
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:

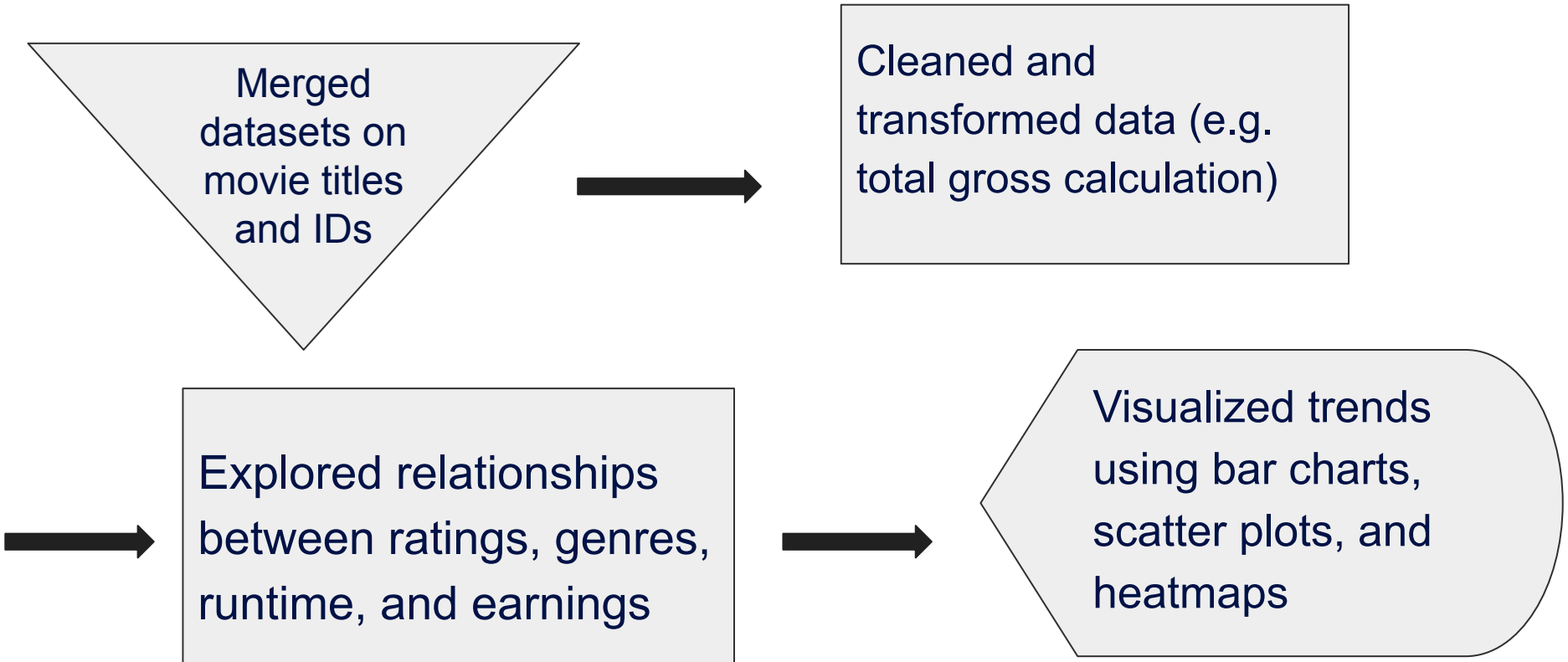
💰 **Box Office Mojo:** for domestic and foreign gross earnings

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

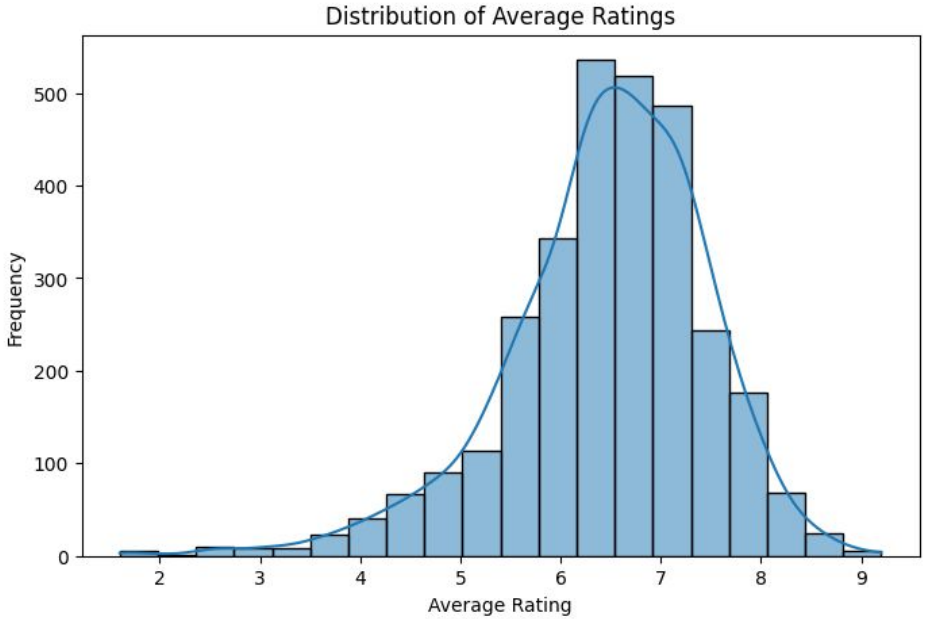
⭐ **IMDb Ratings:** to get average ratings and vote counts

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

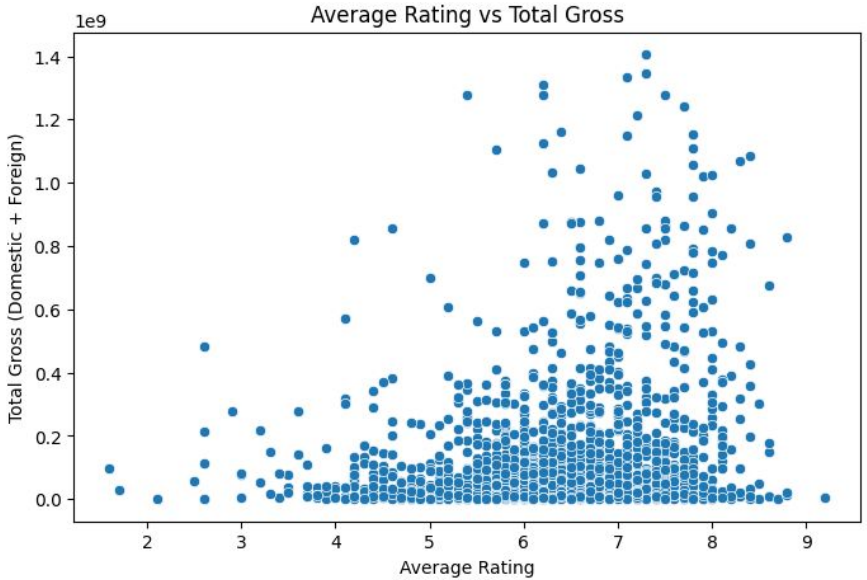
Methods


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

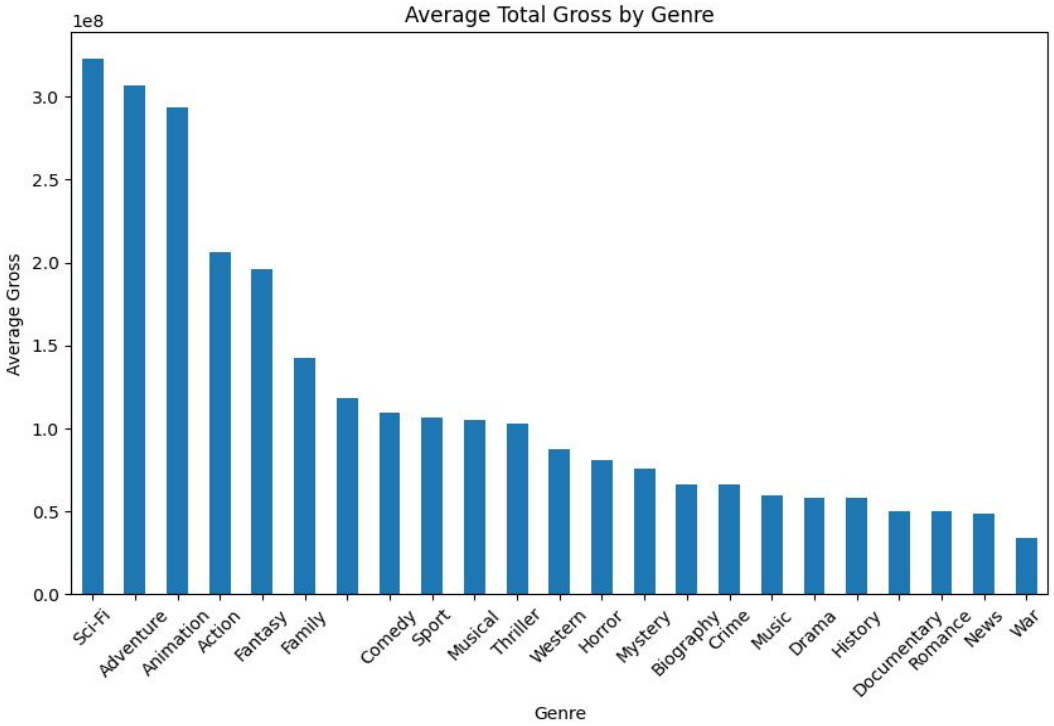


Most movies cluster around mid-range ratings, with fewer extremes



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

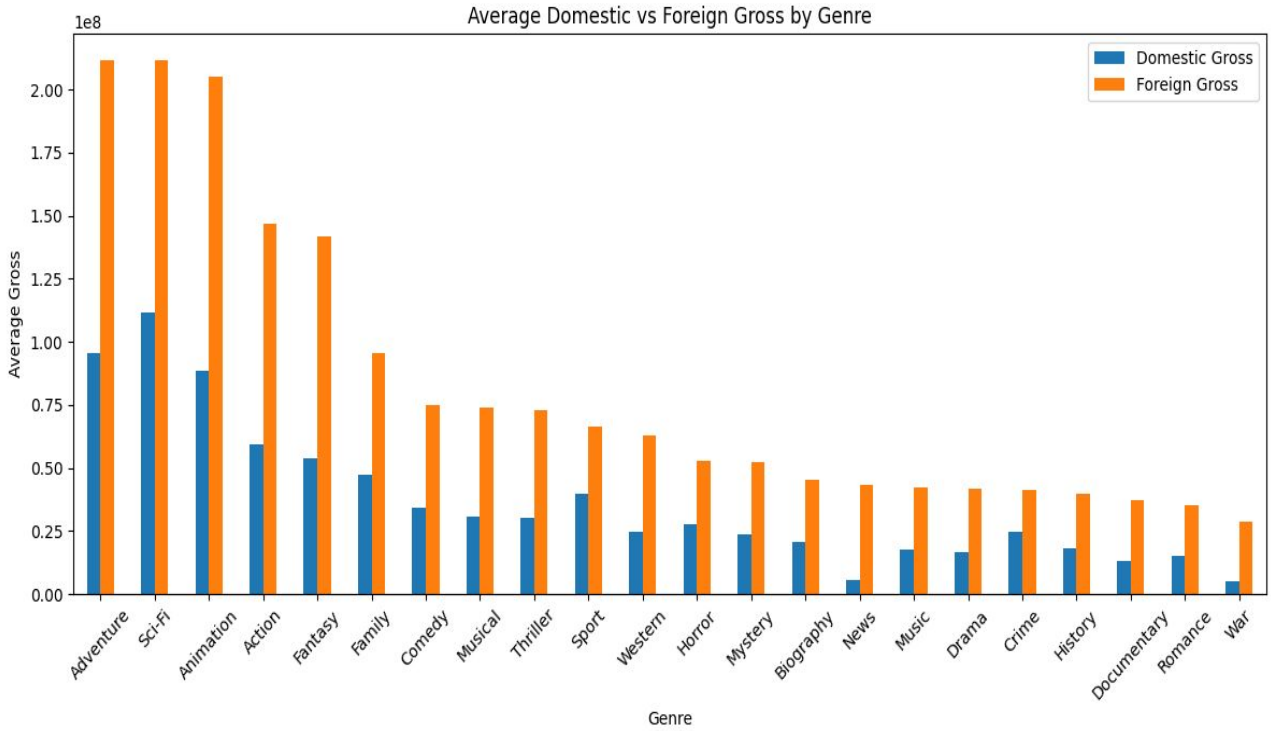
Results



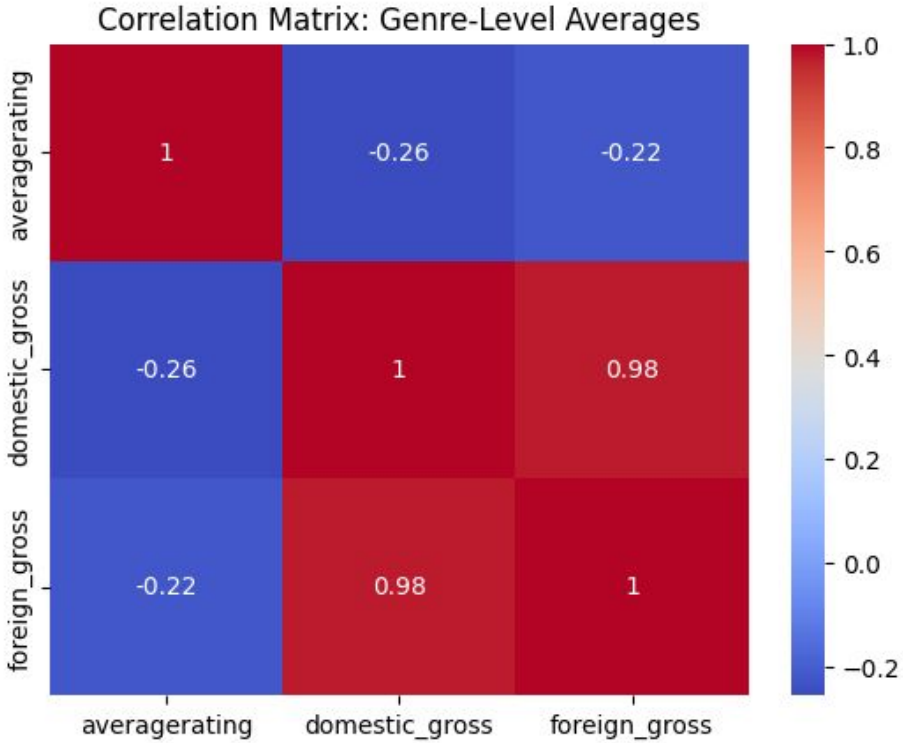
Action, Adventure, and Fantasy genres lead in average gross.

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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