

# Movie Performance Analysis and Recommendations for Microsoft

Phase 1 Project Findings, by Leonard Koyio

# Introduction: Business Understanding

-Microsoft aims to enter the movie production industry and would like recommendations on how best to enter into the market

-Objective: Analyze existing film data to discover trends and patterns for box office success

# Key Business Questions

Which genres perform best?

What is the optimal runtime for movies?

How does release timing impact performance?

What is the correlation between financial performance metrics?

# Data Understanding

Objective: Use information about movies and their performance in the industry to determine which metrics and trends achieve great success in the market. Based on the trends, give Microsoft a concrete recommendation on how best to penetrate the market.

-Focus on info on genre, runtime, release timing of movies and how they affect and relate to the audience ratings, popularity , and ultimately financial success of the movies in the industry.

# Methodology

Data Collection: Multiple datasets on movies.

Data Cleaning: Removed duplicates and irrelevant data.

Data Analysis: Statistical analysis and visualization.

Conclusion: Give Microsoft concrete recommendations based on findings on analysis

# Analysis: Optimal Runtime

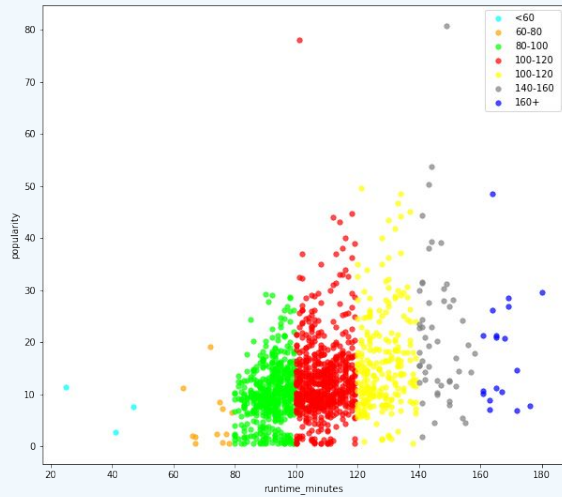
120+ minutes: Best performance across all metrics.

140-160 minutes: Highest gross.

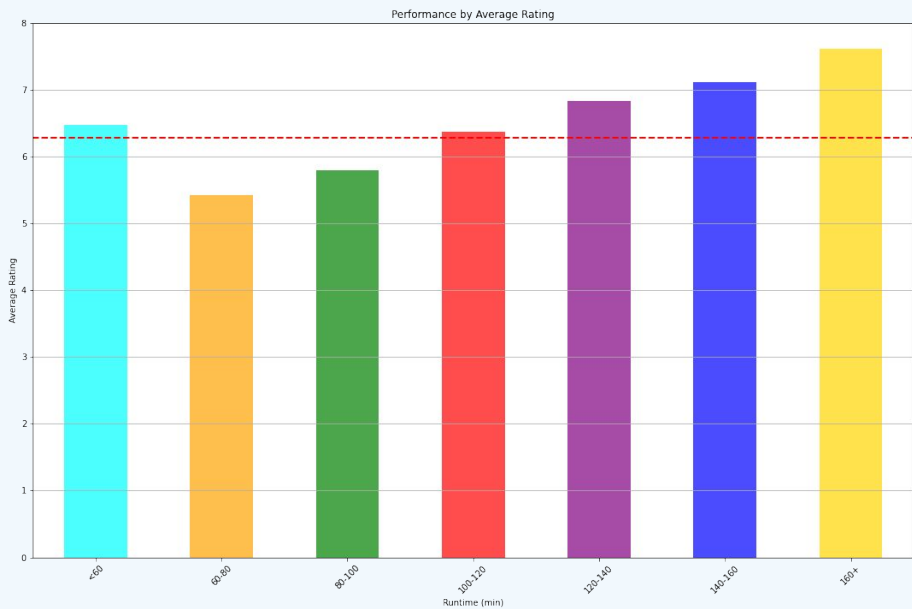
160+ minutes: Best ROI.

<100 minutes: Generally poor performance, especially 60-80 minutes.

# Data visualisation

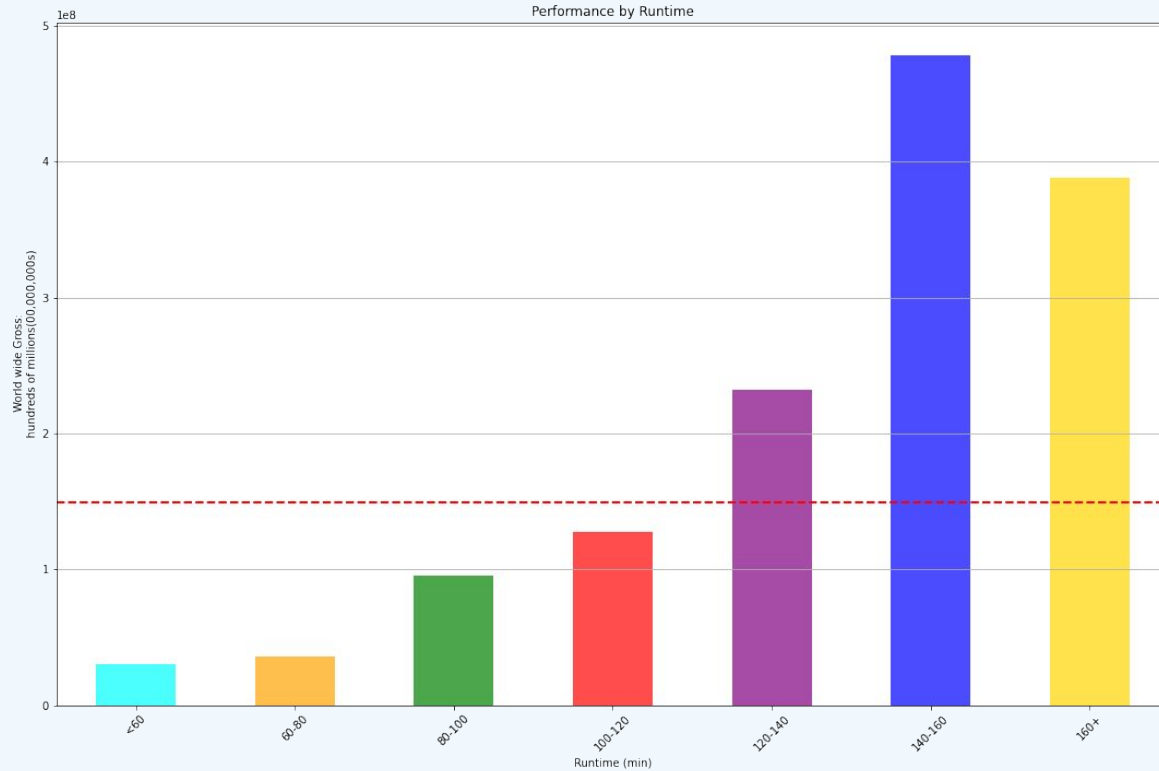


Scatter plot showing positive correlation between runtime of movies and popularity



Bar graph showing relationship between runtime and audience reception





Bar graph showing positive relationship between runtime and worldwide gross

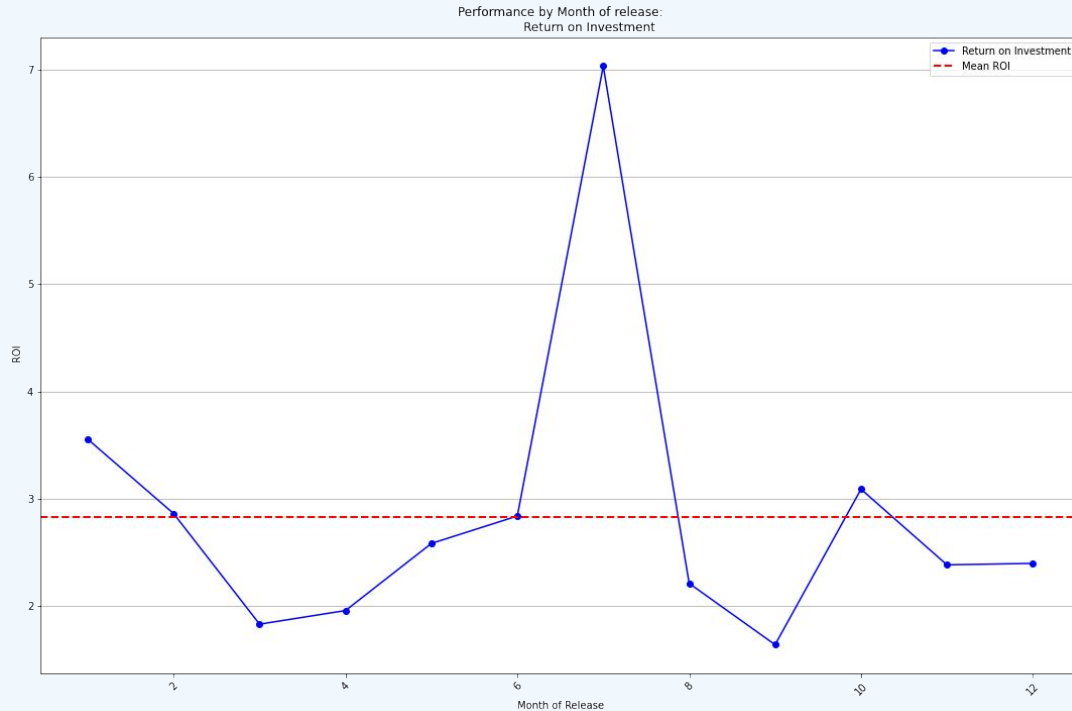
# Analysis: Release Timing

Best Months: May, June, December (Winter and Summer in Northern Hemisphere)

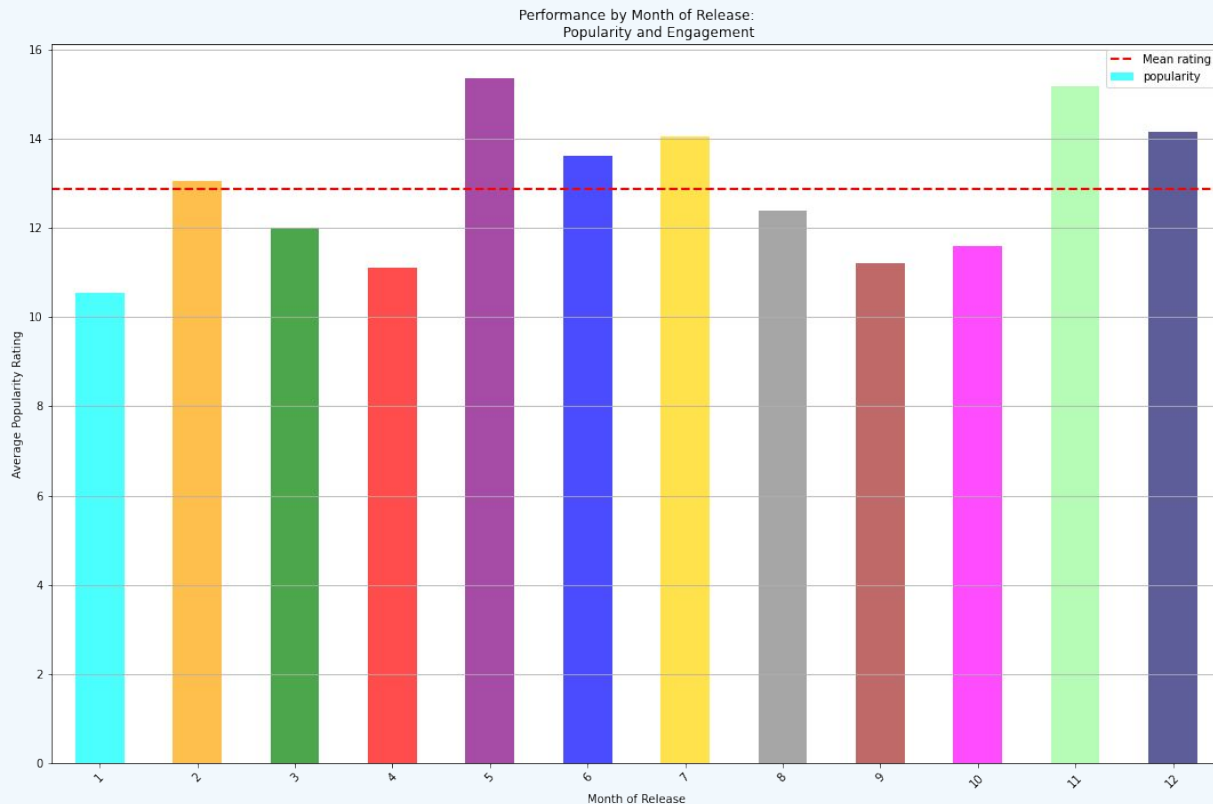
Worst Months: February, August, September.

Implications: Timing significantly affects box office success and audience reception.

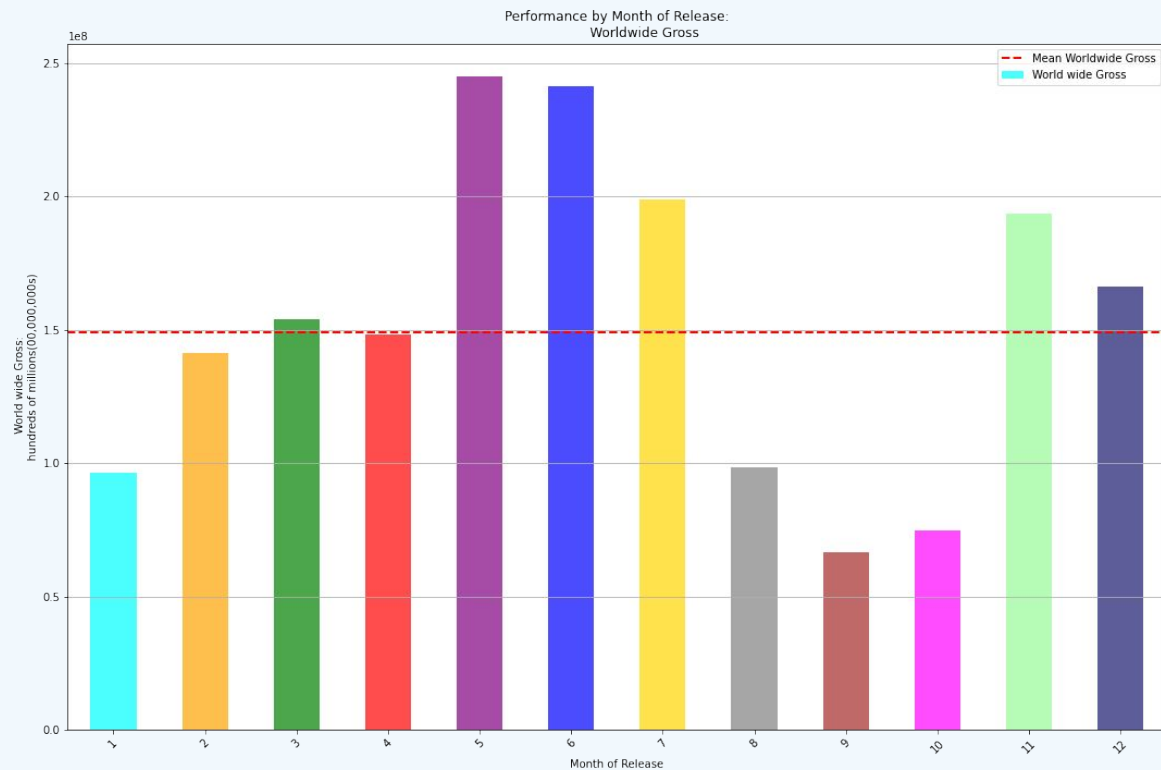
# Data Visualization



Line graph showing Return on Investment by Month of Release. A distinct peak can be seen in June.



Bar graph showing popularity of movies based on month of release. Distinct peaks are seen in May and November while troughs are seen in April and September



Bar graph showing worldwide gross of movies based on month of release. Distinct peaks are seen around May and November.

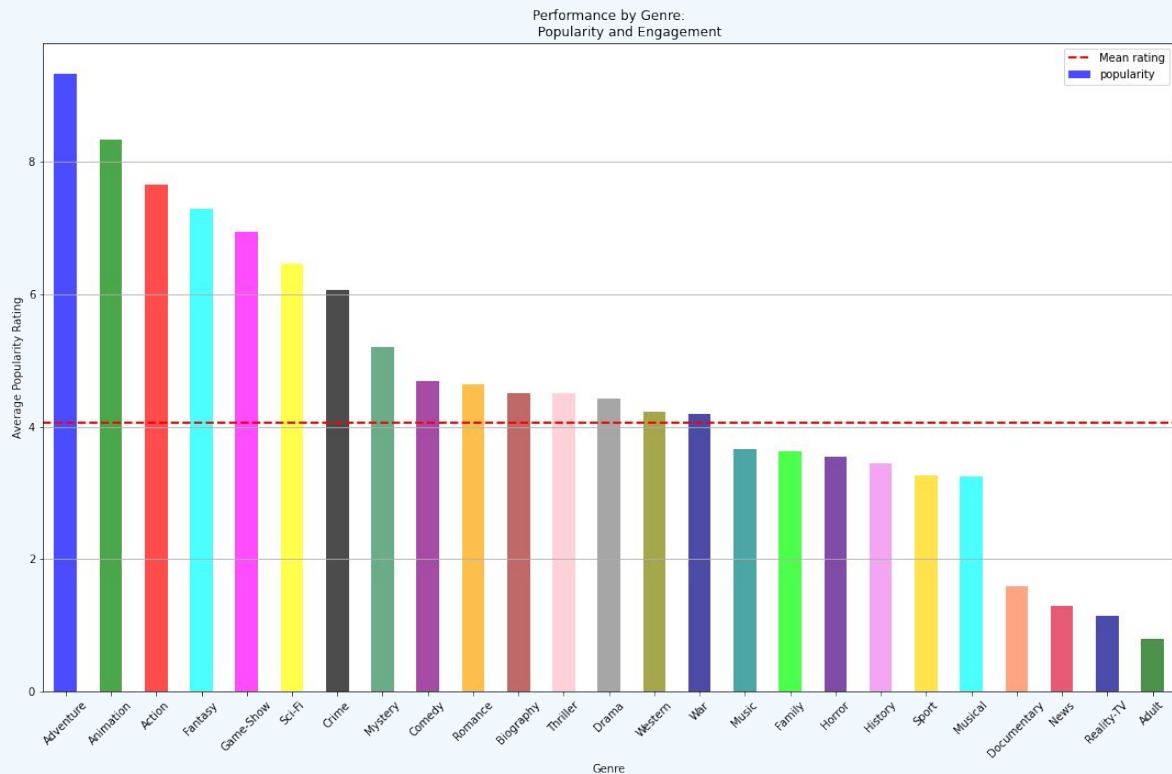
# Analysis: Genre Performance

Top Genres: Adventure, Animation, Sci-Fi, Fantasy, Action.

High Ratings but Lower Gross: Documentary, Biography, History, Music.

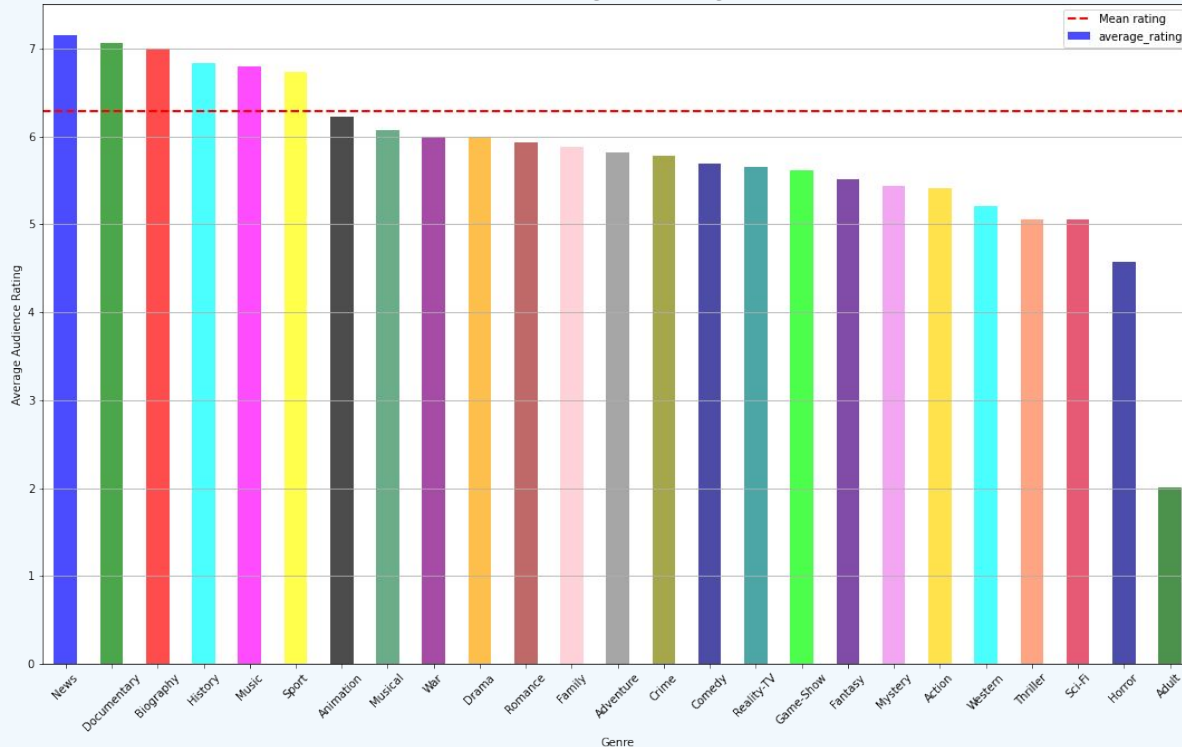
Poor Performers: Adult, News, Reality-TV.

# Data visualisation



Bar graph showing popularity of movies based on genre.  
Top performers- Adventure, Animation, Action  
Poor performers- Adult, Reality TV, News

Performance by Genre:  
Average Audience Rating

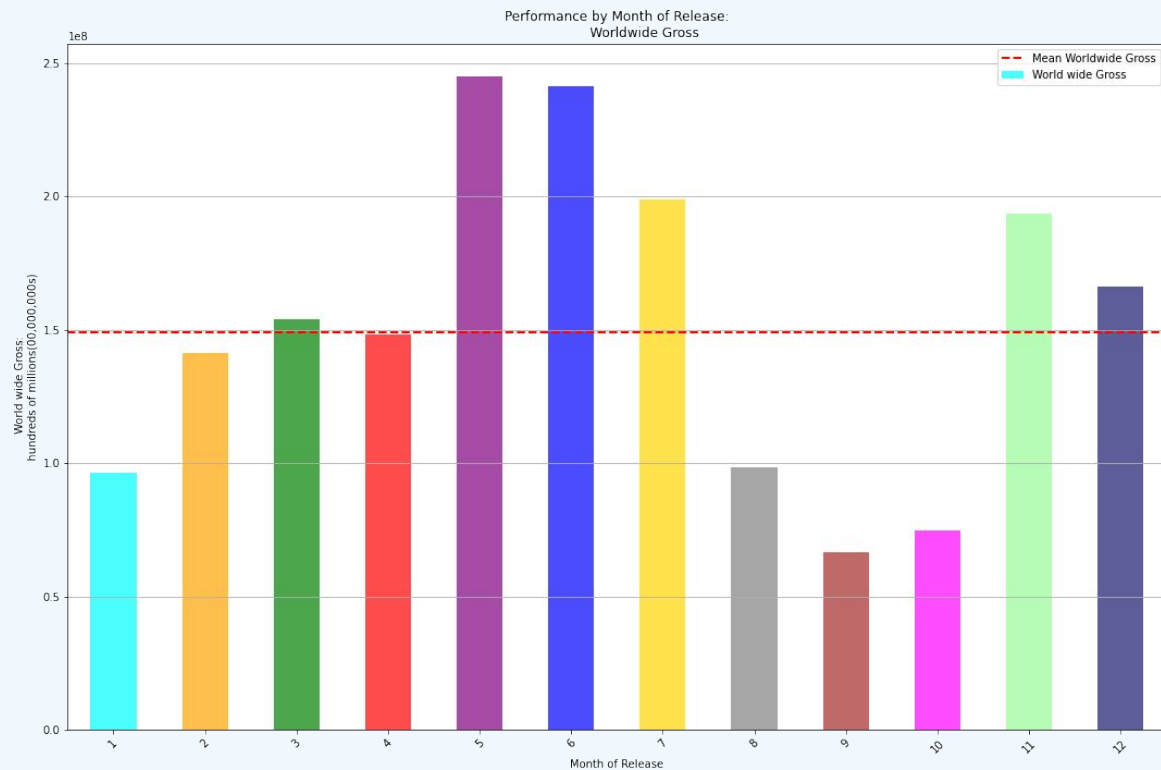


Bar graph showing audience reception of movies based on genre.

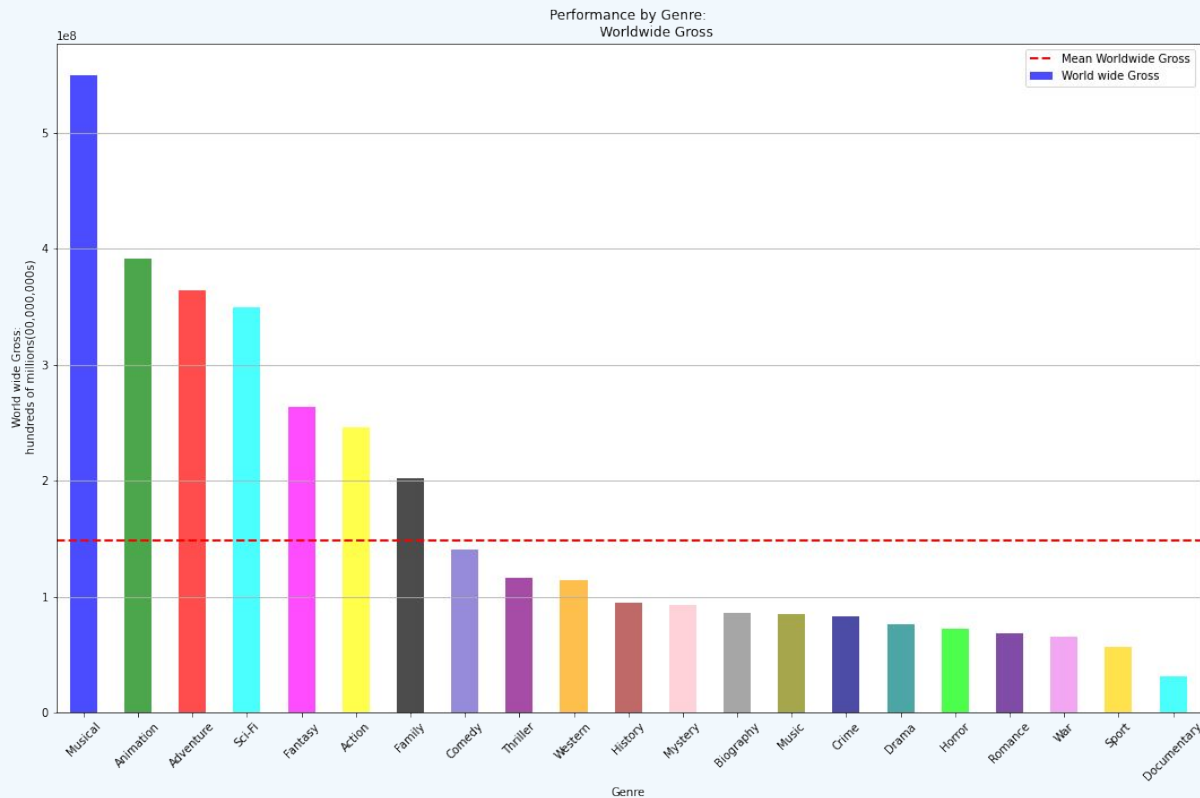
Top performers- News, Documentary, Biography, History

Poor performers- Adult, Horror, Thriller





Bar graph showing worldwide gross of movies based on month of release. Distinct peaks are seen around May and November.



Bar graph showing world wide gross of movies based on genre.

Top performers- Musical, Animation, Adventure, Sci-fi  
Poor performers- Documentary, Sport, War

# Recommendations for Microsoft

Focus on Optimal Runtimes: 120+ minutes, especially 140-160 minutes.

Strategic Release Timing: May, June, December. Avoid February, August, September.

Invest in High-Performing Genres: Adventure, Animation, Sci-Fi, Fantasy, Action.

Avoid Low-Performing Genres: Adult, News, Reality-TV.

# Conclusion

Microsoft has the opportunity to strategically enter the movie production industry by leveraging data-driven insights.

By focusing on optimal runtimes, strategic release timing, and investing in high-performing genres, Microsoft can maximize both financial returns and audience engagement.

Avoiding low-performing genres and release periods will minimize risks and enhance overall performance.

Implementing these recommendations can position Microsoft as a competitive and successful player in the film industry, ensuring a balance of box office success and audience satisfaction.