

Phase 1 Project: Microsoft Movies



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Project Overview

In this project I was assigned the task to help Microsoft get into the film industry by using exploratory data analysis, also known as "EDA", to convince potential share takers that not only would this be a great industry to invest in but also show the value of what being in the industry is all about. I came up with three proposals that could help guide this company in the right direction of success.

Business Problem

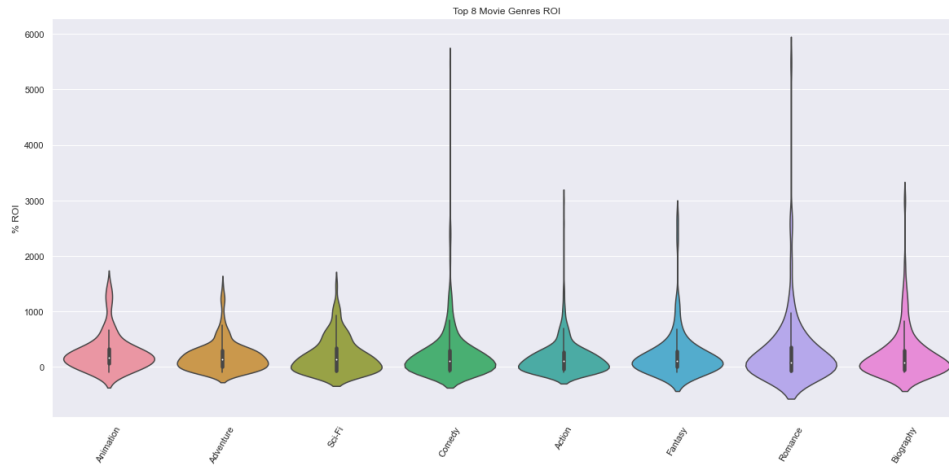
Microsoft, one of the largest and most successful tech companies in the world has decided to take its talents elsewhere, the film industry. I was designated to introduce data and make insights on what makes other film companies successful and how Microsoft can use these insights to get started on the right foot in the film industry.

Data

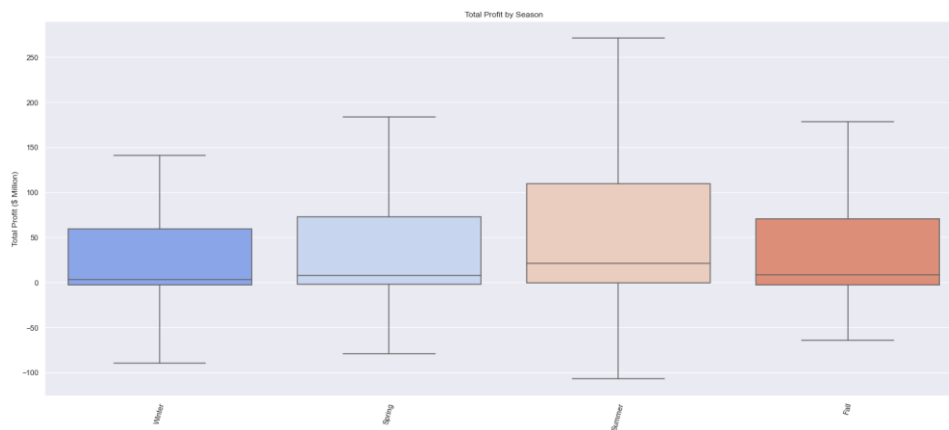
In this project I used the data from The Numbers, Disney, and IMDB which contained multiple columns of data including genres, worldwide gross, domestic gross, and information on Disney's box office transactions over the years.

Analysis

The first analysis shows the ROI% of the top 8 genres according to the data. The graph shows that due to the outliers, especially in comedy and romance, the first 3 genres in animation, sci-fi and adventure show the most even ROI% and don't contain any outliers.

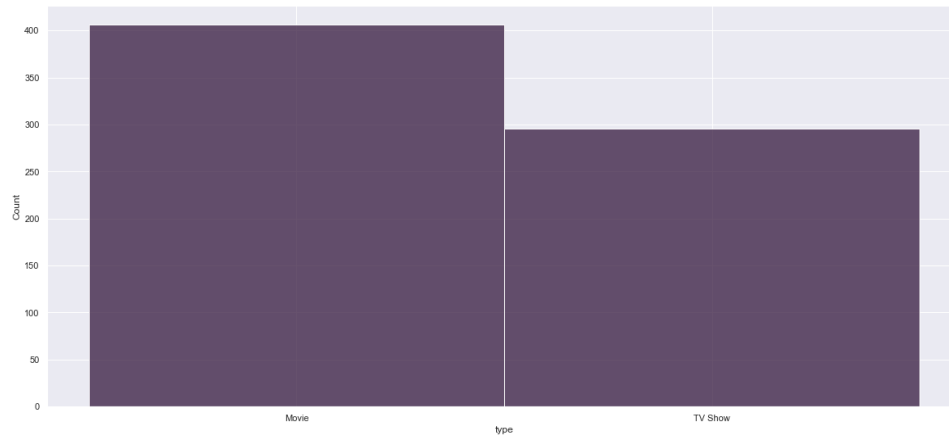


I also checked out the total profit by season to show when the best time would be to premiere a movie. We all know our favorite movies, but do we know when exactly to premiere? With this being Microsoft's beginning stages in the industry its prominent to start off on the right foot.

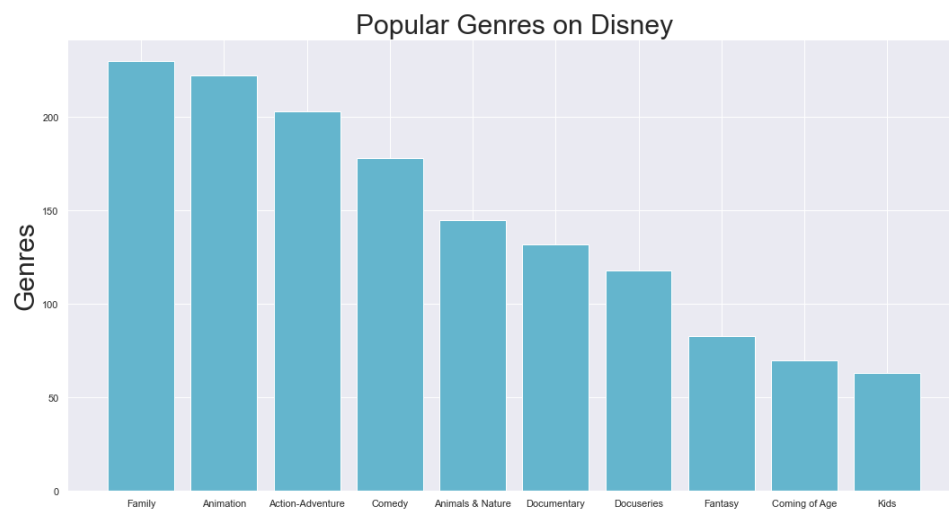
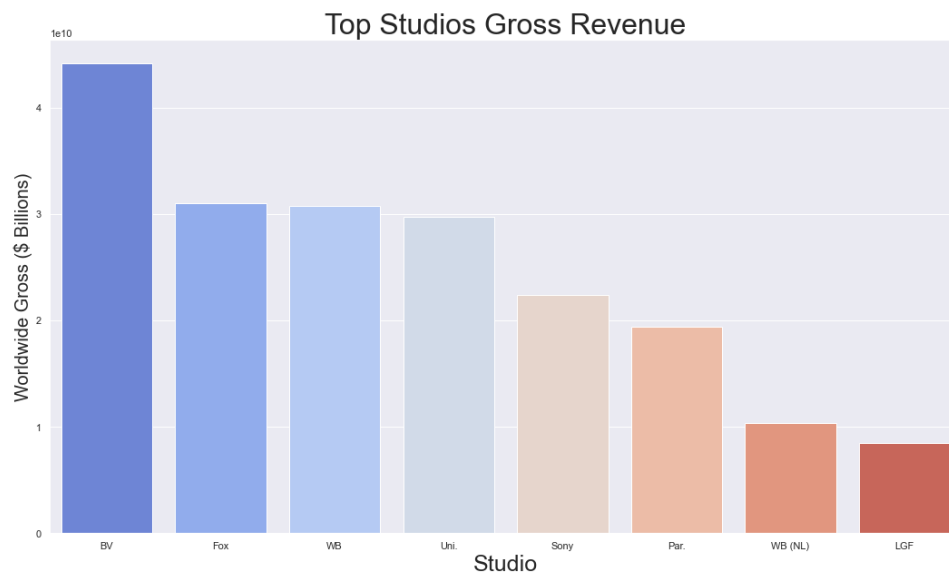


What does our competition look like?

Next I showed the difference in the top studios and their worldwide gross showed in billions. This gives us the notion that this is a lucrative field as long as you produce great, unique content. Disney tops the competition by no surprise and also shows that more folks lean towards the movies that Disney produces rather than the tv shows.



I also dove into the data to show the type of genres Disney does well in. The data coincides with the recommendations above that family, animation and adventure is where Disney makes their big bucks.



Recommendations

Showing the ROI of the Top 8 movie genres have showed that Animation, Adventure and Sci-Fi are the top producing movie genres according to the data given. Big time movies like Star Wars can prove this point further in which they have received profits in the billions. Having the total profit by season allows us to see during which months do movies do well in. The data given shows that the total profit is much greater when a movie is released in summer months and secondly the fall months. With Microsoft planning its first release it is recommended to release during those seasons of the year according to the graph above. You can also see through the information provided that the best studios (BV, Fox and Warner Bros) have the most competition due to the worldwide gross. Also diving deeper into Disney specifically shows the importance of movies vs. tv shows and what genres perform. Microsoft also known for Xbox, has a lot of games they produce that can only be played on that specific console. Why not come out with a movie or limited series that features a storyline of these games. This would also fit within the adventure, animation, and sci-fi recommendations above.

Next Steps

Show the difference in ratings between movies premiered on streaming platforms vs. theater

This would provide Microsoft with the most accurate information on how cord cutting has become more popular over the years, especially after the pandemic. As we know people love convenience, streaming platforms have taken advantage of the movie industry by providing households with access to thousands of movies without them even leaving the comfort of their own home. Maybe this is something Microsoft can create as well to be just as or even more competitive as the big names out there including: Netflix, Disney+, Hulu, etc.

Include difference in the runtime of movies vs. ratings

Does a long movie necessarily mean it was a good movie? This would provide Microsoft with the information needed to understand how to go about producing their own future "classics" and how long each movie would necessarily need to be in order to receive the best ratings.

Are limited series tv shows more popular?

Binge watching tv shows are now more popular than ever, but are they more popular than a movie? Showing the popularity in tv shows vs movies can give more of an understanding of where to start within the film industry. This can also provide the information of what genres of tv shows are most gravitating towards audiences.