

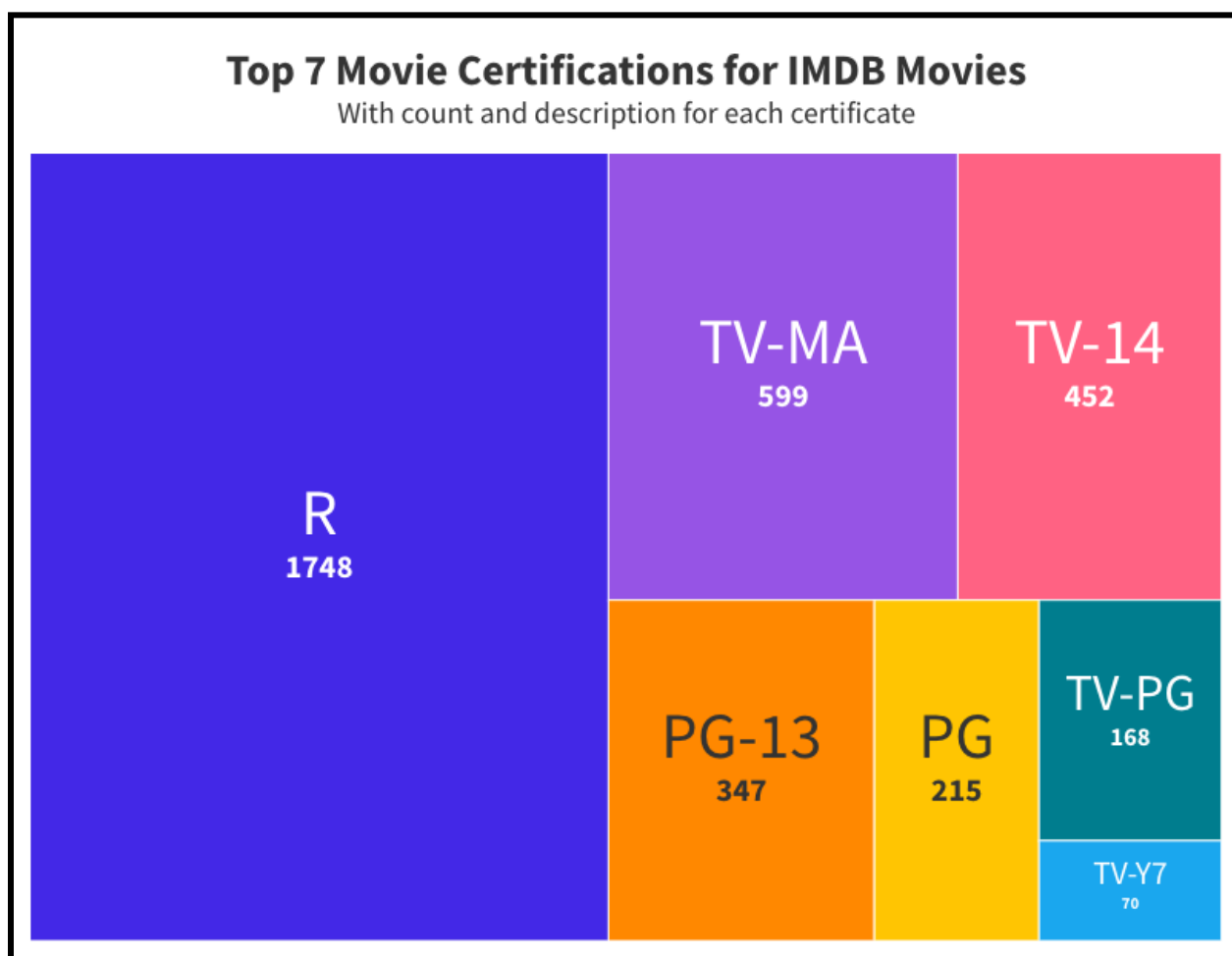
Project 1 - Visualizations

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The IMDb movie data analysis aims to unearthing a profound understanding of various facets of the entertainment industry ranging from audience preferences to prevailing industry trends. Throughout our Data Analysis process we explored correlations among the key features that influence the industry's dynamics. Our comprehensive analysis unveiled several intriguing insights, which are reinforced by the visualizations created in this Assignment.

Visualization 1: Certification Treemap

Link: <https://public.flourish.studio/visualisation/15438049/>



The provided visualization is a Treemap representing the top 7 certifications assigned to movies in the IMDb dataset. Our previous analysis indicated that the 'Crime' and 'Action' genres are the most popular and generate the highest box office revenue, and these genres tend to be associated

with R-rated movies. Consequently, the visualization reinforces the findings from our data analysis.

To ensure a balanced presentation of visual information, count labels have been added to the treemap. This addition enables viewers to gain a clearer understanding of the distribution of movies within each certification category. Furthermore, users can access descriptions of the certifications by hovering over the respective sections.

Visualization 2: Description Word Cloud

Link: <https://public.flourish.studio/visualisation/15437151/>



(Word Cloud Color Palette)

The provided visualization features a Word Cloud containing the top 100 most frequently occurring words found in movie descriptions. The chart systematically employs the following elements to address channel effectiveness and expression:

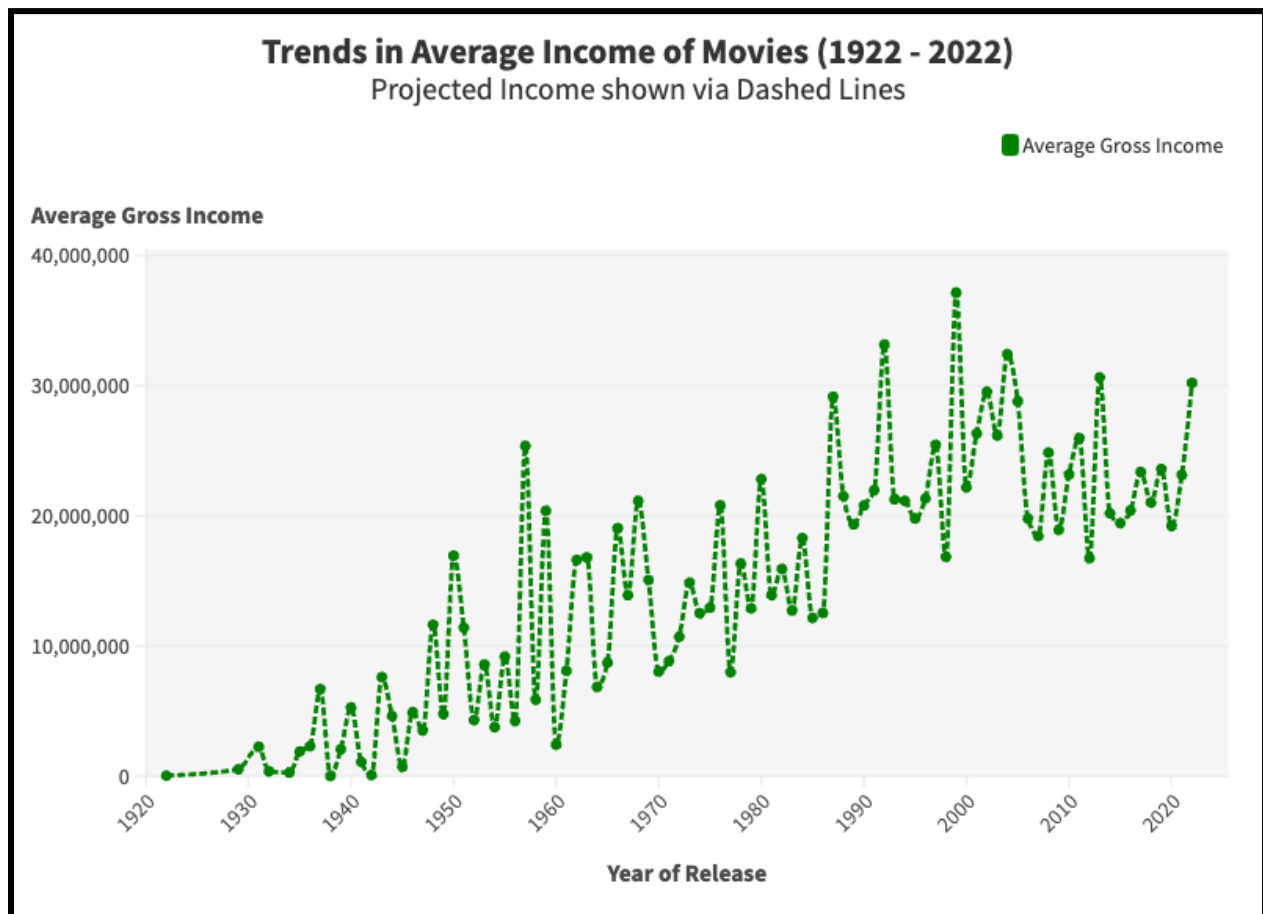
1. Size: Words are displayed in varying sizes, with larger text representing higher frequency.
2. Color: Different colors are assigned to each genre, with the more frequent words on the left end of the color palette. The frequency of words decreases as we move from left to right in the palette.

Moreover, by hovering over each word, users can access information about the word count and its corresponding genre. Notably, the most prominently visible words in the Word Cloud include "police," "murder," and "crime," which are associated with the "Crime" genre.

An intriguing observation is the frequency of words from the "Documentary" genre, marked in pink. This observation aligns with our data analysis, which highlighted a surge in documentary production after the year 2010.

Visualization 3: Average Income Line Chart

Link: <https://public.flourish.studio/visualisation/15445649/>

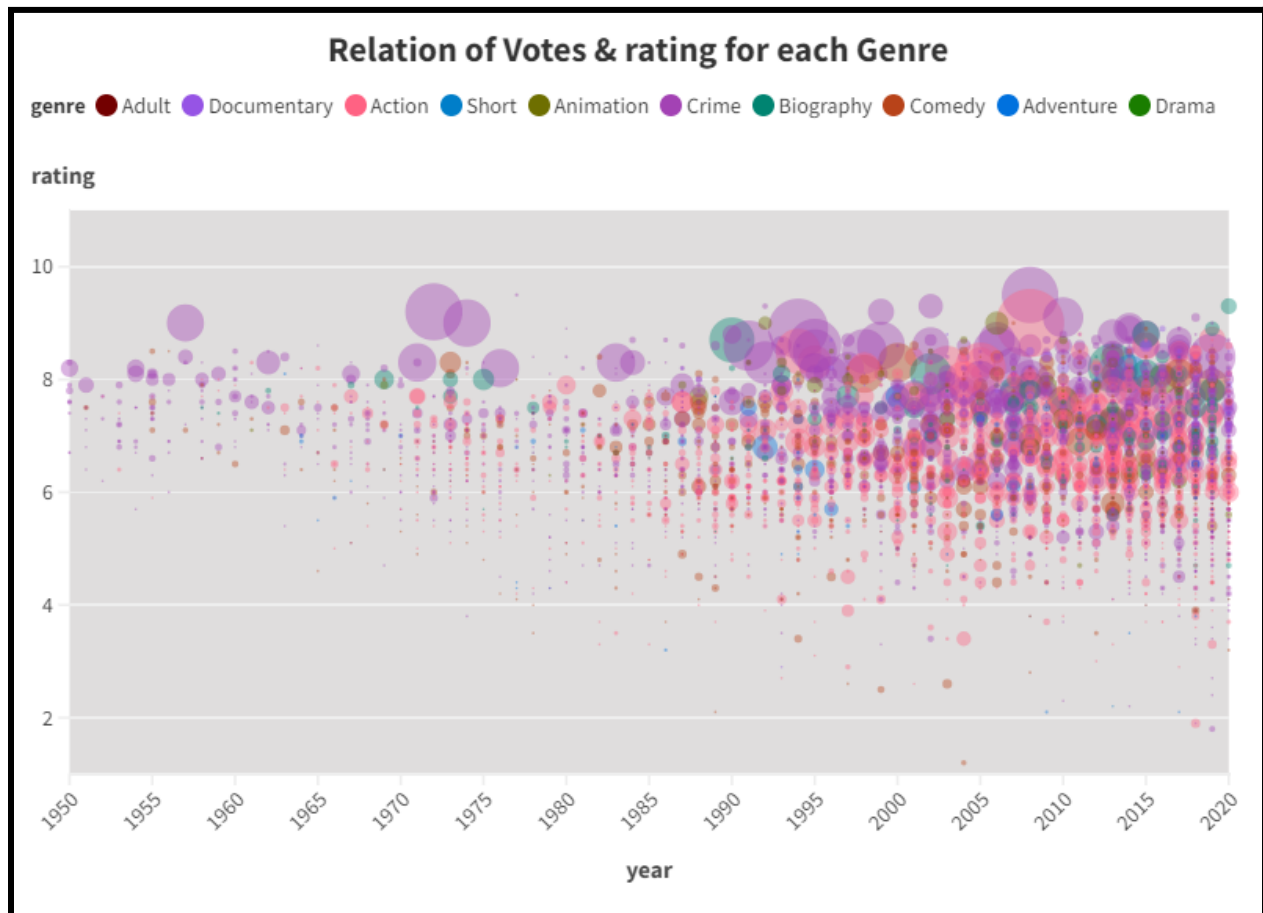


The provided visualization is a Line Chart showing the Average Gross Income Trends in the Movie Industry over a 100-year period. While our data analysis initially considered the

contribution of each genre to total income, the chart clearly demonstrates that over time, the entertainment industry's average income has notably increased, with the highest point in 1999. To facilitate meaningful year-over-year comparisons and accommodate non-cyclic data, we opted to aggregate all genres and calculate the annual gross income, resulting in the plotted average income over the years.

Visualization 4: Relation of Votes & Rating for each Genre

Link: <https://public.flourish.studio/visualisation/15449959/>



The above Bubble chart depicts the votes and rating of each genre type in IMDB Movies dataset over the years. To address the channel effectiveness and channel expression the chart systematically utilizes:

1. Size: Top voted genres are marked with larger size circles.
2. Color: Different color for each genre

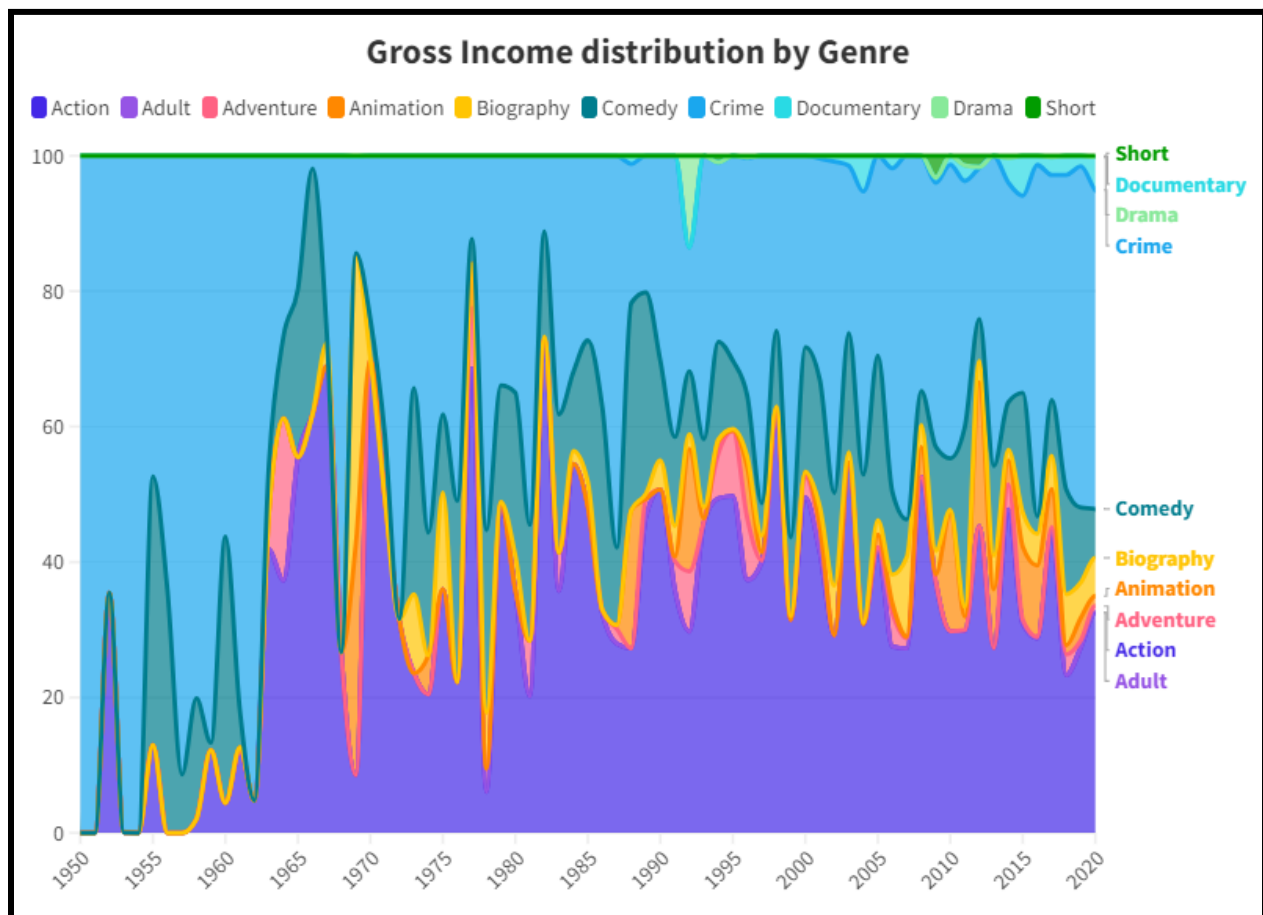
Genre and Ratings: Crime-themed movies consistently receive higher ratings, indicative of their strong storytelling and audience appeal. In contrast, action movies exhibit a broader range of ratings, reflecting the diversity of subgenres within the category.

High Ratings and Popularity:

Notably, there exists a positive correlation between high ratings and the number of votes a movie accumulates as observed in our Data Analysis. Films that earn favorable reviews tend to draw larger audiences, resulting in a higher count of votes. This highlights the symbiotic relationship between quality and popularity in the realm of cinema.

Visualization 5: Gross Income by Genre

Link: <https://public.flourish.studio/visualisation/15450536/>



In the analysis of gross income in relation to movie genres we decided to create an area chart and several key observations emerge as follows:

Genres with Highest Gross Incomes:

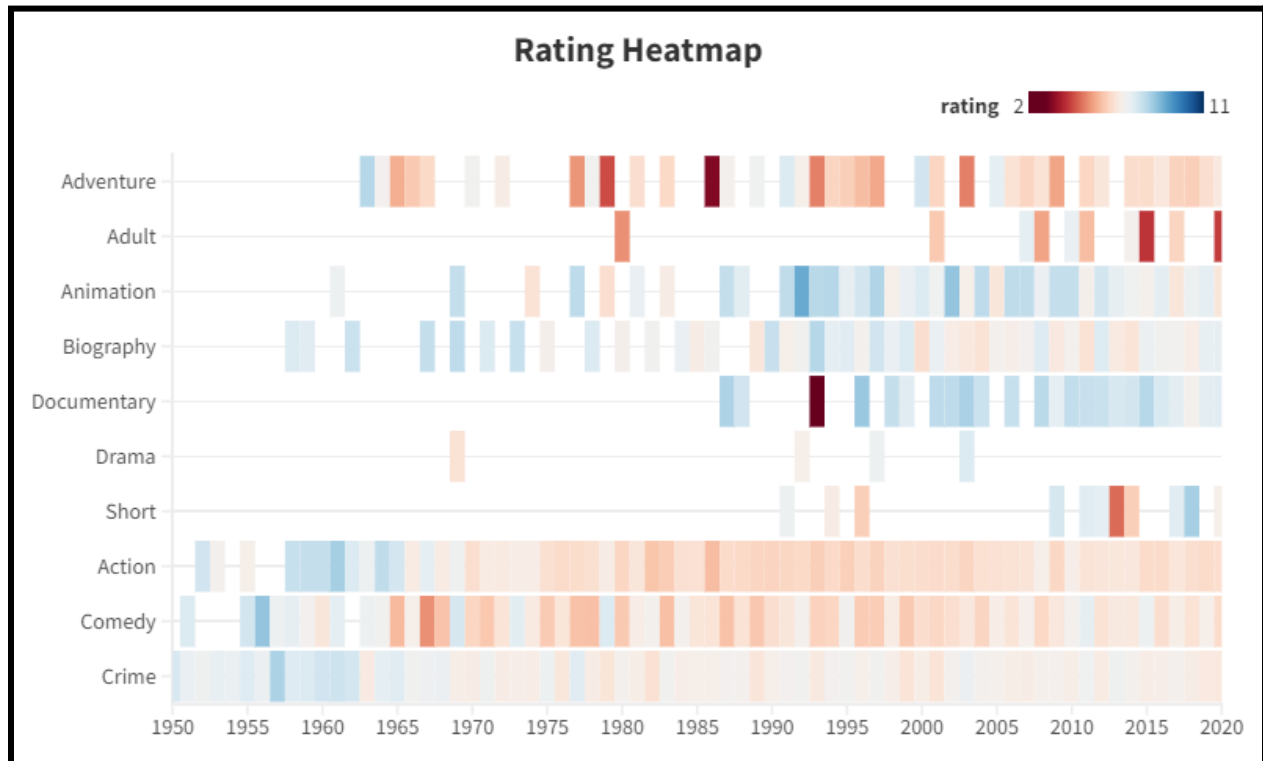
The highest grossing genres, notably action and crime, stand out significantly, outperforming others by a considerable margin. These genres consistently rake in substantial box office earnings, highlighting their widespread popularity and commercial success.

Emerging Genre with Rising Income:

A notable trend is the growing popularity of the documentary genre in terms of gross income. This genre, traditionally associated with informative and factual content, is witnessing an upsurge in earnings. This shift signifies a changing audience appetite for documentary-style storytelling and an expanding market for such films.

Visualization 6: Rating Heatmap

Link: <https://public.flourish.studio/visualisation/15450624/>



The provided heatmap illustrates the evolution of movie ratings over the years for each genre. To enhance channel expression, a color gradient ranging from warm (red tones) to cool (blue tones) has been employed. This color scheme effectively conveys the transition from low ratings (depicted in warm colors) to high ratings (represented by cool colors).

A noteworthy observation from the above heatmap is that movies in the action, comedy, and crime genres exhibit a transition from cooler blue shades to warmer red hues in the heatmap. This shift indicates a decline in the average ratings for these genres over time, suggesting a potential shift in audience reception. On the other hand, the heatmap unveils that adventure movies tend to have lower average ratings. In contrast, animation films consistently receive higher ratings, evident by the heatmap's cooler colors. This contrast highlights the distinct preferences and expectations of audiences when it comes to these two genres.