

**Optimizing decision making &  
utilization of resources in movie  
production.**

# Objectives

The aim of this study is to help Microsoft:

1. Understand the landscape of box office movie production.
2. Generate insights to optimize the utilization of movie production resources.

## Background

Charged with exploring types of films currently doing the best at the box office. Microsoft is interested in generating actionable insights from data that the head of Microsoft's new movie studio can use to help decide what type of films to create.

## Summary & Highlights

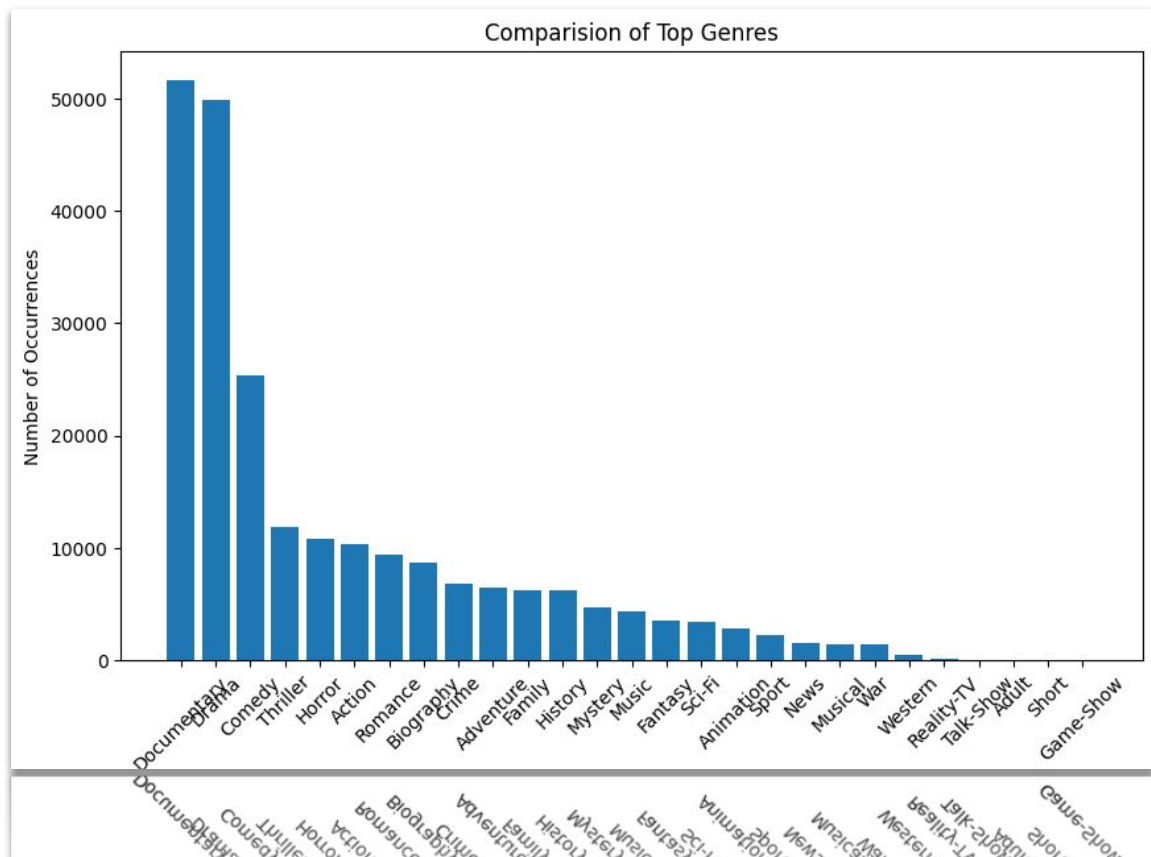
Using EDA techniques & focusing on genres, runtimes and production costs we can come up with useful insights on how Microsoft can optimize for content that audiences actually want to watch.

# Which categories to prioritize?

Comparision of Top Genres

|    | Genre       | Counts |
|----|-------------|--------|
| 0  | Documentary | 51640  |
| 1  | Drama       | 49883  |
| 2  | Comedy      | 25312  |
| 3  | Thriller    | 11883  |
| 4  | Horror      | 10805  |
| 5  | Action      | 10335  |
| 6  | Romance     | 9372   |
| 7  | Biography   | 8722   |
| 8  | Crime       | 6753   |
| 9  | Adventure   | 6465   |
| 10 | Family      | 6227   |
| 11 | History     | 6225   |
| 12 | Mystery     | 4659   |
| 13 | Music       | 4314   |
| 14 | Fantasy     | 3516   |
| 15 | Sci-Fi      | 3365   |
| 16 | Animation   | 2799   |
| 17 | Sport       | 2234   |
| 18 | News        | 1551   |
| 19 | Musical     | 1430   |
| 20 | War         | 1405   |
| 21 | Western     | 467    |
| 22 | Reality-TV  | 98     |
| 23 | Talk-Show   | 50     |

# Which categories to prioritize?



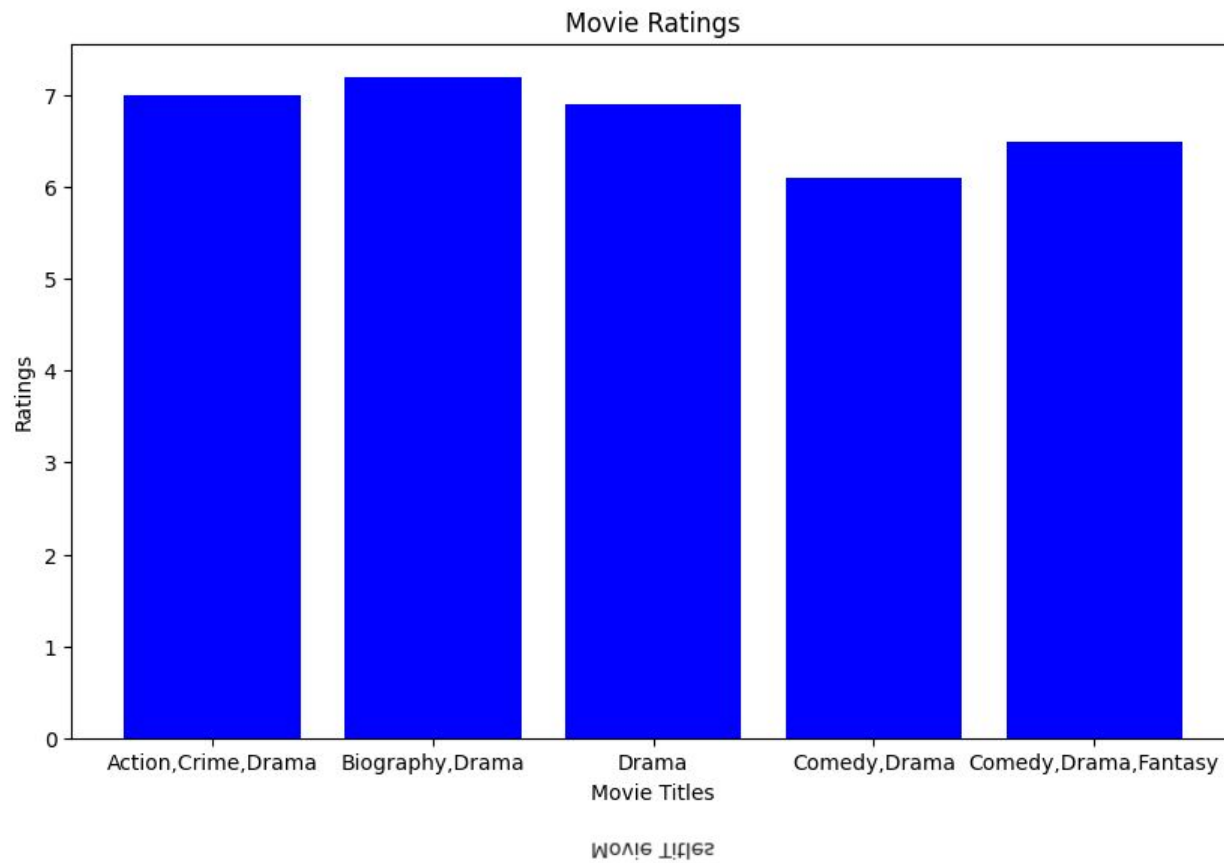
## Movie Runtimes for top movies (minutes)

Median: 87 minutes.

Mean: 86 minutes.

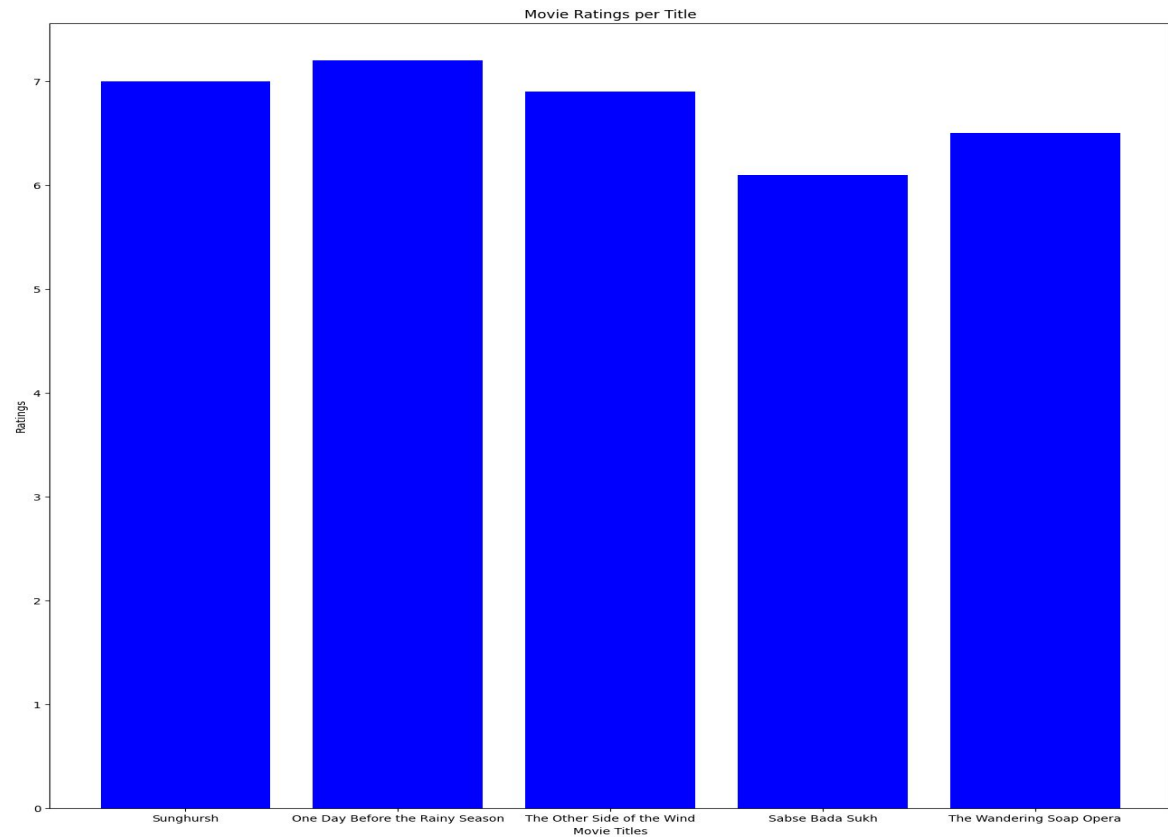
Top rated movies are distributed within within 87 and 120 minutes per movie.

# Movie Ratings per genres.





# Which movies ?

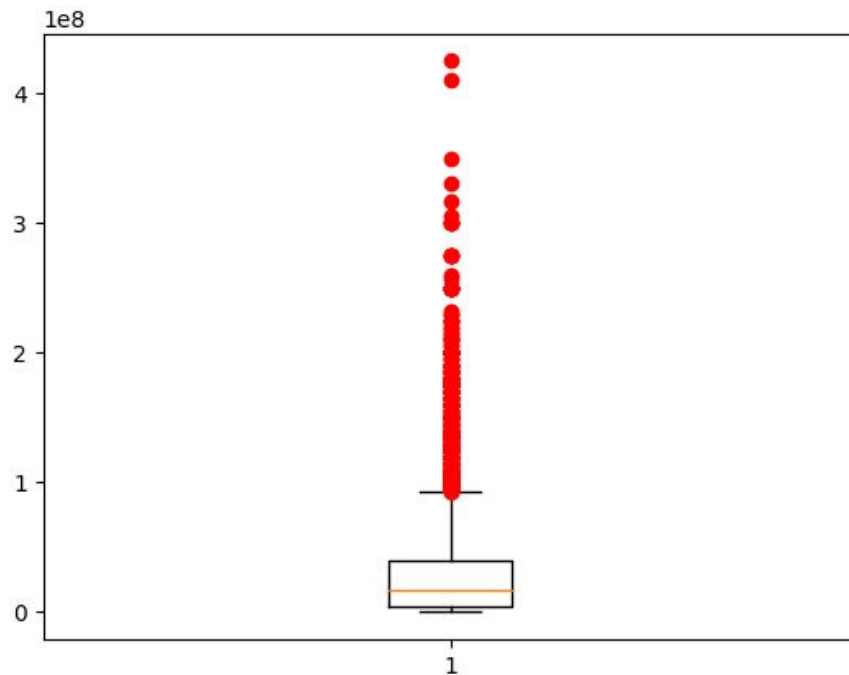


## Production Costs.

The average production of highly rated movies between 5 and 7 is;

**\$ 31,587,757.09**

# Production Costs - Distribution.



## Total Earnings - Gross.

The average earnings of highly rated movies between 5 and 7 is;

**\$ 91,487,460.90**

## Conclusion & Recommendations.

Documentaries would be a good choice to begin with given the lower production costs as compared to other genres.

Movies with drama plots in them seem to be a good second category if you want to cross categories.

## Conclusion & Recommendations.

Average returns across the categories could be as high as

**200%**

## Conclusion & Recommendations.

Initially investing a large amount of money in production could yield great returns.

# Questions?

