Project: Visualizing Movie Data

Step 1: Data Cleanup and Attribute Selection

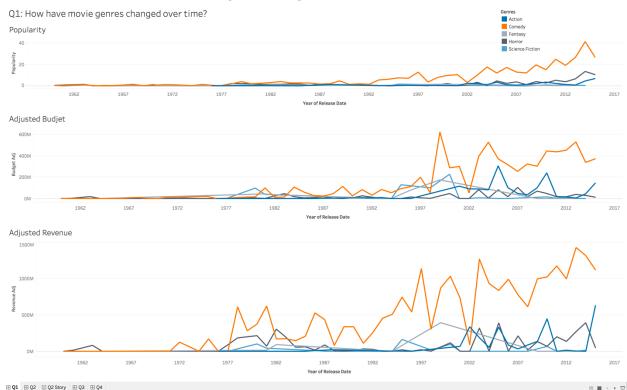
- Used the "Cleaned the Data Interpreter tool" to clean up the data.
- Attributes to be explored in this project are: popularity, release date, genre, revenue, adjusted revenue, adjusted budget, production companies, and original title.

Step 2: Tableau Visualizations

https://public.tableau.com/profile/abhinav.konagala#!/vizhome/Q2 241/Q1

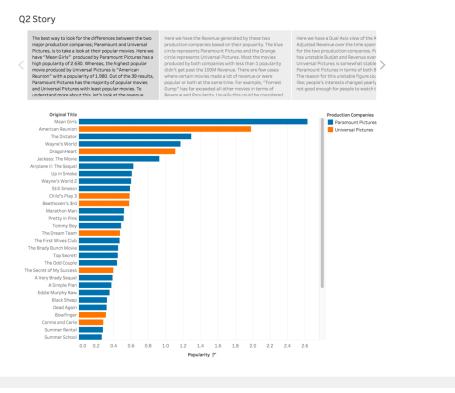
Step 3: Questions

Question 1: How have movie genres changed over time?



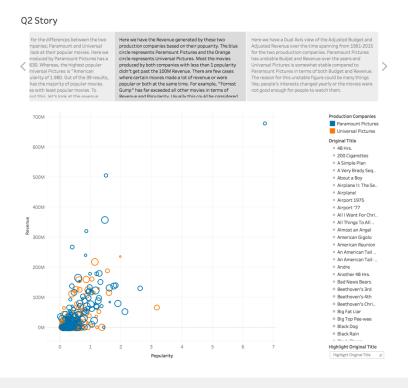
The genres I selected are based on what I mostly watch (Action, Comedy, Fantasy, Horror, and Science Fiction). In order to get an overview on how these five genres have changed over time, I chose the attributes based on popularity, adjusted budget and adjusted revenue. Looking at the popularity of these genres, Comedy has steady increase starting from early 90's and Fantasy remained least popular since 1962. Looking at the adjusted budget, most Comedy movies were made with high budget and Science Fiction with less budget. With high budget, most movies expect high revenue, in this case, it is true since Comedy movies generated high revenue.

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



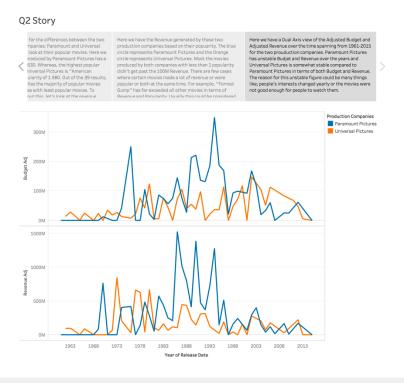
o In order to get an overview of the two major production companies (Paramount Pictures and Universal Pictures), the movies produced by these companies were selected based on their popularity. The most popular movie produced by Paramount Pictures was "Mean Girls" and the most popular movie produced by Universal Pictures was "American Reunion".

⊞ Q1 ⊞ Q2 ☐ **Q2 Story** ⊞ Q3 ⊞ Q4



⊞ Q1 ⊞ Q2 ☐ Q2 Story ⊞ Q3 ⊞ Q4

O Here we look at the revenue generated by these two production companies based on their popularity. "Forrest Gump" was the most popular movie with highest revenue generated by Paramount Pictures. "Forrest Gump" could be considered an outlier in this case since it is far above the rest of the movies, but it is not because it is based on the actual data produced by the "The Movie DB". "American Reunion" was the highest revenue movie by Universal Pictures.



⊞ Q1 ⊞ Q2 □ Q2 Story ⊞ Q3 ⊞ Q4

Here we look at the adjusted budget and adjusted revenue for the two production companies. Movies with high budget are generally generate high revenue. Paramount Pictures generated high revenue (above 1000M) during 80's and 90's based on their high budget (above 150M). Universal Pictures also generated high revenue (500M) according to their budget (100M).

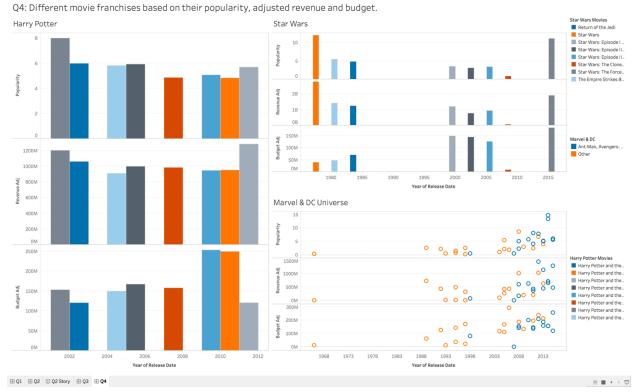
• Question 3: How have movies based on novels performed relative to movies not based on novels?

Q3: How have movies based on novels performed relative to movies not based on novels?



I used Alteryx to separate movies based "Novel" and "Not Novel" by using a conditional statement. First, the money invested in producing the "Novel" films was returned by the revenue generated by the box office receipts. "Novel" movies had a steady positive relationship compared to the "Not Novel" movies. Second, I filtered the average popularity of these categories based on two production companies (Paramount and Universal Pictures). "Not Novel" movies were popular over time and had a steady positive relationship, while "Novel" movies were the least popular over time.

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



- o I chose the four popular franchises (Harry Potter, Star Wars, Marvel and DC) and collected data based on popularity, adjusted revenue and adjusted budget.
- The first Harry Potter movie (Philosophers Stone) was the most popular movie with 150M budget and it generated around 1200M revenue. The final movie (Deathly Hallows part 2) was the fifth popular movie with a budget around 124M and generated highest revenue out of all the movies.
- The first Star Wars movie (A New Hope) was the most popular movie with a budget less than 50M and highest revenue (above 2B) out of all the Star Wars movies. The last movie which was released in 2015 (The Force Awakens), had the highest budget of all the movies (above 150M) and has the second highest revenue (below 2B).
- Lastly, Marvel and DC universes, Marvel movies popularity increased since early 2000's and generated considerable revenue based on their budget. DC on the other hand also became popular in the early 2000's but it is less compared to Marvel, DC also generated considerable amount of budget based on their revenue.