

The Expensive Adventure

Preliminary Data Analysis for Movie Making at Microsoft



Microsoft Making Movies... At Last

- Microsoft wants to enter the movie business and needs to know which ones do well at the Box Office
- We analyzed over 2,000 movies in the last 20 years from from well-known industry databases and...
- Investigated the following factors to determine their impact on financial performance at the Box Office
 - Genre
 - Budget
 - Directors
- **RECOMMENDATION: Make big budget (>\$70M) Adventure movies with directors who have a proven track record of profitability.**

Data: Three “Input” Factors and “Output” Metrics

Input

Genre

Production Budget

Director



Output

Gross Revenue

Return On Investment (ROI)

Gross Margin

- All numbers consider World Wide Box Office Ticket Sales (ie no streaming, downloads, etc)

Data Process

Get the Data

Used data from both a IMDB database and *The Numbers* website.

Data Cleaning & Refinement

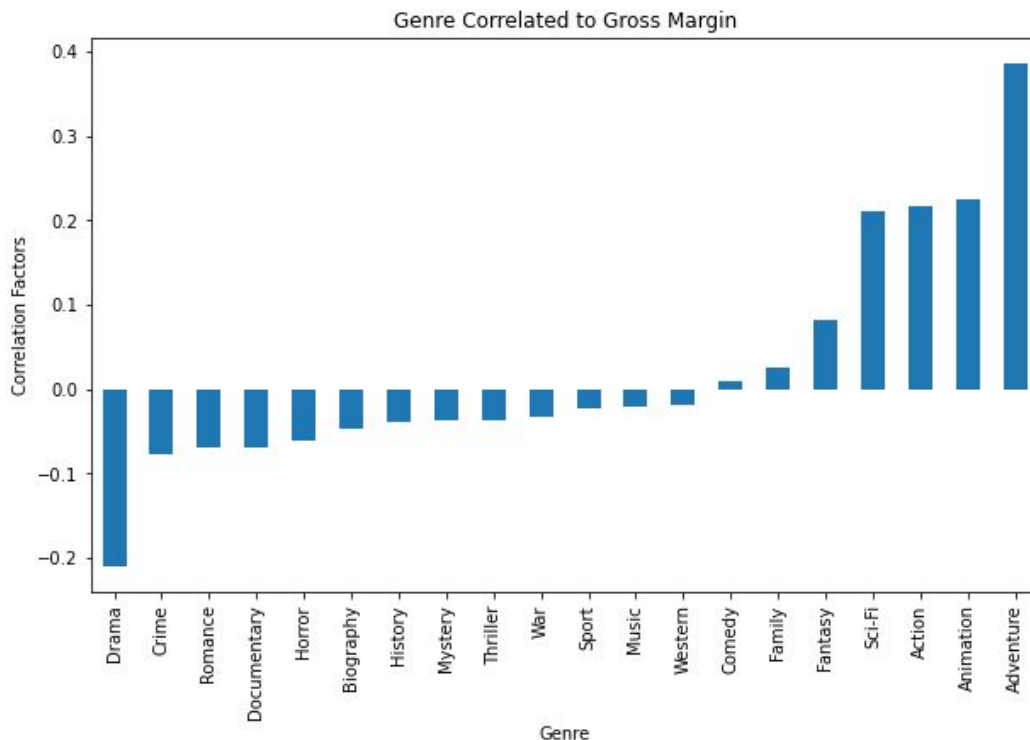
We inspect the data to remove any duplicate or erroneous information.

Analysis

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

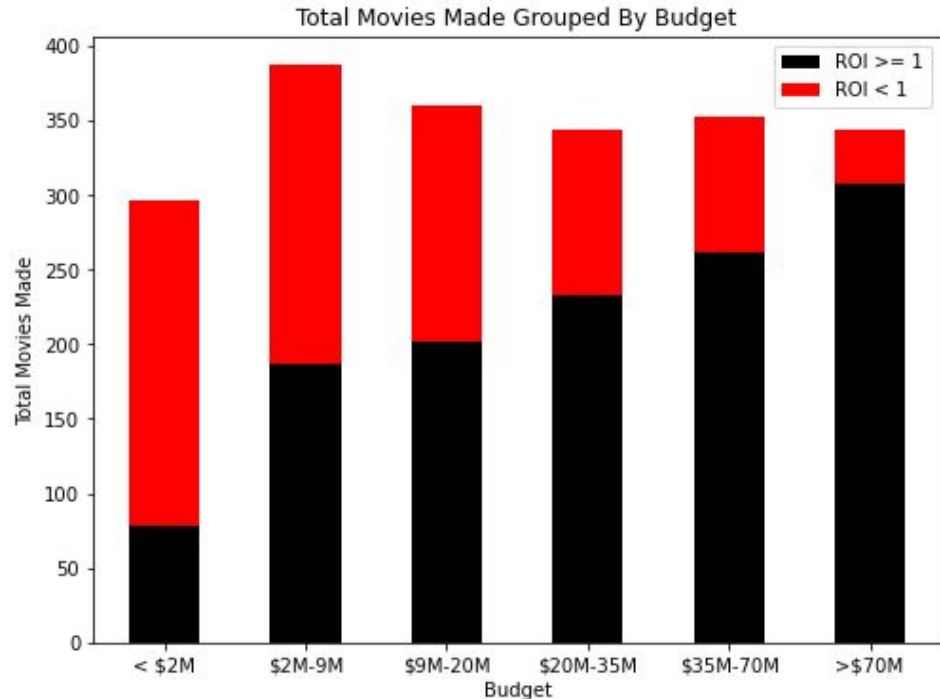
Genre: Adventure shows highest correlation to Gross Margin

- **Adventure has nearly double the correlation factor than the next genre**
- **Animation, Sci-fi, Action, and Fantasy also positive correlation - pair well with Adventure**
- **Stay away from Dramas.**



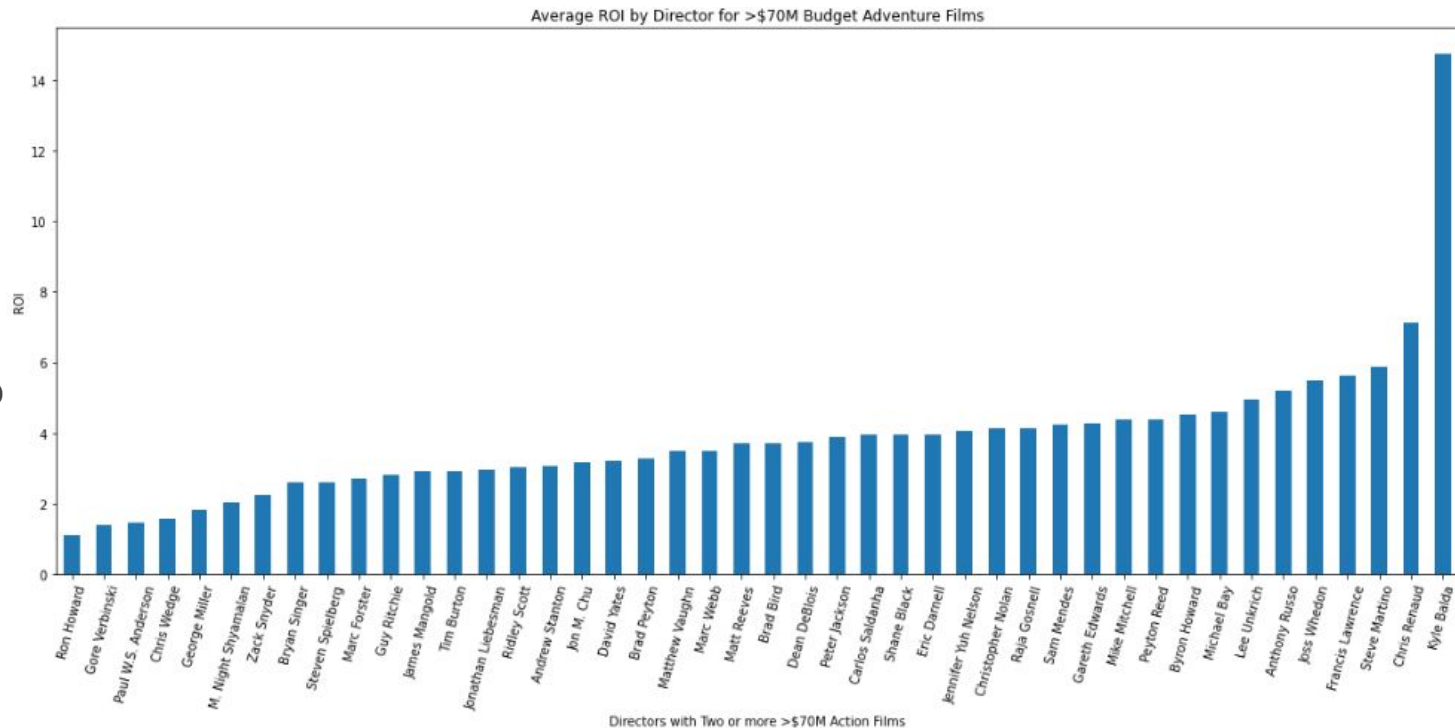
Budget: Big budget ($> \$70M$) movies produce more ROI ≥ 1

- The trend shows more movies make a profit as budget gets larger



Director: 44 Directors have made 2 or more movies with an average ROI >1

- **Kyle Banda, Chris Renaud, Steve Martino, Francis Lawrence, Joss Whedon, Anthony Russo** have an average ROI > 5 on their movies



Recommendation:

Focus development on big budget (\$70M) adventure movies with directors who have a proven track record at the budget, regardless of genre

Genre: Adventure has the highest correlation when considering only genre.

Budget: INVEST! Heavily. More big budget movies make money than mid or small budget features.

Directors: They matter! Reach out to Directors with a proven track record of profitability doing Big Budget Adventure Movie!

Questions:

Andrew Bennett

bennett.andrew.m@gmail.com

Data analyst

