MICROSOFT MOVIE STUDIO

Amos Kipkirui

12.03.2023

Overview

▶ Microsoft wants to venture into video creation industry. It is therefore crucial to explore the type of films that are doing well in box office and recommend accordingly.

▶ We collected data from Kaggle, Box office Mojo and Rotten Tomatoes.

Business understanding

1. Does a studio or production company matters much in terms of Box office and the general revenue of a film?

2. Every film has a genre. How are different film genres contributing to a box office of a film?

3. Films differ in terms of quality. Production budget of a film has a direct influence on the quality of the movie. I will be seeking to answer

the question on whether the production budget affects the box office of a film.

4. Does the presence of stars from another field like sports, music or even from the film industry affect the box office of a film?

5. There are top film producers. Do we have to use them in order to ensure our movies/ films travels up to the international level

which will in turn increase the box office? Relationship between film producers and the box office of a movie

6. Does the rating of a movie affects the box office?

7. How is the run-time of film related to gross income of a film/movie?

8. What are the top 5 movie genres that have high box office?

Data exploration

We used datasets from the following sources:

1. bom.movie_gross.csv

 It had 5 features

 Timeframe : 2010 to 2018

 Total data points: We used data from the top perfoming movies with box office above $100 000000; 284 records.

 2. rotten_tomatoes_top_movies.csv

It had 10 features with two being categorical.

Timeframe: 1930 to 2019

Total data points : We used the top 20 films from the box office performance from a total record of 1610.
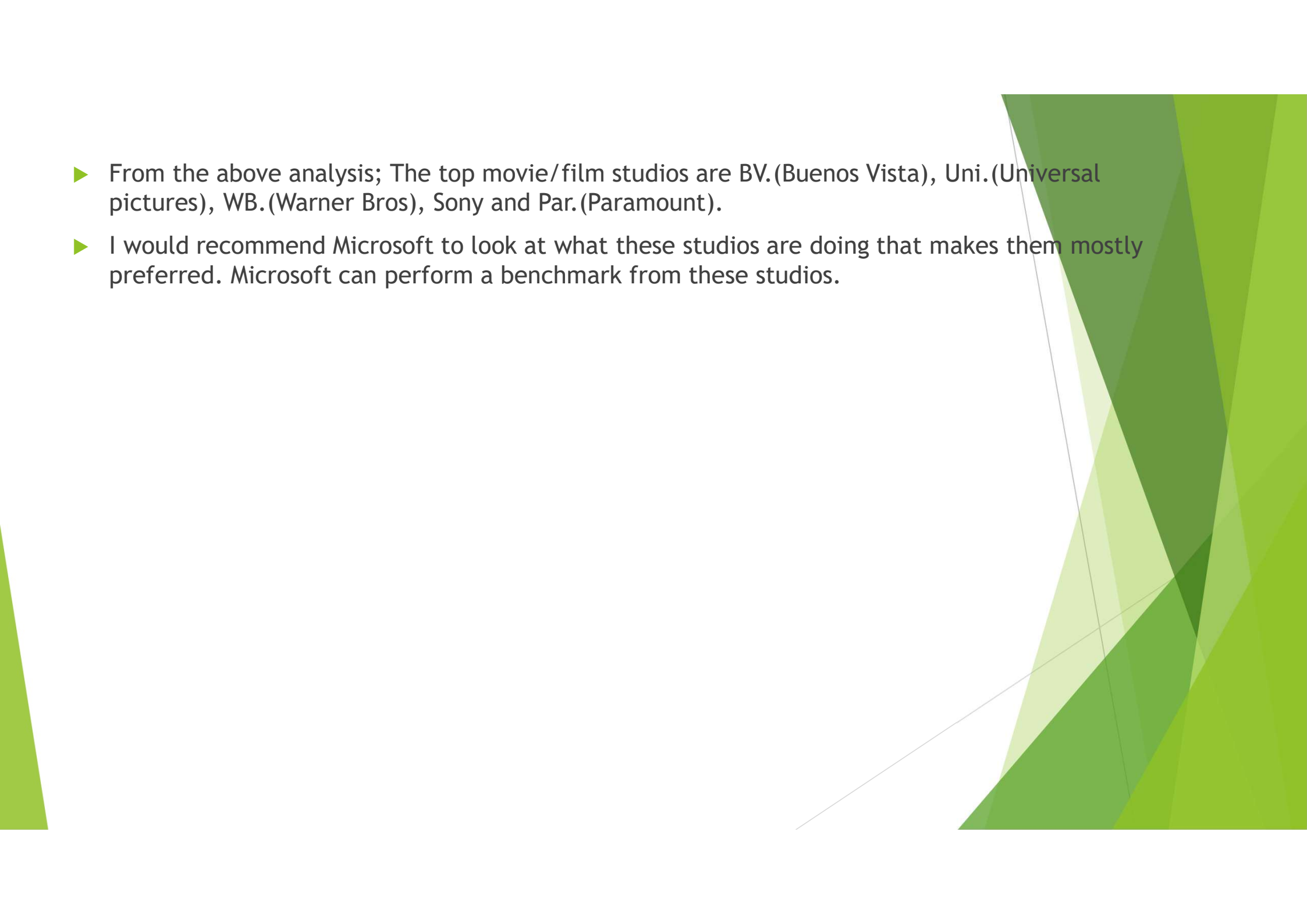
3. tn.movie_budgets.csv

Features: 5

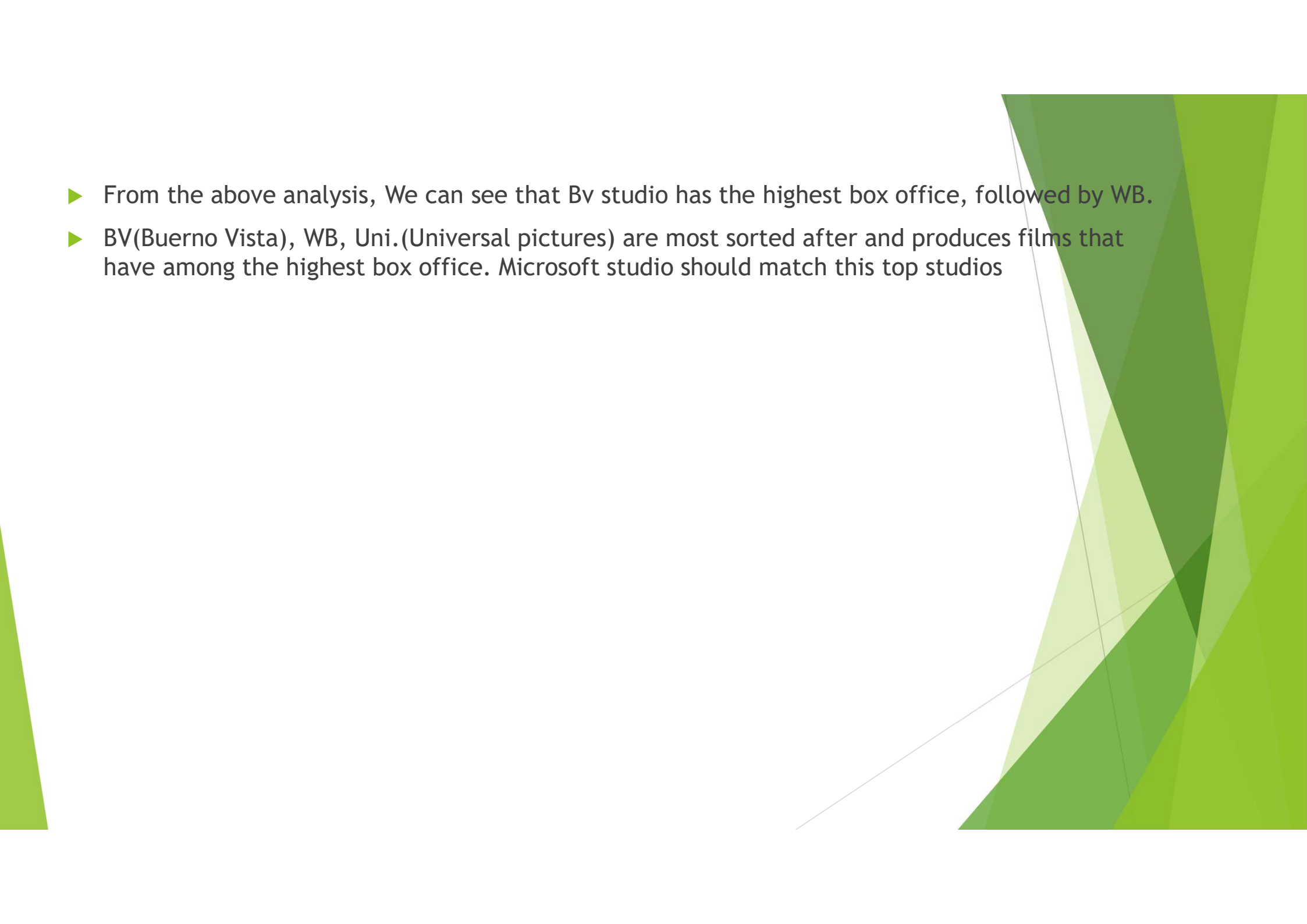Total datapoints: we used to the films with worldwide gross of above $100 000000 from a total record of 5782.

- We want to know the studios that have been used most in production of films that have both domestic and foreign gross above $ 100,000,000.

- This will help us in identifying the qualities of those studios which makes them favorable for productions.
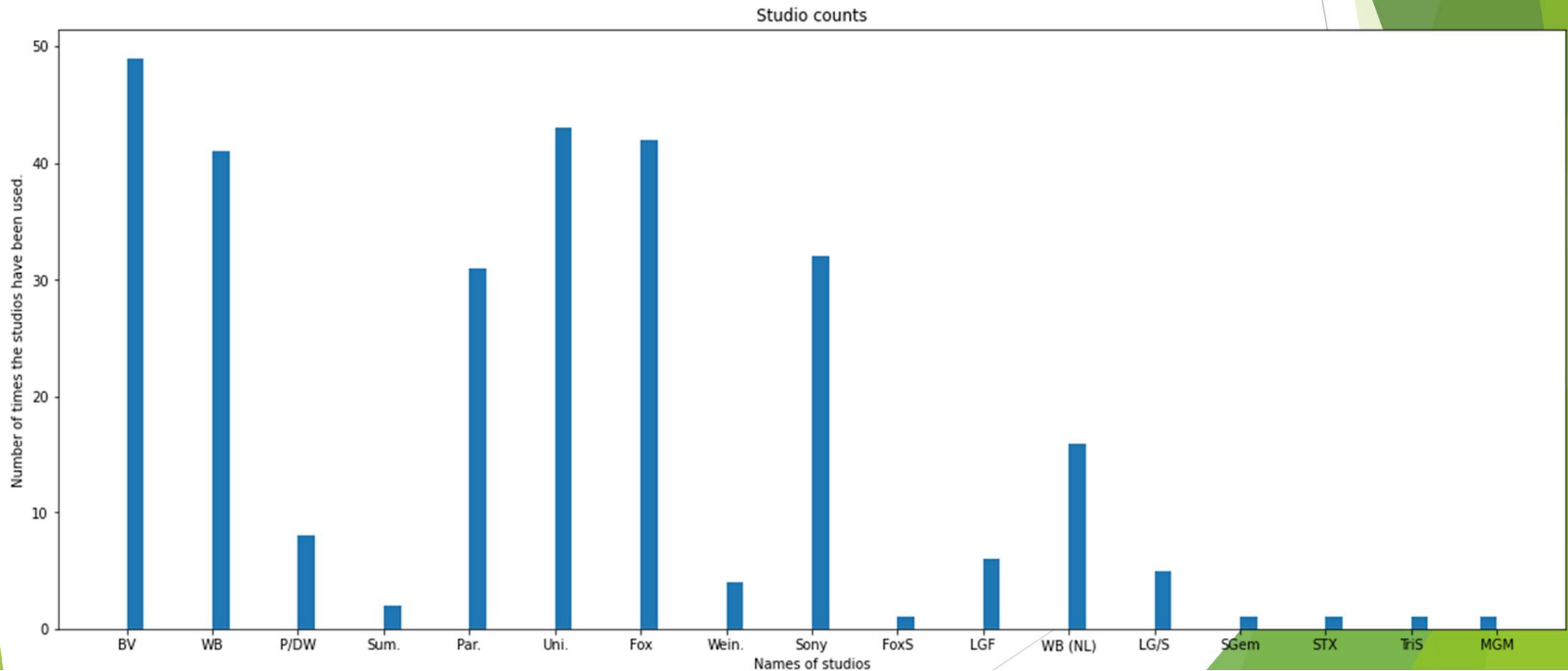
Studio counts

- From the above analysis; The top movie/film studios are BV.(Buenos Vista), Uni.(Universal pictures), WB.(Warner Bros), Sony and Par.(Paramount).

- I would recommend Microsoft to look at what these studios are doing that makes them mostly preferred. Microsoft can perform a benchmark from these studios.

Finding the relationship between studio and the box-office(sum of domestic gross and foreign gross)
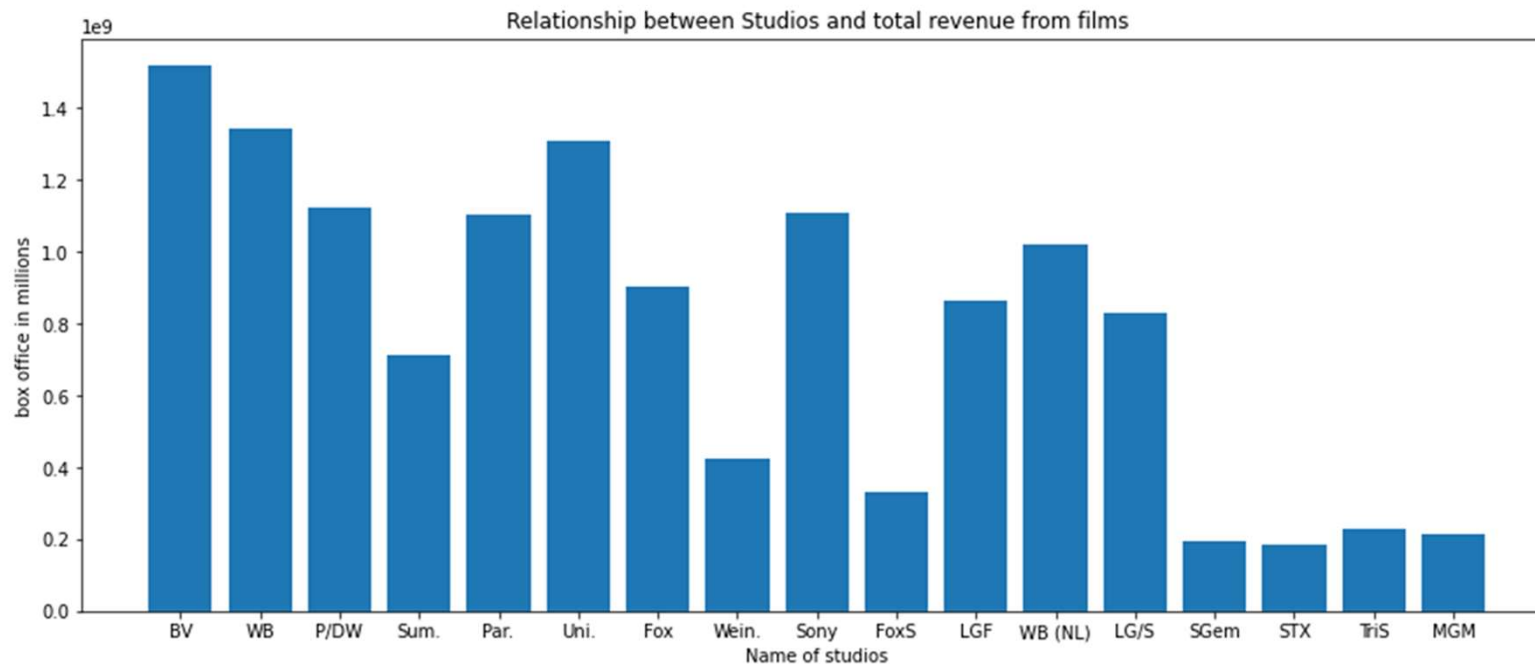
Relationship between Studios and total revenue from films

- From the above analysis, We can see that Bv studio has the highest box office, followed by WB.

- BV(Buerno Vista), WB, Uni.(Universal pictures) are most sorted after and produces films that have among the highest box office. Microsoft studio should match this top studios

The runtime of films top performing films and how they affect their box office.

Relationship between runtime and box office(USA gross)
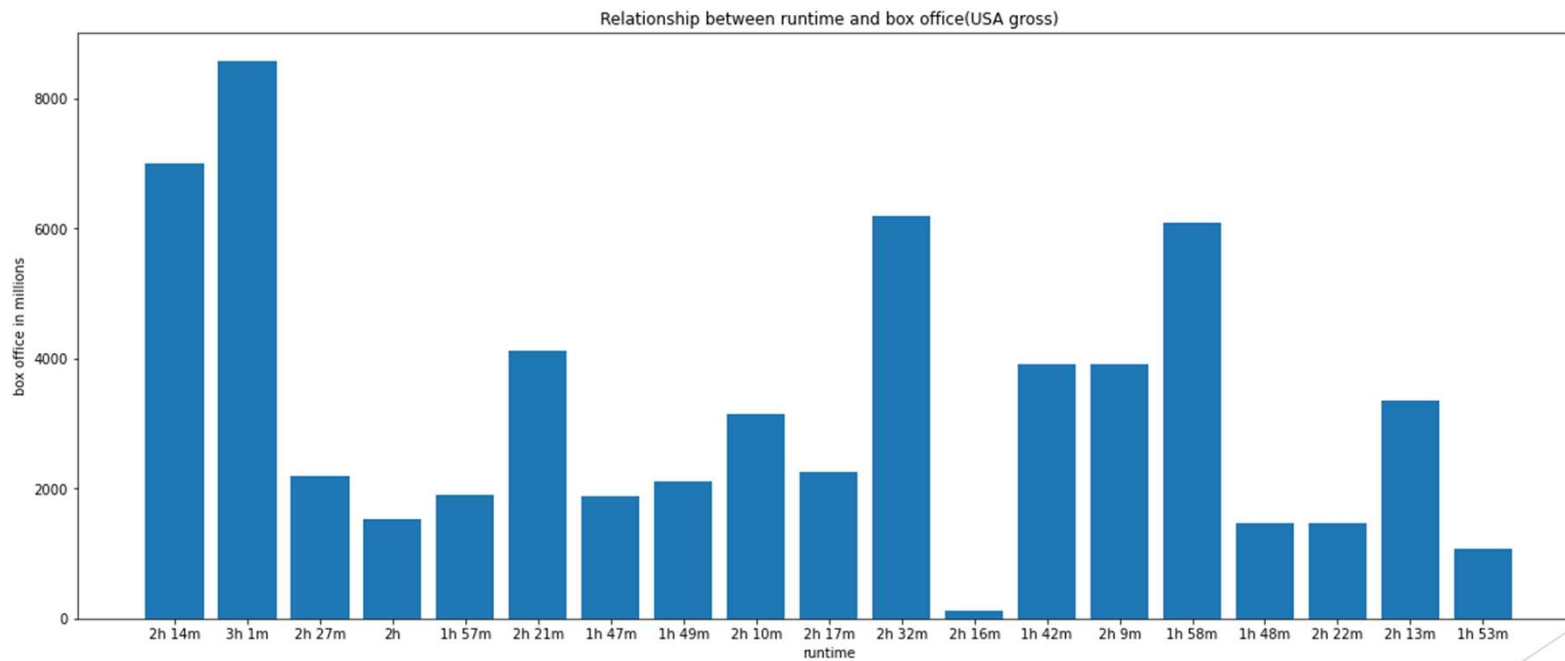
- From the visualization above, there is no clear relationship between runtime and box office as even films with a runtime of less than 2 hrs. performed well in terms of box office in USA gross. I think the performance of a movie/film is dependent on factors like genres, the crews etc. no the runtime. A movie/ film can be long but 'boring'. I would advice Microsoft not to worry much about the runtime of the movie/film.
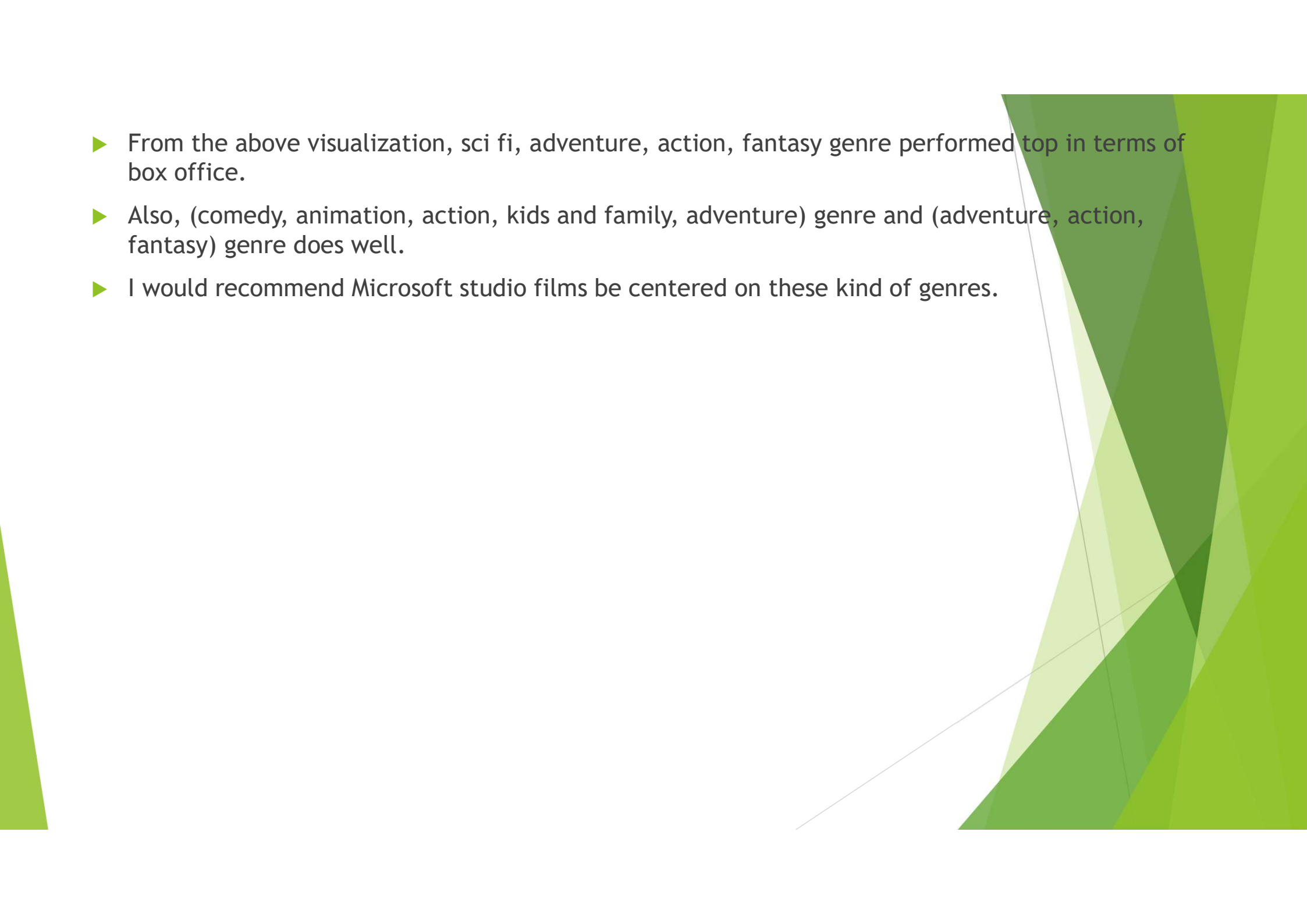
Types of films and how they relate to box office of the top performing films.


Top films types.
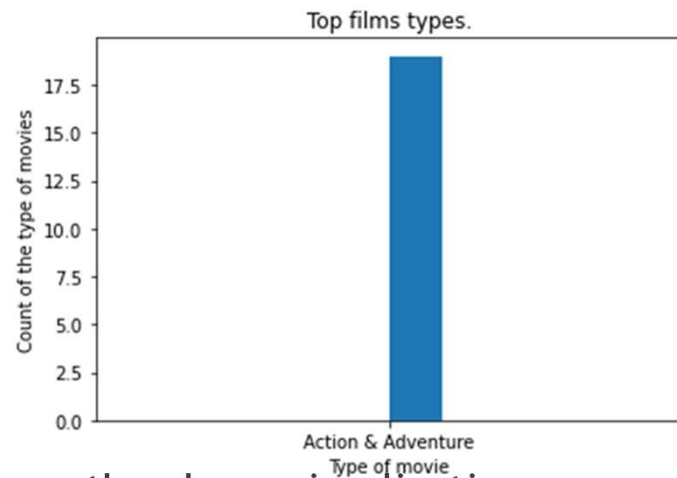
- From the above visualization, we can see that the type of all the top performing films is Action & Adventure.

- I would them recommend the creation of films that are of this(Action and Adventure) type.

How the genre of a movie/film affect the box-office of a movie.
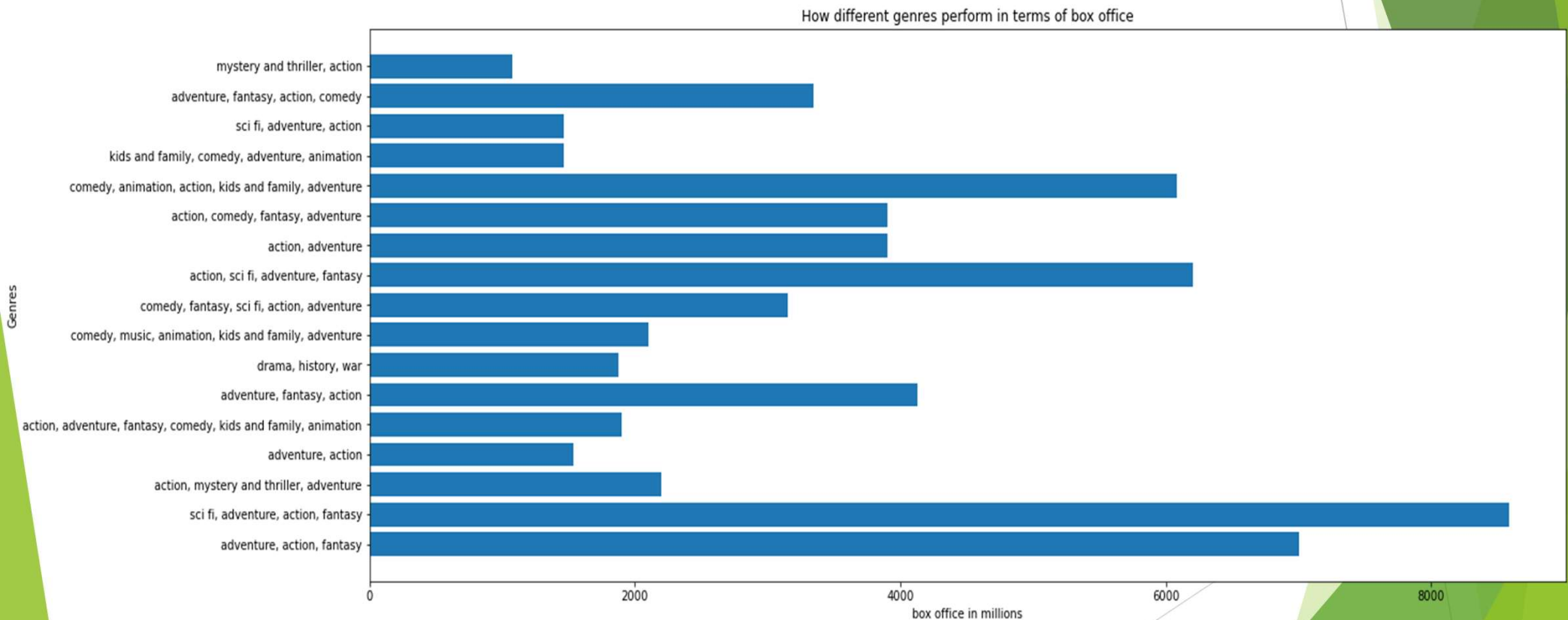
How different genres perform in terms of box office

- From the above visualization, sci fi, adventure, action, fantasy genre performed top in terms of box office.

- Also, (comedy, animation, action, kids and family, adventure) genre and (adventure, action, fantasy) genre does well.

- I would recommend Microsoft studio films be centered on these kind of genres.

We also will have to look at the rating of the top films since it will determine a lot when settling on the type of film to recommend to Microsoft.

How the rating of a film affect the box office
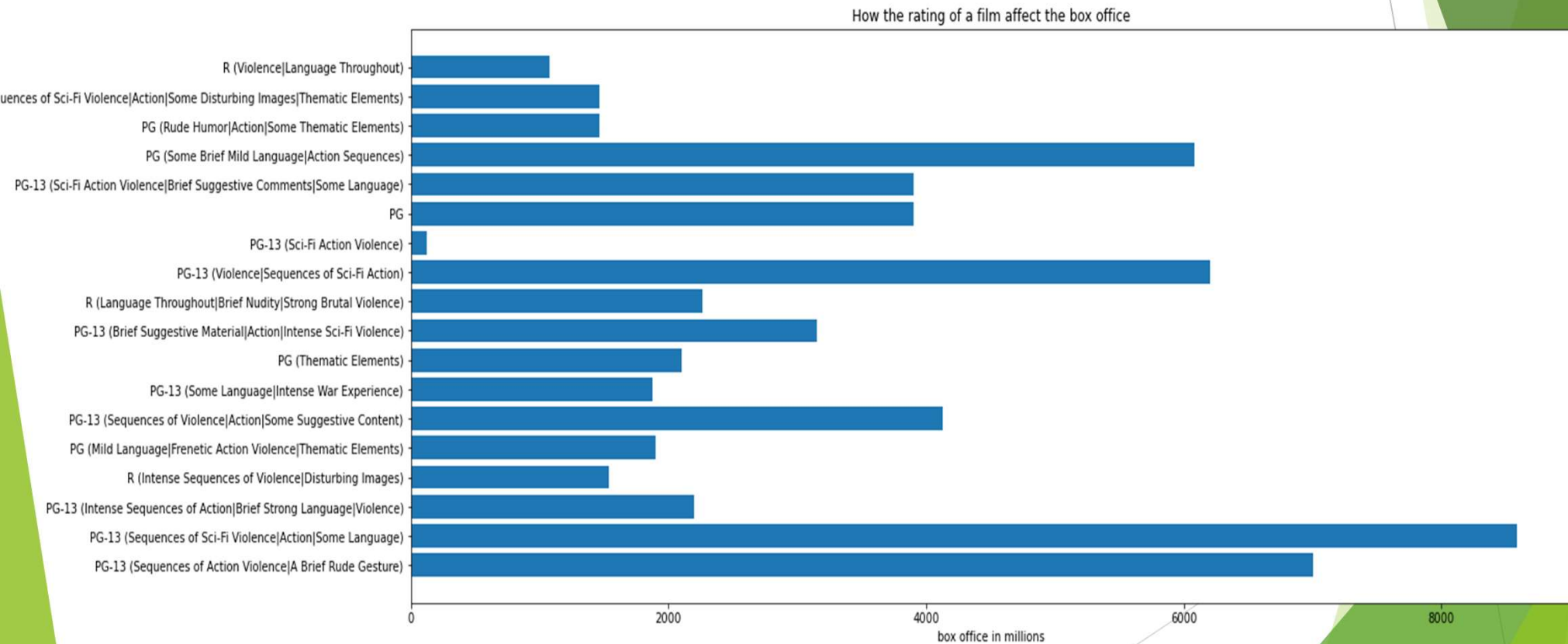
- Also, the sample is of top performing films. The rating from the visualization above matters less in terms of box office.

- We can see the movies rated PG performing highly and also in some titles are performing not that highly.

We then look at producers of these performing films.
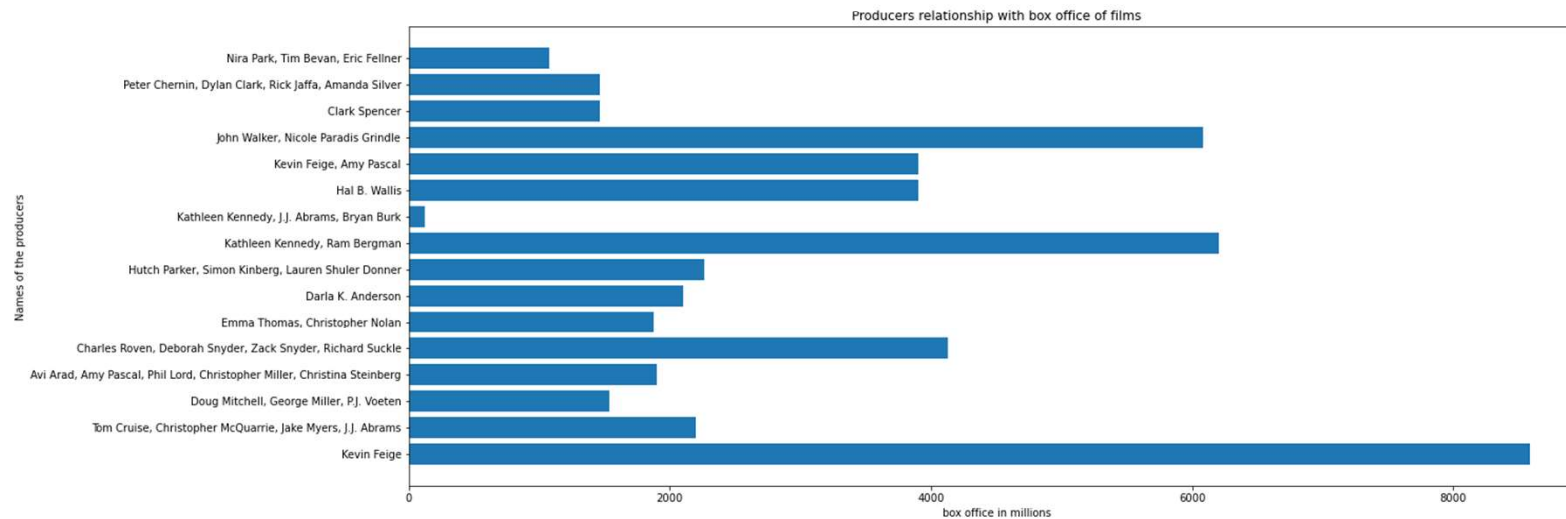
Producers relationship with box office of films

- Kevin Feige is the top film producer. I recommend Microsoft to hire him to train the producers they intend to employ. This will ensure that the new producers are achieving the quality to which Kevin Feige produces films.

- If possible, Microsoft can hire him. Also among the top 3 producers are Kathleen Kennedy and Ram Bergman.

The relationship between production budget and box office
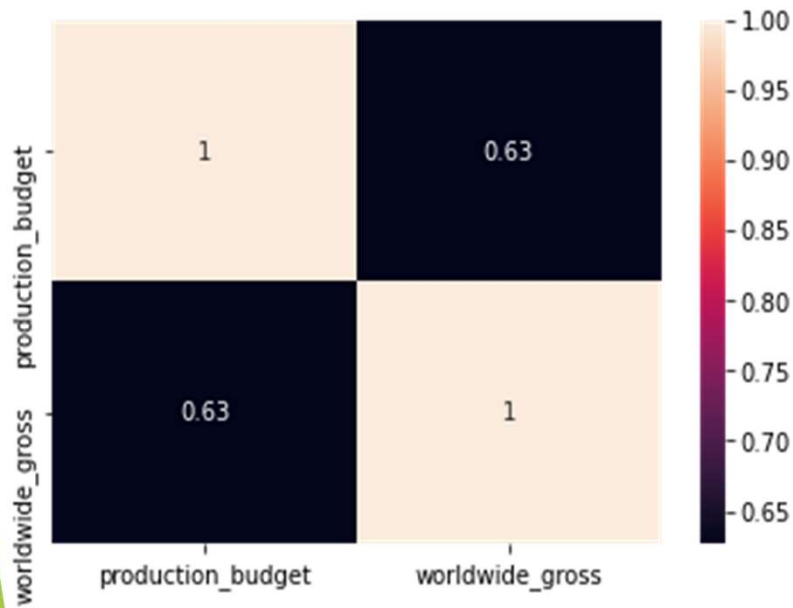
From the correlation matrix, we can see that there is a high correlation of 0.63 between production budget and worldwide gross. The higher the production budget then the probability of a huge worldwide gross is high. I would therefore recommend Microsoft studio to invest more in the production of their films as this will see a high worldwide gross of the films.

Summary and conclusion

- From the analysis;

    1. I would recommend Microsoft to look at what the top studios are doing that makes them mostly preferred. Microsoft can perform a benchmark from these studios. They include: The top movie/film studios are BV.(Buenos Vista), Uni.(Universal pictures), WB.(Warner Bros), Sony and Par.(Paramount).

    2. BV(Buerno Vista), WB, Uni.(Universal pictures) are most sorted after and produces films that have among the highest box office. Microsoft studio should match this top studios.

    3. I would advice Microsoft not to worry much about the runtime of the movie/film. From our analysis, there is no clear relationship between runtime and box office as films with a runtime of less than 2 hrs. performed well in terms of box office in USA gross as compared to some with more than 2 hrs. runtime.

    4. I would them recommend the creation of films that are of Action and Adventure type.

Summary and conclusion cont.

- sci fi, adventure, action, fantasy genre performed top in terms of box office.

- Also, (comedy, animation, action, kids and family, adventure) genre and (adventure, action, fantasy) genre does well.

- I would recommend Microsoft studio films be centered on these kind of genres: sci fi, adventure, action, fantasy genre.

    Also, (comedy, animation, action, kids and family, adventure) genre does well.

Summary and Conclusion cont.

- The rating of a film matters less in terms of box office.

- We can see the movies rated PG performing highly and in some titles are performing not that highly. Therefore,

- In terms of producers; Kevin Feige is the top film producer. I recommend Microsoft to hire him to train the producers they intend to employ. This will ensure that the new producers are achieving the quality to which Kevin Feige produces films.

  If possible, Microsoft can hire him. Also among the top 3 producers are Kathleen Kennedy and Ram Bergman.

Summary and Conclusion

▶ The higher the production budget the higher the probability of a huge worldwide gross. I would therefore recommend Microsoft studio to invest more in the production of their films as this will see a high worldwide gross of the films.