

Phase-1-independent-Project

Movie Insights for Microsoft's Video Content Division

Data Analysis and Visualization

INTRODUCTION

18 February 2024

Overview

Introduction

- Welcome to the Movie Insights Project: Analyzing valuable movie industry data to provide insights for Microsoft's Video Content division's establishment.
- Purpose: This presentation serves as a guide to understand the contents, goals, and findings of the project.
- Objective: Support strategic planning for the establishment of a new studio.
- Dataset: Utilizing a comprehensive dataset (df1) from Box Office Mojo, IMDB, Rotten Tomatoes, TheMovieDB, and TheNumbers.
- Contents: Movie titles, genres, ratings, domestic and foreign revenues, and production details.
- Goal: Equipping the head of Microsoft's Video Content division with actionable insights for informed decisionmaking regarding the new studio's operations and content creation strategies.

Prepared and compiled by:



Purity Kibaki

CD

Table of contents

What to expect in this project presentation

01	Exploratory Data Analysis Page 4	04	Data Sources Page 7
02	Key Findings Page 5	05	Conclusion Page 8
03	Recommendations Page 6	06	The End Page 9



EDA

Key Highlights on how the Exploratory Data Analysis (EDA) involved;

- Conducted in-depth statistical analysis of movie ratings and box office performance to uncover trends and insights.
- Explored the distribution of movie genres over time and their correlations with box office success.
- Visualized key metrics and trends to facilitate a comprehensive understanding of the movie industry landscape.

It is important to note that the analysis was all done using python programming language with the help of a number of python libraries like pandas and matplotlib.

The Analysis was conducted based on the following parameters;

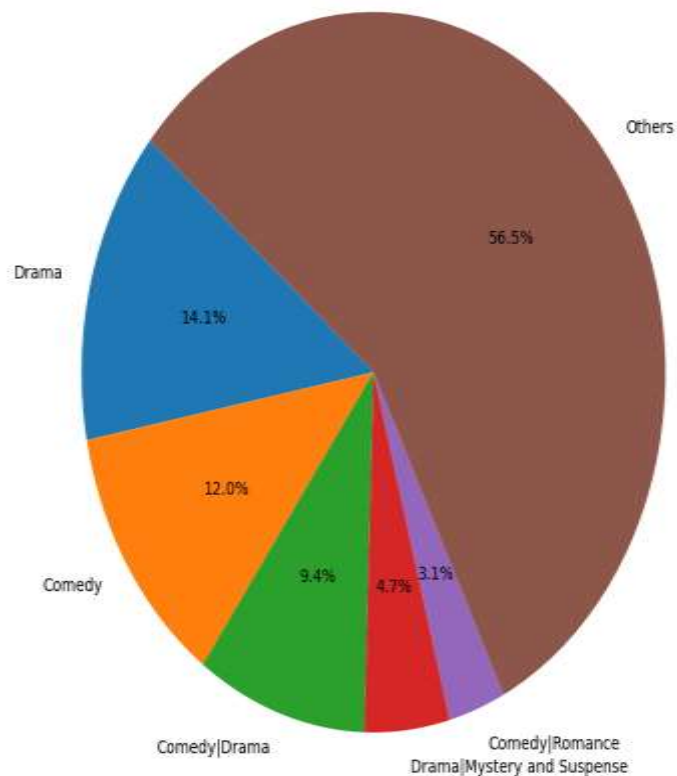
1. Genre
2. Ratings and Average ratings
3. Box Office Performance (Domestic and Foreign Gross)
4. Production Details(Writers and film directors)

Key findings

Summary based on movie genre:

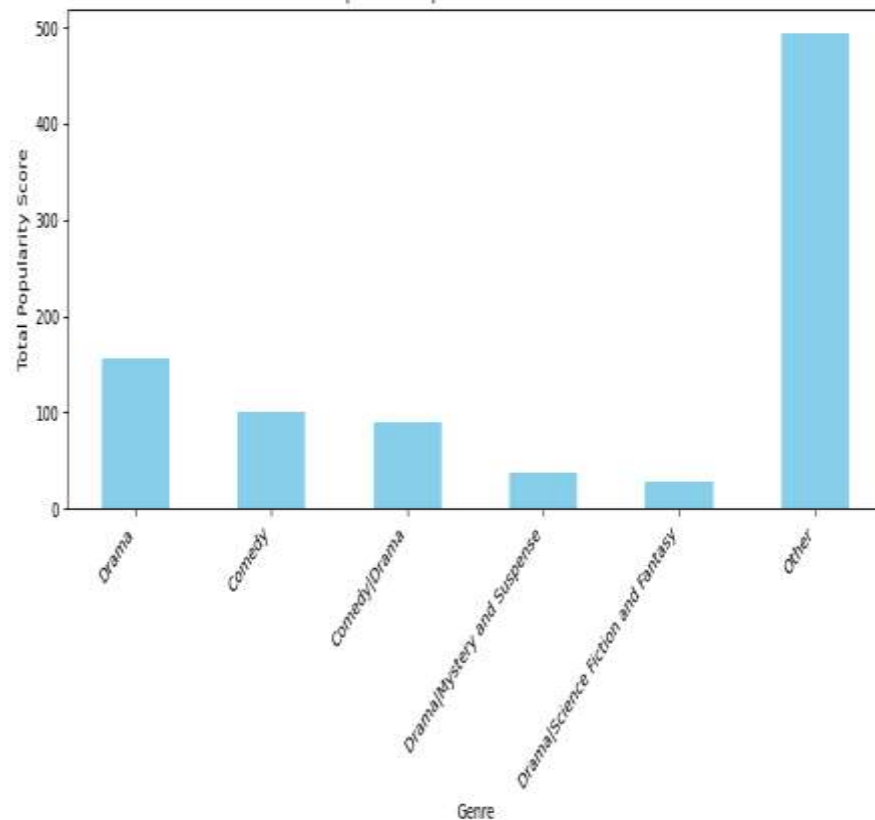
- Drama and comedy genres dominated as the best genres with the most writers, popularity, and production, followed by action.

Distribution of Top 5 Movie Genres and Others



- Identified Roman Coppola and Tamara Jenkins as influential figures in the movie world based on ratings as writers and directors.
- Highlighted the importance of considering foreign gross alongside box office for global market analysis.

Top 5 Most Popular Genres and "Other"





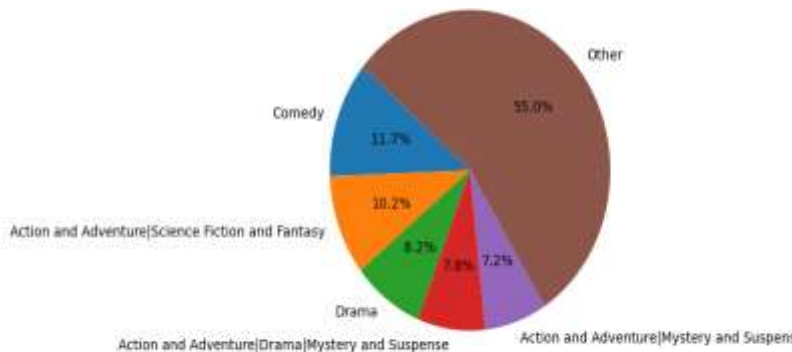
Key findings

Summary based on movie revenues:

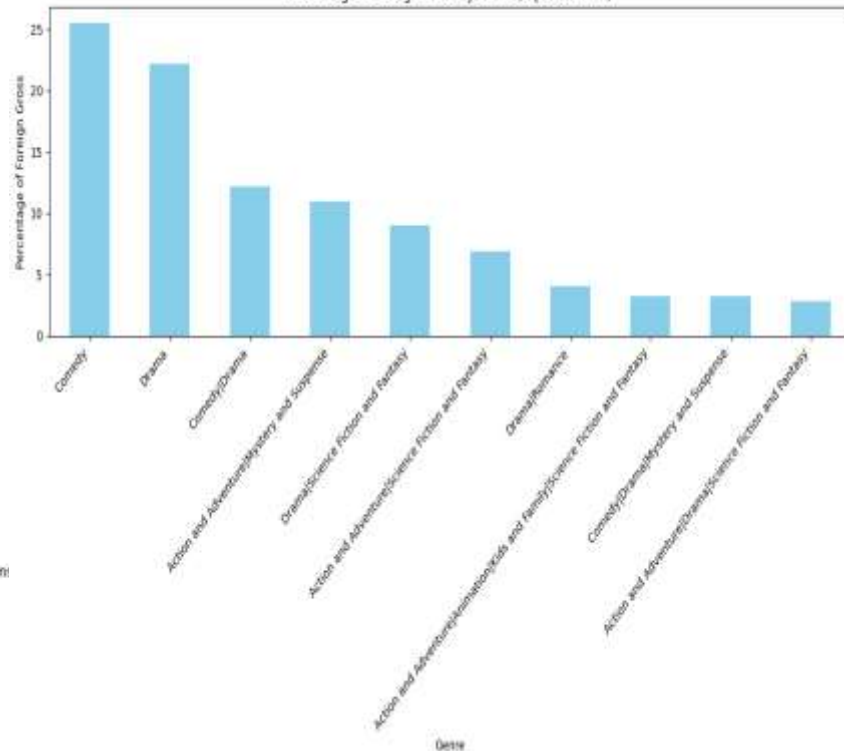
- For global market analysis, the analysis is done using foreign gross revenues instead of box office revenue since it sometimes does not cover foreign earnings. Box office revenue is great if the target market is regional where there are movie theatres.

- Based on the below graphs, we can see that **Comedy** leads in the global market, followed shortly by **Drama** genre. However, using box office earnings, comedy still takes lead and drama is the third best performing after Action genre.

Distribution of Box Office Earnings by Genre



Percentage of Foreign Gross by Genre (Top 10 Genres)

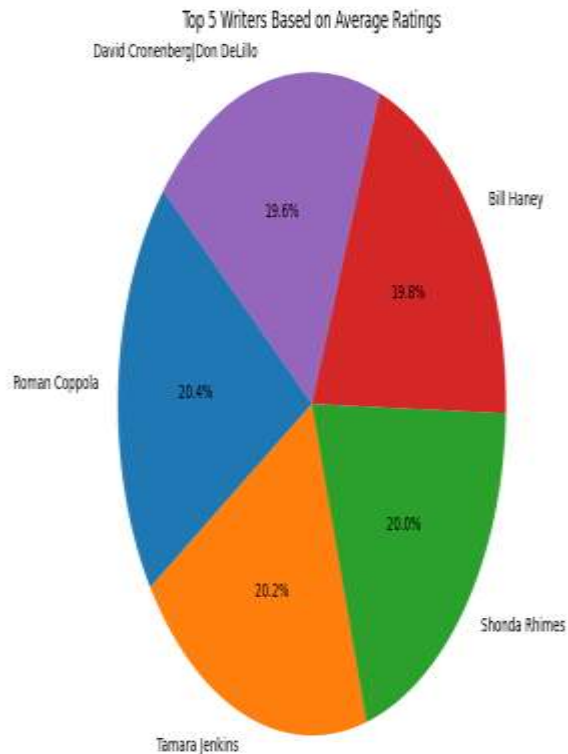




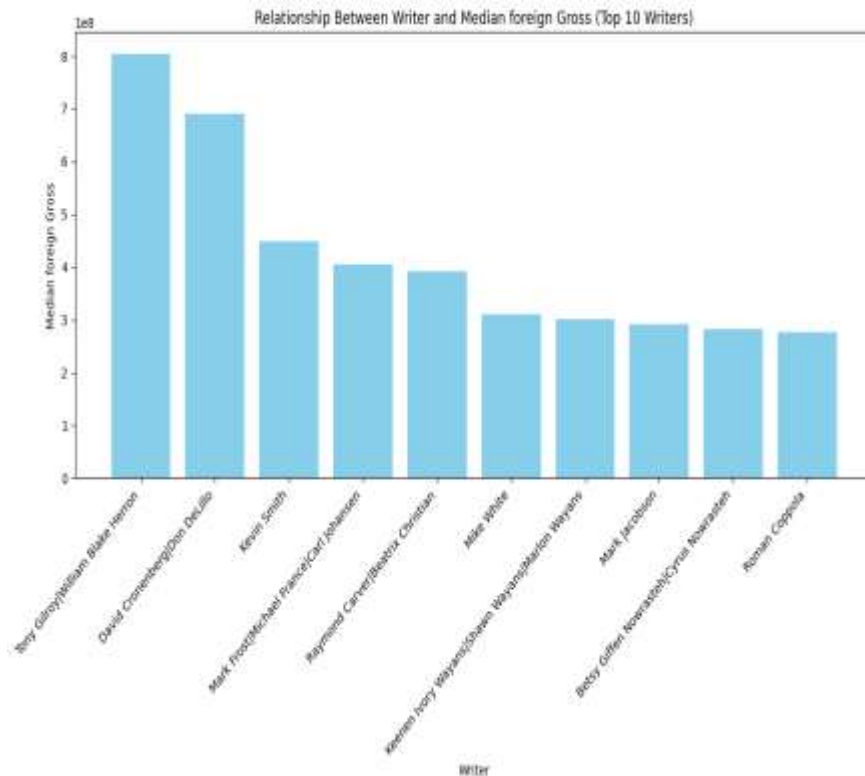
Key findings

Summary based on writers':

- Identified Roman Coppola and Tamara Jenkins as influential figures in the movie world based on ratings as writers using the trend in ratings.



- Generally however, when we look at total revenues, the following are taking lead. Giving entertainment is an evolving industry, its better to follow the influential figures.
- David Cronenberg/Don DeLillo are the best writers to contact since they appear in both sections.



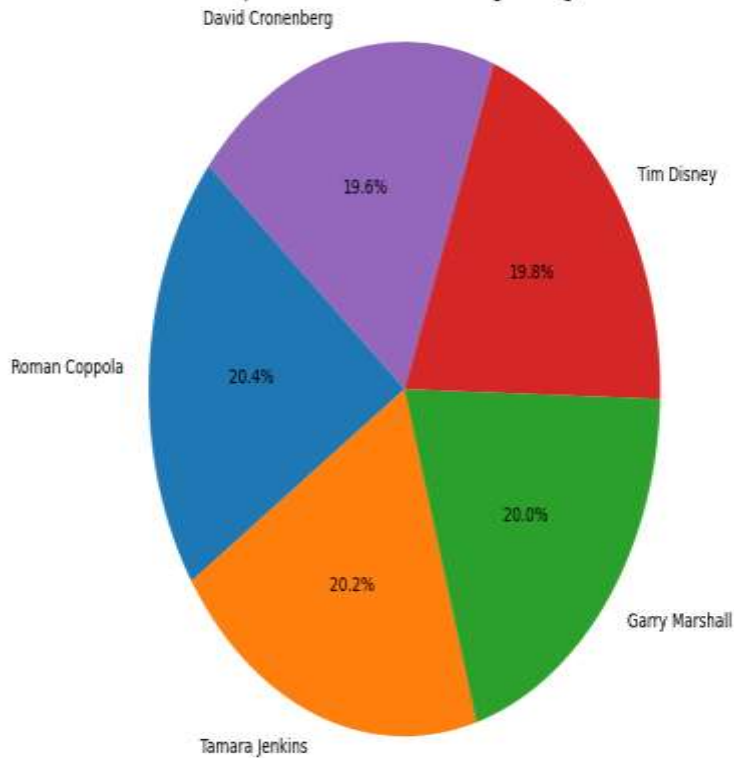


Key

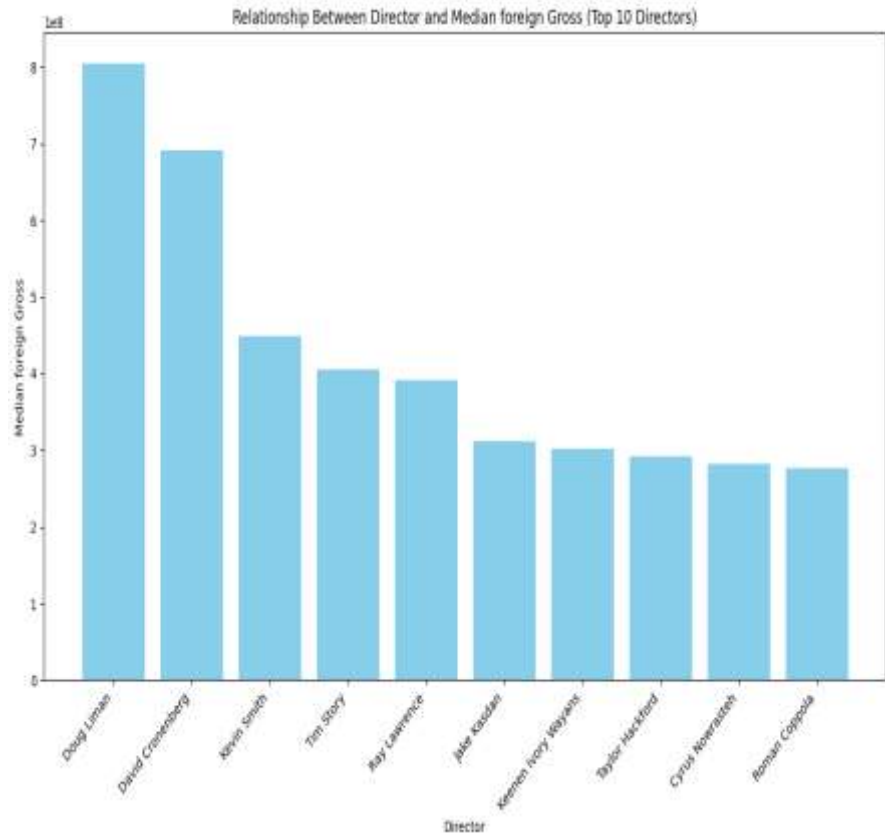
Summary based on Directors':

- Identified Roman Coppola and Tamara Jenkins as influential figures in the movie world based on ratings as not only writers but directors too using the trend in ratings.

Top 5 Directors Based on Average Ratings



- Generally however, when we look at total revenues, the following are taking lead. Giving entertainment is an evolving industry, its better to follow the influential figures.
- David Cronenberg again is among the best directors to contact since he appear in both sections.



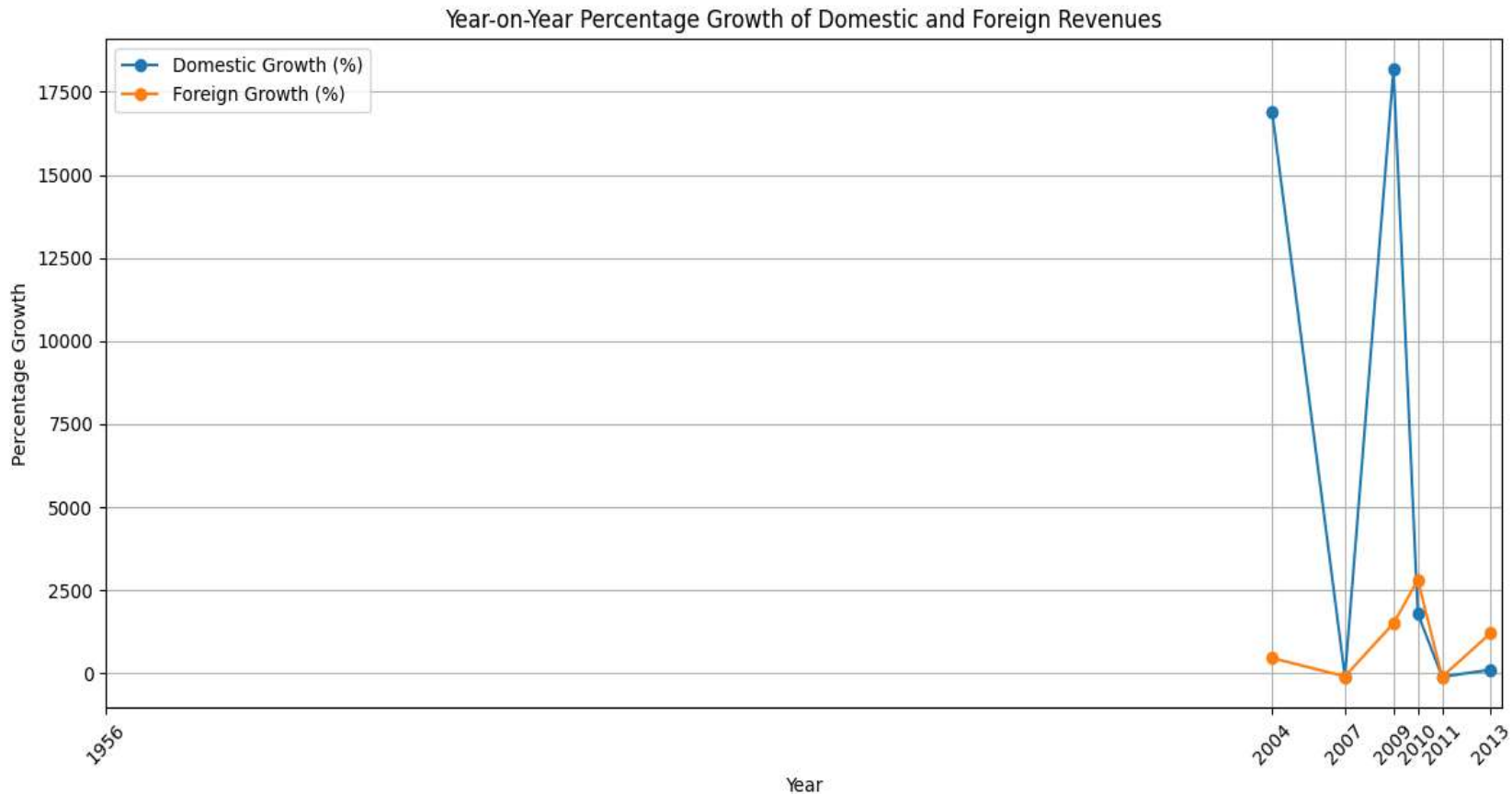


To analyse whether movies revenues are increasing with time:

- ○ Its notable that both the domestic revenue and foreign revenues have increased in the last two years as shown below.

- It is better to invest in the international market since revenues are growing at a higher rate compared to the domestic market.

Key findings



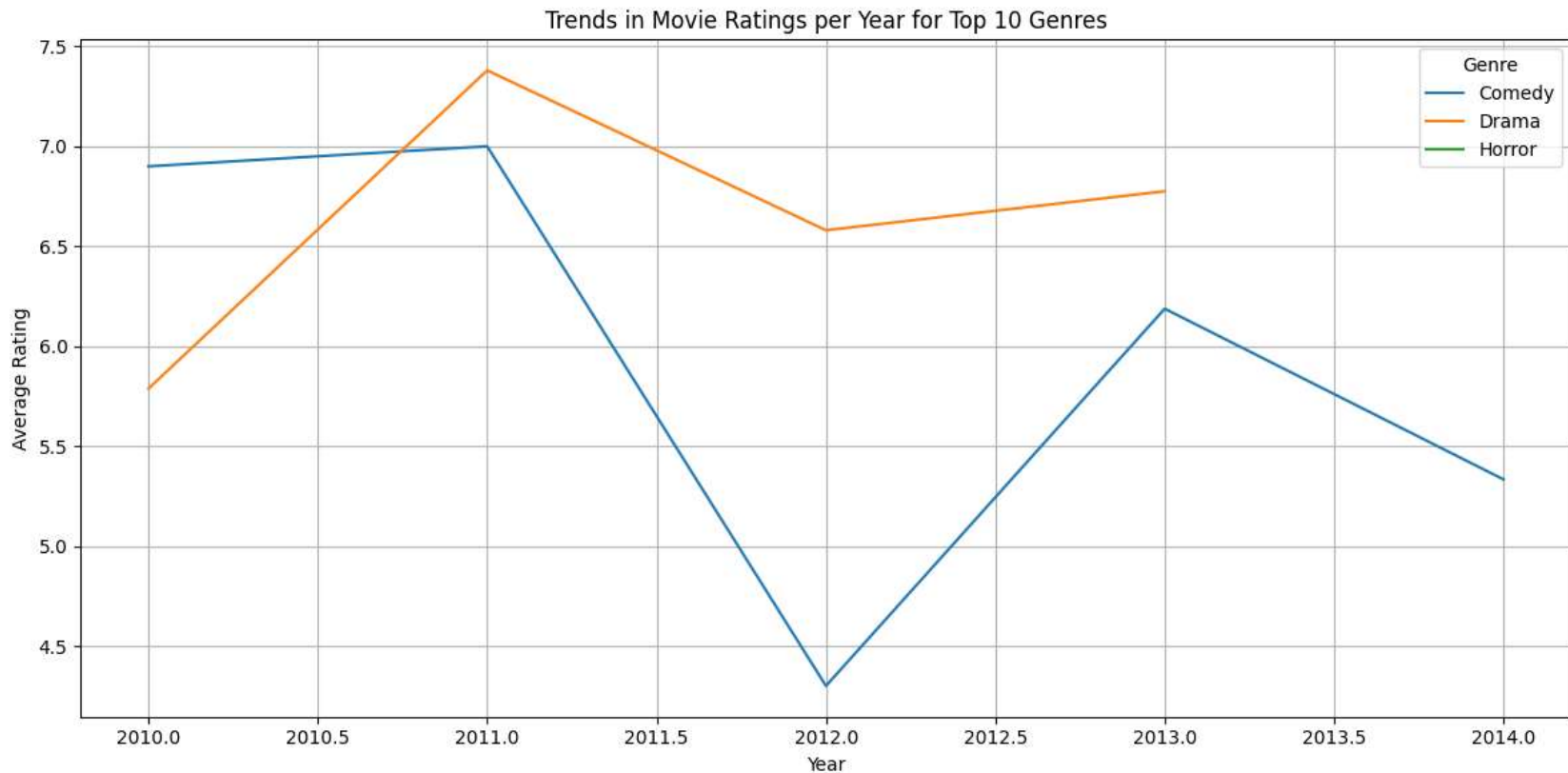


Genre trend analysis:

There is an upward trend in the drama genre and a notable downward trend in the comedy genre over the last three years.

- o It is better to follow the trend given change in taste with consumers i.e. invest in more drama films than comedy ones.

Key findings



Recommendations

1. Focus on genres with demonstrated box office success, particularly drama and comedy.
2. Collaborate with experienced directors and writers associated with successful movies, such as David Cronenberg and Kevin Smith.
3. Monitor and adapt to emerging trends in movie ratings and audience preferences, with a focus on the drama category.

Data Sources

- The insights and analysis presented in this project are derived from a comprehensive dataset (df1) sourced from reputable sources in the movie industry, including Box Office Mojo, IMDB, Rotten Tomatoes, TheMovieDB, and TheNumbers.
- This multi-faceted dataset provides a robust foundation for the exploratory data analysis conducted in this project.

Conclusion

- In conclusion, the Movie Insights project provides valuable insights into the movie industry, aiding Microsoft's Video Content division in making informed decisions for their new studio. By leveraging the findings and recommendations outlined in this document, the studio can strategize effectively, produce compelling content, and thrive in the dynamic landscape of the entertainment industry.
- For further details, insights, and recommendations, please refer to the detailed analysis and visualizations provided in this repository link <https://github.com/Zircor-nn-Black/Phase-1-Independent-Project.git>

THANK YOU