

Project: Visualizing Movie Data

Complete each section. When you are ready, save your file as a PDF document and submit it [here](#).

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.
 - Split Genre by | and only keep the first genre in each entry
 - Split Production Companies by | and only keep the first company in each entry
- List out the attributes (or variables) you plan to dive further with your visualizations. You should explore no more than 8 attributes.
 - Companies
 - Director
 - Genres
 - Release Year
 - Popularity
 - Revenue Adj
 - Profit (calculated as Revenue Adj – Budget Adj)
 - Number of Records
- Please refer back to the [Data Cleanup course](#) to help you clean up your data.

Step 2: Tableau Visualizations

- Please make sure you follow the [rubric](#) 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. [Instructions on how to do this](#).

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?

1. https://public.tableau.com/profile/charlio#!/vizhome/project_movie_01_genres/Q1Story
2. Number of movies in genres typically grow at exponential rate. Among all the genres, some especially explode in recent years, including Drama, Comedy, Action, Adventure.
3. In most recent years, some genres achieve higher average population and average revenue. These include Fantasy, Science Fiction, Action and Adventure.
4. More specifically, Action seems to be the most promising and has a steady growth in average profit over the last ten years.
- **Question 2:** How do the attributes differ between Universal Pictures and Paramount Pictures?
 1. https://public.tableau.com/profile/charlio#!/vizhome/project_movie_02_companies/TwoCompanies
 2. Paramount Pictures has a much larger scale than Universal Studios by having much larger total revenue and number of movies.
 3. However, when calculated in average, both companies have the same level of profit and popularity.
- **Question 3:** How have movies based on novels performed relative to movies not based on novels?
 1. https://public.tableau.com/profile/charlio#!/vizhome/project_movie_03_novels/Novels
 2. When counted in total number of records, movies based on novels only contribute a very small percentage overall as well as in each genre.
 3. However, movies based on novels outperformed movies not based on novels by having larger average popularity and average revenue generally since the 1960s to now.
- What is your additional question that you proposed? What is the answer? How did you come up with this question?

The previous questions focus on different aspect of the movie market. In addition, we want to have a more overall view of the whole market over the years. Moreover, since it will be very helpful for the new movie production company to have an idea of the major players as well as their contribution to the total revenue. So the question I came up with is

Question 4: What is the overall performance of the movie market over the years, and especially at the company level?

1. https://public.tableau.com/profile/charlio#!/vizhome/project_movie_04_overall/Dashboard1
2. Over the years, movies tend to have a slightly growing average popularity. However, average profit tends to decline slowly.
3. At the company level, half of the total revenue comes from only about 10 companies.

