MOVIE ANALYSIS

What makes a successful movie?

OUTLINE

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BUSINESS PROBLEM

Microsoft have decided to a create a movie studio, but without a solid understanding of the current movie landscape, Microsoft will not be able to make confident decisions on content creation.

This analysis will use data from movie data bases, to identify trends and highlight elements that typically make a movie successful.

For the purpose of this analysis, 'successful' is defined as box office revenue, i.e., 'highest gross'.

THE DATA

The data used for this analysis was sourced from:
- IMDB
- Box Office Mojo

These sources were chosen as they have large databases, tracking many features of each movie. For example, IMDB can collate many reviews from a wide variety of sources to provide a representative average rating.

The Box Office Mojo data details the domestic (US) and foreign gross each movie earned.

The IMDB data (including two data sets - "Basics" and "Ratings") describes the movie titles, release year, genres, running time, studio name, and average ratings for movies from 2010 to present.

METHOD

Only movie data from 2015 to 2020 was analysed to focus on the most recent and relevant trends

The **average ratings, genres,** and **runtimes** were compared against the movies' **total gross** (combined domestic (US) and foreign gross) to identify elements of success.

The data was separated into Top 100 Movies (highest total gross) and Bottom 100 Movies (lowest total gross) to provide two comparative sample sets.
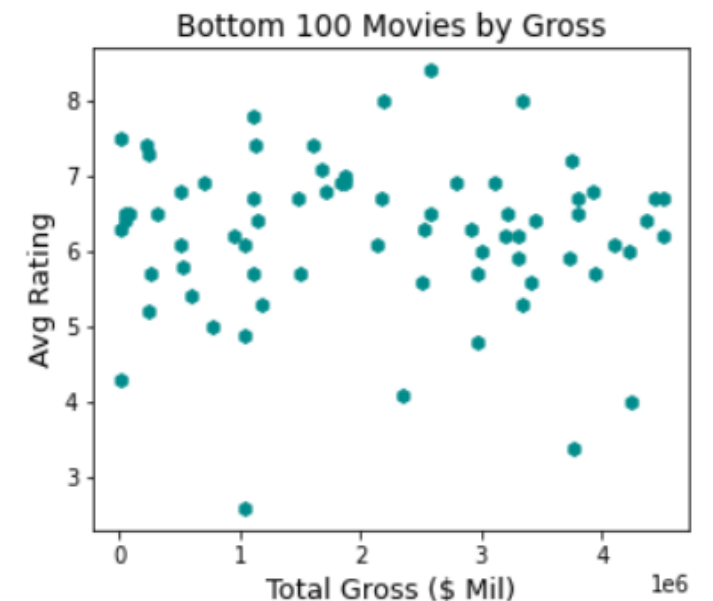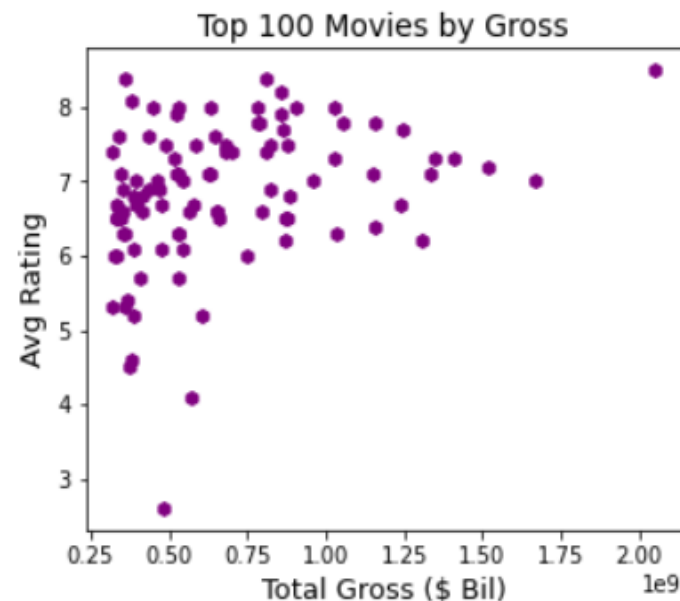
RESULTS

Average Ratings

There is a very **weak positive relationship** between average ratings and total gross (r=0.135).

Meaning, the higher the average rating, gross will likely increase by a small degree also.

However, the charts (right) show the relationship does strengthen at the top end of movie grosses (Top 100 r = 0.329).


Avg Ratings Vs Total Gross

RESULTS

Runtime

There is a **weak positive relationship** between runtime and total gross (r=0.137).

However, like average ratings, the relationship becomes stronger for higher grossing movies.

Top 100 Movies are, on average, **18% longer** than Bottom 100 Movies.

|	Average runtime
Top 100 Movies	116 minutes
Bottom 100 Movies	98 minutes

Runtime Vs Gross
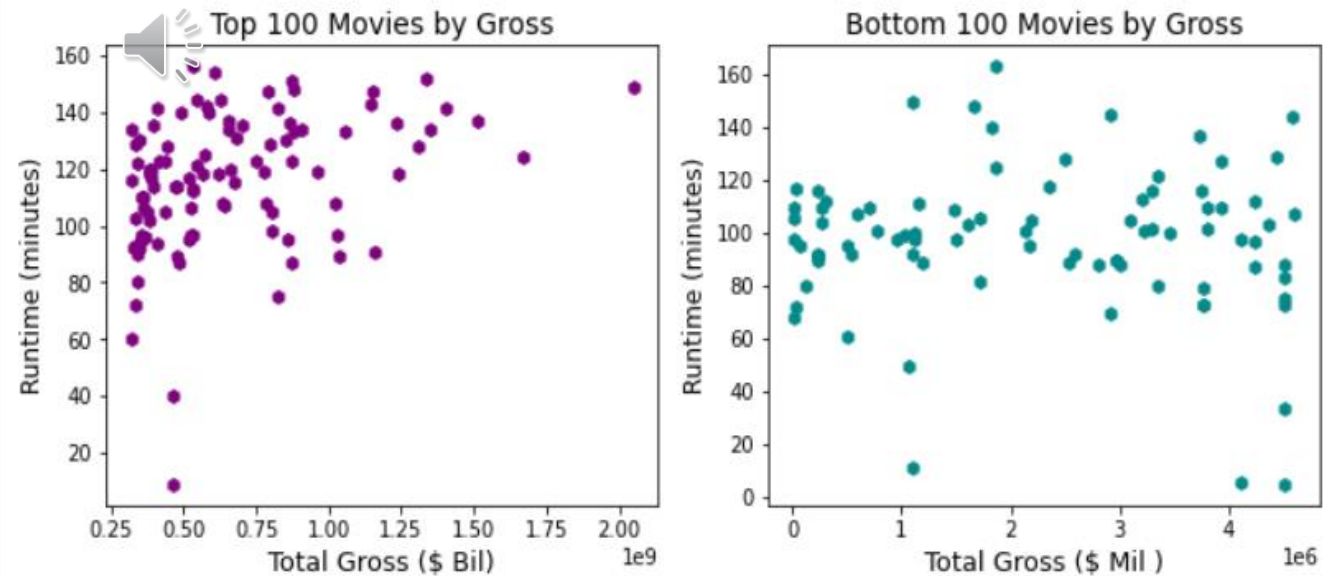
RESULTS

Genres

The composition of genres in the Top and Bottom 100 Movies is clearly very different.

Adventure and **action** are very popular in the Top 100 Movies. However, **drama** and **documentary**, the most popular genres in Bottom 100, only rank 6th and 10th respectively, in the Top 100.

Comedy came in as the 3rd most common for both Top and Bottom 100, indicating other deeper factors need to be examined to establish what makes a successful comedy movie.

Top 100 Movie - Genres

Bottom 100 Movie - Genres
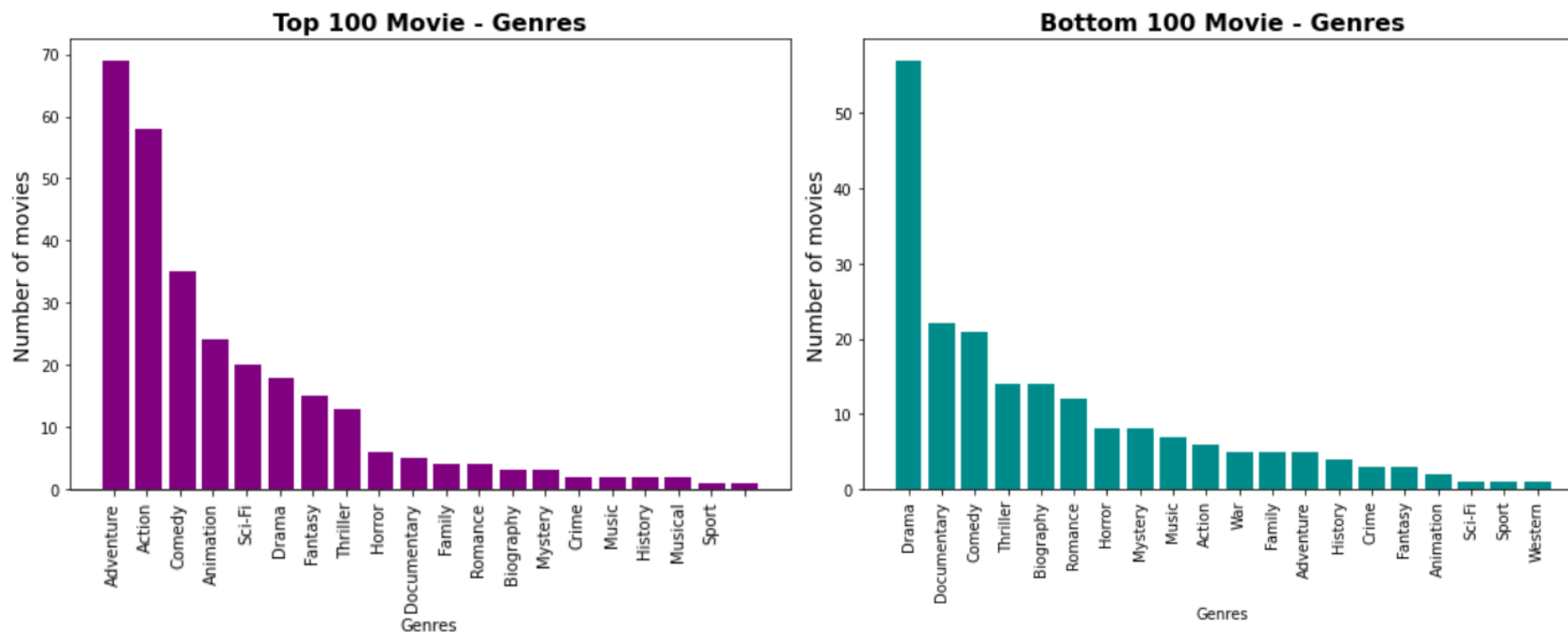
RECOMMENDATIONS

i.   Microsoft should **not** try to make content decisions based on potential movie ratings as:
    a.   The impact of ratings on gross is rather minor, and;
    b.   A studio has limited direct control over future reviews.

ii.   The runtime influence is also minor, but it is worth noting the significant difference in average runtime between Top and Bottom 100 Movies. This indicates audiences prefer longer, epic-like movies and is an area Microsoft should research for further insights.

iii. Microsoft should focus on action and adventure movies and avoid dramas and documentaries. The clearest distinction between the Top and Bottom 100 is the composition of genre, so this area should be considered most carefully.

iv. Microsoft could consider the list of studios that produced the Top 100 and research further how these studios operate to gain insights on how successful movies are chosen and produced.

CONCLUSION

This analysis demonstrated the major factor influencing a movie's success is the genre.

Audiences have a strong preference for action and adventure movies and, to a lesser extent, comedy and animation.

This analysis only looked at movie gross. Further research should examine movies by net profit and loss to gain a better understanding profitability.

Next steps:

1. Conduct further research into movie production costs to understand the relationship between ratings, runtime, and genre and profitability.

2. Explore other related factors to find stronger relationships. For example, the movie rating appeared to have little impact on movie gross, but number of reviews/ratings (i.e., level of media exposure) may be more impactful and worth examining.

APPENDIX

Studios producing the top movies between 2015 – 2022.

	Studio Name	Num of Top100 Movies
1	BV	24
2	Uni.	20
3	Fox	15
4	WB	14
5	Par.	8
6	Sony	7
7	WB (NL)	4
8	LGF	2
9	LG/S	2
10	HC	1
11	WGUSA	1
12	FR	1
13	FUN	1