


MICROSOFT MOVIE ANALYSIS

UNCOVERING FILM TRENDS TROUGH EDA

Summary

Microsoft is venturing into the film industry by launching a new movie studio but lacks prior experience in content production. Tasked with identifying profitable trends, I analyzed box office data and found that genres like Drama, Comedy, Music, Biography, and Adventure perform well both in ratings and revenue, with Drama standing out as the most consistently successful. The volume of films produced doesn't always correlate with profitability, emphasizing the value of strategic genre selection and budget control. Most top studios are U.S.-based, suggesting that market dynamics favor American partnerships or distribution models. For optimal returns, investing in mid-budget films (around \$4M–\$10M) within proven genres is a sound entry strategy.



Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions



Business Problem

Microsoft sees all the big companies creating original video content and they want to get in on the fun. They have decided to create a new movie studio, but they don't know anything about creating movies.

I was tasked with exploring what types of films are currently doing the best at the box office. I was to also translate those findings into actionable insights that the head of Microsoft's new movie studio can use to help decide what type of films to create.



Data

To conduct a comprehensive evaluation of film performance, I used 5 datasets compiled from industry-leading platforms:

- Box Office Mojo
- IMDB
- Rotten Tomatoes
- TheMovieDB
- The Numbers



Methods

- I limited the scope to movies released in 2010 or after to avoid distortions caused by streaming platforms.
- Rows with missing financial data (budget, revenue) may have been dropped if they couldn't support ROI(*Return on Investment*) calculations.
- I intentionally ignored extreme outliers -this helps focus on typical patterns rather than statistical noise.



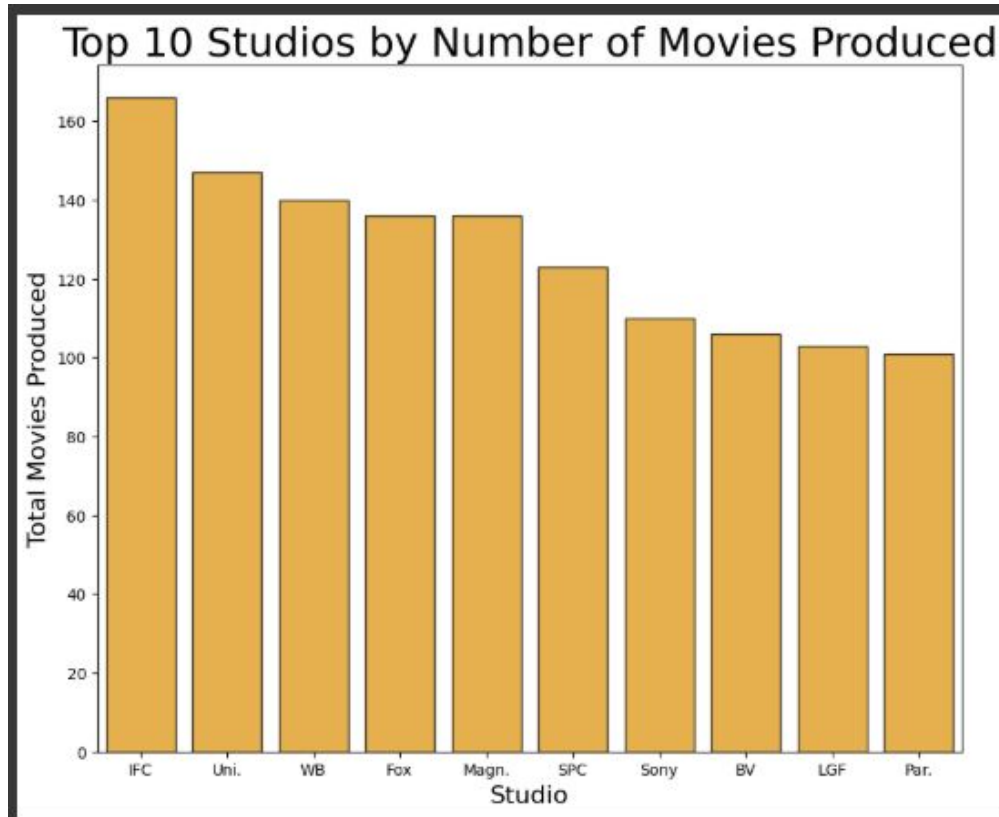
Results

Studio Analysis:

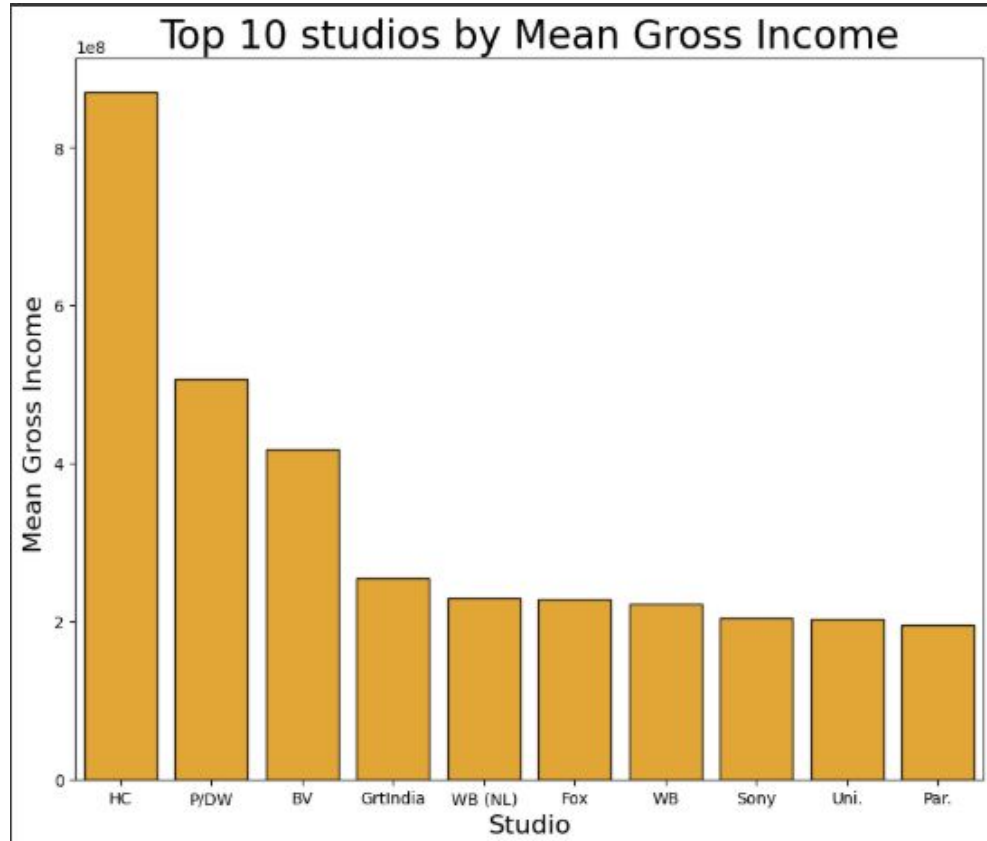
- Top 10 studios producing the most number of movies
- Top 10 studios making the highest gross income on average



Top 10 studios producing the most number of movies



Top 10 studios making the highest gross income on average

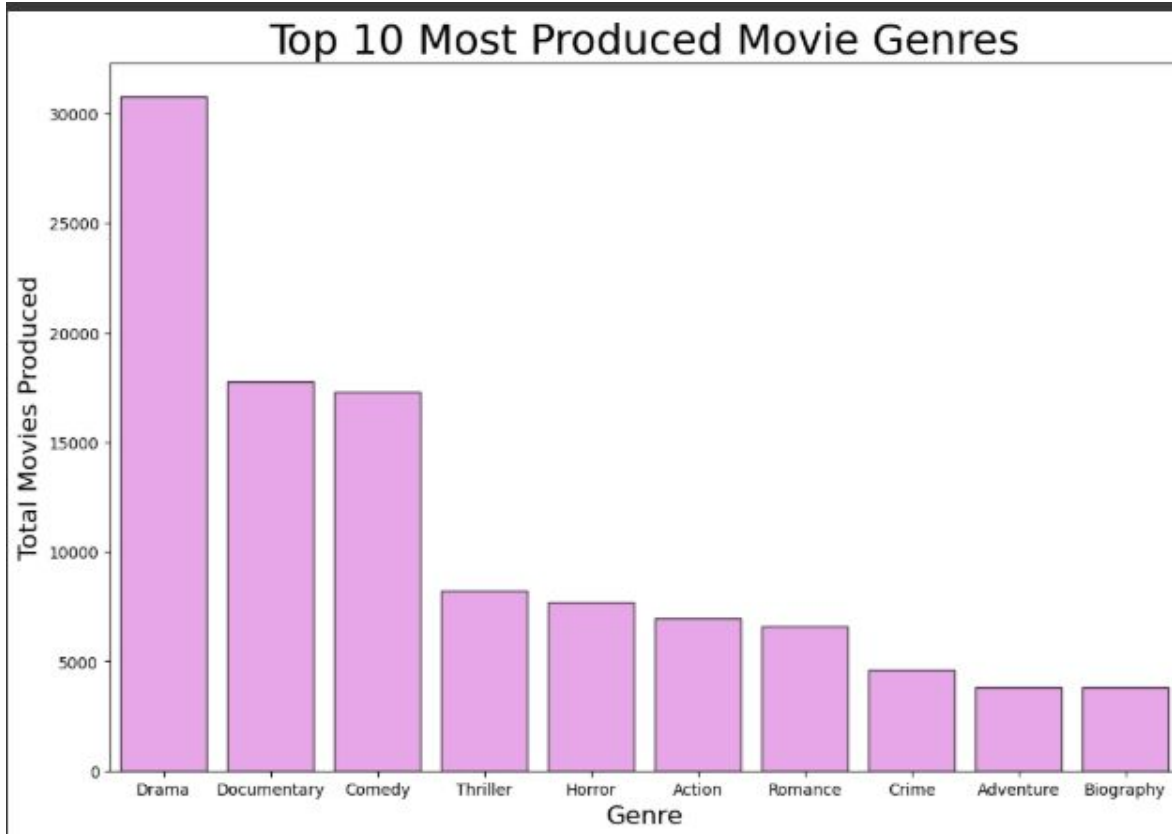


Budget and Profit Analysis:

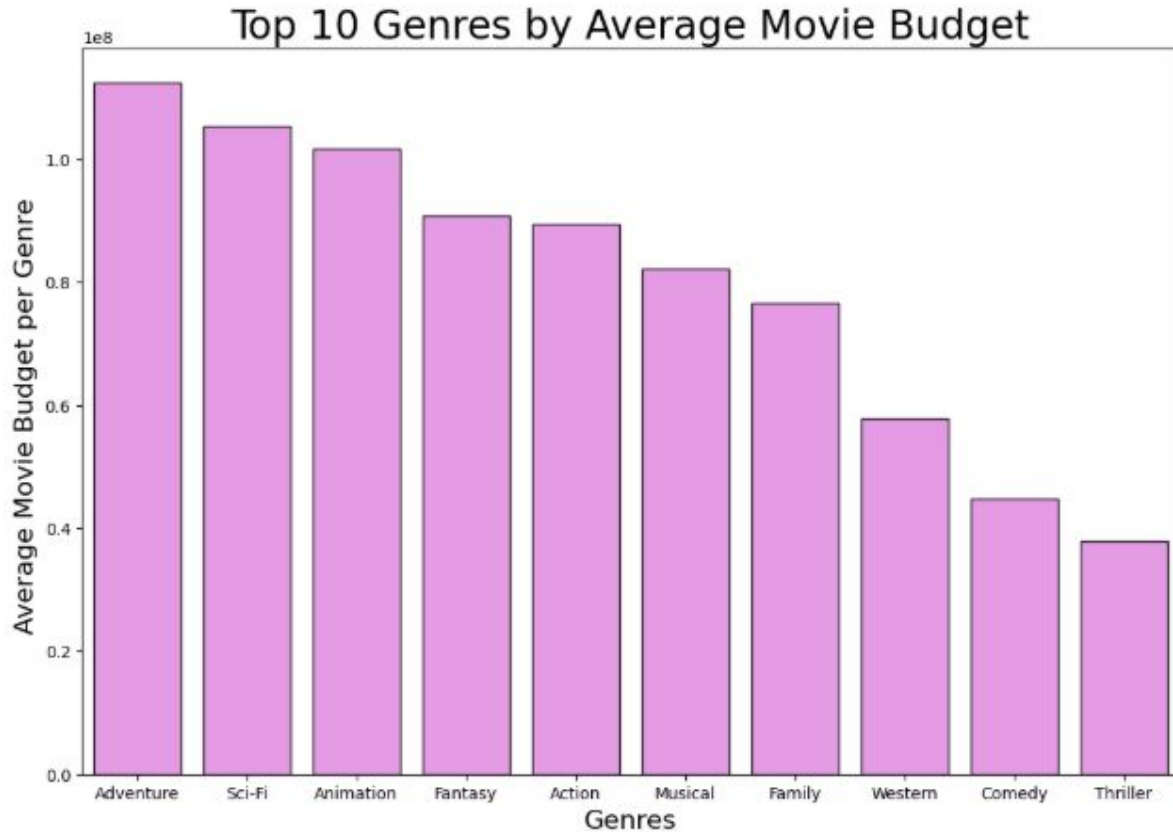
- Top 10 most produced genres
- Average budget per genre
- Calculate profit by genre
- Calculate profit margin by genre



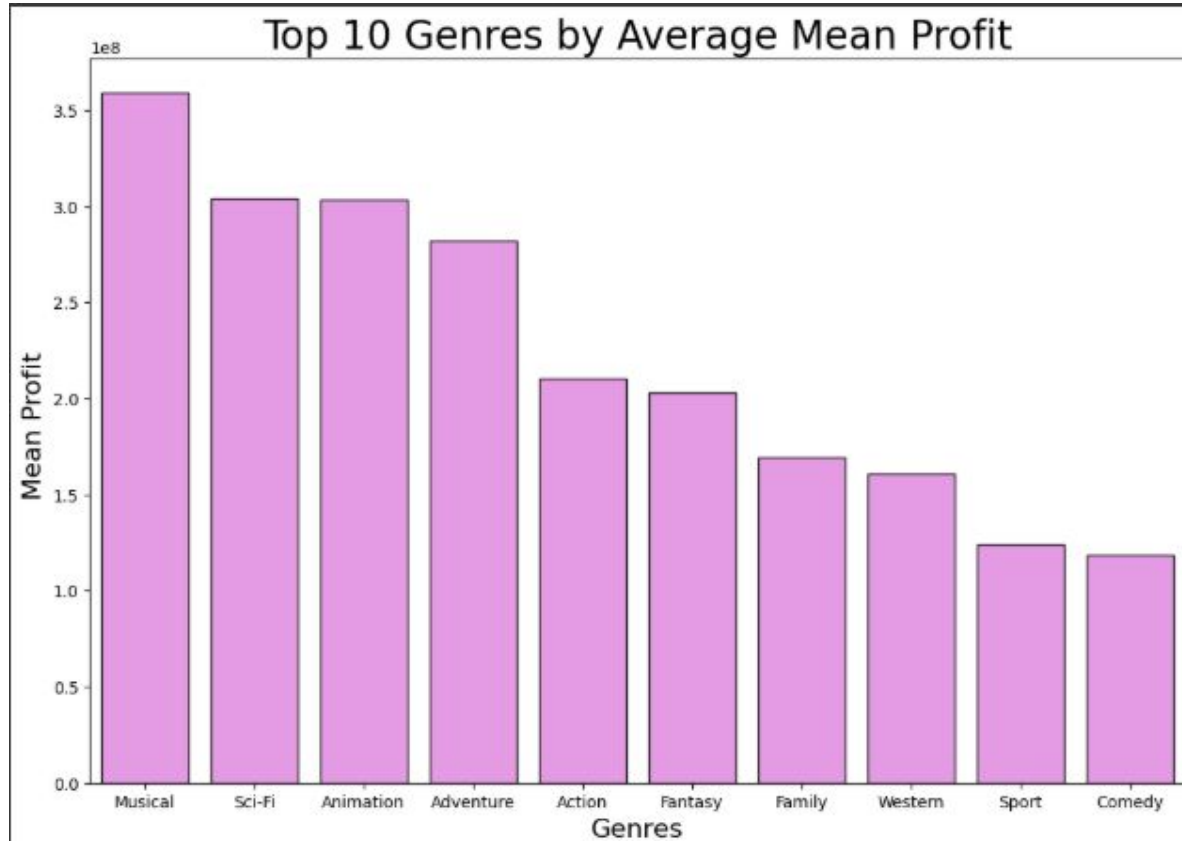
Top 10 most produced genres



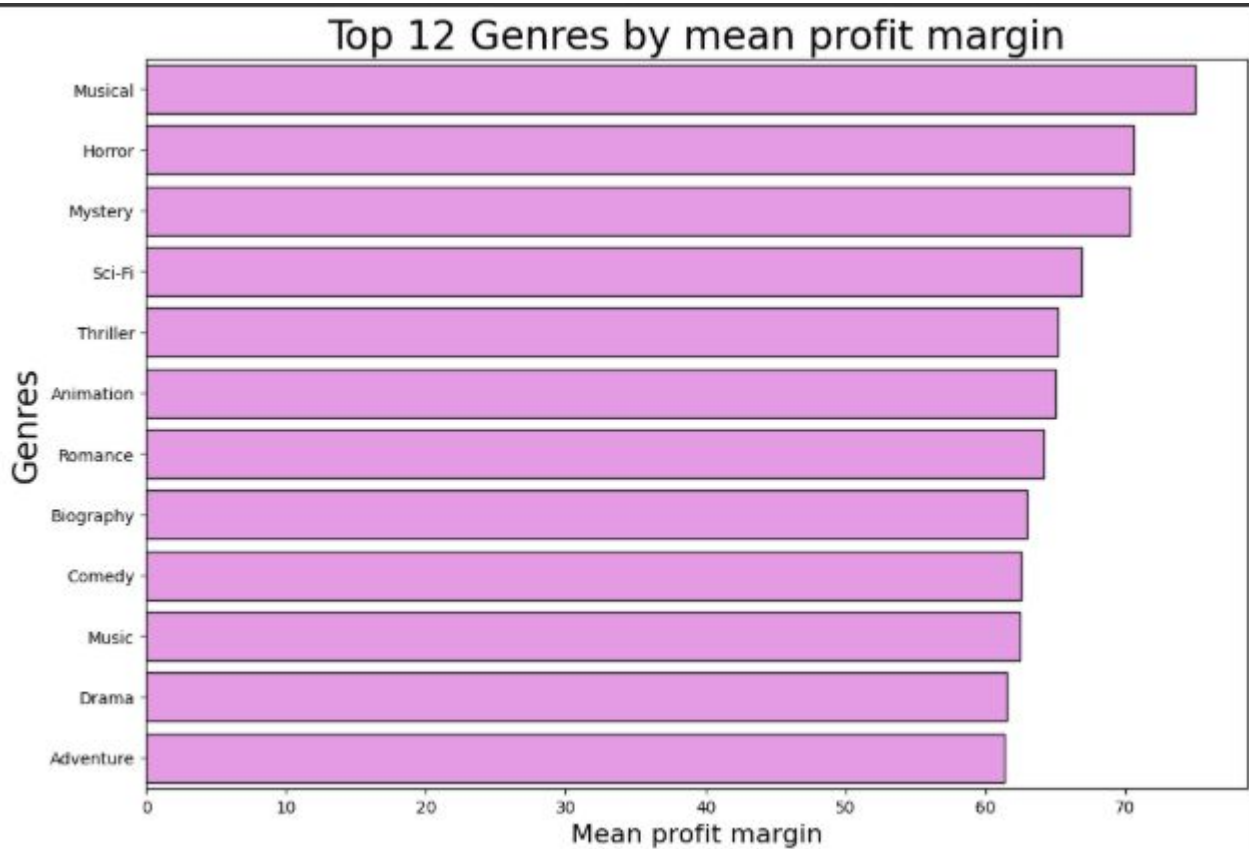
Average budget per genre



Calculate profit by genre

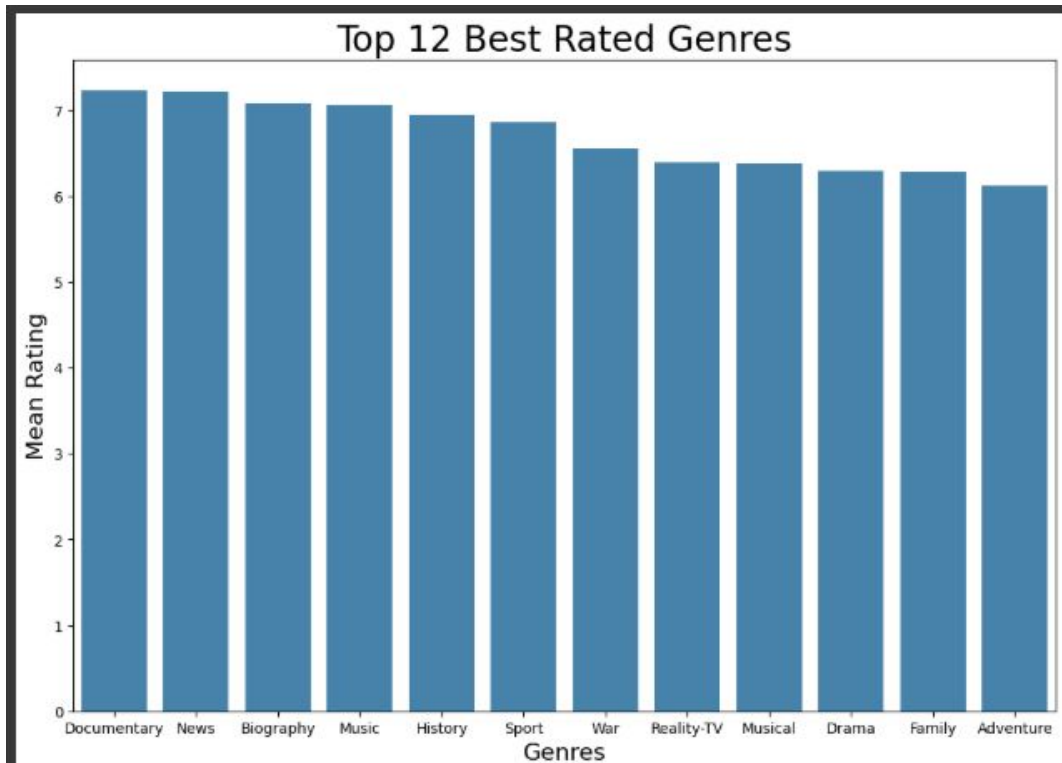


Calculate profit margin by genre



Ratings Analysis

- Top 10 best rated genres



Conclusions

- A higher number of movies produced does not imply higher revenue.
- Music, Musical, Drama, Biography and Adventure are well rated and also highly profitable.
- Drama, Documentary, and Comedy are the storytelling engines of modern cinema.
- Investing more in the right genre pays off.
- Movie industry is mostly centralized in the USA as most of the top 10 studios with most movies produced since 2010 are of American origin.
- Drama is our Top 1 most produced and we also see it in the top 12 best rated and it's also listed in the top 12 with the highest return percentage.
- A good budget for each movie produced should be between 4M and 10M



Thank You!

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