

Giving Microsoft a Solid Start in the Movie Industry

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Microsoft

Summary

Microsoft is setting out to create its own Movie Studio. To ensure this is a successful endeavor, we must:

- Analyze movie data to discover insights to which movies are most successful
- Explore budget data to properly understand how much it may cost to create a movie
- Explore what genres in movies perform well in the box office

Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions
- Recommendations
- Next Steps

Business Problem

- Unknown pathway to creating successful movies
- Need to match or exceed industry standard of success for movies we produce
- Ensure we can make more movies in the future



Data & Methods

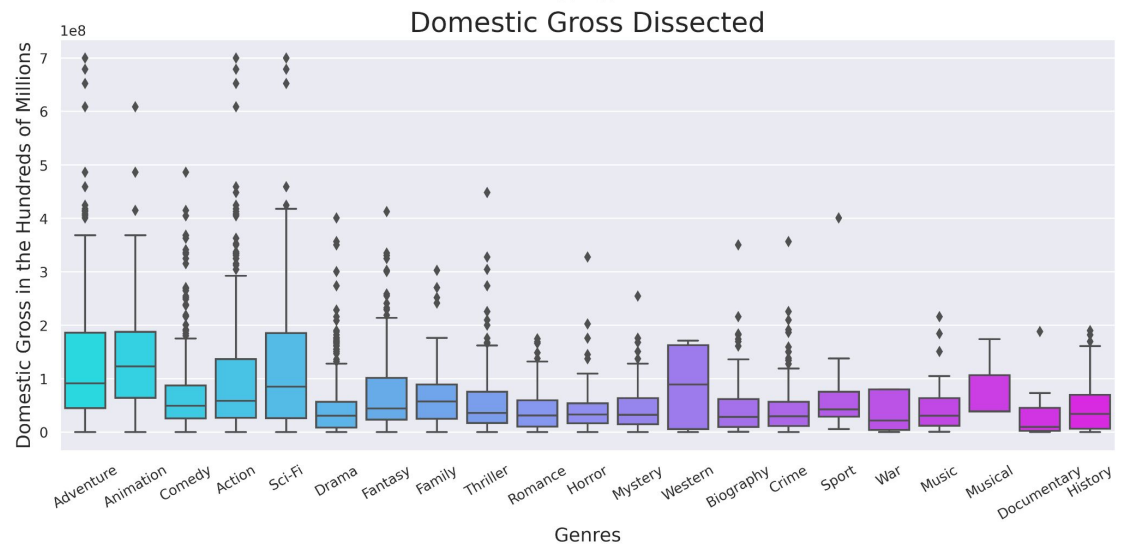
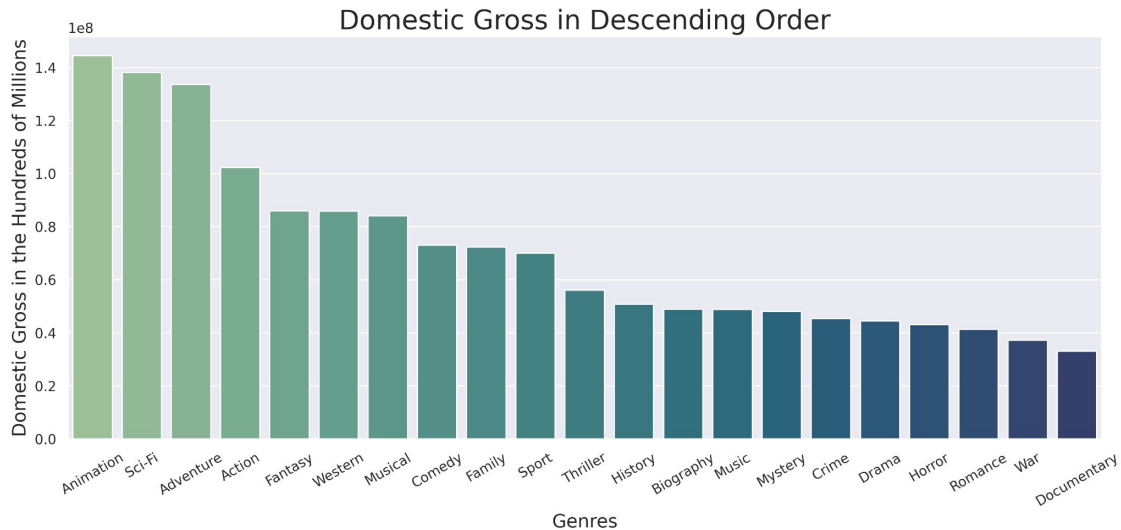
- Data sourced from:
 - IMDB
 - Box Office Mojo
 - The Numbers
- 982 Movies
 - Dating back to 2010
- Movie Title, Domestic Gross, Worldwide Gross, Genres, and Movie Budget Data

Results

Based on gross sales data, these genres generate the most capital in both domestic & worldwide metrics

- Sci-Fi
- Adventure
- Action

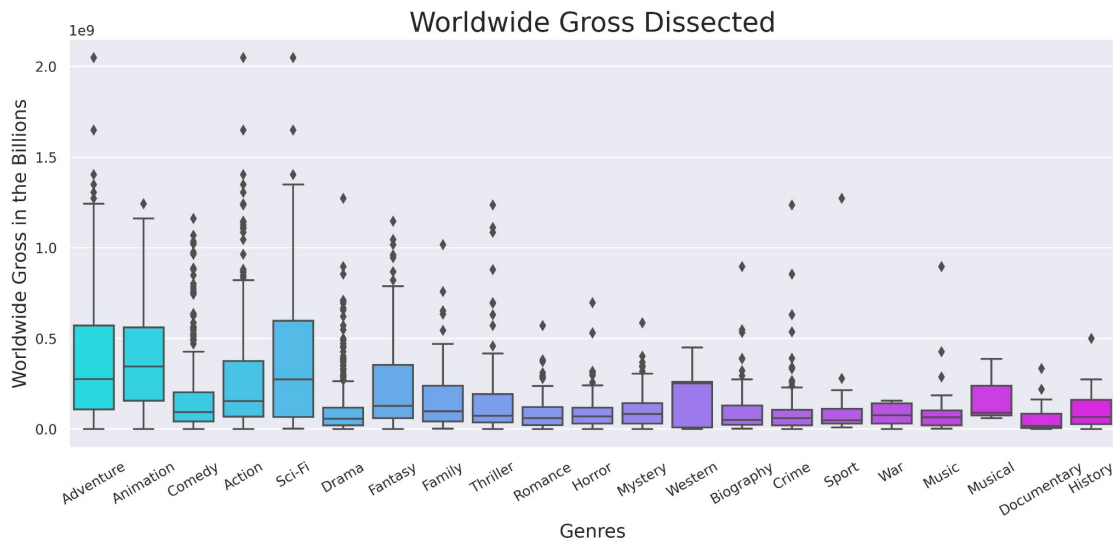
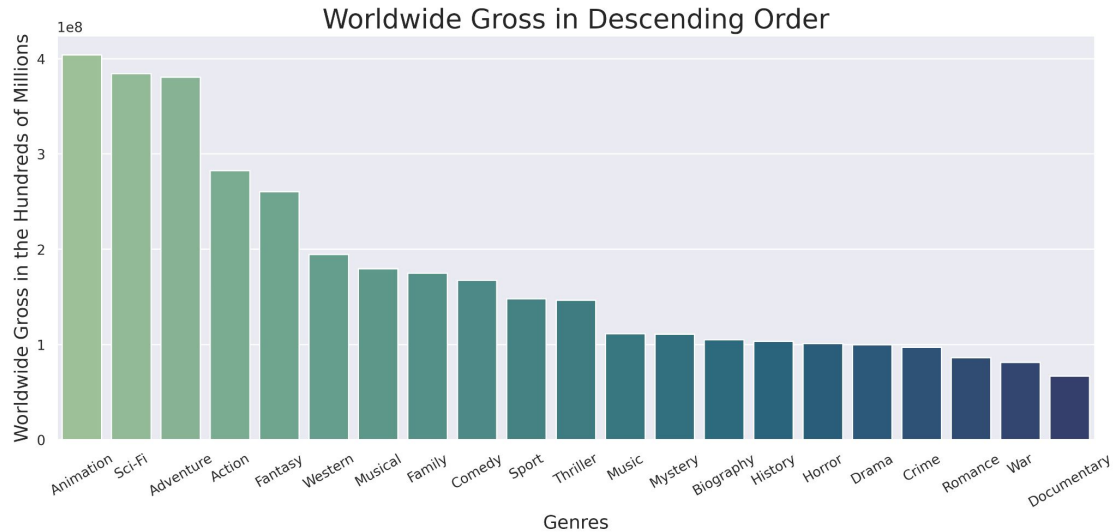
- Each box in a box plot, represents 50% of the data for that column.
 - The line in each box represents the median
- Tick Marks encompass 99.3% of the data
- Outliers are represented by dots above the tick marks. About 0.7% of the data total



Results

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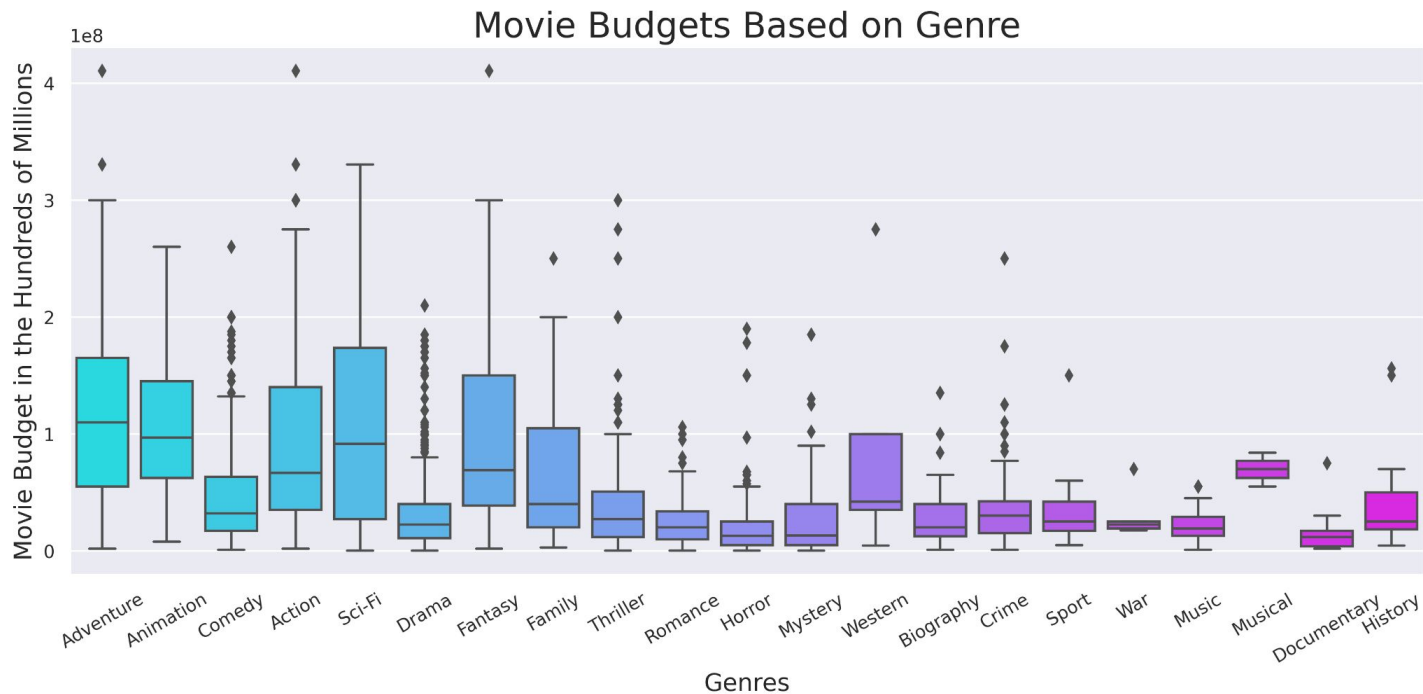
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- Adventure
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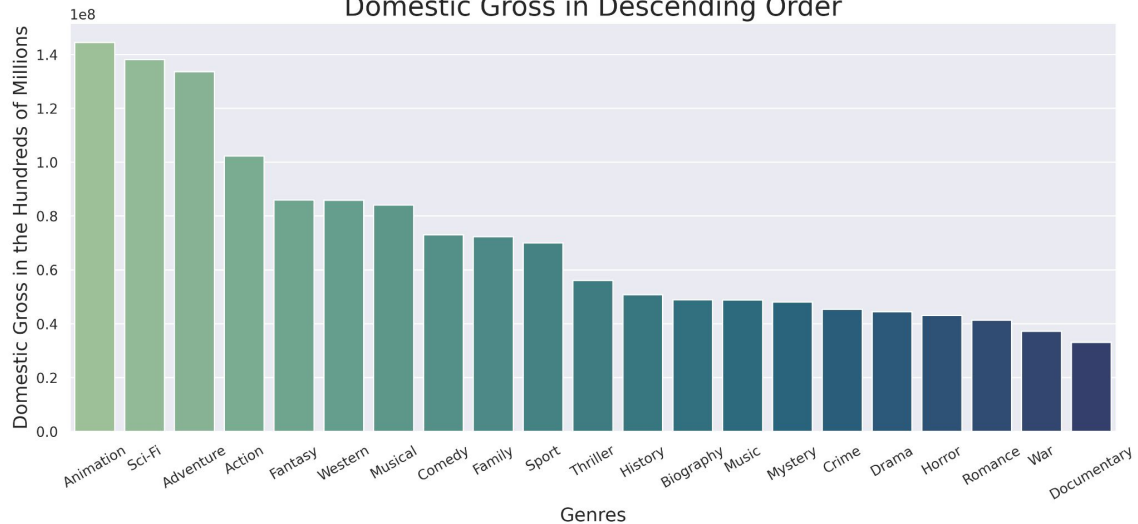
Results

Compare this data to the Domestic & Worldwide sales

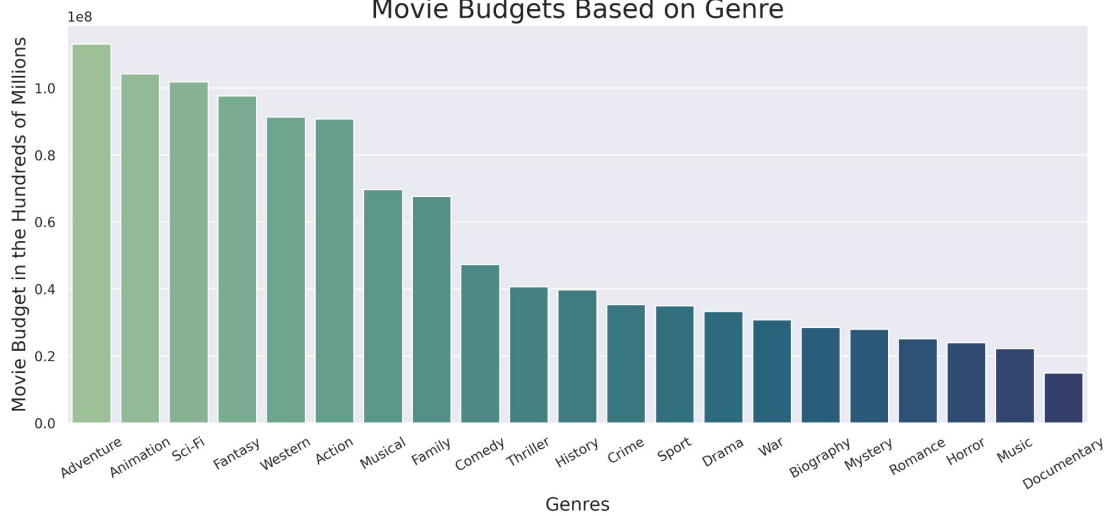
- Action, Adventure, Sci-Fi are very lucrative
- Animation movies are also have great showings
- Fantasy movies might break even



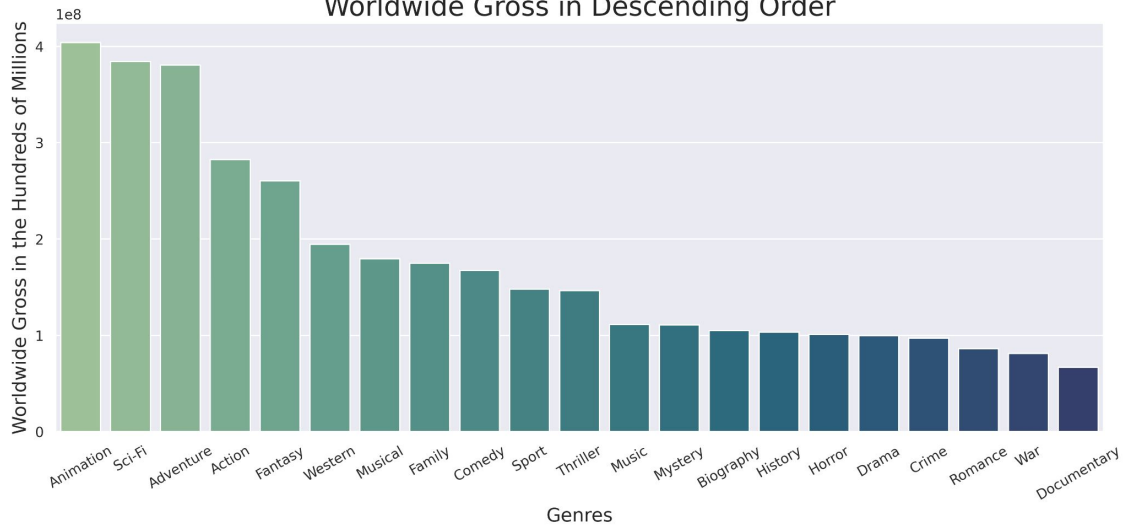
Domestic Gross in Descending Order



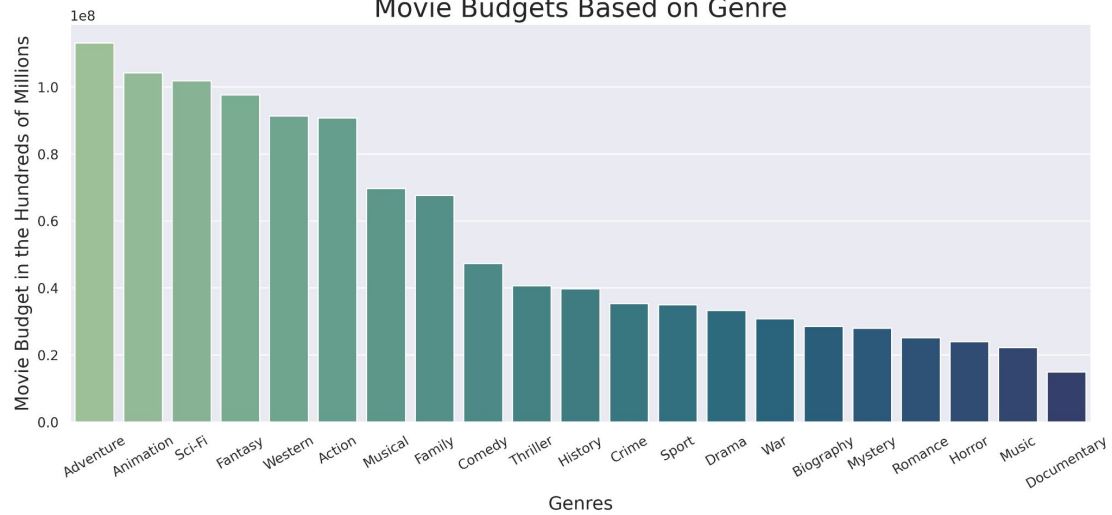
Movie Budgets Based on Genre



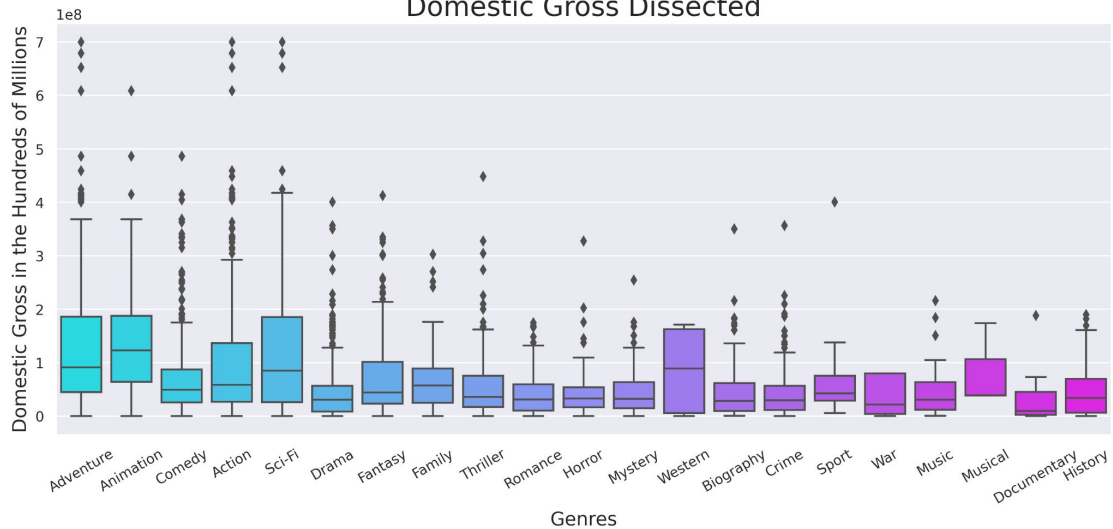
Worldwide Gross in Descending Order



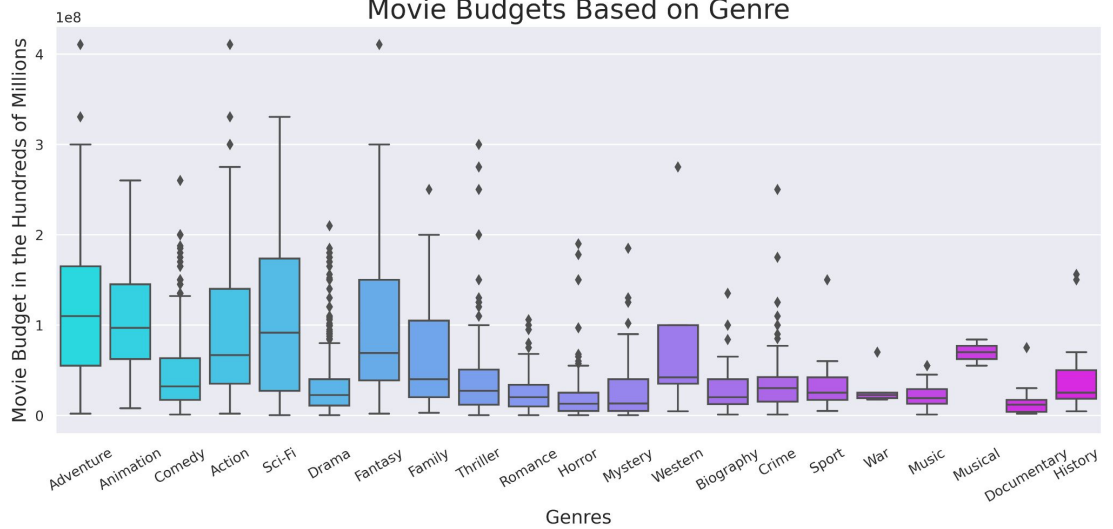
Movie Budgets Based on Genre



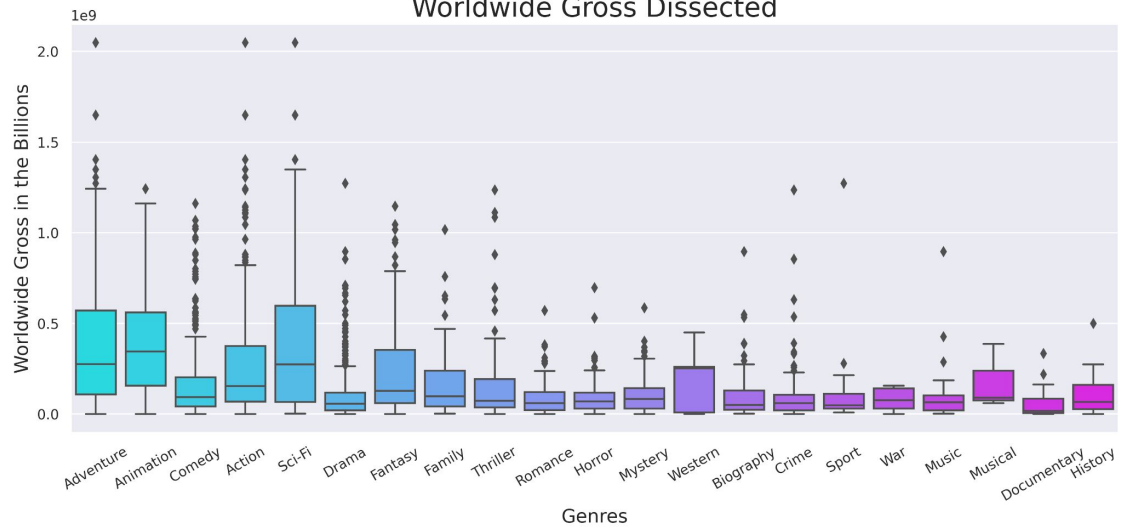
Domestic Gross Dissected



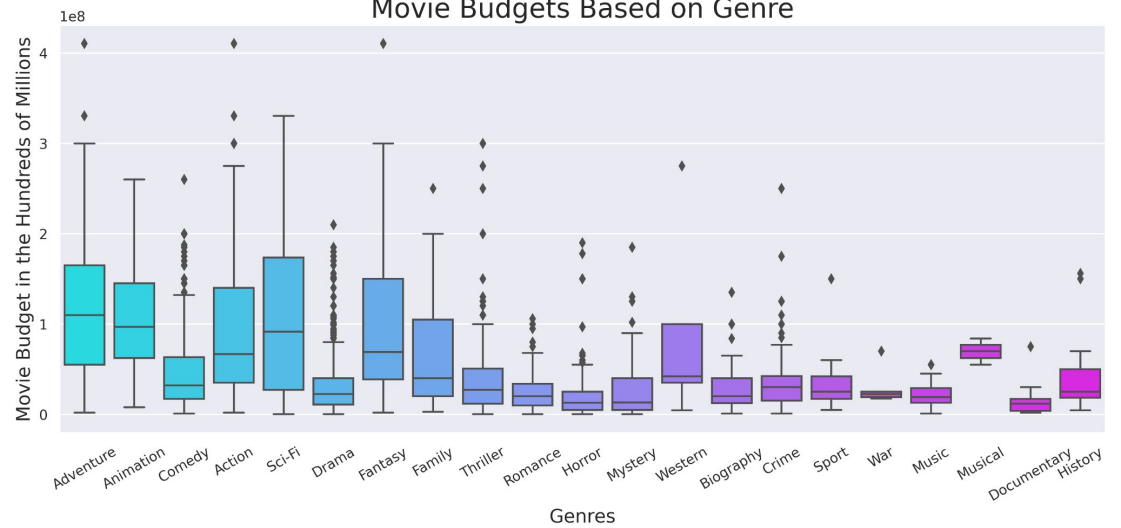
Movie Budgets Based on Genre



Worldwide Gross Dissected



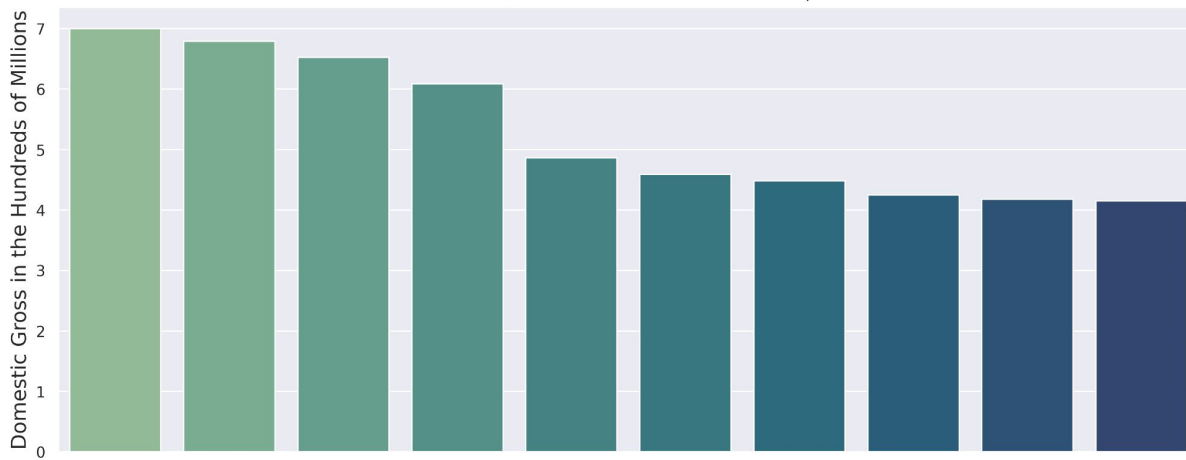
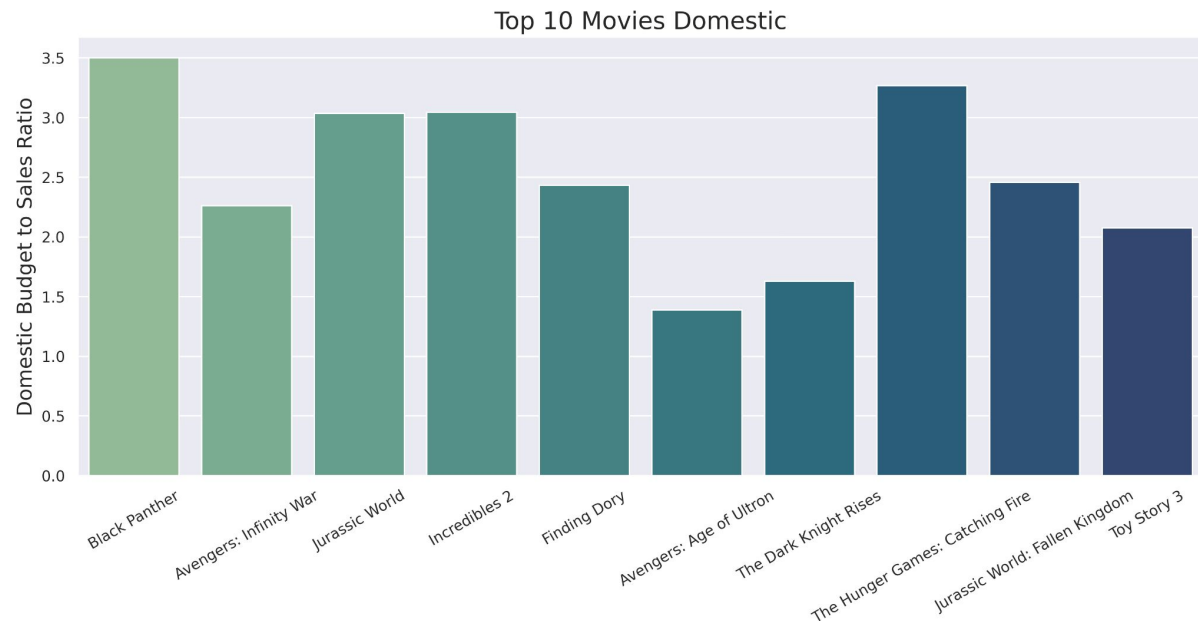
Movie Budgets Based on Genre



Results

Top 10 Movies:

Budget-to-Gross ratio

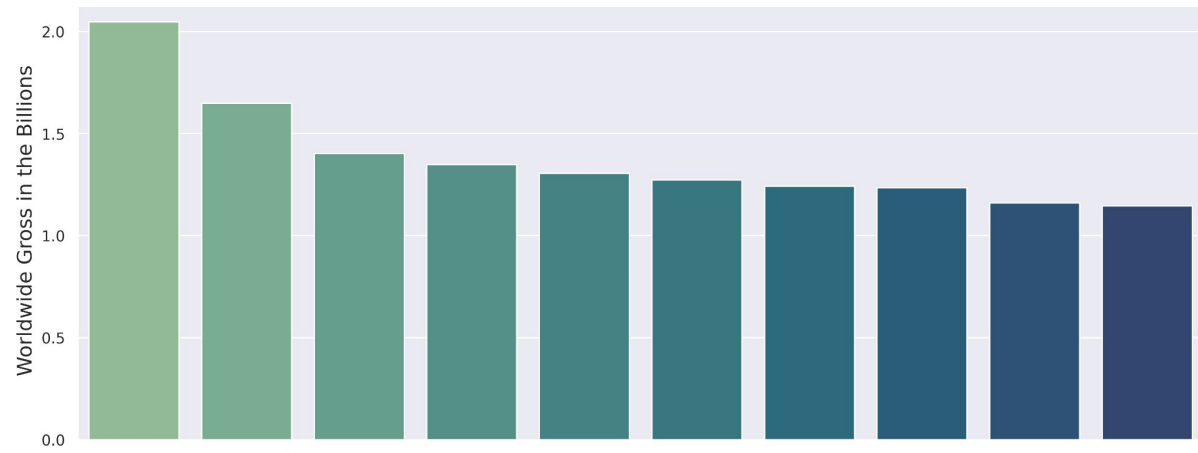
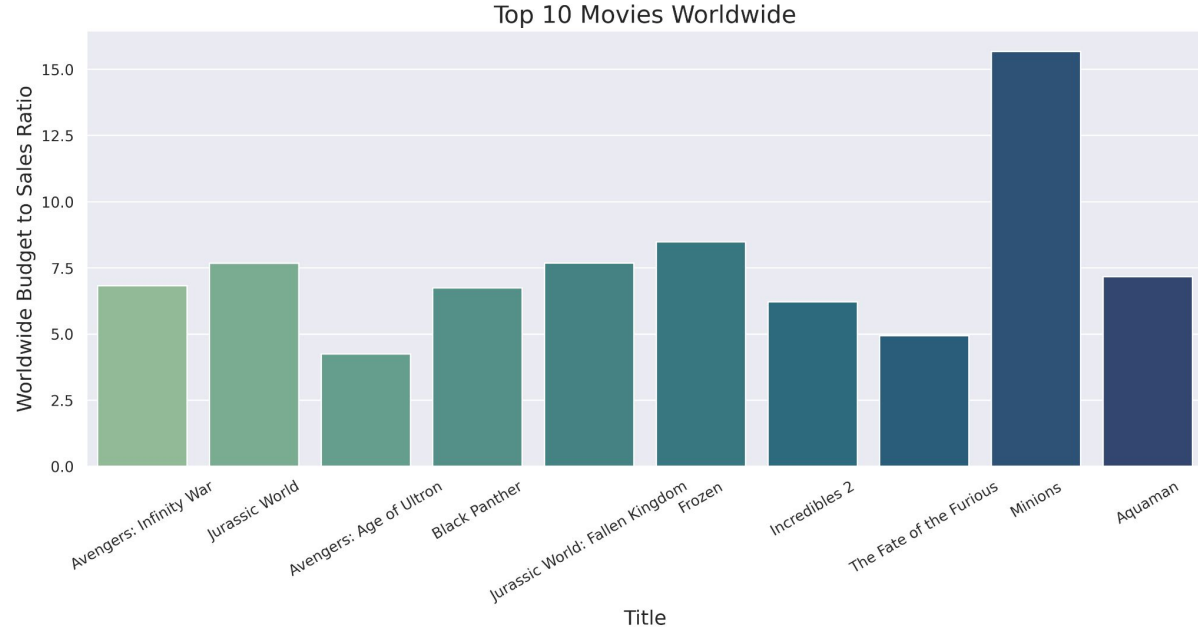


The most successful movies maintain a return of 1.5 or higher, by domestic metrics.

Results

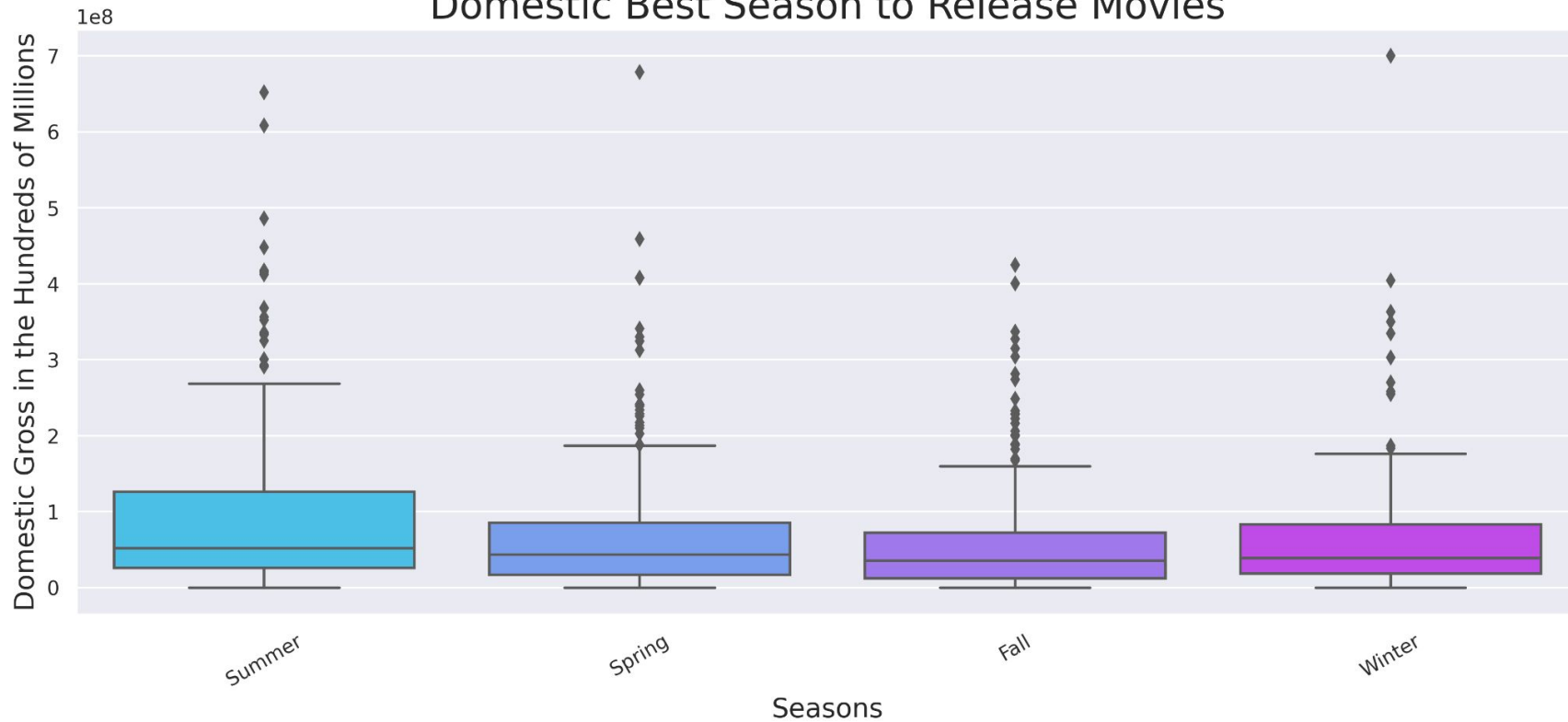
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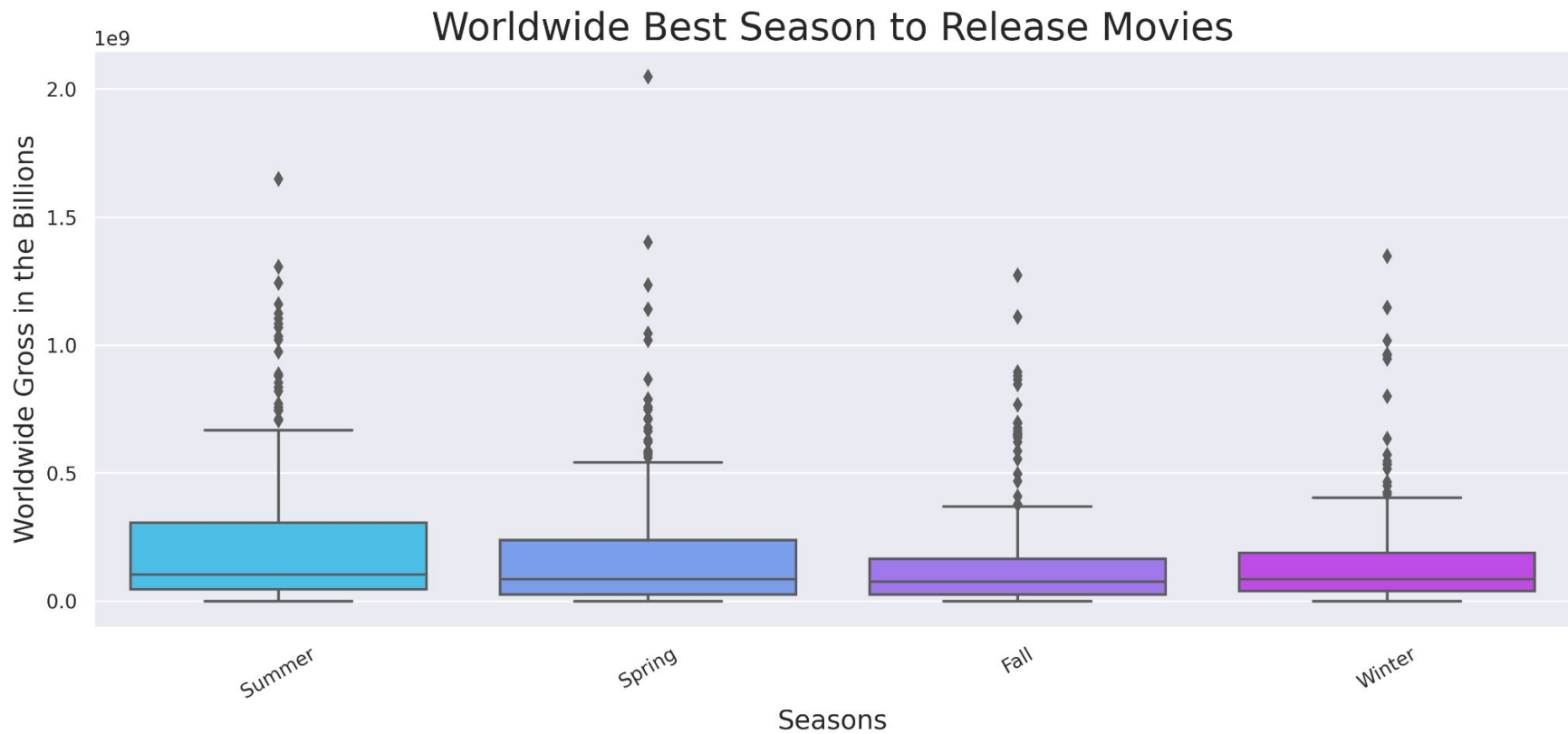


By worldwide metrics, the most successful movies maintain a return of 4.0 or higher ratio.

Domestic Best Season to Release Movies



Results



Results

Conclusions

- Action, Adventure, and Sci-Fi movies completely dominate domestic and worldwide metrics.
- In contrast, Documentary movies perform the least well everywhere.
- Western & Fantasy movies may be a challenge as well. Since they garner a similar amount of returns as the overall cost of the budget, on average.
- Adventure movies can be the most rewarding. Out of the top movie sales, Sci-Fi had the lowest budget output
 - Animation movies have a similar outlook

Conclusions

- High Budget doesn't necessarily equal high grossing film
- Summer is the overall best season
 - Spring and Winter have comparable and some better outlier high grossing films to summer
- Movies like Jurassic World can be a case study.
 - A Lower budget, despite massively successful gross metrics & returns

Recommendations

1. Microsoft should make an Action & Adventure movie, with elements of Sci-Fi
2. Microsoft should aim for a minimum 2x return on their investment in domestic metrics
 - a. 4x return on their investment in domestic metrics by worldwide metrics
3. Microsoft should release their movie in the summer season

Next Steps

Further analyses could yield additional insights to further improve movie creation at Microsoft's movie studio:

- Curating a movie that benefits from multiple genre entries.
- Looking into the best resources we can use (writers, filmmakers, sound, etc), in order to create our movie.
- Predict undesirable outcomes. This modeling could identify movies that are more likely to have undesirable box office sales, based on shareholder requirements.



Questions?

Thank You!

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