## **Project: Visualizing Movie Data**

## Step 1: Data Cleanup and Attribute Selection

- Clean up any missing information and choose the most important attributes you will explore further in your visualizations.
- List out the attributes (or variables) you plan to dive further with your visualizations. You should explore no more than 8 attributes.
- Please refer back to the <u>Data Cleanup course</u> to help you clean up your data.

The data was cleaned using the Alteryx tool and the following attributes were used for the visualizations

- Genre
- Production companies
- · Release year
- Budget adjusted
- Revenue adjusted

Budget and revenue adjusted to inflation was selected since it would give us a better idea on the revenue pattern and maintain an uniformity since we are dealing with a very long range of the years

### Step 2: Tableau Visualizations

- Please make sure you follow the <u>rubric</u> and include Tableau Dashboards, Stories, and the appropriate visualizations (small multiples, scatter plot, bar chart, etc..) your reviewer expects your visualizations to contain. Remember: You need one Dashboard for every question (Q1-Q4) and in addition, you also need one Story, pertaining to a question of your choosing.
- Attach your visualizations as Tableau Workbooks in a zip file along with this report.

**IMPORTANT**: Please upload the workbooks to **Tableau Public** to allow reviewers to access your workbooks. Note that simply saving your file as a ".twbx" is not enough to allow all reviewers to access.

### Tableau public link for the project:

https://public.tableau.com/profile/publish/Project3\_V3/Dashboardforrevenuecomparison#!/publish-confirm

### Step 3: Questions

### Question 1: How have movie genres changed over time?

In the year 1960 there were only 16 genres and by the year 2015 there were 20 different types of genre.

The following are the most produced genre of movies in the year 2015 (count more than 100)

- Action
- Comedy
- Drama
- Thriller
- Horror

**Action** genre started with 8 movie releases, had an exponential increase over the years and by the year 2015 it had a total of 107 releases

**Comedy** genre had a relatively flat growth until 1977 and then increased exponentially over the time to reach a maximum of 198 movies

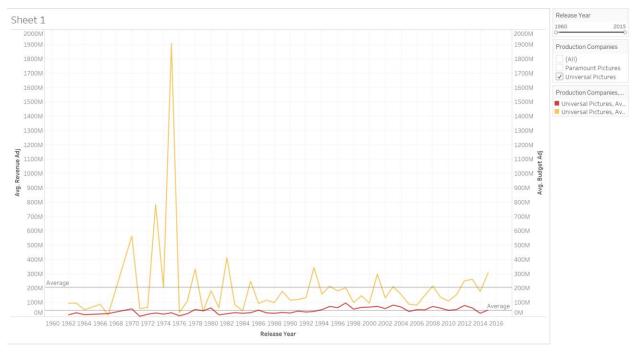
**Drama** had a linear growth during the initial years then it had exponential growth to reach 260 movies in the year 2015.

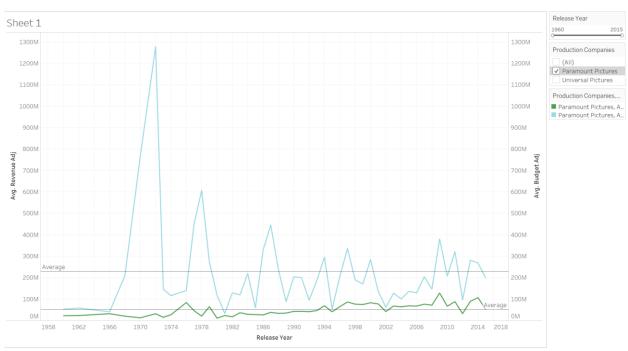
Thriller genre had an exponential increase over the years,

Horror genre had a linear growth until 1988, then it had an exponential growth in the later years

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

By having to look at the graph of budget/revenue vs the Year graph. [All amounts in million USD]





The average budgetary allocation of the universal pictures is \$42.329M and the revenue generated was \$205.914M, which keeps the average profit of 386.4% of the average budgetary allocation

The Paramount pictures had a budget of \$50.591M and the revenue generated was \$227.510M, which means that the average profit of 349.7%

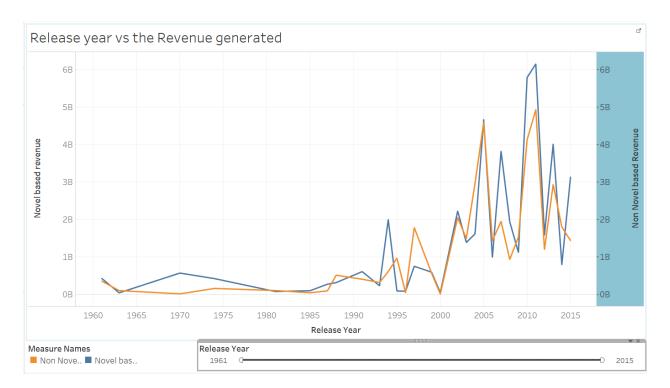
Over the period of 1960-2015 we can infer that the Universal pictures had a better returns on the investment it had made.

Paramount pictures started the production of the movies from the year 1960, and the universal pictures started the movie production in the year 1962

### 3. How have movies based on novels performed relative to movies not based on novels?

When we see the overall graph, we can see that in time line of 1960-2015 the Novel based movies have fared better than the Non-Novel based movies except in 1963 and 2004, which the latter had a slightly more revenue

At the beginning of the comparison, the revenue of the novel based movies stood at \$421.642 million whereas non-novel based movies had a revenue of \$349.838 million,



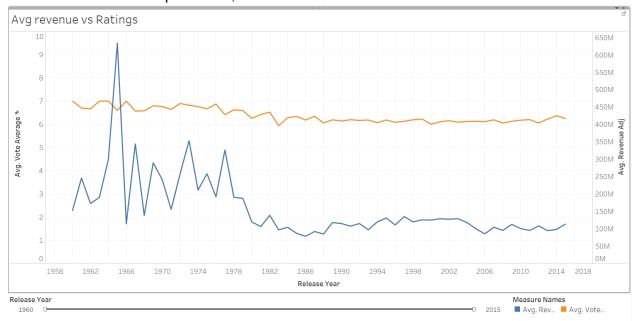
## 4. What is your additional question that you proposed? What is the answer? How did you come up with this question?

#### How have movie ratings affected the revenue collection over the years?

This can be answered with a complete graph of movies and their ratings vs the revenue generated over the years

This question came into my mind since, I felt that there should be some relation between movie ratings / popularity and the revenue collections

#### As we can see from the plot below,



The initial years the ratings affected the movie revenue collection, but later on the average vote remained in the range of 6.0 to 6.5 and the average revenue was below \$150 million.

A dashboard has been created where we can see how revenue collection has affected the ratings