



Key Insights to being a Successful Movie Studio

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Main Questions



- How do we define a successful movie?
- Where is the money?
- Which genre is the most successful?
- Which Actors/Directors/Writers yielded the highest profit?

How we went about getting our results



Set up an Amazon RDS to store our data.

We got our data from two sources, the-numbers.com and oMDB.

We primarily used Python on this project for:

- Web-scraping and API calls
- Parsing and cleaning data
- Executing mySQL queries to access our DB.
- Making visuals using the Matplotlib library

Movie Data Set



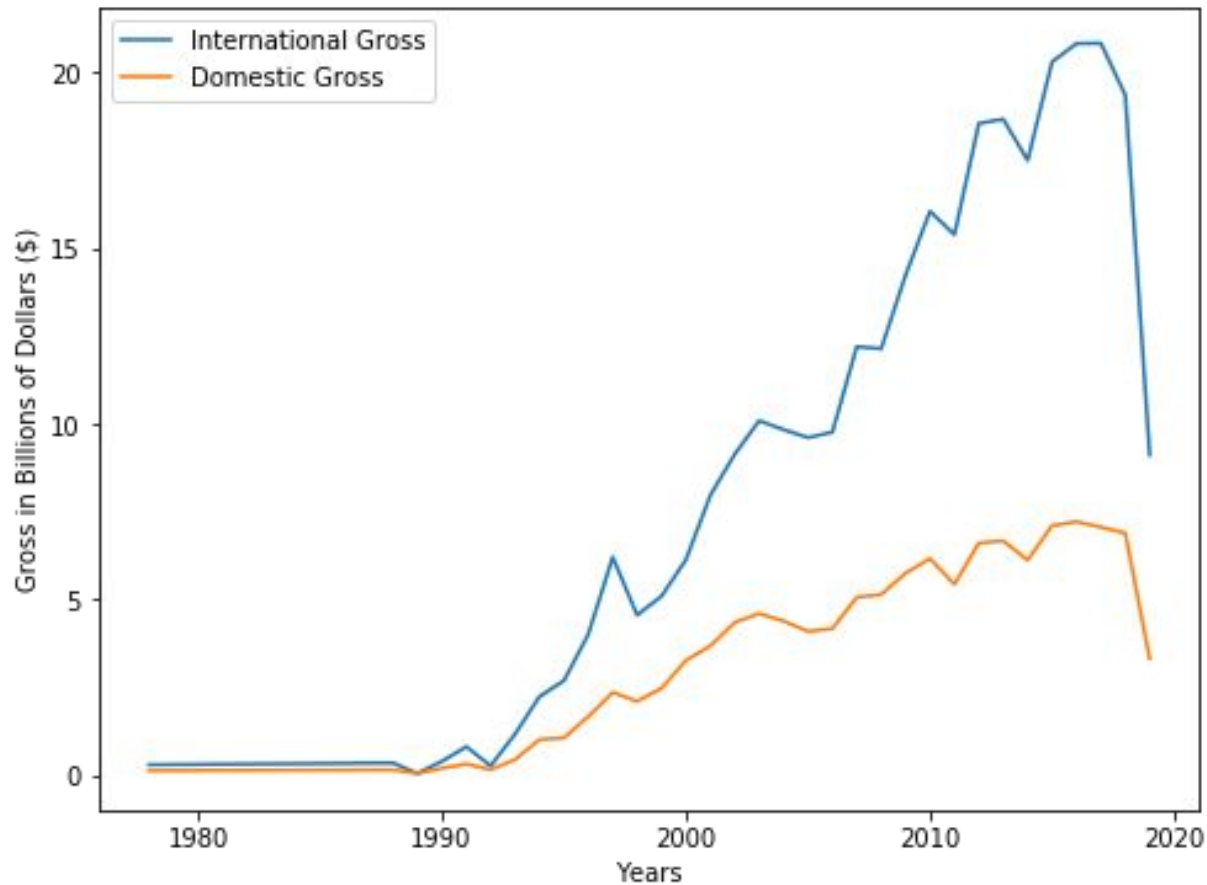
- We gathered information about 906 movies from years 1978-2019.
- Each movie was ranked based on its return on investment (ROI).
- We also gathered information on 466 Directors, Actors, and Writers associated with these movies.

Results Preview



Using the data we gathered, we have found that there are certain types of movies that have the highest chance of success.

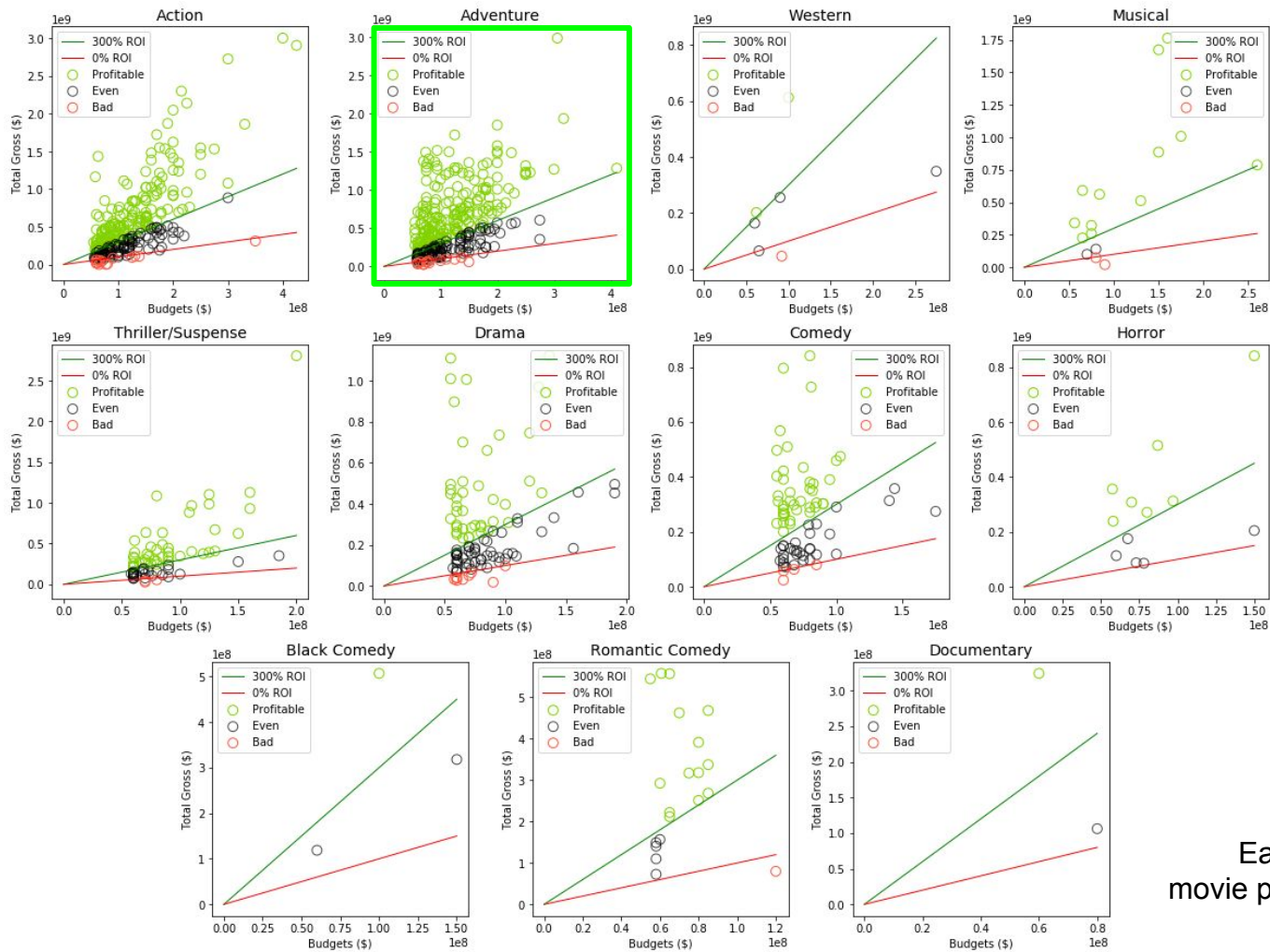
International Gross vs. Domestic Gross



International Gross has been trending upwards quicker than Domestic Gross

The drop-off at the end is due to incomplete data for 2019, since it is still 2019 during the making of this graph.

ROI Per Movie by Genres



Each observation is a movie plotted by its budget and total gross

Percentages of Profitable Movies by Genre

Genre	# of Movies	Profitable (%)	Unprofitable (%)	Average Profit Per Minute (\$)
Action	276	60.14 %	39.86 %	\$ 3205019.74
Adventure	322	63.98%	36.02%	\$ 3988165.40
Western	7	28.57%	71.43%	\$ 929311.70
Musical	16	75%	25%	\$ 4125000.88
Thriller/Suspense	72	59.72%	40.28%	\$ 2226753.53
Drama	101	40.59%	59.41%	\$ 1603825.80
Comedy	75	53.33%	46.67%	\$ 1818745.16
Horror	12	58.33%	41.67%	\$ 1923055.74
Black Comedy	3	33.33%	66.67%	\$ 1469832.38
Romantic Comedy	20	70%	30%	\$ 2026348.92
Documentary	2	50%	50.00%	\$ 1346020.16

The Adventure genre is the best movie type because it yielded a high profit percentage and average profit/minute. Adventure was a better pick compared to other genres with high numbers because it had more data backing it.

Who would we want making our movie?

Role	Name	Average Profit per Movie	Number of Movies
Director	Tim Burton	\$ 711396753.30	3
Director	Eric Darnell	\$ 524966532.40	5
Writer	Ted Elliott / Terry Rossio	\$ 500352488.00	8
Writer	Linda Woolverton	\$ 765283436.20	5
Actor	Johnny Depp	\$ 567477869.40	9
Actress	Angelina Jolie	\$ 609795584.80	5
Actor	Jason Lee	\$ 509959706.20	5
Actor	Mike Myers	\$ 808525821.30	4

We determined these candidates based on the average profit of movies they have worked on and their experience.

Real World Applications:



- International Market yields higher profit at an exponential rate overtime
- Adventure genre are the most successful type of movies
- Directors such as Tim Burton and Eric Darnell and Actors such as Johnny Depp and Angelina Jolie are the best candidates to work with