

Microsoft-Movie-Analysis

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Summary

- Microsoft wants to create a new movie studio, to identify the types of films that are currently performing well at the box office.

➤ Findings

- Movies with higher ratings tend to have higher gross revenue, but the correlation is not very strong.
- The most popular genres of movies are Drama, Comedy, and Action.
- This can be useful for businesses to understand the preferences of their target audience.

Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

Business Problem

Microsoft wants an understanding of which types of films are currently successful:

- Microsoft can make data-driven decisions about what types of films to produce in order to maximize their chances of success.

☐ Research Questions

- ☐ What are the most popular movie genres?
- ☐ Which movie genres have the highest average ratings?
- ☐ What is the relationship between movie budget and revenue?
- ☐ Which movie studios have produced the most successful films?

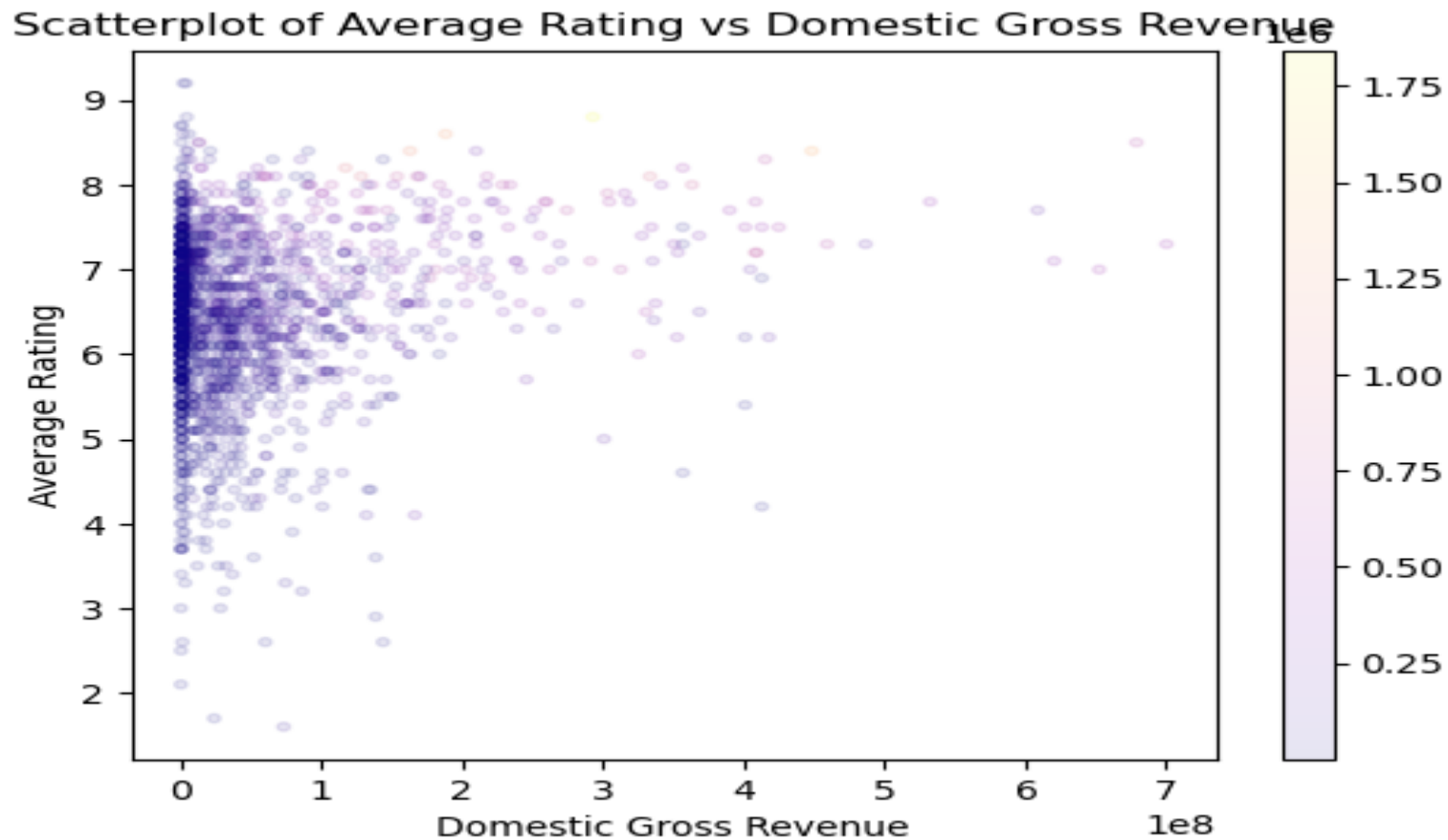
Data

- For this project, we are using two datasets: "movie_basics" and "movie_ratings".
- "movie_basics" dataset was obtained from the IMDb database:
 - Contains information about movies such as title, year of release, genre, and production studio.
 - "movie_ratings" dataset was also obtained from the IMDb database and contains information about the ratings and reviews of movies.
- Our target variable is the movie's revenue or box office gross,
 - Obtained from external sources such as the "bom.movie_gross.csv" dataset.

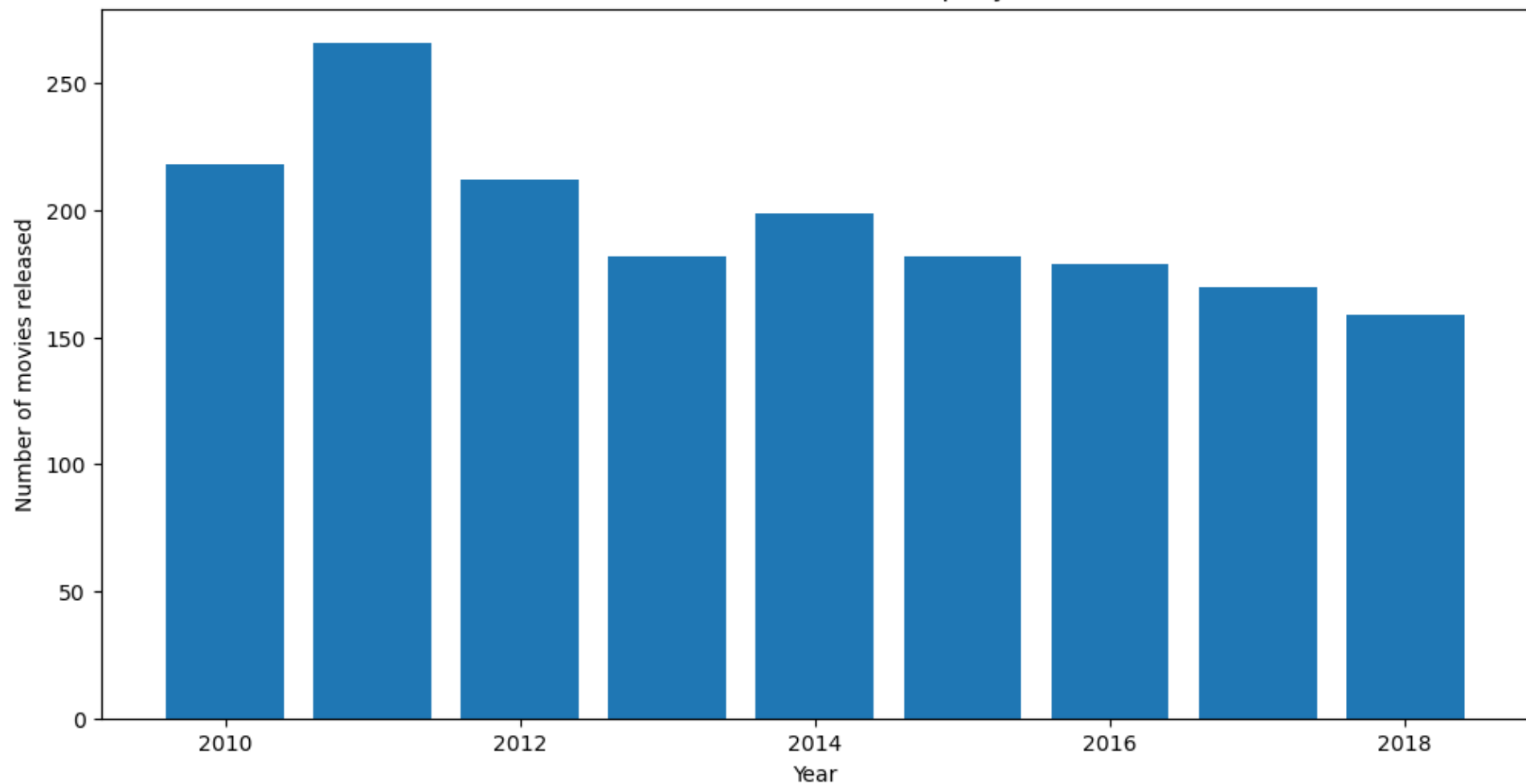
Methods

- ✓ Data was analyzed and modeled using pandas data manipulation and visualization tools in Python.
 - ✓ loading and cleaning the data, including dropping missing values and merging relevant tables.
 - ✓ Data was then visualized using a scatter plot, bar chart, stacked bar chart, histogram, and pie chart.
 - ✓ To gain insights into trends and relationships between variables

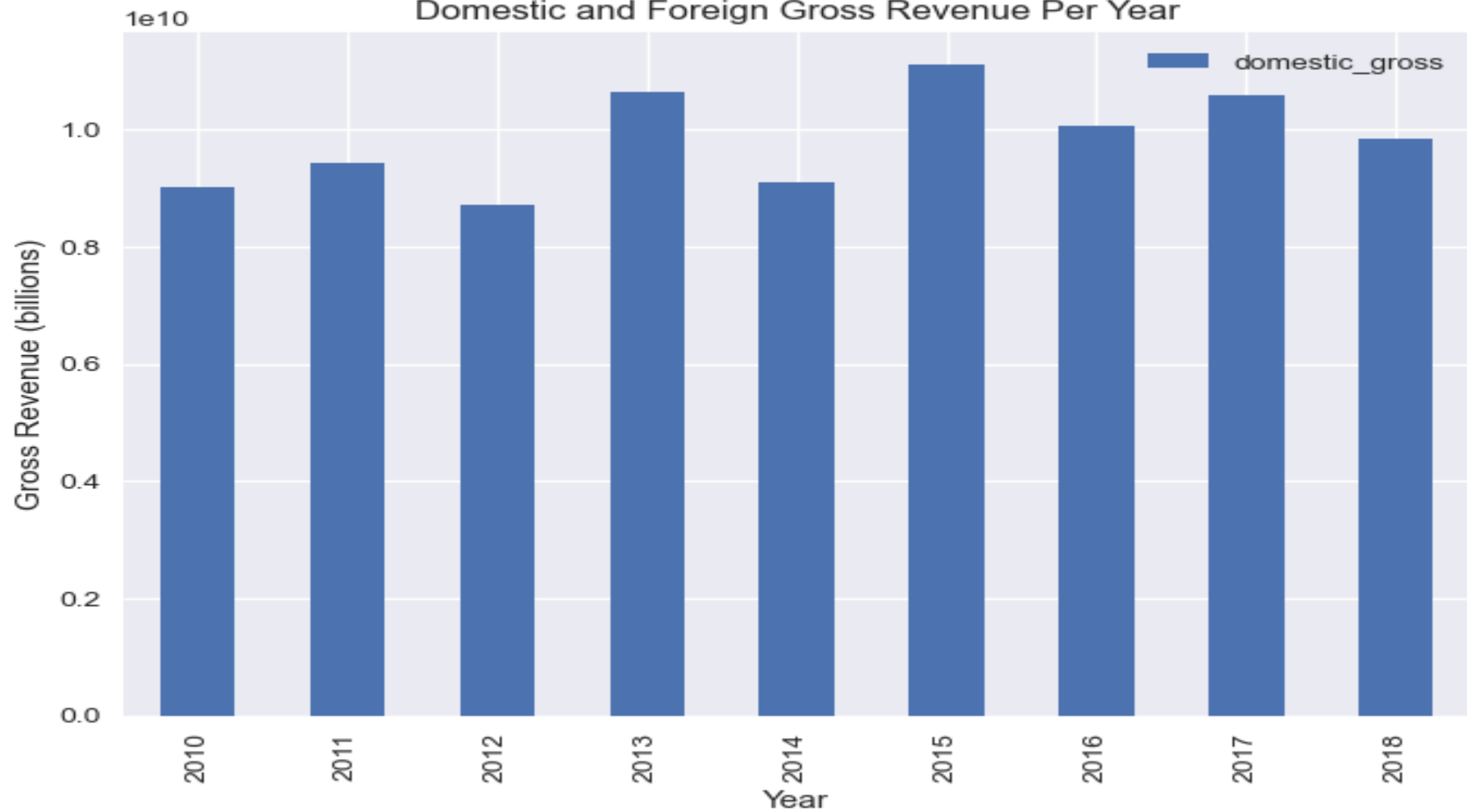
Results



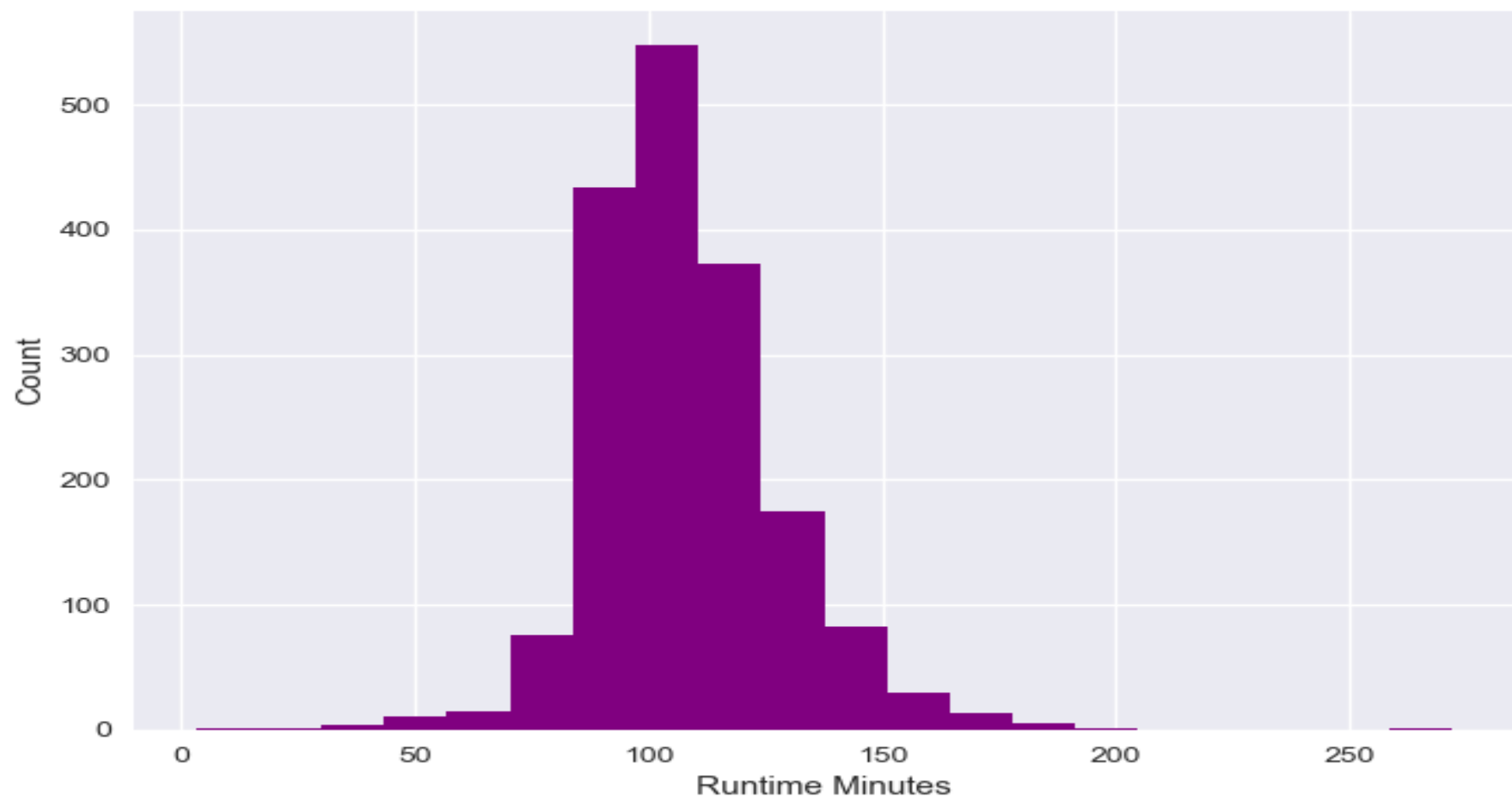
Number of movies released per year



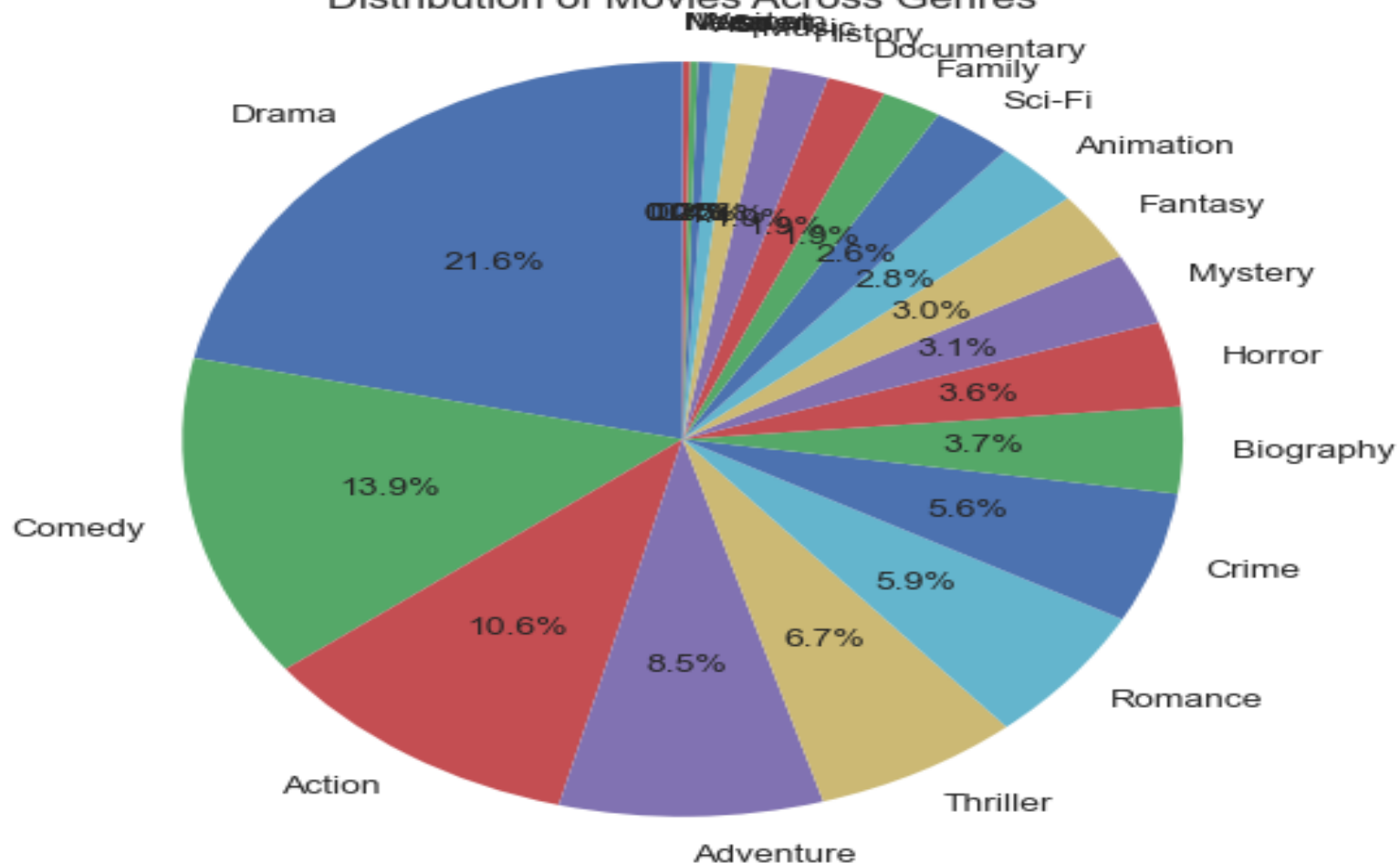
Domestic and Foreign Gross Revenue Per Year



Distribution of Runtime Minutes



Distribution of Movies Across Genres



Conclusions

- The pie chart shows that the most popular genres of movies are Drama, Comedy, and Action.
- The business can use these insights to make data-driven decisions, such as identifying the most profitable genres and focusing on increasing foreign revenue.
- We did not consider the impact of external factors such as competition and economic conditions on the movie industry.
- We could consider including more data sources to increase the scope of our analysis.
- We could also use machine learning algorithms to predict the success of a movie based on its genre, runtime, and other factors.

Thank You!

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