Market Analysis & Insights For Strategic Movie Production

AUTHORS ; Noel Christopher, Margaret Nyairo, Masinde Victor, Anthony Ekeno, James Ngumo

BUSINESS UNDERSTANDING

This project is designed to aid a company's venture into the movie production industry by launching a new studio.

Through comprehensive data analysis, the project will identify current trends and provide actionable insights from box office data.

This information will guide the company in determining the types of movies that are most successful in today's market, thereby supporting strategic content creation and maximizing box office returns.

MAIN OBJECTIVE : To identify the most successful types of films currently at the box office and translate these insights into actionable strategies that guide the new movie studio's production choices, ensuring competitive and commercial success in the film industry.

DATA UNDERSTANDING & CLEANING

Understanding ;

The data used in this analysis contains data collected from various popular movie sites such as Box Office Mojo, IMDb, movie info and budget info.

It contains detailed information on movie titles, actors, directors, box office earnings, and movie ratings.

Cleaning ;

Missing values and duplicated rows are handled. Also, columns irrelevant to the project are dropped. Formatting of columns and their contents for smooth analysis.

DATA ANALYSIS- Transformation & Merging.

Transformation;

Converting the data types in our datasets to enable manipulation.

Gross[foreign_gross] & budget[domestic_gross,producion_budget,worldwide_gross] the columns in this dataset are object data type,this means the numeric figures are read like strings instead of numbers.

So to have clarity ,we convert them to float datatype for more accurate readings

Merging;

Having a cleaned data versions we perform merge .

Merging data frames combines multiple datasets into a single, unified dataset,allowing for a more comprehensive analysis.

Merging the datasets will enable us to explain more with visualization for better understanding of our objective

FINDINGS

1).Demographics Driving Success:

-The analysis of ratings indicates that PG-13 rated movies have the highest domestic earnings, while R-rated movies perform better in foreign markets. This suggests that different ratings attract different audience segments.

2).Optimal Release Seasons:

-The analysis of monthly performance shows that October has the highest total gross, followed by September, while June has the lowest total returns. This indicates that the fall(SEPT/OCT) season may be the most lucrative time for movie releases.

-The foreign gross tends to outperform domestic gross in September and October, suggesting that these months may attract a more international audience.
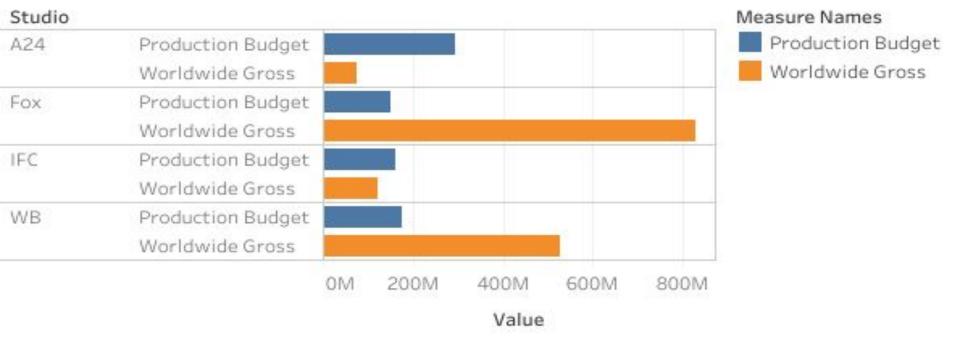
FINDINGS

3)Movie Budgets and Profitability:

-There is a strong positive correlation (0.800886) between domestic gross and worldwide gross, suggesting that movies with higher domestic earnings tend to perform well globally.

-The analysis of studio budgets shows that A24 has the highest production budget, which may correlate with its success in producing high-grossing films.

-Studios like Fox have lower production budgets, which may limit their ability to produce high-grossing films.

4)These are the most popular genres in the movie industry; Documentary

-Comedy,Drama,History
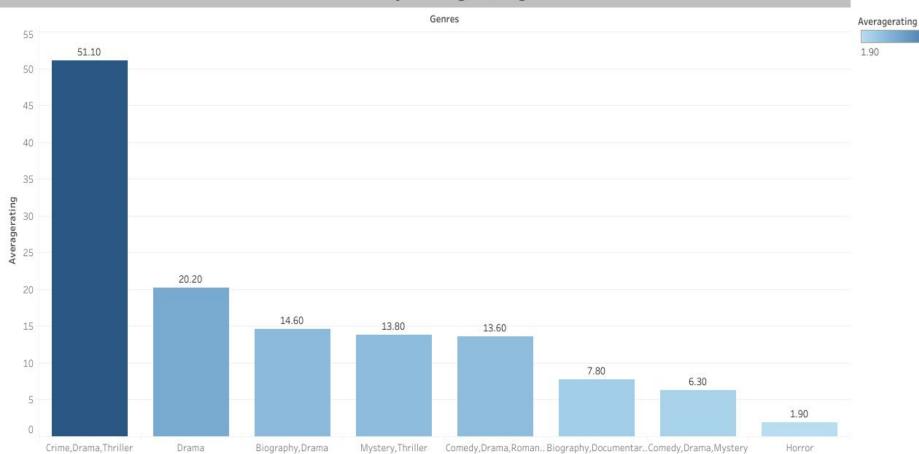
-Action, Thriller & Comedy,Drama,Thriller

Budget and Income graph.

GENRE AVERAGERATING

Genres by Averagerating
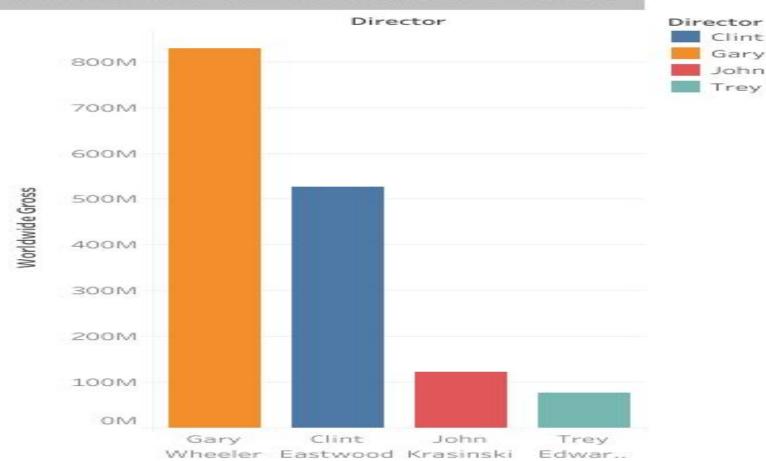
Director Worldwide Gross
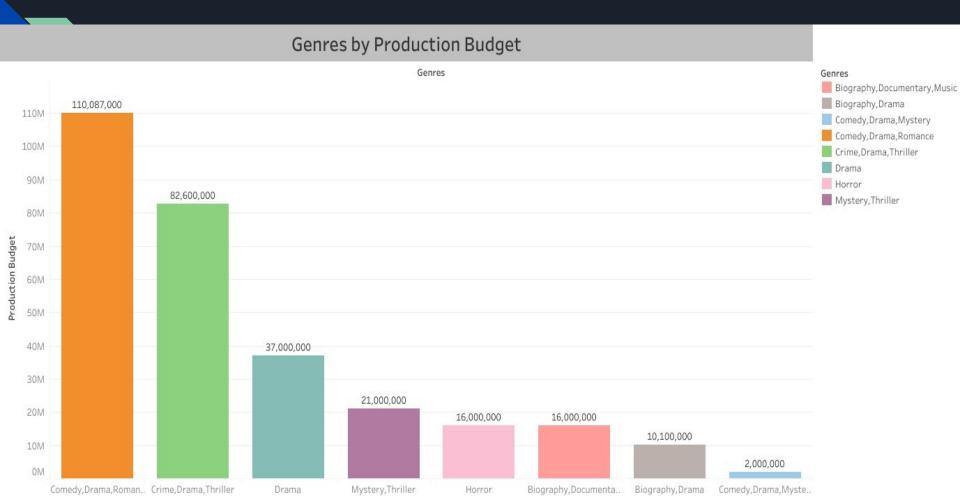
GENRES PRODUCTION BUDGET

Genres by Production Budget

Genres
- Biography,Documentary,Music
- Biography,Drama
- Comedy,Drama,Mystery
- Comedy,Drama,Romance
- Crime,Drama,Thriller
- Drama
- Horror
- Mystery,Thriller

RECOMMENDATIONS

Budget Allocation : since we want to minimize cost and it is not necessarily correct that a high production budget relates to higher returns.

 The optimal solution would be choosing the studio with the lowest production budget , which is `Fox.  If interested in other studios with favorable budgets, consider ; ` Independent Film Channel(IFC) & Warner Bros(WB)`.

Highly-Rated Genres ;

 The new studio should prioritize producing films in the Crime/Drama/Thriller , Drama , Biography/Drama, since these are highly rated.

Highest Earning Director; The new studio should focus on highest grossing director i.e "Gary Wheeler"

Genres by Production Budget ;

The new studio based on budgeting should focus on releasing Crime/Drama/Thriller films

CONCLUSIONS

The analysis done has provided useful insights for the company to venture into the filmmaking industry.

It is important that these recommendations be included together with the other factors to make the best decision for the company .

These insights will act as a fundamental framework , enabling us to understand the kinds of movies that appeal to audiences the most and are profitable

THANK YOU

COLLABORATORS;

[Noel Christopher](https://github.com/NOE0464)

[Margaret Nyairo](https://github.com/vidya-byte)

[Victor Masinde](https://github.com/Masinde10)

[Anthony Ekeno](https://github.com/sananthonio)

James Ngumo](https://github.com/nyange21)