EXPLORATORY DATA ANALYSIS

MORINGA
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BY STEVEN KIKWA KALUNGU

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PROBLEM

BUSINESS PROBLEM

Microsoft is looking to enter the movie industry by creating a new movie studio, but they lack prior knowledge and experience in this field. The challenge is to identify successful movie trends and generate insights to inform decision-making regarding the type of films that would appeal to the audience and generate revenue.

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OBJECTIVE

To use exploratory data analysis to identify the most successful movie genres at the box office and provide actionable insights to the head of Microsoft's new movie studio to help guide their decision-making process when creating new films.

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BUSINESS UNDERSTNDING

- The project aims to explore the current movie market and identify the types of films that are successful at the box office.
- The findings will be translated into actionable insights that can help the head of Microsoft's new movie studio in deciding what types of films to create.
- The insights generated from the analysis could be used to inform the creative direction of the studio's films and help the marketing team in identifying target audiences and designing effective promotional strategies.
- The stakeholders who could use this project include the head of Microsoft's new movie studio, the creative team, and the marketing team.

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BUSINESS UNDERSTNDING

- The project's value lies in providing insights into the current movie market that can help Microsoft's new movie studio make informed decisions about the types of films to create, appeal to the audience, and generate revenue for the company.

DATASETS

We will be working with the following datasets:

- Box Office Mojo (bom.movie_gross.csv)
- IMDB (im.db)
- Rotten Tomatoes (rt.movie_info.tsv)
- TheMovieDB (tmdb.movies.csv)
- The Numbers (tn.movie_budgets.csv)

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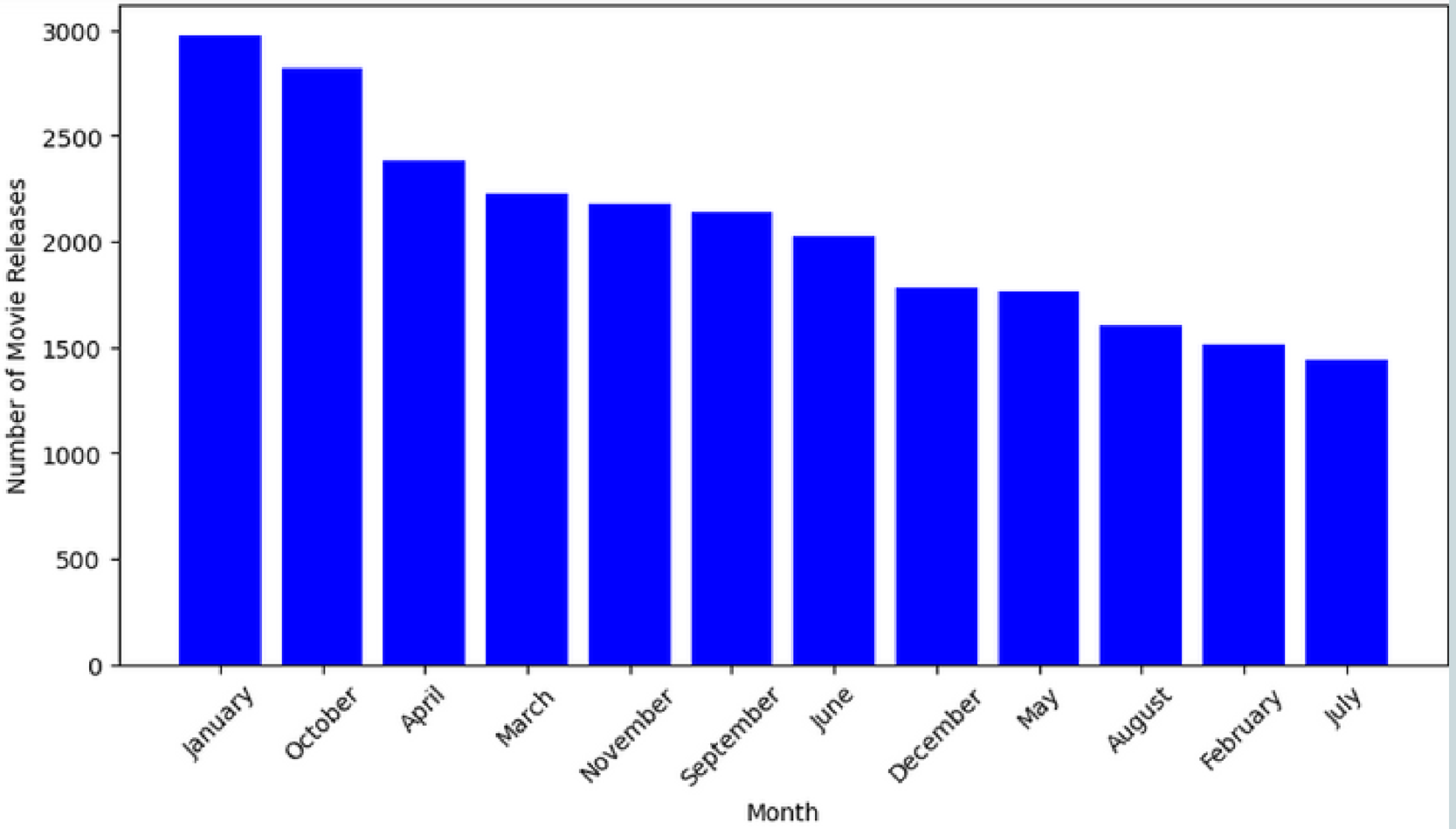
NUMBER OF MOVIE RELEASES BY MONTH



Insights

Most movies were released in January and October as compared to February and July

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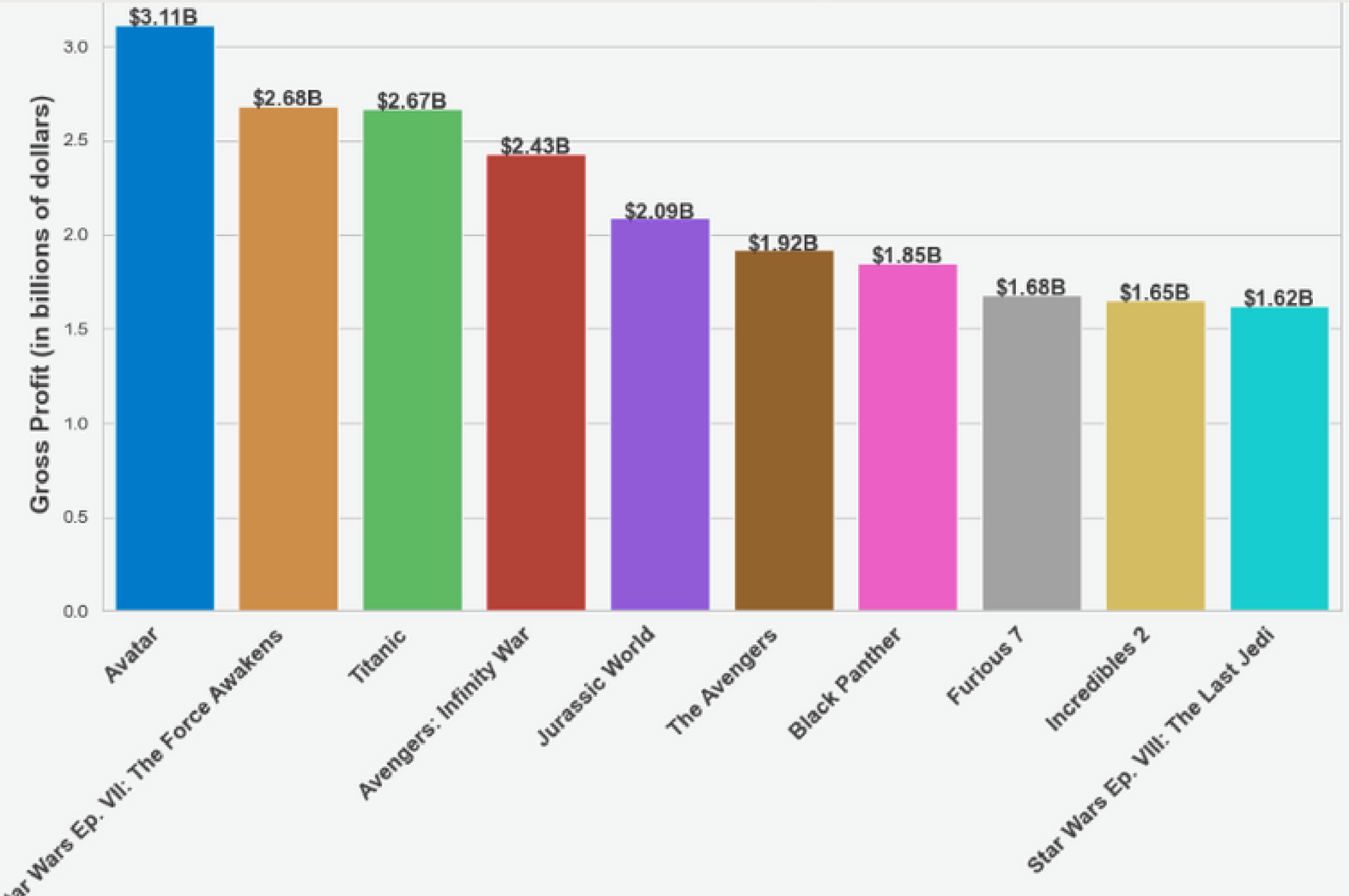
TOP 10 MOVIES BY GROSS PROFIT



Insights

Avatar generated the highest gross profit among all movies analyzed in the dataset

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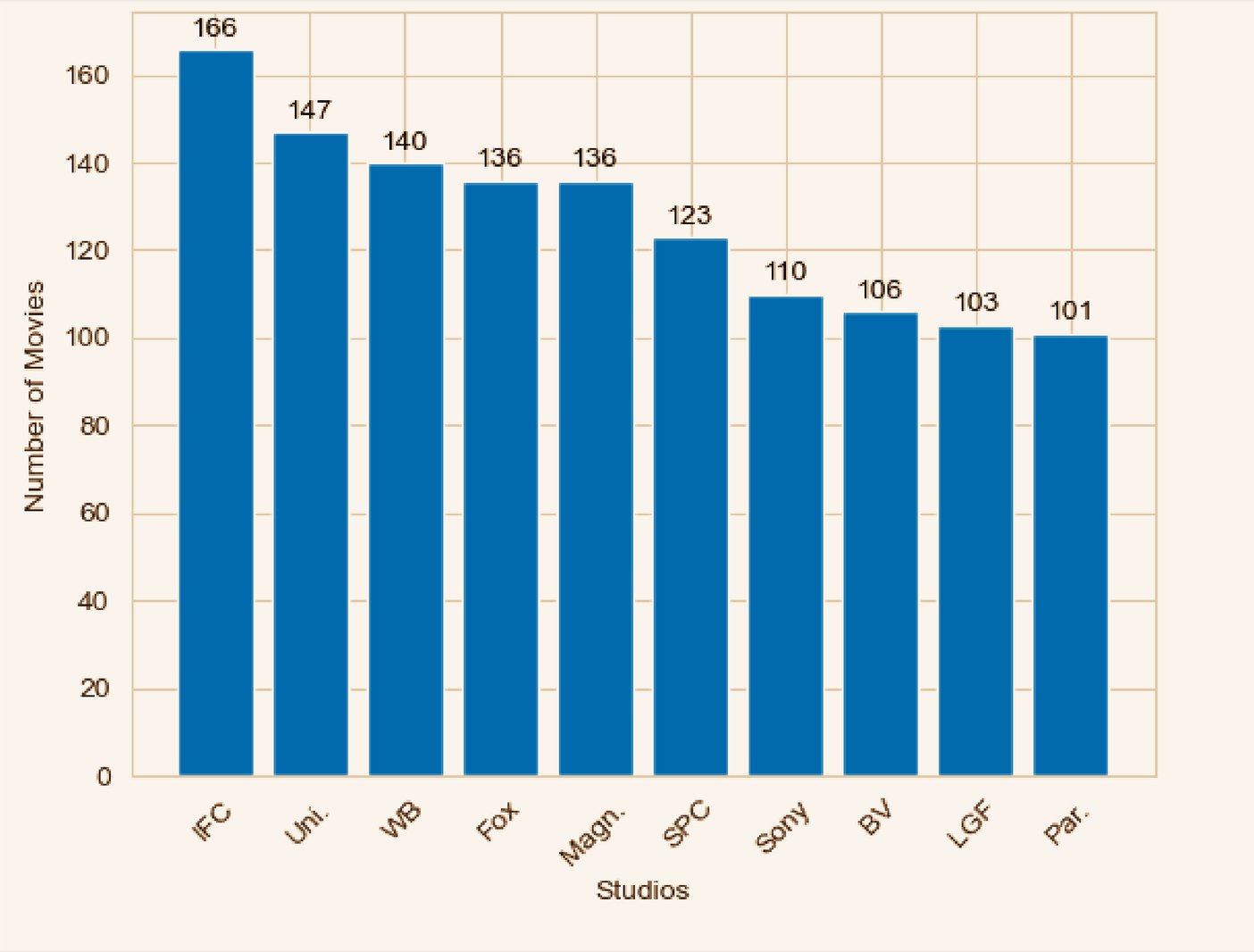
NUMBER OF MOVIES PRODUCED BY TOP 10 STUDIOS

- IFC emerged as the leading film production company in the analyzed dataset, producing a higher number of movies compared to other film industries.



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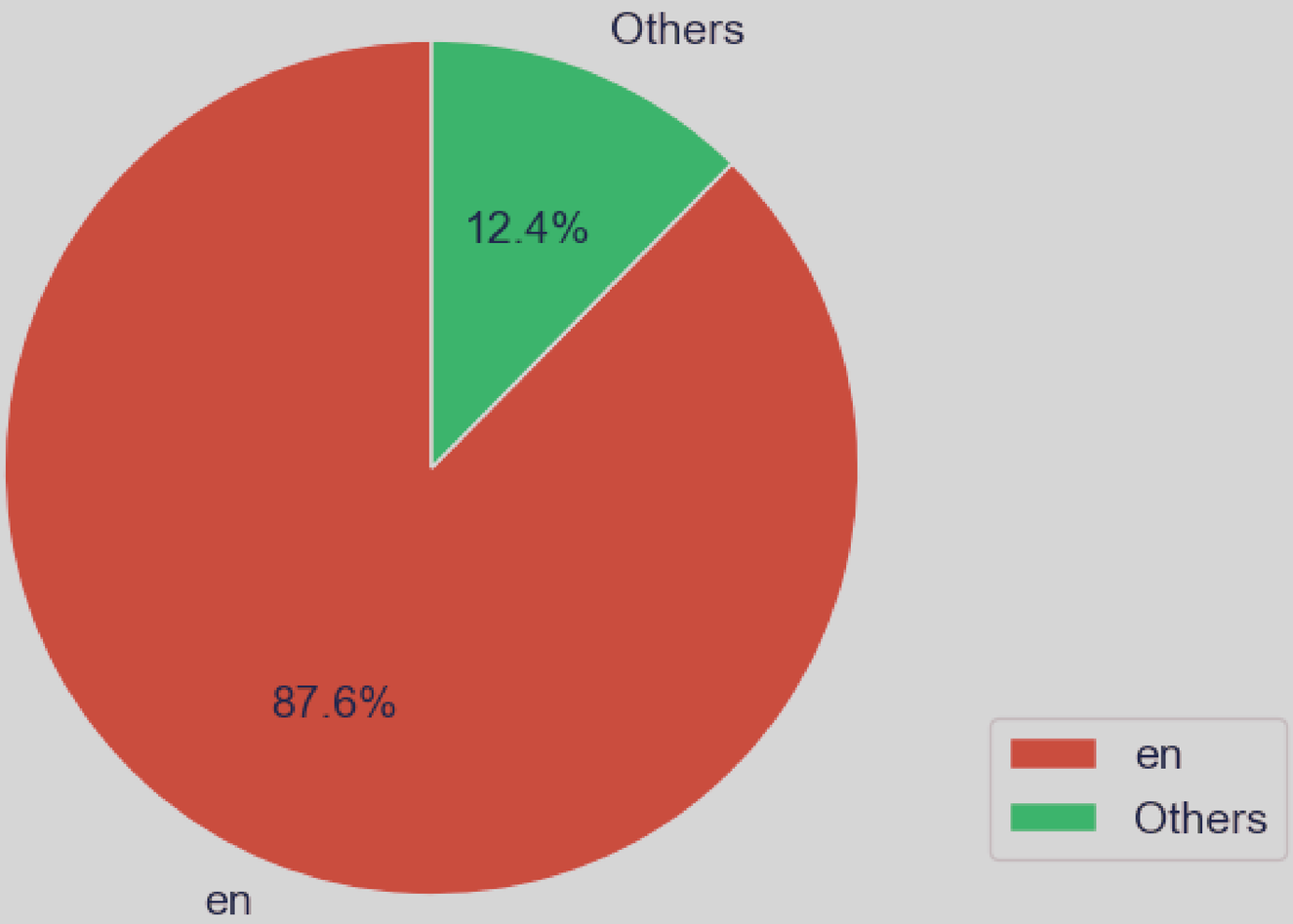
TOP 10 MOVIES BY GROSS PROFIT



Insights

- English was found to be the dominant original language in the movie dataset, accounting for 87.6% of all films.
- This suggests that English-speaking audiences are a significant target audience for the movie industry.
- The prevalence of English-language films could be attributed to factors such as the global influence of Hollywood and the predominance of the English language in international business and media.

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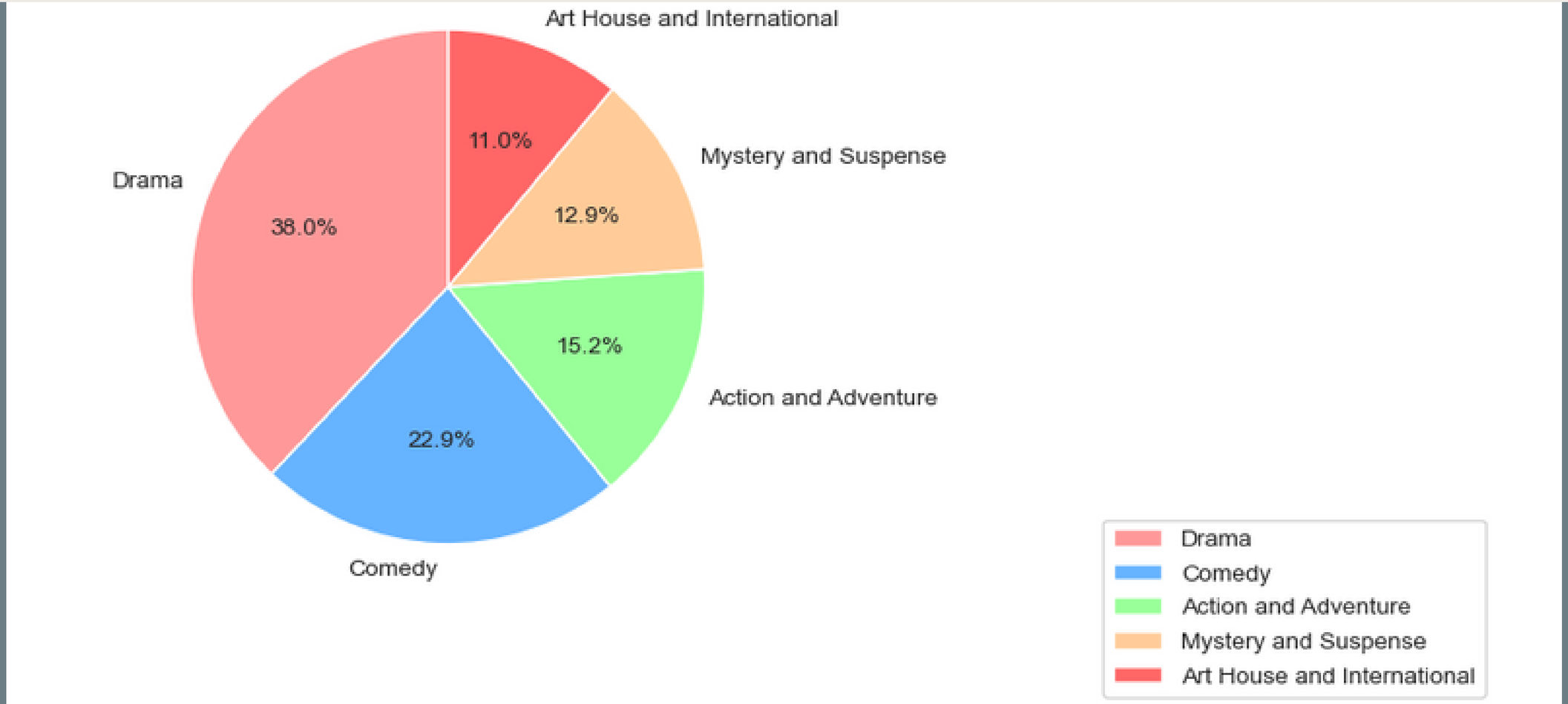
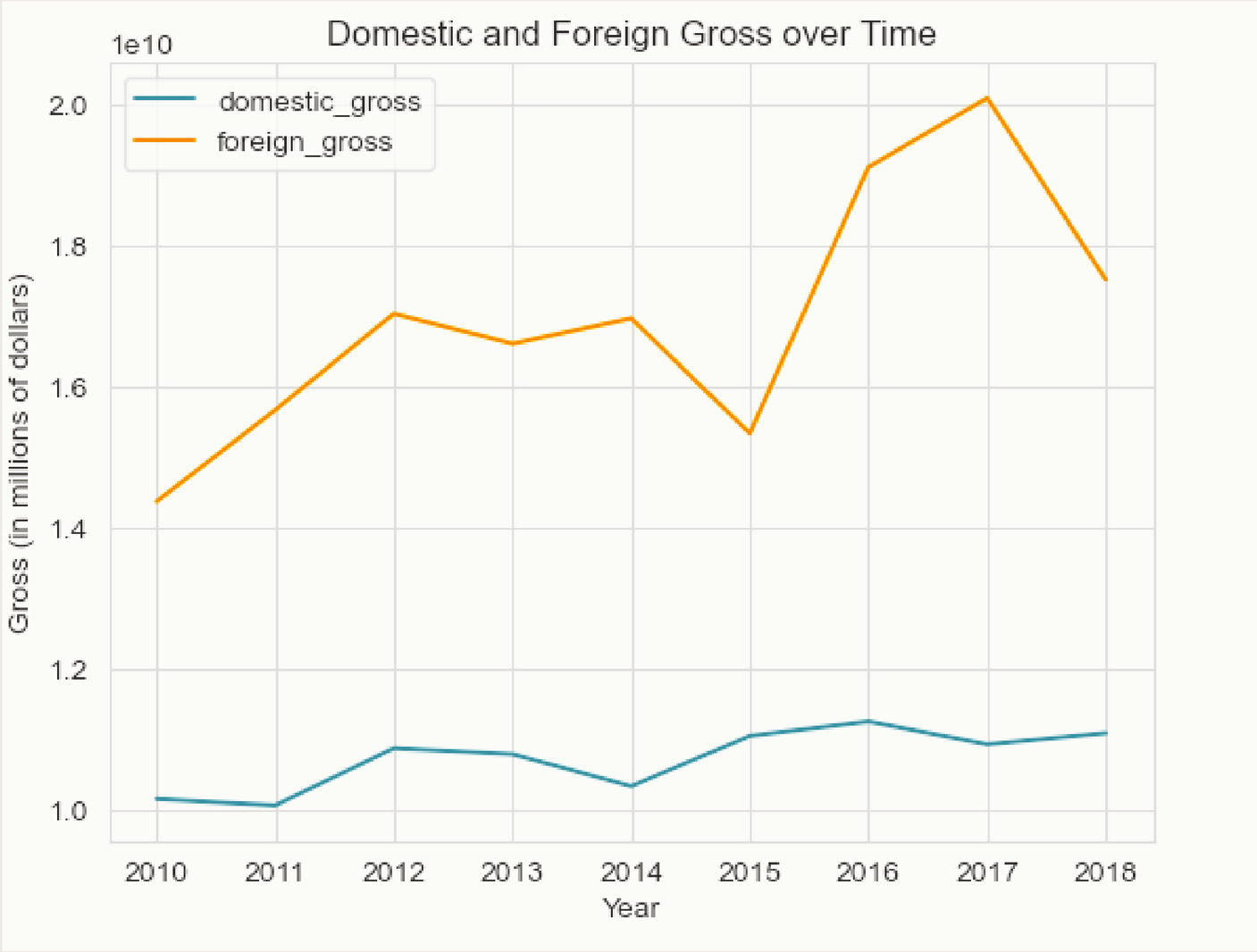
TOP 5 MOVIE GENRES

- Our analysis of the movie dataset revealed that drama is the most popular genre in terms of the number of movies produced, with over 38% of all movies falling under this category.



DOMESTIC AND FOREIGN GROSS INCOME OVER TIME

- Since 2010, foreign gross income has consistently surpassed domestic gross income in the movie industry. Additionally, the highest gross income achieved was in the year 2017.



RECOMENDATIONS

1. Plan to release movies in January, October, and April as these months seem to have a higher chance of success based on the popularity of released movies in the dataset.
2. Consider partnering with IFC and Universal Studios as they have produced more movies than other studios in the dataset.
3. Take note that foreign gross is always higher than domestic gross, so consider targeting international markets as well when promoting and marketing movies.
4. If looking for a blockbuster movie with high gross profits, consider producing movies like Avatar, Star Wars Ep.VII: The Force Awakens, and Titanic, which have a history of performing well in terms of gross profit.

- Consider producing movies in English as it is the most common language in the dataset and may have a wider audience.
- Produce more movies in the Drama and Comedy genres as they are the most popular.

THANK YOU

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https://github.com/kikwasteve23/phase-1-project.git