The Midbudget Miracle

Finding the Sweet Spot for Movie Making Magic at Microsoft





Microsoft Making Movies... At Last

- Microsoft wants to enter the movie business and needs to know what movies to make
- We analyzed over 2,000 movies in the last 20 years from from well-known industry databases and...
- Investigated 3 factors on box office success:
 - Genre: Was there any correlation between genre and Return on Investment (ROI)?
 - Budget: Which budget (micro, small, ginormous, etc...) movies frequently yields a positive return?
 - Directors: Which do we hire? Does it matter?
- Findings
 - No strong correlation between genre and ROI
 - Mid-budget (\$30-45M) have yielded the most money making movies
 - There are 20 or so directors who have made 2 or more \$30-45M movies that made money. Yes it matters!
- RECOMMENDATION: Make movies in the \$30-45M range with directors who have a proven track record with those budgets, regardless of genre.

Data: Three "Input" Factors and "Output" Metrics

Input

Genre

Production Budget

Director



Output

Gross Revenue -Worldwide

Return On Investment (ROI)

Gross Margin -Worldwide

- ROI is the total Gross Revenue divided by the Production Budget
- Gross Margin is the total Gross Revenue less the Production Budget.
- All numbers consider World Wide Box Office Ticket Sales (ie no streaming, downloads, etc)

Data Process

Get the Data

Merged data from both a SQL, IMDB database and spreadsheet from The Numbers spreadsheet.

Data Cleaning & Refinement

We inspect the data to remove any duplicate or erroneous information.

Analysis

We use computing power to group, sort, and filter data to meet our needs.

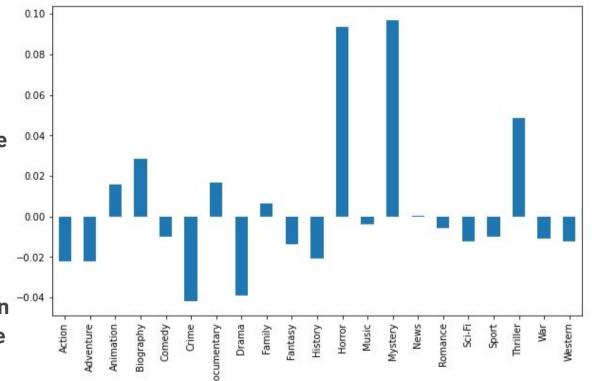
We used single variable correlation studies as needed.

Findings: Correlation between Genre and ROI?

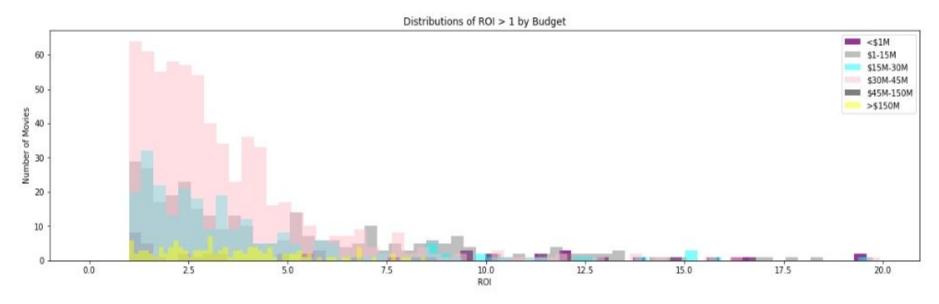
 NO STRONG correlation shown

 Mystery and Horror have the greatest correlation but it's considered less than weak.

 Would expect correlation at least above 0.25 to be considered weak.

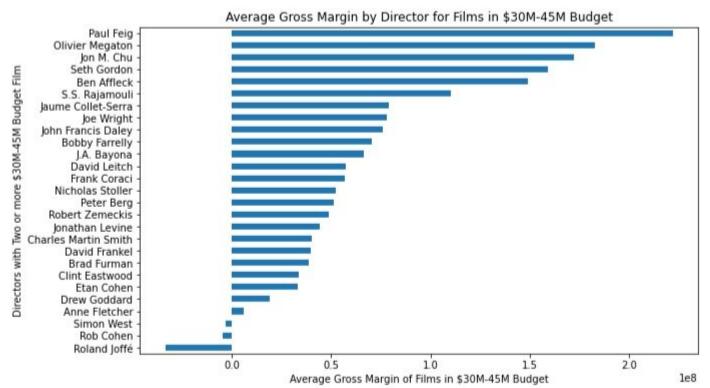


Findings: Which budgets yield good ROIs?



Many more movies in the \$30-45M range have made money.

Finding Directors: Who should we hire?



• 24 directors have made 2 or more midbudget, money making movies on average

Recommendation:

Focus development in the \$30-45M range with directors who have a proven track record at the budget, regardless of genre

Genre: Be Agnostic! No one genre is strongly correlated with box office success

Budget: INVEST, but don't over do it. More midgbudget movies make money. Fewer big budget or small budget movies break even.

Directors: They matter! 24 directors have successfully made money on average with 2 or more midbudget movies. Find one with a track record of success.

Questions:

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