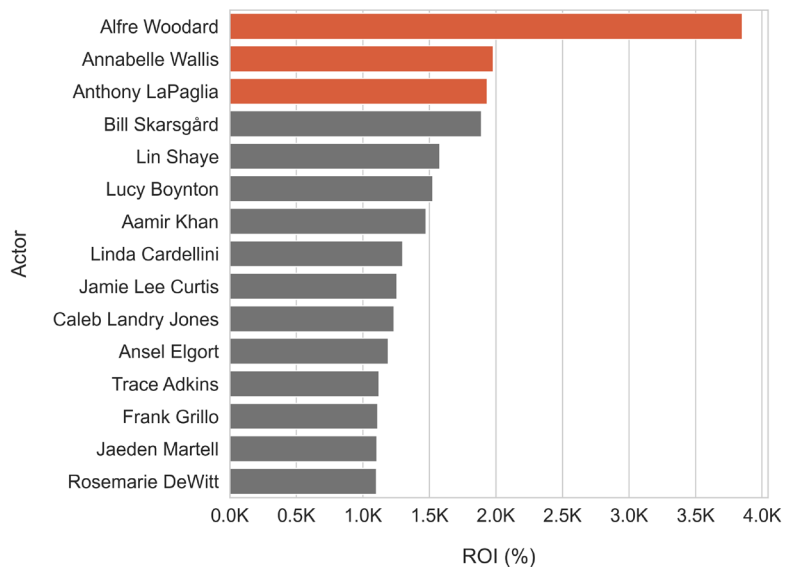


- Analyzed genres of top 100 films (highest ROI)
- Mystery, Horror, Action have highest ROI

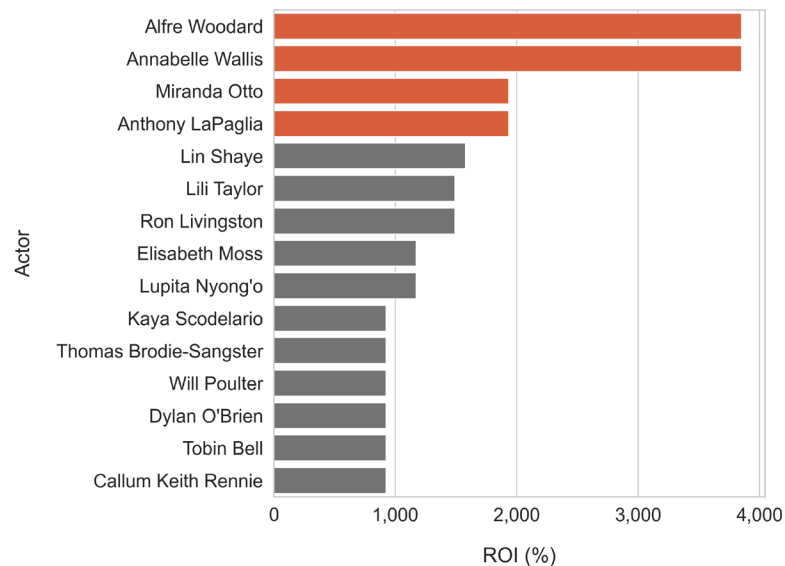
Results: Actors

* Actors who have appeared in more than 5 films

Average ROI for Actors (overall)



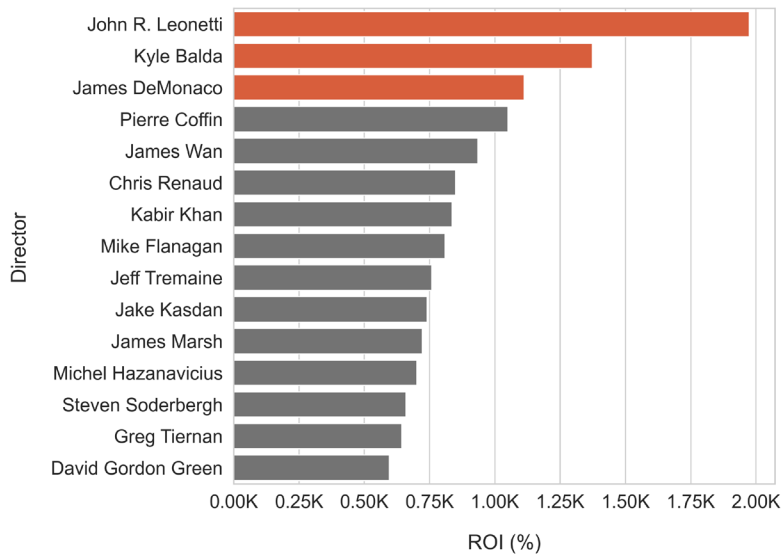
Average ROI for Actors (Mystery)



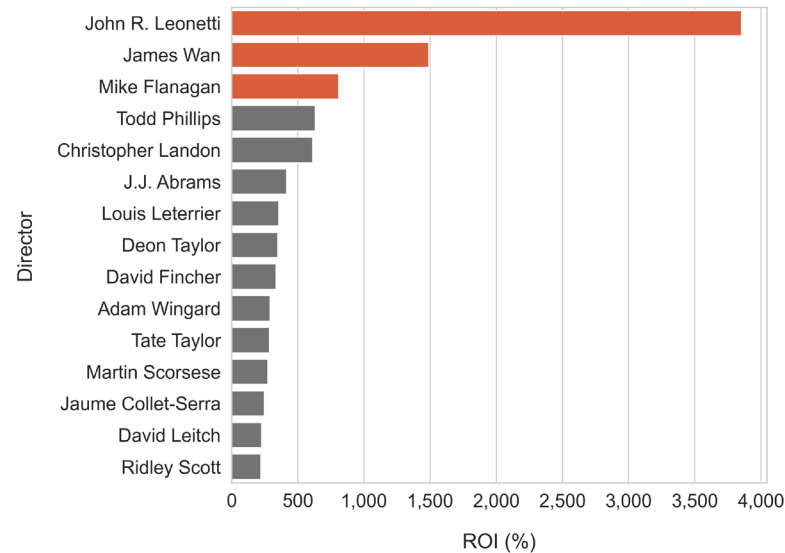
Results: Directors

* Directors who have directed more than 5 films

Average ROI for Directors (overall)



Average ROI for Directors (Mystery)



Conclusions

General

- 24M - 58M to budget start, 58M+ in the future
- Release during summer (May-July) or holidays (November-January)
- Genres: Mystery, Horror, Action
- Actors: Alfre Woodard, Annabelle Wallis, Anthony LaPaglia
- Directors: John R. Leonetti, Kyle Balda, James DeMonaco

Specific (initial release)

- 24M - 58M budget
- Release during July or November
- Genre: Mystery
- Actors: Alfre Woodard, Annabelle Wallis, Miranda Otto, Anthony LaPaglia
- Directors: John R. Leonetti, James Wan, Mike Flanagan

Next Steps

- Gather more monetary data on films
- Model rates of production
- Look at other measures of success (profits)
- Limit budget investigation to only recent releases
- Examine trends and practices for other movie studios

Thank You!

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