

### Summary

- Cleaning all data set supplied for a better performance.
- 3 business recommendations in relation to movie studios.
- First recommendation: Top 5 movie studios.
- Second recommendation: Movie genres with the highest domestic gross.
- Third recommendation: Movie genres with the highest ratings.

## Business Problem

 Microsoft want to create a new movie studio. They need recommendations, so they can choose the right type of films.

### Data

- For this project I have decided to use the following data set:
  - Imdb.title.basics
  - Imdb.title.ratings
  - bom.movie\_gross

## Methods

- Data cleaning
- Merging data frames
- Data analysis
- Plotting and Visualization





## Results

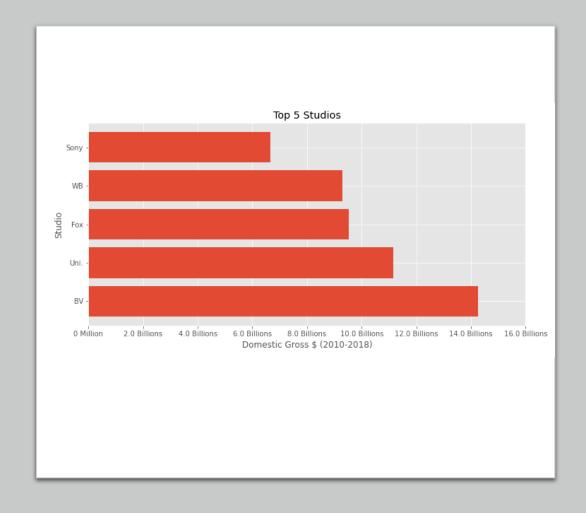
- Recommendations are based on different perspectives:
  - Established movie studios
  - Types (genres) of movies
  - Audience rating.

# First recommendation

There are over 200 movie studios in the dataset with different types of success, but for my first recommendation, I've found the top 5 in terms of domestic gross using data from over 2500 movies.

#### Top 5 Movie Studios:

- BV \$14.2B
- Uni. \$11.1B
- Fox \$9.5B
- WB \$9.3B
- Sony \$6.6B



#### First recommendation

I recommend to follow the steps of Buena Vista International (BV) by Disney Channel, since they are the most profitable movie studio in the business. Having the 4 movies in the top 5 in relation to domestic gross in this period shows that they are very successful and creating excitement in views with high range of ratings.

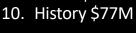
	primary_title	genres stud	dio	domestic_gross	averagerating	year
1035	Black Panther	Action,Adventure,Sci-Fi E	BV	700100000.0	7.3	2018
2094	Avengers: Infinity War	Action,Adventure,Sci-Fi	BV	678800000.0	8.5	2018
4	Jurassic World	Action,Adventure,Sci-Fi U	lni.	652300000.0	7.0	2015
1602	Star Wars: The Last Jedi	Action,Adventure,Fantasy	BV	620200000.0	7.1	2017
1943	Incredibles 2	Action,Adventure,Animation	BV	608600000.0	7.7	2018

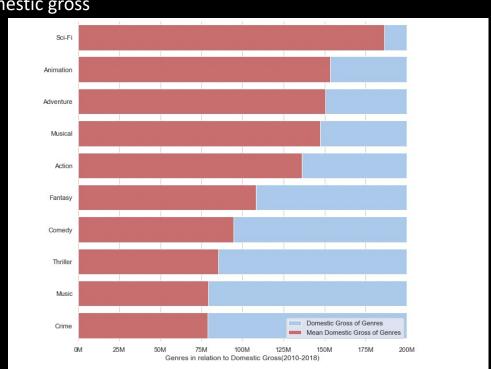
#### Second recommendation

For this recommendation I've used the top 5 movie studios subset of the original data to find the movie genres with the highest domestic gross. These are the movie genres Microsoft should focus on.

#### Top 10 movie genres with the highest domestic gross

- Sci-Fi \$186M
- Animation \$153M
- Adventure \$150M
- Musical \$147M
- Action \$136M
- Fantasy \$108M
- Comedy \$94M
- Thriller \$85M
- Crime \$78M





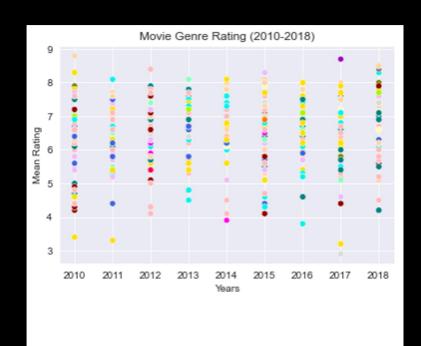
#### Second recommendation

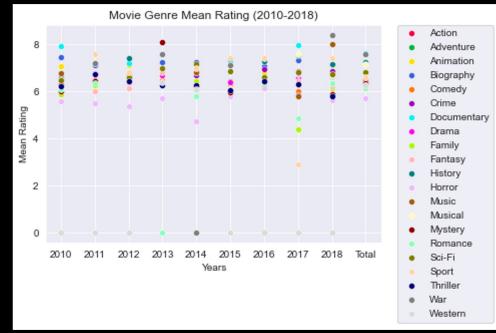
I have selected the top 5 genres as a recommendation from the data as shown previously, such as, Sci-Fi, Animation, Adventure, Musical and Action. Nevertheless want to highlight that Microsoft should also be on the look for ways to combine this genres as they appeared in the data frame bellow.

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1943	Incredibles ?	Action,Adventure,Animation	BV	608600000.0	7.7	2018

#### Third recommendation

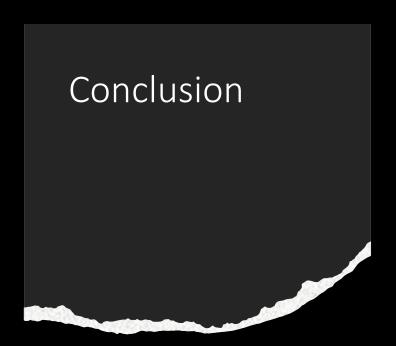
For this recommendation I've used the top 5 movie studios subset of the original data to find the movie genres with the highest audience ratings each year. This comes from a movie viewers point of view to give a different perspective.





# Third recommendation

Through showing these values on the charts, we can see that there isn't really a trend in terms of best genre for ratings. However, considering Sci-Fi is a top genre in terms of domestic gross, we can see that they have steady ratings of 6.7 ranking. This makes Sci-Fi a solid recommendation for a stable, consistent audience.



In summary I will recommend to produce moves based on Sci-fi, Action, Adventure, not only because they possess good ratings, also they seem to be a great combination for movies that are earning a great domestic gross, as proven from the top 5 movie studios, and top movie genre domestic gross.

I recommend following in the footsteps of Buena Vista International (BV) Studios in how they approach movies since they have been a good example to follow, being the most profitable with less movies in comparison to the other top 5 movie studios.

