**Fandango Movie Rating Discrepancy Analysis**

**Problem statement** - If you are planning on going out to see a movie, how well can you trust online reviews and ratings? Especially if the same company showing the rating also makes money by selling movie tickets. Do they have a bias towards rating movies higher than they should be rated?

**Overview of the project:**

Back in 2015, FiveThirtyEight published an article entitled "Be Suspicious Of Online Movie Ratings, Especially Fandango’s". The article concluded that Fandango tends to overrate their movies. In other words, the number of stars that the website shows for a certain movie is often higher than the true rating for the same movie.

**The Data**

**all\_sites\_scores.csv**

contains every film that has a Rotten Tomatoes rating, a RT User rating, a Metacritic score, a Metacritic User score, and IMDb score, and at least 30 fan reviews on Fandango. The data from Fandango was pulled on Aug. 24, 2015.

|  |  |
| --- | --- |
| **Column** | **Definition** |
| FILM | The film in question |
| RottenTomatoes | The Rotten Tomatoes Tomatometer score for the film |
| RottenTomatoes\_User | The Rotten Tomatoes user score for the film |
| Metacritic | The Metacritic critic score for the film |
| Metacritic\_User | The Metacritic user score for the film |
| IMDB | The IMDb user score for the film |
| Metacritic\_user\_vote\_count | The number of user votes the film had on Metacritic |
| IMDB\_user\_vote\_count | The number of user votes the film had on IMDb |

**fandango\_scape.csv**

contains every film 538 pulled from Fandango.

|  |  |
| --- | --- |
| Column | Definiton |
| FILM | The movie |
| STARS | Number of stars presented on Fandango.com |
| RATING | The Fandango ratingValue for the film, as pulled from the HTML of each page. This is the actual average score the movie obtained. |
| VOTES | number of people who had reviewed the film at the time we pulled it. |

To conduct an analysis of Fandango movie rating discrepancies, you can follow these general steps:

**1. Define the Problem:**

Clearly articulate the problem or question you want to address. For example, you might want to investigate if there is a significant difference between Fandango's movie ratings and ratings from other sources.

**2. Data Collection:**

Obtain the necessary data for your analysis. You may need Fandango's ratings and ratings from other sources like IMDb or Rotten Tomatoes. Ensure that your data set is representative and unbiased.

**3. Exploratory Data Analysis (EDA):**

Explore the data to identify patterns, trends, and potential outliers. This may involve creating visualizations, summary statistics, and correlation analyses.

**4. Comparison with Other Rating Systems:**

Compare Fandango's ratings with ratings from other platforms. Calculate correlation coefficients and create scatter plots to visualize the relationships. You can use statistical tests to determine if the differences are significant.

**5. Focus on Fandango Ratings:**

Since the focus is on Fandango, conduct a detailed analysis of their ratings. Check for any biases or irregularities in the distribution of ratings. Look for patterns that might suggest inflated ratings.

**6. Historical Analysis:**

If possible, analyze historical data to see if there have been changes in Fandango's rating system over time. Companies may update their rating methodologies, which could affect the analysis.

**7. User Reviews:**

Consider analyzing user reviews and comments on Fandango. This qualitative data can provide insights into user experiences and perceptions of movie ratings.

**8. Interviews or Surveys:**

If applicable, consider conducting interviews or surveys with users to gather more qualitative data. This can provide additional context to the quantitative analysis.

**9. Statistical Testing:**

Use statistical tests to determine if the observed differences are statistically significant. This may involve t-tests, chi-square tests, or other appropriate statistical methods.

**10. Report Findings:**

Summarize your findings in a clear and concise manner. Provide visualizations, tables, and statistical results to support your conclusions. Clearly state any limitations of your analysis.

**11. Recommendations:**

Based on your analysis, provide recommendations or suggestions for improvements. This could include suggestions for Fandango to enhance transparency or adjust their rating system.