

Microsoft's Cinematic Exploration: A Box Office Analysis

For: Data Science Phase-1 Project

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Project Overview

Microsoft is venturing into the world of movie production and aims to establish a successful movie studio.

This project provides insights on the industry and involves analyzing data on box office performance, including factors such as genre, production budget, ROI, release day/ month and viewer ratings.

Business Problem

Microsoft lacks prior experience in the movie production industry and needs to make informed decisions about the types of films to create in order to achieve success at the box office.

Data Sources

The data sources for this analysis include IMDb's title and ratings data, Box Office Mojo's movie gross data and The Numbers' movie budgets data.

Methods Used

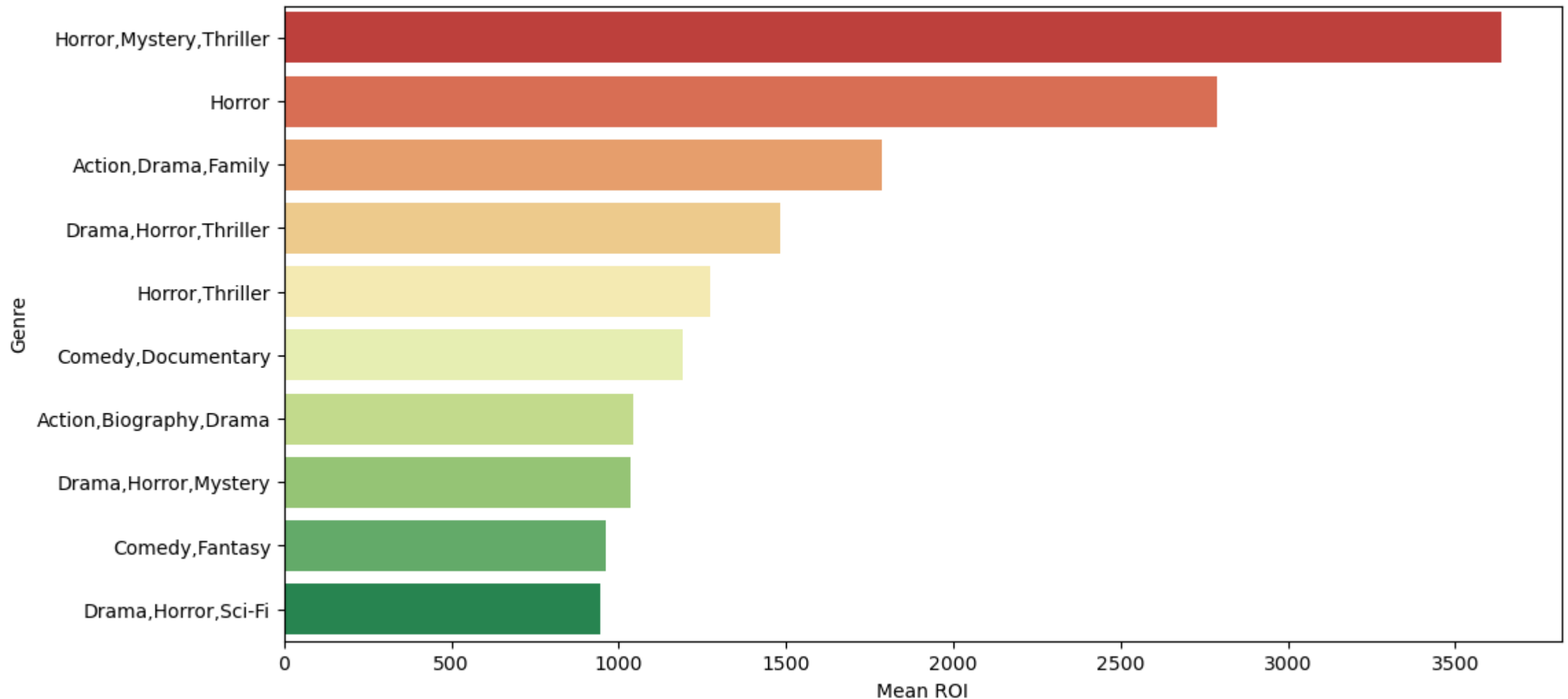
This project uses descriptive statistics to understand box office trends such as correlation to identify predictive factors for a movie's success

It analyses data on box office performance, including factors such as genre, production budget, ROI, release day/ month and viewer ratings.

Project Results

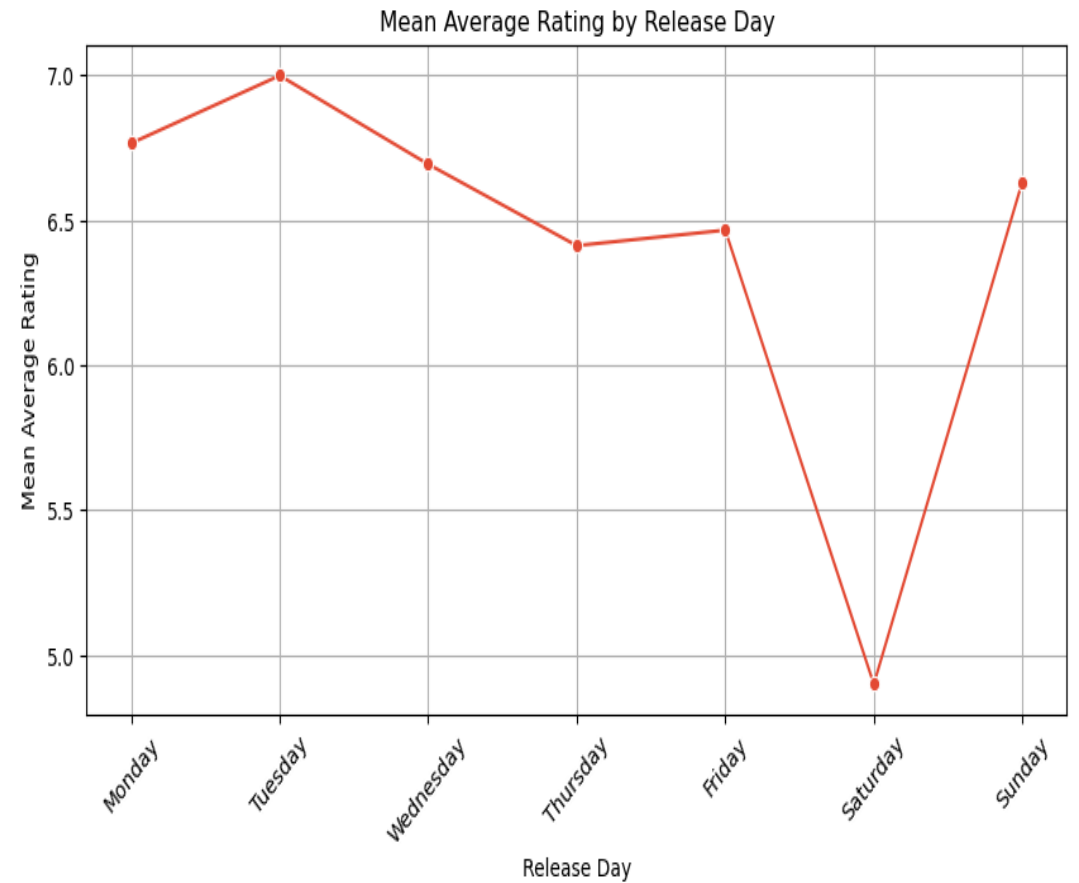
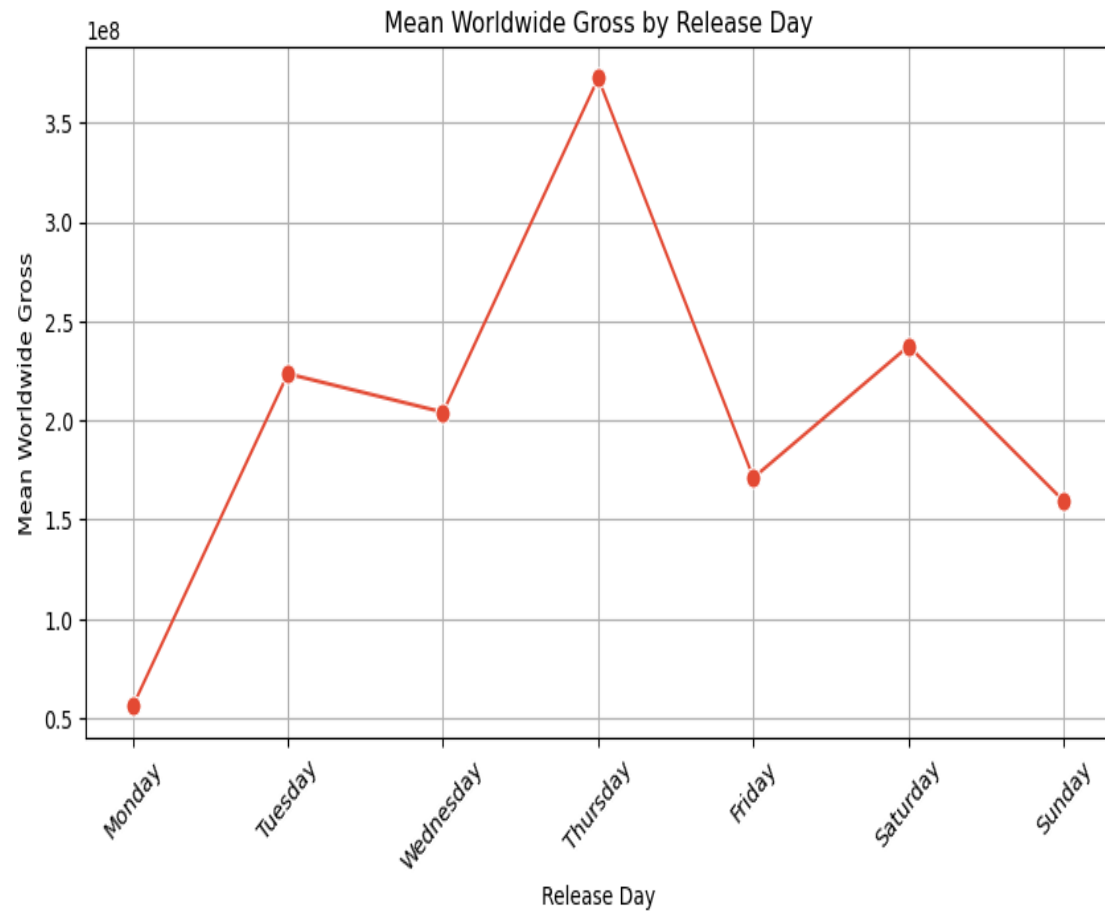
Horror, Mystery, Thriller – is the best performing genre in terms of ROI

Top 10 Genres with the Highest Mean ROI



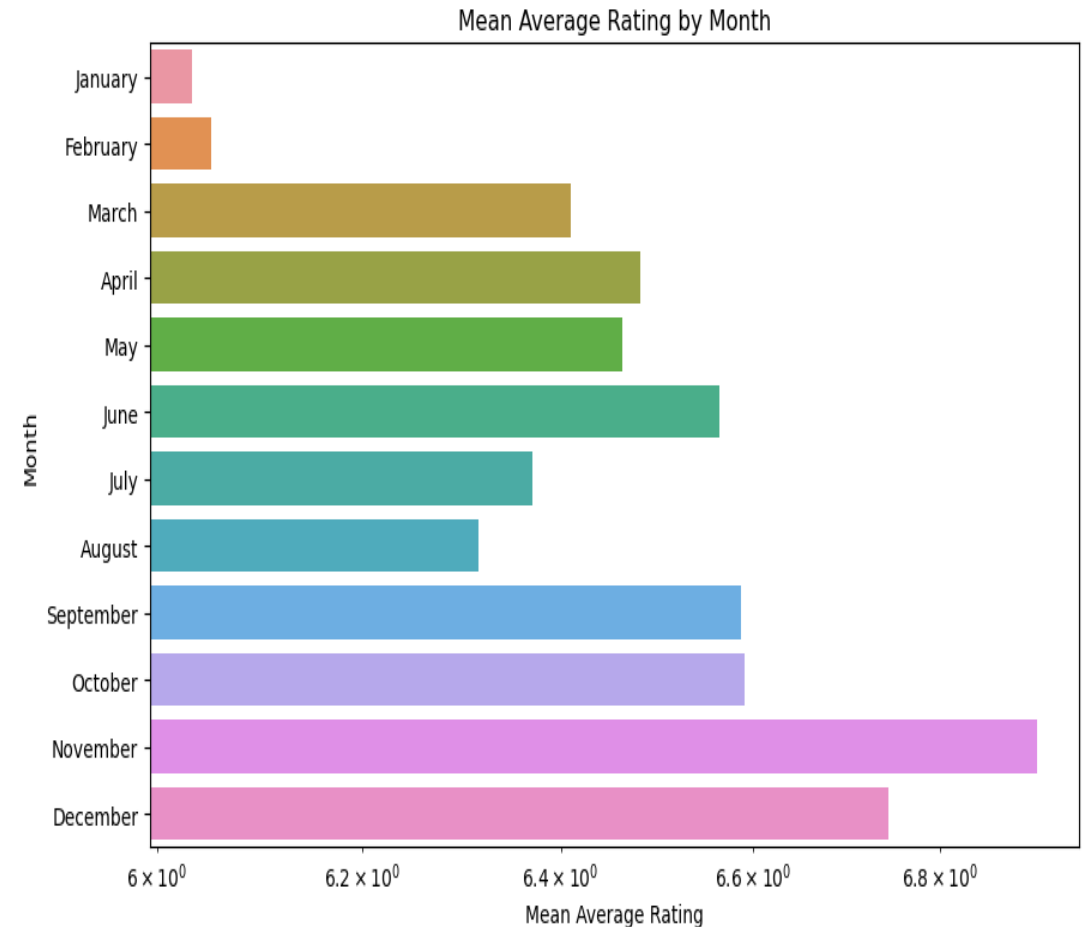
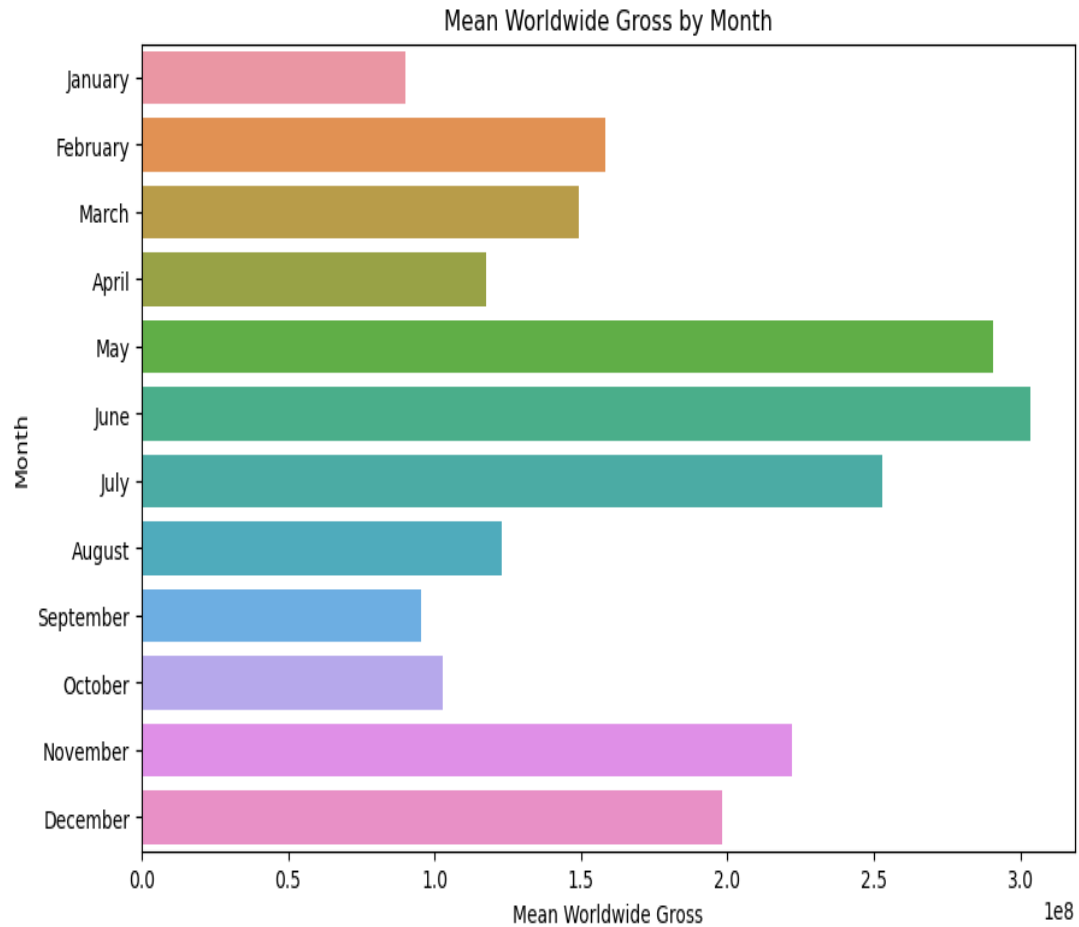
Project Results

Thursday, Tuesday – the best days to release movies in terms of revenue & ratings respectively



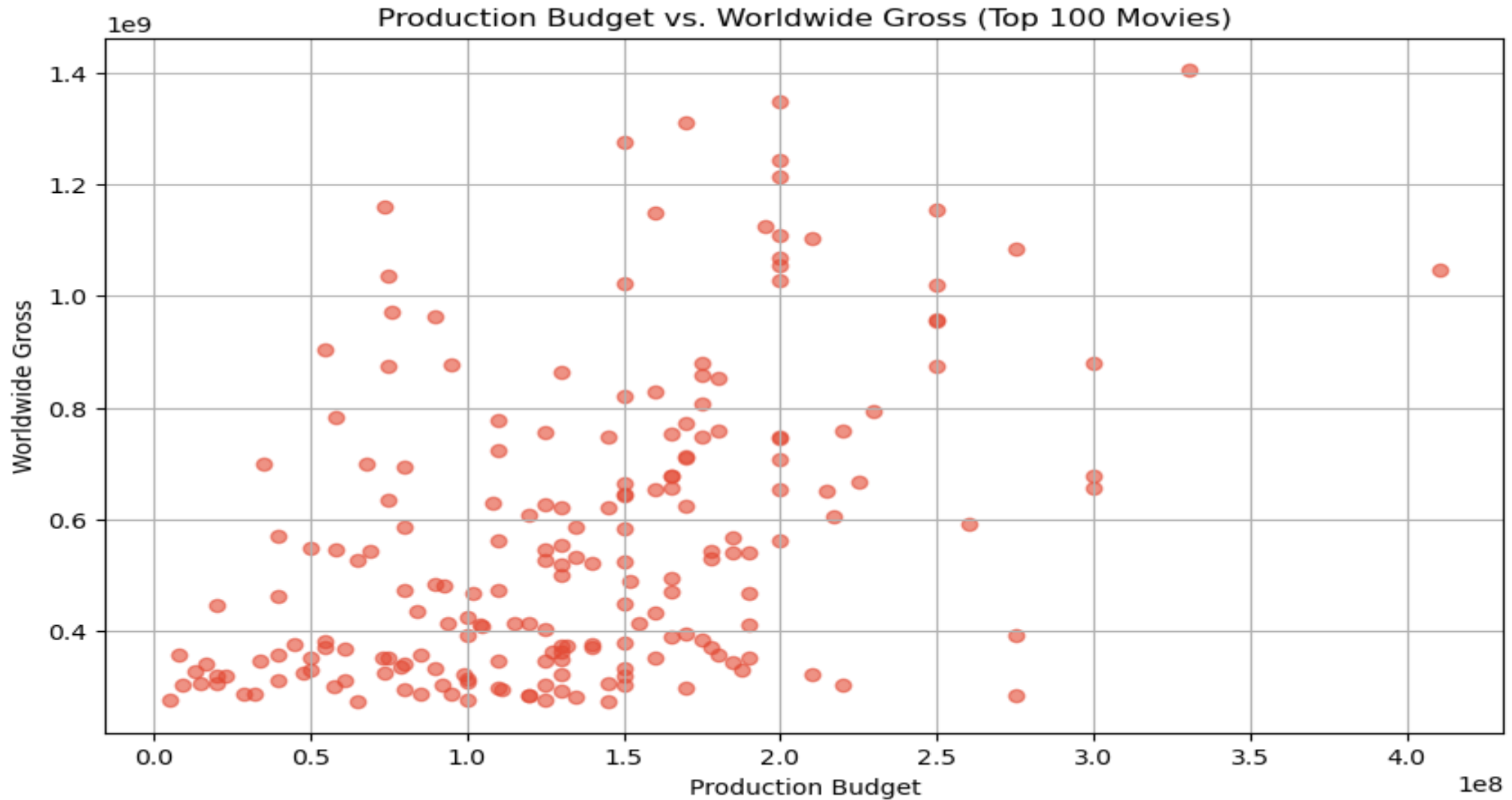
Project Results

June, November – the best months to release movies in terms of revenue & popularity respectively



Project Results

There's a positive correlation between production budget and worldwide gross for the top 100 movies



Conclusions

Based on the insights from the analysis, the following recommendations are made:

1. To maximize return on investment (ROI), focus on producing movies in the Horror, Mystery, Thriller, and Action, Drama, Family genres.
2. May, June, and July (summer time) are the ideal months for high ROI movie releases, while November and December are preferable for boosting popularity.
3. The positive correlation between the production budget and worldwide gross for the top 100 movies suggests that higher budgets tend to result in higher revenues. Further analysis can however be made to ascertain the extent of this correlation

Next Steps

Further analysis on:

1. Streaming and Home Entertainment Revenue: With the growing importance of streaming platforms such as Netflix, including data on revenue from digital and streaming services, can provide a more comprehensive picture of a film's overall financial performance.]
2. Marketing and Promotion: Examining data related to marketing and promotional strategies employed by successful movies can help Microsoft understand how to effectively market their films
3. Impact of Cast on Movie Performance. This analysis can help identify talent with a strong track record of contributing to successful films

Thank you!

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