

Overview

Microsoft is considering entry into the movie industry, driven by observations of thriving ventures within the sector. Seeking guidance, they aim to discern the optimal film attributes conducive to box office success. Leveraging comprehensive movie data encompassing worldwide and domestic box office revenue, production budget, genre classification, and runtime, our objective is to elucidate correlations among these variables and cinematic success metrics. This analytical endeavor aims to furnish Microsoft with actionable insights, guiding informed decision-making processes toward crafting high-earning cinematic endeavors.

Business understanding

Microsoft's entry into the movie industry will be made a lot easier when we take the following questions are answered:

- What types of genres should Microsoft focus on as a priority?
- Is there an optimal duration for a movie?
- Does higher investment lead to improved movie performance?
- Which studios should Microsoft look out for? To emulate or to avoid direct competition

Data understanding

To do this data analysis for Microsoft the following datasets will be used:

- Movie_budgets as it has both domestic and worldwide gross, as well as the movie budget
- Movies_info gives us the runtime, as well as the genre of the movie
- Bom_movies gives us information on how studios perform at the box office

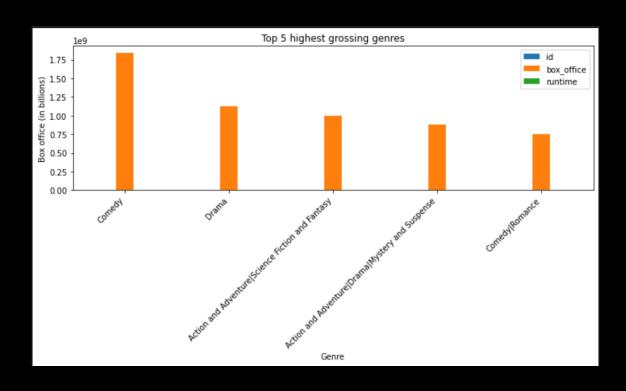
Using these datasets, we were able to answer the business questions

Data analysis - What types of genres should Microsoft focus on as a priority?

Findings

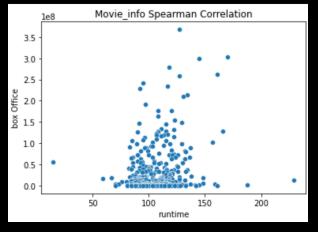
- We can determine that Comedy is the genre that performs the best
- Meaning Comedy movies should be the genre Microsoft should aim to product

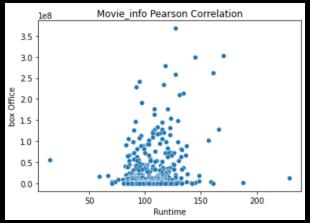
Bar graphs of highest grossing genres



Data analysis - Is there an optimal duration for a movie?

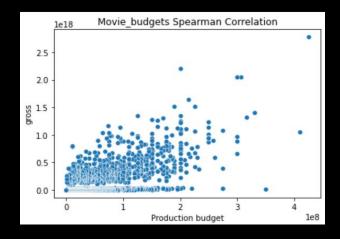
- The Spearman correlation between runtime and gross is: 0.170218625644249
- The Pearson correlation between runtime and gross is: 0.21995170240736545
- The correlations between runtime and gross are positive but not strong and therefore we can no with confidence say that runtime positively affects correlation as the relationship is very weak.

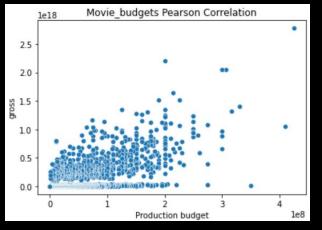




Data analysis - Does higher investment lead to improved movie performance?

- The Pearson correlation between budget and gross is: 0.6711098549674701
- The Spearman correlation between budget and gross is: 0.72791854688128
- The correlations between budget and gross are very strongly positive. This suggests movies with bigger budgets tend to earn more money.



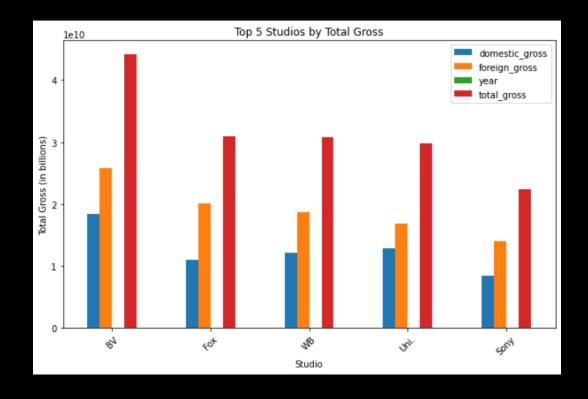


Data analysis - Which studios should Microsoft look out for?

Findings

- We can see that BV(Disney)
 is the highest-earning
 studio by over a billion
- Meaning BV is the studio that Microsoft should emulate and/or watch out for.

Bar graph of highest grossing studio



Limitations

• The data overlooks various elements that influence a movie's success, including its reception by critics, inventive marketing approaches, and cultural significance. Popular films available exclusively for streaming, such as those on Netflix, are not accounted for in the data.

Correlation is not causation

• Furthermore, there might be undisclosed expenses, like marketing expenditures, which are absent from reported film budgets.

Recommendations

Flexibility Regarding Movie Length:

Microsoft can utilize its flexibility with movie length to experiment with storytelling formats, catering to diverse audience preferences. This may include exploring shorter formats for streaming platforms and creating longer, immersive cinematic experiences for theaters, allowing Microsoft to appeal to a broader audience and stand out in the competitive film market.

Strategic Investment in Film Budgets:

Microsoft should strategically invest in high-budget film productions to improve quality and attract top talent, creating cinematic experiences distinguished by superior production values, storytelling, and visual effects. This approach can elevate Microsoft's presence in the film industry and boost the chances of producing lucrative blockbuster hits.

Recommendations

Emulating Successful Studios Like Disney:

Microsoft should emulate Disney's successful strategies by focusing on brand building, content creation, and market dominance. This could include hiring experienced executives from Disney for industry expertise and prioritizing the development of intellectual properties with global appeal. By following Disney's proven formula, Microsoft can strengthen its position in the film industry and achieve sustainable growth.

Focus on High-Grossing Genres, Particularly Comedy:

Microsoft should prioritize producing comedy films that resonate with diverse audiences by investing in captivating content and pioneering innovative filmmaking techniques. By focusing on lucrative genres like comedy, Microsoft can bolster its position in the film industry and generate significant revenue.

Questions?

Compile by Ingavi Kilavuka

The end, Thank you!