VISUALIZE MOVIE DATA

Report: -

The analysis shown below has been performed on TMDB movies dataset (a subset of IMDB dataset on Kaggle)

The dataset contains information about 10K+ movies which includes various important attributes related to the movies, such as popularity, release year, genre, production company, budget_adj, revenue_adj and Profit (calculated field)

List of movies with '0' budget or revenue are removed (as it may skew the data and such movies would be considered as outliers). That leaves us with 3855 rows of data out of 10866 rows. Even though many data are being excluded, the exclusion will help with the data investigation as budget and revenue are the main variables to be studied.

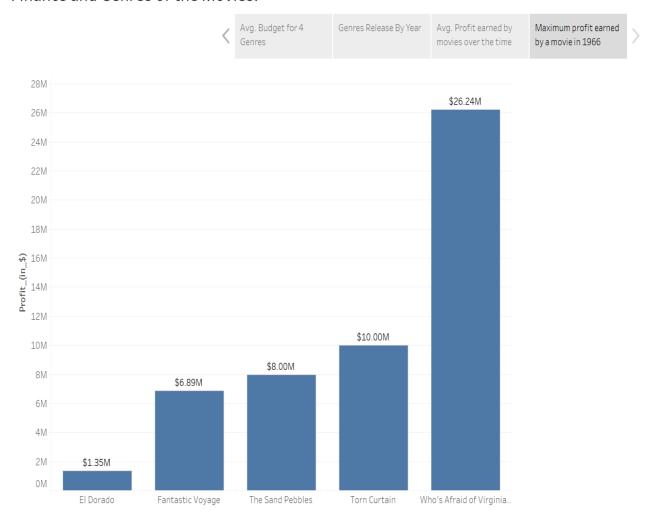
EXPLORATORY DATA ANALYSIS(EDA)

Few Question that can analysed from this data set -

- Which movies had the highest profit in each year?
- Is popularity of a movie related to the revenue being earned by the movie?
- Comparison between two production companies in terms of their revenues & number of movies released each year?

Q.1) How have movie genres changed over time?

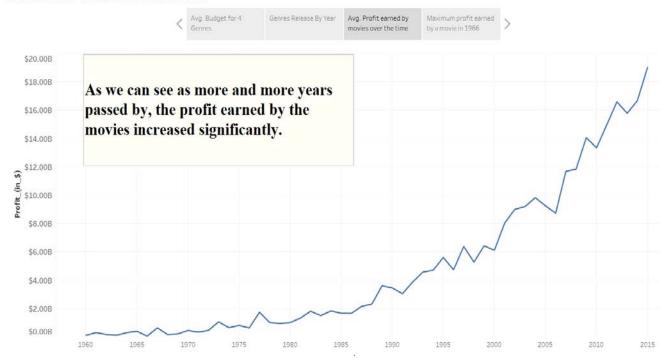
Finance and Genres of the Movies.



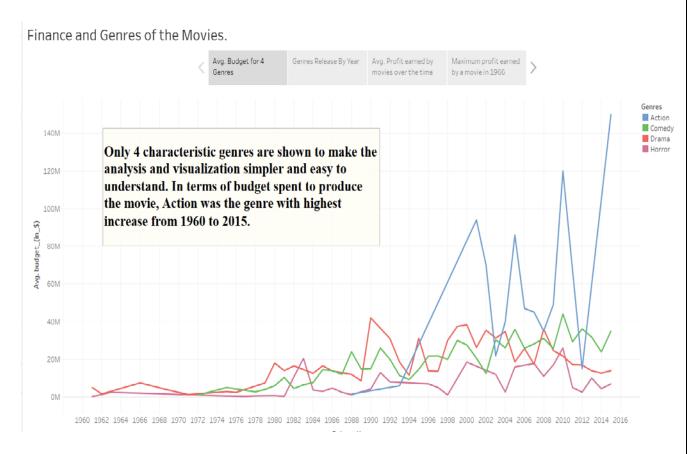
Ans-1) As we can see the Directed by Mike Nichols, Who's Afraid of Virginia Wolf? film has the highest profit in all, making over \$26M in profit in this dataset, which was released in 1966.

Q.2) Average Profit of movies over the time?

Finance and Genres of the Movies.

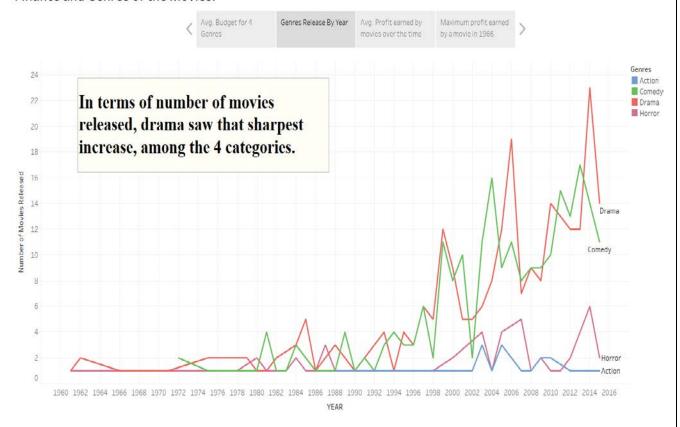


Q.3) Average budget of the different genres in different years?



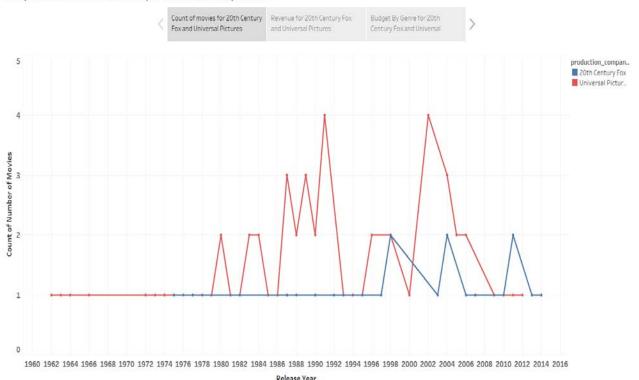
Q.4) How many movies released from a genre in different years?

Finance and Genres of the Movies.

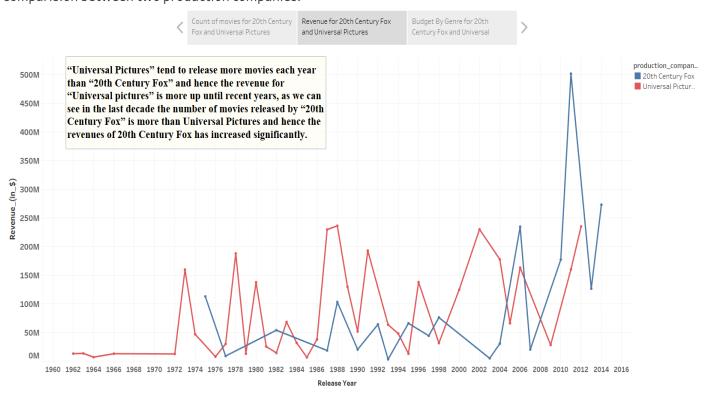


Q.5) How do the attributes differ between Universal Pictures and Paramount Pictures?

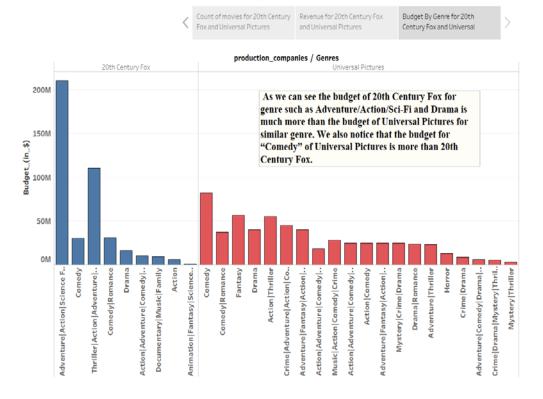
Comparision between two production companies.



Comparision between two production companies.



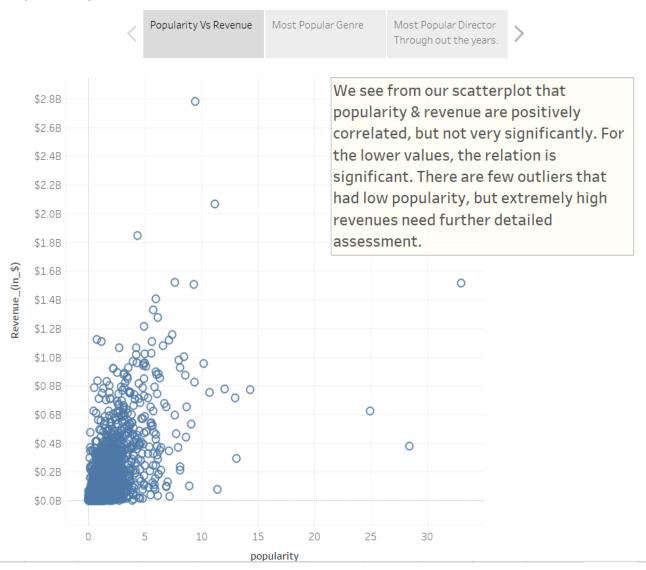
Comparision between two production companies.



production_compan..
20th Century Fox
Universal Pictur..

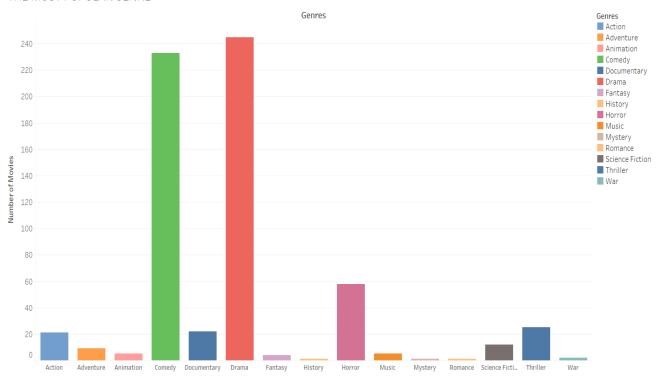
Q.6) Is popularity of a movie related to the revenue being earned by the movie?

Popularity of Genres and Directors.



Q.7) Which is the most popular Genre?

THE MOST POPULAR GENRE

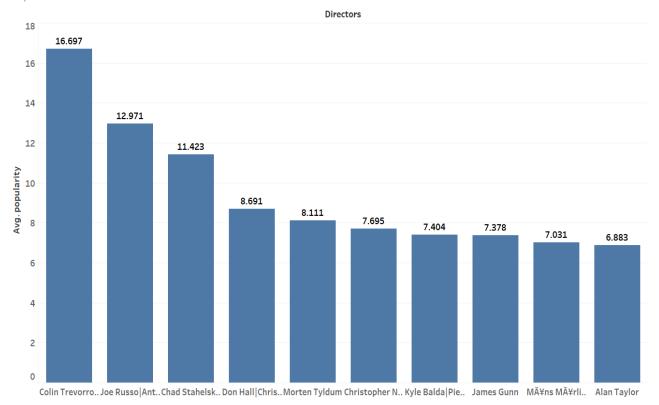


 $Count of \, Number of \, Records \, for \, each \, Genres. \,\, Color \, shows \, details \, about \, Genres. \,\, The \, view \, is \, filtered \, on \, Genres, \, which \, keeps \, 15 \, members. \,\, Color \, shows \, details \, about \, Genres \, about \, about \, Genres \, about \, Genres \, about \, Genres \, about \, Genr$

Ans -7) The most popular genre is comedy and drama, as the number of movies released in that genre is significantly higher when compared with other genre.

Q.8) Who is the most popular director throughout the years?

Popular Directors Over The Years



Average of popularity for each Directors. The marks are labeled by average of popularity. The view is filtered on Directors, which has multiple members selected.

Ans -8) As we can see from the bar-chart "Colin Trevorrow" is the most popular director.

Conclusion -

For a movie to be successful it must have following criteria -

- **Average budget of the movie should be around 60 million dollars.**
- Anyone of these should be in the cast: Chris Pratt, Keanu Reeves, Christian Bale.
- The movie should be directed by the any one of the following directors:
- Christopher Nolan, Colin Trevorrow, Joe Russo.
- **Genre must be: Action, Comedy, Drama, Adventure, Thriller.**

Limitations:

- The budget and revenue column does not have a specific currency unit, it might be possible different movies have different budgets in different currency according to the country they are made in.
- Dropping the rows and columns with missing values might have also affected the analysis.