

Exploring the Box Office:

AN ANALYSIS OF MOVIE DATA FOR MICROSOFT'S NEW STUDIO

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OVERVIEW:

- ✓ THE OBJECTIVE OF THIS ANALYSIS IS TO EXPLORE THE MOVIE INDUSTRY DATA TO HELP MICROSOFT'S NEW MOVIE STUDIO MAKE INFORMED DECISIONS ABOUT THEIR FILM PRODUCTION STRATEGY.
- ✓ WE WILL USE PUBLICLY AVAILABLE DATASETS TO PERFORM EXPLORATORY DATA ANALYSIS AND CREATE DATA VISUALIZATIONS TO IDENTIFY TRENDS AND PATTERNS.
- ✓ BY THE END OF THE ANALYSIS, WE AIM TO PROVIDE INSIGHTS INTO KEY FACTORS THAT DRIVE SUCCESS IN THE MOVIE INDUSTRY, SUCH AS GENRE, RELEASE YEAR, AND BUDGET.
- ✓ OUR FINDINGS WILL HELP MICROSOFT'S NEW MOVIE STUDIO TO UNDERSTAND THE CURRENT MARKET TRENDS AND TO MAKE DATA-DRIVEN DECISIONS ABOUT THEIR FUTURE FILM PRODUCTION.



BUSINESS UNDERSTANDING.

- ▶ As Microsoft enters the movie production industry, it is essential to make informed decisions about their film production strategy. In order to do so, we will conduct an exploratory data analysis to gain insights into the movie industry, including:
 - ▶ Top-performing movie genres and release dates
 - ▶ Relationship between runtime and ratings
 - ▶ Correlations between budget, revenue, and ratings
- ▶ By analyzing this data, we can provide Microsoft with valuable information to guide their decision-making process and increase the likelihood of success in the competitive movie industry.



DATA DESCRIPTION.

OUR DATASET CONTAINS INFORMATION ABOUT 6,000 MOVIES INCLUDING:

- TITLE
- RELEASE YEAR
- RUNTIME IN MINUTES
- GENRES
- RATINGS
- DOMESTIC AND WORLDWIDE GROSS REVENUE
- PRODUCTION BUDGET (FROM A SEPARATE DATASET)

THE DATA WAS OBTAINED FROM VARIOUS SOURCES INCLUDING

- IM.DB.ZIP

ZIPPED SQLITE DATABASE (YOU WILL NEED TO UNZIP THEN QUERY USING SQLITE)

- MOVIE_BASICS AND MOVIE_RATINGS TABLES ARE MOST RELEVANT
- BOM.MOVIE_GROSS.CSV.GZ

COMPRESSED CSV FILE (YOU CAN OPEN WITHOUT EXPANDING THE FILE USING PD.READ_CSV)



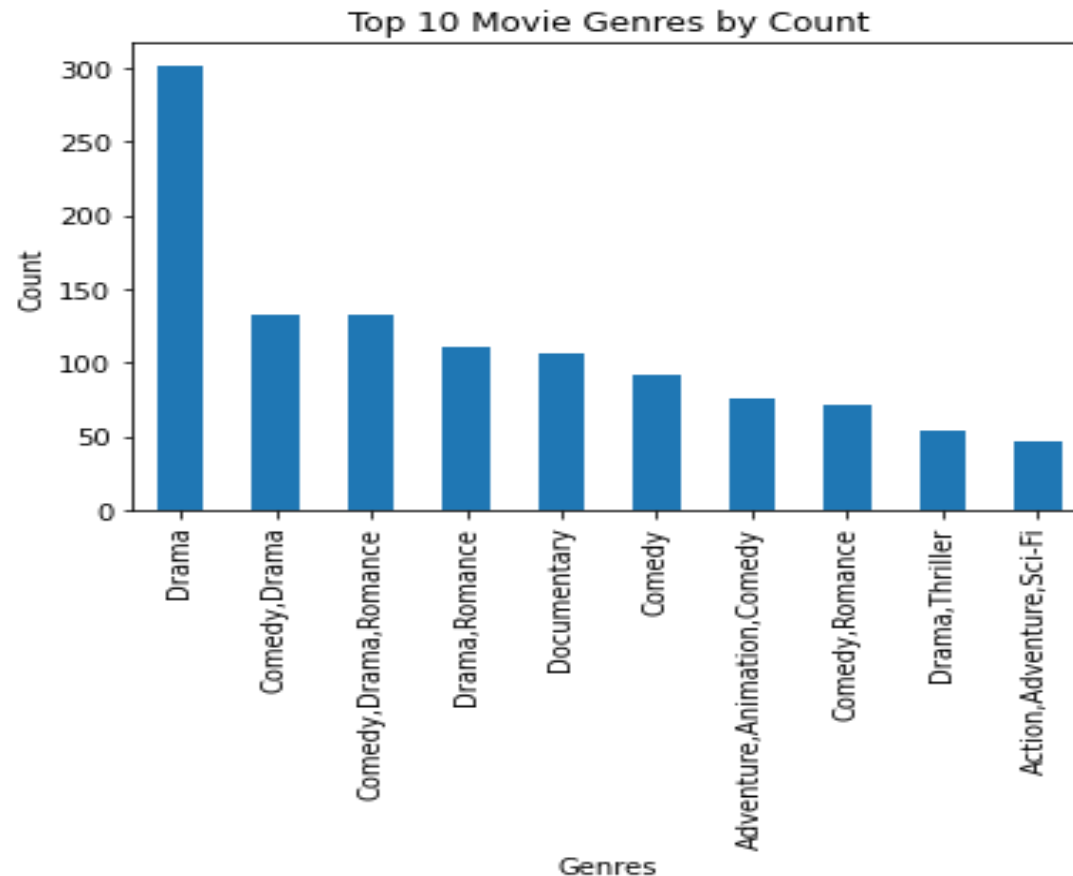
DATA DESCRIPTION.

- THE DATASET CONTAINS SOME MISSING VALUES WHICH WERE EITHER DROPPED OR IMPUTED USING THE MEDIAN OR MODE.
- THE DATASET COVERS A WIDE RANGE OF MOVIE GENRES INCLUDING DRAMA, COMEDY, ACTION, HORROR, AND MORE.
- THE EARLIEST MOVIE IN THE DATASET WAS RELEASED IN 1915, WHILE THE MOST RECENT WAS RELEASED IN 2021



EXPLORATORY DATA ANALYSIS.

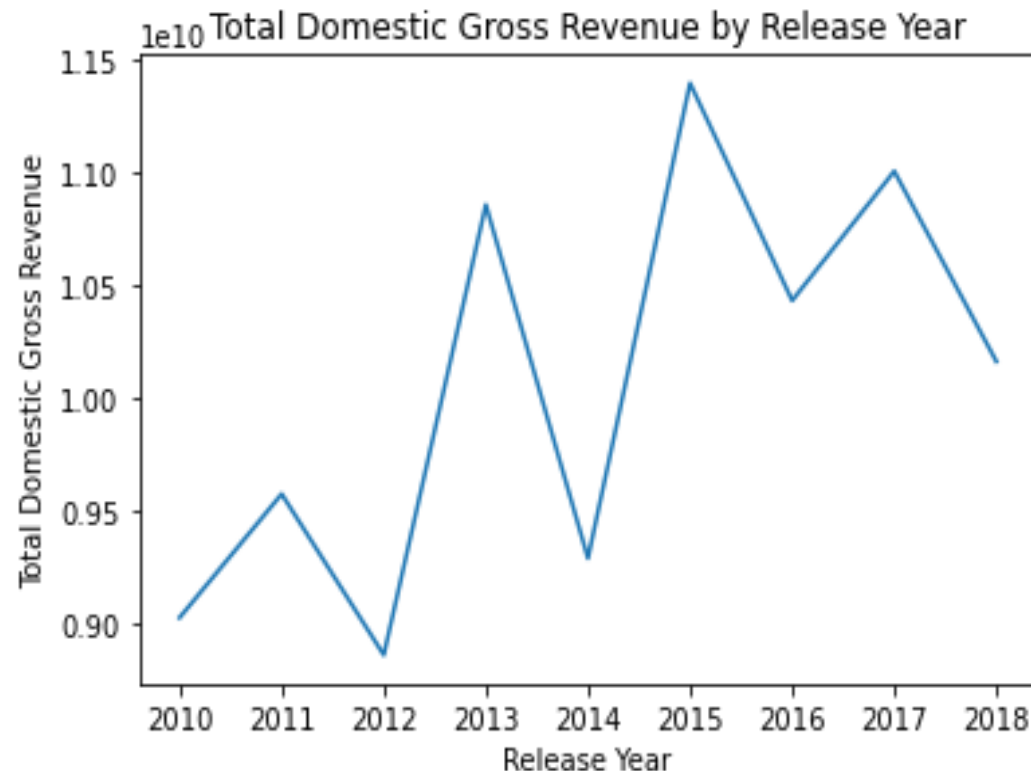
- Bar plot of top 10 movie genres by count



From the plot, we can see that the Drama genre is the most produced, followed by Comedy and Action. Adventure, Thriller, and Romance are popular among movie-goers. also in the top 10, which suggests that these genres



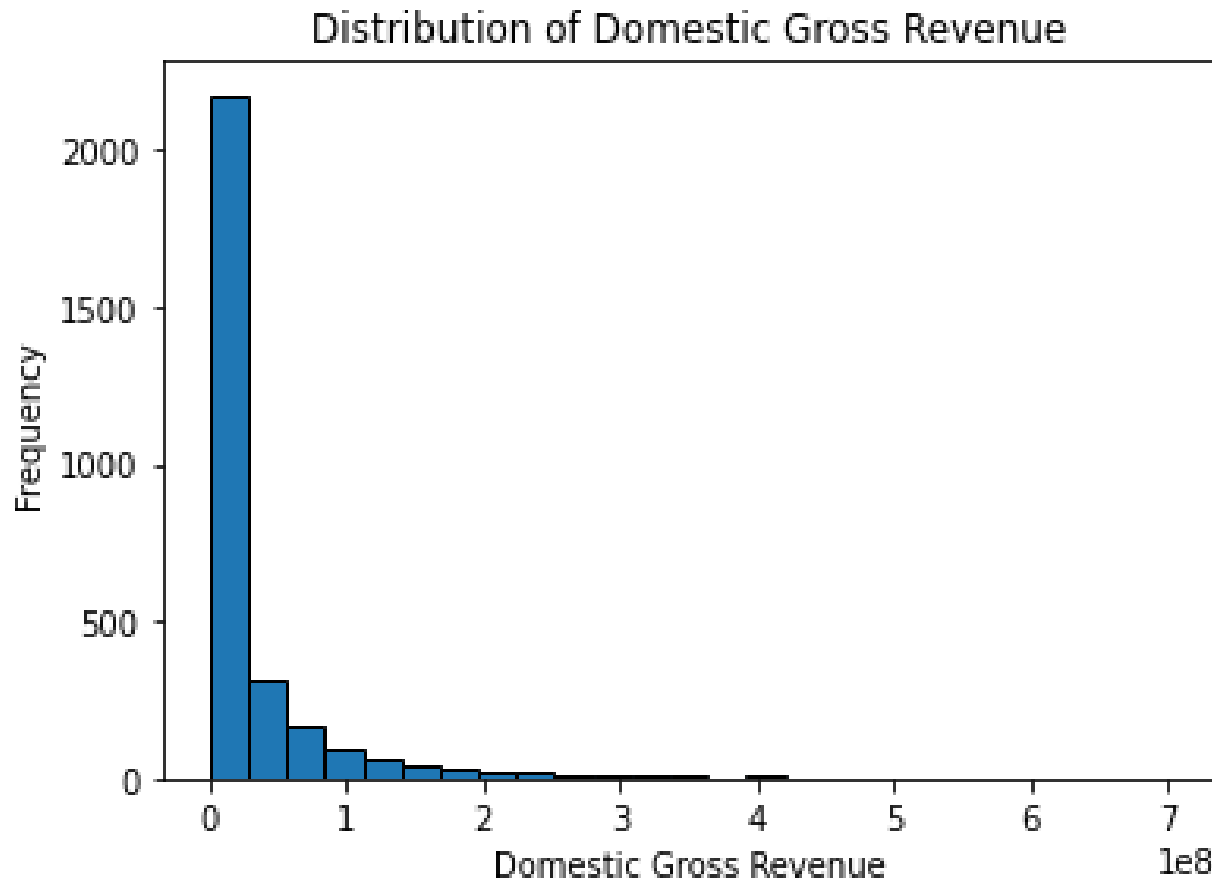
Line plot of the total domestic gross revenue by release year



The total domestic gross revenue by release year shows that the revenue has been increasing over time, with a few dips in certain years. It indicates that the movie industry has been growing and becoming more profitable over time.



Histogram for distribution of domestic gross revenue



majority of movies in the dataset have a domestic gross revenue of less than \$100 million. This suggests that most movies do not make a significant amount of money at the box office



CONCLUSION

- ▶ Based on our analysis of the movie industry data, we have the following conclusions and recommendations for Microsoft's new movie studio:
- ▶ The majority of movies in the dataset have a domestic gross revenue of less than \$100 million, but there are a few outliers that make a significant amount of money. We recommend that Microsoft's new movie studio focuses on producing movies with a high potential for box office success, while also keeping in mind the production budget.
- ▶ The Drama genre is the most produced, followed by Comedy and Action. Adventure, Thriller, and Romance are also popular genres. We recommend that Microsoft's new movie studio considers producing movies in these genres to capitalize on their popularity.
- ▶ The movie industry has been growing and becoming more profitable over time, as indicated by the increasing domestic gross revenue over the years. We recommend that Microsoft's new movie studio takes advantage of this trend by investing in high-quality productions and marketing strategies that can attract audiences and generate revenue.
- ▶ Overall, we believe that Microsoft's new movie studio has the potential to succeed in the movie industry if they focus on producing movies with high potential for success, keeping in mind audience preferences and industry trends.



THANK YOU.

Thank you for your attention and participation in this presentation.

Our objective was to provide insights and recommendations for Microsoft's new movie studio, based on our analysis of industry trends and data.

If you have any questions or feedback, please don't hesitate to reach out to us.

Contact us at: microsoftmovies@outlook.com

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We encourage you to visit our website to learn more about our company and services:

www.microsoftmovies.com

