

Project: Visualizing Movie Data

Step 1: Data Cleanup and Attribute Selection

After cleaning up the dataset, I have found the most important attributes to be used in the visualizations.

- Budget
- Revenue
- Genres
- Release_date
- Director
- Production_companies
- Popularity
- Release_year

Step 2: Tableau Visualizations

All the workbooks are attached with zip file and links of tableau public are provided in the report.

Step 3: Questions

- Answer the following questions. Refer to your online visualizations to back up your answers:
 - **Question 1:** How have movie genres changed over time?
Ans: Movie genre variations have been evolving and diversifying day by day. If we see the top 10 genres based on popularity graph, before 1980's there were not so much genres other than action, comedy, drama, romance. After time to time genres has been evolved with adventure, sci-fi, horror, thriller., mystery etc. unique and diversified subjects. Improvement in technology is one of the major catalyst behind this revolution. Besides, budgets and revenue is also increasing day by day.
From the first visualization we can see, drama consists of the most number of movie in the list followed by Comedy, Thriller and Action.

<https://public.tableau.com/profile/fahad.munir#!/vizhome/HowMovieGenresChangedOverTime/HowMovieGenresChangedOverTime?publish=yes>

- **Question 2:** How do the attributes differ between Universal Pictures and Paramount Pictures?

Ans:

Universal and Paramount Pictures are one of the two most successful production houses in the movie industry. Comparison of different attributes of these two production houses are shown in the visualization.

From the first dashboard of the story we can say, both production companies are neck on neck. A regular ups and downs shown in the graph because the popularity normally depends on the movie. In recent years we can see universal pictures movies popularity is increasing and popularity of paramount movies is decreasing. Another interesting insight from the same graph (**Popularity vs Month of Release Date**) shows, paramount mostly successful with their year opening and year ending releases whereas universal pictures dominating mid-year releases. **If we compare the popularity by different genres we can see, Paramount Pictures' most popular genre is Science Fiction and Universal Studios most popular genre is Animation.**

In revenue comparison, similar ups and down is shown. However, in recent years' universal pictures is earning more than paramount it will definitely change because in previous years both companies have gone through multiple ups and downs in terms of revenue earnings. Animation is the genre which is responsible for Universal's recent rise in revenue.

In budget graph we can see, universal pictures mostly make big budget movies however in recent years they have also been making low budget movies. Paramount makes movies of different budget from high to low.

<https://public.tableau.com/profile/fahad.munir#!/vizhome/DifferenceofAttributesbetweenUniversalPicturesandParamountPicturesFromMovieDatabase/DifferenceofAttributesbetweenUniversalPicturesandParamountPictures?publish=yes>

- **Question 3:** How have movies based on novels performed relative to movies not based on novels?

Ans:

From the second visualization where the quantity of movies based on novel and not based on novel were compared we can see, how the number of movies evolved through decades. As the quantity is very small in novel based movies, the graph is mostly flat. However, movies that are not based on novel are on increasing trend since 1980's showing some decreasing trend after the year 2000 when the movies based on novel showing some success.

From the first visualization we can see, movies those are based on novel may be smaller in quantity but are more popular and more profitable in terms of average

popularity and average revenue. However, if we see the visualization of top 30 most profitable movies, movies that are not based on novel are excelling this chart. on novels are much better than movies not based on novels in terms of audience response.

<https://public.tableau.com/profile/fahad.munir#!/vizhome/ComparisonbetweenMoviesbasedonnovelandnotbasedonnovel/ComparisonbetweenMoviesbasedonnovelandnotbasedonnovel?publish=yes>

- What is your additional question that you proposed? What is the answer? How did you come up with this question?

Ans:

The additional question I propose is, who are the top 10 directors of 21st century based on revenue generation?

The answer lies within the visualization below.

<https://public.tableau.com/profile/fahad.munir#!/vizhome/Top10SuccessfulDirectorsof21stCentury/Top10SuccessfulDirectorsof21stCenturyBasedonRevenueGeneration?publish=yes>

In the above visualization we can see, James Cameron is the most successful director of 21st century (till now). He is way away of the others with around 2800 million dollar revenues with his releases. David yates is in second position with around 1300 million dollars in revenue earnings. The visualization is provided is a bubble chart where it can be easily identified which directors are the most successful in the business.

The reason I came with the question is, directors are an integral part of their movies success. This question can help us predict the success of future releases.