

Microsoft Movie Analysis

By David Boyd





What will we cover

- Executive Summary (1 pager to send out via email)
- Summary of what needs to be analysed
- Methodology and data sources used
- Key findings
- Recommendations
- Future analysis
- Q&A



Executive Summary

- Looking at domestic gross, **Action/Adventure/Sci-fi** movies generate the most money. However when looking at overall ROI, **Thriller** movies generate the highest ROI. Invest in these movie types to see good returns. Action
- Aim to release your movies in **June, January or February** to see highest returns & largest % of returns from opening weekend sales
- Make sure that your movie **doesn't run over 135 minutes**, unless it is part of a longer series
- **NR, R & PG** rated films have the best rotten tomatoes score. Focus on writing content in these rating brackets
- Movies released in **December** take the **longest to regain their production costs** due to higher production budgets



What are we trying to solve?

Microsoft is looking to launch a movie studio, but doesn't have experience within the movie industry and wants to understand different key pieces of information that help them to understand what types of movies they should make and when should they release them.

The purpose of this analysis is review data from multiple sources to help answer the following questions:

- Which genre has the best ROI
- What movie rating gets the best reviews on rotten tomatoes?
- Should they focus on family friendly or non-family friendly movies?
- How long should the movie last?
- Which month of the year is the best to release a movie, both for overall ROI and best opening weekend sales?



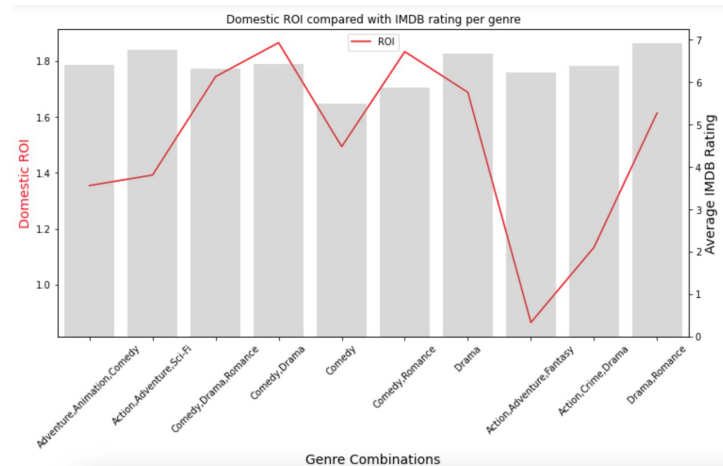
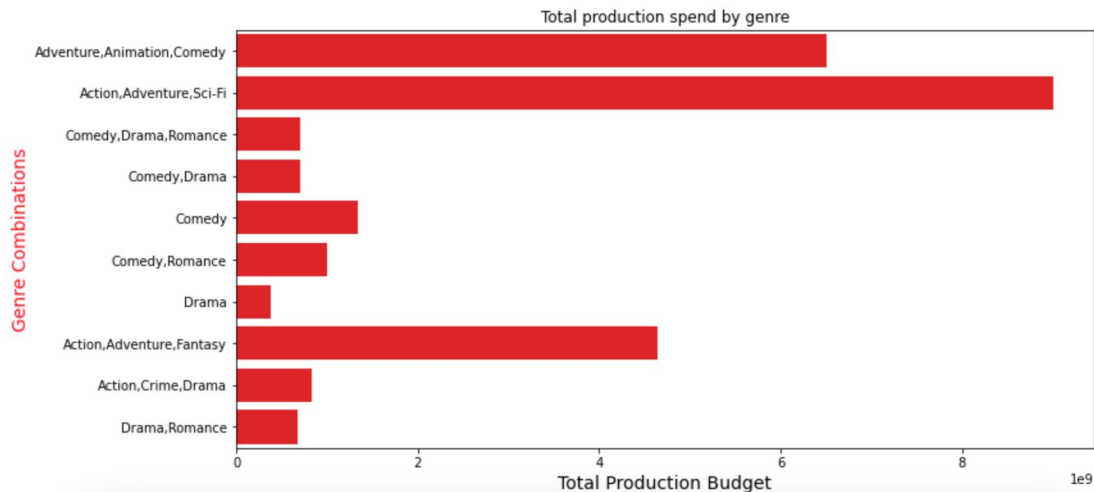
Methodology

In my analysis, I looked at different data sources. These range from:

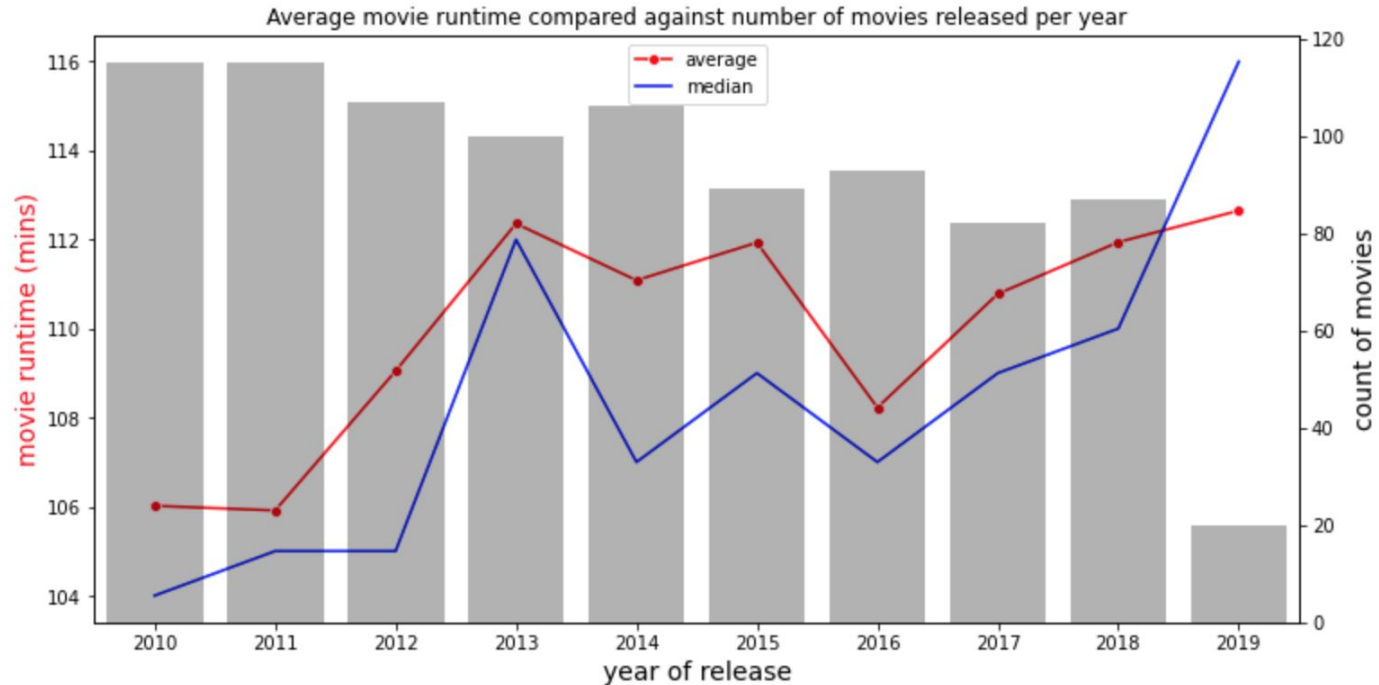
- Movie review data from Rotten Tomatoes & IMDB
- Movie budget data from <https://www.the-numbers.com/>
- US Opening Box Office figures from Box Office Mojo - This was scraped manually

All data sources were cleaned, converted into the correct data types, replaced/handled missing null values and joined together on a 1-1 relationship to prevent skews across my data

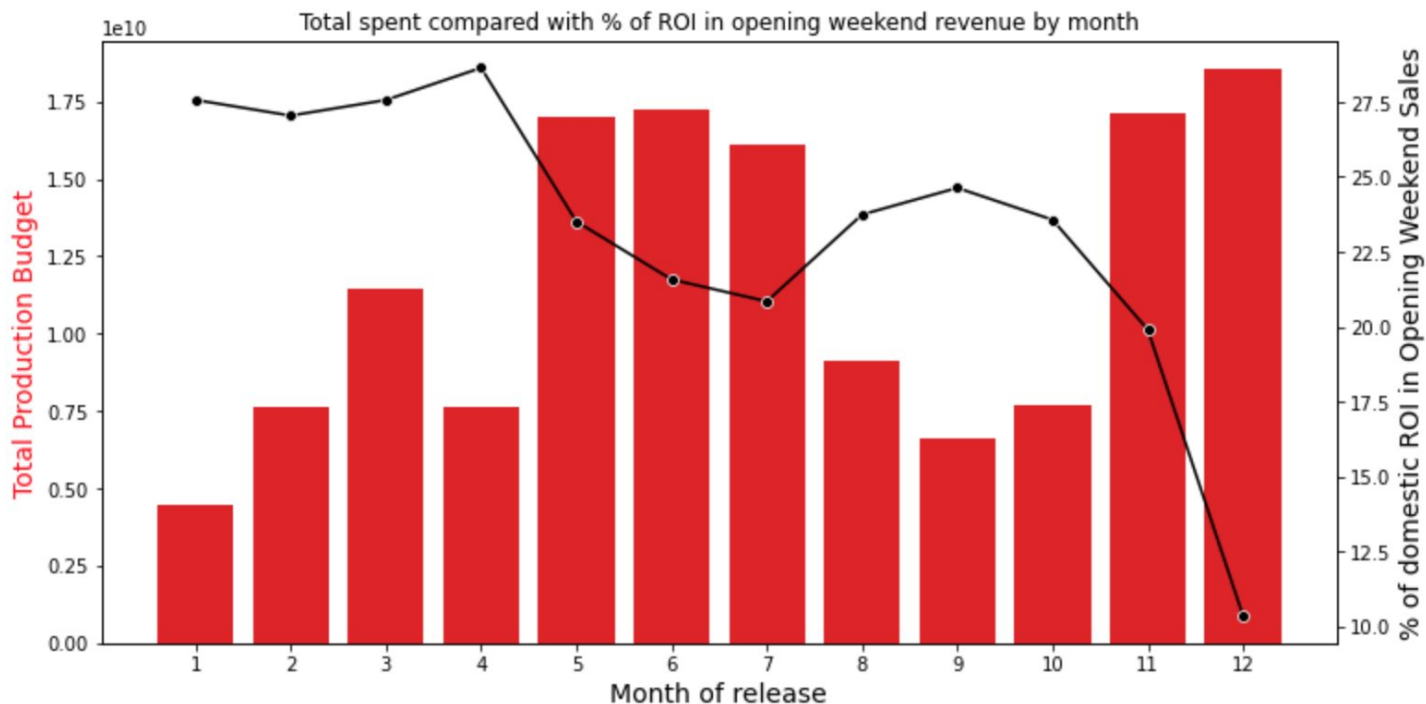
Action/Adventure/Sci-fi both have the largest production budget and high IMDB ratings



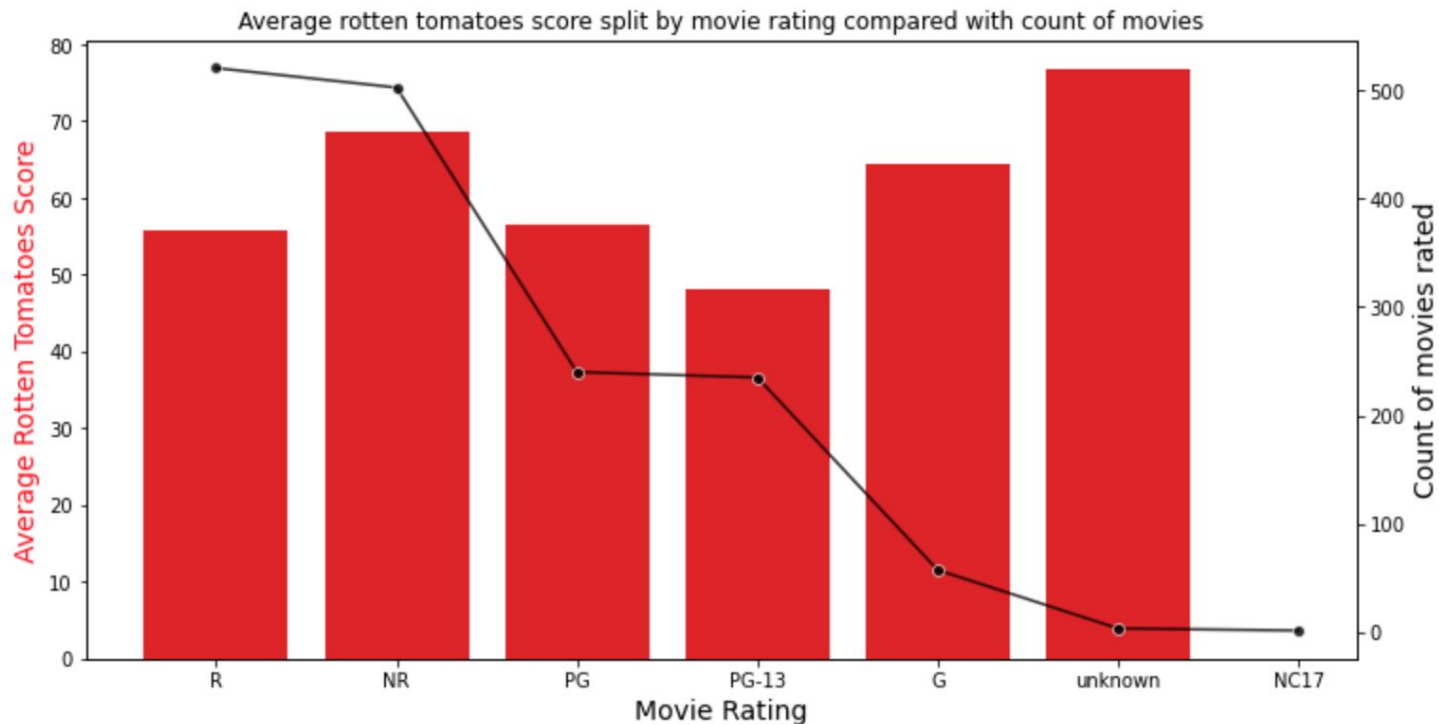
The runtime on movies is steadily rising over time. It's normal to watch over 90 minutes per movie



December has the biggest costs, but doesn't get the same box office returns compared to summer released movies



NR & R rated movies score the highest in Rotten Tomatoes ratings





Recommendations

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Future steps

- Explore what is the distribution between cinema sales & DVD sales
- Explore what type of movie (animation, etc) drives the best ROI
- See if there is a correlation between rotten tomatoes score & ROI. Does it lead to higher sales?
- Explore what are the most common traits of movies in the top grossing films
- Which countries outside of the US gross the highest % for movies & does it differ by genre? To understand where they should release their movies next & make sure translations are sourced early to increase ROI
- Once defining that G rated movies have the best rating, scrape movie names, directors & writers from that list to get the best performing directors & writers to hire

Any Questions?

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