MICROSOFT PROJECT

Project Overview

- The projects aims at using exploratory data analysis. we will identify the relevant data we need from the available datasets, clean the data, then use descriptive analysis to analyse the data. The outcome from our analysis to generate meaningful insights that Microsoft will use to make calculated business moves.

Business Problem

Microsoft has looked at the movie making market and has seen a business opportunity. They are seeking to create a new studio for movie productions. Since Microsoft is new to the film making industry we will look at which genre of films are currently doing well so that Microsoft can know which films to create.

Data Understanding

Since Microsoft wants to join the film making industry it doesn't have data of its own. We are using data that was collected from various locations. The data collected includes movie ratings and movie basics that are associated with movie ids. The datasets provides a lot of information that includes domestic and foreign gross, movie budgets and the genres of movies.
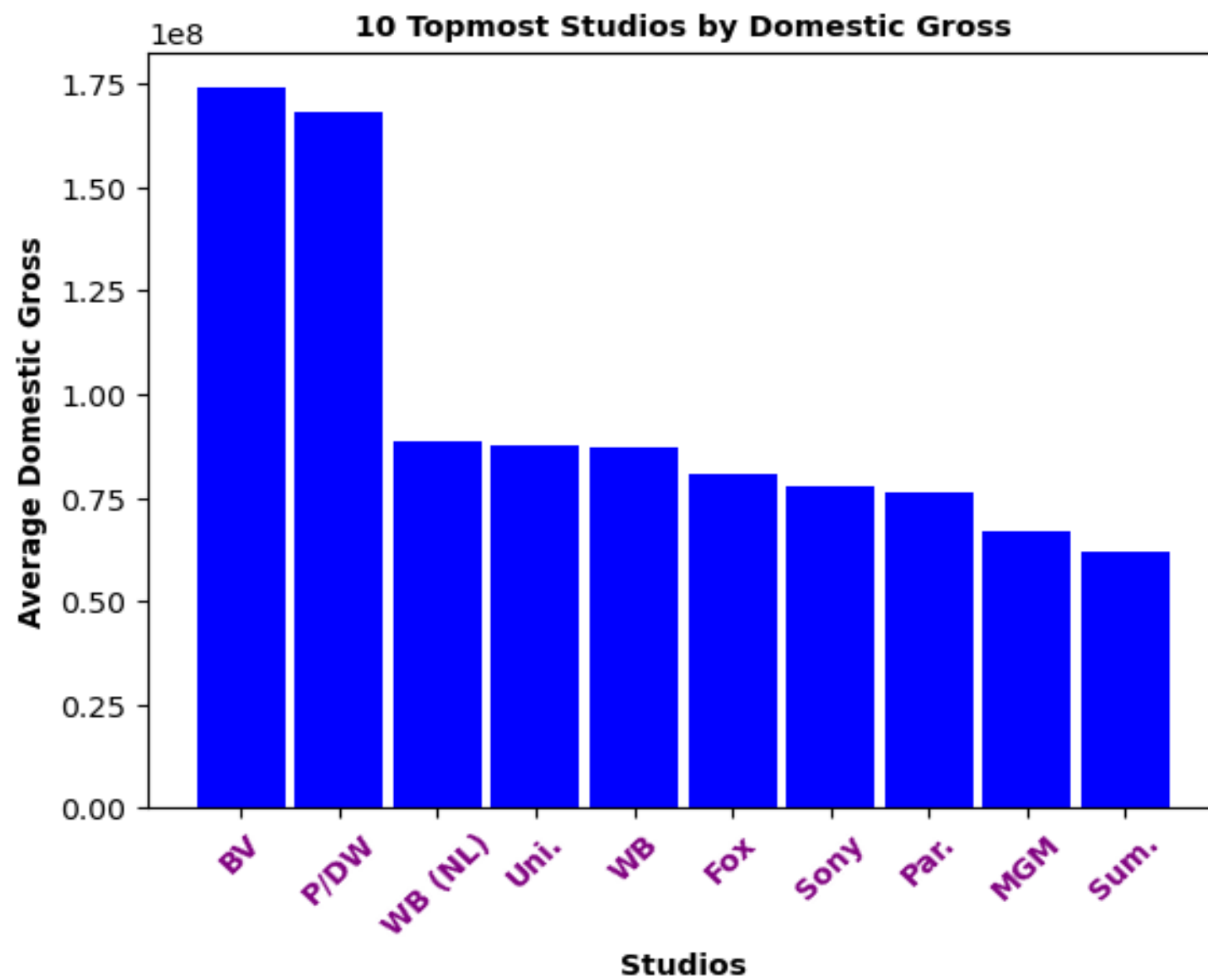
DATA

For this project we used 3 datasets:

- Movie Budget
- Bom Movie Gross
- IMDB Data

BOM MOVIE GROSS

For the movie budget we are looking at the which studios are doing well and producing better films. We will also look at which studios are going to be a competition for our Microsoft studio. We are going to group our Bom movies dataset and group using studio and gross and plot a histogram to show the average domestic gross for the 10 top most studios.
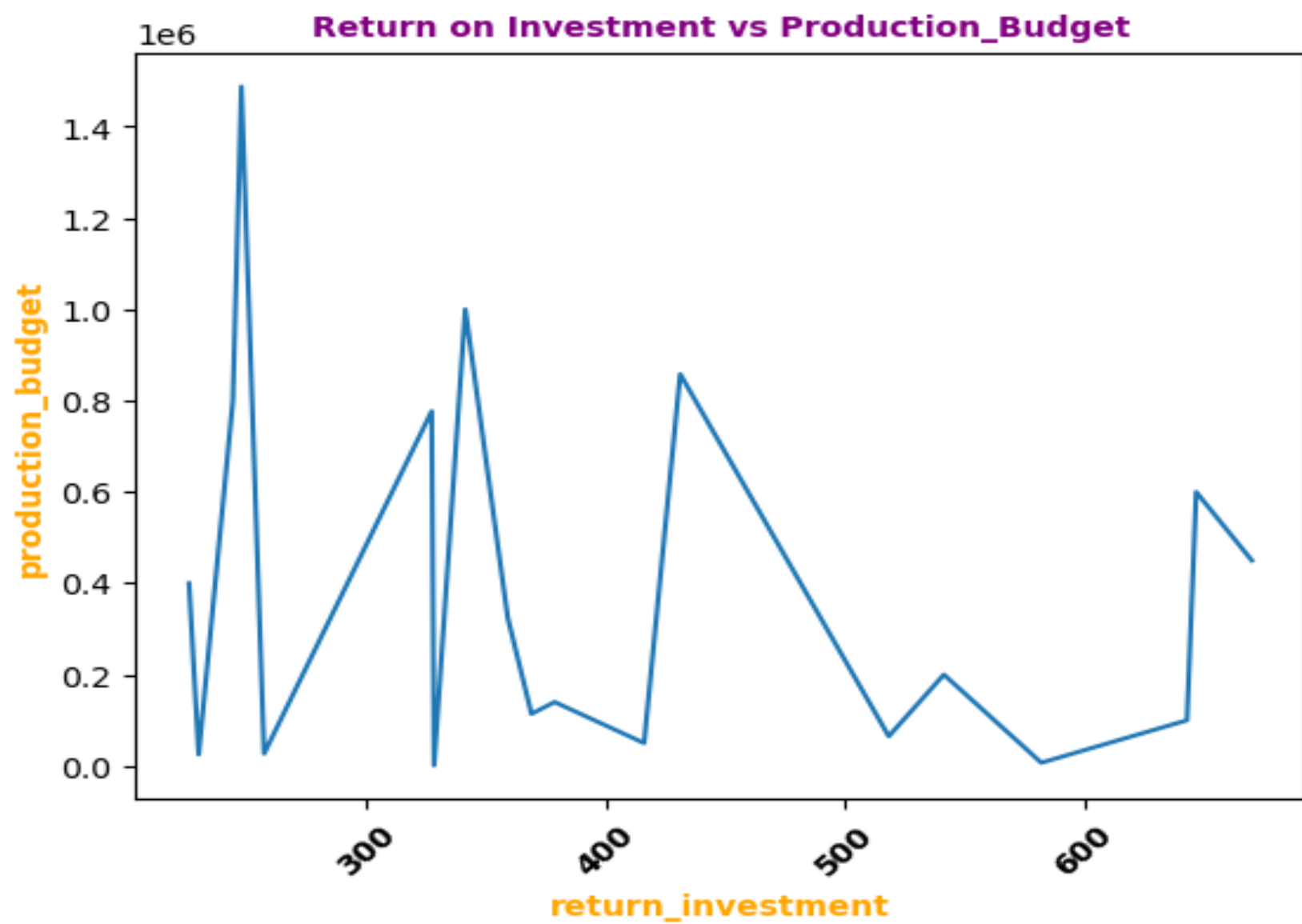
10 Topmost Studios by Domestic Gross

Explanation

- Looking at the top 10 studios that are producing movies we find that at the top is BV who's domestic gross is averaging at 1.73m while at P/DW is averaging at 1.68m at second position. Most of the studios are averaging between 6 and 8m. For Microsoft to be the best film producing studio they will look forward to competing with BV studios and P/DW studios. Microsoft can learn from BV and P/DW studios and discover what makes them the best studios with the highest averaging domestic gross.

MOVIE BUDGET DATA

We are performing analysis for the movie budget dataset. For analysis we are looking at the production cost which we are going to compare with the return investment. We want to see if there is a linear relationship between the production budget of the movie and the return on investment. To compare the two we will draw a line graph.

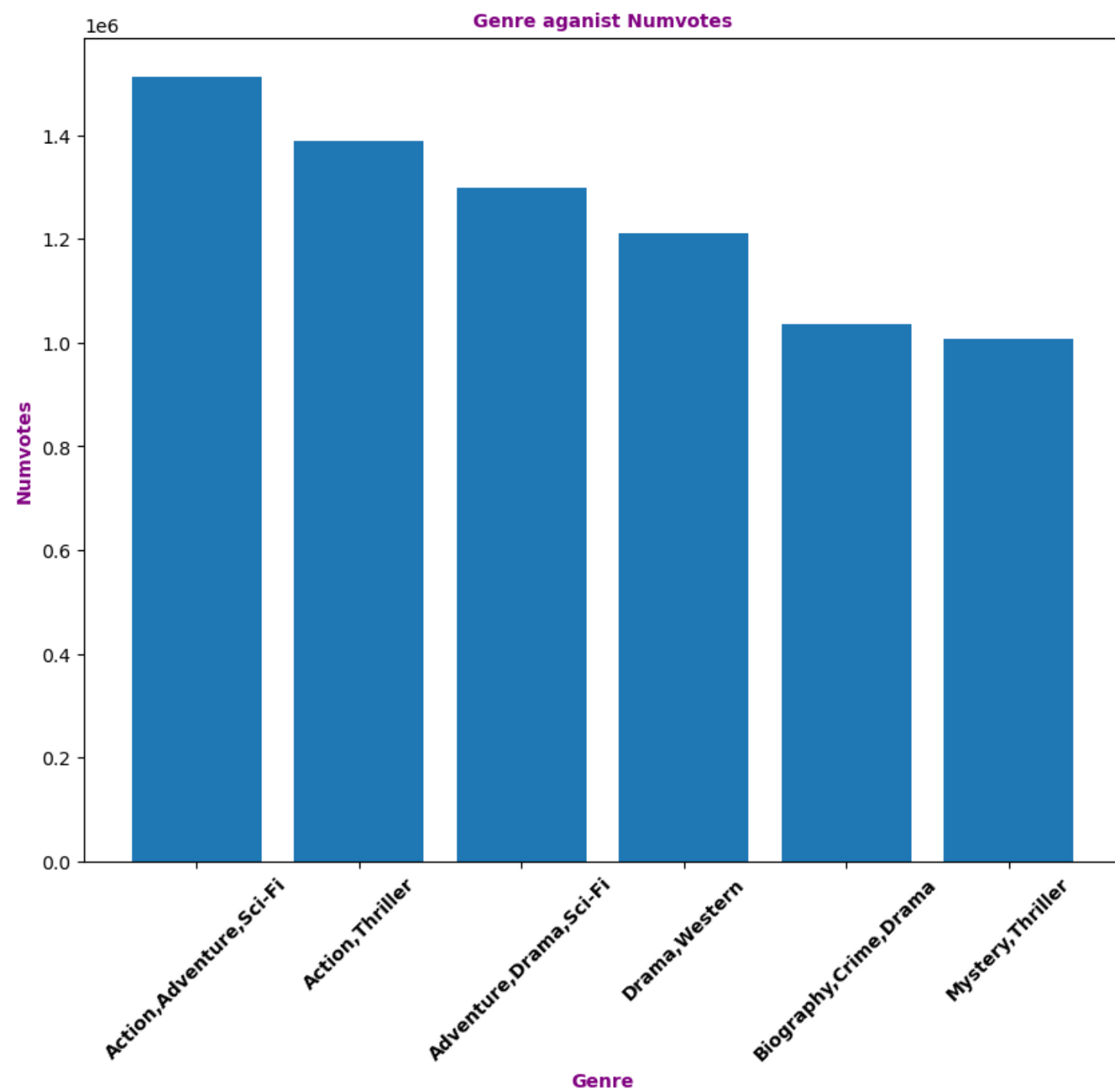**Return on Investment vs Production_Budget**

Explanation

For this analysis we looked at the return investment against the production budget. According to the line graph we can clearly see that there is no linear relationship between the movie production budget and the profit made from the movies. Microsoft should look at other ways to make a movie successful rather than having a big production budget.

IMDB DATA

For this analysis we are looking for the genre which has the most votes. Our data is grouped by genre and numvotes(number of votes) this will tell us which movie genre has the most votes. For this analysis we draw a figure that clearly depicts the studios with the number of votes that they acquired.

Genre aganist Numvotes

Explanation

For this analysis we have looked at the genre movies against the number of votes. According to the graph action,adventure,sci-fi is the most streamed movie as it acquired the most votes averaging at 1512360 votes. Action and thriller movies are the second most streamed movies with 1387769 votes. The least watched genre was mystery and thriller with 1005960 votes. Microsoft may consider producing more action,adventure,sci-fi movies as they are the most watched and they can also double down on action and thriller without excluding the other genres as they average between 1m and 1.3m votes which is still high.

Conclusion

This analysis leads to three recommendations that Microsoft should consider when creating their new studio:

1.Microsoft should do more research and learn from BV and P/DW studios and discover what makes them the best studios with the highest averaging domestic gross.

2.Microsoft should look at other ways to make a movie successful rather than having a big production budget. since there's no correlation between the budget and the movies success Microsoft can consider looking for good script writers, directors , actors and quality videos for the success of the movies.

3.Microsoft may consider producing more action,adventure,sci-fi movies as they are the most watched and they can also double down on action and thriller without excluding the other genres.

NEXT STEP

More research and further analysis could be helpful in yielding additional insights that Microsoft would use when setting up their studio. They should focus on gaining insights and familiarity for later investigation.

1.Predicting undesirable outcomes- this models could help Microsoft to be prepared they should consider investigating possible negative outcomes that can occur so that they can look for ways to overcome them.

2.Modelling for qualified personnel- Modelling how impactful having qualified personnel could help in realizing what makes movies successful since we so there no linear relationship between production budget and the success of the movie

3.More and better predictions on the genre of movies that that are a success - the models would give more insights on the kind of movies that the studio could focus on.

Thank you
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THANK YOU

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