Movie Studio Strategy Review

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Project Goals

- Use data to determine what features contribute to a successful film.

Data analyzed

- Analyzed a dataset of over 5,000 films.

- Dataset was filtered to exclude all non-english-language films, and all films released before 1996.

Factors considered

Inputs

- Lead Actors

- Supporting Actors

- Genres

- Plot keywords

Factors considered

Determinants of success

- Normalized Profit

  - Normalized Profit = Film Profit / Avg. Profit for all Films

  - Definition of success - *a film is considered successful on this metric if it is greater than or equal to the 75th percentile value for profit for all films (2.09)*

- Return on Investment (ROI)

  - ROI = Film Profit / Film Budget

  - Definition of success - *a film is considered successful on this metric if it is greater than or equal to the 75th percentile value for ROI for all films (94%)*

Actor Analysis

Which actors appear in the most successful movies?

Which lead actors appear in the most profitable movies?

- 48 lead actors have an average normalized profit greater than 2.09.

Top Experienced Lead Actors by Avg. Profit

Lead Actor	Avg. Profit (millions USD)	Normalized Profit (profit / mean profit for all films)
Robert Pattinson	130.8	12.8
Bryce Dallas Howard	128.6	12.6
Steve Carell	97.3	9.5
Jennifer Lawrence	84.7	8.3
Bradley Cooper	80.7	7.9

Which supporting actors appear in the most profitable movies?

- 128 supporting actors have an average normalized profit greater than 2.09.

Top Experienced Supporting Actors by Avg. Profit

Supporting Actor	Avg. Profit (millions USD)	Normalized Profit (profit / mean profit for all films)
Billy Boyd	188.8	18.5
Josh Hutcherson	184.3	18.1
Joel David Moore	176.2	17.3
Rupert Grint	118.3	11.6
John Ratzenberger	116.2	11.4

Which lead actors appear in movies with the highest ROI?

- 54 lead actors have an average ROI greater than 94%.

Top Experienced Lead Actors by Avg. ROI

Supporting Actor	Avg. Return on Investment (ROI)
Mark Margolis	18.8
Lin Shaye	16
Noel Gugliemi	6.3
Robert Duvall	5
Kevin Zegers	3.7

Which supporting actors appear in movies with the highest ROI?

- 113 supporting actors have an average ROI greater than 94%.

Top Experienced Supporting Actors by Avg. ROI

Supporting Actor	Avg. Return on Investment (ROI)
Mark Margolis	18.8
Lin Shaye	16
Noel Gugliemi	6.3
Robert Duvall	5
Kevin Zegers	3.7

Director Analysis

Which directors direct the most successful movies?

Which directors direct the most profitable movies?

- 74 directors have an average normalized profit greater than 2.09.

Top Experienced Lead Actors by Avg. Profit

Director	Avg. Profit (millions USD)	Normalized Profit (profit / mean profit for all films)
Peter Jackson	152	14.9
Francis Lawrence	151.1	14.8
Andrew Adamson	130.6	12.8
Phil Lord	115.2	11.3
Christopher Nolan	101	9.9

Which directors direct movies with the highest ROI?

- 77 directors have an average ROI greater than 94%.

Top Experienced Directors by Avg. ROI

Supporting Actor	Avg. Return on Investment (ROI)
Alex Kendrick	61
James Wan	14.8
Darrem Aronofsky	10.4
Michael Moore	8.3
Darren Lynn Bousman	8

Genre Analysis

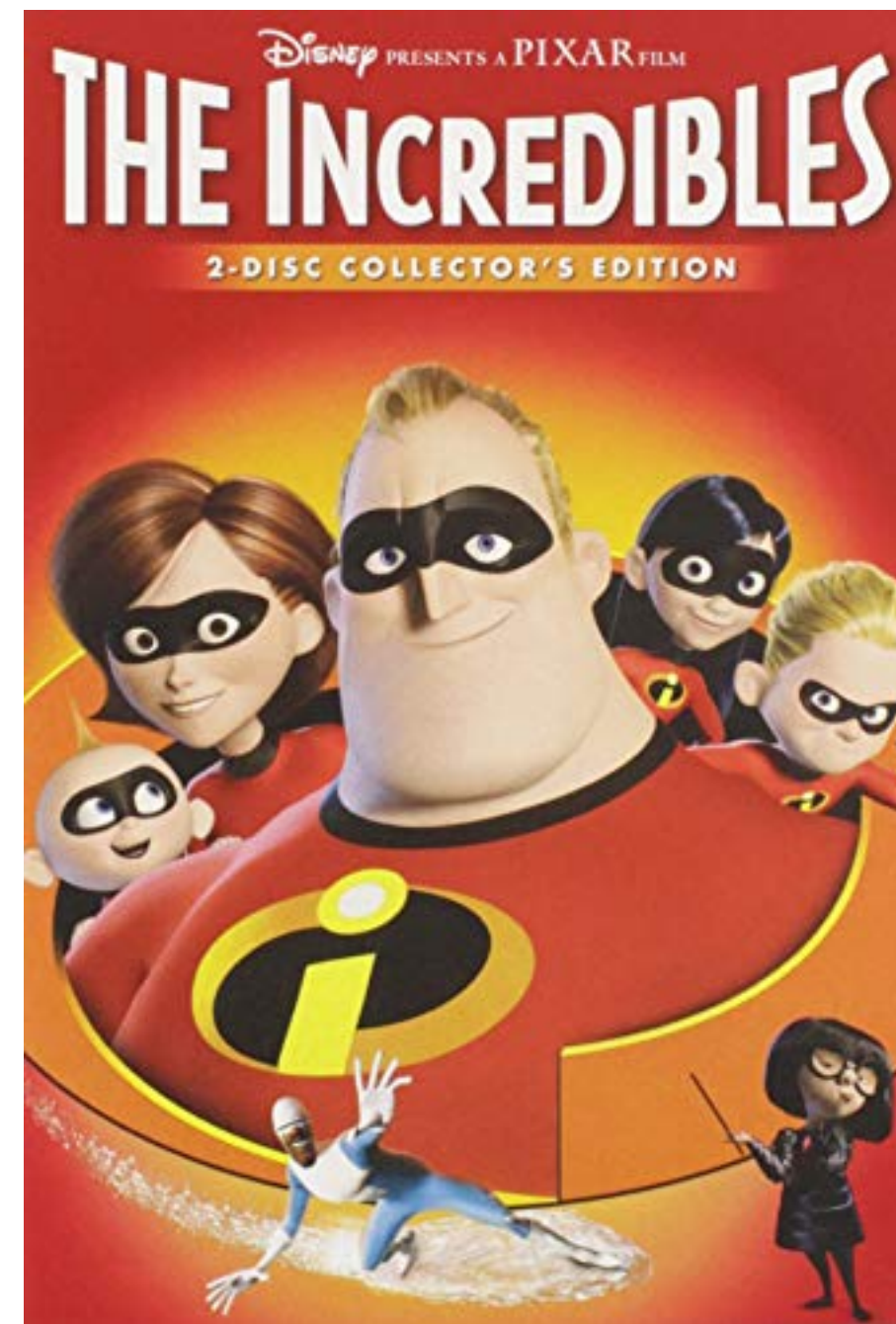*Which genres are the most financially successful?*

Recommendations

- Focus on growth in two categories:

  - Blockbuster

  - Crowd-pleasers

- De-emphasize less profitable genres - including Action, Crime, Thriller, and Drama.

Blockbusters

- Blockbusters are high-budget, high-margin films.

- The resources required to produce these films means that they are released infrequently, but they are often highly profitable.

- Blockbuster genres include Adventure (6.3% of all films), Fantasy (4.3%), Sci-fi movies (4.4%, Animation (2), and Family movies (4.3%).

Crowd pleasers

- Crowd-pleasers have lower budgets and lower margins, and are released more frequently.

- Crowd-pleasers are less profitable than blockbusters, but they are released more frequently.

- Crowd-pleaser genres include Romance (8.2% of all films) and Comedy (15% of all films).

Keyword Analysis

Which plot keywords are the most financially successful?

Which plot keywords are the most profitable?

- There are 4 plot keywords with average normalized profit greater than 2.09.

- Movies with the plot keywords 'wedding', 'island', 'high school', 'female nudity', and 'hospital' are the most profitable, on average.

- Movies with the plot keywords 'small town', 'writer', 'escape', 'scientist', 'boy', 'future', and 'box office flop' are not profitable, on average.

Which plot keywords have the highest ROI?

- There are 4 plot keywords with average ROI greater than 94%.

- Movies with the plot keywords 'small town', 'writer', 'escape', 'scientist', 'boy', 'rescue','future', and 'box office flop' are not profitable, on average.

- Movies with the plot keywords 'scientist', 'box office flop' have negative ROI, on average.