

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.
- 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 [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

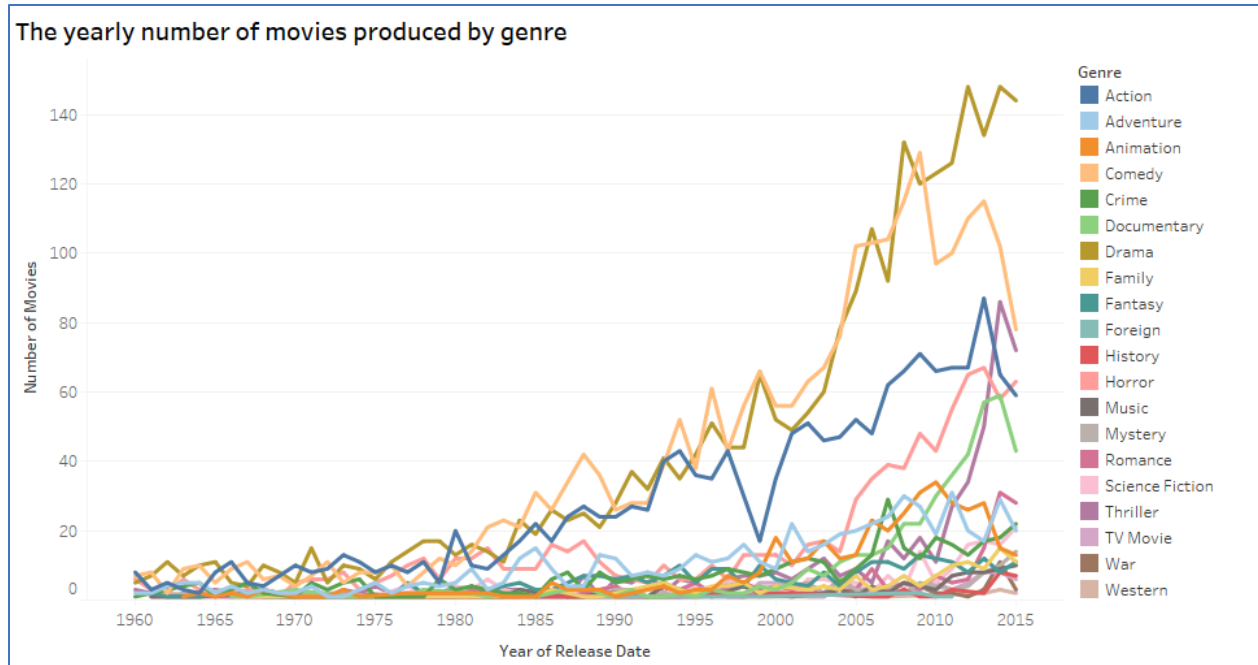
- Answer the following questions. Refer to your online visualizations to back up your answers:

Question 1: How have movie genres changed over time?

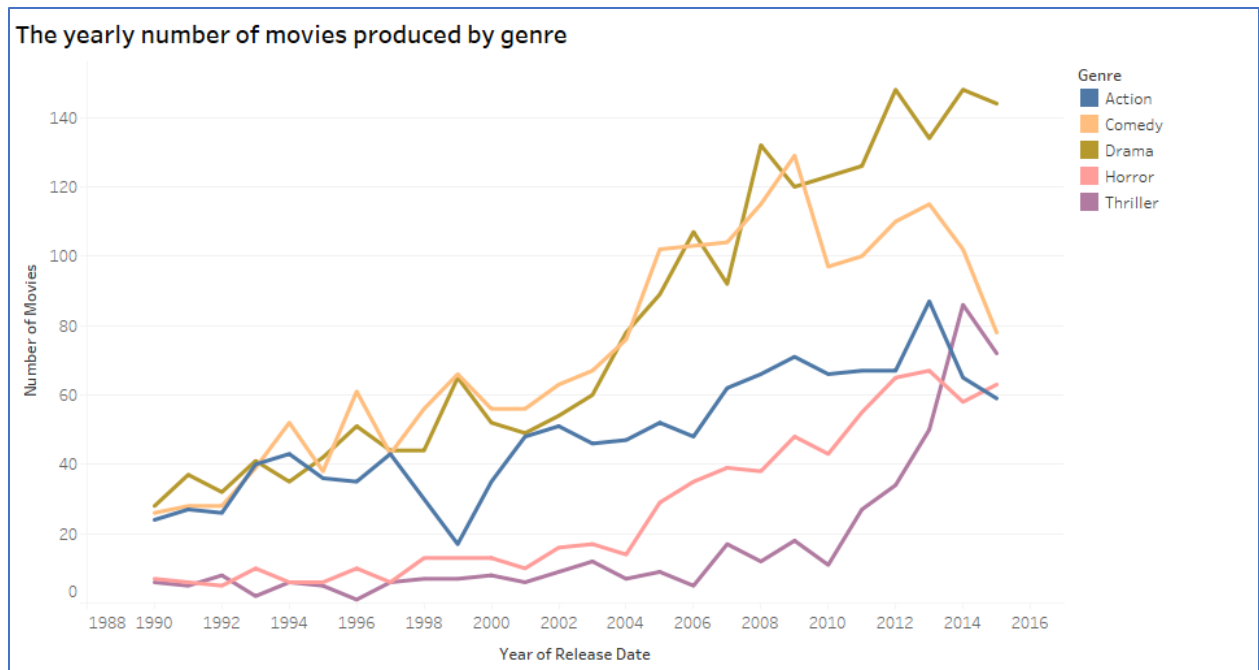
- Please refer to the link below for the online visualizations
<https://public.tableau.com/profile/manar3259#!/vizhome/Q1-Howhavemoviegenreschangedovertime/Q1-Dashboard?publish=yes>

The yearly number of movies produced by genre

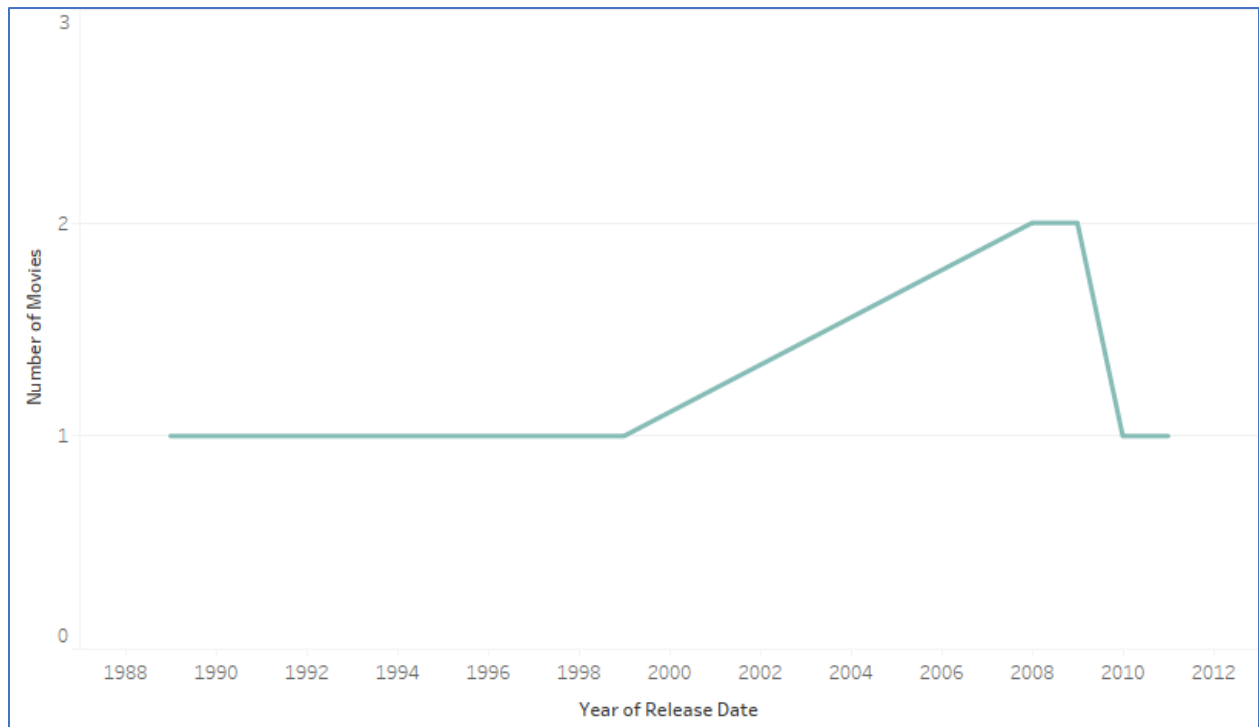
- Generally, the number of movies for most genres has increased over the years.



- The top 5 genres in terms of number of movies produced in 2015 were Drama, Comedy, Thriller, Action, and Horror respectively.
 - **Drama** genre had the largest number of movies from 2010 to 2015.
 - **Comedy** movies have suffered from the instability in the number of movies produced as they keep increasing and decreasing year by year.
 - **Thriller** movies have started to grow after 2010.
 - **Action** movies had a drastic decline in 1999.
 - **Horror** movies have significantly increased after 2004.

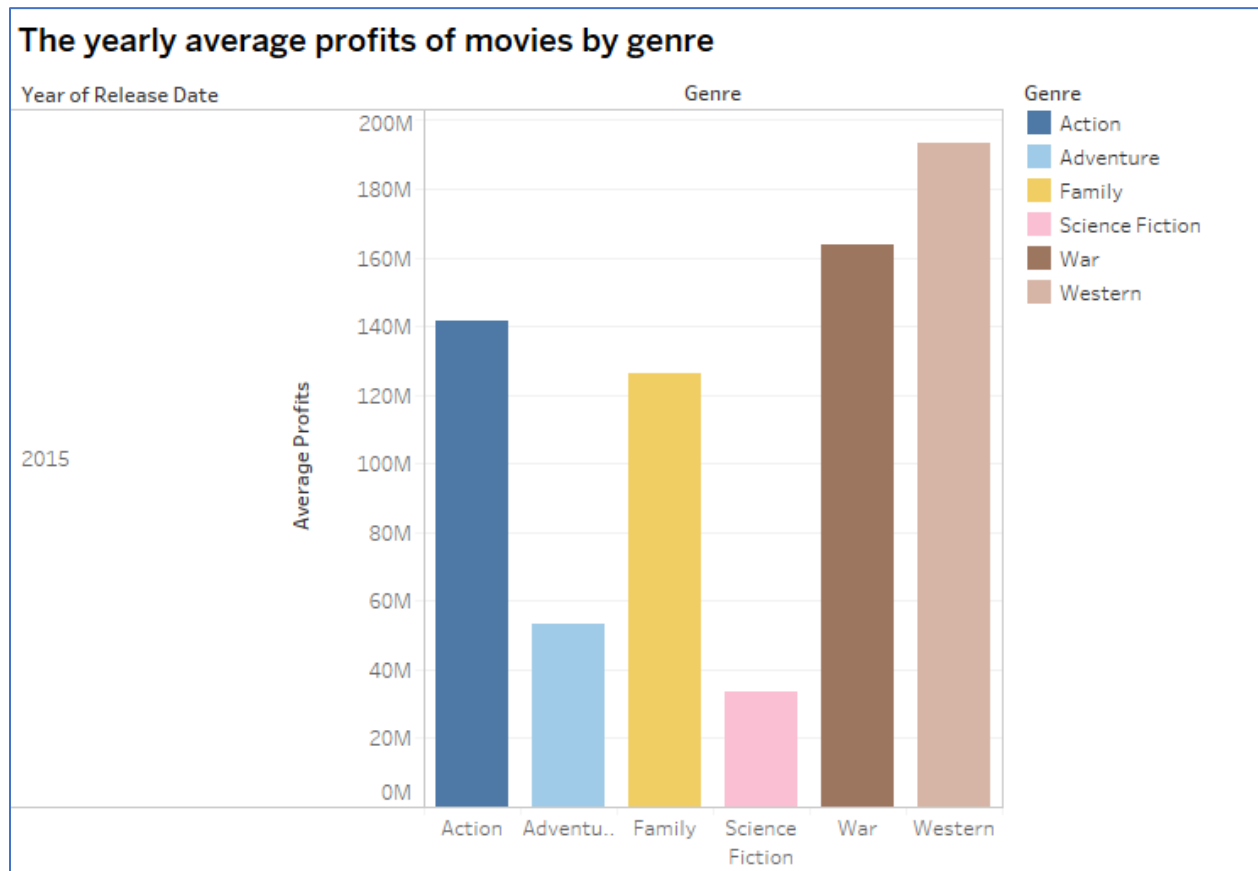


- Foreign movies had stopped to be produced after 2011



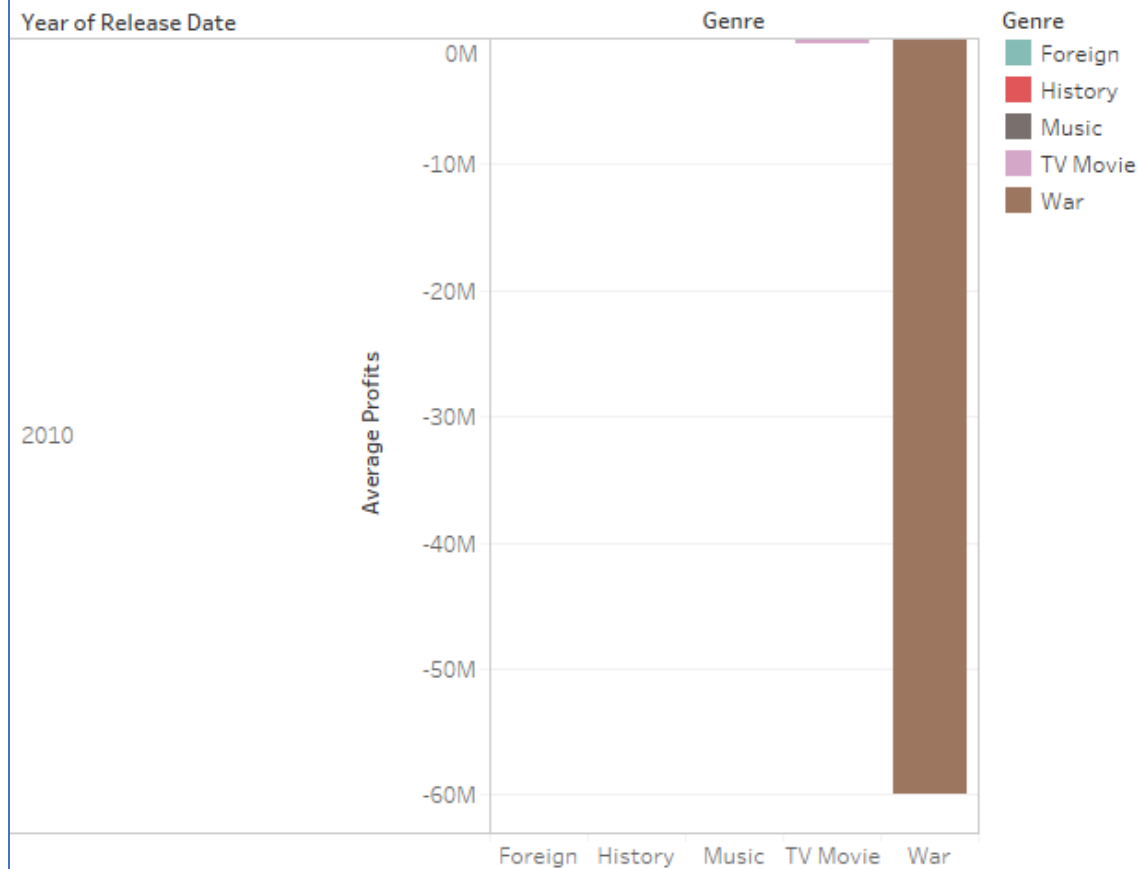
The yearly average profits of movies by genre

- In 2015, the top 5 movies in term of average profits were Western, War, Action, Family, Adventure, and Science Fiction respectively.



- In 2010, the Western movies lost 60,005,000, which is considered to be the largest loss of profits over the years.

The yearly average profits of movies by genre



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

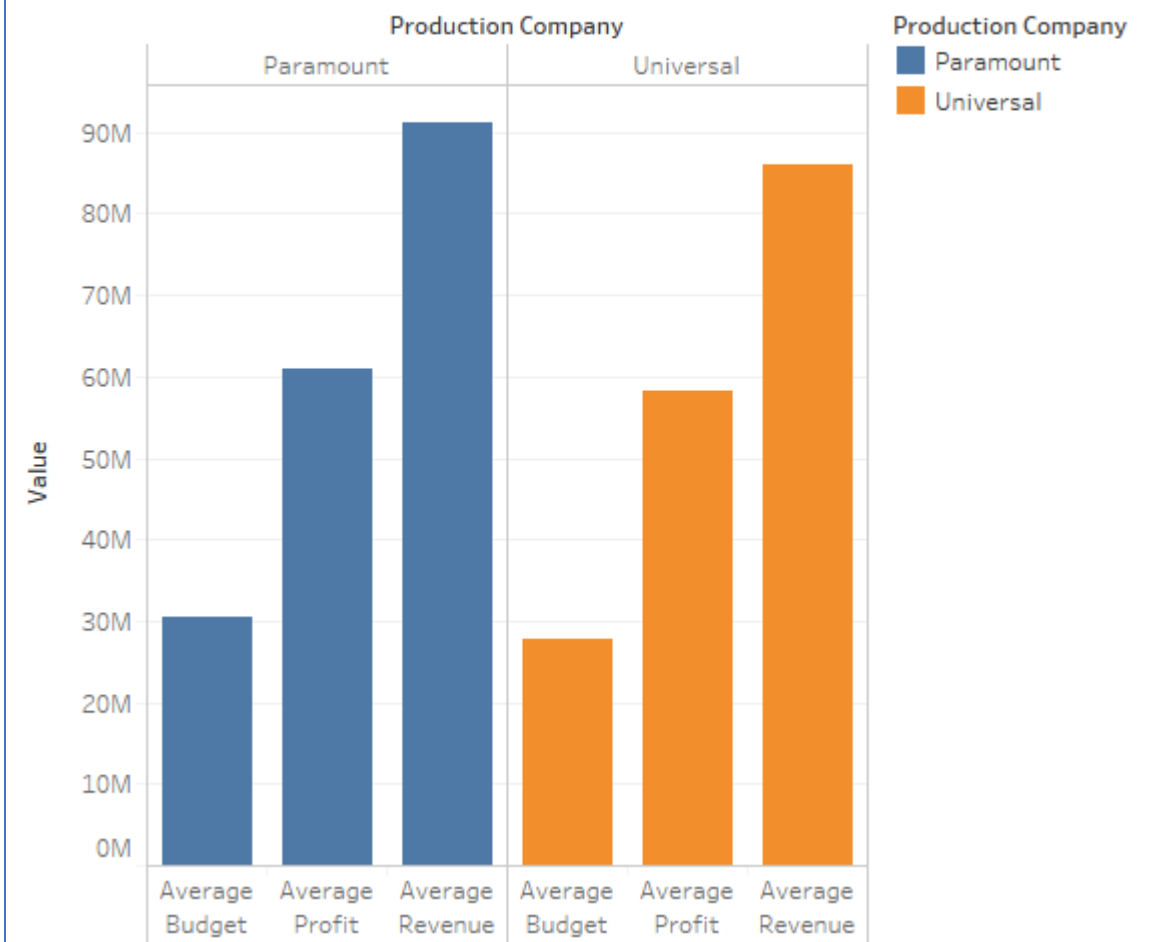
- Please refer to the link below for the online visualizations

<https://public.tableau.com/profile/manar3259#!/vizhome/Q2-HowdotheattributesdifferbetweenUniversalPicturesandParamountPictures/Q2-Dashboard?publish=yes>

Different attributes values of Universal Pictures and Paramount Pictures

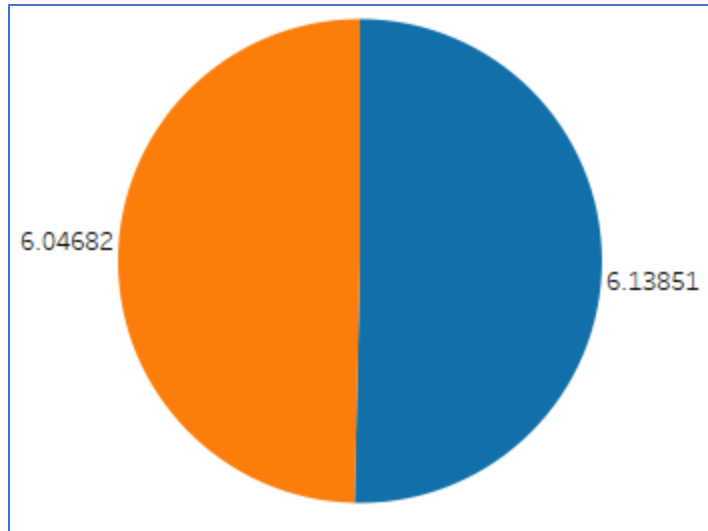
- Although, Paramount Pictures costed more than Universal Pictures, it gained more revenues and profits.

Different attributes values of Universal Pictures and Paramount Pictures



The Average Rating of Universal Pictures and Paramount Pictures

- Paramount Pictures received higher rating than Universal Pictures.

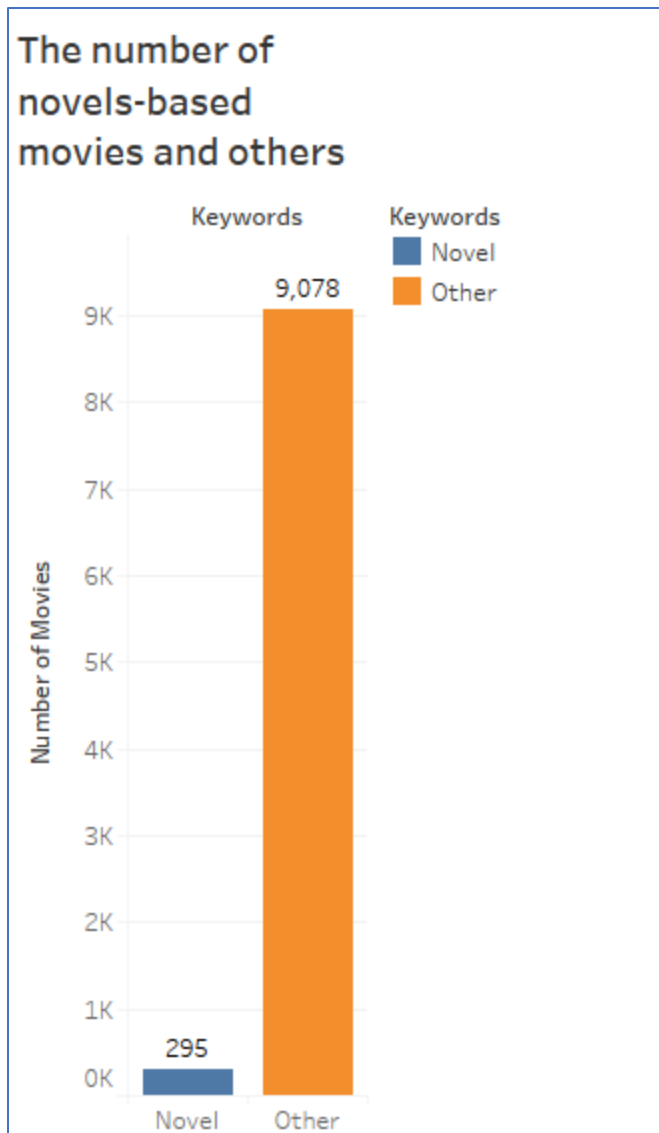


Question 3: How have movies based on novels performed relative to movies not based on novels?

- Please refer to the link below for the online visualizations
<https://public.tableau.com/profile/manar3259#!/vizhome/Q3-Howhavemoviesbasedonnovelsperformedrelativetomoviesnotbasedonnovels/Q3-Story?publish=yes>
- Generally, movies based on novels performed better than movies not based on novels.

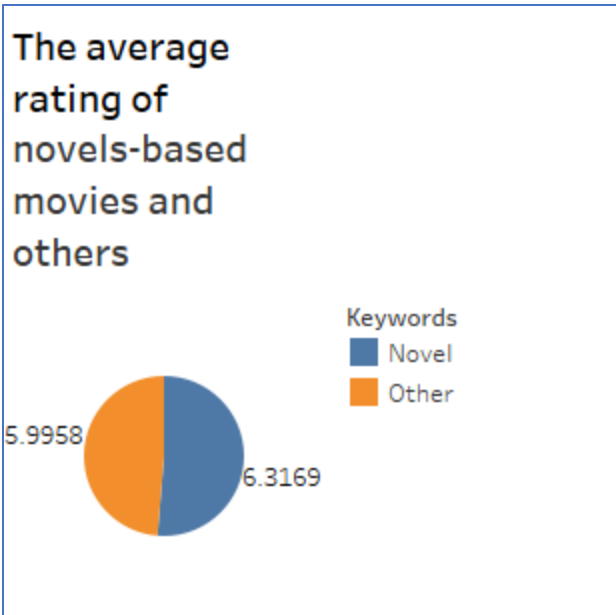
The number of novels-based movies and others

- The number of novels-based movies is less than the number of other movies.



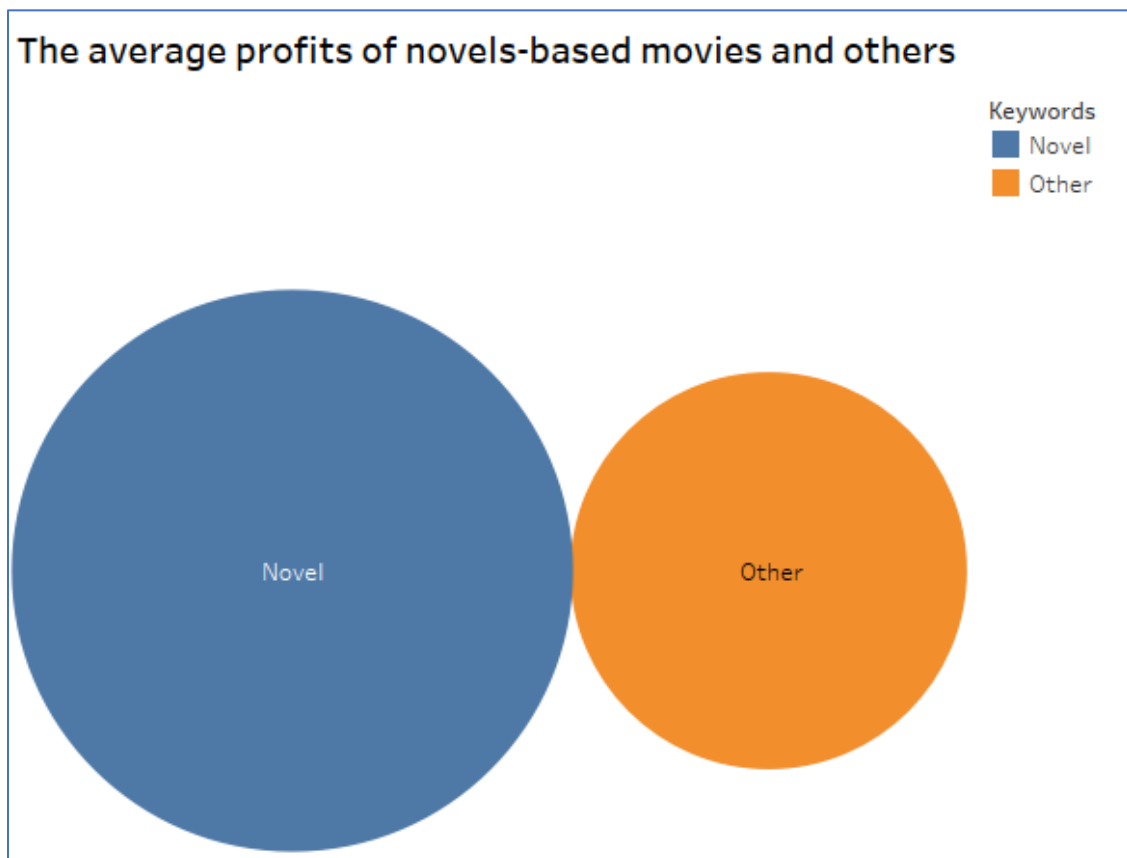
The average rating of novels-based movies and others

- Movies based on novels received higher average rating.



The average profits of novels-based movies and others

- Movies based on novels gained more profits.



Question 4: What is the most profitable runtime for a movie?

- Please refer to the link below for the online visualizations

<https://public.tableau.com/profile/manar3259#!/vizhome/Q4-Whatisthemostprofitableruntimeforamovie/Q4-Dashboard?publish=yes>

- I divided the movies runtime into 6 groups, as each group range is 50 minutes:
 1. 0 - 49 minutes
 2. 50 – 99 minutes
 3. 100 – 149 minutes
 4. 150 – 199 minutes
 5. 200 – 248 minutes
 6. More than 248 minutes
- (150-199) group gained highest profit average
- (200-248) group received the highest rating average
- (50-99) group has the largest number of movies

The number of movies, average profit and average rating by runtime

