

PROJECT OVERVIEW

- This project will assess movie industry trends on various metrics such as earnings, profit, genre and ratings.
- Sequels are becoming increasingly popular.
- ► Foreign film markets are becoming less profitable as the domestic market continues to grow.
- This analysis will help Microsoft determine the category of movies to produce, markets to target, and budgetary allocation for their productions.



BUSINESS PROBLEM STATEMENT

- Microsoft wishes to venture into the movie production industry.
- ► The box office movie industry is expected to continue growing at least in the next 10 years.
- I will analyze relevant data, illustrate the patterns in movie release trends, box office revenue, ratings, and popular genres to build a movie studio business strategy for Microsoft.

DATASETS USED

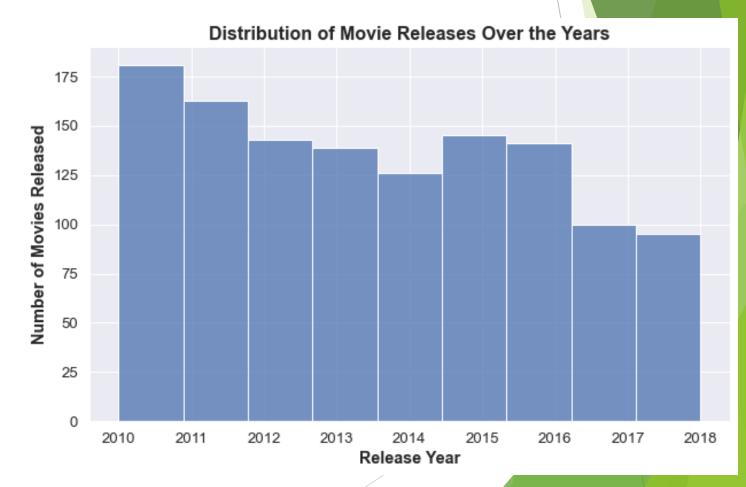
- 1) imdb.title.basics.csv IMDb dataset of all movies in 2019.
- 2) bom.movie_gross.csv a BOM dataset of movie gross revenues
- 3) tn.movie_budgets.csv movie budgets data from The Numbers
- 4) tmdb.movies.csv.gz includes movie information such as the genres, original language, title, popularity, release date, vote average and vote count.

METHODOLOGY

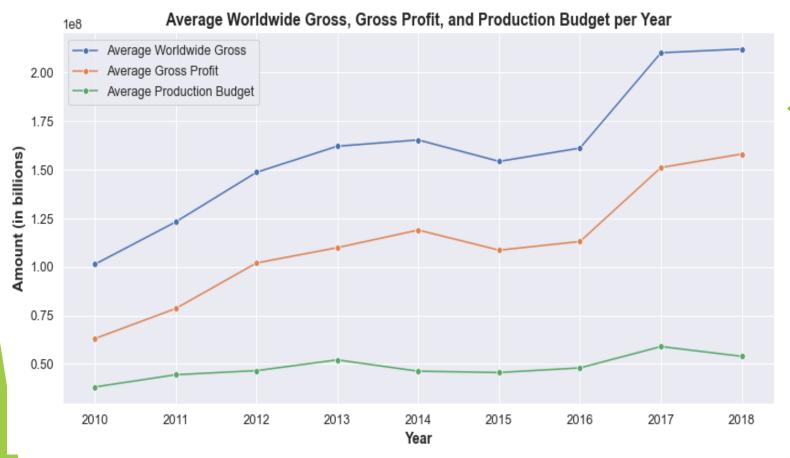


This project uses Exploratory Data Analysis (EDA) including trends and correlation providing key insights into the movie industry to identify penetration strategies for Microsoft.

- 1. Distribution of Movie Releases Over the Year
- A downward trend on the number of movies released yearly from 2010 to 2018.
- While a slight recovery is observed in 2014, releases steeply drop in 2016 and only further declining thereafter.



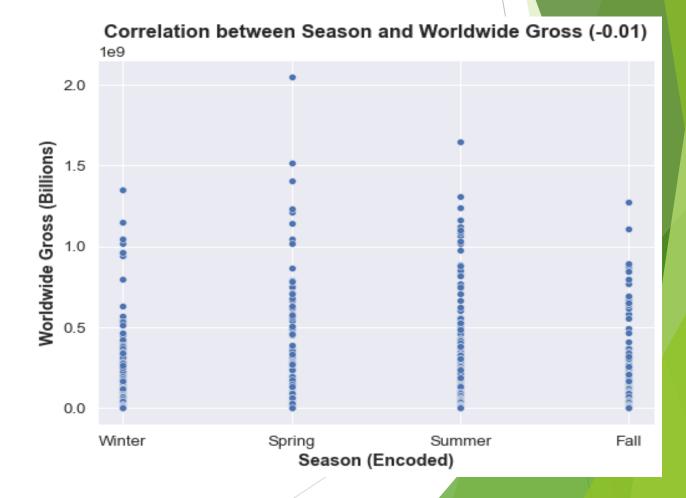
2. Average Worldwide Gross, Gross Profit, and Production Budget per Year



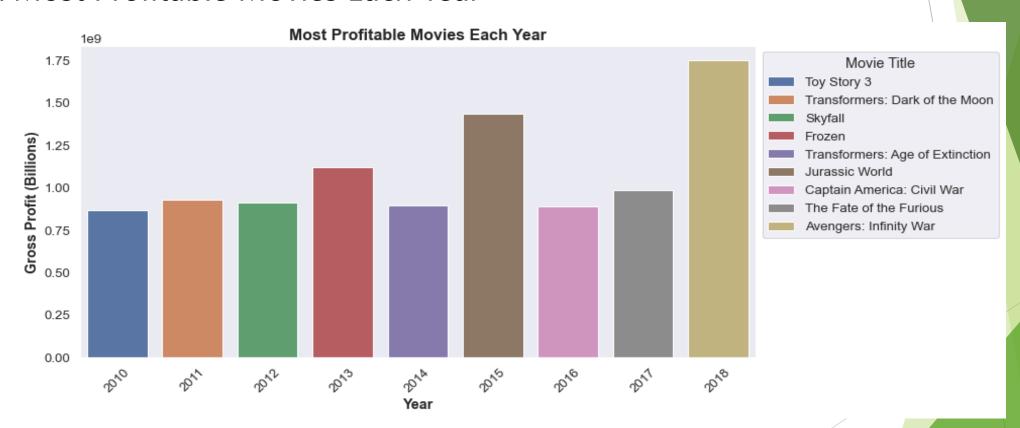
 Average gross profit and worldwide gross revenue follow a similar trend.

3. Correlation Between Release Season and Worldwide Gross

The correlation between movie release season and gross earnings is -0.01, indicating no linear relationship between the two variables.



3. Most Profitable Movies Each Year



The highest earning movies worldwide each year are also appear to be the most profitable movies in their respective years.

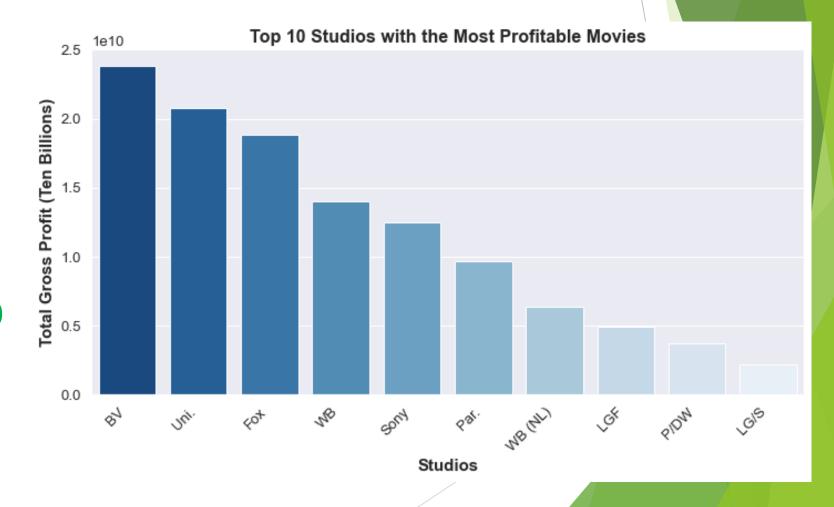
4. 20 Most Profitable Movies Overall

65% are sequels inferring that they generally fetch more at the box office than stand alone original films or original films related to a sequel (parent films).



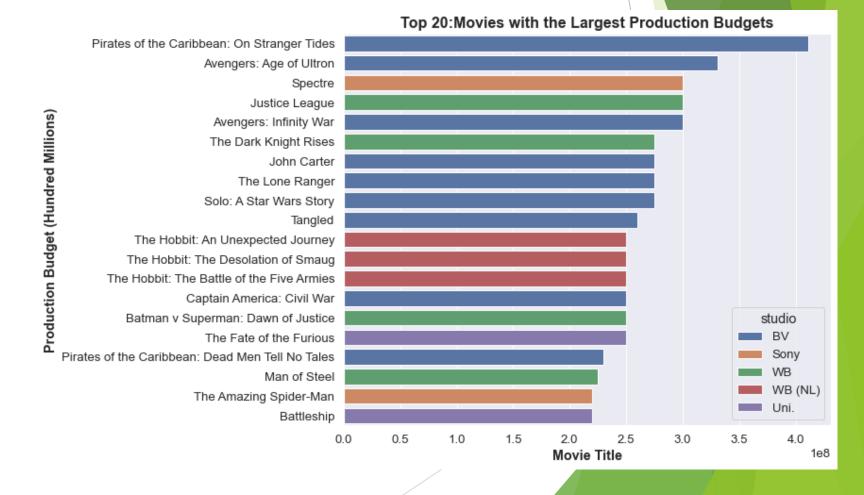
5. 10 Most Profitable Studios

Walt Disney and Universal Studios are the two most profitable studios raking in USD 23,835,217,937.00 and USD 20,733,081,963.0.

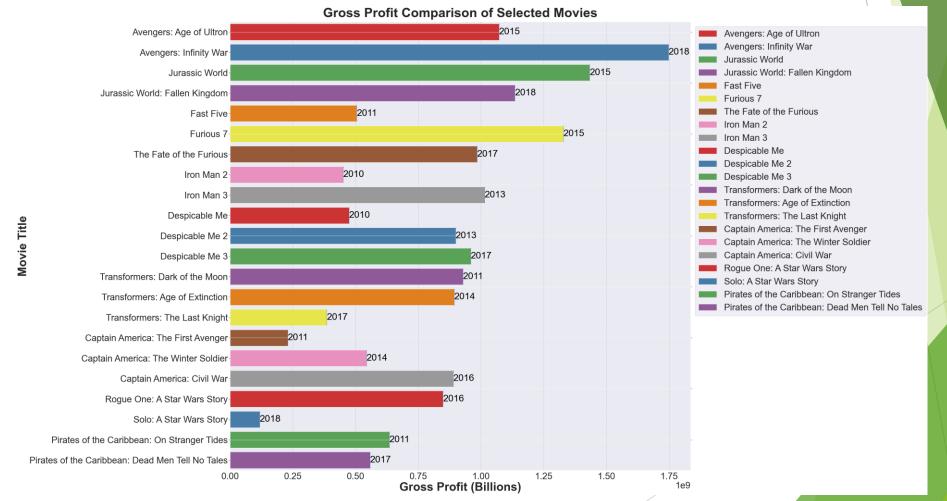


6. Top 20 Movie Productions with the Highest Budgets

Studios making big bucks also often allocate hefty budgets towards their production but this doesn't always pay off as we see only 4 movies among the top 20 most profitable.



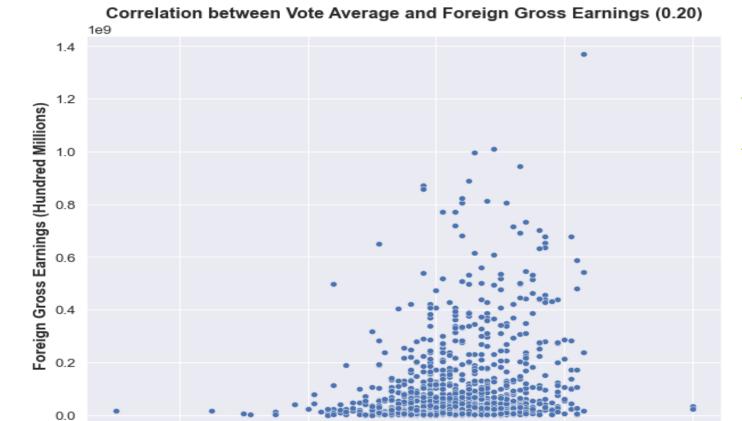
7. Sequels: Comparative Analysis on Gross Profits



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8. Correlation between Vote Average (Rating) and Gross Profit



Vote Average

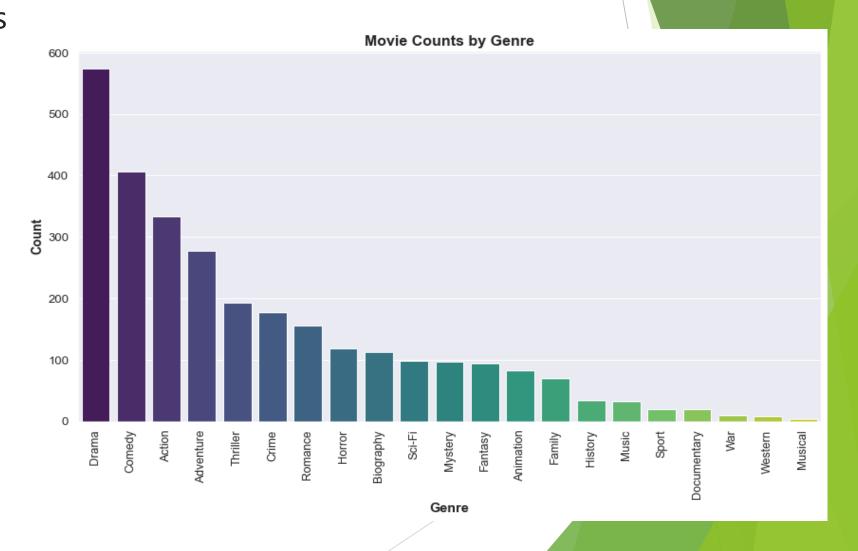
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- Correlation => 0.20
- There is a weak positive relationship between vote average rating and gross profit.

9. Most Popular Genres

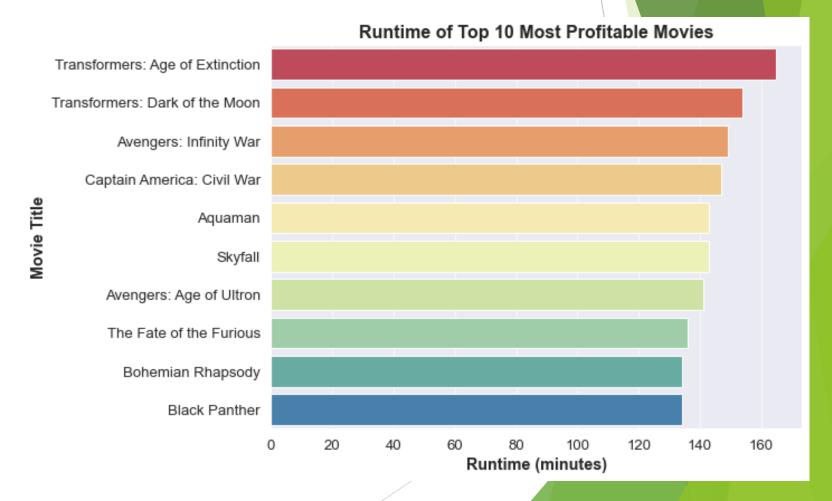
The top 5 most highly produced genre of film in the dataset are,

- i. Drama 574
- ii. Comedy 406
- iii. Action 333
- iv. Adventure 278
- v. Thriller 193



10. Runtime Minutes for 10 Most Profitable Movies

While the average runtime for movies in the dataset is 108 minutes, the top 10 most profitable movies range from 134 to 165 minutes.



CONCLUSION

- ► The movie industry is highly lucrative, earning the major studios hundreds of millions of dollars in profit.
- The industry is currently dominated by 10 major studios whose movies are consistently among the highest earning and most profitable.
- A portion of the success of these studios can be attributed to their ability to turn already existing stories such as comic books and movies into franchise films as well as make multiple sequels from their original creations.
- The leading studios in the industry have done their homework, majorly focusing their productions of the most lucrative genres, Action, Adventure, Sci-Fi, Animation and Comedy a recipe for success.

BUSINESS RECOMMENDATIONS

- 1) Microsoft should conduct a thorough market and competitor analysis on the top 5 dominant studios, given that numerous studios with years of experience have yet to dethrone them.
- 2) To penetrate the industry it will be advantageous for Microsoft to hire talent from the top 5 studios as they'll guide their strategy and content creation.
- 3) Microsoft should focus more on the foreign market because it has proven to be a major contributor to the success of the top 5 studios.
- 4) Develop storylines with longevity.
- 5) Investment in the right technology is key. Almost every movie being released at the moment is 3D and includes a massive amount of CGI.

BUSINESS RECOMMENDATIONS

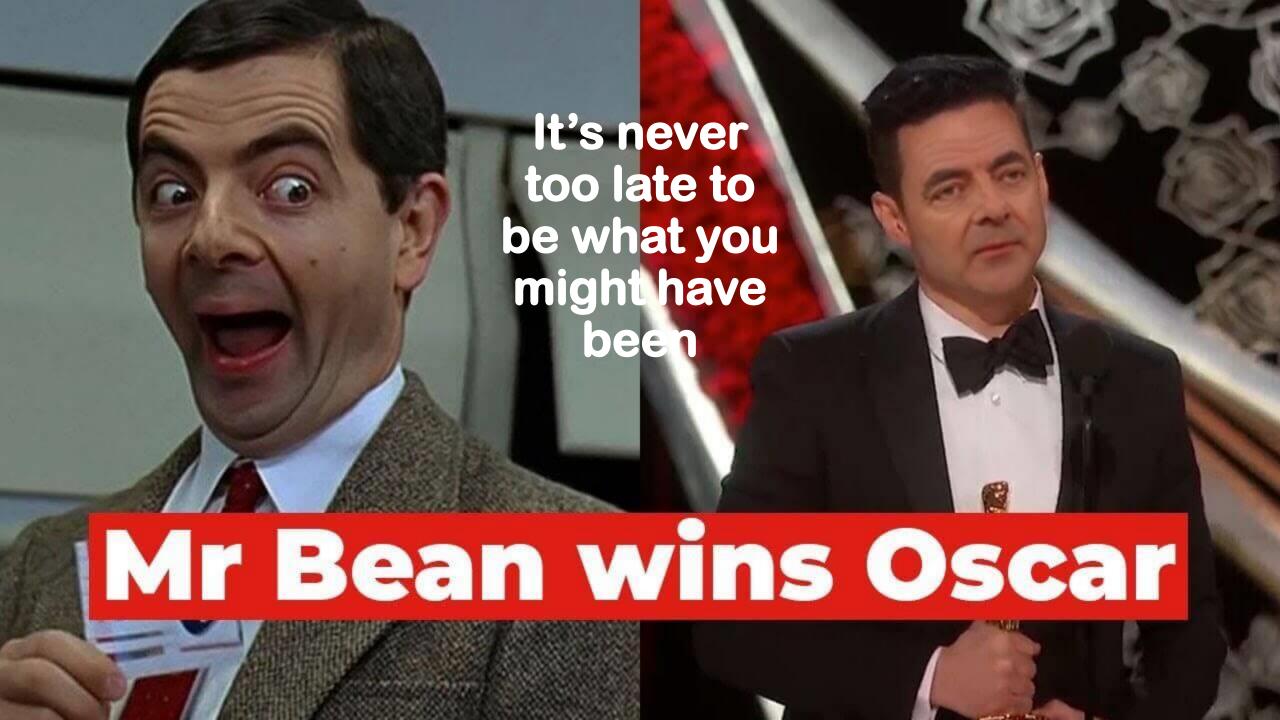
- 6) When it comes to runtime minutes it seems that nowadays, the longer the better.
- 7) Lastly, it is also a viable option for Microsoft to look into buying out one of the more successful studios in the industry given that it is far less risky and guarantees Microsoft a decent form of return.

STUDY LIMITATIONS

- 1) Given the structure of the data, the correlation between genre and earnings could not be established.
- 2) The data did not contain all original titles to enable comparative analysis with the succeeding sequels/ franchise films.
- 3) We are unable to establish the impact of contributions towards earnings made by factors such as marketing, cast and crew.

RECOMMENDATIONS FOR FUTURE ANALYSIS

- 1) Effects of streaming sites on the movie industry.
- 2) Genre as a contributor to the success of a film.
- 3) Impact of studio name (brand), on the success of a film.



THANK YOU FOR YOUR TIME AND ATTENTION