





# Outline

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# Business Problem

To determine the viability of establishing a movie studio for Microsoft.

# Data

The data set sources included:

- [Box Office Mojo](#)
- [IMDB](#)
- [Rotten Tomatoes](#)
- [TheMovieDB](#)
- [The Numbers](#)

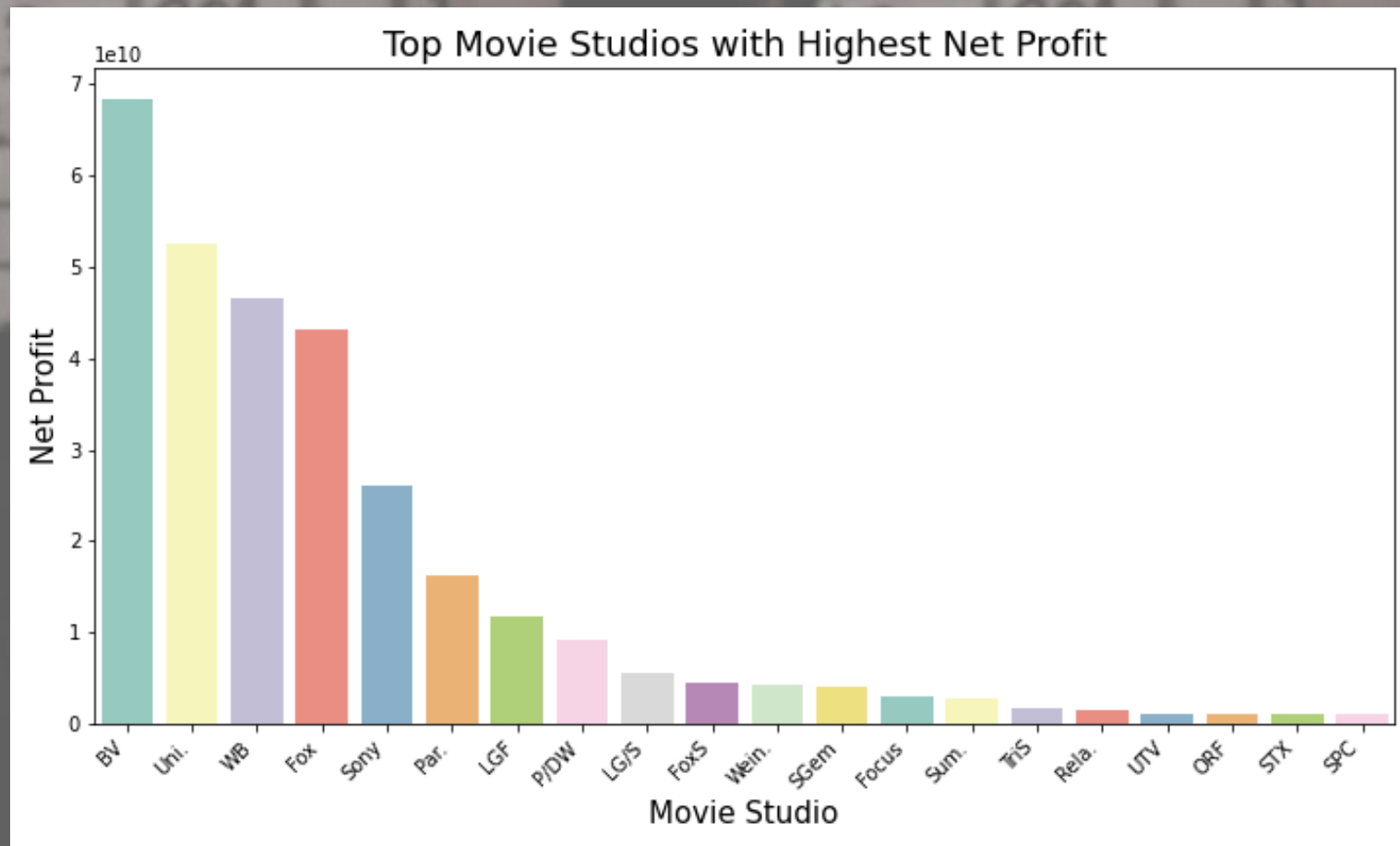


# Methods

This project uses Exploratory Data Analysis to clean, scrub, visualize, summarize and interpret the data to gain insights and identify patterns, trends and potential relationships between variables.

# Results

## Top 4 Movie Studios with the highest Net Profit



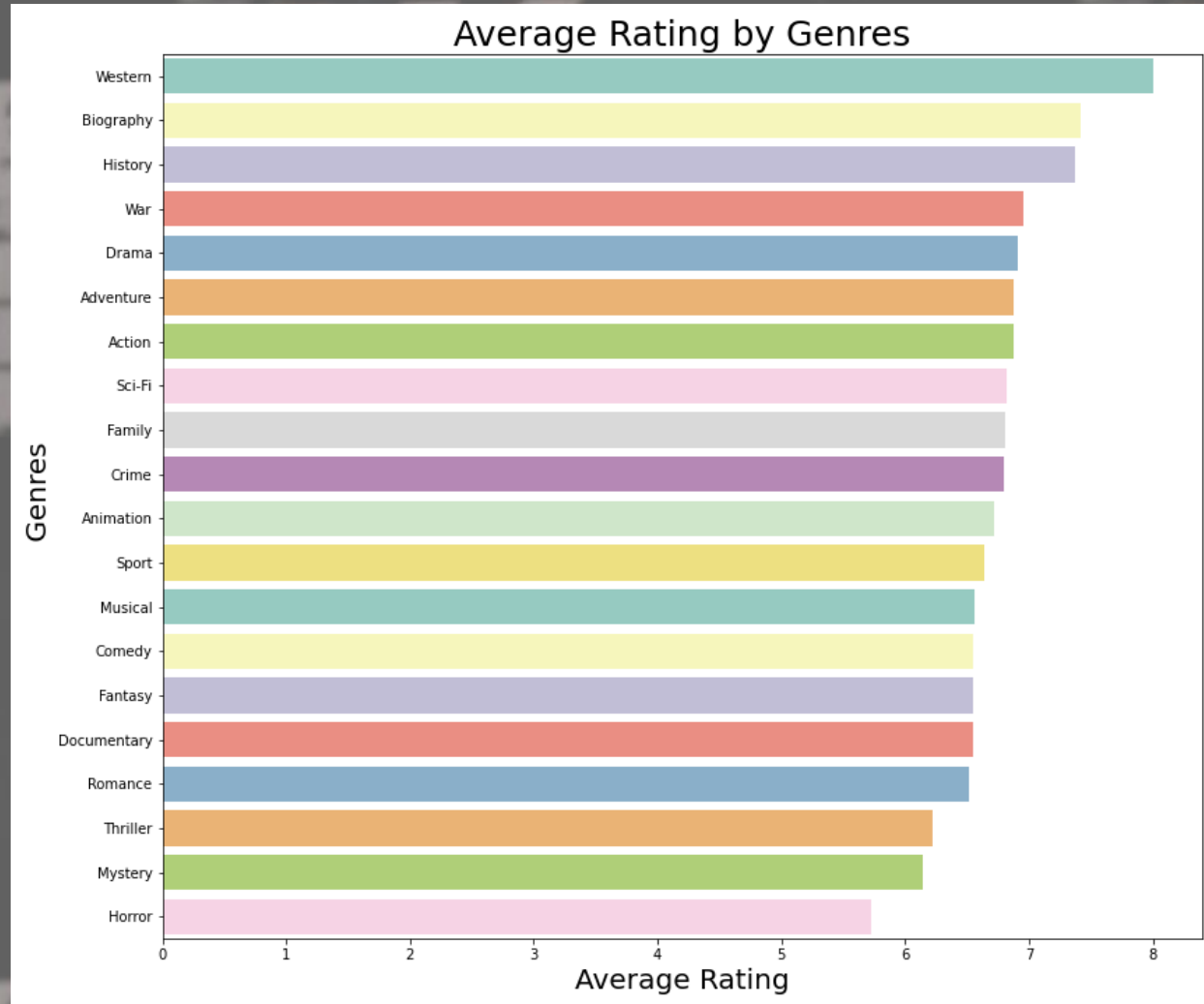
The plot showcases the top 4 movie studios that have the generated the highest net profits as Buena Vista(BV), Universal Studios(Uni.), Fox and Warner Bros Studios(WB).







# Average Rating by Genres

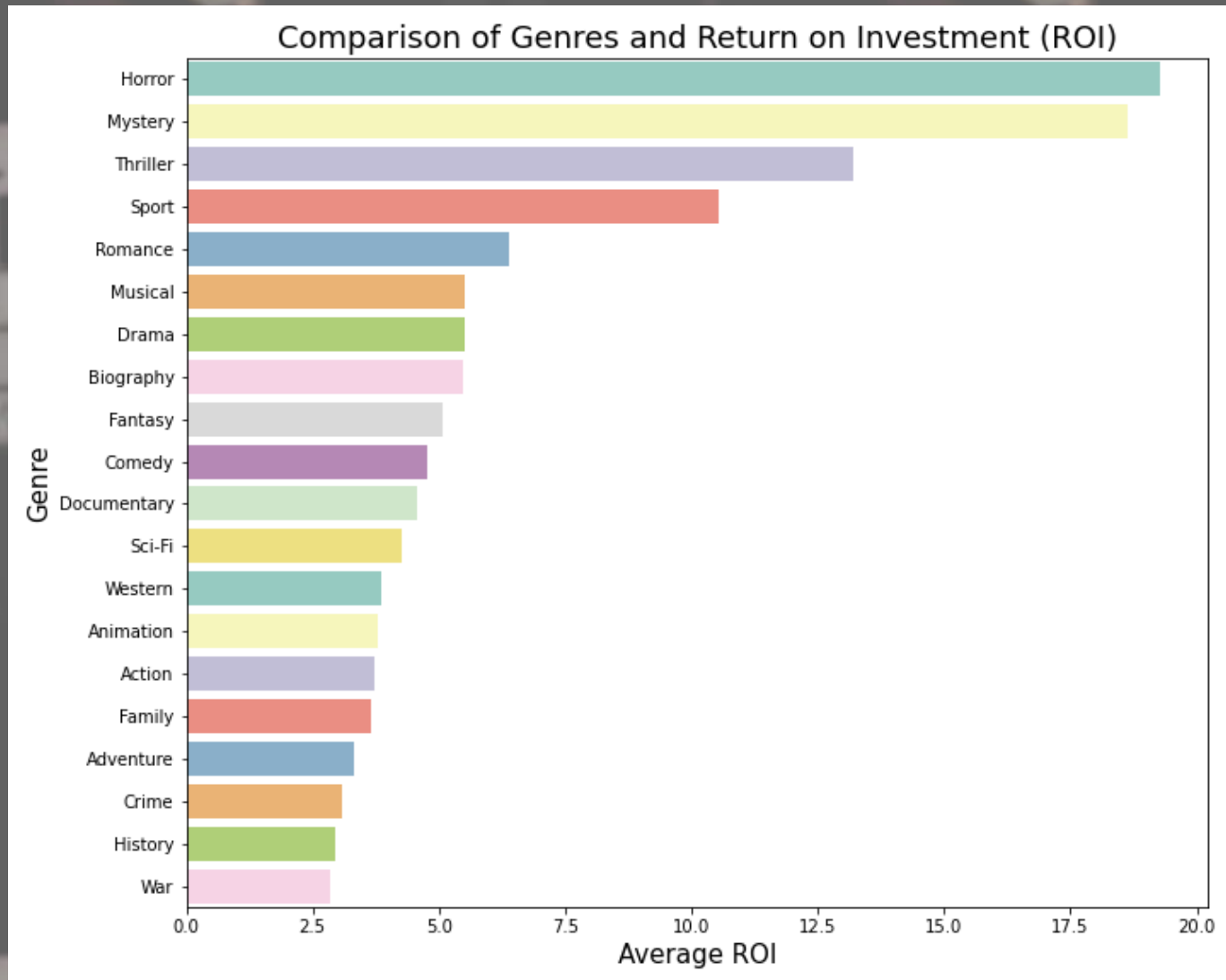


This visualization shows that all genres in our dataset have an average rating above 5. However, this information alone does not suggest a direct correlation between movie genres and the potential success of a movie studio.

# Genres with the highest ROI

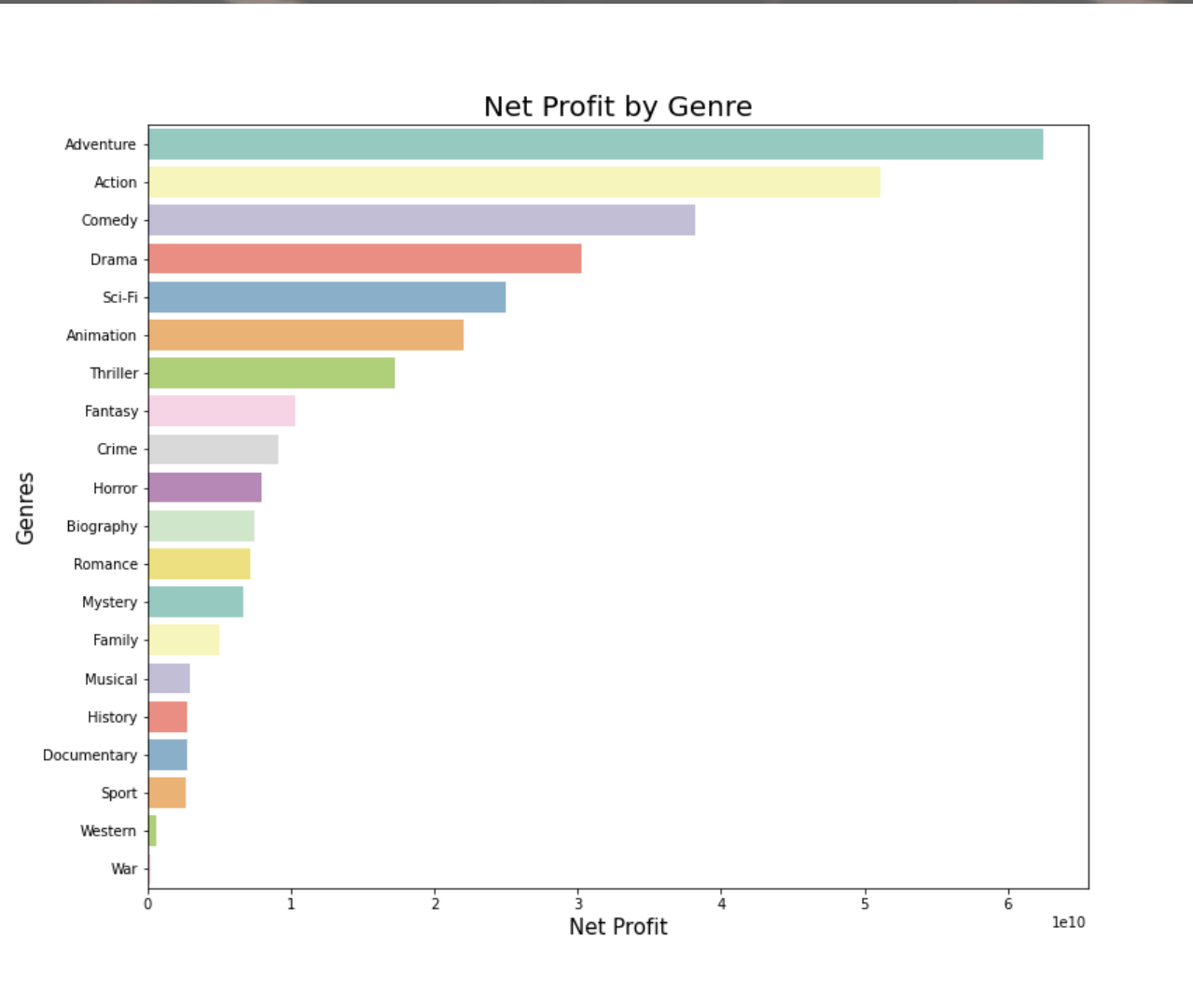
| Genre       | Average ROI |
|-------------|-------------|
| Horror      | 19.5        |
| Mystery     | 18.5        |
| Thriller    | 13.5        |
| Sport       | 10.5        |
| Romance     | 6.5         |
| Musical     | 5.5         |
| Drama       | 5.5         |
| Biography   | 5.5         |
| Fantasy     | 5.0         |
| Comedy      | 4.5         |
| Documentary | 4.5         |
| Sci-Fi      | 4.0         |
| Western     | 3.5         |
| Animation   | 3.5         |
| Action      | 3.5         |
| Family      | 3.0         |
| Adventure   | 3.0         |
| Crime       | 2.5         |
| History     | 2.5         |
| War         | 2.5         |

The genres that have the highest Average ROI as seen in the visualization are Horror, Mystery, Thriller, Sport and Romance.



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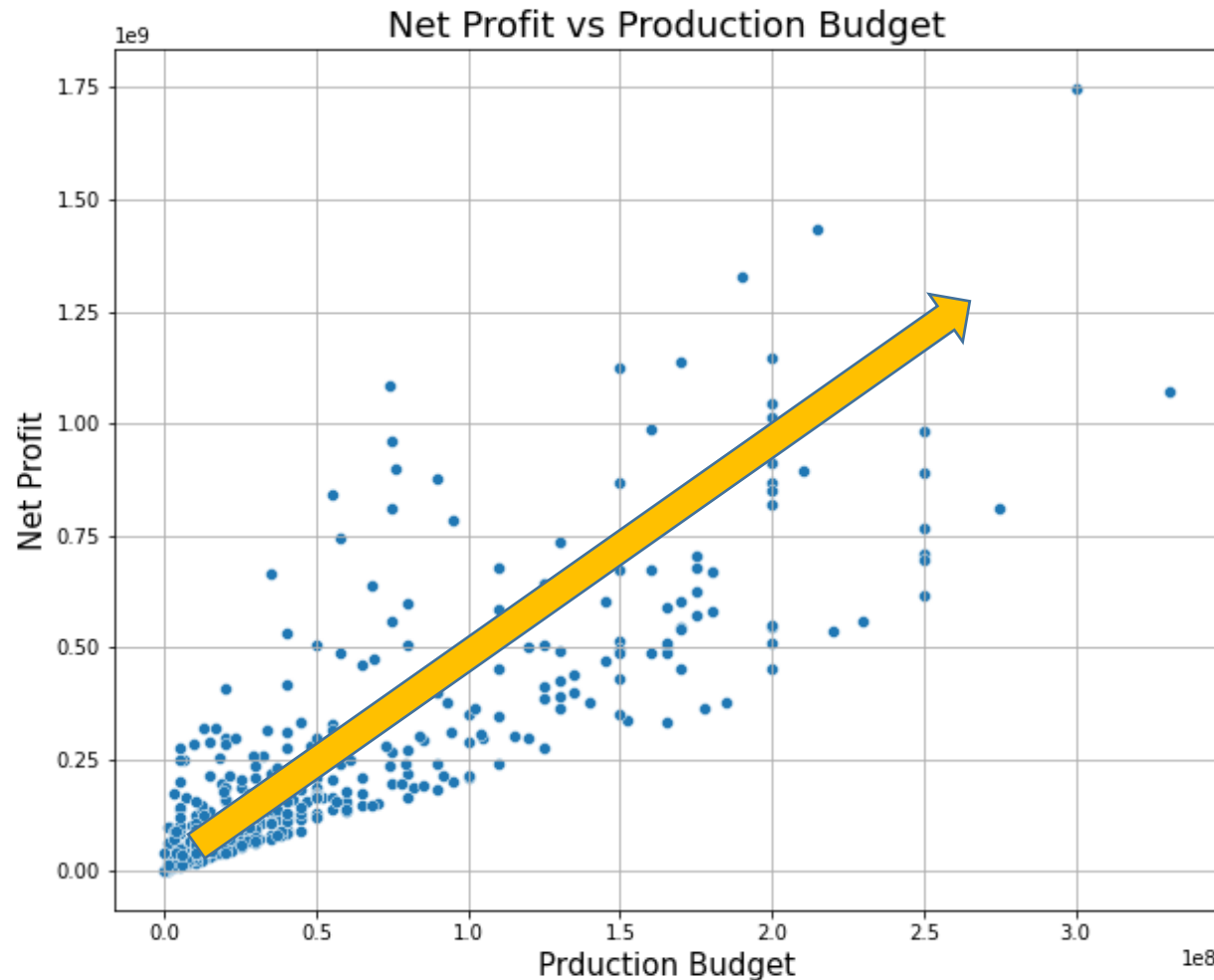
# Movie Genres that Generated the Highest Net Profit



Adventure, Action, Comedy and Drama seem to have generated the highest net profit while War and Western have generated the lowest net profit.

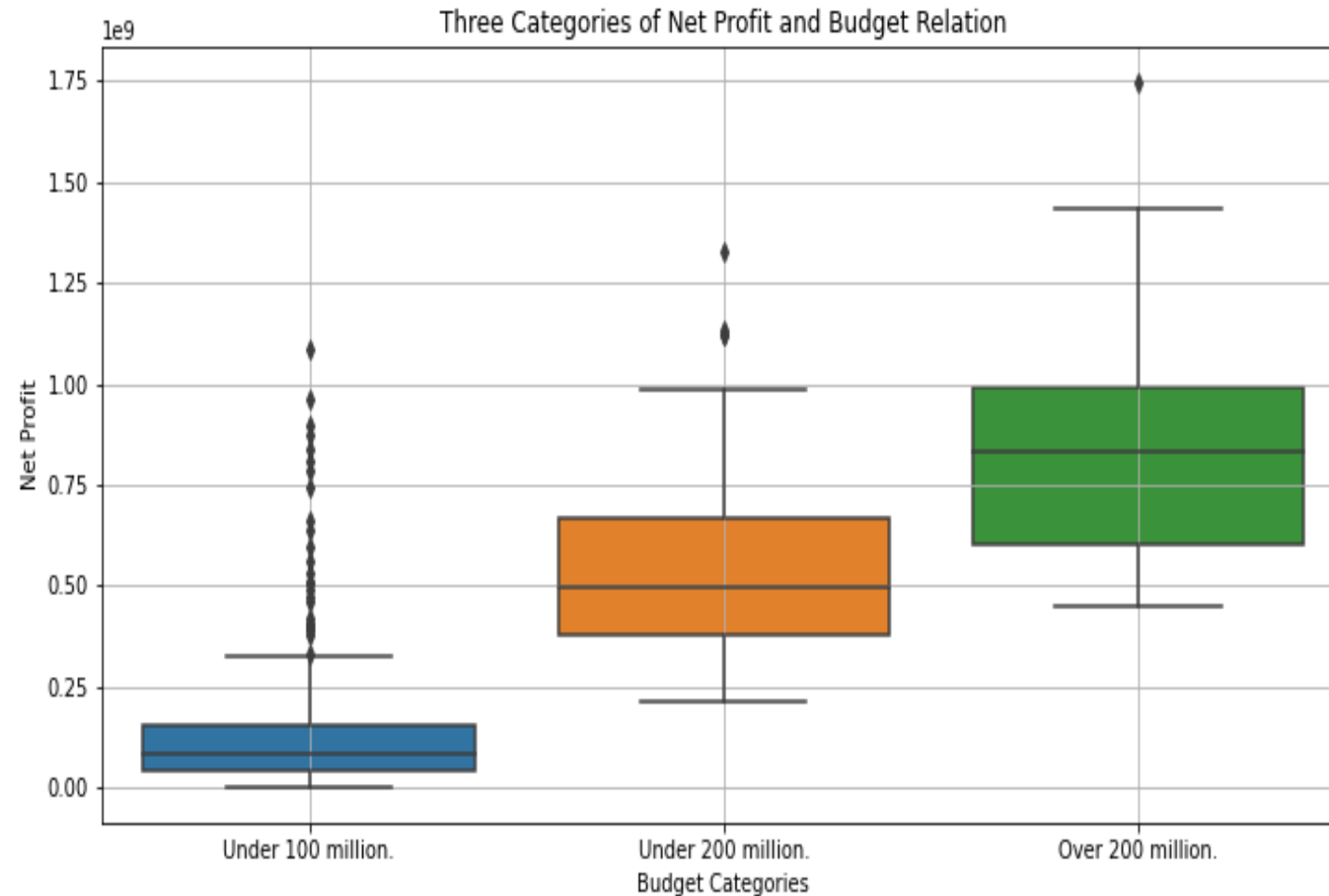


# Correlation between the Production Budget and the Net Profit



It is observed that the more the production budget the more the net profit.

# Three Categories of Net Profit and budget Correlation



The most Net Profit is gotten from a Production Budget of over 200 million Dollars and the least Net Profit from a Production Budget of under 100 million Dollars.

# Recommendations

- Prioritize making movies in the Adventure, Action, Comedy, and Drama genres, as they have demonstrated higher net profit potential.
- Microsoft should focus on producing movies in the Drama, Comedy, Adventure, and Action genres, as they hold greater audience appeal.
- Boosted Budgets, Bigger Returns: Higher film budgets enable improved production values.
- Strategic Partnerships: seeking collaborations with movie studios like Universal, Buena Vista and Warner Bros to boost market reach and profitability.
- Exploring untapped genres: taking a risk and venturing into movie genres with fewer productions.





