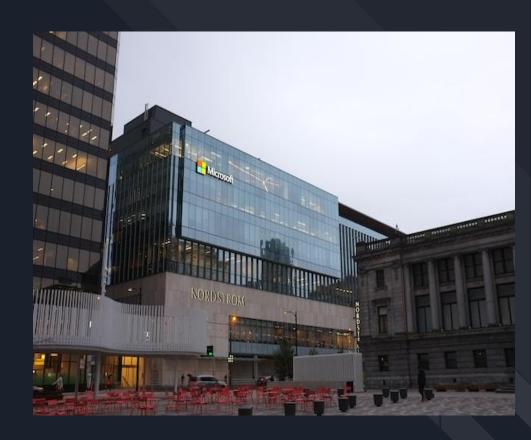


#### Overview.

In this project, exploratory data analysis will be used to identify the genres of movies that are currently performing the best at the box office and to make recommendations for future film production in Microsoft's New studio.



# Outline

- 1. Business Understanding
- 2. Data and Methods
- 3. Results
- 4. Conclusions

# **Business Understanding**

What movie genres are successful in the market?

What types of films should we produce and why?

### Data and Methods

1.Data from imdb in form of a database

2.Data from Bom.Movies .A sample of the data is illustrated in the adjacent table

We will be using Exploratory data analysis (EDA) which is used by data scientists to analyze and investigate data sets and summarize main characteristics, often employing data visualization methods.

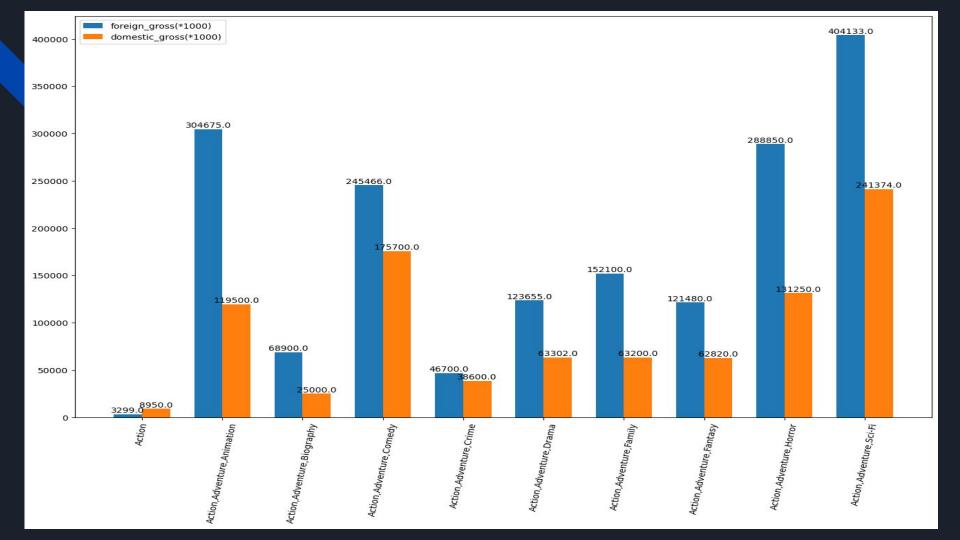
Title	Studio	Domestic_g ross	Foreign_gro	Year
Toy Story 3	BV	415000000	652000000	2010
Alice in	BV	334200000	691300000	2015
Harry Potter	WB	296000000	664300000	2012
Inception	WB	292600000	535700000	2010
Shrek	P/DW	238700000	513900000	2010

### Results

These are the top income generating genres.

It is derived from grouping movies with same genre and aggregating their income

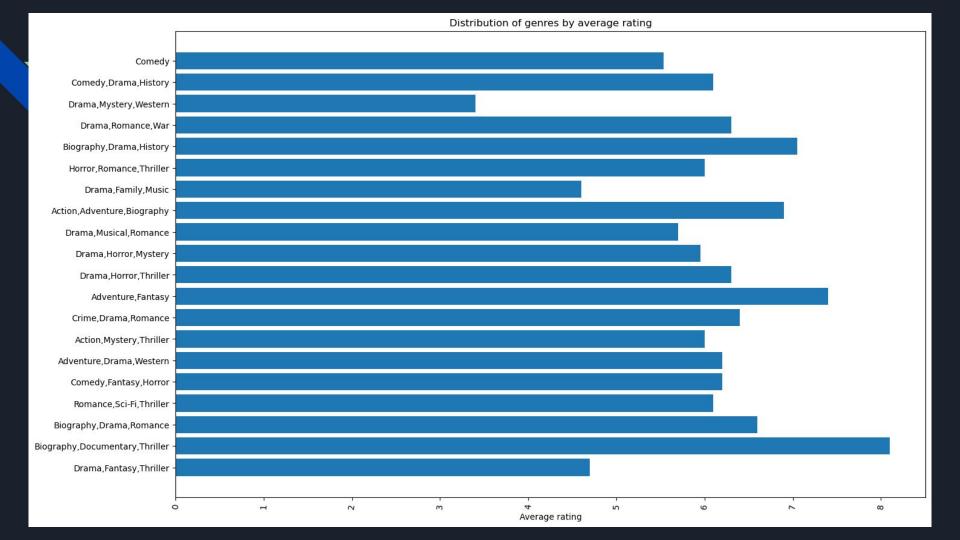
Genres	Foreign_gross	Domestic_gross	Overall_gross
Adventure,Fant asy	700.9M	259.4M	960.3M
Action,Adventur e,Sci-Fi	404.4M	241.6M	646.0M
Adventure,Dra ma,Sci-Fi	401.2M	228.8M	630.0M
Adventure,Anim ation,Comedy	408.8M	216.8M	625.6M
Biography,Dram a,Musical	261.8M	174.8M	436.6M



## Results

We can also compare various genres with their aggregate average rating

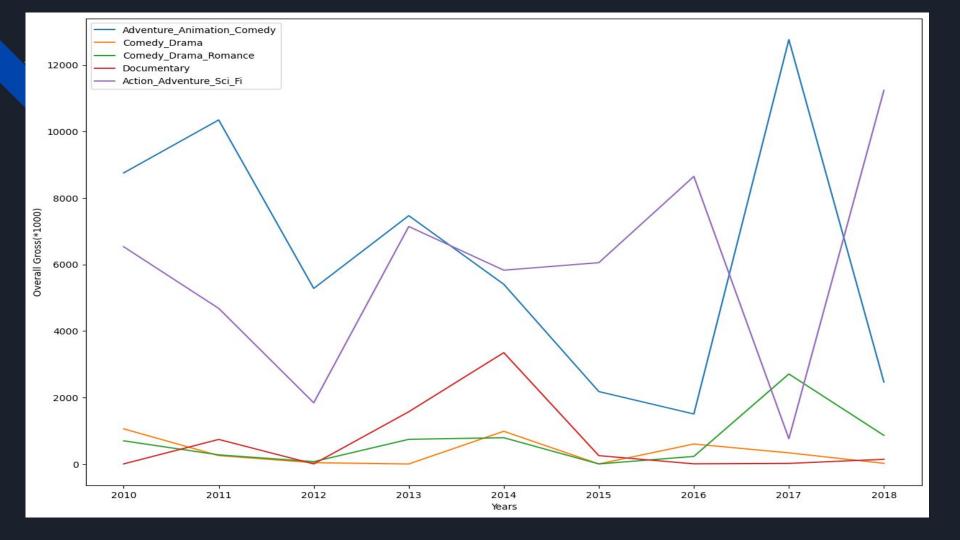
Genres	Averagerating
Biography,Documentary,T hriller	8.1
Adventure,Drama,Sci-Fi	8
Action,Sci-Fi	7.9
Drama,Mystery,Sci-Fi	7.8



## Results

We can also compare the total gross for the genres over the years.

This was derived from grouping the data set by genres and plotting years by the overall gross.



### Conclusion

Based on the analysis above we would come up with the following recommendation:

- 1. Go for the biography genre accompanied by other genres preferably adventure and drama. If the company is more driven towards getting good ratings they should produce biography movies because it results in movies that are top rated.
- 2. If the company is more inclined towards getting income from producing movies, its evident from the overall gross to go for the adventure genre combined with most probably action, si-fi or drama. For the reason these combinations when carefully added with the right genre can yield high income.
- 3. In order to get the best from the movie one is to make, it should perform both financially and appealing to the audience. It is to that, that we recommend genres that are performing well both in average rating and gross income. A combination of action, adventure, si-fi and drama would certainly do good both for the producers and the audience.

#### Next Steps

Further analyses could yield additional insights to further improve operations at the Microsoft Studio:

- 1. What are the estimated budgets for some of the genres in play.
- 2. Which personnels when brought to the company can bring increase in performance.
- 3. Upcoming types of genres

# Thank You!

Are there any questions? If so send them to:
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