MOVIES DATASET ANALYSIS

Predicting Trends and Needs

BUSINESS UNDERSTANDING

As of 2023, 64% of European-based respondents stated they needed more entertaining movies. Movies have long been a staple of the entertainment industry. In this project we shall analyze data from the IMDB movies database, to identify key characteristics that can inform best-selling movie genres, producers, and categories.

This analysis will enable upcoming movie directors and movie companies to decide on the most profitable and popular types of movies and which other factors viewers appreciate when reviewing movies and rating them.

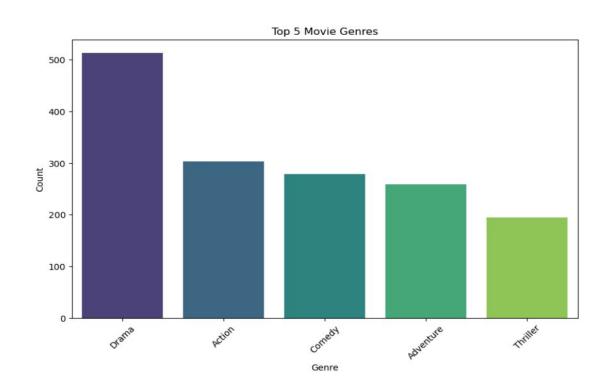
ANALYSIS QUESTIONS

- Which are the top five most popular movie genre
- Run time analysis and Insights
- Who are the top 10 movie producers with highest grossing movies
- Which are the top 100 most-voted movies and their analysis

Data Analysis Design following CRISP-DM Guidelines

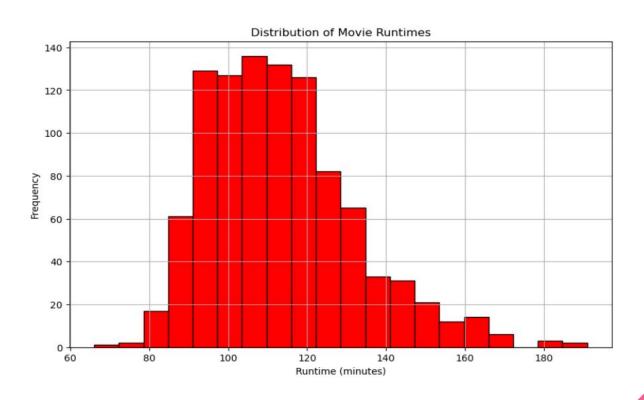
- Importation of all the necessary libraries for our project.
- Obtaining and analyzing the features of the dataset used in this project.
- Loading and viewing our data to facilitate appropriate analysis.
- Finding anomalies, missing values, and outliers and cleaning our data.
- Modeling
- Evaluation and providing recommendations.

MOVIE GENRES ANALYSIS



 The top five movie genres according to their rating are Drama, Action, comedy, Adventure and thriller respectively.

MOVIES RUNTIME ANALYSIS



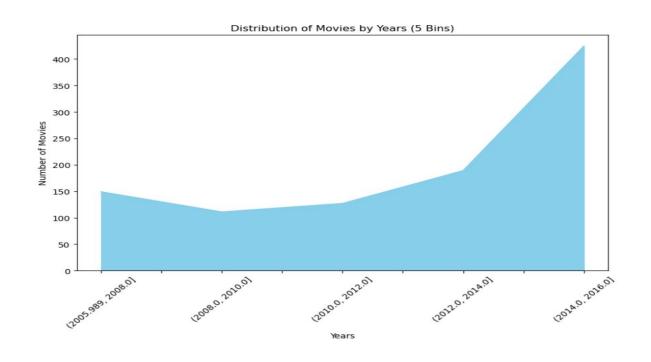
 Most movies run between 90-120 minutes.

MOVIE RATINGS ANALYSIS

| | Rank | Title | Genre | 1 |
|-----|------|-----------------|---------------------------|---|
| 54 | 55 | The Dark Knight | Action, Crime, Drama | |
| 80 | 81 | Inception | Action, Adventure, Sci-Fi | |
| 117 | 118 | Dangal | Action, Biography, Drama | |
| 36 | 37 | Interstellar | Adventure, Drama, Sci-Fi | |
| 96 | 97 | Kimi no na wa | Animation, Drama, Fantasy | |

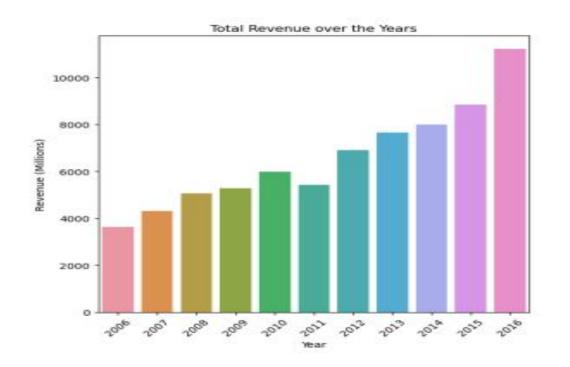
This is an analysis of the most highly rated movies and their respective genre. This supports the analysis of the most preferred movie genre.

NUMBER OF MOVIES OVER TIME(YEARS)



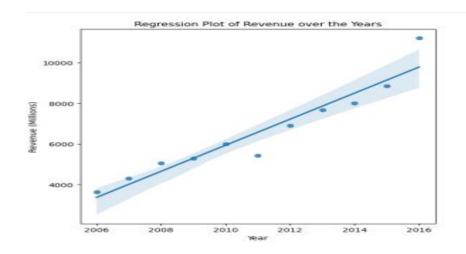
 There have been a steady increase in the number of movies as the years progressed

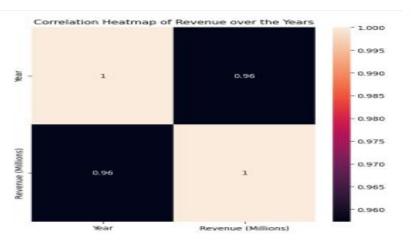
REVENUE OVER THE YEARS



 The total revenue from movies of the years has seen a steady increase over time.

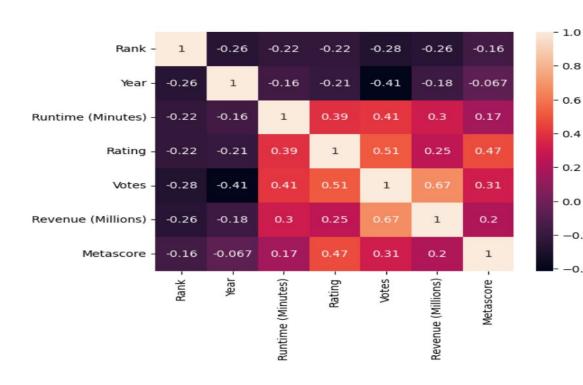
REVENUE OVER THE YEARS





There is a positive correlation between the years and the revenue collected for movies produces

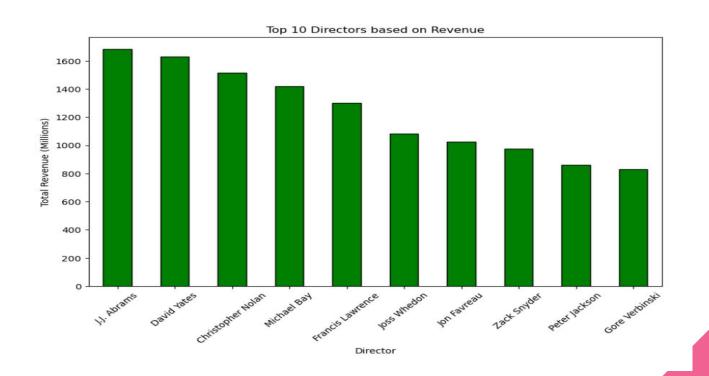
Correlation Heatmap of Numerical Variables



We can gauge the areas where there is a +ve or -ve correlation between the variables

- -0.2

TOP 10 DIRECTORS BASED ON REVENUE



JJ Abrams, David Yates and Christopher Nolan have created movies that were able to generate highest revenue

EVALUATION AND RECOMMENDATIONS

- Most Movies run between 90-120 minutes which is the recommended runtime for a movie.
- The total revenue is expected to increase as the years progress. This makes movie production a worthy venture as the years progress.
- Different genres appeal to different audiences. However, it is recommended that if investing in particular genre that is most popular, Dramas are the most common genre followed by comedy, Action, crime and Adventure.
- If you want a good revenue in return, JJ Abrams would be the best director for the movies followed by David Yates and the rest.

Thank You.