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*MICROSOFT
MOVIE ANALYSIS*

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Overview

- Microsoft Studios
 - What content to produce?
- Exploratory data analysis
- Actionable insight into which content will be most likely to be successful

Business Understanding

- What types of films do best at the box office?
 - Best genres?
 - How to think about ratings?
 - Best runtimes?

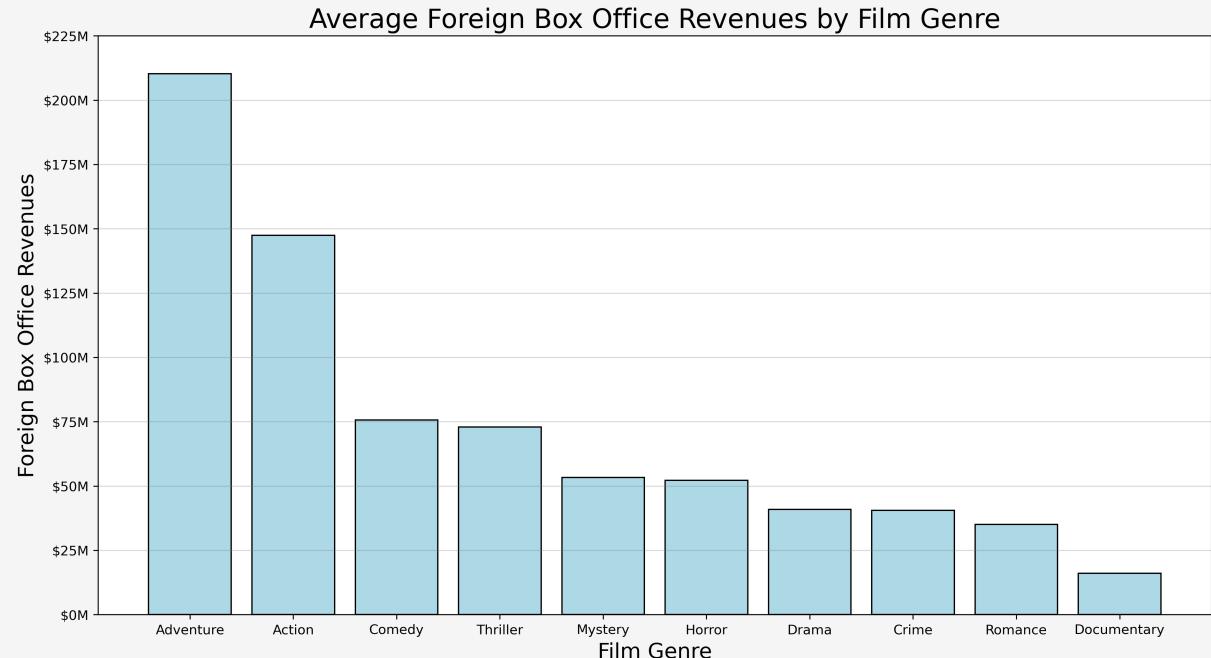
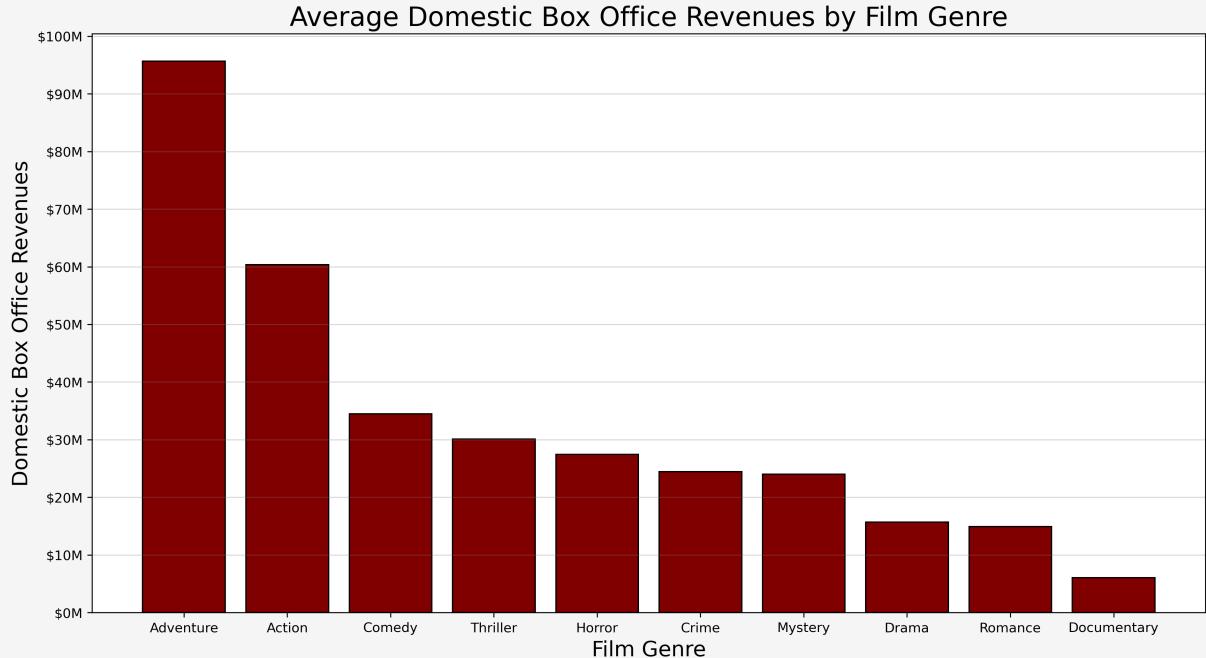
Data Understanding

- IMDb dataset:
 - movie ID, primary title, original title, year, runtime, genre(s), **average rating**, **number of votes**
- Box office dataset:
 - title, studio, **domestic gross revenues**, **foreign gross revenues**, year

Data Analysis

Act 1

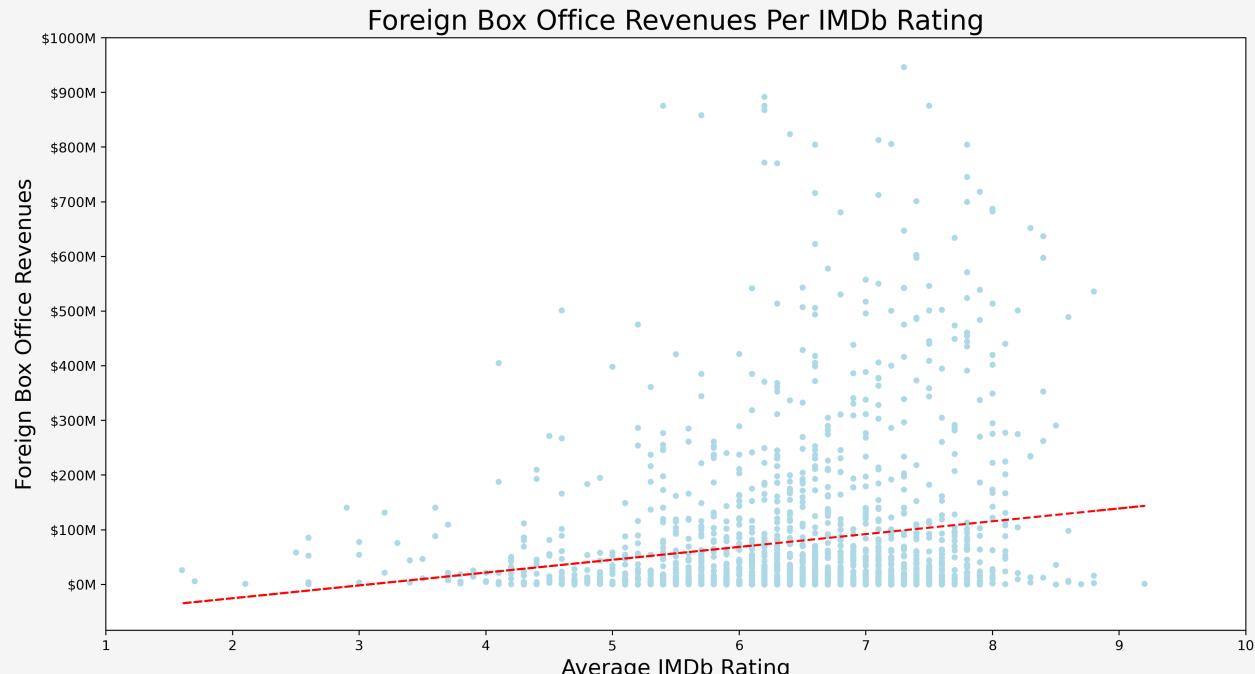
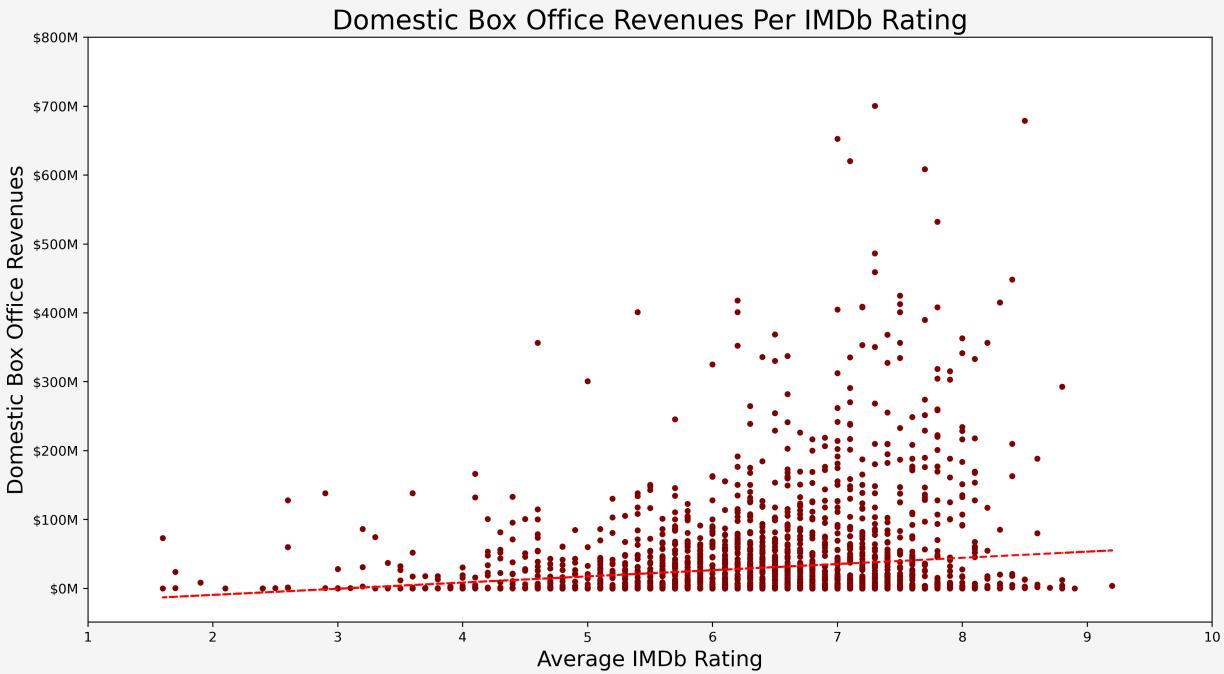
- Adventure and Action stand out
 - Outliers?
 - Could also cost more
- Domestic markets prefer crime
 - Foreign markets prefer mystery



Data Analysis

Act 2

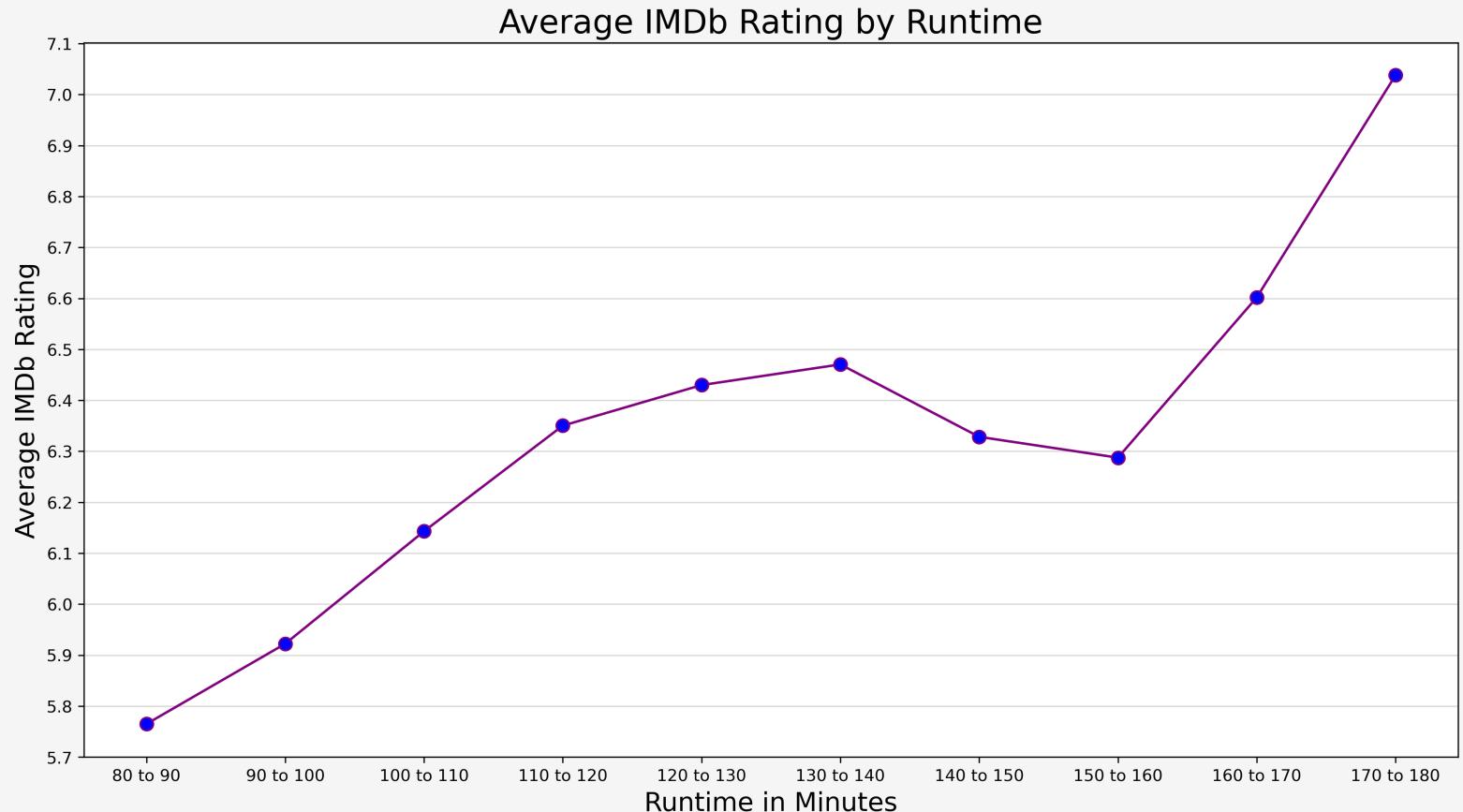
- Positive correlation between rating and revenues
- Stronger correlation in foreign markets



Data Analysis

Act 3

- Upward trend in rating until 130 to 140 minutes (local maximum)
- Spikes after 160 minutes



Recommendations

- **If aiming for exposure over profits, opt for adventure, action, and comedy**
 - But these may not be the most profitable
- **Take note of whether film will be targeted to domestic or foreign markets, and adjust film genre accordingly**
 - Domestic prefers crime, foreign prefers mystery
- **Give priority to producing highly rated content for films that cater to foreign markets**
 - Save risky/experimental films for more forgiving domestic audiences
- **Aim for a runtime range of 130 to 140 minutes for most films**
 - Unless it's an epic, then go into 160 minutes +

Next Steps

Remaining Questions

- Replace revenues with profits and see if the outcomes differ
 - Segment runtimes vs. ratings by genre
 - Analyze film success by release month, and further segment by genre
 - Account for effects of inflation
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- Why does average IMDb rating spike after a film runtime surpasses 160 minutes?
- What is it about adventure and action movies that make them the highest grossing film genres?

Thank You



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