# **Tomatometer Movie Rating Data Analysis**

## **Executive Summary:**

The analysis of an extensive dataset of 15,000+ movies reviewed by Rotten Tomatoes aims to provide insights into the film industry. By examining film details, ratings, genres, directors, cast, and audience feedback, the report aims to inform decisions related to film production, marketing, and distribution. Key areas of focus include understanding the distribution of films by rating and primary genre, exploring discrepancies between audience and critic ratings, and leveraging success strategies from high-performing studios.

## **Methodology:**

The methodology involves data collection from Kaggle, data cleaning, and treating null values, data modelling on MS Excel, and data analysis. The analysis includes monitoring the performance of various genres, tracking release timing as a key performance indicator, and exploring new film releases over time.

* In order to compare the Tomatometer and audience rating, I found that there are 2 ways by which we can compare the Tomatometer and Audience Rating:

1) finding out the Absolute difference

2) by filtering Top 10 audience rated data and then sorting the Tomatometer rating in ascending order.

There were 252 records of films which had no audience ratings, so I deleted these records to make the data more consistent and filtered the data on the basis of Top 10 audience rating and sorted the Tomatometer rating in ascending order.

* Sentiment analysis: To get a cleaned data analysis of critic consensus I deleted 8329 records of data which did not contain the critics' comments. Hence, this analysis is based on the comments of 8309 records of movies only and was performed by using Azure Machine Learning tool.

## **Goals and KPIs:**

The goals of the analysis include gaining insights into audience preferences, understanding critical acclaim through the Tomatometer status, and identifying trends to inform strategic decisions related to film production and release timing. Key performance indicators (KPIs) include the distribution of films by rating and primary genre, Tomatometer status, audience rating and genre performance.

## **Findings:**

1. The total no. of movies released from 1914 – 2019 were 16638.
2. 36.89% movies were of Restricted category which required parental guidance for kids under 17 years, and were unsuitable for kids under 6 years of age.
3. During the years from 1914 – 2019, 45.90% movies were rotten and only 32.71% were under fresh category.
4. The top 5 genre of movies were: Comedy, Drama, Action & Adventure, Art House & International and Documentary.
5. Maximum no. of movies was released between the years 2009 – 2014.
6. By analysing the last 10 years (2009 -2019) data, it was seen that maximum movies were released in the months of March, September & October suggesting a seasonal trends.
7. As per Tomatometer Rating, **Paramount Pictures studio** had obtained the maximum rating over the years.
8. In 2014 maximum no. of movies were produced, out of which ‘**Bill Burr: I’m Sorry You Feel That Way’** received the maximum Tomatometer rating.
9. According to the critic consensus, 61.96% were positive, 21.25% were negative and 16.79% were neutral reviews.
10. Then I wanted to analyse the discrepancy between the audience and Tomatometer ratings, and it was found that **‘Mysteries of The Jesus Prayer’** had the greatest discrepancy, where Tomatometer had rated it only 20 and the audience had rated it 100.

## **Recommendations to Film Makers:**

Recommendations to film makers include prioritizing the production of popular genres, leveraging the trend of strategic release dates, diversifying ratings to attract a wider audience, and focusing on quality content to increase the percentage of movies in the fresh category. Additionally, the report recommends emulating success strategies from high-performing studios and investigating discrepancies between audience and critic ratings to better meet audience expectations.

## **Conclusion:**

In conclusion, the analysis of the dataset provides valuable insights for the film industry, including understanding audience preferences, identifying successful strategies, and making informed decisions about film production, promotion, and distribution. The findings can be used to enhance the cinematic experience for viewers and improve the overall performance of the film industry.

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