Movie Profitability Analysis

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September 30th, 2021

Outline

- Business Problem
- Data & Methods
- Results
- Conclusions



Business Problem

Microsoft is looking to create a new movie studio and would like to know which types of films are most profitable.

I will review the relationships between the following three movie attributes and how they relate to the movie's profitability:

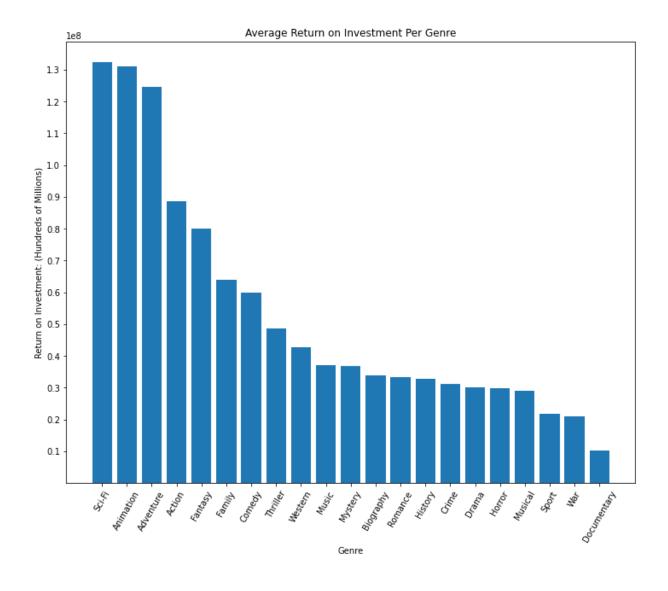
- Genre
- Principal Actors Involved
- Release Month

Data & Methods

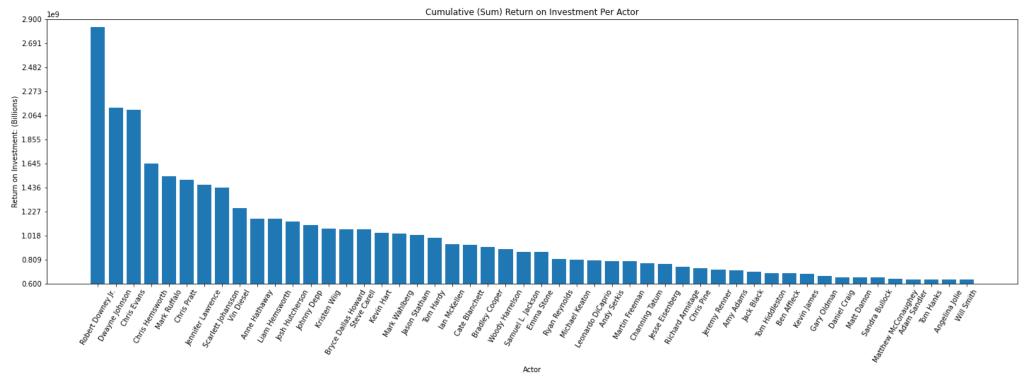
- The data has been culled from 11 data sets obtained from various reputable movie-related websites.
- This data covers a time period of 11 years between 2010, up to and including 2020, 1349 films, 2703 actors, and 21 different movie genres.

Results: Genres

- The genres with the highest average return on investment by far are Sci-fi, Animation, and Adventure, with an ROI of between 124 and 132 million dollars.
- Following at a distant second are Action, Fantasy, Family, and Comedy films, with an average ROI between 60 and 88 million dollars.
- The remaining genres have average ROI under 50 million dollars.



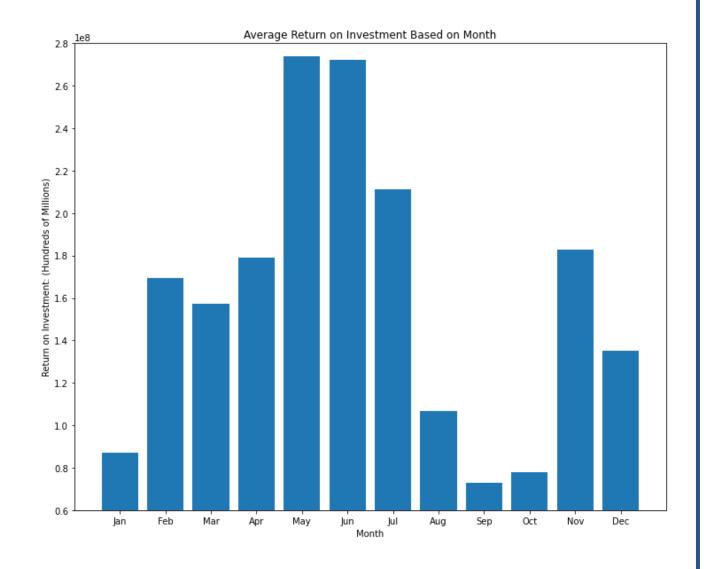
Results: Actors



- The 50 actors in this chart represent better than the top 2% based on their cumulative return on investment.
- Robert Downey Jr. stands alone by far, with a cumulative return on investment of over 2.8 billion dollars.
- The following two actors Dwayne Johnson and Chris Evans, each have a cumulative ROI of about 2.1 billion, and round out the list of actors with a cumulative ROI of 2 billion or above.
- Immediately following them there are five actors Chris Hemsworth, Mark Ruffalo, Chris Pratt, Jennifer Lawrence. and Scarlett Johansson, who have a cumulative ROI of between 1.4 and 1.6 billion.
- The remaining actors have a cumulative ROI of 1.25 billion or less, with about 75% of those being under 1 billion dollars.

Results: Months

- May and June both yield an average return on investment of 270 million dollars, which are by far the highest returns.
- These are followed by July, with an ROI of 210 million, rounding out the top three, as well as the only months with ROI(s) greater than or equal to 200 million dollars.
- September is the month with the lowest average ROI at 72 million dollars, followed by October and January, at 78 million and 86 million respectively.
- The rest of the months have an average ROI between 130 and 180 million dollars, with the exception of August, which is considerably lower at 100 million.



Conclusions

• Genres:

- 1. With the highest average return on investment by far, I recommend considering making Sci-fi, Animation and Adventure movies.
- 2. At a distant second, but still offering a very high return on investment, Action, and Fantasy films are also good options.



Actors:

- 1. I would most highly recommend the top nineteen actors in this chart who constitute the very best, of the very best, with a cumulative ROI of over 1 billion dollars each.
- 2. Any of the actors in the top 50 are a very good option, with the lowest cumulative ROI in this group being over 600 million dollars.

Months:

- 1. With an average ROI of over 200 million dollars each, I recommend the months of May, June or July as movie release months.
- 2. I would recommend against releasing movies in the months of September, October, or January, since these represent the months with the lowest average ROI(s) by a pretty large margin.