
Navigating the Film Industry: Data-Driven Insights for Successful Movie Studio"

PROJECT BY :

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OUTLINE

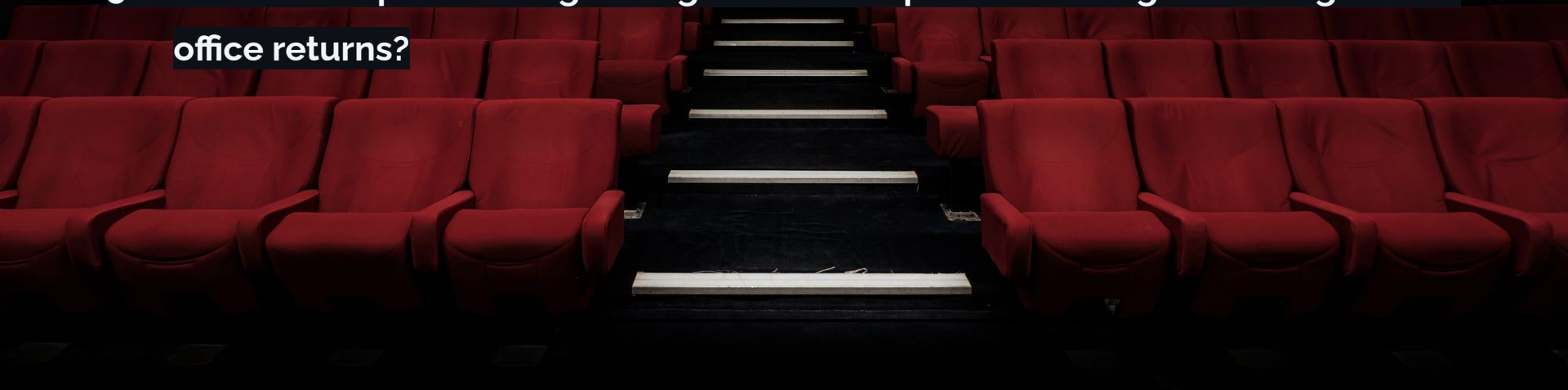
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INTRODUCTION

- In response to the rising trend of original video content from major companies, our organization is launching a new movie studio.
- Having no prior experience in film production, understanding market dynamics is important to our project.
- The film industry is highly competitive, with numerous production companies vying for audience attention.
- Our task is to identify top-performing genres, analyze how genre and viewer ratings affect revenue, recognize patterns in successful films, and determine optimal budgets and release periods to maximize box office returns.

RESEARCH QUESTIONS

1. What genres are currently the most successful at the box office?
2. How does genre influence revenue and viewer ratings?
3. How do genre and ratings impact a movie's revenue?
4. What patterns can be observed in successful movies, and how can these patterns inform production choices for a new studio?
5. Is there an optimal budget range or release period that aligns with higher box office returns?



DATASET OVERVIEW

- The dataset was sourced from various platforms including Box Office Mojo, IMDb, Rotten Tomatoes, The Movie DB, and The Numbers, consists of movie-related data in different formats, such as CSV, TSV, and a SQLite database.
- Key entries include the "movie_basics" and "movie_ratings" tables from the IMDb database, along with box office gross data from the compressed CSV file.

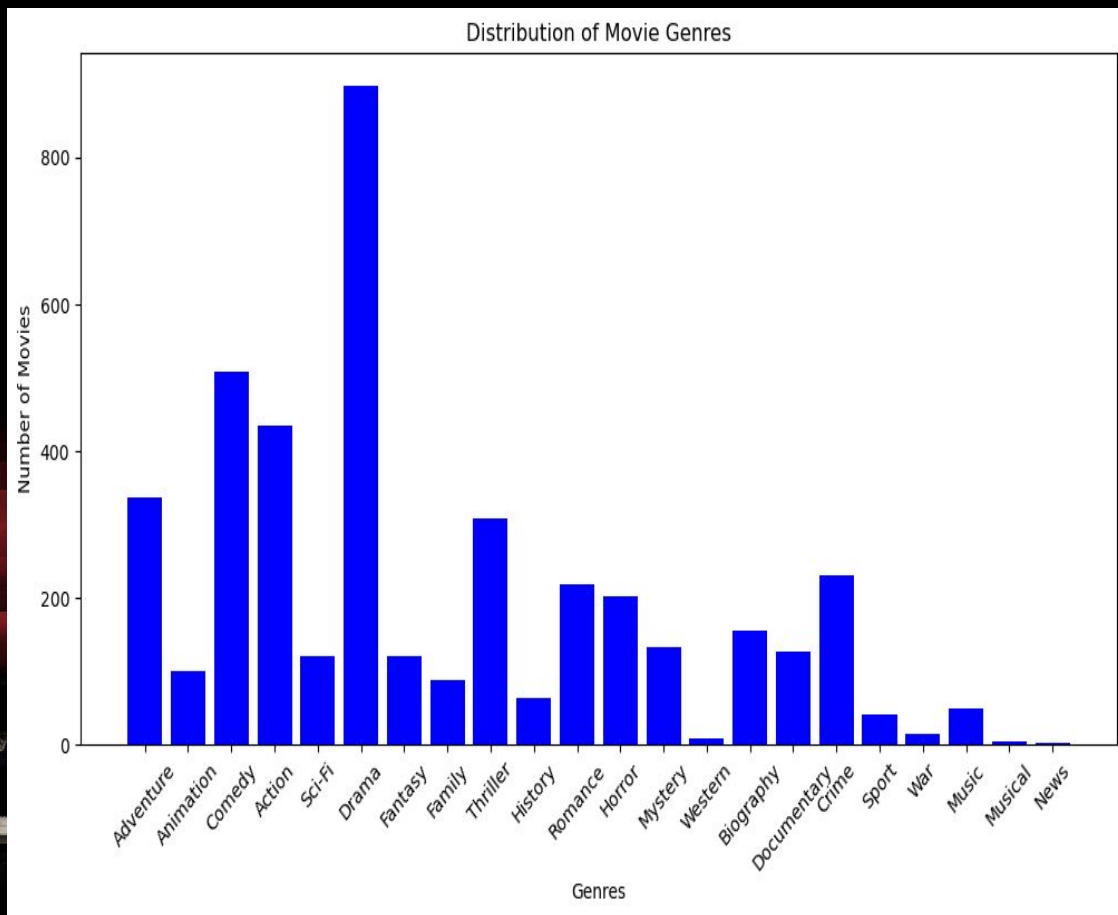
- The dataset includes 1,764 films and 12 columns, covering titles, studios, runtime, genres, popularity, release dates, ratings, budgets, and gross revenues.
- Analyzing production budgets, gross earnings, and audience ratings will reveal trends to guide the new movie studio's genre and theme decisions
- Insights drawn from the dataset will enable the studio to align its production strategy with market demands, increasing the likelihood of creating successful original video content.



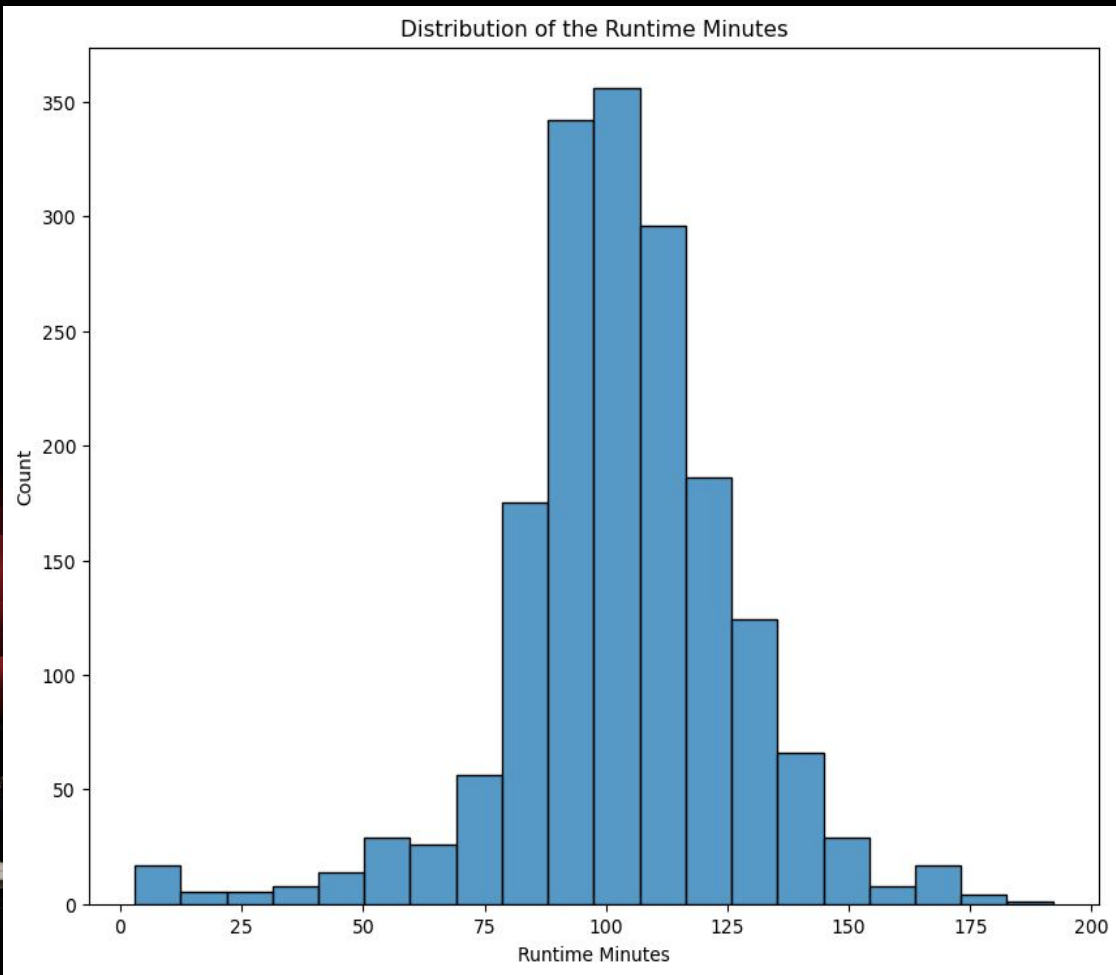
ANALYSIS AND RESULTS

A photograph of a theater with rows of red seats and a central aisle, with the text 'ANALYSIS AND RESULTS' overlaid in white. The theater is empty, and the seats are arranged in a semi-circle. The aisle is carpeted and has a few steps. The background is dark, and the overall atmosphere is quiet and focused.

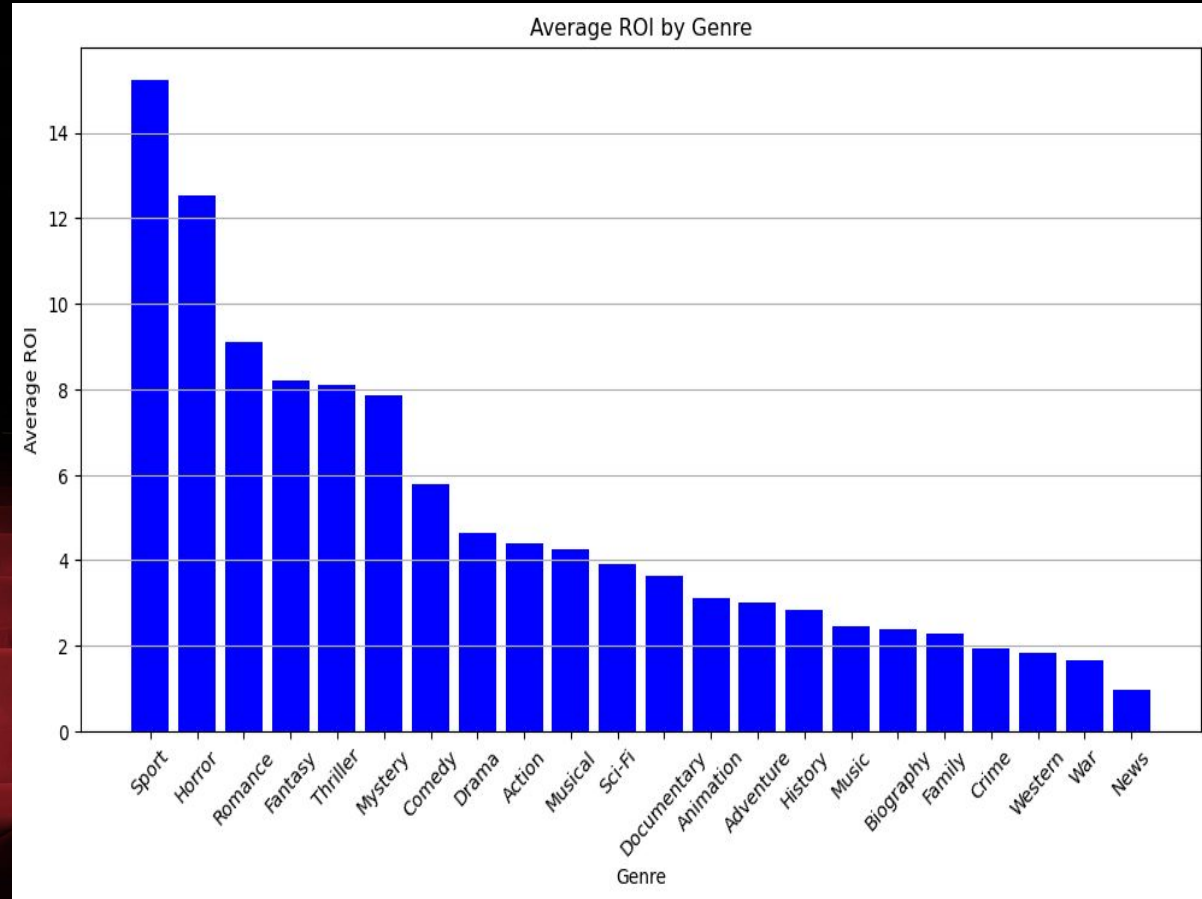
- **Drama is the most prevalent genre, with 897 entries. This suggests a strong audience interest in character-driven stories and emotional narratives, making it a staple in film production.**
- **There remains a healthy diversity of genres that cater to varied tastes, although some traditional genres like westerns and musicals are underrepresented. This trend suggests filmmakers continue to explore a wide range of narratives while also gravitating towards proven successes in more popular genres.**



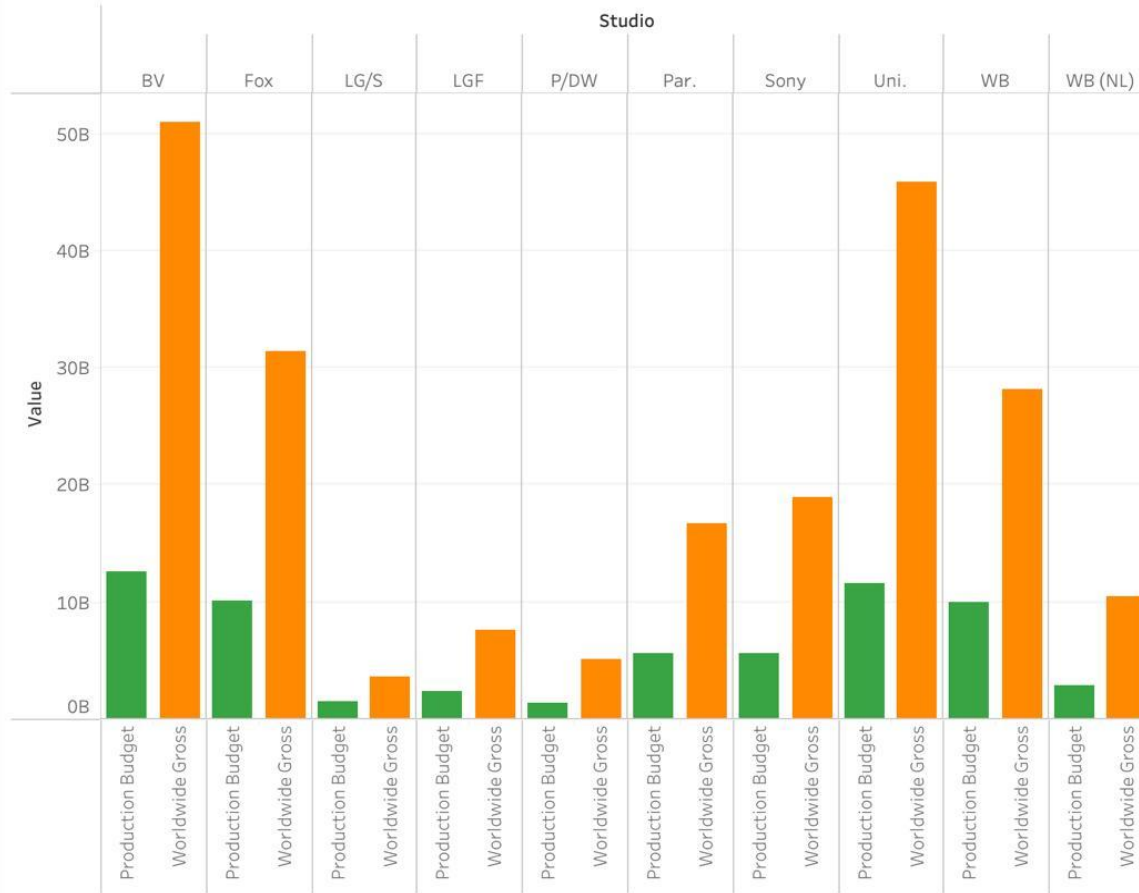
The distribution of movie runtimes shows that the average runtime is approximately 100 minutes, with most films falling between 90 and 120 minutes, indicating a wide range of runtimes in the dataset.



- The average ROI shows that the Sport genre is the most profitable, with an ROI of about 15.23, followed by Horror at 12.52 and Romance at 9.12. In contrast, genres like War (1.68) and News (0.98) have much lower returns, highlighting big differences in profitability among genres.



Production budget and worldwide gross by studios

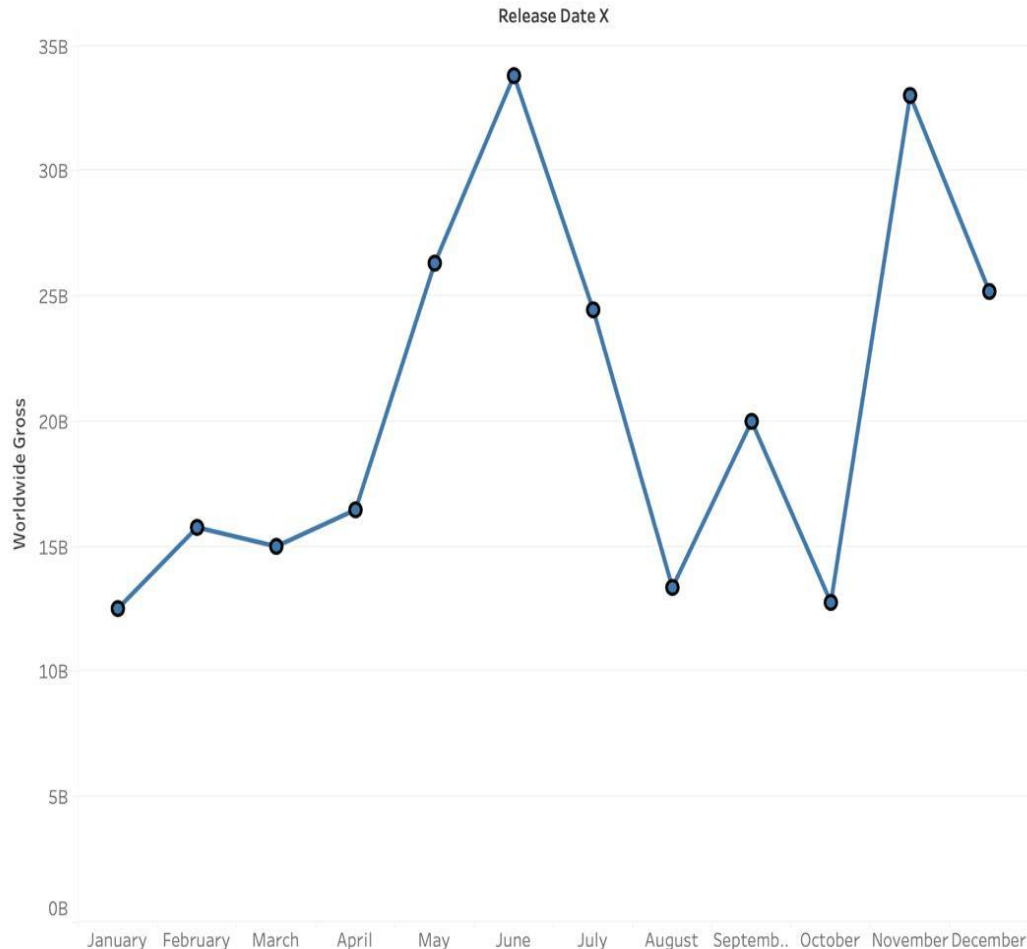


Measure Names

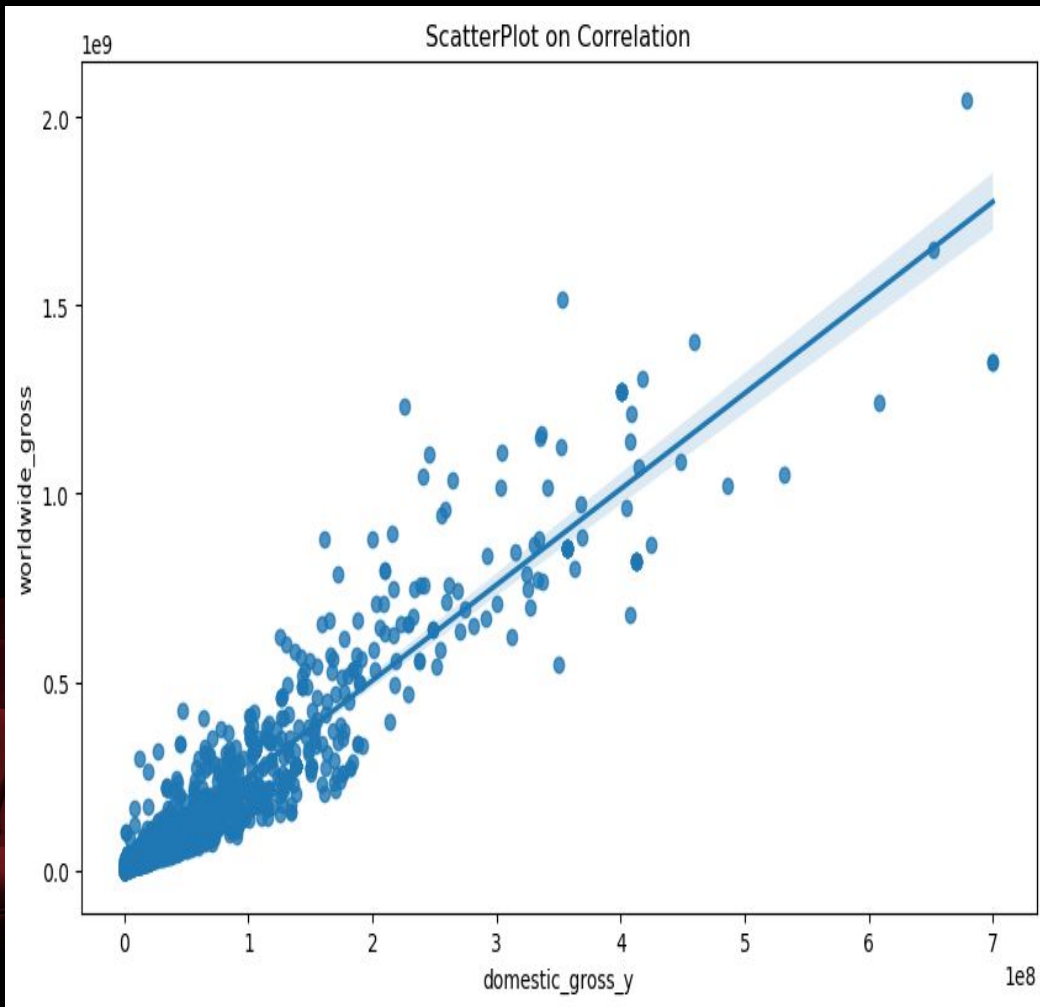
- Production Budget
- Worldwide Gross

❑ A strong positive correlation between production budget and worldwide gross suggests that higher production budgets generally result in higher worldwide earnings across the different studios.

Seasonal Trends in Worldwide Box Office Revenue



- May and June have the highest revenues reflecting high attendance, while November and December also see significant earnings
- January, August, and October have the lowest revenues which could indicate reduced audience interest.
- March, April, and September maintain steady revenue, showing consistent audience engagement, though not at peak levels.



- ❑ The scatter plot indicates a strong positive correlation between domestic and worldwide gross revenues (0.944), suggesting that movies that perform well domestically also tend to succeed globally, with domestic revenue being a reliable predictor of worldwide earnings.

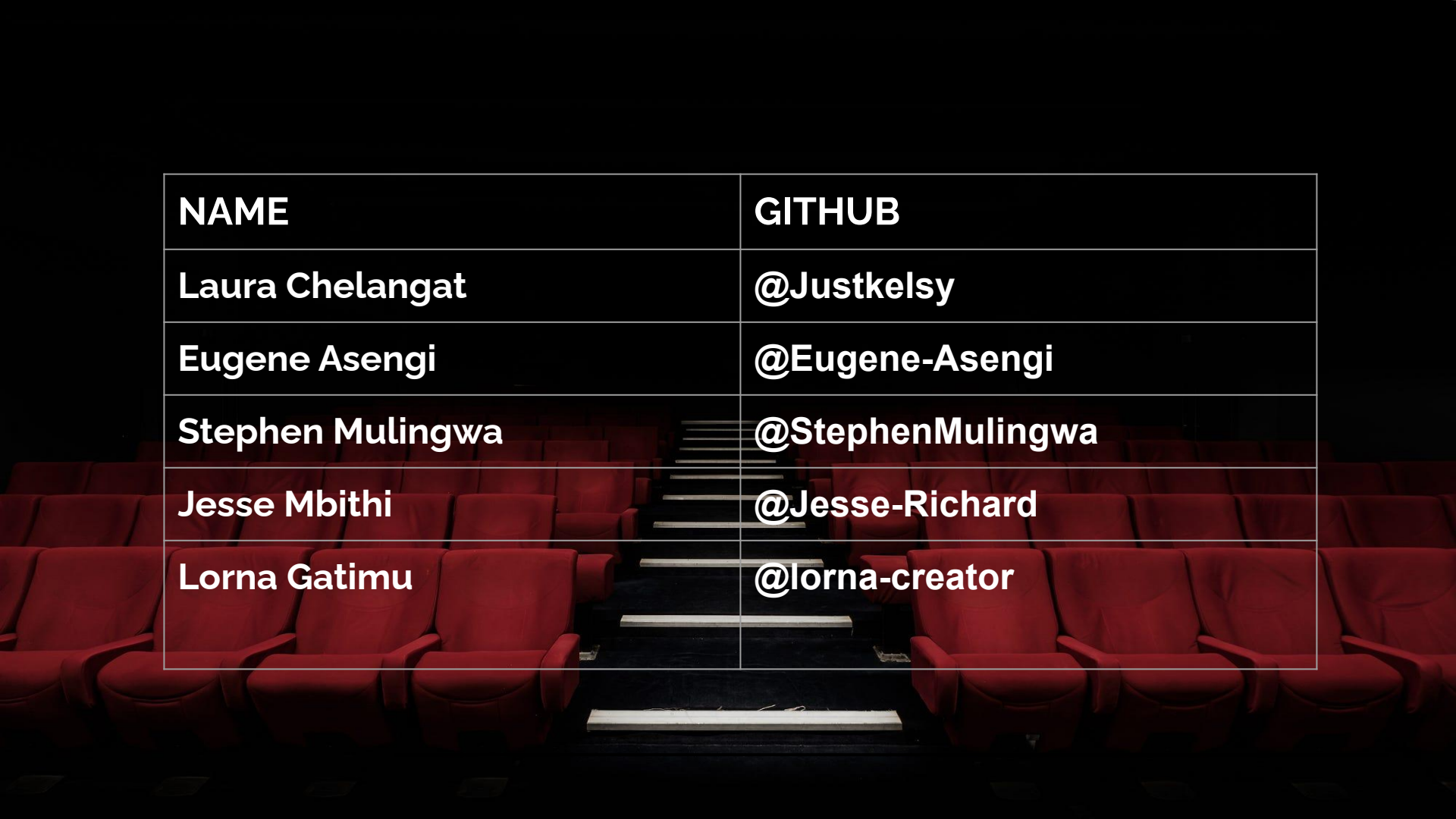
CONCLUSIONS

- It is clear that Drama, Comedy, and Action genres are the most successful because they have significantly more films produced compared to other genres, suggesting high market demand
- Genres like Sport, Sci-Fi, and Fantasy achieve high gross revenues, strong viewer ratings, and favorable ROIs, while genres like War and News have lower financial returns and ratings, making them less attractive for investment.
- Seasonal movie releases timed during some months tend to yield high revenues, while certain months experience a significant drop in audience engagement. This can help in planning release schedules.
- The strong link between domestic and worldwide gross shows that how well a film does at home is important, highlighting the need for good marketing and audience engagement in the domestic market.

RECOMMENDATIONS

- Prioritize investment in Drama, Comedy, and Action genres when developing new content. These genres have proven to attract large audiences and are likely to yield higher returns on investment.
- Invest primarily in Sport, Sci-Fi, Fantasy, and Animation genres, as these have shown strong revenue potential and viewer engagement.
- Releasing major films during peak months (May, June, November, and December) to capitalize on increased audience attendance during these times.
- Focus on strong marketing and connecting with audiences at home to boost a film's worldwide profits.





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