

# **MICROSOFT PROJECT**

**FIONA WANGUI  
NJUGUNA  
12TH MARCH, 2023**

# BACKGROUND

- Microsoft wants to start a new movie studio since it has seen other big companies making original video content.
- Focusing on the performances of movies based on got from given datasets which are Box Office Mojo and The Numbers, we look at the factors that affect the performance of a movie. With the data provided, we can be able to analyze and recommend factors that Microsoft could consider in the strategies to use and consider while starting up a new movie studio



# OUTLINE



- Business problem
- Data preparation
- Data Analysis
- Recommendations

# **BUSINESS PROBLEM**

- Microsoft want to create a movie studio but know nothing about movies or movie production.
- We need to identify what features or factors will aid in answering the problem.

# DATA

# PREPARATION...

The data used in the analysis was got from:

- The Numbers–provided the numeric data.
- Box Office Mojo–provided the categorical data.


# **NUMERIC FEATURES**

- Production Budget
- Worldwide Gross
- Domestic Gross

# **CATEGORICAL FEATURES**

● Studio

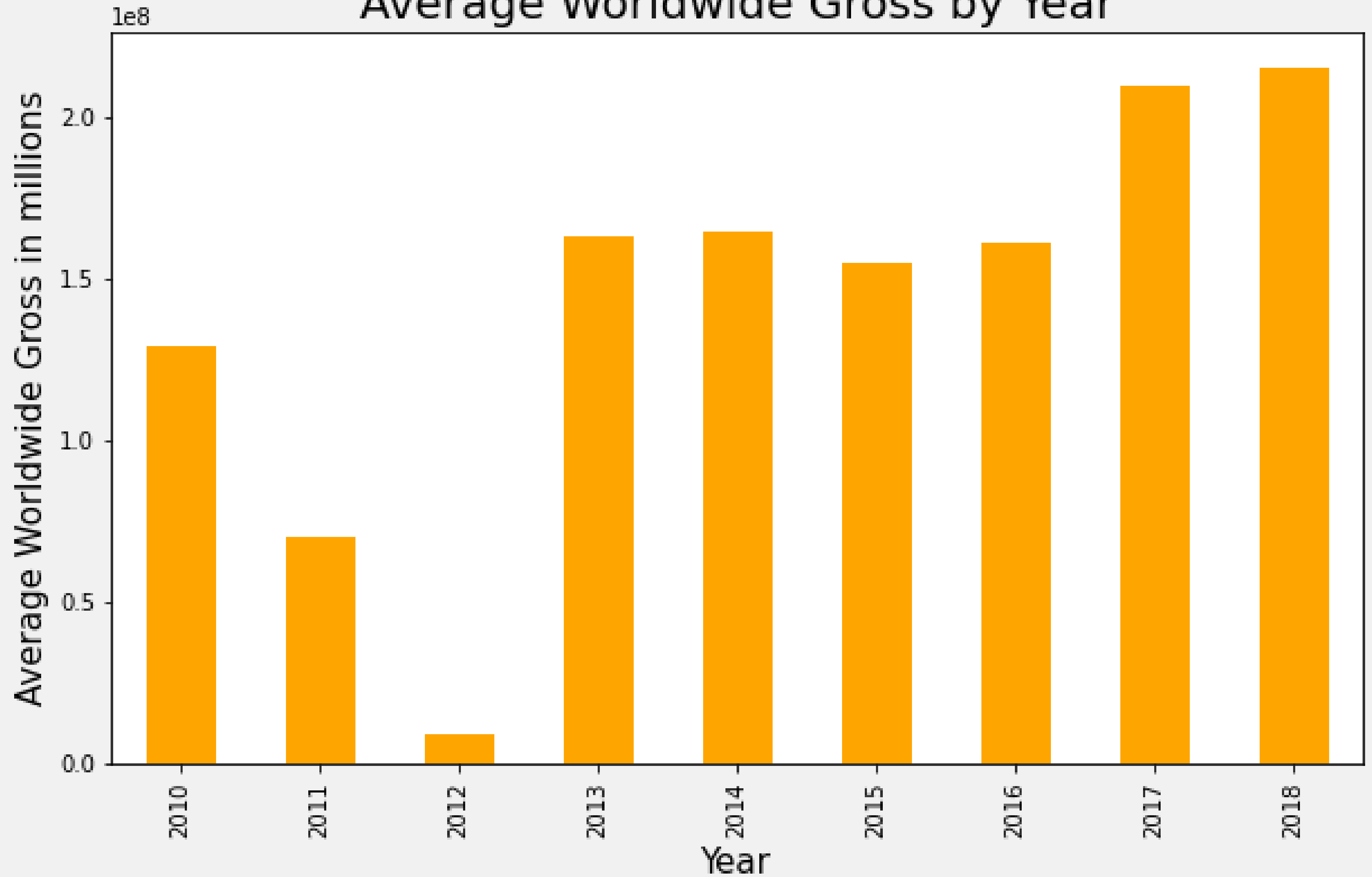
● Year

A large, solid pink semi-circle is positioned in the upper half of the image, with its flat edge at the bottom. The text 'DATA ANALYSIS' is centered within this semi-circle.

# **DATA ANALYSIS**

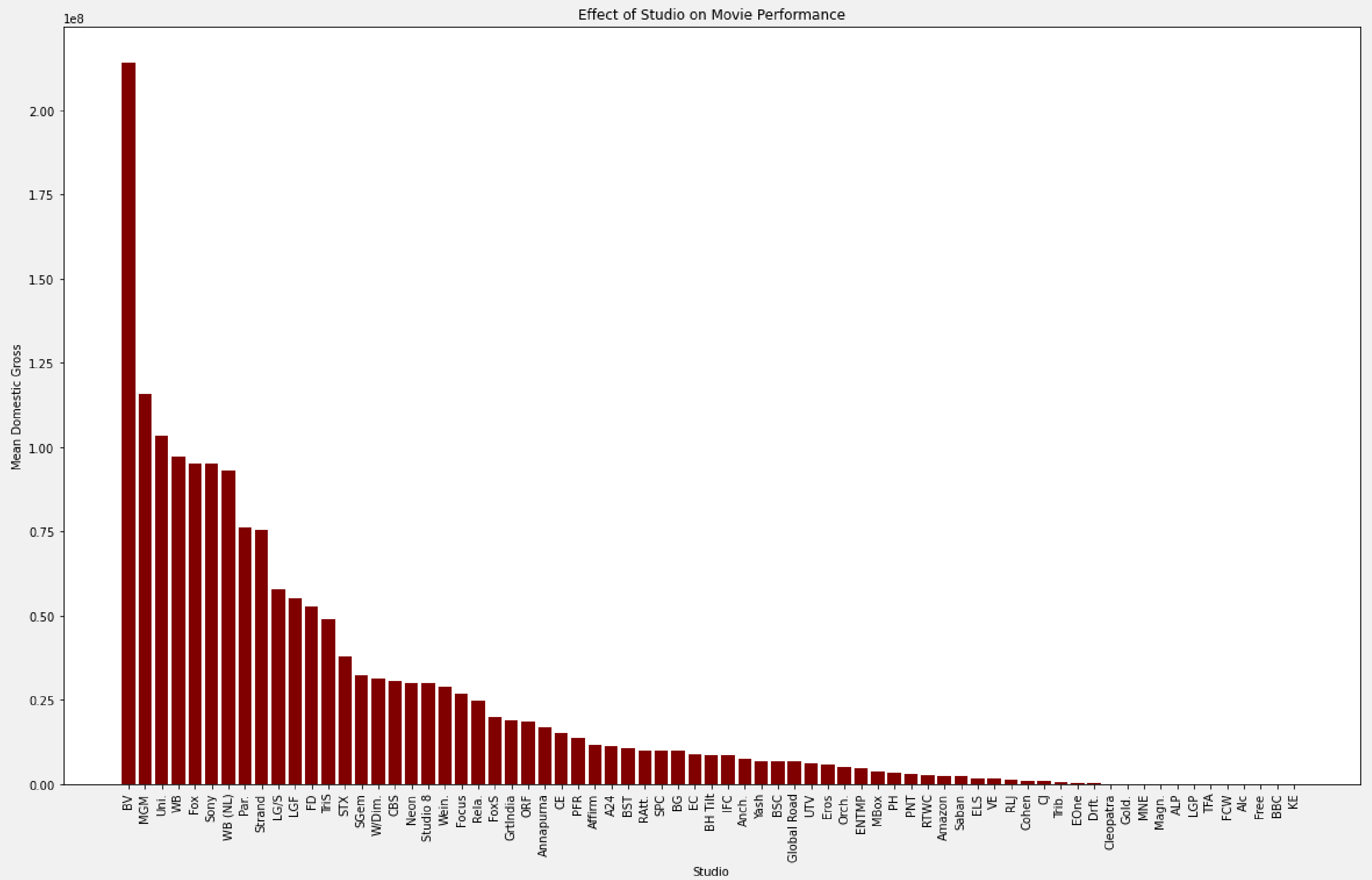


# Average Worldwide Gross by Year



# **EFFECT OF YEAR TO MOVIE PERFORMANCE**

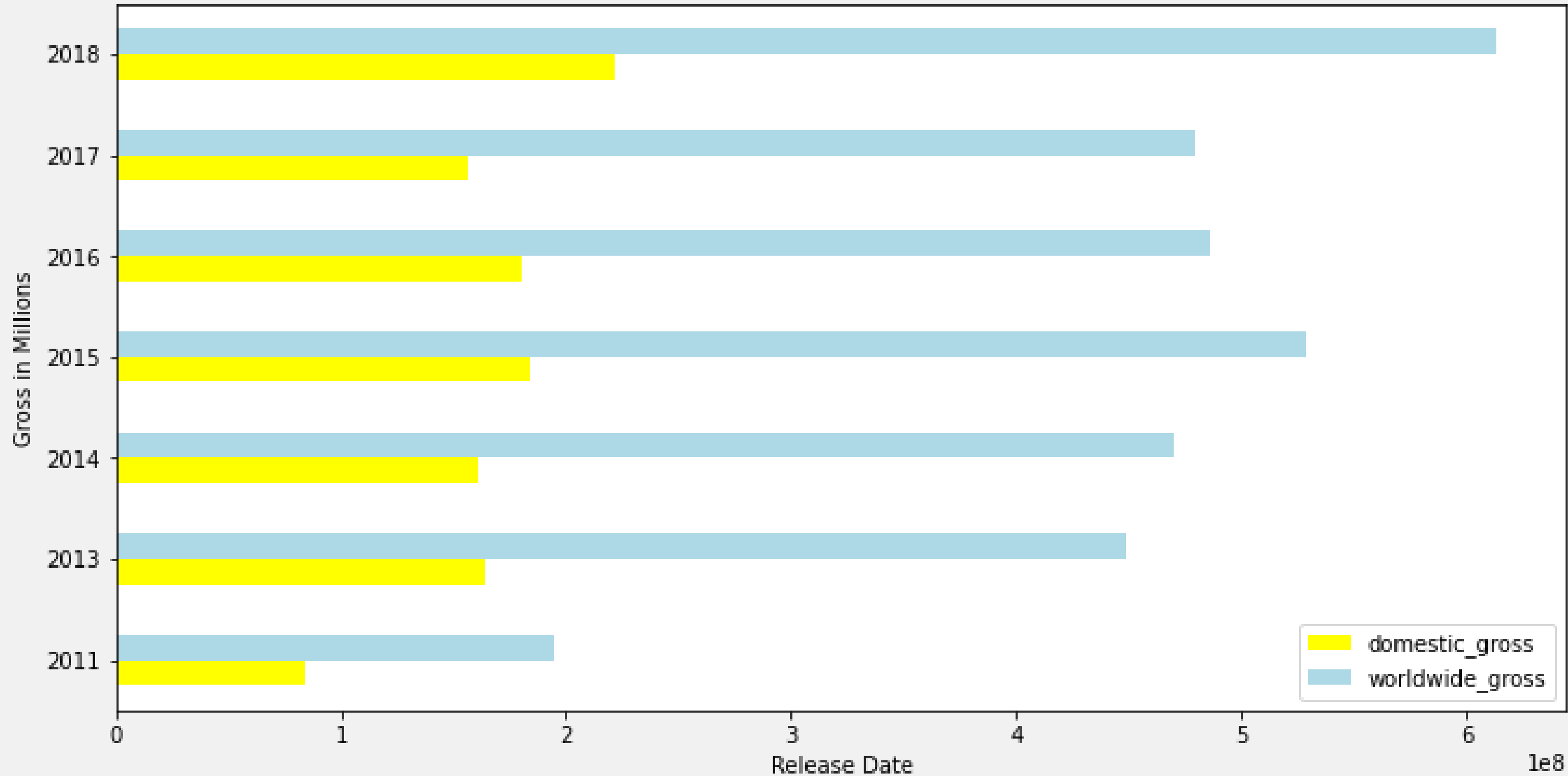
- Movies released after 2013 have a higher average worldwide gross
- Past movies released before did not perform as well
- This shows that the movie studio in this day and age would do well since the performance of the movies peaked and the worldwide gross income remained high



# **EFFECT OF STUDIO TO MOVIE PERFORMANCE**

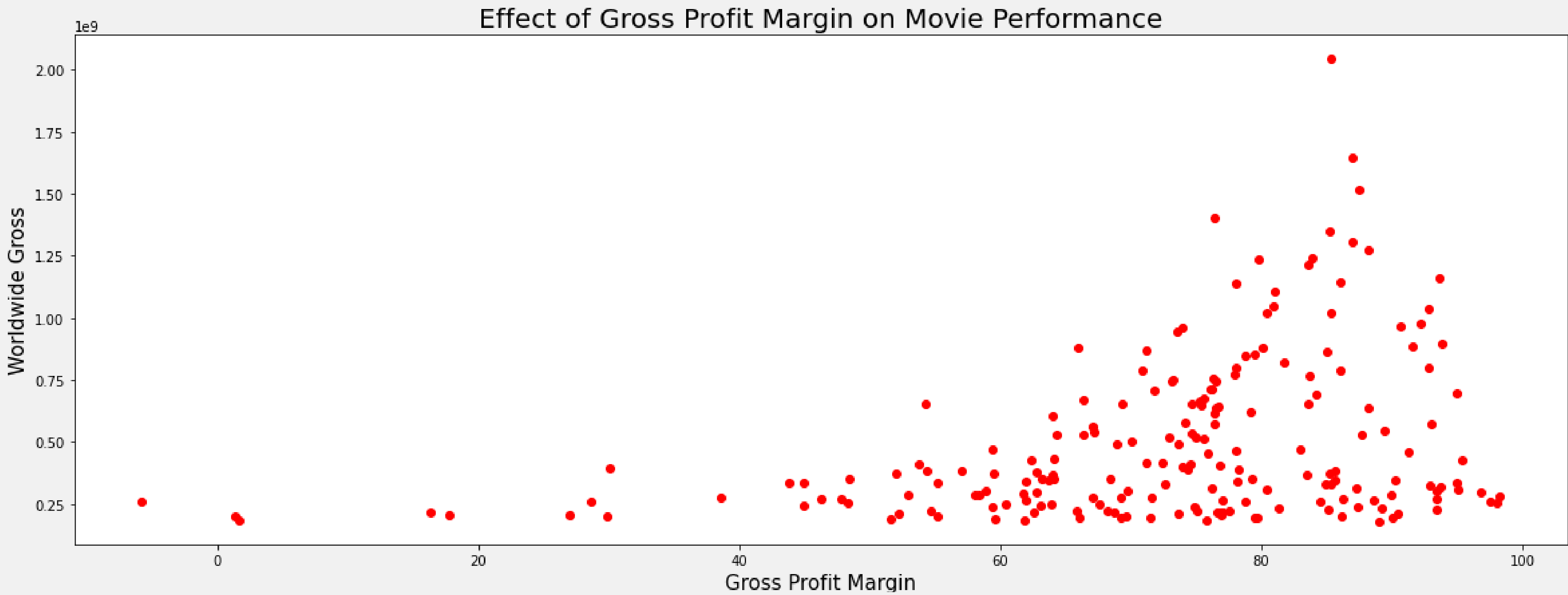
- The best performing studio is Buena Vista, BV.
- This is a subsidiary of the Walt Disney Company.
- This analysis could assist in mapping out the most effective strategies to follow by searching out BV's strategy in order to be the most successful movie studio.

# Effect of Top 200 Movies on Performance



# **EFFECT OF TOP200 MOVIES ON MOVIE PERFOMANCE**

- Movies released late into the year have higher domestic and worldwide gross.
- This indicates that movies peak later on into the year as compared to the beginning of the year.
- This analysis would help in showing when would be the appropriate time to release a movie in order to have it having a high performance rate.



# **EFFECT OF GPM ON MOVIE PERFORMANCE**

- The gross profit margin scatter plot shows the relationship between the worldwide gross of a movie and its gross profit margin.
- There are more movies whose gross profit margin is high and high worldwide gross.
- The higher the gross profit margin, the more profitable the movie was since the worldwide gross is high.



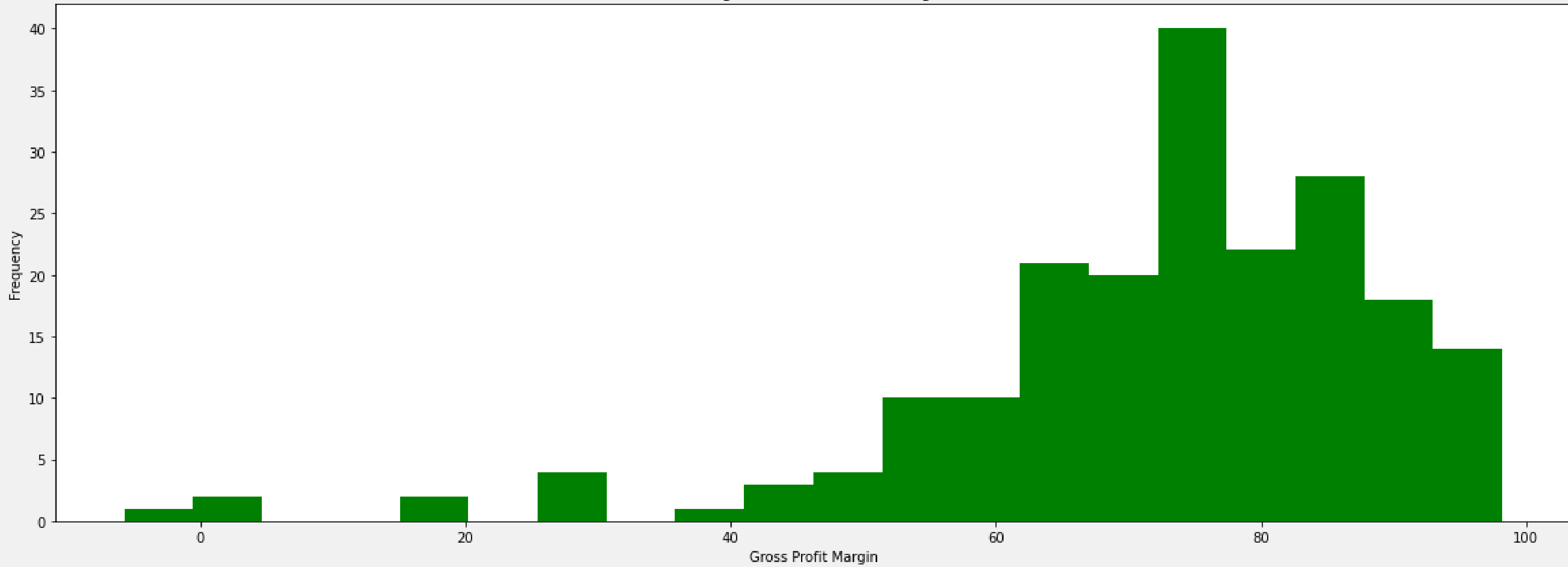
Effect of Return of Investment on Movie Performance



# **EFFECT OF ROI ON MOVIE PERFORMANCE**

- The return of investment scatter plot shows the relationship between the worldwide gross of a movie and its ROI.
- There are more movies whose ROI is relatively high and has a high worldwide gross.
- Regardless of it not being very high, it's still relatively high and shows that the performance of the movie will be high due to the worldwide gross being high thus having a high ROI.

Histogram of Gross Profit Margin



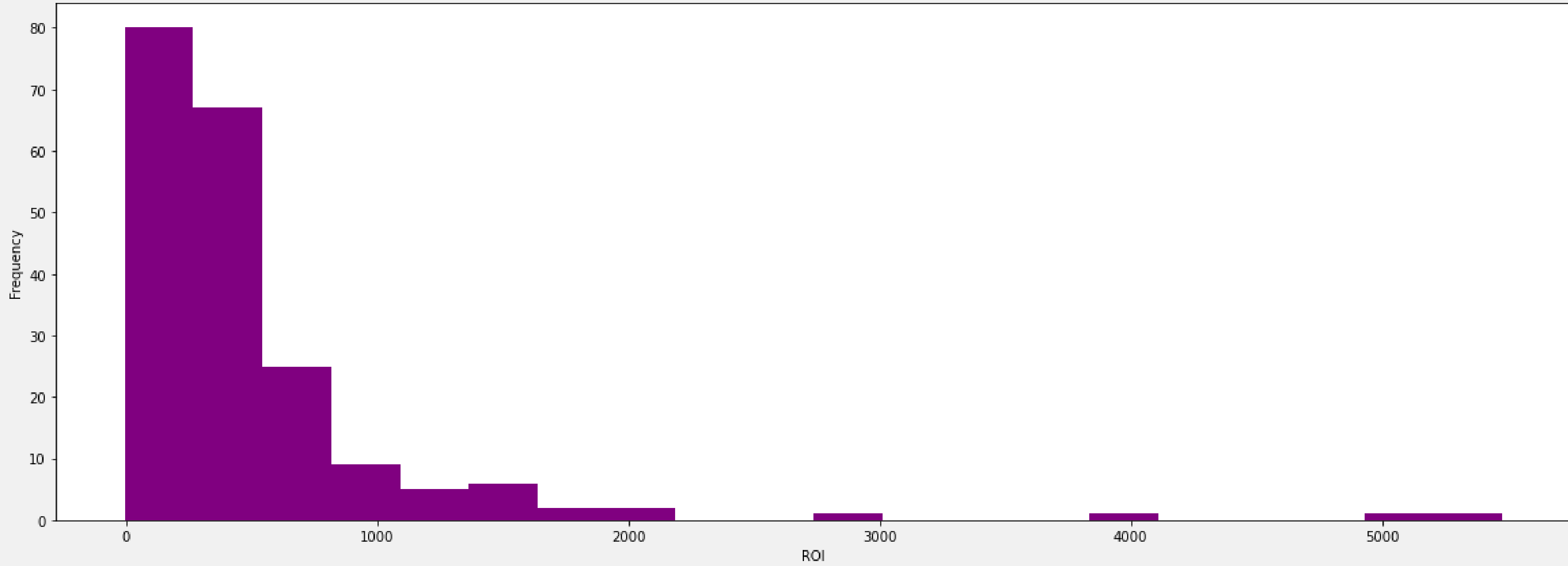
# HISTOGRAM OF GROSS PROFIT MARGIN

- From the histogram, we see that the majority of movies have a GPM between 50 and 100 peaking around 75.

- This means that for the majority of movies, the production budget is close to or higher than the gross profit.

- It shows that there is a wide range of GPM values for movies, with a majority of movies falling within the range of 55-98.

Histogram of ROI



# HISTOGRAM OF RETURN OF INVESTMENT

- From the histogram, we can see that the majority of movies have an ROI between 0 and 200%, with a peak around 25–50%
- There are also a few movies with an extremely high ROI, above 1000%, which are outliers in the data.
- This indicates that while many movies are profitable, there is also a significant number of movies that do not perform well in terms of ROI. It shows the risk and unpredictability involved in the film industry.

# RECOMMENDATIONS

- I would recommending using the gross profit margin and return of investment since they give a more accurate reading.
- This is because movies with a high ROI yield a higher worldwide gross.
- They should also consider consulting the subsidiary of the Walt Disney Company, Buena Vista in order to get insights on how to better the performance of the movie.



**THANK YOU!**