

osing data to drive strategic basiness decisions

OVERVIEW The objective is to examine data on movies to determine why they perform the way they do and recommend the best types of movies for Microsoft's new studio to produce. The success of James Cameron's Avatar movies shows that choosing the right types of films can bring in good results. Historical data on films can help determine what types of films to invest in.

BUSINESS UNDERSTANDING Producing profitable films is important for Microsoft's new studio. It benefits shareholders, employees, and customers. Shareholders receive more profit, employees are paid well and customers are provided with consistently good films. Focusing on profitable film types is good for Microsoft.

DATA UNDERSTANDING Sources of Data To understand the types of films the new Microsoft studio needs to produce, we first need to examine how the industry has performed, films that have performed well in the box office and their genres, and try to use statistical data to infer the reasons why they performed well and how that can be replicated by the studio.

I would say that the results are as good as the data used. In this analysis, we use data collected from the following sites:

- TheMovieDB
- The Numbers
- Box Office Mojo

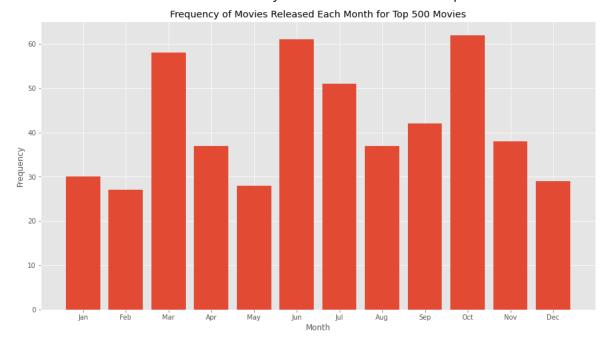
Description of Data We have three datasets obtained from the above sites for this analysis. The data sets are named tn.movie.budgets.csv (Obtained from the Numbers website), *bom.movie_gross.csv (obtained from Box Office Mojo website), and tmdb_movies.csv (obtained from TheMovieDB website).

The datasets are suitable for the analysis as they provide information on the following:

- Production budgets
- Movie genres,
- Gross earnings (both domestic and worldwide)
- Release Dates

The information helps us to understand movie performance, genres/combinations of genres that perform better in the box office, and whether production costs and release dates influence movie performance.

DATA ANALYSIS AND VISUALIZATION Monthly Release Dates for the top 100 Movies



From this chart, highest number of movies in the top 500 list were released around March and April, June and July, then September, October, and November. Although Other factors could also influence such figures, it would be important to consider the month when deciding when to release movies.

Besides, there might be other factors that influence people to watch movies more during these months such as weather, when its cold and people have to stay indoors. For example, the the highest months are June and July, where most people might end up staying indoors due to winter climates in most parts of the world.

Hence, its important to understand the months when people are more inclined to watch movies, while also considering other factors.

Studios with the Highest number of Movies in Top 250 List Studios with the Highest number of Movies in Top 250 List

Most Common Genres in Highest Grossing Films Most Common Genres in Highest Grossing Films

CONCLUSION AND RECOMMENDATIONS The analysis shows a strong correlation between movie genre and performance as well as production studio and performance.

The recommendation is for Microsoft to produce movies in the Adventure, Action, Fantasy, Science Fiction, and Comedy genres and partner with production studios such as Warner Bros, Fox, Universal Studios, and Walt Disney Studio Pictures.

Production cost and release month are also factors to consider but of lower priority.