MICROSOFT STUDIO MOVIE ANALYSIS

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PROJECT INTRODUCTION

OVERVIEW:

This project uses exploratory data analysis (EDA) to help Microsoft's new movie studio by analyzing a comprehensive dataset, the project aims to provide actionable insights for producing financially successful movies that resonate with their respective viewers.

The data utilized in this project was sourced from the following link:

- IMDB: https://www.imdb.com/interfaces/
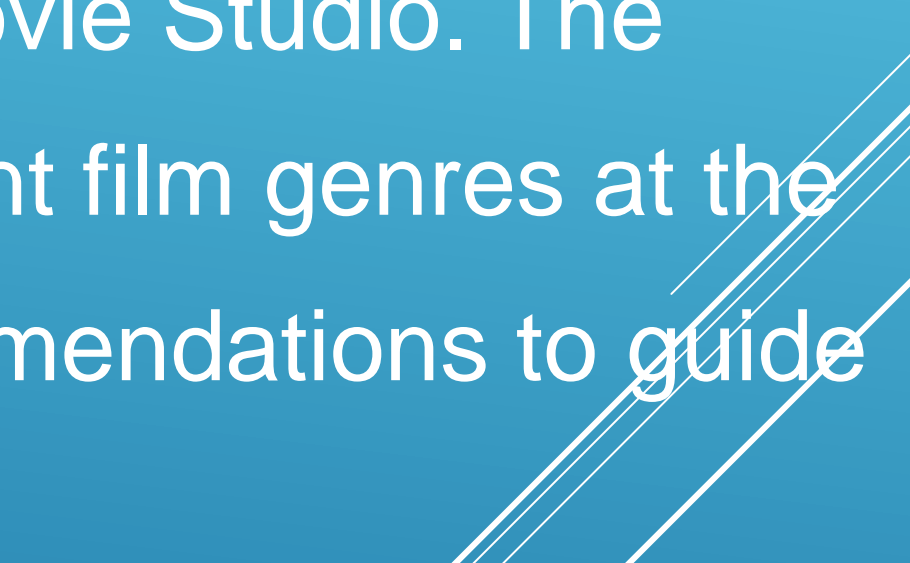
Presentation Objectives

- Data Understanding

- Data preprocessing

- Data Analysis

- Data Visualization

BUSINESS UNDERSTANDING

1. Business Problem

2. Data Understanding

3. Data Preparation

4. Data Analysis

5. Conclusions and Recommendations

Problem Statement

Microsoft recognizes the trend of major companies producing their own original video content and seeks to create their own Movie Studio. The task is to investigate the current performance of different film genres at the box office and translate the results into practical recommendations to guide their decision making on the types of films to produce.
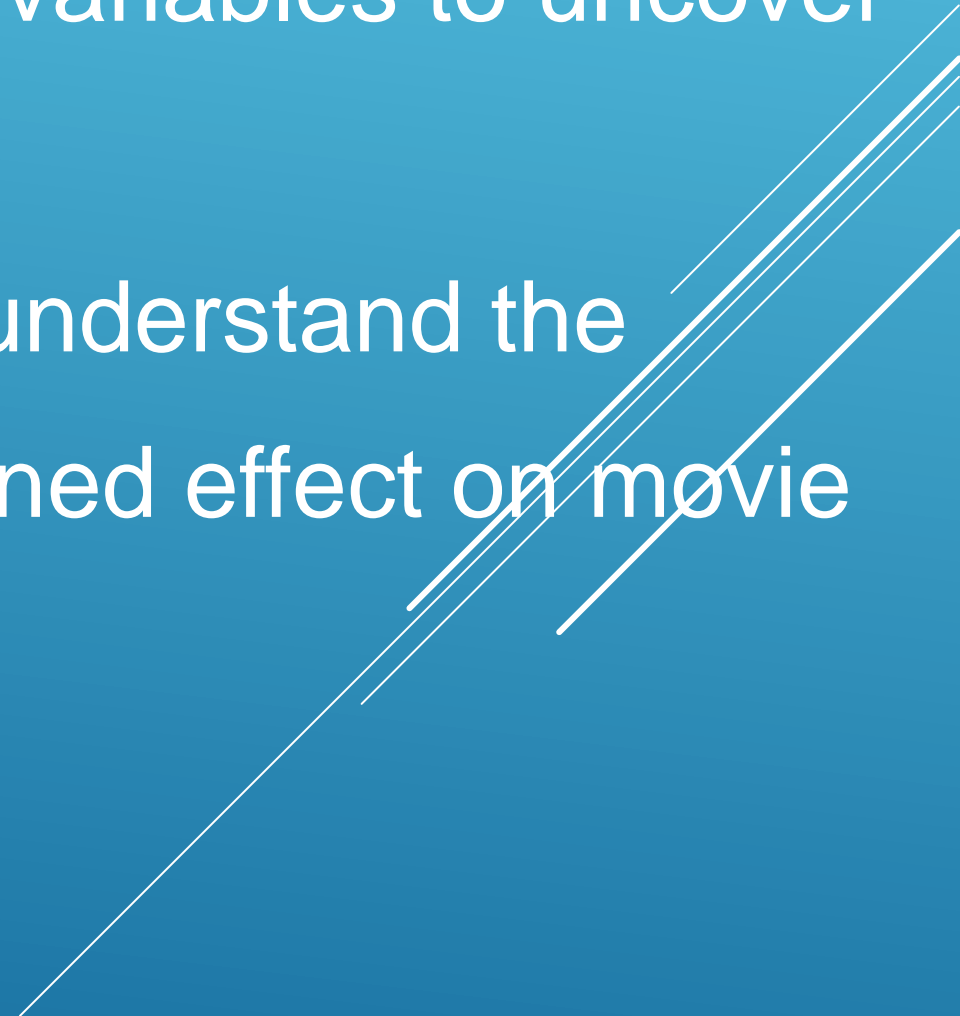
Analysis Objectives

1. Analyzing box office performance and market trend.

2. Identify the most profitable and popular movie genres in the market.

3. Developing a list of recommendations for Microsoft's new movie studio based on the research findings.

4. Providing actionable insights

DATA ANALYSIS

Univariate Analysis: Investigated the distribution of single variables to understand their characteristics.

Bivariate Analysis: Explored relationships between two variables to uncover patterns and insights.

Multivariate Analysis: Conducted complex analyses to understand the interactions between multiple variables and their combined effect on movie performance.
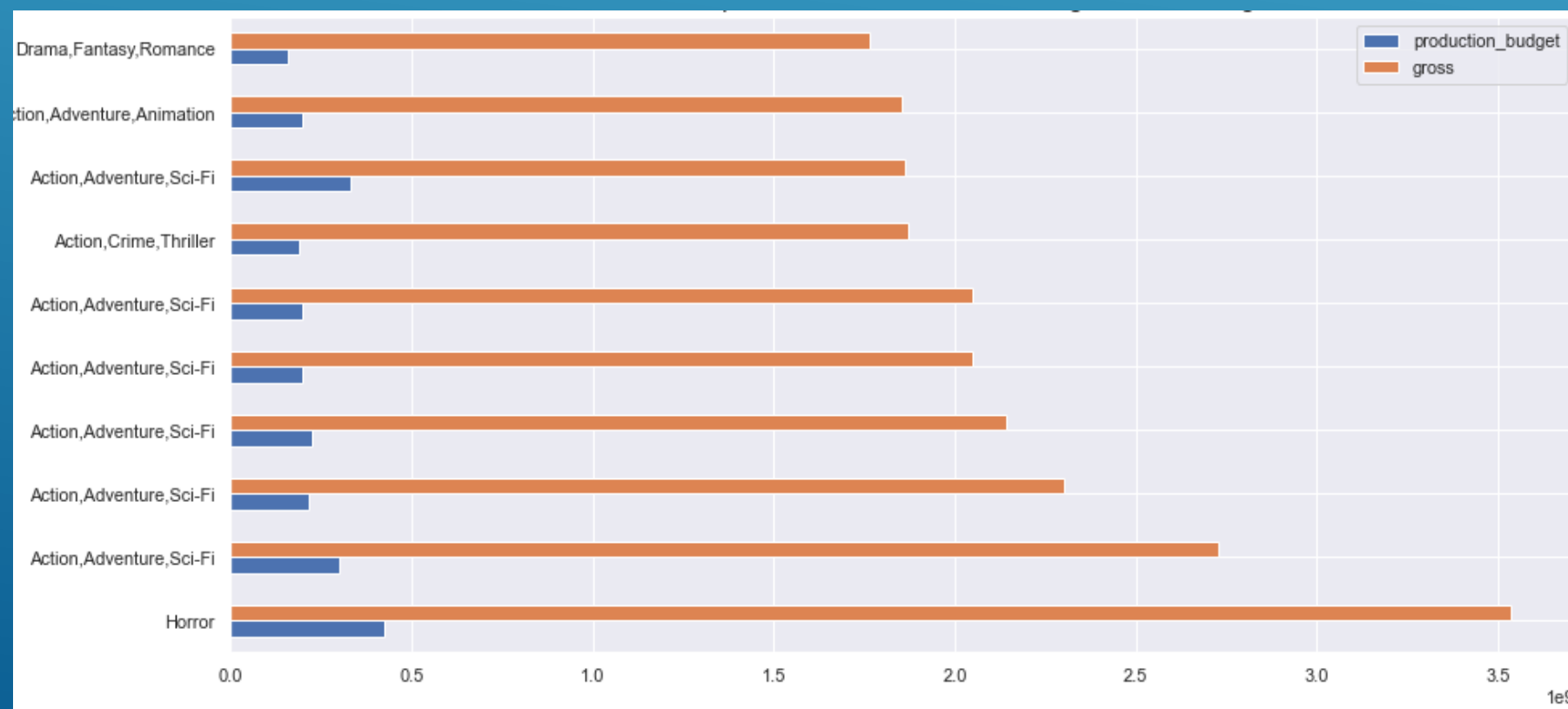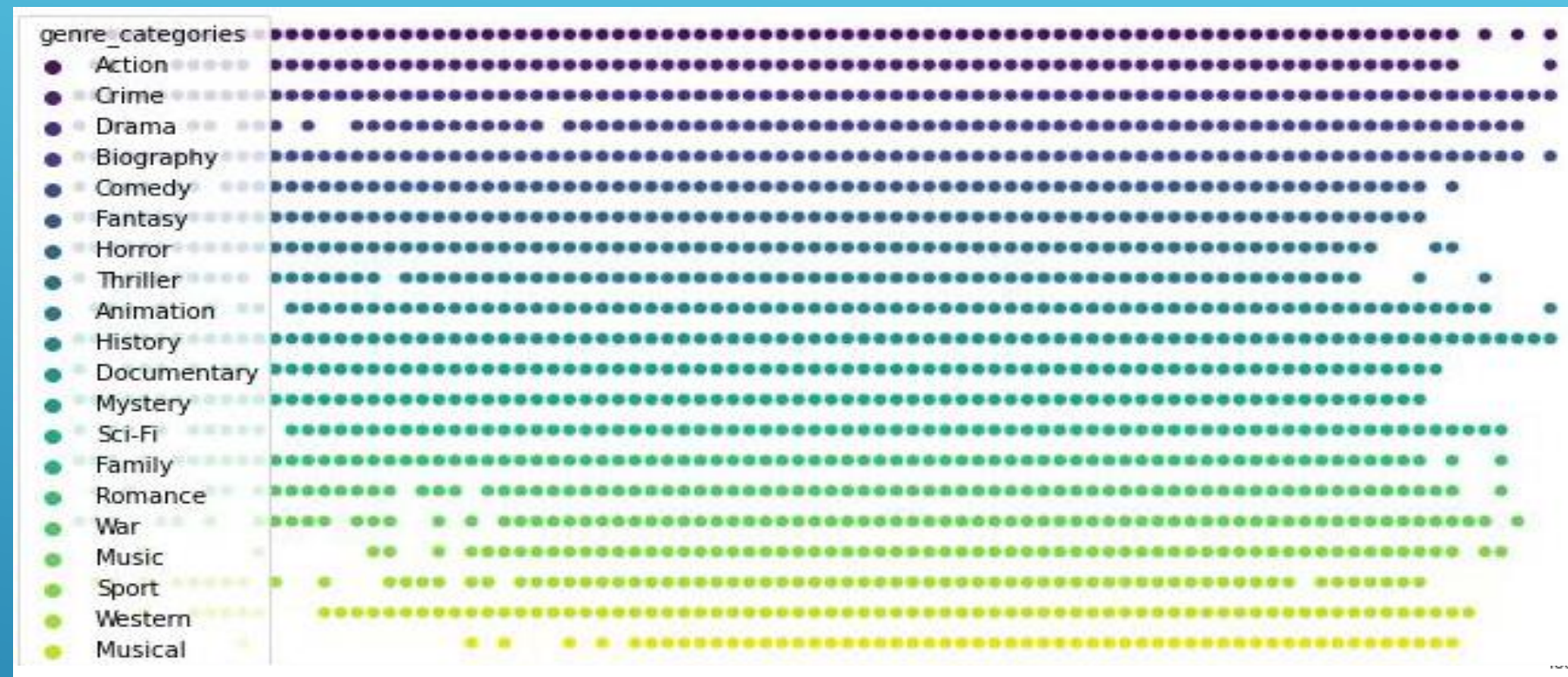
Data Preparation

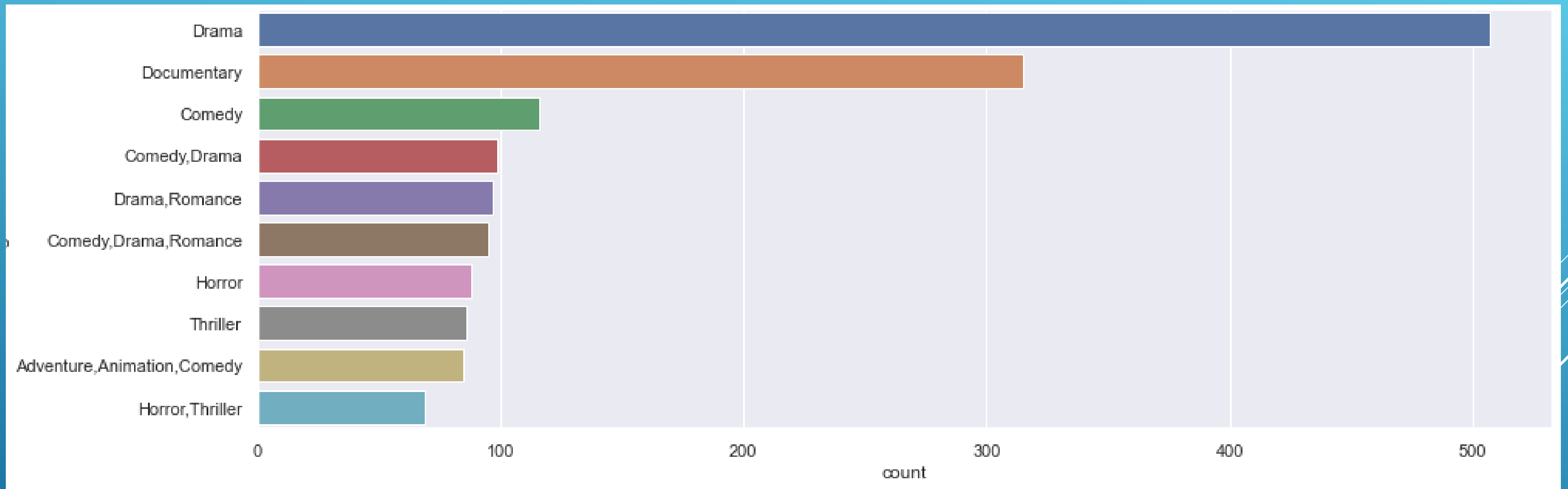The steps taken to prepare the data for analysis were:

- Merging the datasets; movie_budgets, tmdb and title_basics.

- Dropping the columns that are redundant and not required for the analysis.

- Checking for and imputing null values.

- Checking for duplicated entries and dropping them.

- Converting the production_budget, domestic_gross and worldwide_gross columns into numeric columns.

Top Movies rank
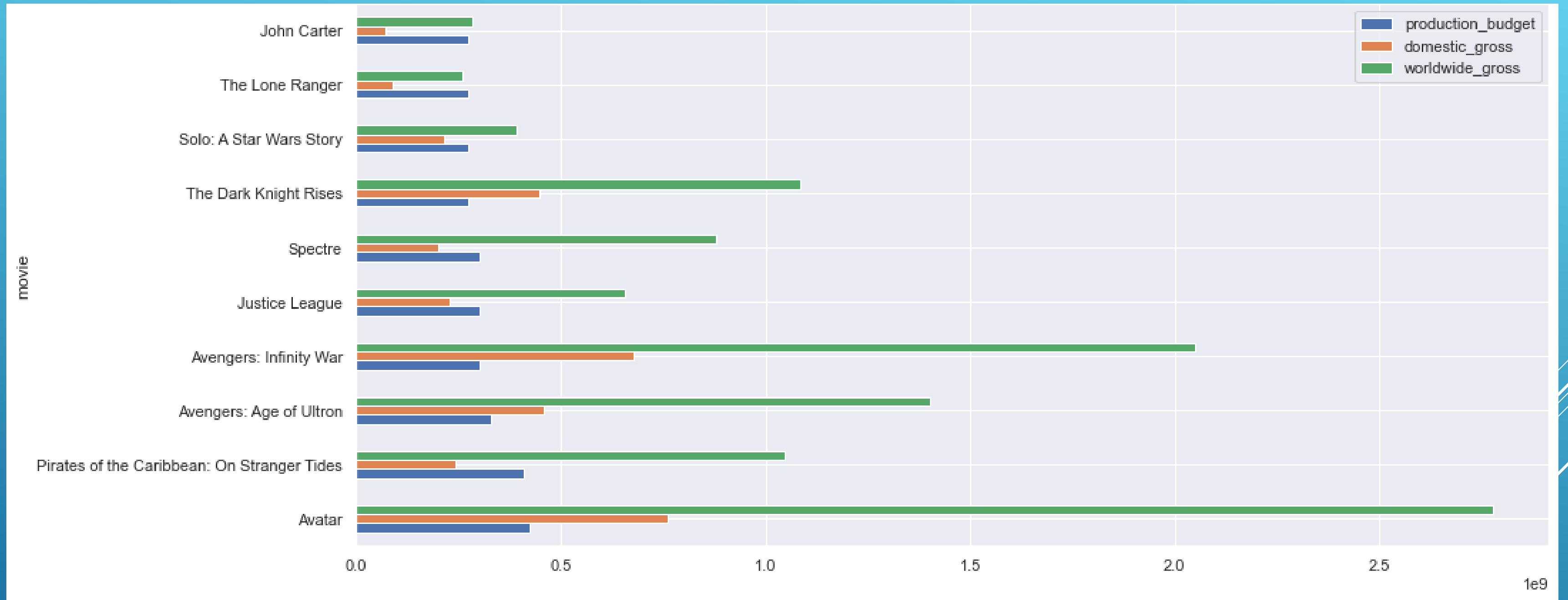

The drama genre, along with documentary, shows a consistency in ratings across a range from low to high. Action, crime, drama, comedy, documentary, and history have also received extremely high ratings of 10. Drama appears to garner a significant amount of attention.

Top Genres

Majority of the movies in the data belonged to the Drama genre.

Top Movies by the Production Budget

CONCLUSIONS & RECOMMENDATIONS

Conclusions

- From the analysis, it was noted that, overall there is a strong positive correlation between the Production Budget and the Domestic and Worldwide Gross.

- Overall movies in the Adventure Genre Outperformed movies in other Genres.

- The Horror Genre grossed the highest amount in terms of both Domestic and Worldwide Gross. However it should be noted that the reason for this is due to the Avatar Movie, an outlier, which had significant success at the Box Office due to several reasons.

Recommendations

1. Invest in Marketing and Promotion. Effective marketing and promotion campaigns are also crucial for driving audience awareness and interest. Microsoft should allocate appropriate resources for marketing and promotion to ensure their films reach their target audiences effectively.

2. Movies in the Action,Adventure,Sci-Fi Genre to be the main focus as they perform equally well.

3. Maintain a Balanced Runtime of about 90-120mins so that its not very lengthy

Thankyou