Microsoft Movie Analysis

Breaking into
The Movie Industry

Summary

The goal of the project was to find insights based on the trend of the movies released in the past to enable Microsoft studios to break into the Movie Industry.

I used data sets and analyzed the movies, their genres, ratings, budgets to come up with insights that will drive the success of Microsoft studios.

My analysis concluded that Dramas, Comedies and Action movies were the top 3 genres and that Microsoft should aim to release their movies in June and May for maximum revenues.

Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

Business Problem

Microsoft is aiming to break into the Movie industry using Microsoft Studios. It is a new field for them. We shall focus on 2 key factors:

- What movies should they make?
- How do they attain maximum revenue and Return on Investment(ROI)?

Data

The Datasets used came from IMDB and The Numbers.

The data from IMDB contained movies with their titles, ratings, number of votes, genres and so on.

The data from The Numbers contained movie titles and financials all of the financials utilized in this dataset for analysis.

Methods

Before I could utilize the variables aforementioned, the data had to undergo a process of preparation to ensure that the insights I would generate would be as accurate as possible. This included:

- Dropping rows with empty values
- Removing any duplicated rows
- Making sure the data is in the correct format
- Creating variables necessary for analysis
- Dropping variables not needed in analysis

Results
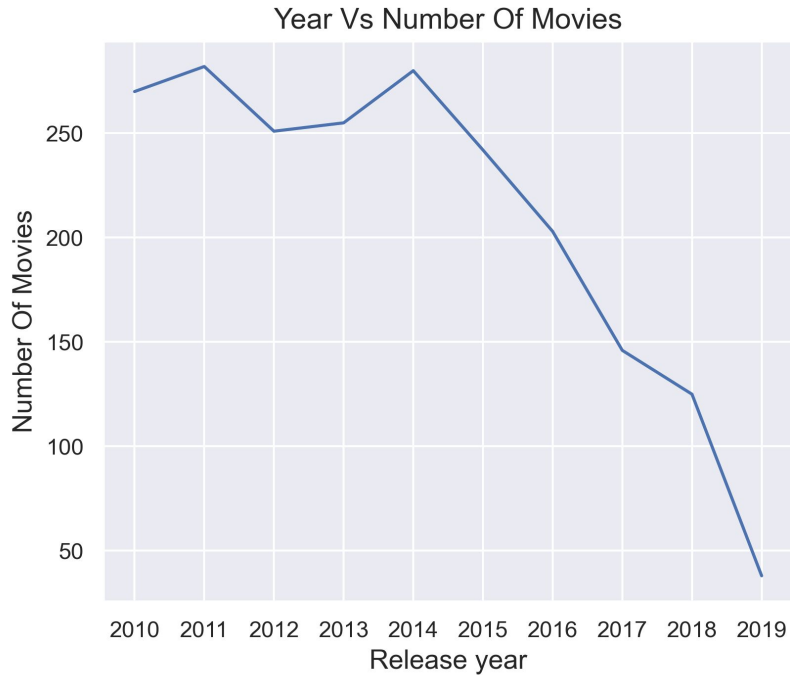
Here, we are able to see that the number of movies produced each year has reduced since 2014. Microsoft studios should be wary of this fact as they seek to break into the movie industry.

Months vs Number Of Movie Releases
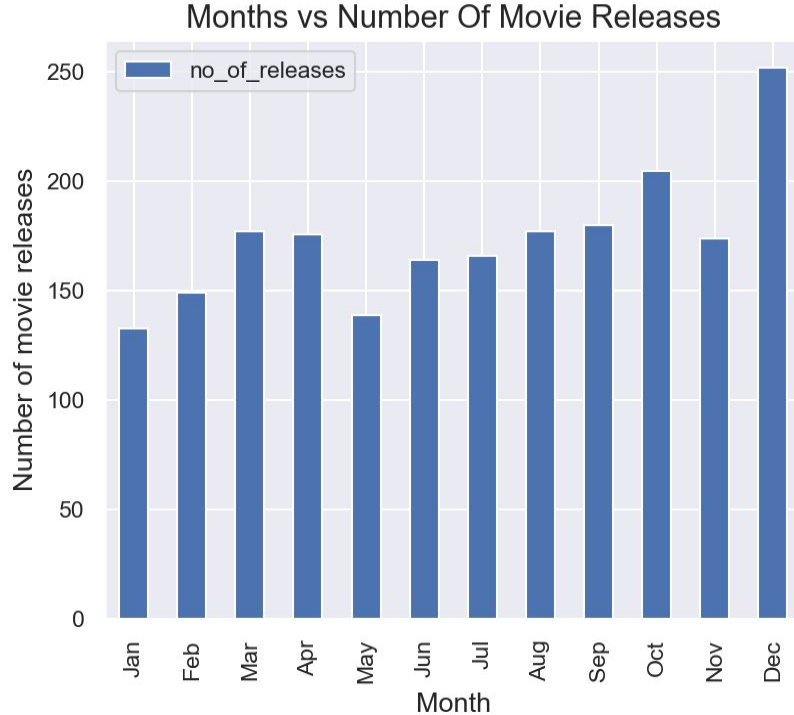
That said, over the last 10 years, December has on average had the most number of movies released. This is followed by October and September. This indicates a high number of studios targeting release around these times.
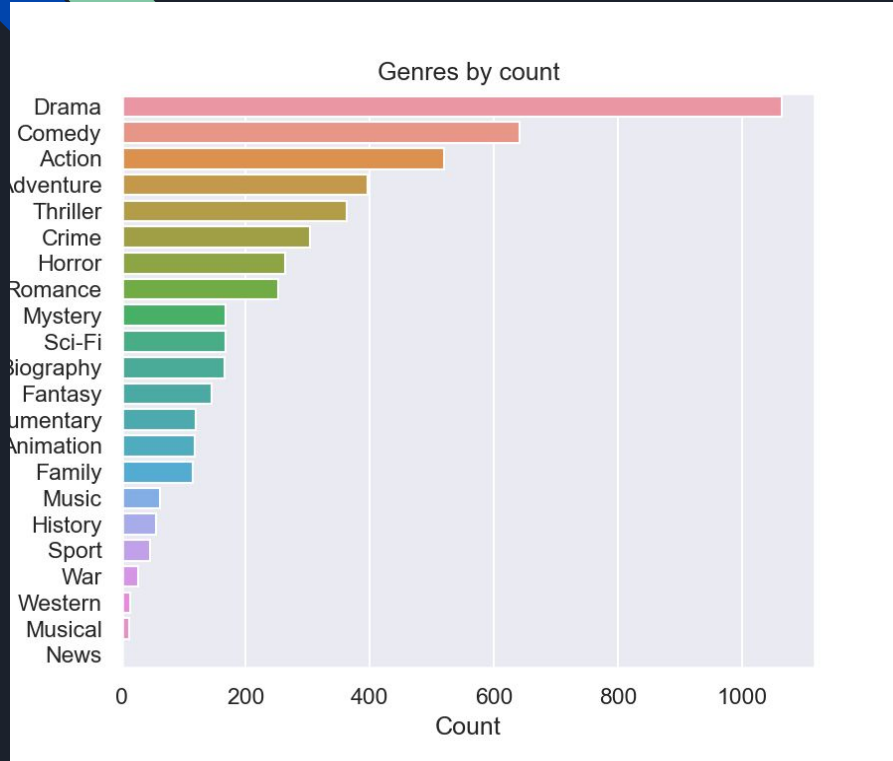
Average revenue by month (2010 - 2019)
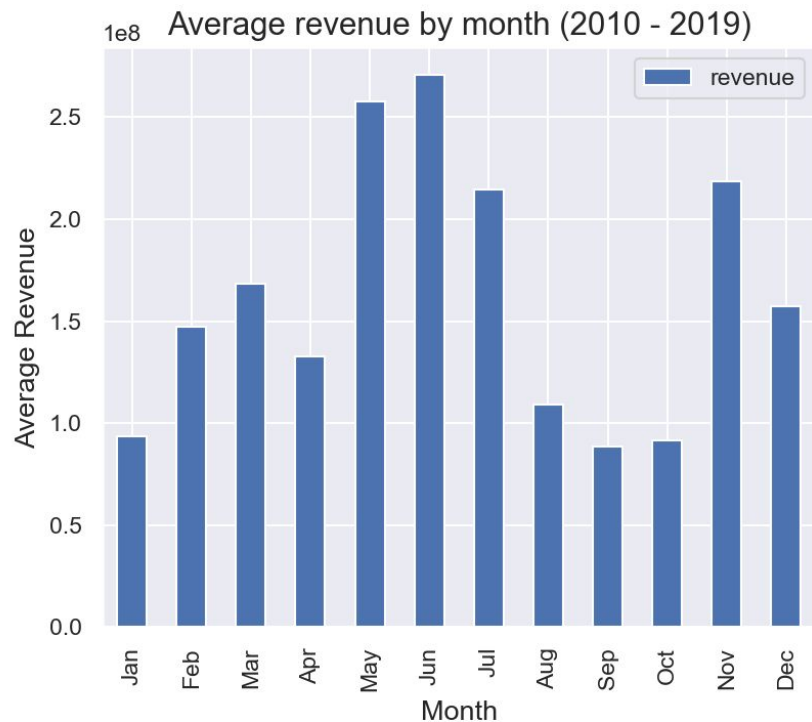
However, we are interested in the revenue. Where does the money lie?

In the last 10 years on average, June has had the highest revenue produced by movies. This followed closely by May, November then July.

These are the months we should me targeting for maximum profitability.

Genres by count

Now that we know which months to target, what kind of movies should they make?

Over the last 10 years, Drama has had the highest popularity by count in terms of the movies produced. In second, Comedy, followed by Action, Adventure and Thriller.

This is indicative of a market with an appetite for these genres, hence their creation. This is where they should be focusing.

Production Budget Vs Average Rating
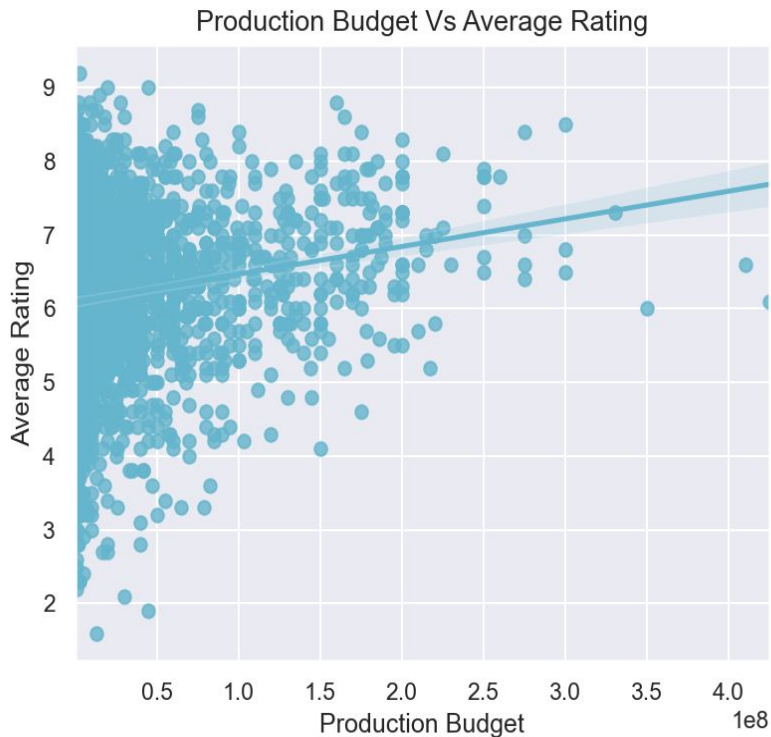
We now have our release months and genres. What can we learn about our finances?

Looking at Production Budget vs Average Rating, there is a low positive correlation between the two. In other words, optimizing our production will do very little to change our movie ratings.

Production Budget Vs Revenue(2010-2019)
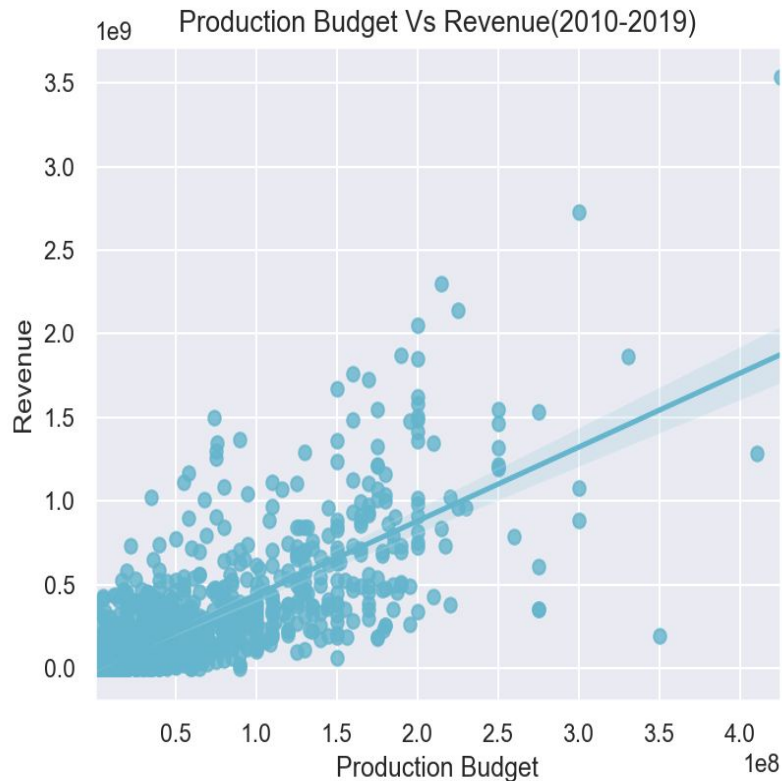
However, taking a look at Production Budget and Revenue, we can see a high positive correlation between the two.

Simply put, we can see a good connection between the budget and the revenue a movie generates.

It is good to remember that correlation does not imply causation. Nonetheless, this is a good sign of where we need to go.
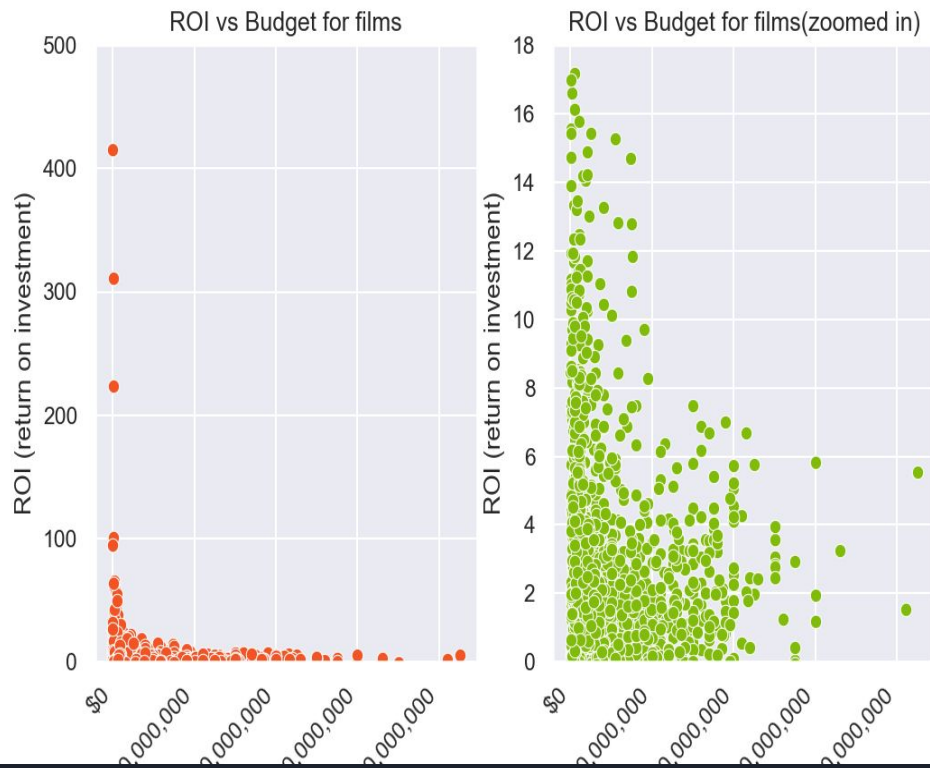
Good revenues sound amazing! But what does that really mean for their profitability?

Assessing the Return on Investment and Production Budget, we see that even lower budget movies can achieve a good Return on Investment. In fact, most good returns lie with the lower budget movies.

Caution lies here not to overspend on a movie expecting good returns.

Conclusions

All in all, I present Microsoft with these recommendations:

1. Initially, Microsoft should focus on Drama, Comedy, Action, Adventure and Thriller genres during movie production.
2. Microsoft studios should aim to release their movies in June, May and September to optimize revenues.
3. Microsoft studios should manage their movie production budgets as higher budgets do not necessarily lead to higher profits.

This is just a preliminary analysis. A more detailed analysis can be later carried out with focuses being on matters such as:

- Most profitable movies by genre
- Markets to target based on viewing population
- Inclusion of only movies rated by a large enough audience
- Individual factors that when put together can make a successful and profitable movie consistently

Thank You!

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