

A person stands in the center of a vast, empty theater, looking up at a large screen. The theater's walls and ceiling are covered in a complex, three-dimensional structure of blue, rectangular blocks, creating a futuristic, data-like environment. The floor is dark and reflective. The seats are blue and arranged in rows, leading towards the screen. The overall lighting is blue and dramatic, with spotlights illuminating the screen and the person.

What Makes a Movie a Box Office Hit?

Insights for Microsoft's New Movie Studio

Summary



- I analyzed box office and IMDb data to uncover what types of movies perform best financially and critically.
- The findings reveal key genre trends, rating correlations, and runtime effects that can guide Microsoft's movie production strategy.

Presentation Outline



Business Problem



Data



Methods



Results



Conclusions

Business Problem !?

Microsoft is launching a movie studio but lacks industry experience. They need data-driven insights to decide which types of films to produce for maximum box office success.

Data

Three datasets were used:

 **Box Office Mojo:** for domestic and foreign gross earnings

 **IMDb Basics:** for movie titles, genres, runtimes, and,

 **IMDb Ratings:** to get average ratings and vote counts

These were merged and cleaned to create a unified dataset for analysis.

Methods

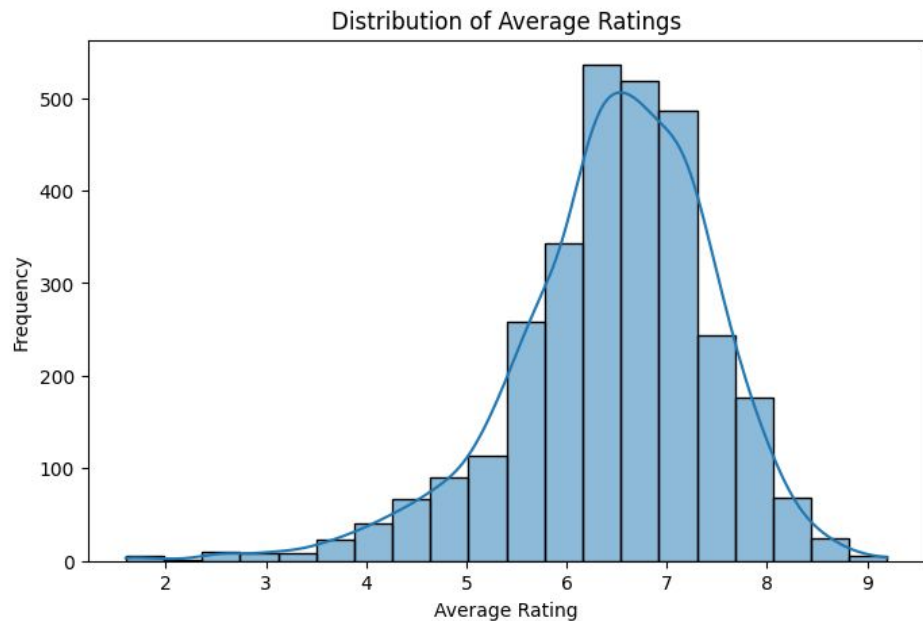
Merged
datasets on
movie titles
and IDs

Cleaned and
transformed data (e.g.
total gross calculation)

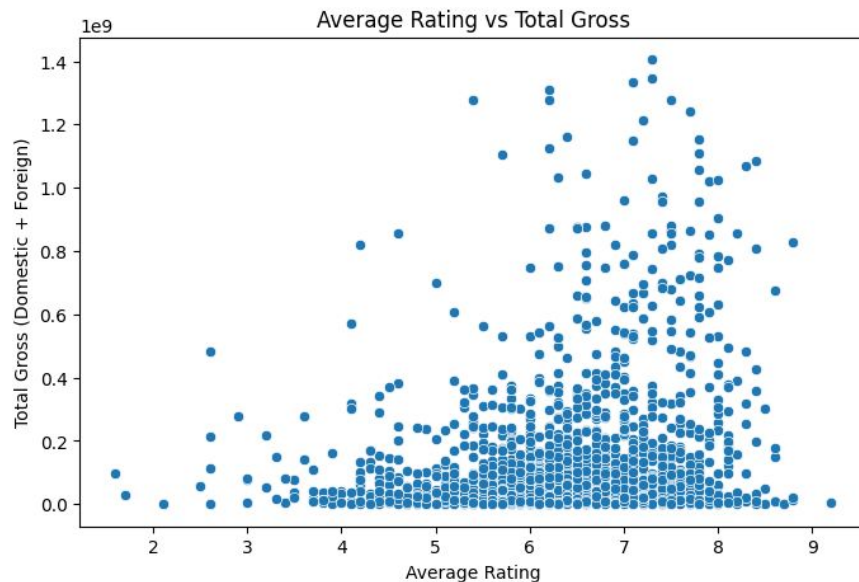
Explored relationships
between ratings, genres,
runtime, and earnings

Visualized trends
using bar charts,
scatter plots, and
heatmaps

Results

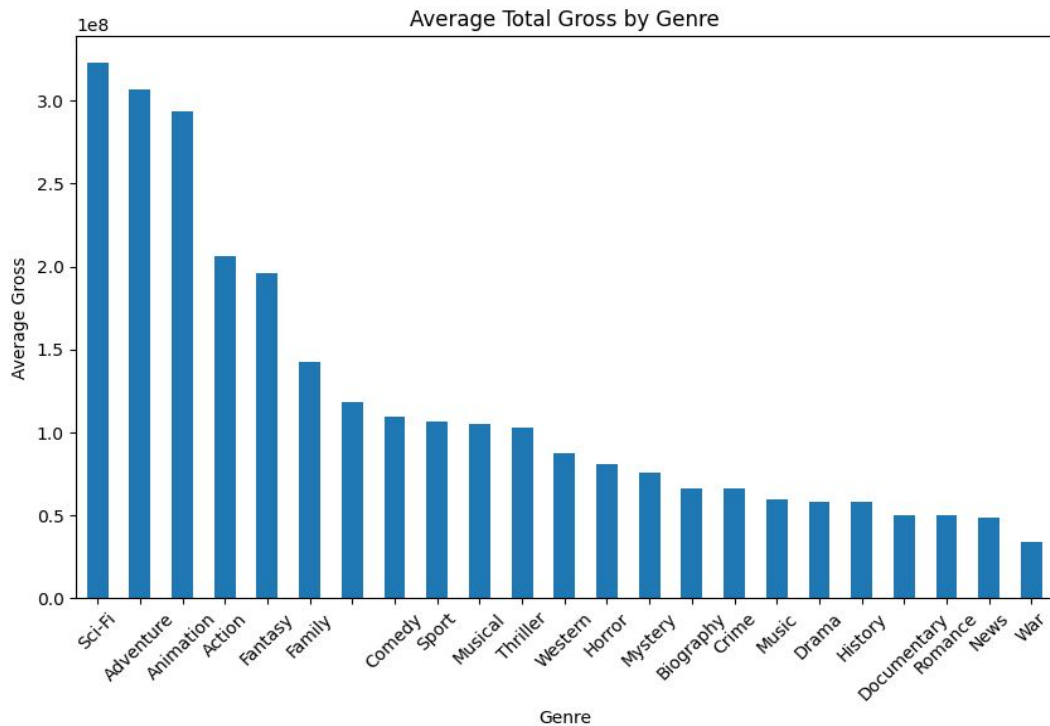


Most movies cluster around mid-range ratings, with fewer extremes



Higher-rated movies show a trend toward higher total earnings.

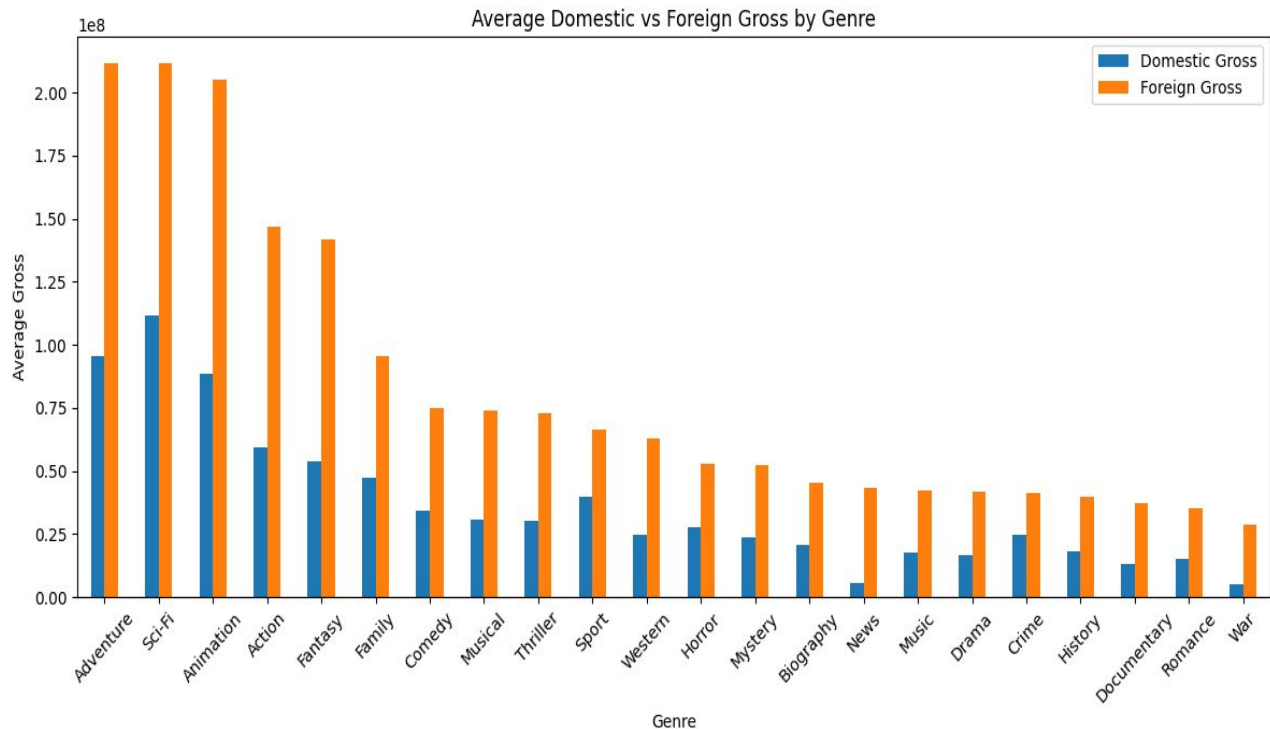
Results



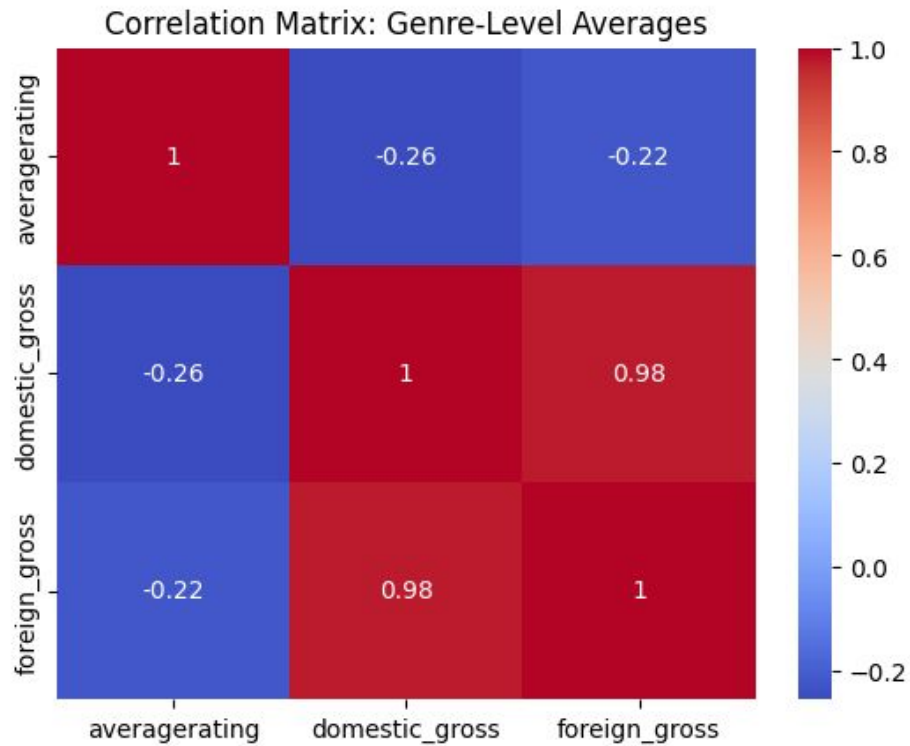
Action, Adventure, and Fantasy genres lead in average gross.

Results

Some genres perform better internationally than domestically



Results



Ratings and earnings show moderate correlation across genres

Conclusions



Recommendations for Microsoft:

1. Focus on producing Action, Adventure, and Fantasy films
2. Prioritize quality—higher ratings correlate with higher earnings
3. Target international markets with genre-specific strategies



Limitations:

- Data is historical and may not reflect future trends
- External factors (e.g. marketing, star power) not included



Next Steps:

- Explore streaming performance data
- Analyze audience demographics



Thank You!

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