Maximizing your chances at a financially successful film
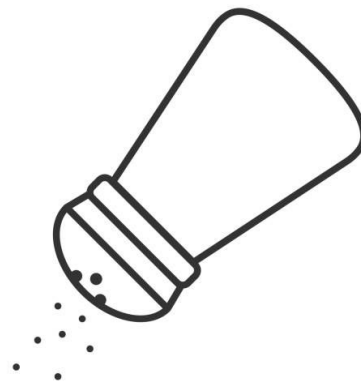
Matt LeRoi
February 14, 2025

Summary

Analysis reveals the following trends:

- Low budget horror films = high return on investment

- Big budget animation and sci-fi films = big blockbusters

- Higher ratings = more money
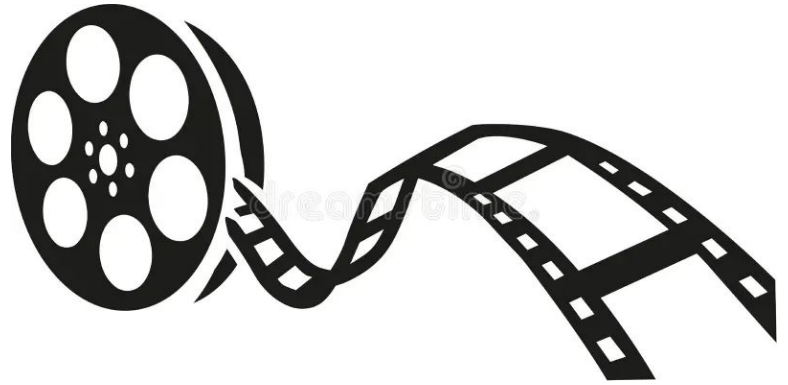
Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions / Recommendations

Business Problem

Acme Co. is getting into the film business!

Financial success can mean:

- Total net profit
    Profit = gross - budget

- Return on investment (ROI)
    ROI = net profit / budget

Data

Two sources:

Financial:
https://www.the-numbers.com/

Film details:
https://www.imdb.com/

Proportion of Profitable vs. Unprofitable Films

Profitable

75.7%

24.3%
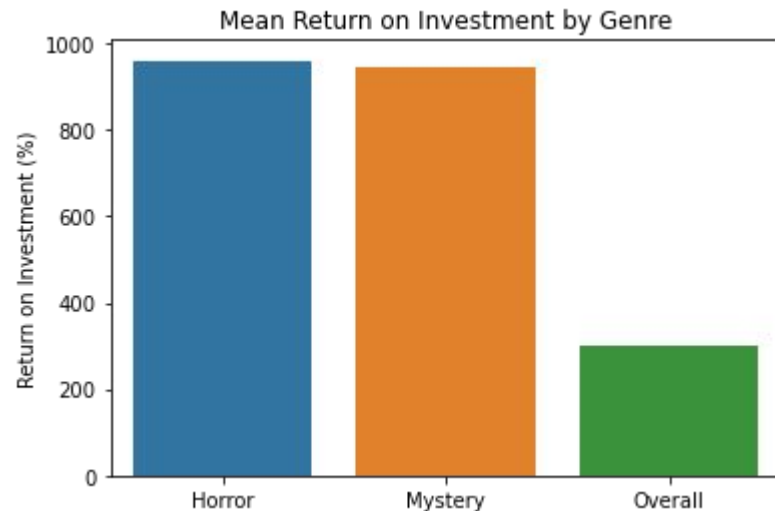
Unprofitable
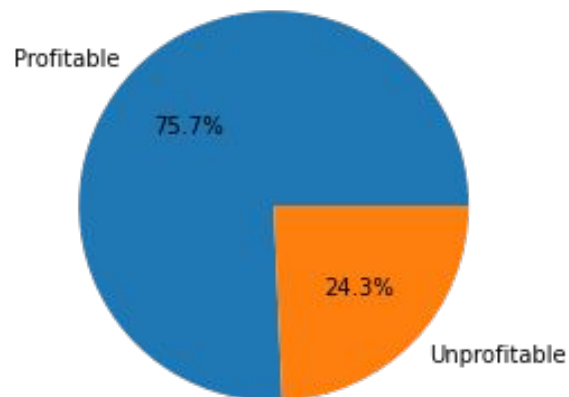
Methods

Created linear models based on:

- Genre
- Rating
- Runtime
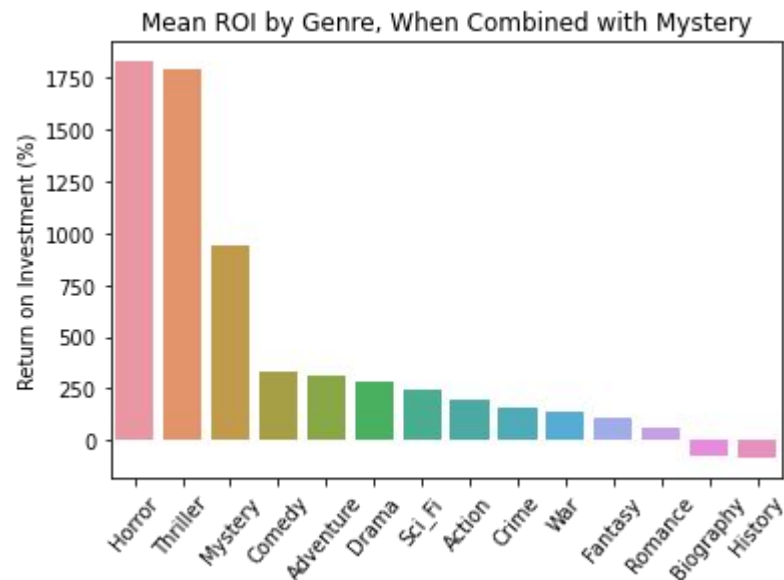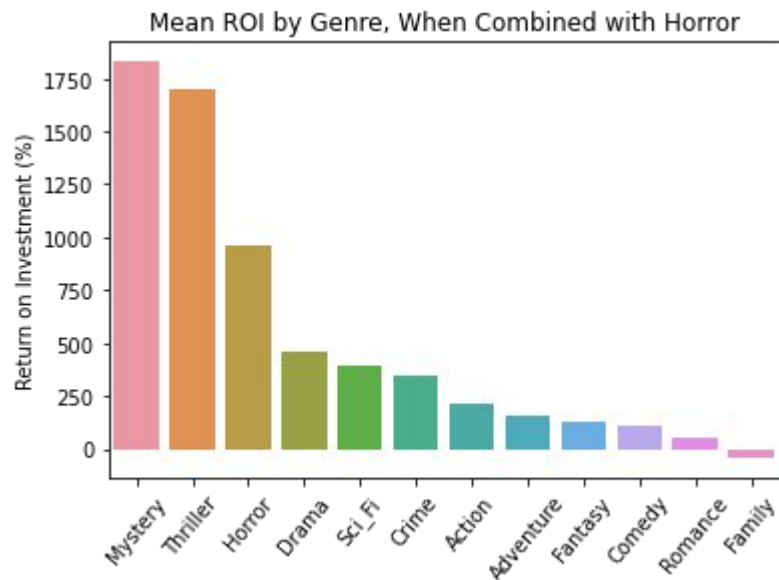- Release month
- Budget

Results - Return on Investment (ROI)

Statistically significant results:

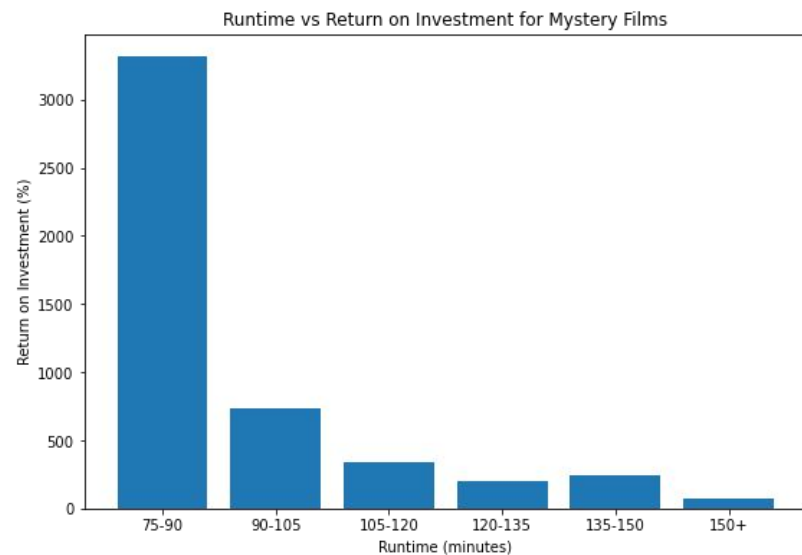- Genre (Horror and Mystery)

- Rating

- Runtime

Mean Return on Investment by Genre

Results - ROI

Horror + Mystery = secret sauce

Mean ROI by Genre, When Combined with Horror

Mean ROI by Genre, When Combined with Mystery

Results - ROI

Runtime should be 75-90 minutes

Runtime vs Return on Investment for Horror Films

Runtime vs Return on Investment for Mystery Films
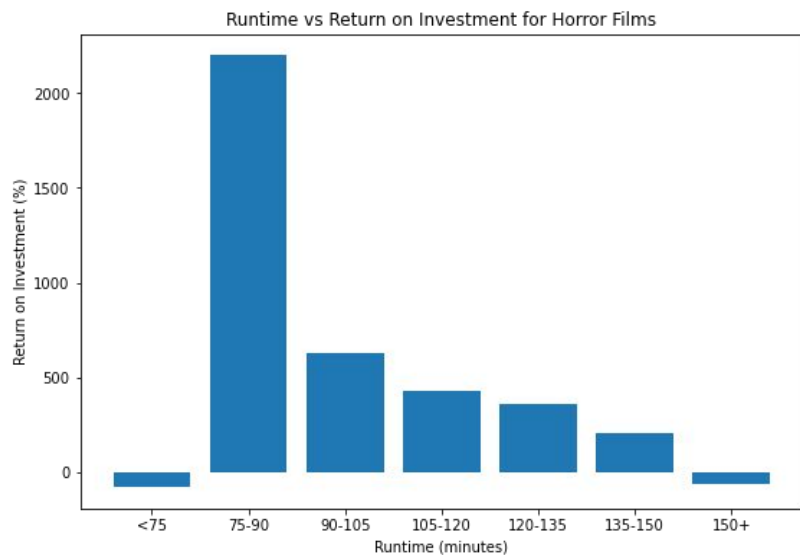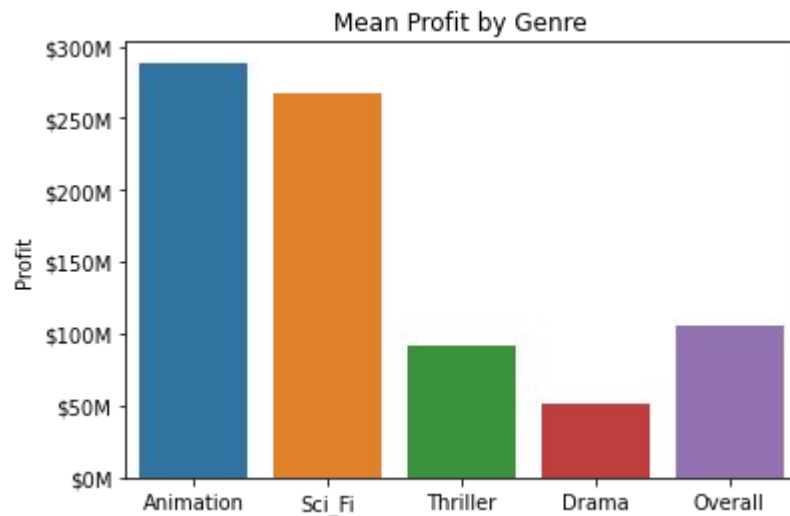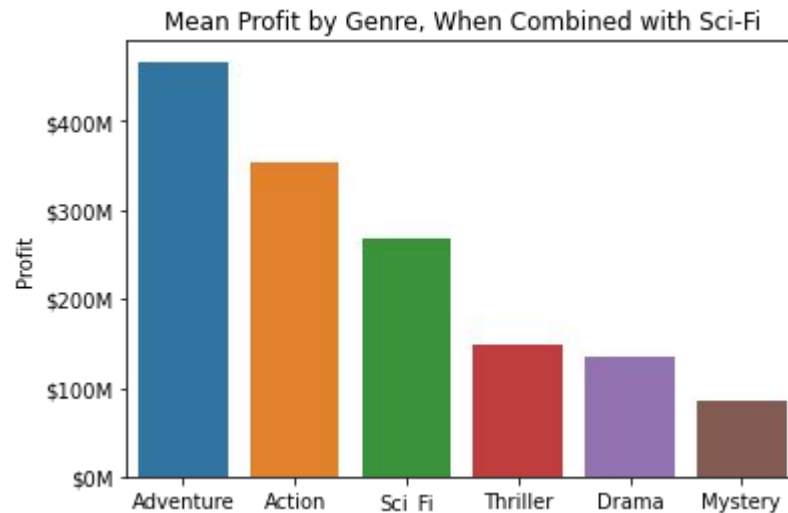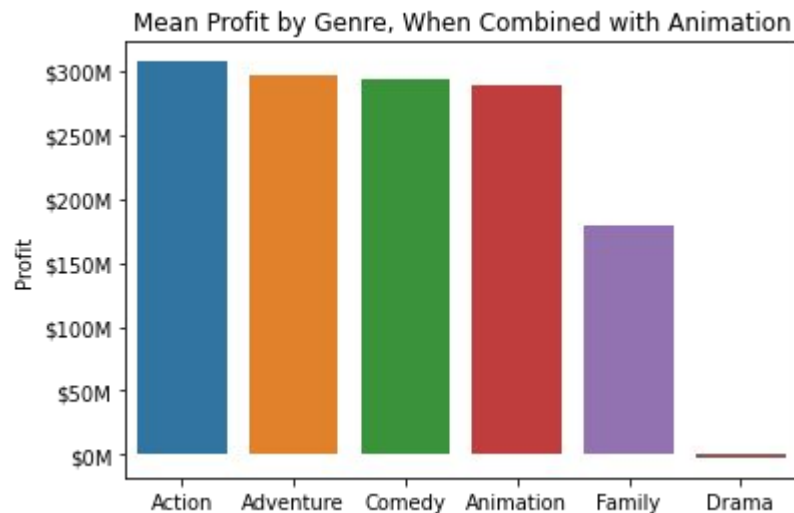
Results - Net Profit

Statistically significant results:

- Budget

- Genre (Animation, Sci-Fi, Thriller, Drama)

- Rating

- Runtime

Mean Profit by Genre

Results - Net Profit

- Combine Animation with Action, not drama
- Combine Sci-Fi with Adventure

Mean Profit by Genre, When Combined with Animation

Mean Profit by Genre, When Combined with Sci-Fi

Results - Net Profit

- Animated runtime should be 105-120 minutes

- Sci-Fi runtime should be 135-150 minutes

Runtime vs Profit for Animated Films

Runtime vs Profit for Sci-Fi Films
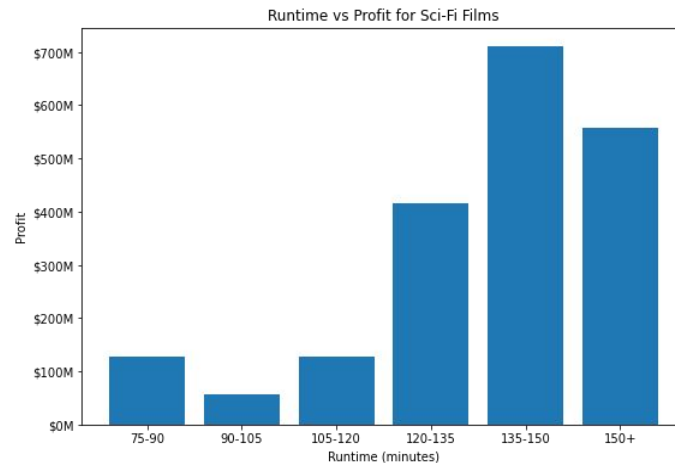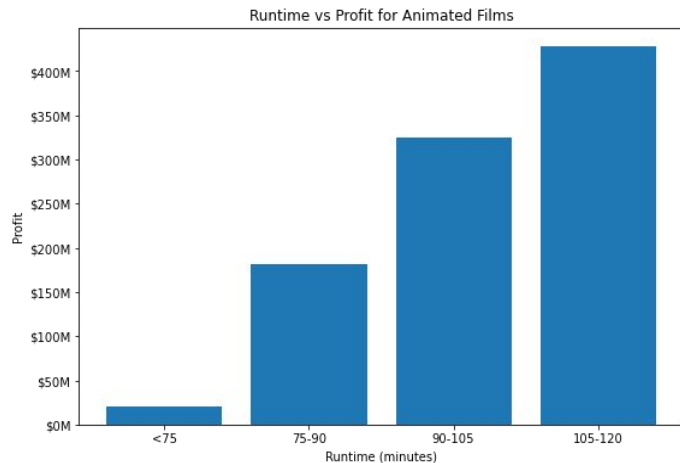
Conclusions - Maximize ROI

- Genre: horror + mystery

- Rating: higher = better

- Runtime: 75-90 minutes

Conclusions - Maximize Net Profit

- Budget: higher budget = higher net profit

- Genre: Animation or Sci-Fi

- Rating: higher = better

- Animation runtime: 105-120 minutes

- Sci-Fi runtime: 120-135 minutes

Thank You!

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