Analytical Insights into Making a Successful Movie

By: Sergio Rodriguez

Summary

Microsoft is looking to expand its footprint outside of their core lines of business, and start a new movie studio arm.

In order to maximize profitability of this new LOB, we need to consider the several factors that that could influence the success of the new movie studio. With this in mind, we investigated the following three questions:

- 1. What genres are most successful in terms of return on investment (ROI)?
- 2. Which months are lead to highest viewer participation and ROI?
- 3. Which Studio has a track record of producing high grossing and ROI films?

Data

Data used in this project comes from the following sources:

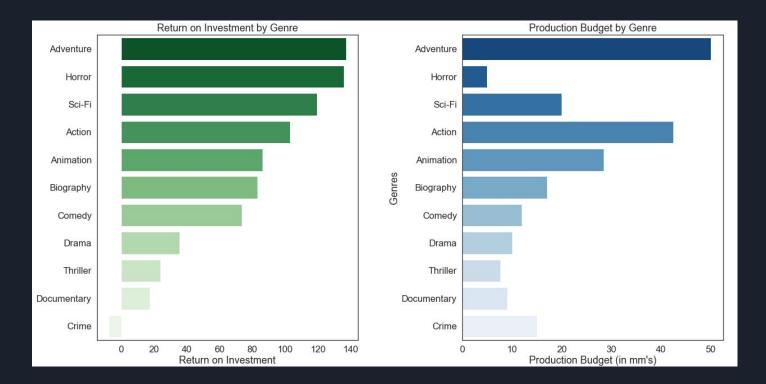
- Box Office Mojo
- IMDB
- Rotten Tomatoes
- TheMovieDB.org

Data Key:

File Name	bom.movie_gross	imdb.title.basics	tmdb.movies	tn.movie_budgets
Dataframe Name	studio	genres	tmdb_movies	budgets
	title*	tconst	genre_ids	id
	studio	primary_title*	id	release date
	domestic_gross	original_title	original language	movie*
	foreign_gross	start_year	original_title	production budget
	year	runtime_minutes	popularity	domestic gross
		genres	release_date	worldwide gross
			title*	
*primary_key			vote_average	1
			vote_count]

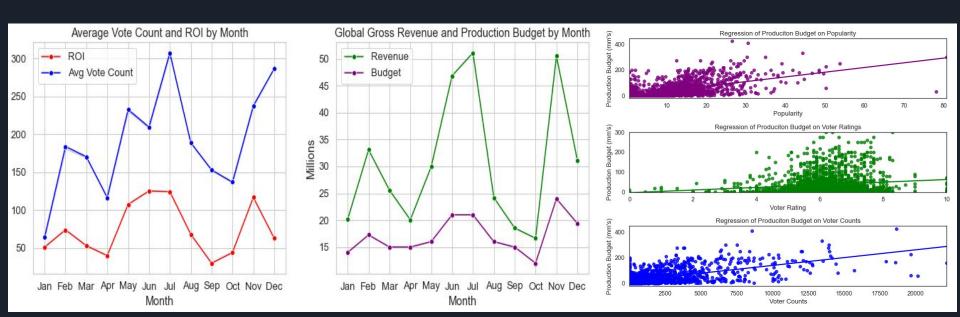
1. Which genres produce the highest ROI?

- Action, Horror, and Sci-Fi have the highest median ROI amongst the top genres
- All genres vary by production budgets



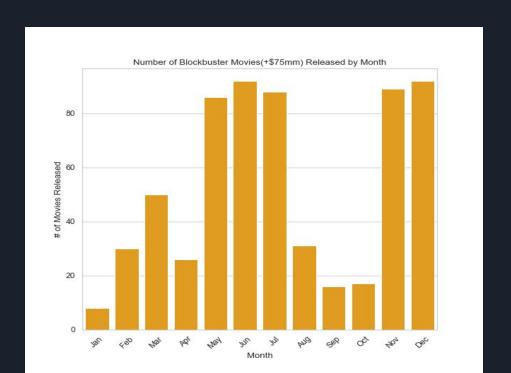
2. When are the best months to release a film?

- Months with highest viewer participation also correspond to high Gross Revenue and ROI
- While a high production budget doesn't mean a film will get good reviews, it is indicative of viewer turnout



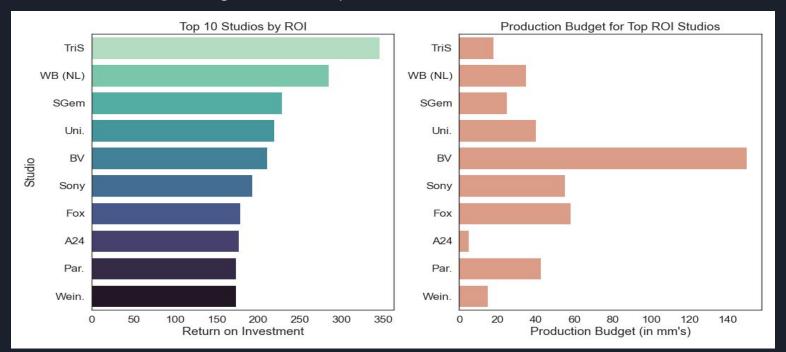
2. When are the best months to release a film?

 High gross revenue and viewer participation months are also same months when most blockbuster films are released



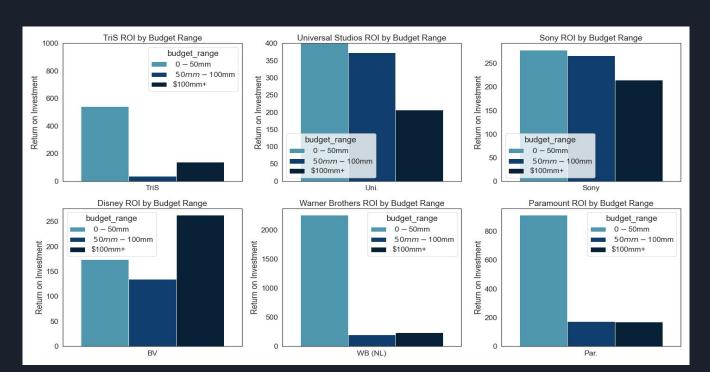
3. Which studios have a proven track record?

- Among studios that have made at least 10 films, the below studios have consistently produced profitable films
- Production budget varies widely across studios



3. Which studios have a proven track record?

- TriStar Pictures has the highest ROI
- Studio profitability also varies across production budget



Conclusions

Determining the production budget of the prospective film will guide the rest of the decisions made regarding profitability. Different genres and studios have high ROI but with varying costs associated.

- 1. For a low budget film, I would suggest a horror movie released in March or August, using Warner Brothers Studio
- 2. For a high budget film, I would suggest an Action or Adventure movie, released in July or November, using Disney or Sony as a studio

Some limitations to our analysis are that the data could not be robust enough to make an accurate depiction of the movie market

Future Work

- To further improve upon this analysis, it would be helpful to analyze which studios are best making specific genre types as well as investigating directors and actors that are known for being in or directing certain genres of film.
- Additionally, it would be interesting to analyze how movies released over streaming platforms such as Netflix or Hulu as they release exclusive content as well and have introduced a paradigm shift to the entertainment industry as a whole

Thank You!

Email: srodriguez2742@gmail.com

GitHub: @srodriguez2742