

# **Analysis of Movie Release Profitability and Success**



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# Agenda

1. Business Problem
2. Data
3. Visualizations
4. Conclusions

# Problem

Entering the video content space, need actionable insights for new projects.

To this end, this analysis seeks to answer:

1. Most profitable movie genres.
2. Most profitable time of the year to release.
3. And whether resources should be committed to pleasing critics and garner good ratings.

# The Data

3 Databases:

IMDB Title Basics- includes movie title and genres

- Combined with movie budgets, grouped by release month to ascertain the most profitable time to release
- Combined with movie budgets, grouped by genre to find the most profitable genre across 6027 movies and 2637 genres

IMDB Title Ratings- includes average rating of movies

- Combined with movie budgets to graph the correlation between profit and ratings

Movie Budgets- Movies, release date, production budgets, domestic gross, worldwide gross, and Profit

- 5782 movies across multiple decades, combined with both other databases

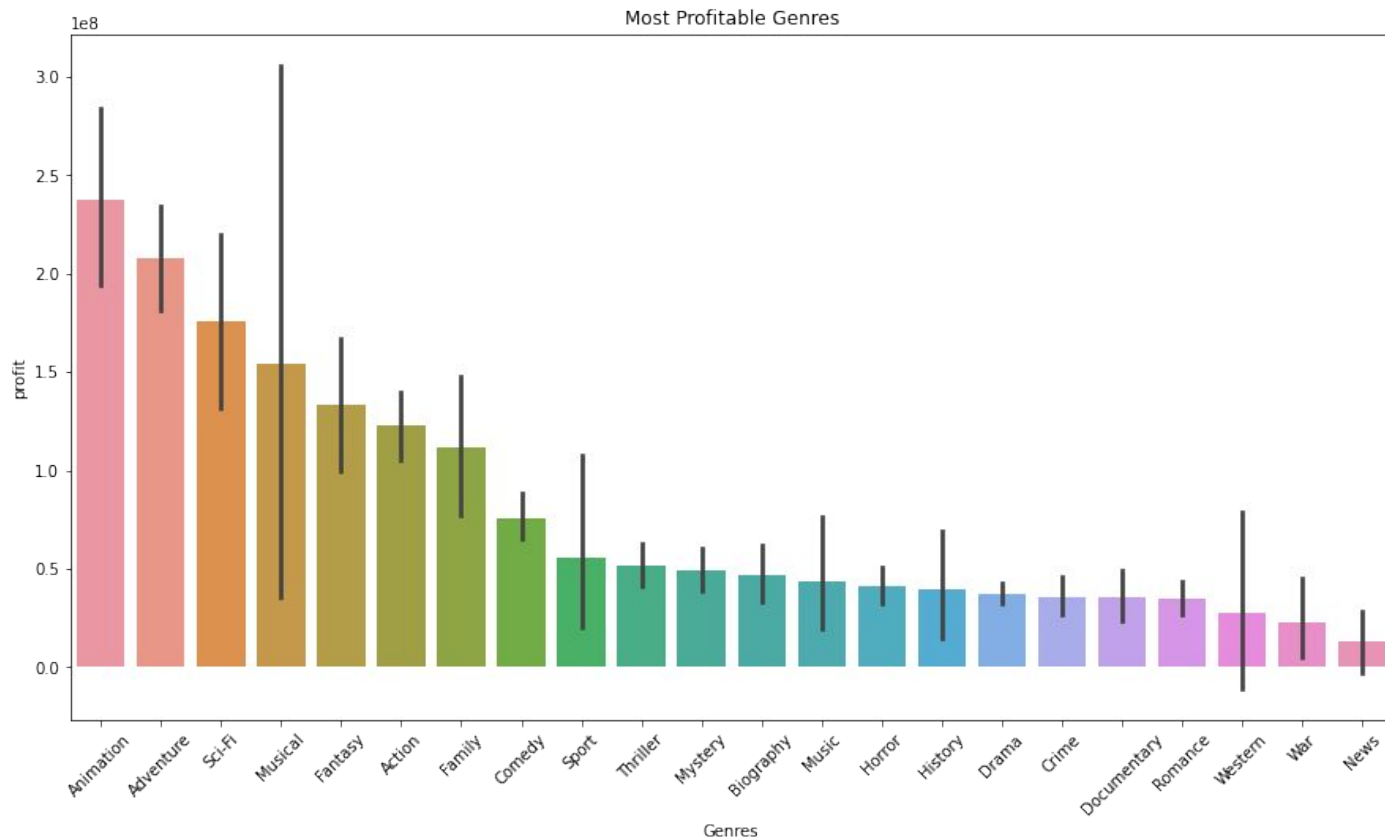
# Methods

Key Metrics of analysis:

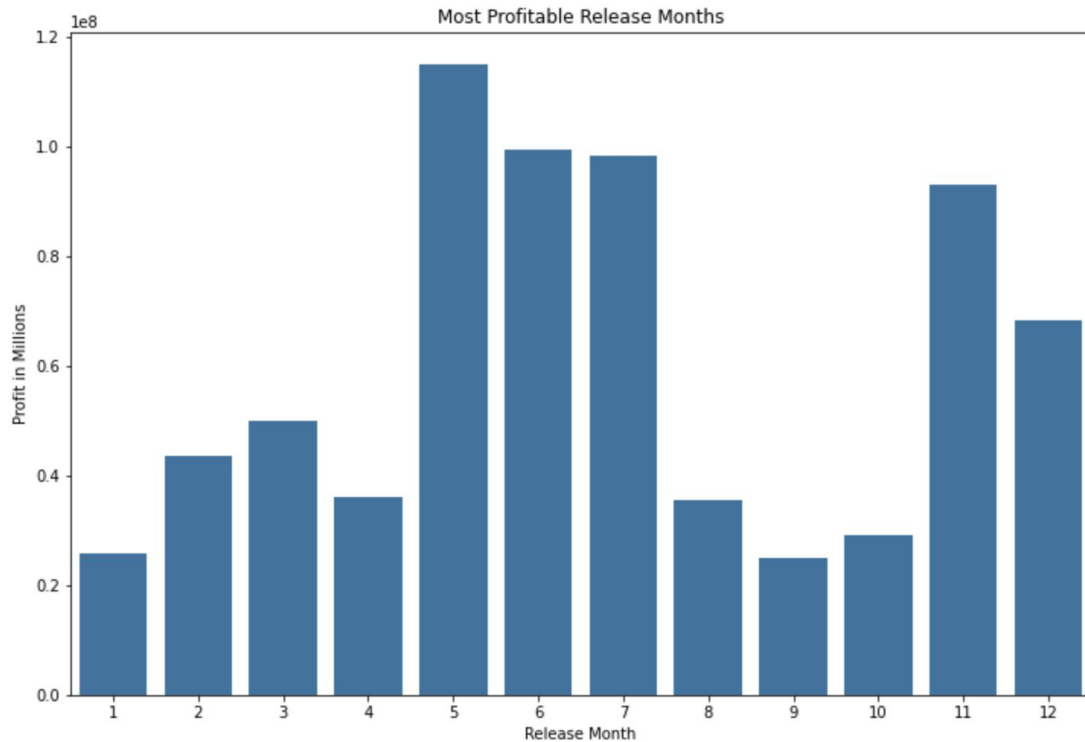
1. Profit
2. Release month
3. genre

Using barplots, scatterplots, and correlation

# 1. Most Profitable Genres



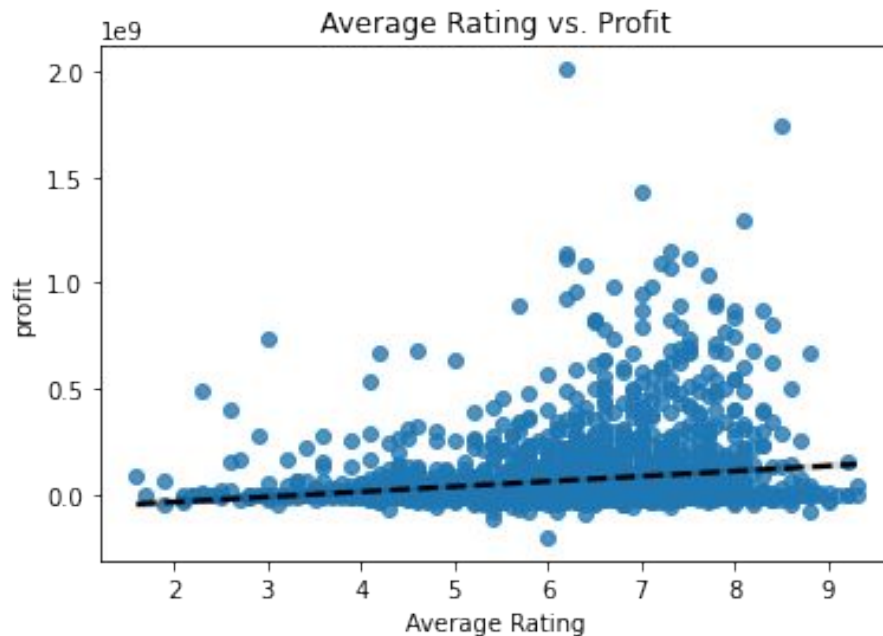
## 2. Most Profitable Release Months



### 3. Are good ratings correlated with profit?

$R^2 = 0.03155812333694898$

- Representing the strength of the relationship between ratings and profit
- Very weak positive correlation





# Conclusions and Recommendations

- 1.) **Release movies during the most historically profitable months.** Coinciding with the summer and the holidays, these months are *May, June, July, November, and December* (in that order).

## 2.) Choose projects occupying the animation, adventure, or sci-fi genres.

Historically, these genres have the highest profitability (in that order) within tolerable variability. With these genres, Microsoft will be best able to capture audiences and drive meaningful return on investment.



3.) **Focus artistic and strategic direction on the end consumer, not critics.** Since ratings do not correlate strongly with profitability, investing resources into pleasing critics does not necessarily result in ROI. Instead, invest in marketing and promotion targeting the end consumer. Movie critics may examine movies on different criteria (acting caliber, cinematography, total artistic worth etc.) than the average movie goer.



# Limitations of Analysis

Production budget used as the only cost input

- Excludes selling, general, and administrative expenses

Analysis does not consider momentum effects in a movie series

- The profitability of sequels/prequels in a movie series may be systematically different from single entry movies. Momentum effects should be further examined to see if they yield significant profitability.

**Questions?**