

Genre, Release Time, and Budget: Recommendations for Microsoft Movie Studio

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Presentation Outline

- Business Problem
- Data
- Methods
- Results
- Recommendations

About the Movie Industry

- 2021, \$99.7 billion globally¹
 - Digital, theatrical, and physical sales
 - \$36.8 billion in domestic revenue
 - Streaming services at \$59 billion in the U.S.
- Digital sales account for 80% of all revenue
- Theatrical sales is 12%
- Physical media is 8%



WARNER BROS.



dreamstime.



NEW LINE CINEMA



LIONSGATE



FOCUS FEATURES



Microsoft

Business Problem

Microsoft is creating a new movie studio and wants insight on:

- What types of movies they should produce
- When to release them
- How much to budget for each movie

Data used for analysis

Internet Movie Database



- >70,000 movies
- Owned by Amazon
- Registered users generated content ²
- Data used
 - Movie title
 - IMDb rankings

The Numbers Database (TNDB)

- Owned by Nash Information Services
- Data tracked in a systematic, algorithmic way ³
- Data Used
 - Movie title
 - Production Budget
 - Worldwide Gross Revenue
 - Release Date



- Owned by Amazon
- Data from movie studios, distributors, sales agents, and others in the movie industry ⁴
- Data Used
 - Movie title
 - Domestic Gross Revenue
 - Foreign Gross Revenue

Data Processing

Data Preparation

- Data is gathered and combined
- Variables assessed for relevance

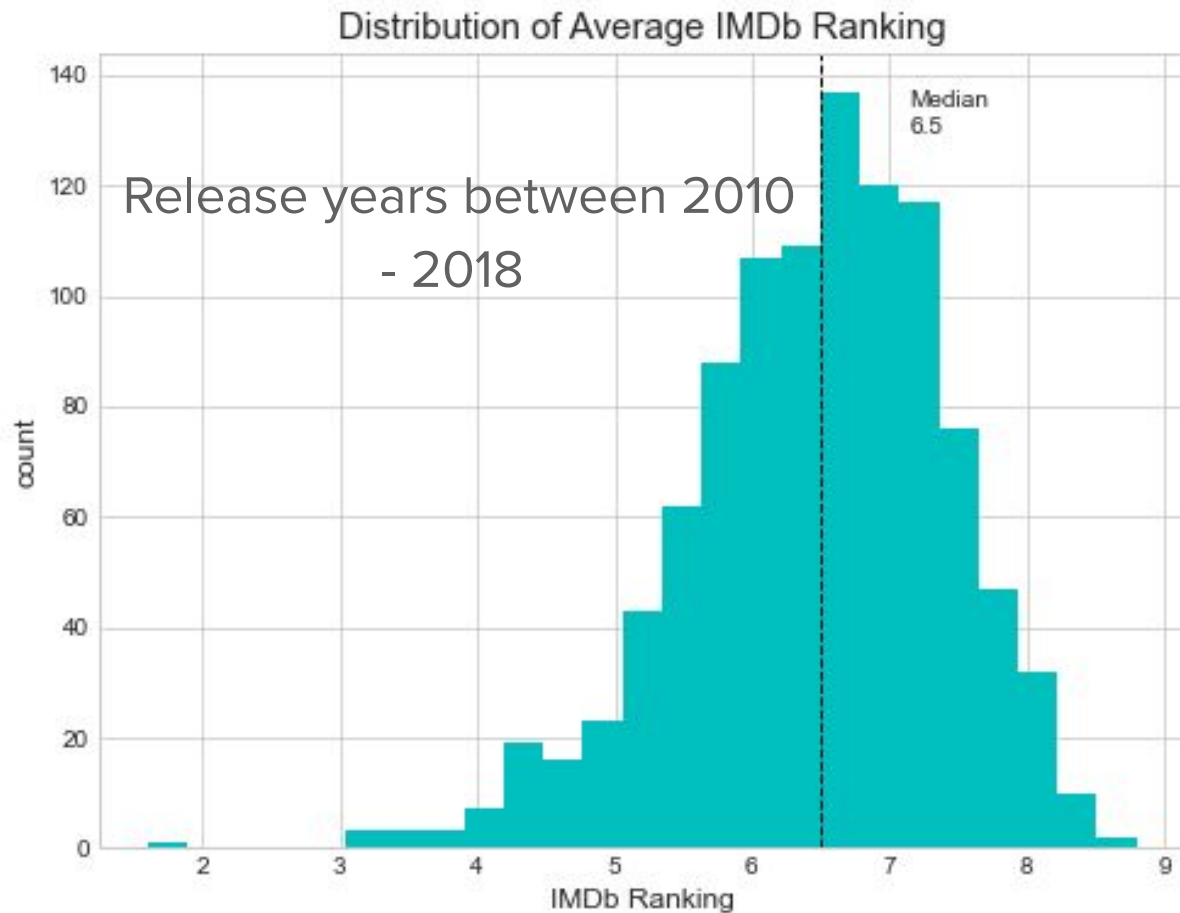
Cleaning

- Removed duplicates
- Fixed missing values
- Corrected data type

Analysis

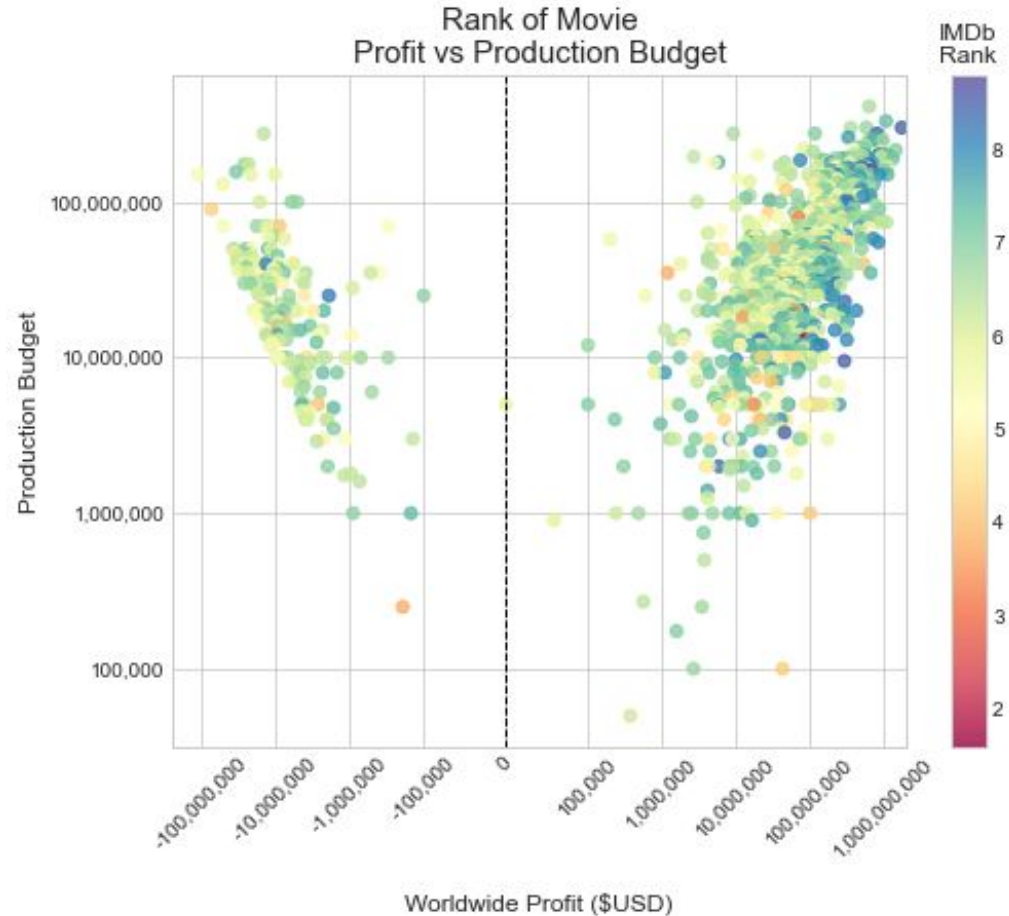
- Profit Calculated
- Assessed production budget's effect on revenue and ranking
- Discovered top four genres with highest gross revenue
- Analyzed yearly quarters with highest revenue and ranking

Median of 6.5 IMDb ranking in 1025 movies analyzed



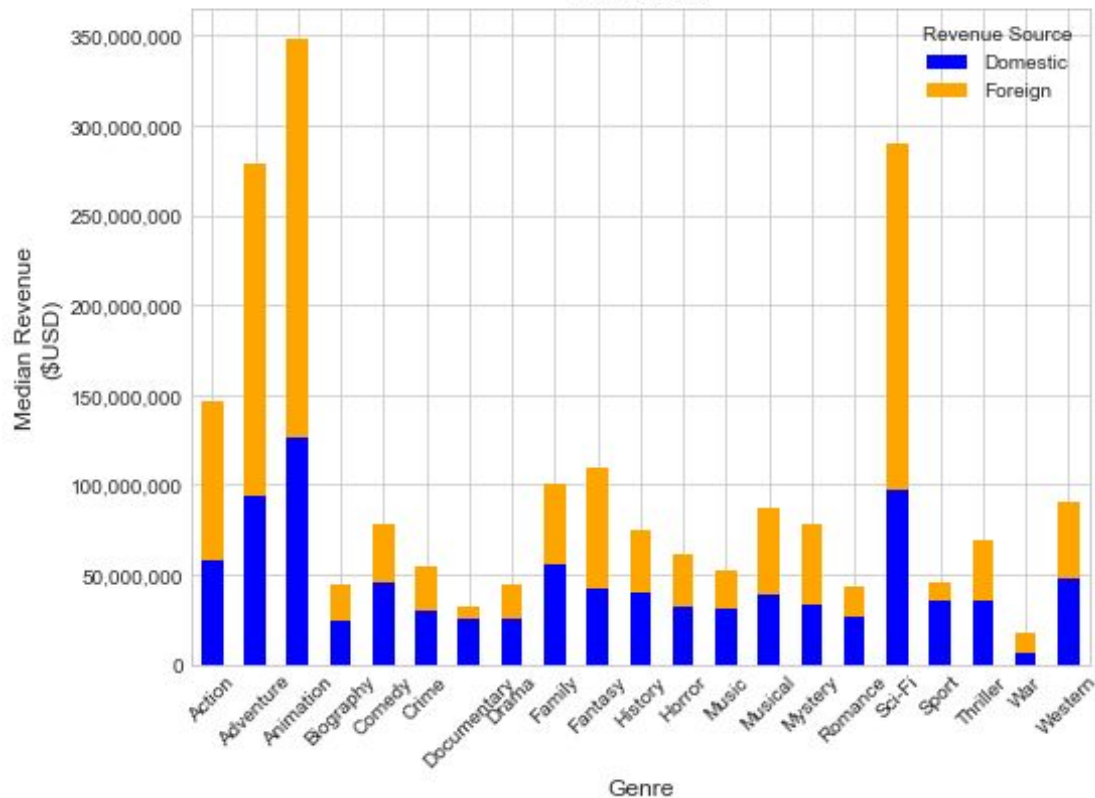
Large budget and ranking does not guarantee profit

- Estimated profit does not include marketing costs
- 83% of movies generated a profit
- 17% lost money

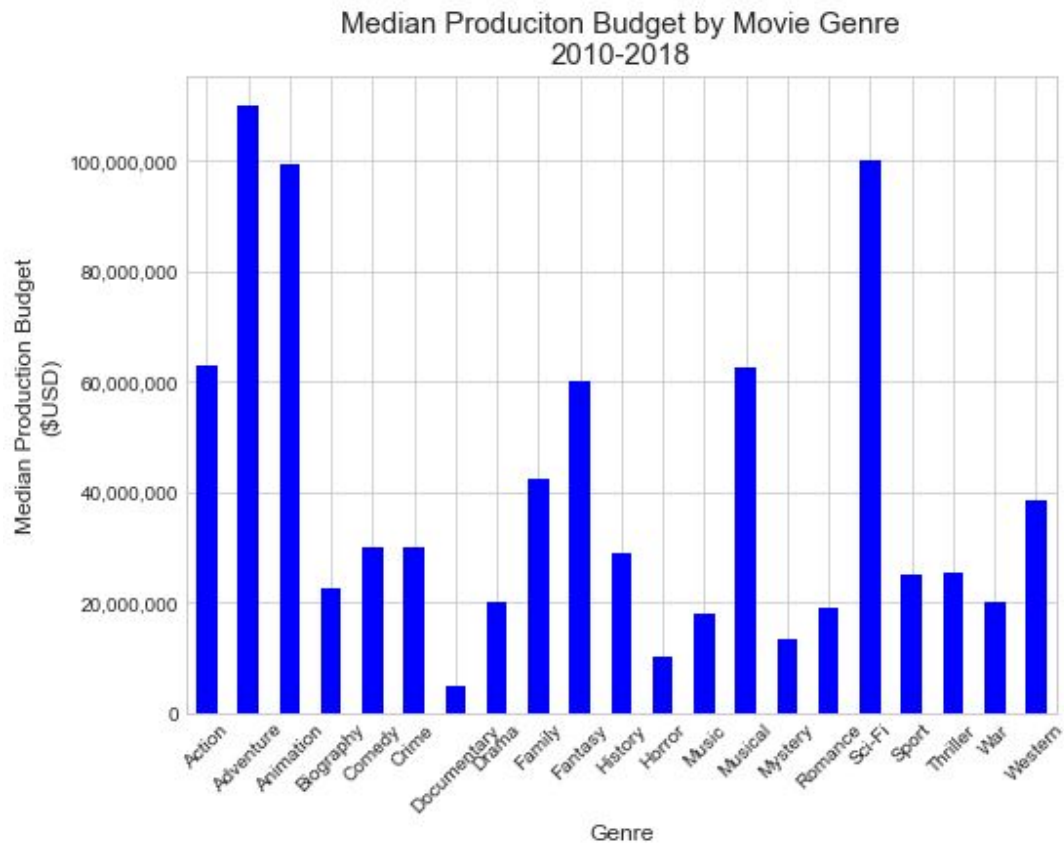


Top four performing genres Action, Adventure, Animation, Sci-Fi

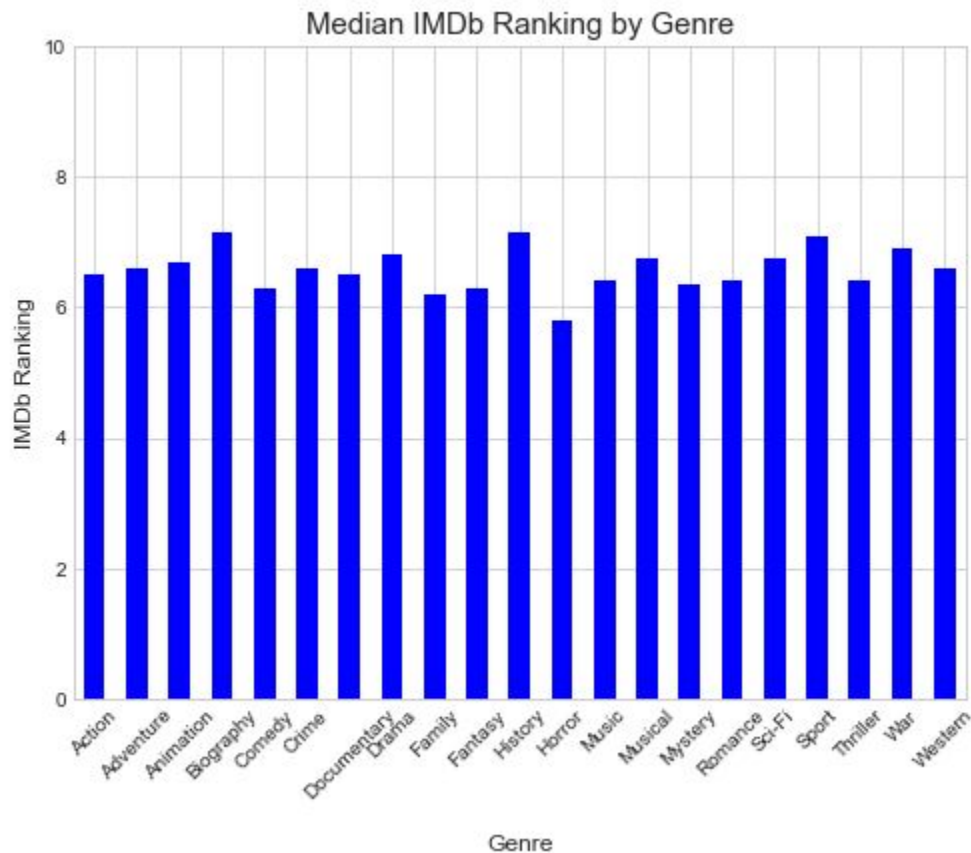
Median Domestic and Foreign Revenue by Genre
2010-2018



Action, Adventure, Animation, and Sci-Fi have highest median production budgets

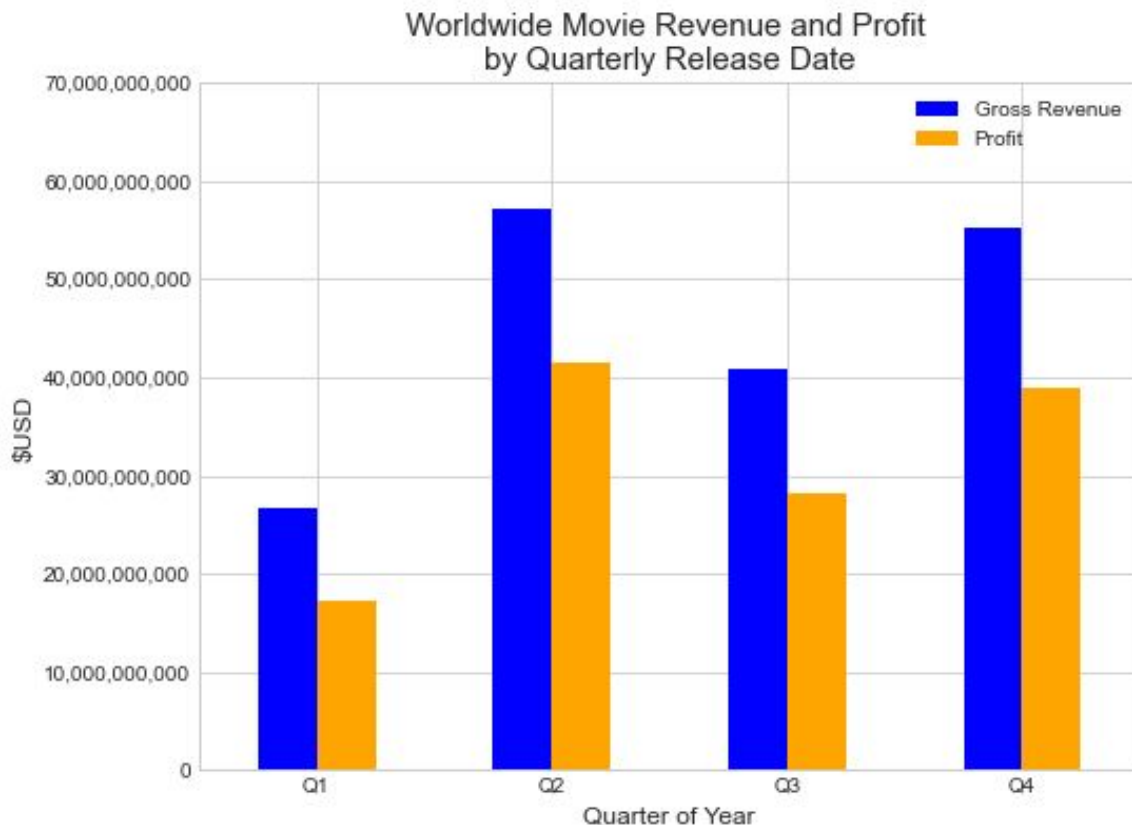


IMDb Ranking is similar across genres



Q2 and Q4 releases have the highest revenue and profit

- Q2 overlaps summer holidays
- Q4 overlaps fall and winter holidays



Recommendations

Microsoft's new movie studio should focus on

Genre

Action
Adventure
Animation
Science Fiction

Budget

\$60 million
to
\$100 million

Release Date

Q2
or
Q4

Next Steps

- Find what directors, producers, and actors that have a track record of being involved in highly reputable and profitable movies of the recommended genres.
- Conduct a survey on Xbox Live users to assess their preferred movie genre and how often they go to the movie theater

Thank You!

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References

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2. IMDb Ratings FAQ. *IMDb*, 31 Jan 2022, <https://help.imdb.com/article/imdb/track-movies-tv/ratings-faq/G67Y87TFYYP6TWAV#>. 18 May 2022.
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