



PHASE II PROJECT GROUP 8

CLASS: DSF-PT08
SCHOOL: MORINGA SCHOOL

TITLE:ANALYZING CURRENT BOX OFFICE TRENDS TO PROVIDE ACTIONABLE INSIGHTS FOR LAUNCHING A SUCCESSFUL MOVIE STUDIO

OVERVIEW

In the Rapidly evolving entertainment industry, original video content has become a significant driver of audience engagement and revenue. Recognizing this trend, our company has decided to venture into the world of movie production by establishing a new movie studio, Majestic Motions. However, as a newcomer to the film industry, we face the challenge of understanding what types of films resonate most with audiences and perform well at the box office.

Problem Statement: To ensure the success of its film productions, Majestic Motions needs to understand current box office trends and identify the most successful film genres. The primary challenge is to explore and analyze these trends to provide actionable insights that will guide the studio's strategic decisions, ensuring that their film productions align with market demands and audience preferences.

DATA UNDERSTANDING

The data was collected from IMDB and Box Office, which provided detailed information on various films, including their genres, ratings, box office earnings, and other relevant attributes. The datasets included a variety of columns such as movie titles, release dates, genres, ratings, box office earnings, and more. These columns were crucial for analyzing the types of films that are currently performing well at the box office.

We conducted a thorough assessment of the data quality, identifying and addressing issues such as missing values, duplicates, and inconsistencies. This step ensured that our analysis would be based on accurate and reliable data. Using Python, we performed exploratory data analysis to uncover patterns and trends within the data. This included generating summary statistics and visualizations to better understand the distribution and relationships between different variables.

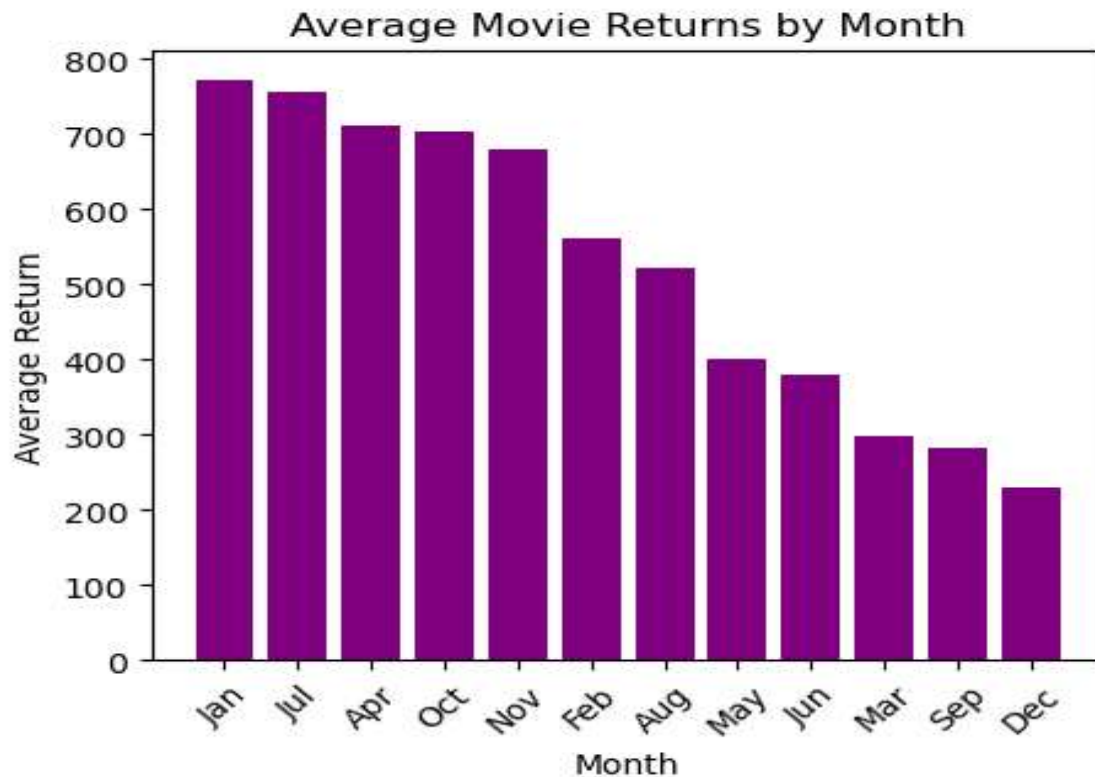
The data was cleaned by querying it using SQL to filter out irrelevant information and correct any errors. This process involved handling missing values, removing duplicates, and standardizing formats to ensure consistency across the dataset.

OBJECTIVES

1. Determine which film genres are at present high performing at the box office.
2. Examine how the production budget of a film correlates with its box office revenue, identifying the optimal budget range that maximizes profitability.
3. Establish whether there is a relationship between film genre rating(review) and box office performance in terms of net revenue.
4. Identify the most effective (successful) periods of the year for movie releases.

DATA ANALYSIS

To achieve our 4th Objective, we analyzed our data in terms of monthly average returns and monthly average ratings. We the proceeded to plot the averages against the months.



Conclusion & Recommendation:

From the graph, we concluded that the top 3 months with highest returns were January, July and April. Thus, we would advise Majestic Motions to highlight these as the prime months for movie releases in order to make profitable returns.

DATA ANALYSIS

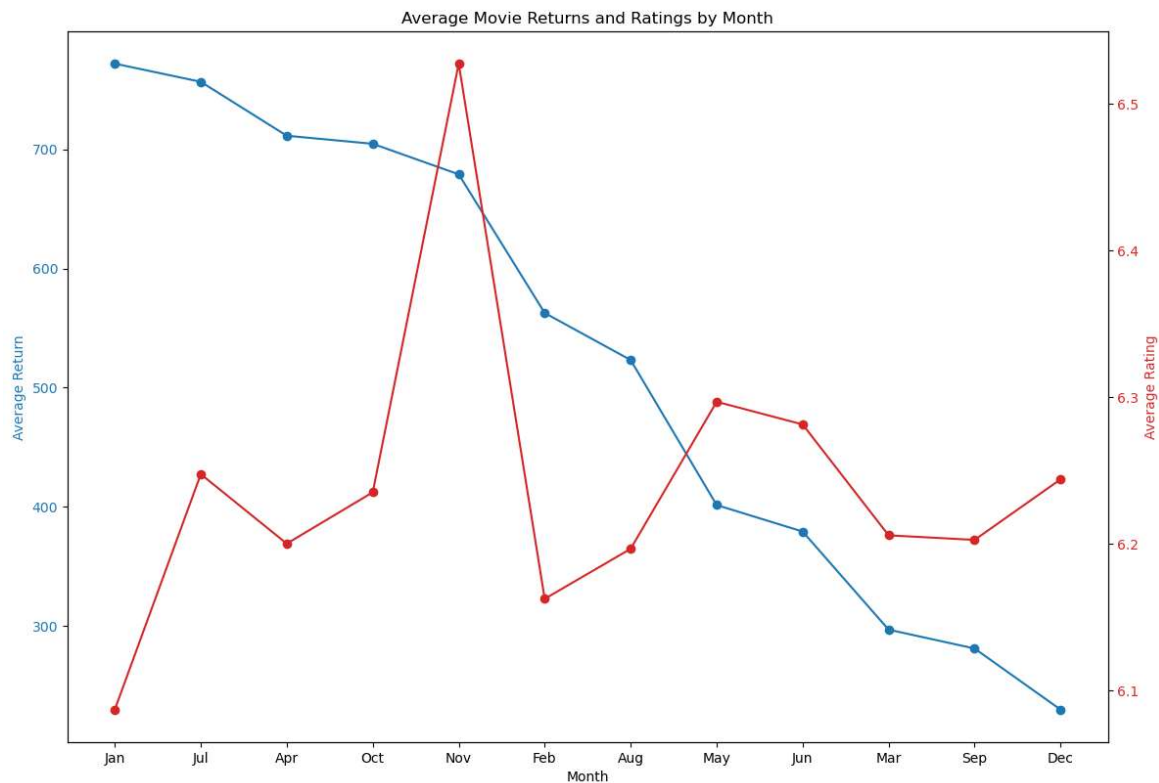


Conclusion & Recommendation:

From the graph, Movies released in November had the highest ratings. In terms of ratings, we would advise majestic motions to consider November as the best month to release movies in order to increase their ratings.

DATA ANALYSIS

We then proceeded to combine ratings and return in order to identify the optimal time when movie releases have higher returns and relatively high ratings. This also aided us in achieving our 3rd objective which was to establish whether there is a relationship between film genre rating(review) and box office performance in terms of net revenue.



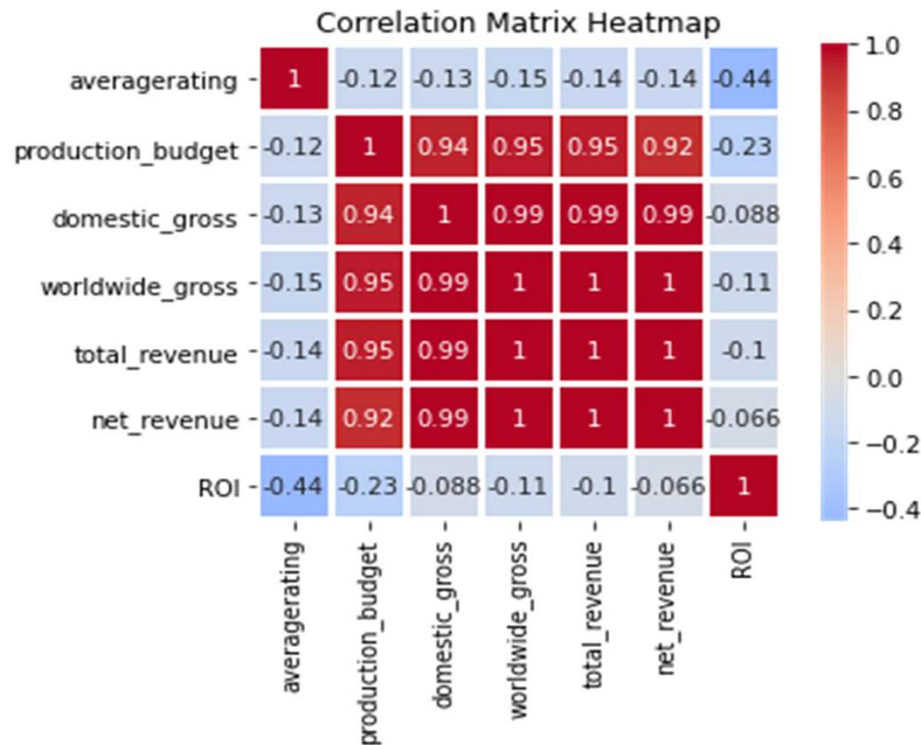
Conclusion & Recommendation:

From the plot, it is evident that the average movie returns have no correlation to the average ratings. We can also conclude that the optimal period for movie releases where the returns and ratings are relatively high is between October and November.

We would therefore advice Majestic Motion in order to get optimal results the best time to release their movies would be those particular months(October & November).

DATA ANALYSIS

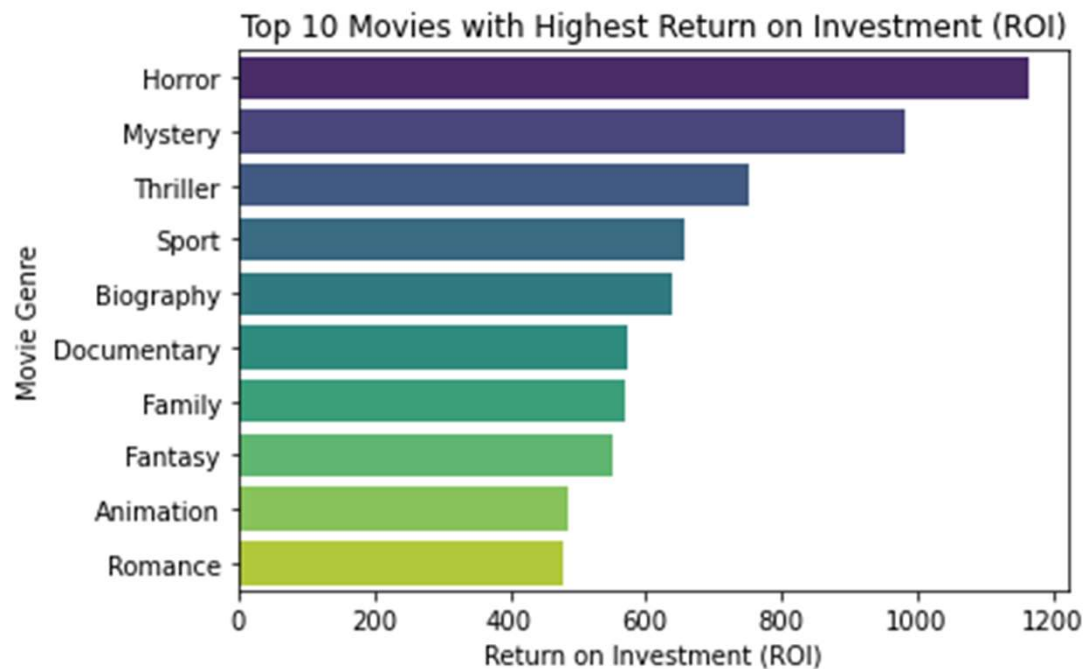
To achieve our 2nd Objective which involved examining the correlation between the production cost and revenue then identify the optimal budget range that maximizes profitability, our findings were as follows;



From our plot, we derived that there is a strong positive correlation of 0.92 between production budget and box office revenue. Hence this suggests that higher production budgets tend to result in higher movie box office revenue as depicted by the heatmap visualization diagram.

DATA ANALYSIS

To achieve our 1st objective which involved identifying which film genres are at present high performing at the box office. These were our findings:



Conclusion & Recommendation:

From the visualizations, we derived that horror, mystery and thriller were the top 3 high performing genres. We would thus advise Majestic motions to consider creating movies from this genres in order to make profitable returns.

RECOMMENDATIONS

1. We would advise Majestic Motions to highlight January, July and April as the prime months for movie releases in order to make profitable returns.
2. *In terms of ratings, we would advise majestic motions to consider November as the best month to release movies in order to increase their ratings.*
3. *In order to get optimal results that include relatively high ratings and returns the best time to release their movies would be October & November.*
4. *Horror, mystery and thriller genres had the highest return on investment. We would thus advise Majestic motions to consider creating movies from this genres in order to make profitable returns.*