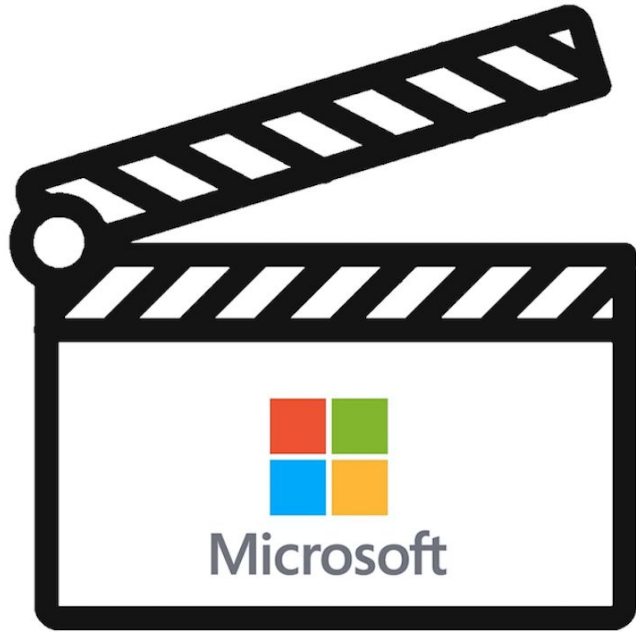# Making Movies at Microsoft

Contributors: Alaska Lam, Derek Davis, and Jeremy Lee

July 23, 2020

Problem Statement:

- Media and tech companies alike are now creating lots of original video content.
- Microsoft has decided they want to create original content as well and created their own movie studio.
- Unfortunately, Microsoft has no prior knowledge of the movie industry so they don't know how to move forward in creating content.
- In this presentation, we will investigate the practices that are foundational for a profitable/award winning film.

Business Value:

- A successful movie studio will create a new revenue stream for Microsoft
- Increase subscription user base by offering exclusive content to those with Microsoft 365 and Xbox Live subscriptions
- A successful movie studio can improve brand recognition which can in turn help with the promotion/sales of already existing Microsoft products
  - For example, think of a popular superhero relying on Microsoft products to save the day

Methodology:

- Analyze past movie data to make recommendations to Microsoft on how to be successful in the movie industry
- Some of the topics we will explore:
  - Budgets for high profits and awards
  - Best time to release a movie
  - How to divide budget between genres
  - Which ratings are most profitable by genre
  - Which Actors and Directors are most valuable
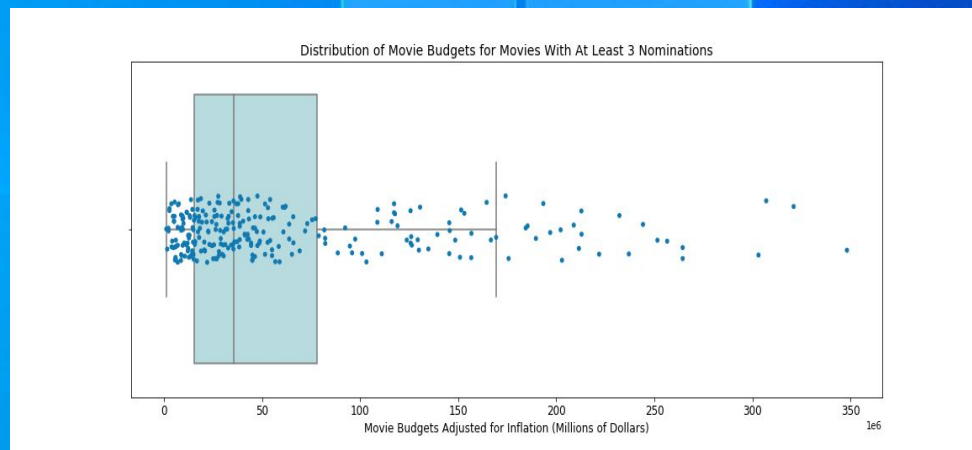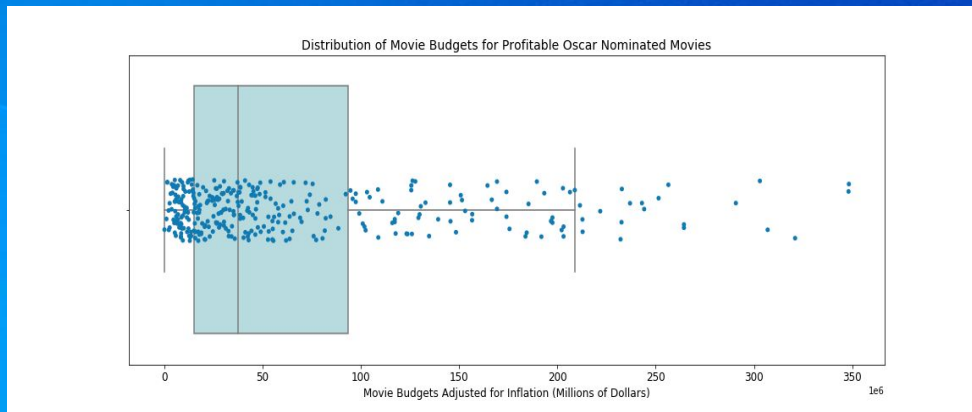 - Which studios are going to be the biggest competition

Recommendation 1:

- Our analysis shows that median profit margin for all profitable movies is 67%.
- We recommend a budget of $82,250,000 which correlates with an 80% profit margin and lessens the risk of reducing the profit margin by spending too much.
- The top 25 most profitable movies ever only have a slightly higher median profit margin of 84% so 80% makes Microsoft competitive

Adjusted Budget vs Adjusted Profit for Profitable Movies


Adjusted Budget vs Profit Margin
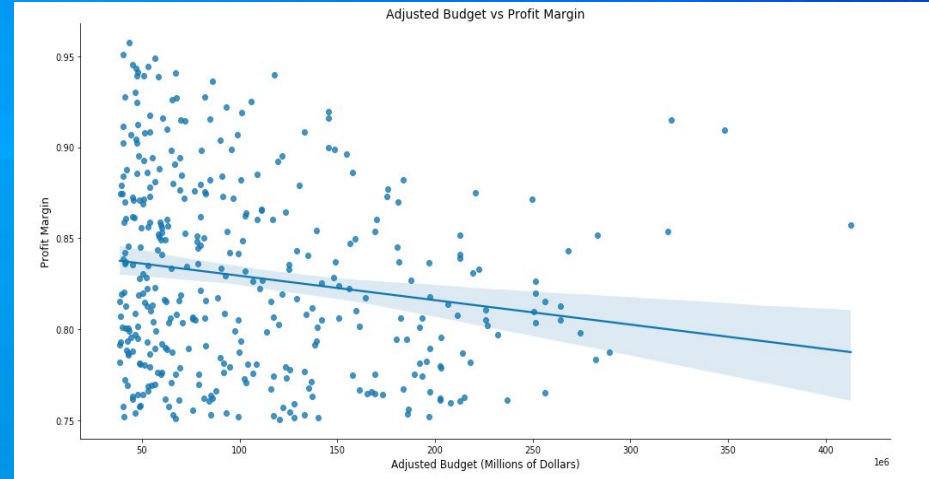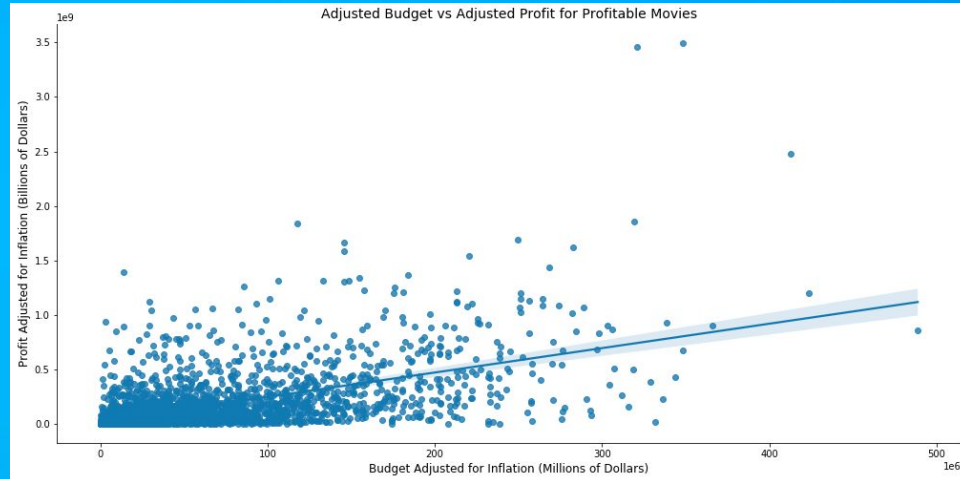
Recommendation 2:

- Oscars are the most prestigious award in the industry!
- In to win 1 award, you will need to be nominated for 3.
- The median budget of a movie with at least 3 nominations is $35,465,000.
- Microsoft should spend at least $35,465,000 to make and Oscar winning movie.

Distribution of Movie Budgets for Profitable Oscar Nominated Movies

Movie Budgets Adjusted for Inflation (Millions of Dollars)

Distribution of Movie Budgets for Movies With At Least 3 Nominations

Movie Budgets Adjusted for Inflation (Millions of Dollars)

Recommendation 3:

- Our analysis shows that 69% of the total net profits across all genres come from just the top six; Action, Adventure, Animation, Comedy, Drama, and Sci-Fi
- We would recommend focusing our projects on the six genres listed above, with a further recommendation to focus on Animation and Sci-Fi due to lower market saturation and high median net profits.

Net Profit By Genre

Percent of Net Profit By Genre
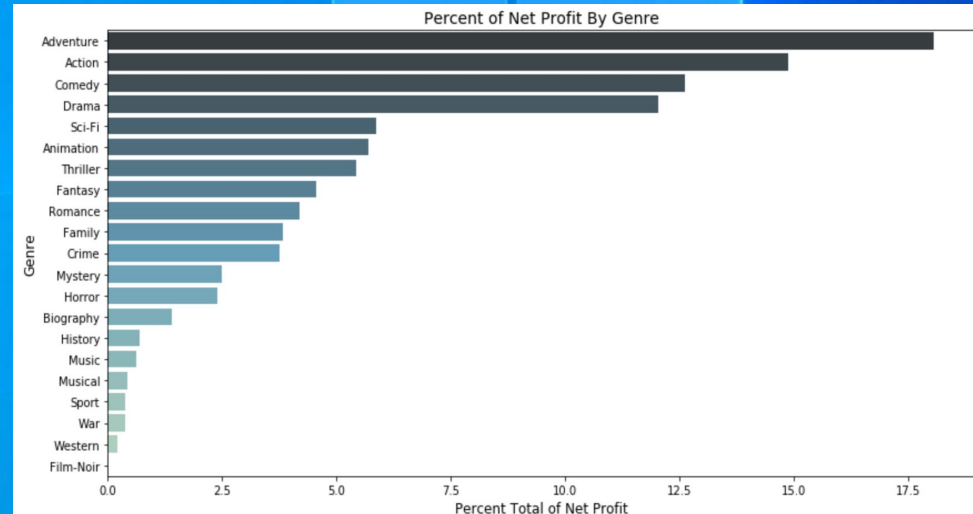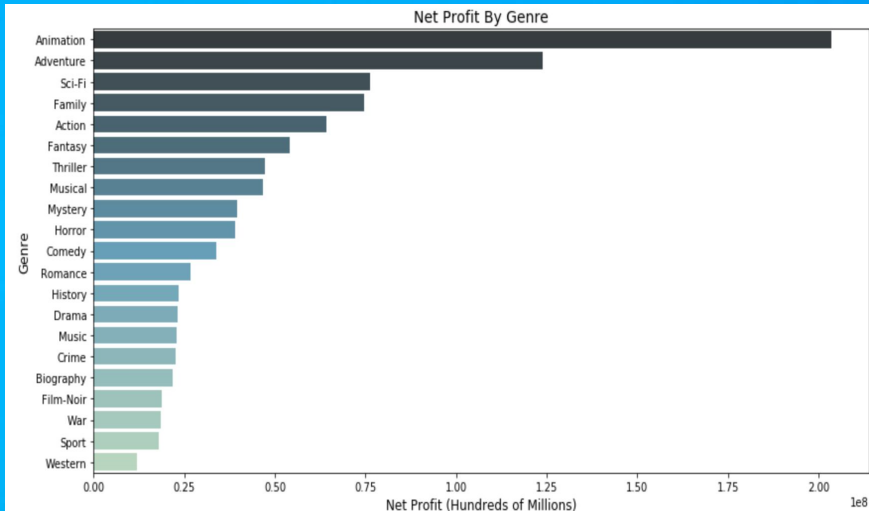
Recommendation 4:

- We recommend that Microsoft release the bulk of their movies, especially Animation, during the summer months.
- Adventure, Drama and Comedy movies would see similar success if released in November, but the recommendation remains to focus on summer.
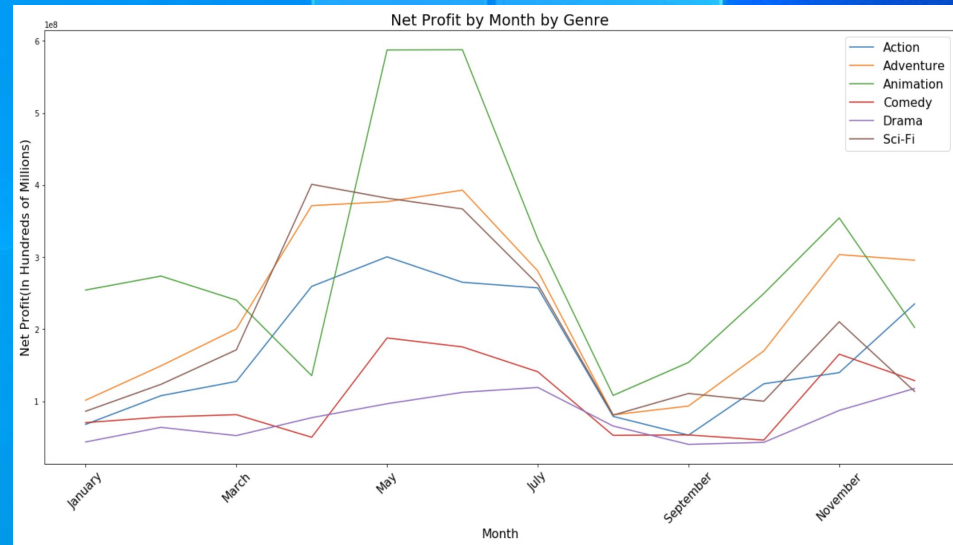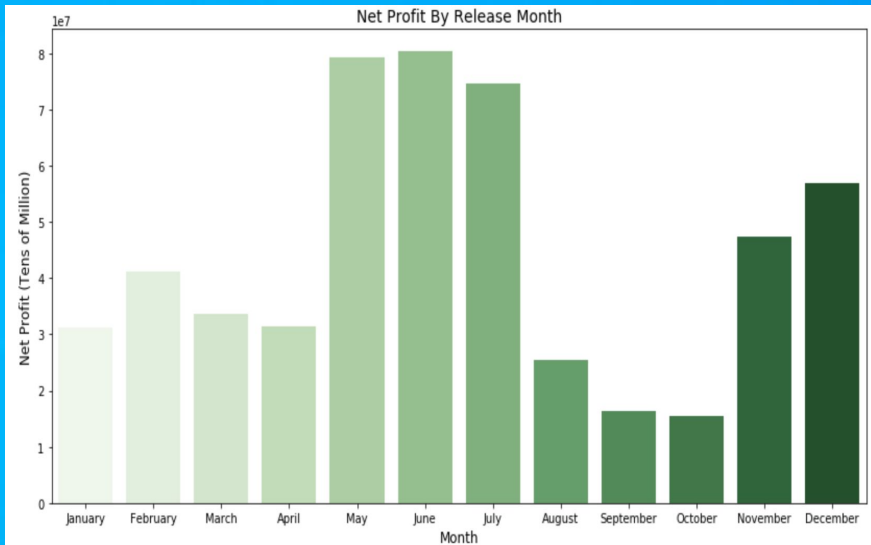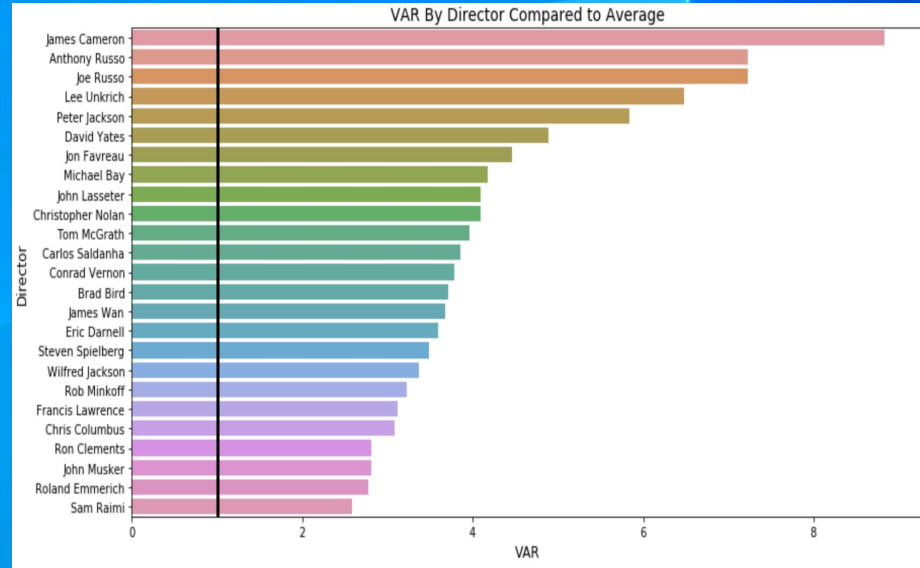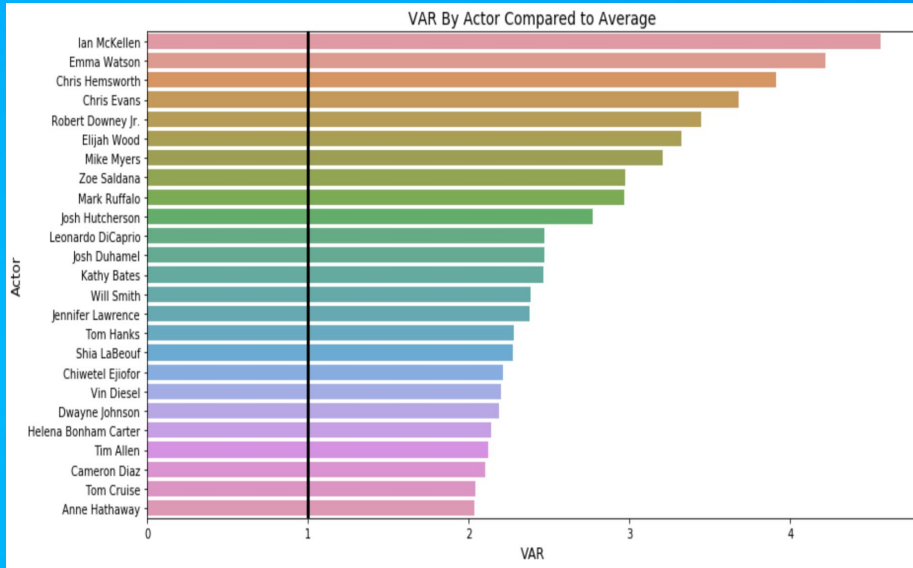
Recommendation 5:

- We recommend that Microsoft take into consideration the rating of the movie based on the genre and target audience. If making animation movies, it is wise to stick to a G or PG rating, otherwise PG-13 tends to have the most success.
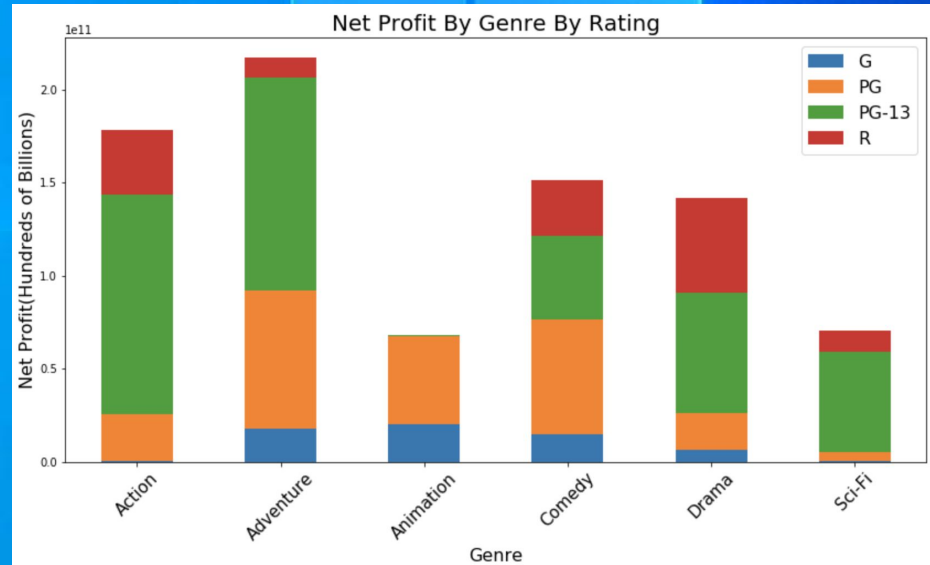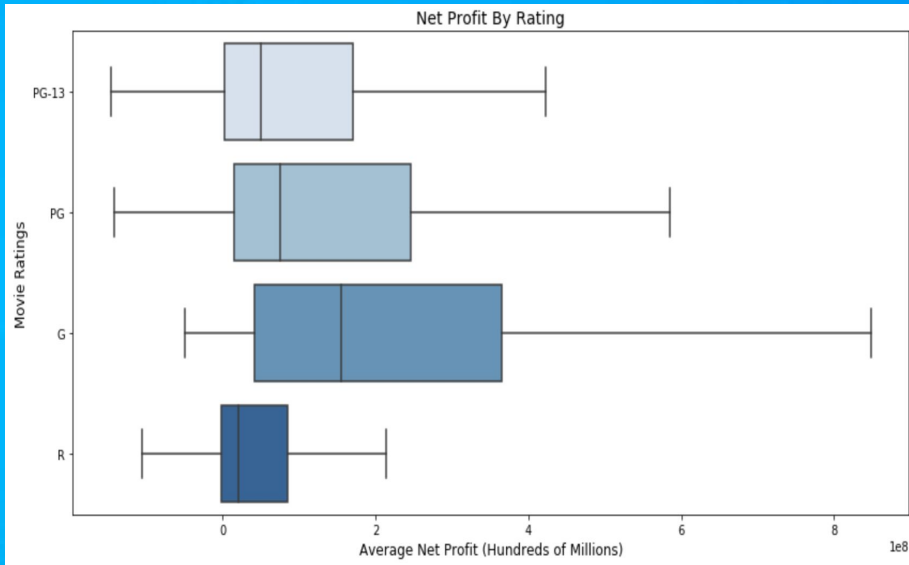
Recommendation 6:

We recommend that Microsoft focus their cast and crew search to individuals who consistently score at least 1.0 on the VAR score. We can, with a high level of confidence, conclude that these individuals will elevate the overall production.


VAR = Value Above Replacement. Average net profits from Actor A / Average Net Profits from all movies
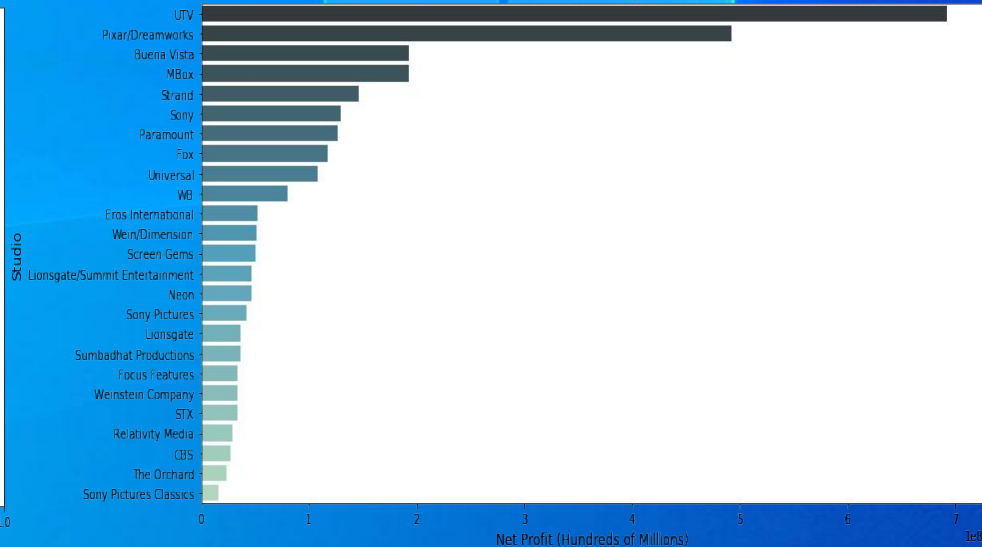
Recommendation 7:

If Microsoft wishes to be in the top 50% of these 25 studios listed below, we recommend they should aim for a profit margin of 66%, which corroborates our prior recommendation, and a net profit of slightly over 50 million per movie to compete with the top existing studios.


Median Profit Margin By Studio
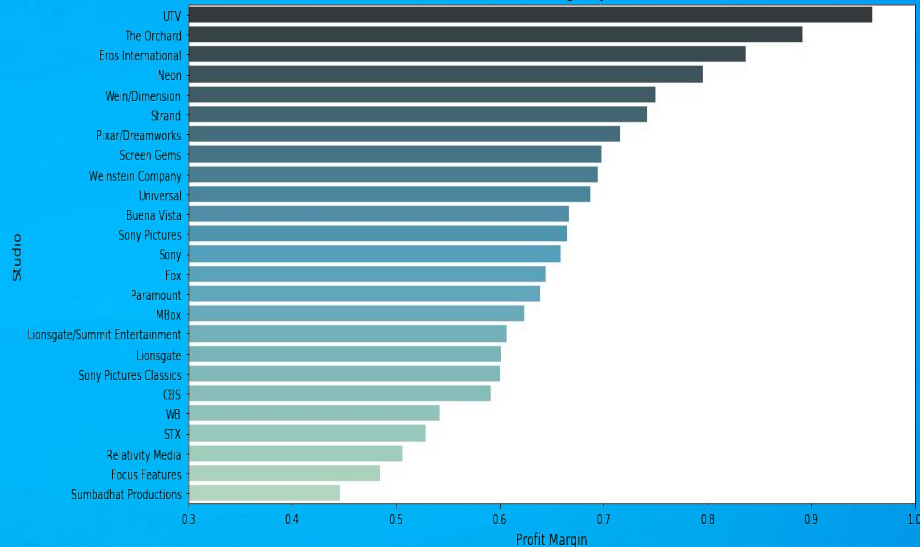
Median Net Profit By Studio

Recommendation 8:

- We first look at Studio performance per theater.
  - We don't consider New Line Cinemas because they only have 7 of the 1000 movies in this data set.
- Disney and Warner Bros. are the two clear after incorporating award data.
  - Disney is the best among them all with an average domestic gross of $78,797 per theater and a Oscar win rate of nearly 60%.

- Microsoft needs to target: 3818 theaters at a movie's peak and $78,800 per theater
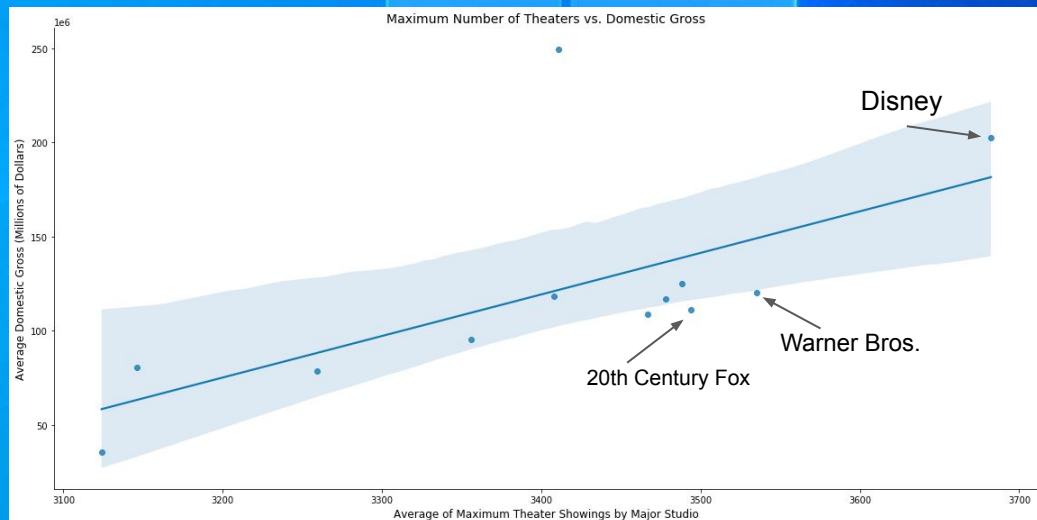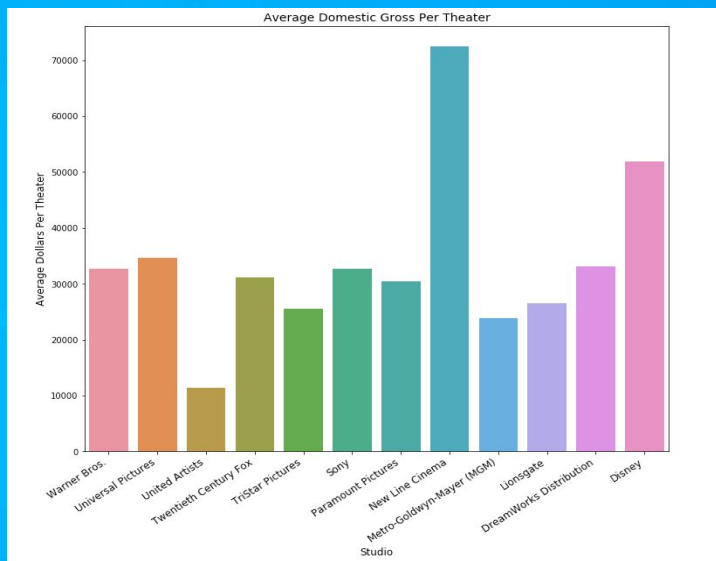
Future Considerations

- Analyzing profit and profit margins for movies released on holidays or on holiday weekends
- Does the opening weekend box office gross have a strong correlation with the profit?
- Analyzing VAR for producers in addition to actors and directors
- How much of an impact does premiering a movie a film festival (i.e. Sundance) have if that movie has a subsequent major box office release?

Thank You!