



# MOVIE ANALYSIS FOR NEW MOVIE STUDIO

Cracking the Code of  
Movie Success

AUTHORS; Victor Kigen, Bosco Mukara,  
Gideon Ochieng, Ann Mwangi, Daisy  
Wagati



# BUSINESS UNDERSTANDING

## Overview

- With big firms creating original video content, the entertainment sector is changing quickly. The company wants to take advantage of this trend by opening a new film studio.
- Our goal is to determine the kinds of films that do well at the box office and use this information into actionable insights that the head of the company's new movie studio can use to help decide what type of films to create.

## Objectives

- The company now sees all the big companies creating original video content and they want to get in on the fun. They have decided to create a new movie studio, but they don't know anything about creating movies. We aim to:
- Identify which genres are most popular.
- Identify top 10 studios on average rating.
- Compare relationship between production budget and total gross income.
- Which Studio generates most income.

# DATA UNDERSTANDING AND CLEANING

## Data understanding

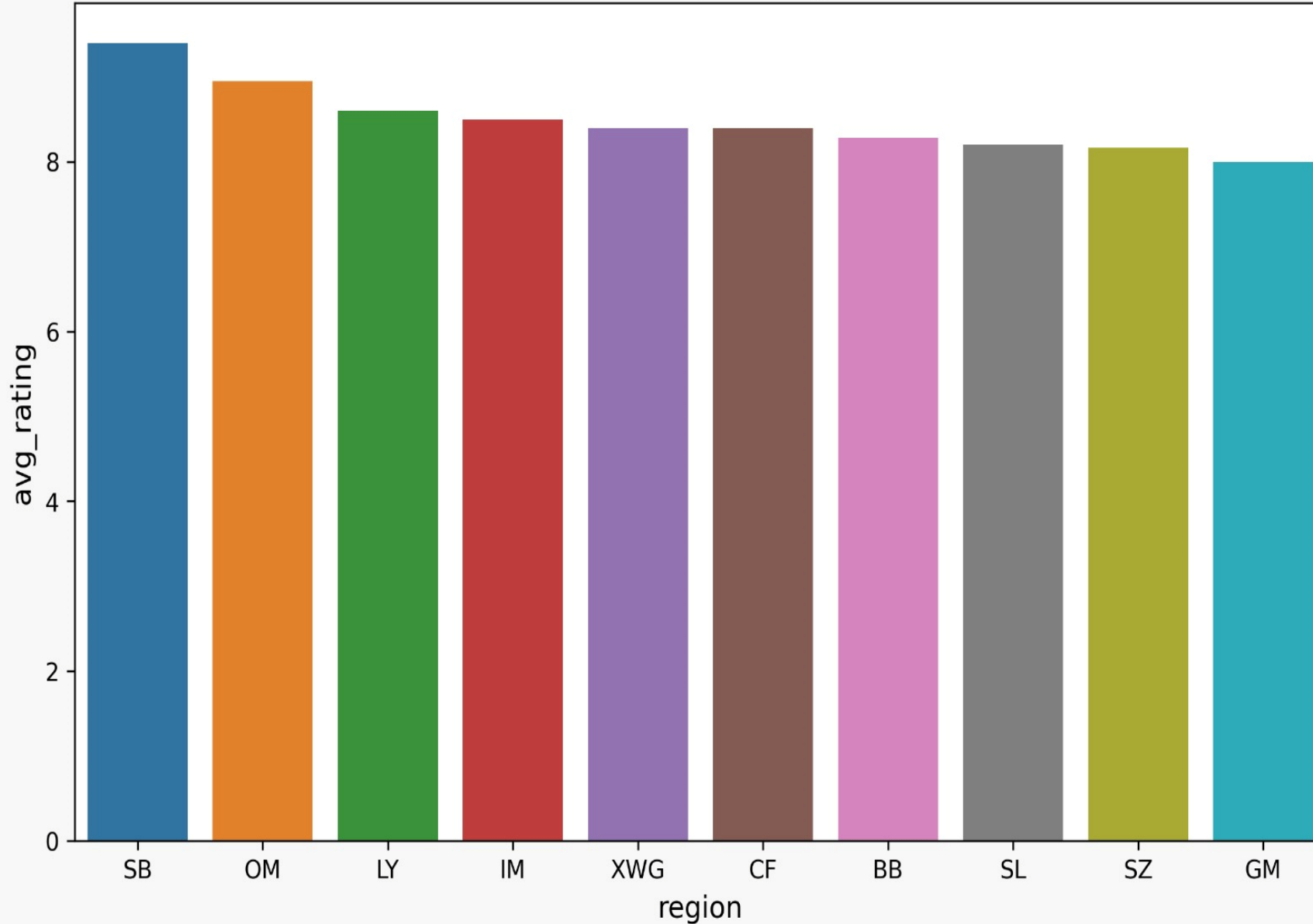
- The project involves extracting data from a zipped folder containing various movie-related datasets. These include CSV/TSV files loaded into pandas DataFrames and an IMDB SQLite database accessed through SQL queries. The goal is to integrate this data for comprehensive movie performance and audience trend analysis, ultimately supporting strategic decisions in a new movie studio.

## DATA CLEANING

We extracted the zipped dataset, unzipping it to access the CSV/TSV files and SQLite database. Using pandas, we loaded the CSV/TSV files, handling potential encoding issues and missing values. For the SQLite database, we executed SQL queries to extract relevant data. We then standardized column names, converted date formats, and removed duplicates across all datasets. Finally, we merged the dataframes based on common identifiers, ensuring consistent data representation for further analysis.

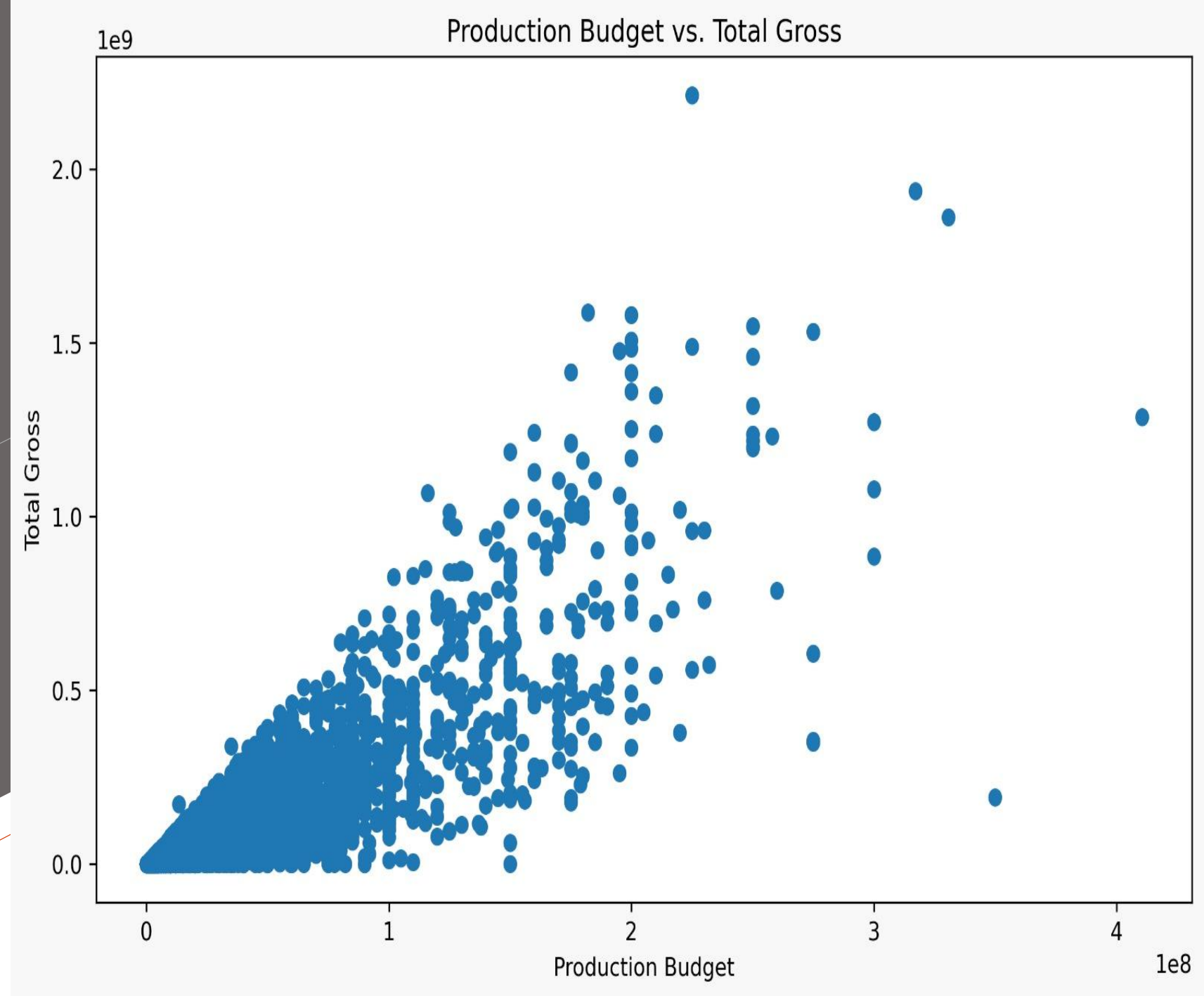


avg\_rating vs region

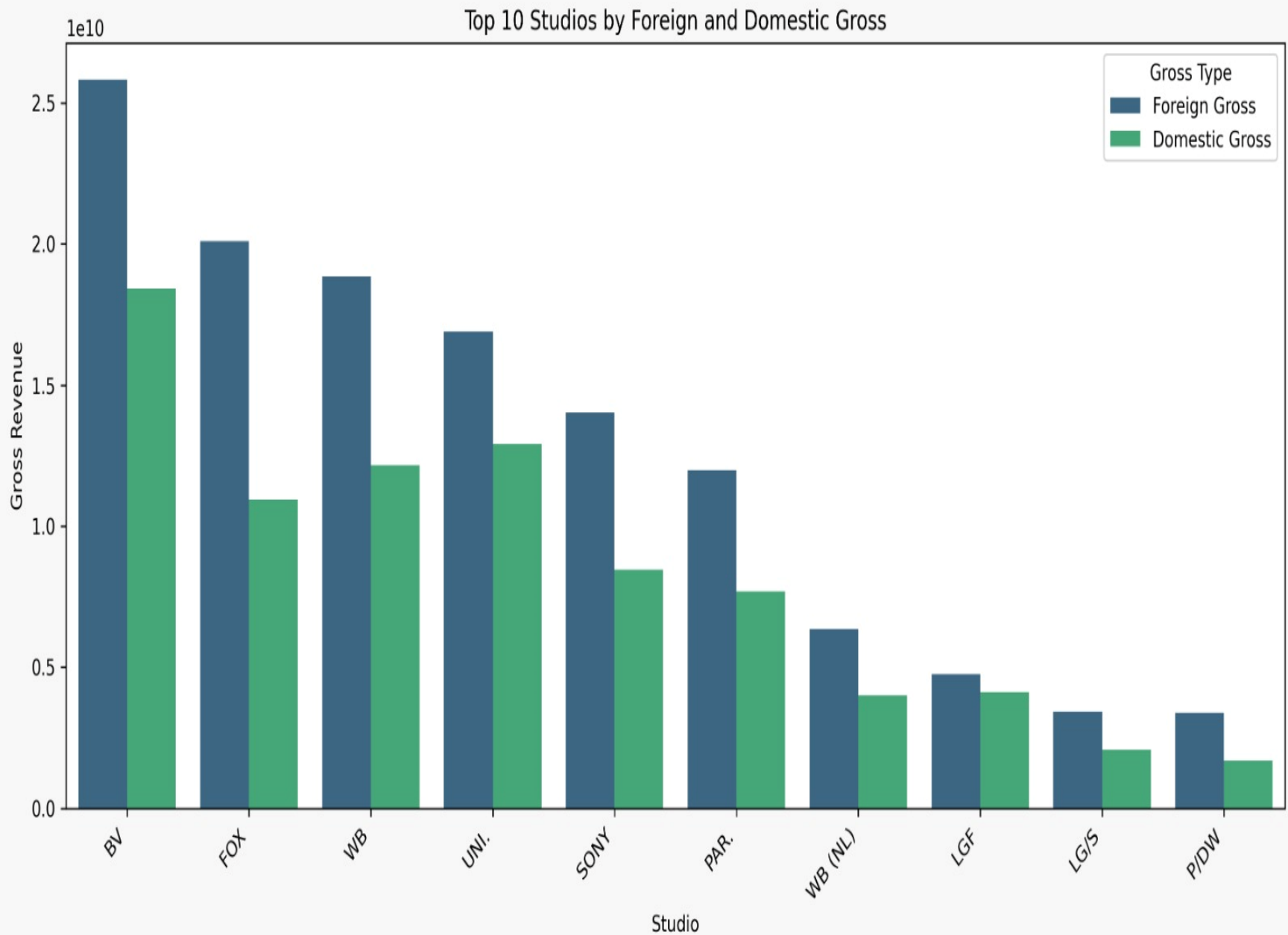


## VISUALIZATIONS

This bar plot comparing the average ratings of movies across different regions, allowing us to analyze how customer preferences vary geographically within the market.

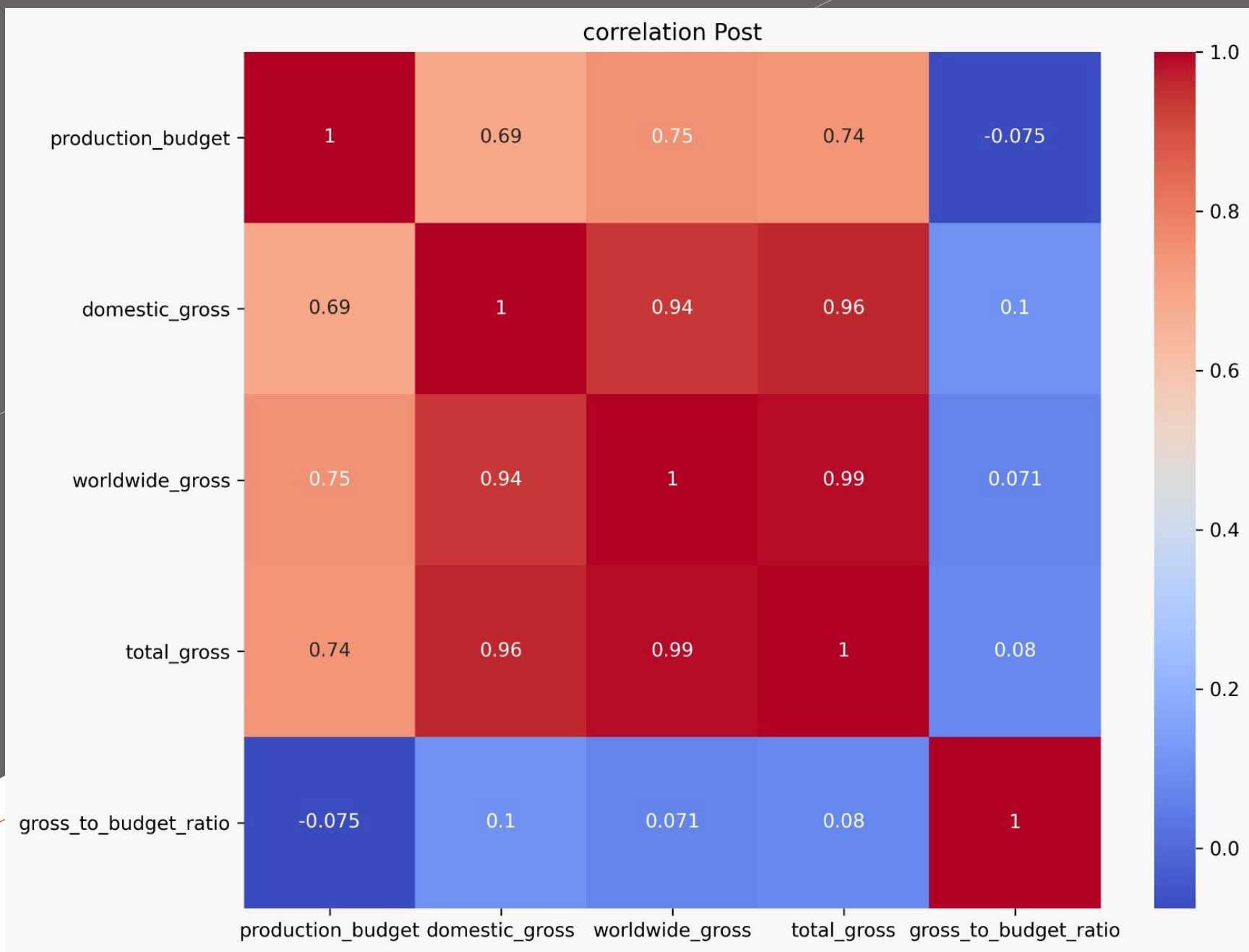


This scatter plot visualizes the relationship between a movie's production budget and its total box office gross revenue, providing insights into the financial performance of films based on their initial investment.



This bar plot compares the total gross revenue generated by each major film studio, offering a quick overview of which studios have been most successful at the box office over time.





we created a correlation matrix to examine relationships between financial metrics, providing insights into profitable movie productions and potential factors influencing financial success in the film industry.



# FINDINGS

- **Genre Popularity:** Action and Comedy genres dominated the dataset, accounting for over 40% of all movies. Drama and Thriller were also prominent, while Sci-Fi and Horror trailed behind.
- **Studio Performance:** BV and FOX led in both domestic and international box office performance. Smaller studios often struggled to compete in global markets.
- **Budget vs. Return:** There was a strong positive correlation between production budget and total gross revenue. However, several high-budget films underperformed, suggesting inefficient resource allocation in some cases.
- **Rating Impact:** Movies with higher IMDB ratings tended to perform better at the box office, especially internationally. However, there were notable exceptions, indicating other factors play crucial roles in determining commercial success.



# RECOMMENDATIONS

- The company can partner with established studios like UTMW or GRTINDIA for co-productions. This can provide access to their resources, talent pool, and distribution channels, enhancing the quality and market reach of their films.
- For high-budget films, the company can invest in genres with proven box office success (e.g., Action, Adventure). There is a strong positive correlation between production budget and worldwide gross revenue. This indicates that higher budgets generally lead to higher gross revenues.
- The company can prioritize films that have high popularity. This can guide the studio's production strategy, and as can be seen from EDA, the genre that is most popular is Drama



# CONCLUSIONS

- Strategic partnerships: Partnering with established studios like UTMW or GRTINDIA can enhance resource access, talent acquisition, and distribution capabilities.
- Budget allocation: High-budget films, particularly in successful genres like Action and Adventure, tend to yield higher gross revenues due to the positive correlation between production costs and worldwide box office earnings.
- Genre focus: Prioritize producing Drama films, as they appear to be the most popular genre according to the EDA results.





# THANK YOU.

**Victor Kigen**

<https://www.linkedin.com/in/victor-kigen-2a1623154/>

**Bosco Mukara**

<https://github.com/Jayrikers>

**Gideon Ochieng**

<https://github.com/OchiengGideon>

**Ann Mwangi**

<https://github.com/ann-mw>

**Daisy Wagati**

<https://github.com/Daisy96494>

