Risk Analysis of the Film Industry

John Streaman

Business Understanding:

- Our company is interested in creating a new movie studio
- What kinds of films are doing best at the box office?

Recommendations:

- What best genre to begin with (Production Budget vs. ROI)
- Most popular director by selected genre
- What month to release the film in (for best success)

Data Sources

The following datasets were provided by:

- IMDB
- Box Office Mojo
- TheNumbers

Note: Films are limited between the years of 2010 - 2018, film trends may have changed since then (post-Covid)

Metrics of Success

Annually 7/10 films by studio lose money.

Aim: Low risk, high reward

Approach: Conservative

- Low Production Budget
- High R.O.I.

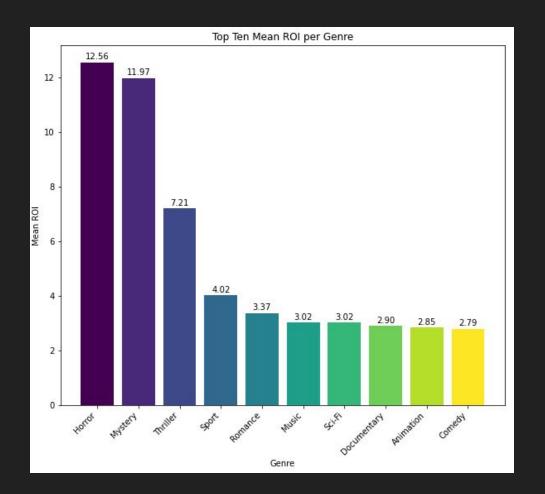
Return on Investment (R.O.I.)

Worldwide Gross – Production Budget

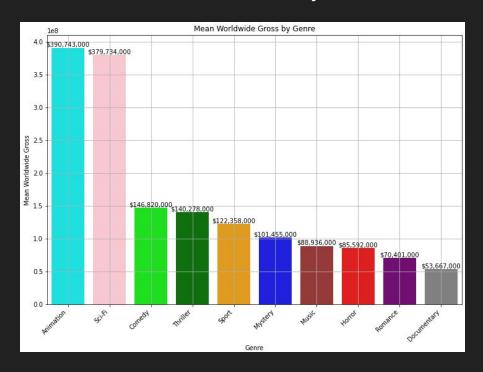
Production Budget

Top 10 Genre by R.O.I.

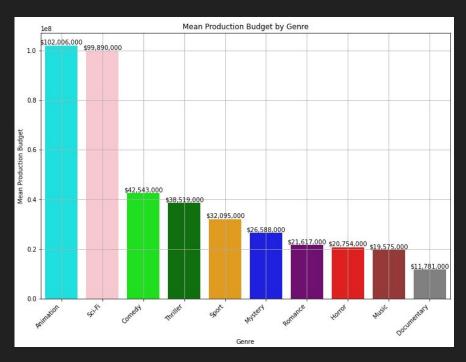
- Average R.O.I.
 particularly high for
 Horror, Mystery, &
 Thriller genres
- Low R.O.I. for Comedy, Animation, & Documentary



Mean Worldwide Gross by Genre



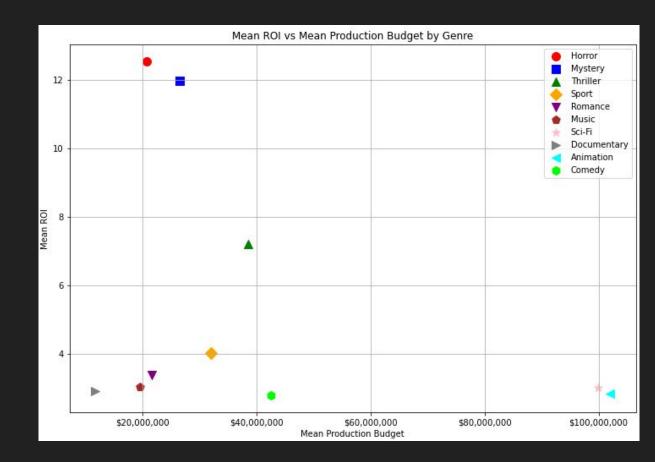
Mean Production Budget by Genre



Means: ROI vs. Budget

- Strong values:
 - Horror
 - Mystery
 - Thriller

- Poor values:
 - Animation
 - Sci-Fi



Top 5 Director: Horror

Recommendation:

- William Brent Bell
 - High ROI
 - "The Devil Inside"
 - Budget: \$1 Mill
 - Gross WW: \$101 Mill
- David F. Sandberg
 - "Lights Out"
 - Budget:\$5 mill
 - Gross WW: \$150 Mill

Top 5 Directors for "Horror" on Worldwide Gross:			
Name	Total Worldwide Gross	Film Count	
Andy Muschietti	\$697,460,000		
David F. Sandberg	\$305,380,000	1	
Tod Williams	\$177,510,000	1	
Steven Quale	\$155,010,000	1	
Joe Johnston	\$142,630,000	1	

Top 5 Directors for "Horror" on ROI:			
Name	Total ROI	Film Count	
William Brent Bell	100.76	1	
Levan Gabriadze	63.36	1	
Tod Williams	58.17	1	
Dan Trachtenberg	20.65	1	
David F. Sandberg	19.35	1	

Top 5 Director: Thriller

Recommendation:

- Andy Muschietti
 - Great Gross, ROI
- Levan Gabriadze
 - "Unfriended"
 - Budget: \$1 Mill
 - Gross WW: \$63 Mill

Top 5 Directors for "Thriller" on Worldwide Gross:			
Name	Total Worldwide Gross	Film Count	
F. Gary Gray	\$1,234,850,000		
Olivier Megaton	\$777,770,000	3	
Paul Greengrass	\$734,340,000	3	
Andy Muschietti	\$697,460,000	1	
Jaume Collet-Serra	\$646,210,000	5	

10 mm and a company of the company o			
Top 5 Directors for "Thriller" on ROI:			
Name	Total ROI	Film Count	
Levan Gabriadze	63.36	1	
David F. Sandberg	19.35	1	
Andy Muschietti	18.92	1	
Daniel Stamm	18.49	2	
Morten Tyldum	14.18	1	

Top 5 Director: Mystery

- James Wan
 - High Gross & ROI
 - Multiple films:consistent
 - "Saw" Franchise
- Travis Cluff
 - Extremely high ROI
 - "The Gallows"
 - **■** Budget: \$100k
 - Gross WW: \$43 Mill

Top 5 Directors for "Mystery" on Worldwide Gross:			
Name	Total Worldwide Gross	Film Count	
David Fincher	\$1,823,820,000		
Todd Phillips	\$1,759,380,000	1	
Denis Villeneuve	\$1,727,670,000	3	
Neil Burger	\$1,294,710,000	2	
James Wan	\$1,253,610,000	2	

Top 5 Directors for "Mystery" on ROI:			
Name	Total ROI	Film Count	
Travis Cluff	226.6	1	
James Wan	40.88	2	
Jordan Peele	34.21	1	
Levan Gabriadze	31.8	1	
Ariel Schulman	19.81	1	

Horror Monthly

- July, Oct, Jan high
 ROI
- Autumn, winter popular months for film release

Horror Genre Monthly Statistics			
Month	Film Count	Mean Worldwide Gross	Mean ROI
January	11	\$95,957,300	15.14
February	12	\$75,505,800	7.37
March	7	\$49,905,700	8.3
April	13	\$40,140,800	12.59
May	5	\$106,212,000	8.88
June	8	\$120,800,000	5.7
July	9	\$94,254,400	53.22
August	12	\$123,761,000	8.71
September	15	\$101,077,000	3.67
October	17	\$89,538,800	15.3
November	6	\$43,990,000	1.87
December	3	\$44,663,300	1.6

Thriller Monthly

- July, April high ROI
- Autumn, winter popular film release months

Thriller Genre Monthly Statistics			
Month	Film Count	Mean Worldwide Gross	Mean ROI
January	16	\$79,518,800	4.04
February	20	\$147,847,000	5.09
March	13	\$104,785,000	1.83
April	12	\$314,780,000	14.16
May	6	\$121,850,000	8.35
June	9	\$105,424,000	5.31
July	15	\$218,956,000	30.31
August	22	\$98,879,500	4.1
September	22	\$97,613,600	2.53
October	35	\$126,325,000	7.4
November	14	\$201,393,000	2.86
December	9	\$130,771,000	3.69

Mystery Monthly

- July, April, October high ROI
- October very popular for Mystery films

Mystery Genre Monthly Statistics			
Month	Film Count	Mean Worldwide Gross	Mean ROI
January	8	\$77,570,000	5.37
February	10	\$115,443,000	7.89
March	12	\$61,201,700	4.76
April	8	\$46,760,000	17.73
May	3	\$323,880,000	17.1
June	8	\$110,934,000	2.4
July	7	\$121,529,000	64.94
August	4	\$123,532,000	8.22
September	8	\$89,358,800	4.52
October	21	\$104,312,000	10.04
November	3	\$85,760,000	3.2
December	3	\$129,367,000	0.7

A Final Note:

New Horror Movie trend - Public Domain

"Winnie the Pooh: Blood and Honey"

Estimated Budget: \$100k

Worldwide Gross: \$5,000,000

Mickey Mouse public domain expired two days ago...

"Mickey's Mouse Trap" trailer released



Recommendations:

- Horror, Mystery, or Thriller highest R.O.I. & relatively low avg.
 Production Budget
- Director: Prioritize high ROI, consistent track record.
 - James Wan High ROI, "Saw" franchise, "The Conjuring", etc.
 - Great alternatives:
 - Travis Cluff, William Brent Bell, Levan Gabriadze, David F. Sandberg
- July:
 - Remarkably high ROI
- Autumn (October), & April
 - Popular time for film release. Further analysis may be required.
- Minimum ROI?
 - Anything above 1.0x is profitable, success

Next Steps

- Analyze overhead costs, marketing, etc. for more accurate min. ROI.
- Research successful writers, producers
- Further analyze film release timing
- Explore public domain trend
- Once established, explore higher grossing genres (Animation, Sci-Fi)

Thank you.