MICROSOFT'S NEW MOVIE STUDIO DATA DRIVEN ANALYSIS



INTRODUCTION

- *The consumer preference is slowly shifting to streaming movies. On noticing the trends, Microsoft is eager to join the movie making venture by introducing a new studio.
- *For Microsoft to strategically setup the new studio, Microsoft needs to understand the dynamic of the audiences and trends in the industry.

CONT'D...

*To equip Microsoft with the necessary information for the strategic setup of the new studio, this project will utilize data analysis to come up with valuable insights into movie genres, release dates, budgets and revenues.

PROJECT APPROACH

The project approach was through this three major steps;

- Data collection: The data utilized was from various data sources.
- 2. Exploratory Data Analysis(EDA): Use of descriptive analysis and visualizations to gain meaningful insights.
- 3. Recommendation

DATA COLLECTION

Data source 1: bom.movie_gross.csv.gz, box office mojo that has the gross earnings of the movies.

Data source 2: tmdb.movies.csv.gz that contain data about the release dates of the movies.

Data source 3: rt.movie_info.tsv.gz that contain the genre of the movies.

Data source 4:. tn movies that has information about gross earnings.

TYPES OF DATA COLLECTED:

From the sources of data, the main focus for this project was the following data;

- *Movie genres
- ***Revenue**
- *Release dates (Months and Years)

DATA PREPARATION

DATA CLEANING

Pandas software library was the software library that was used in this project for data manipulation and analysis.



EXPLORATORY DATA ANALYSIS

The general objective is to identify patterns in the data.

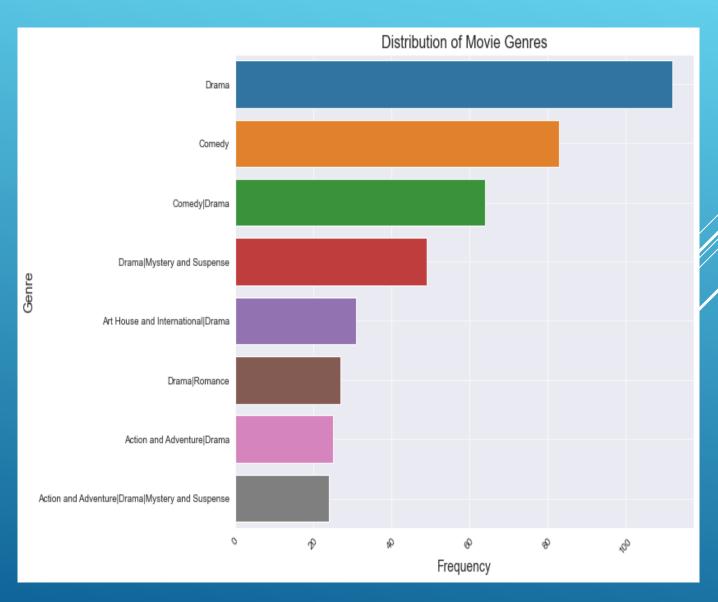
Methodology:

- Visualization Techniques i.e use of histograms, bargraphs, etc
- Statistical measures e.g mean, standard deviation, mode

KEY FINDINGS FROM EDA

GENRE ANALYSIS

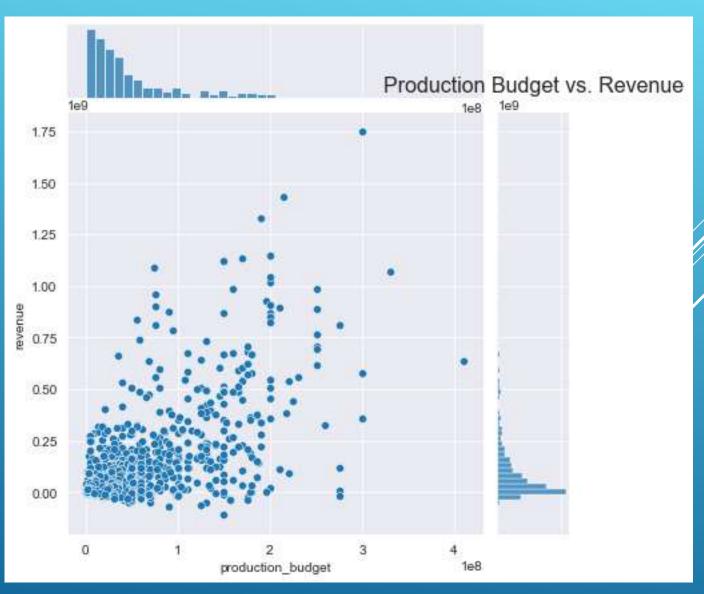
By comparing the length of the bars, we can see the most popular genres in this case the most popular is Drama followed by Comedy.



CONT'D: REVENUE ANALYSIS

PRODUCTION BUDGET AND REVENUE CORRELATION

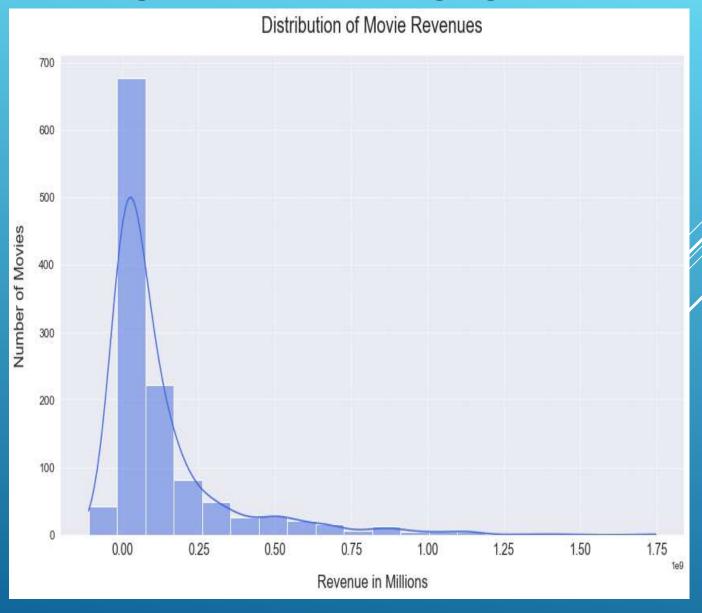
*There is a general trend higher budgets can lead to higher revenue.



CONT'D: REVENUE ANALYSIS

REVENUE DISTRIBUTION

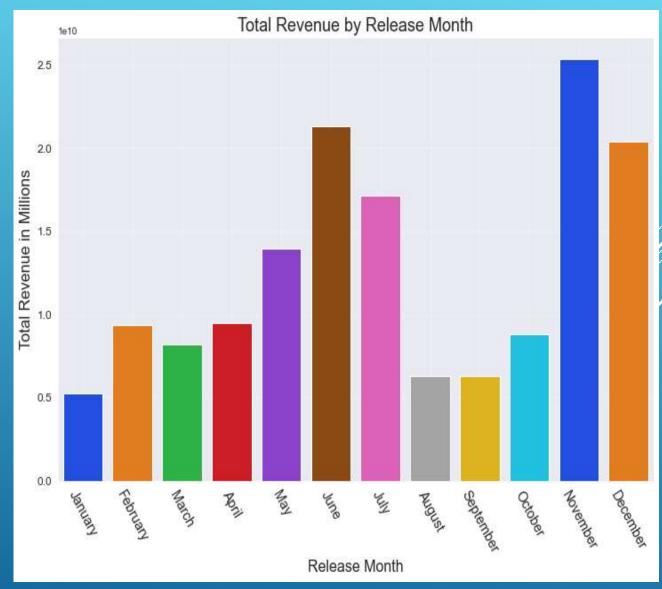
Most movies have a revenue of less than \$0.5 million with a smaller number of movies exceeding \$1.5 million in revenues.



CONT'D: REVENUE ANALYSIS

REVENUE DISTRIBUTION ACROSS MONTHS

- We notice that there is a peak in revenue between April and July and between November and December. However the peaks in revenue may indicate that relatively more movies were released in those months, making the revenue to be higher.
- * This indicates seasonal trends.



RECOMMENDATIONS

From the results, here are my recommendations:

1. Microsoft should consider releasing movies that are among the top 10 genres and also coming up with unique subgenres with a blend of the most performing genres. This can help captivate a new audience and broaden the revenue.

2. Budget allocation: Microsoft should consider allocating sufficient budgets for the film production as the correlation coefficient of 0.639 shows a positive correlation between budget allocated and revenues. However it is important to balance expenditure for better revenues. Invest in high-quality production, marketing, and distribution to ensure the budget translates into higher success.

3. Optimal Release Periods: The most profitable release months are June, July, November and December. Microsoft can opt to do major releases during this periods to capitalize on higher audience turnouts. Microsoft should align its marketing campaigns to build anticipation leading up to these months.

ADDITIONAL STRATEGIC RECOMMENDATIONS

1. Diversification: While focusing on the most profitable genres, it's also beneficial for Microsoft to diversify its portfolio to mitigate risks associated with market fluctuations and changing audience preferences. This is by looking at thr emerging genres and coproducing films to target a wider international market.

- 2. Leveraging data analytics to continuously monitor market trends, audience preferences, and competitor strategies.
- 3. Microsoft can invest in securing top talent (actors, directors, writers) who can draw audiences and add credibility to your projects.
- 4. Microsoft can invest in strong marketing campaigns to maximize reach and audience engagement.

CONCLUSION

- *Based on the analysis, we can draw several key insights and strategic recommendations for Microsoft's new studio.
- The key findings are optimal budget allocations based on budget and revenue correlation, optimal release months and popular genres.
- *The recommendations are based on Genre selection, budget allocation and release months selection.

- The analysis provides clear insights into the dynamics of movie profitability, guiding Microsoft's strategic decisions as they enter the entertainment industry. By focusing on the most profitable genres, allocating budgets strategically, and timing releases for optimal impact, Microsoft can position its new movie studio for success.
- *These data-driven strategies will help Microsoft navigate the competitive landscape of the film industry and achieve sustained profitability and growth.



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