

In this work, we are trying to come up with some (three or more) business plans for Microsoft to consider in order for them to enter film industry. The **goal** of this work is to come up with the best **genre**, **director**, **movie studio** and the **release month** for the movie by working with some available data. We define return ratio (shown by R here) calculated by R = (D + W - B)/B with D, W, B are respectively, domestic gross, worldwide gross, production budgets and we consider highest mean of return ratio as a metric to use to obtain the results.

#### **Data**

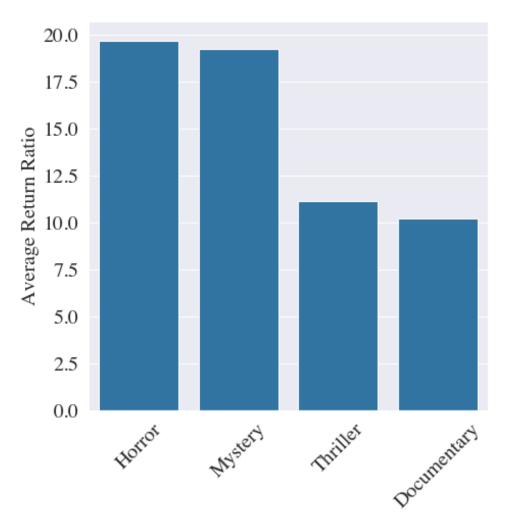
The data we use contains information about different movies. These data frames contain information on name of the movies, production budgets, domestic and worldwide grosses, directors, genres, release date, rating etc.

### Results

## Selecting a Genre

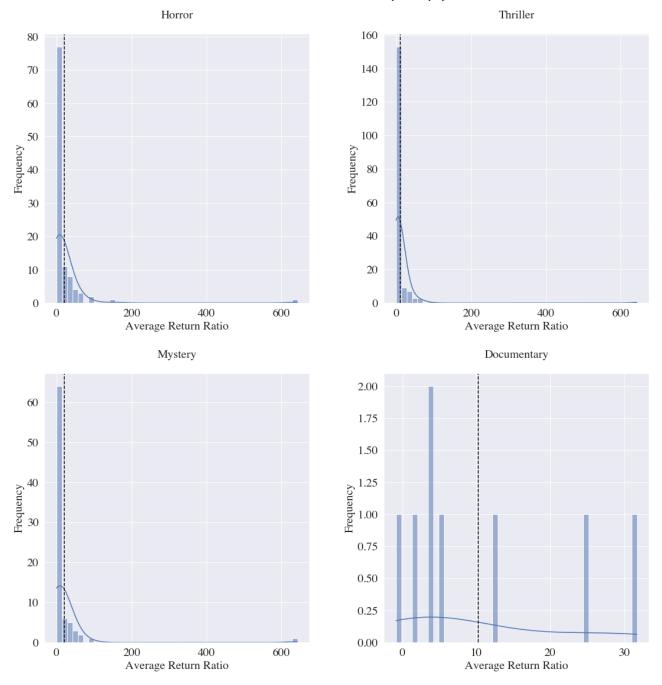
By performing some analysis we find that genres as shown in the next figure:





Genre

The histogram of these genres are shown below:

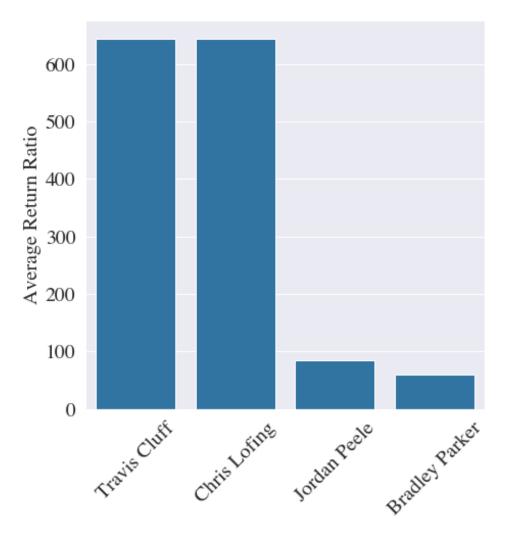


Since Horror and Mystry genres both almost have equal average return ratio, we will check which one has the higher average rating. Then we pick the one with the higher average rating. After performing some analysis, we pick Mystry as the main genre.

## **Selecting a Director**

In the selected genre, we try to find a director whose movies have the highest average return ratio. The results are shown below





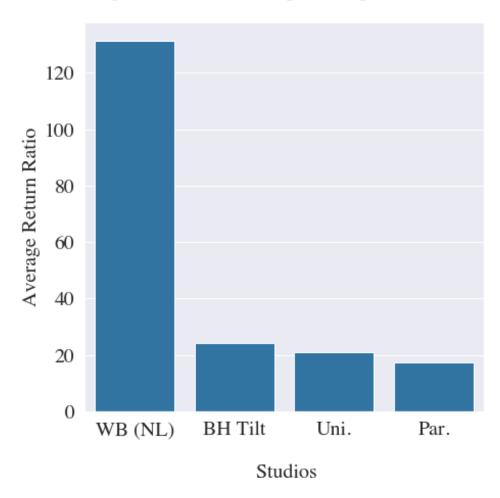
#### Directors

We see that Travis Cluff's movies have as equal average return ratio as the works of Chris Lofing. Now we check whose work gained the higher average rating. We see that both works have again equal average rating. Now we check the total number of votes to select based on. But, again there are equal number of votes. So we would suggest to work with either directors.

#### Selecting a Studio

By performing analysis we see that WB (NL) has made movies in the selected genre with a higher average return ratio. So collaboration with this studio would be suggested. The result of the analysis is shown below.

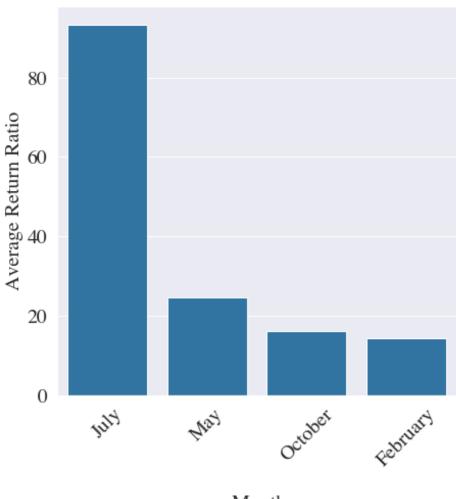




## Selecting a Release Month

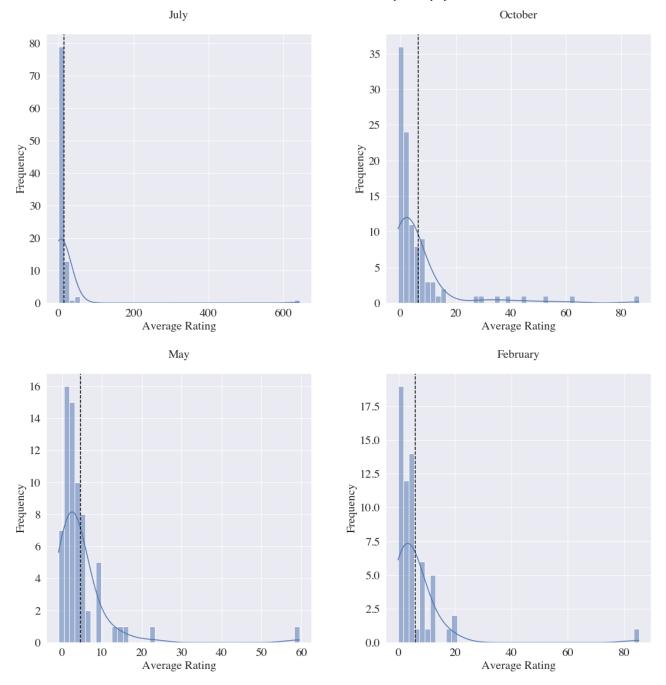
We would recommend to consider July as the month of the release. The results of the analysis are shown below

#### Top Months with the Highest Avg. Return Ratio



Month

The histogram of the distribution of data is shown below



# **Conclusion and Suggestions:**

In this report, we used highest mean of the return ratio as a metric to find the genre. Then we found the name of the director and the studio who have made movies in the chosen genre with the highest mean of the return ratio as well. The results of this report are as follows:

1. **Recommended Genre**. After analyzing available data, we concluded that Mystery has the highest mean of return ratio among all other genres. Therefore, we recommend Microsoft to choose Mystery as the genre to make a movie.

- 2. **Recommended Director**. After choosing Mystery as the genre of the movie, we did analyze the data and we realized that Chris Lofing and Travis Cluff have made movies as a director with the highest mean of return ratio. Therefore, we recommend Microsoft to choose either Chris Lofing or Travis Cluff as the director of their movie.
- 3. **Recommended Month of Release**. Considering that the Mystery as the genre of the movie, we concluded that movies released in July have the highest mean of return ratio. Therefore, we would recommend Microsoft to release their movie in July.
- 4. **Recommended Studio**. From analyzing movies within Mystery genre, we concluded that Mystery movies made by studio WB (NL) have the highest mean of return ratio. Therefore, we recommend Microsoft to work with WB (NL) for making a movie.

## **Next Steps**

The next steps we would recommend Microsoft to consider for achieving their goals are:

- 1. **Selecting Writers and Actors and Actresses**. We would recommend to Microsoft to do the same analysis to find the best writers, actors and actresses for their movie.
- 2. **Selecting Production Budget**. We recommend Microsoft to select production budget to consider to make a movie by analyzing available data.

#### Releases

No releases published Create a new release

#### **Packages**

No packages published Publish your first package

#### Languages

Jupyter Notebook 55.3%HTML 44.7%