MOVIE INDUSTRY ANALYSIS: DATA-BACKED APPROACH.

MICROSOFT'S VENTURE INTO FILM PRODUCTION.

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Agenda

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Introduction

Microsoft, a technology powerhouse renowned for its contributions to the digital sphere, has its sights set on a brand-new endeavor: filmmaking. This ambitious project is a huge step into the inventive and exciting world of the film business.

In today's presentation, we will embark on a journey to understand Microsoft's entry into the movie industry. Our primary goal is to leverage data-driven insights to guide Microsoft in making informed decisions regarding the types of films to produce.

Overview

Entering the world of studio movie production requires a deep understanding of its complexities. It starts with script development, collaborating with experienced writers and directors. Pre-production balances creativity and cost management, while filmmaking and postproduction demand precise scheduling.

Data-driven marketing and distribution are essential. Microsoft must adapt to industry changes, manage finances wisely, and nurture creative partnerships, combining technology with storytelling in line with its mission to foster creativity in the digital era.

Objectives

- To assess the success of different languages based on their worldwide gross earnings.
- To profile the competitive landscape within the movie industry, including the performance of key players.
- To assess the financial implications of production budgets on the performance of movies.

Data Understanding

We tapped into insights from many databases that offer a comprehensive view of the business in our investigation of the environment of film production. These datasets include: Box Office Mojo, The Movie Database and The Numbers.

We were able to produce a sizable and well-structured dataset that served as the foundation for our study. The list of columns include: Title, Studio, Genre ID, Original Language, Popularity, Vote Average, Vote Count, Production Budget, Domestic Gross and Worldwide Gross.

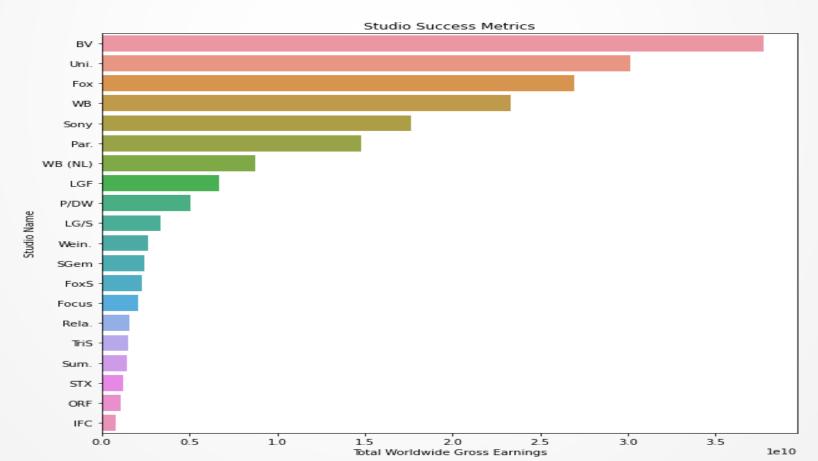
Data Cleaning

- First, unnecessary columns were removed, yielding a more concentrated dataset of shape (1395, 10)
- A single missing value in the 'studio' column was quickly deleted. As a consequence, we were left with a dataset of shape (1394, 10).
- The next crucial step was to detect duplicates. This revealed 124 duplicated values that were immediately removed, giving us a dataset of shape (1270, 10).
- We data casted the "production_budget", "domestic_gross_y" and "worldwide_gross" columns to float data type to guarantee numerical consistency.

Data Analysis

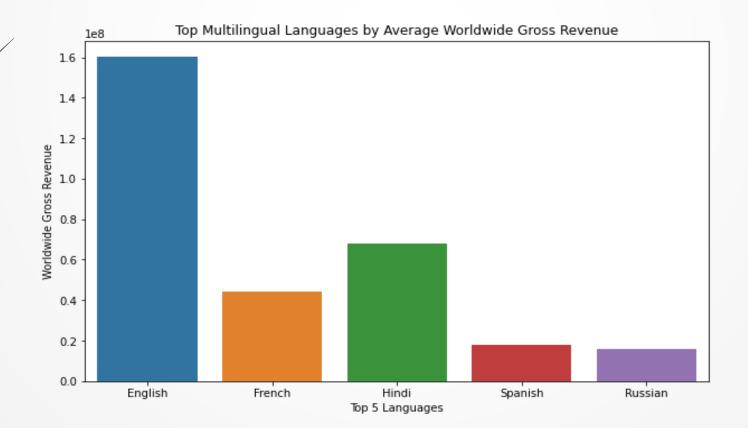
Problem Statement 1:

To profile the competitive landscape within the movie industry, including the performance of key players. The below graph shows that BV, Universal and Fox Studio are the most dominant with the largest market shares.



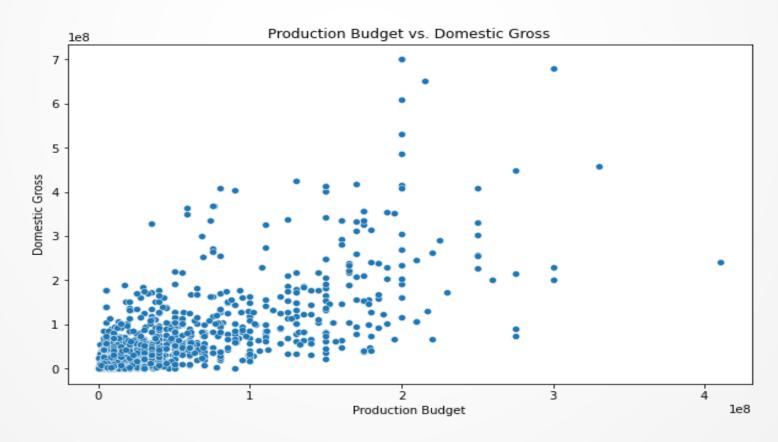
Problem Statement 2:

To assess the success of different languages based on their worldwide gross earnings. The figure below shows that the English-language films produce the greatest world gross revenue.



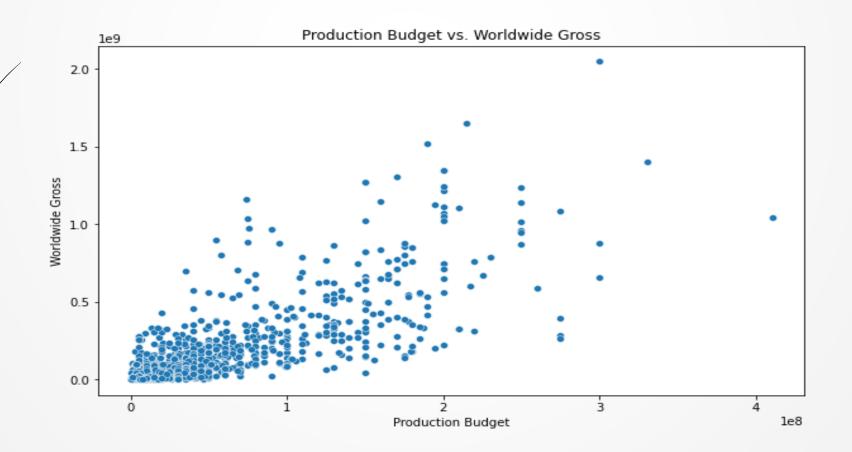
Problem Statement 3:

- To assess the financial implications of production budgets on the performance of movies.
- The graph below shows a moderately strong correlation between Production Budget and Domestic Gross.



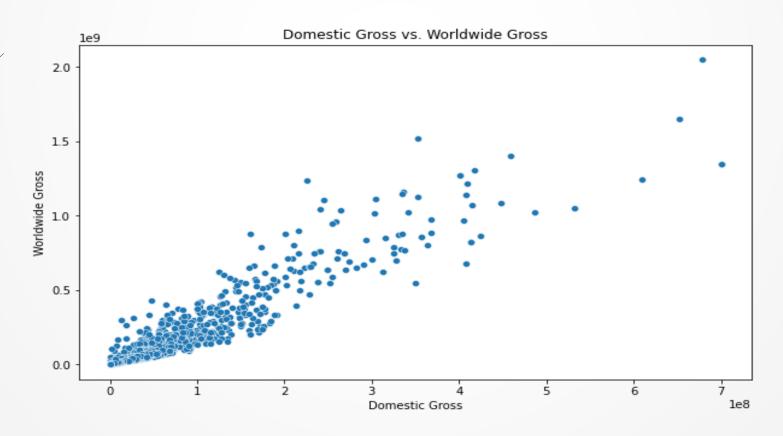
Correlation between Production Budget and Worldwide Gross.

The below graph shows a moderately strong correlation between production budget and worldwide gross.



Correlation between Domestic Gross and Worldwide Gross

The graph below shows a very strong correlation between Domestic Gross and Worldwide Gross.



Findings and Insights

- Competitor Market Analysis: This analysis entails the identification of immediate competitors, analysis of their financial metrics and market share. In the end, this iterative approach helps firms thrive in a competitive environment by fostering performance improvement, informed decision-making, market positioning and efficient strategy planning.
- Language Choice Analysis: When compared to films in other languages, the study of the movie dataset shows that English-language films regularly have the greatest worldwide box office take. English-language films are produced by renowned studios, which can increase their marketability and appeal to a broad audience.
- Budget Allocation Analysis: These strong positive connections highlight the financial significance of production budget allocation in the film business, to sum up. In light of the fact that wise production investments can have a major impact on both domestic and international

Recommendations

- Microsoft, as a new company entering the industry and provides a benchmark to compare against. It helps in setting realistic goals for market share and revenue targets
- Microsoft should consider producing a significant portion of its movie portfolio in English. This aligns with the global appeal of English-language cinema and its potential to reach a broader audience
- Microsoft's new film studio should take these findings into account when deciding how much money to allocate to filmmaking. Recognizing the interdependence of the domestic and international markets further highlights the importance of flexible distribution and marketing tactics for maximizing profit potential

Conclusion

- Language Choice: English-language movies tend to achieve the highest worldwide gross, highlighting the global appeal of English cinema.
 Microsoft should consider producing a significant portion of its movie portfolio in English to tap into this broad audience.
- Budget Allocation: The production budget and both domestic and global gross have a strong positive link. This suggests that strategic budget allocation can have a big impact on generating revenue. To maximize revenue, Microsoft should carefully manage and spend its budgets. The remarkably strong correlation between domestic and international box office revenue shows that films that do well domestically also frequently do well internationally. Microsoft may use its local success to broaden its appeal internationally.
- Collaboration and Competition: It is crucial to comprehend the competitive environment. Microsoft ought to be aware of the market share and effective strategies of other significant studios. To increase its influence and reach, chances for partnership with other studios or distribution channels can also be investigated.

Thank You!

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