

Creative Brief

on

Exploring Movie Data with Interactive Visualizations.

Submitted as a part of course curriculum for TSWD



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Overview:

In this project, we aim at gaining comprehensive knowledge about movies, via analyzing related dataset.

In this project, we will use the dataset to clean, analyze and determine whether any information about a movie can predict the parameters that affects the total revenue of a movie. We will then attempt to predict whether a movie's revenue will be affected by the popularity, length of the movie etc.

Movies, also known as films, are a type of visual communication which uses moving pictures and sound to tell stories or teach people something. Nowadays, movies are appealing a rapidly-increasing number of audience. There are abundant data resource, recording various kinds of features of thousands of movies.

If it was somehow possible to know beforehand the likelihood of success of the movies, the production houses could adjust the release of their movies to gain maximum profit. They could use these predictions to know when the market is dull and when it is not.

Drivers:

=>Objectives:

- To showcase a series of Data Wrangling techniques needed in general for cleaning, preparing and transforming a raw data from the source to a Proper Data ready and suitable for Analytical Methods to be implemented on them.
- To showcase various Univariate, Bivariate and Multivariate Analysis Techniques to be used on the transformed data and generate accurate visualisations and insights on the trend of movies and films throughout the past century.
- Making conclusions regarding whether a movie is profitable, or in other words, worth investing by considering different parameters.

Furthermore, when a Movie is to be produced, the directors and producers require an estimate of the parameters that affects the financial expenditure and the overall success of the movies so that they can proceed with a specific pipeline to follow. But many well-financed movies fail because these estimations were not taken into account and it turned out to be unsuccessful.

Audience:

- **Director**

Generally considered the most important person on a set. The director usually, but not always, has the clearest vision of the final product, is in charge of the actors and technicians, and often has a say in both the pre- and post-production aspects of filmmaking.

- **Editor**

In motion picture production, the person responsible for editing a film. The editor mainly works behind the scenes of a film, Although the success or failure of the production is due to the length of the movie, popularity of the scenes and quality of the editor's work.

- **Producer**

The person exercising overall control over the production of a motion picture and holding ultimate responsibility for its success or failure. Producers require an estimate of the parameters that affects the financial expenditure and the overall success of the movies so that they can invest accordingly.

- **Script**

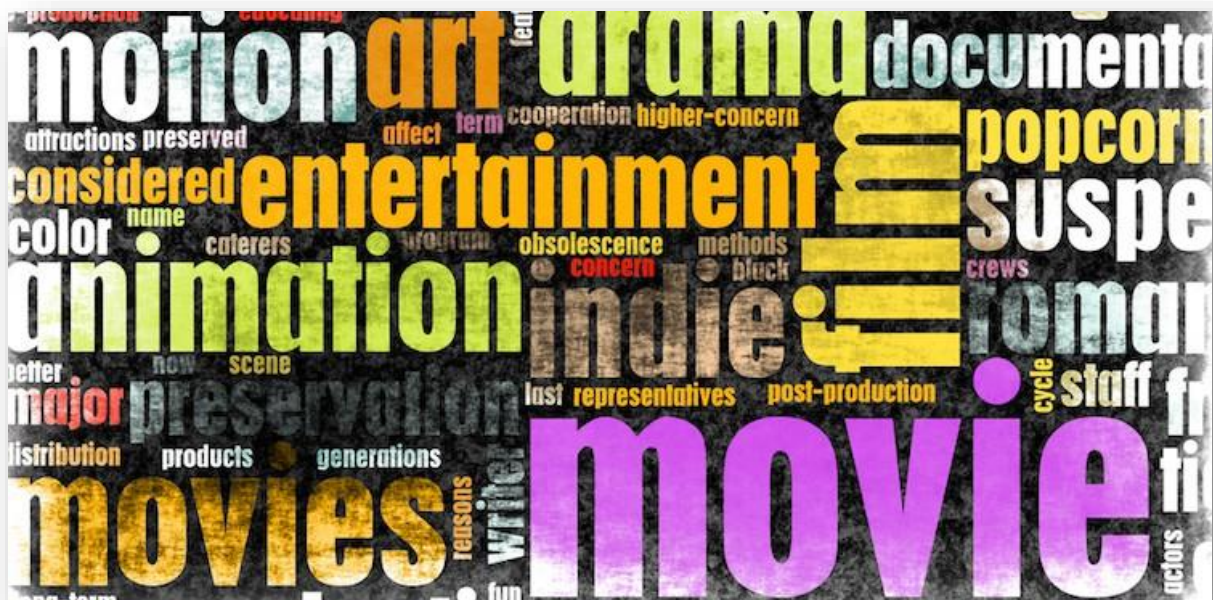
A written work made by screenwriters. Scripts can be original works or adaptations from existing pieces of writing. In them, the movement, actions, expression,

and dialogues of the characters are also narrated. The script can be tweaked according to the trend, expectations of the producers and viewers, data analysis outcome etc.

● Viewer

Analysis of the dataset and the visualizations made helps the viewers,

- To find interesting movies easier.
- To have knowledge about the popular movies.
- To have knowledge about the factors that makes the movies popular and successful.



Message:

Predicting a movie's opening success is a difficult problem, since it does not always depend on its quality only. External factors such as competing movies, time of the year, budget, length of the movie and even weather influences the success of a movie. As a result, these factors impact the BoxOffice sales for the movie opening.

Nevertheless, predicting a movie's opening success in terms of BoxOffice ticket sales is essential for a movie studio, in order to plan its cost and make the work profitable.

I introduce some visualisations for predicting movie success in terms of financial success and viewer recipience. As a result, this approach can achieve some decent estimations, allowing the production houses to adjust the release of their movies to gain maximum profit. They could also use these predictions to know when the market is dull and when it is not.

So, the prediction of movie success is of great importance to the industry.

Machine learning algorithms are widely used to make predictions such as growth in the stock market, demand for products, etc. But here we are using visualisations.

Details:

Some of the types of data visualization charts and graph formats used:

- *Scatter plot.*
- *Bar chart*
- *Histogram*
- *Pie chart*
- *Stacked Bar Graph*
- *Heat Map*

Preconceived ideas:

Making conclusions regarding whether a movie is profitable, or in other words, worth investing by considering different parameters.

If we predict the likelihood of success of the movies, the production houses could adjust the release of their movies to gain maximum profit. They could use these predictions to know when the market is dull and when it is not.

Limitations:

These are factors that makes the movies become popular and successful. But we should also notice the limitations. There are some missing data and many erroneous zeros which may affect the analysis.

- 1. It's hard for us to know how the vote_counts and popularity are measured.*
- 2. For foreign movies, currecy is not indicated. inflation over the years should also be taken into consideration.*

Reference (for the dataset chosen):

<https://www.kaggle.com/deepak525/investigate-tmdb-movie-dataset/data>