Exploring the Impact of Movie Reviews on Overall Success

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***Abstract*—Movie reviews tell us if a movie is loved by the audience or not which determines the box office revenue of the movie. The movie review and ratings contain the sentiments of the public and a numerical rating to share their opinion. In this study, We will analyze the connection between movie reviews on success, and different machine learning methods are used to determine the effectiveness of reviews on box office collections. Our model is tested using a real-world dataset and the methods to analyze and compare the models. The outcome of the research offers important implications for the film industry and sets the stage for future research in this area.**

I. Introduction

Movie reviews might play a vital role in determining the total revenue/income of a movie. We can learn a lot by analyzing the movie reviews and the movie revenue together which can be used to make better movies that are more appealing to the audiences.

The purpose of this research paper is to analyze the reviews of the audience on IMDB and Metascore and classify them into different categories. The review data may be used to determine the audience's opinion of the movie. Analyzing the perceptions will help us determine the kinds of movies people prefer. Moreover, we are using IMDB comments and Metascore reviews because IMDB has a vast source of opinions on newly released movies as well as old ones. The audience's review includes a wide variety of perspectives including personal opinions, political views, one's mental state, and box office collection. Metascore additionally includes critic reviews which have a massive impact on the audience. Our study focuses on these reviews and box office revenue. Machine learning techniques are employed to extract outcomes from the data.

II. Related Works

We are reviewing many related works on this topic. So far we have found a professor of Information and Finance Management from National Taipei University of Technology in Taiwan, Li-Chen Cheng's work quite remarkable. She implemented Baseline and Extended Regression Models in her project. Her study on the effect of movie reviews on box office revenue deduced that the numerical ratings do not affect the revenues much, but positive and negative reviews had a significant impact.

III. Dataset

According to our research topic, we are looking for a compatible dataset that contains a minimum of 1000+ movies' info along with their IMDB ratings and box office revenue. From the dataset, we will try to figure out the correlation between the review and revenue. To do that, certain methodologies will be followed.

IV. Methodology

There are many algorithms that can be used to deduce a movie's success based on the review it gets. We are researching various algorithms that can be useful to reach our research goals.

V. Result

As soon as we find a suitable algorithm, we will implement it and train the model using our dataset to get the expected results.

VI. Conclusion

As we are still working on our research and have yet to determine the Machine learning algorithms that are to be used to meet our needs. We haven't reached any conclusion yet.