

# DATA ANALYSIS OF THE FILMS AT THE BOX OFFICE

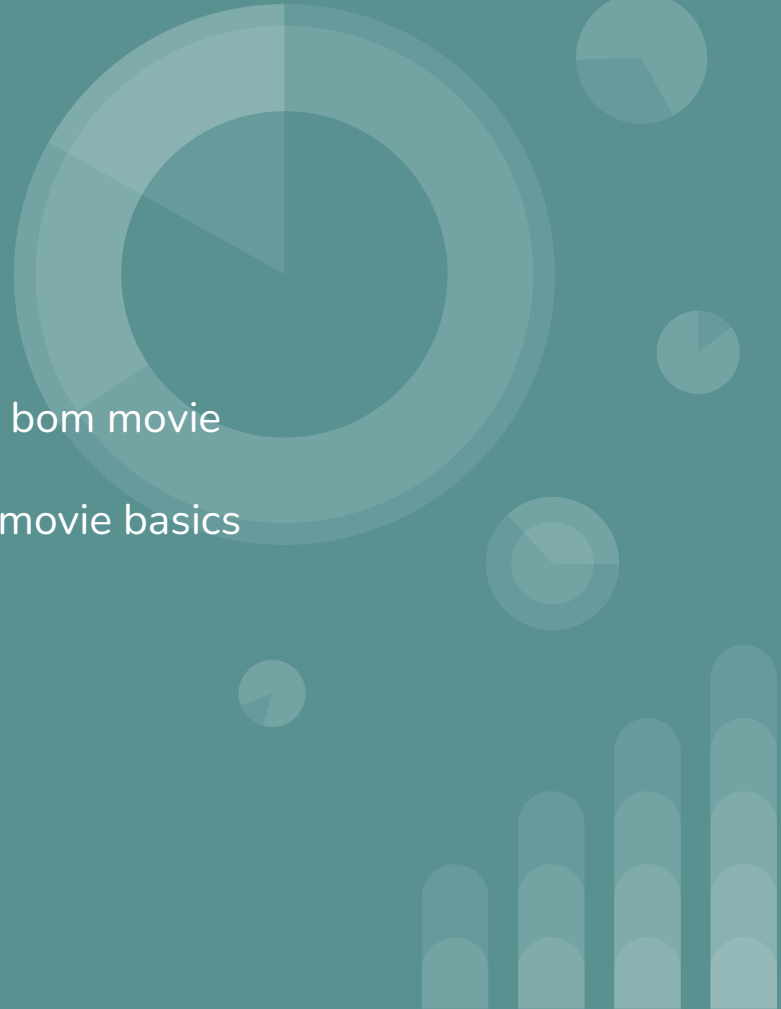


# OBJECTIVES

- To find out the top films at the box office.
- To find out the film genres with the highest ratings and those with the lowest ratings.
- To find out the relationship between average rating and numvotes.
- To find out the relationship between the domestic gross and foreign gross.

# PROJECT DATA

- ❖ In this project, two datasets were used; the bom movie gross data and imdb dataset.
- ❖ In the imbd database, the focus was on the movie basics and movie ratings tables.



# METHODS USED

- ❖ To analyse the two datasets; first, the data was cleaned then exploratory data analysis was performed.
- ❖ The analysis was done using python.



# BUSINESS UNDERSTANDING

The complex relationship between movie-related data and movie box-office revenues, plus the increasing volume of data in online movie databases, pose challenges for their effective analysis.

This analysis will take into consideration two datasets to try and understand the types of films that are currently doing the best at the box office in order to decide what types of films Microsoft should create.

# DATA UNDERSTANDING

This project considered two datasets;

- The bom movie gross dataset was a csv file with five columns; title, studio, foreign gross, domestic gross and year
- The imdb dataset was an sql database. Two tables from the database; movie basics and movie ratings, were used since they were the most relevant tables for the research.

# DATA ANALYSIS

## The top films at the Box Office

Sorting the bom movie gross data using the foreign gross, the top 5 movies were:

- ❖ Harry Potter and the Deathly Hallows Part 2
- ❖ Avengers: Age of Ultron
- ❖ Marvel's the Avengers
- ❖ Jurassic World: Fallen Kingdom
- ❖ Frozen

# The top films at the box office

Sorting the bom movies gross data using the domestic gross, the top 5 movies were:

- Star Wars: The Force Awakens
- Black Panther
- Avengers: Infinity War
- Jurassic World
- Marvel's the Avengers



# Movie genres with the highest ratings

The top rated movies were of genre:

- Comedy
- Drama
- Documentary
- History



# Movie genres with the lowest ratings

The poorly rated movies were of genre:

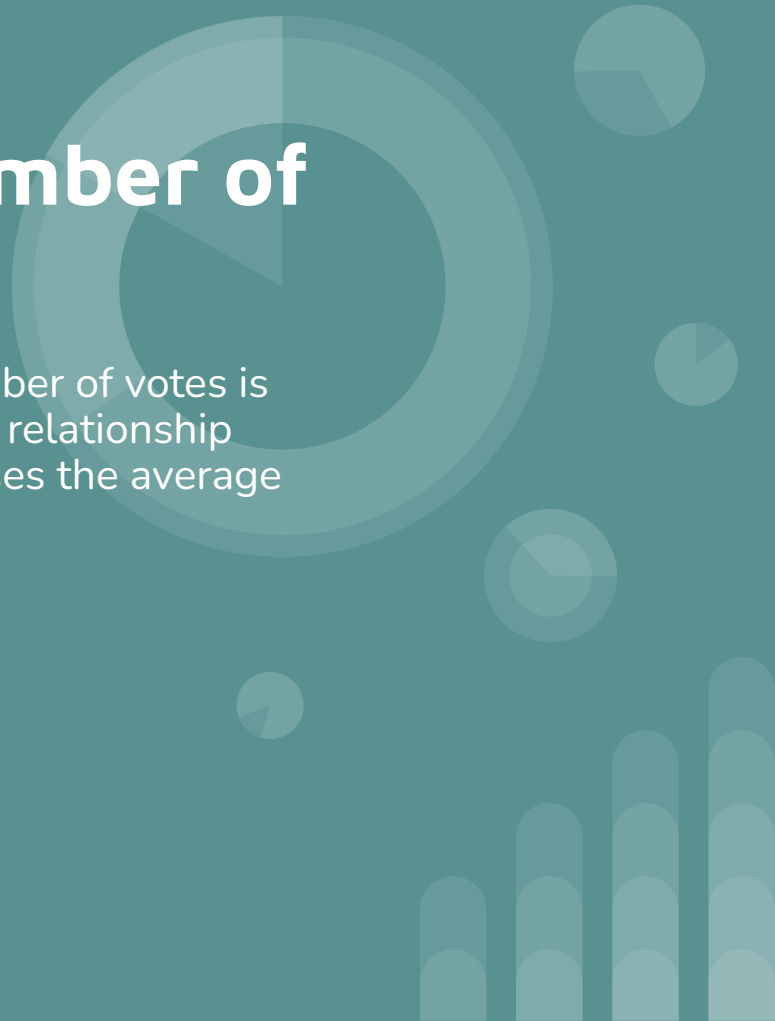
- Documentary
- Drama
- Horror
- Thriller
- Comedy



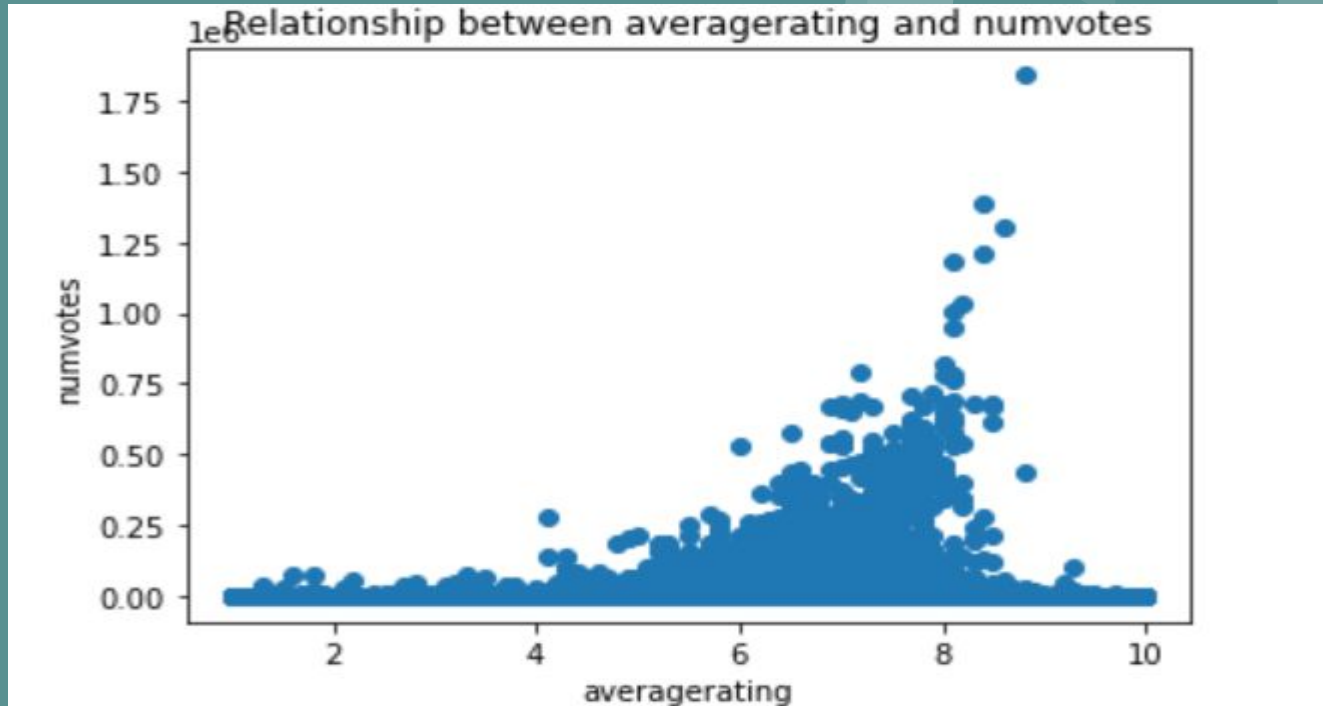
# Relationship between average rating and number of votes

The correlation between average rating and number of votes is 0.048756 which shows that they have a positive relationship implying that increase in number of votes increases the average rating.

We can visualize in the next slide.



# Visualization of the relationship between average rating and number of votes

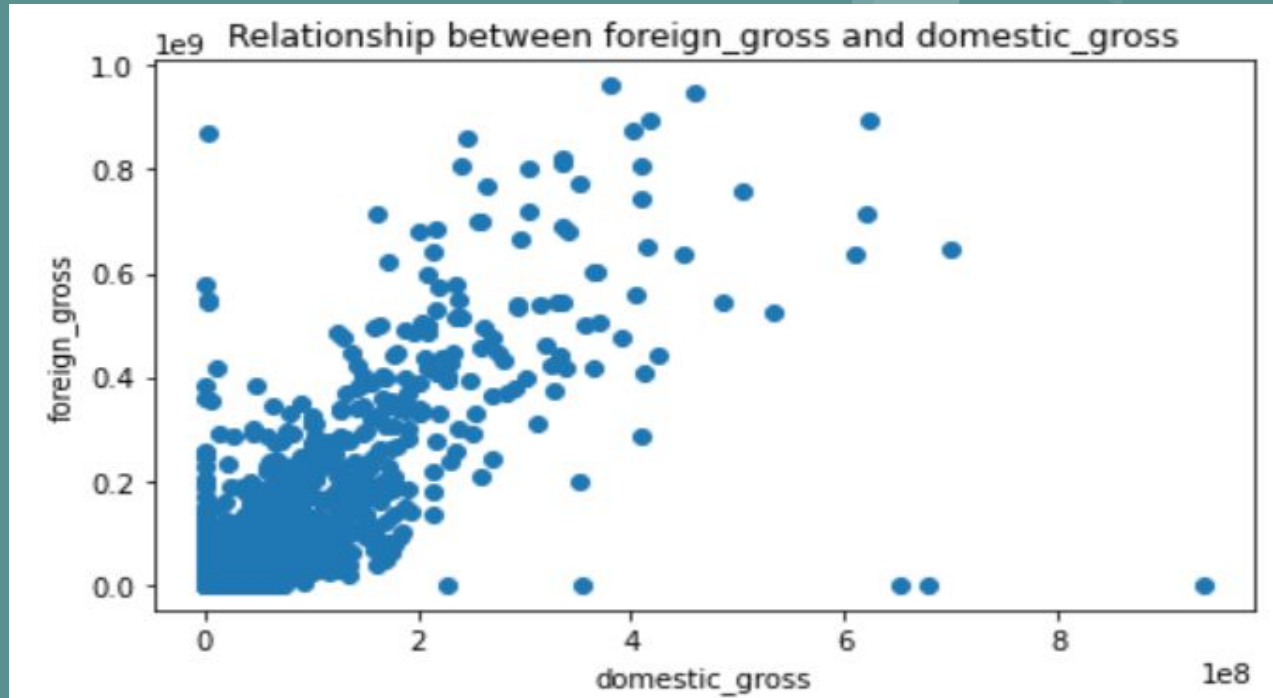


# Relationship between the domestic gross and foreign gross

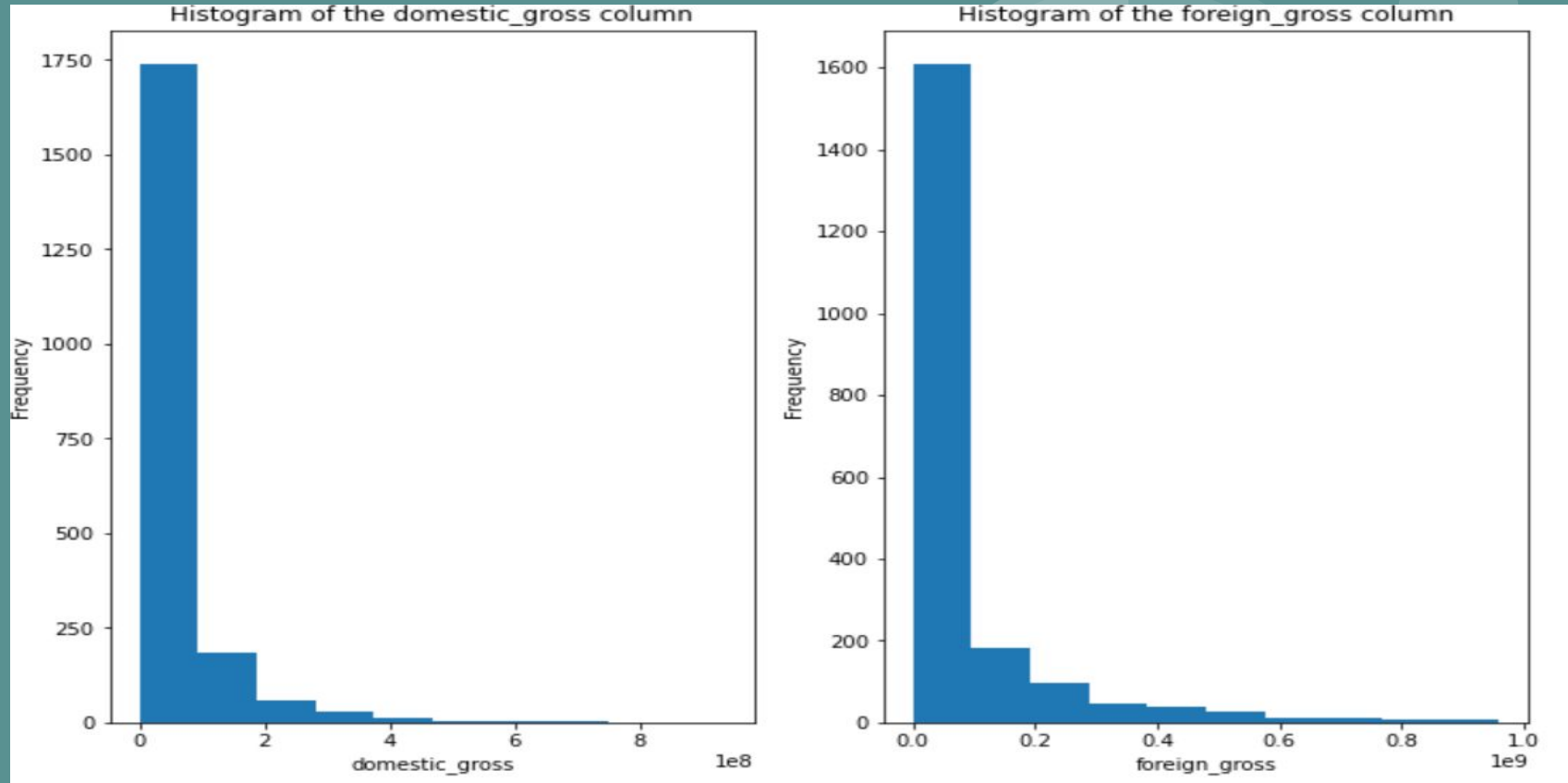
The correlation between domestic gross and foreign gross was 0.768451 which indicates that the two variables have a strong relationship and that they are positively correlated, that is, increase in domestic gross leads to increase in foreign gross and vice versa.

We can visualize this in the next slide.

# Visualization of the relationship between domestic gross and foreign gross



The histogram below shows that the data in both columns is positively skewed.



# Conclusion

## Recommendations

- ❖ The company should consider creating more movies of genre; comedy, drama, documentary and history since the top rated movies were of these genres.
- ❖ The company should consider creating few movies of genre; horror, thriller and family since the least rated movies were of these genres.
- ❖ The company should make movies that are not too long nor too short since increase in runtime minutes increases number of votes but also decreases the average rating.



# Next steps

From this analysis, it is noted that most of the top movies were recorded by BV and Uni studios. More research on both these studios might be necessary so as to know why their movies came up top.



Thank you for your time and attention.

If there are any questions, feel free to ask.

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