

Microsoft Corporation

Creating Movies

Problem Statement

- Microsoft Corporation has decided to diversify into creating original video content.
- The corporation has no prior knowledge on running a film studio or creating original video content
- They would like to understand the insights that data has to offer concerning this new venture.

Objectives

- i. To access what movie genres are profitable
- ii. To determine the relationship between expenditure and profit
- iii. To identify the most profitable movie genres
- iv. To access the profits of other movie studios

Methodology

- Analyze movie data obtained from Box Office, MDB, TheMovieDB, and The Numbers websites.
- Explore what types of films are currently doing the best.
- Make recommendations to Microsoft on what type of films to produce.

DATA PREPARATION

- Irrelevant columns were dropped
- Duplicate copies were dropped
- Entries with null values were dropped
- Column types were changed appropriately
- 4 data frames were merged
- The final dataset used for analysis had 11 columns with 3821 entries.

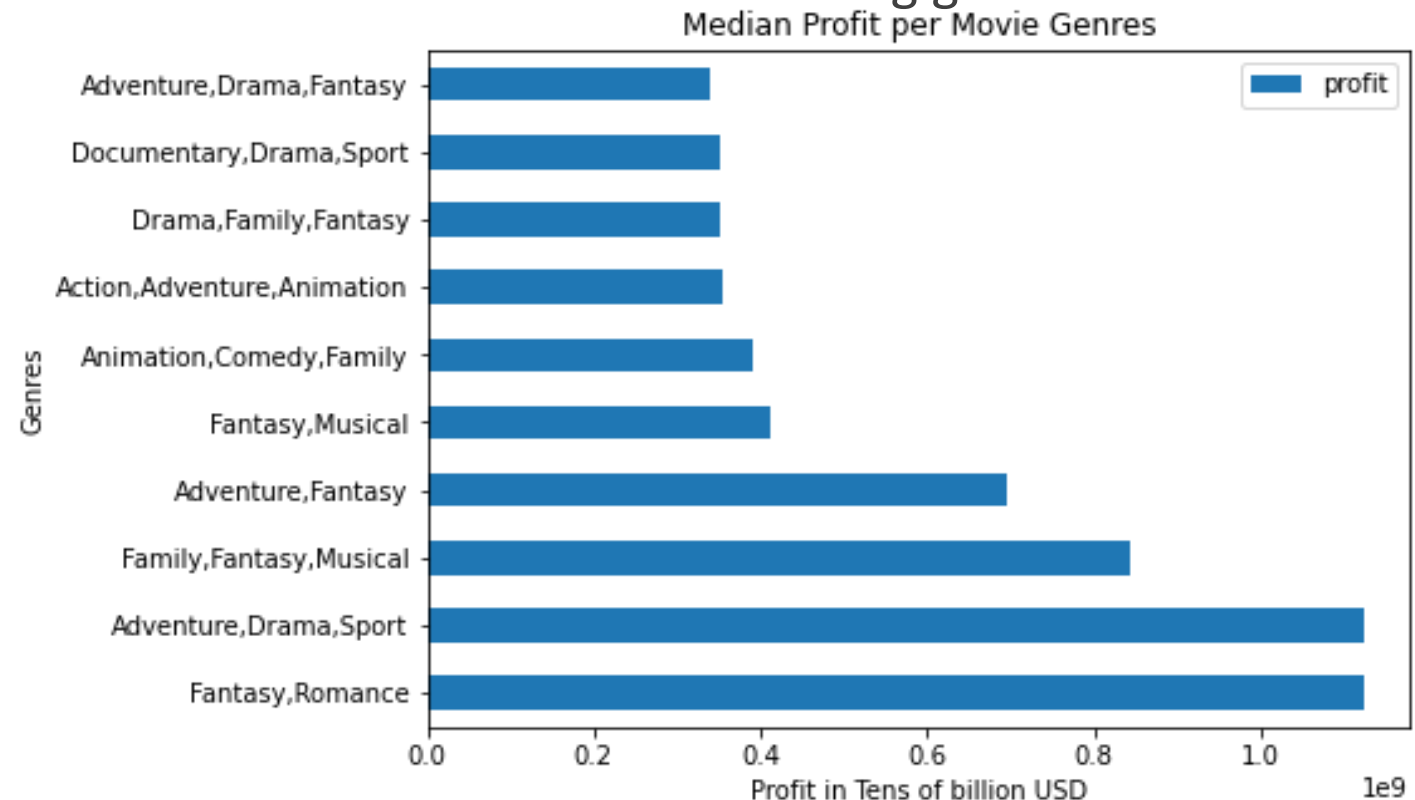
Data Analysis

- Exploratory data analysis was done
- Correlation between profit and production_budget was found to be 0.68
- Correlation between profit and worldwide_gross was found to be 0.98
- Horizontal bar plots between the top 10 genres and the following columns were plotted: popularity, vote_average, production_budget, domestic_gross, worldwide_gross, profit.

Recommendation 1

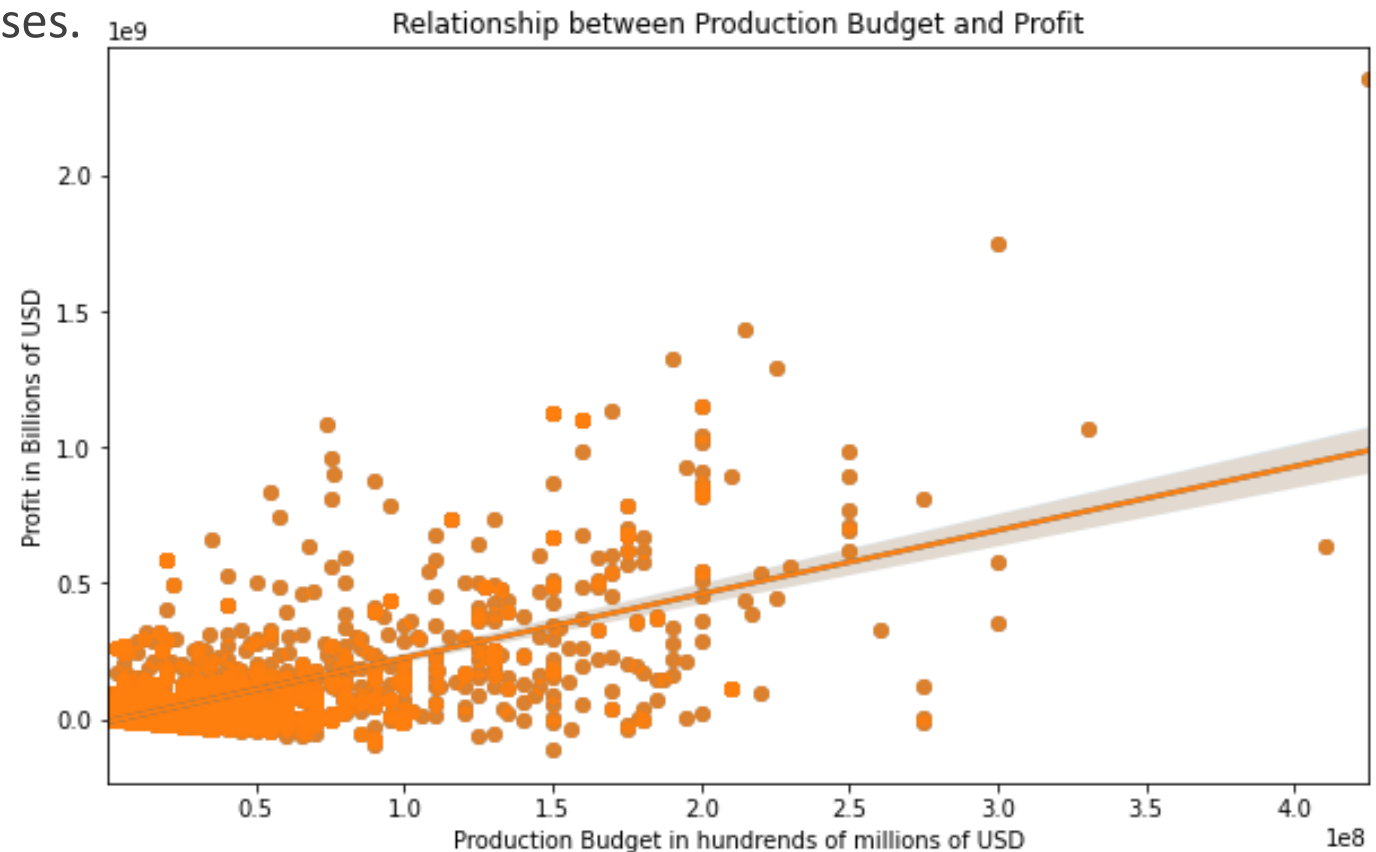
The analysis of the top 10 genres with high median profits shows that, to get a profit of more than \$400 million, Microsoft should consider the following genre combinations

- i. Fantasy and Romance
- ii. Adventure, Drama, Sport
- iii. Adventure, Drama, Sport
- iv. Adventure, Fantasy
- v. Adventure, Fantasy.



Recommendation 2

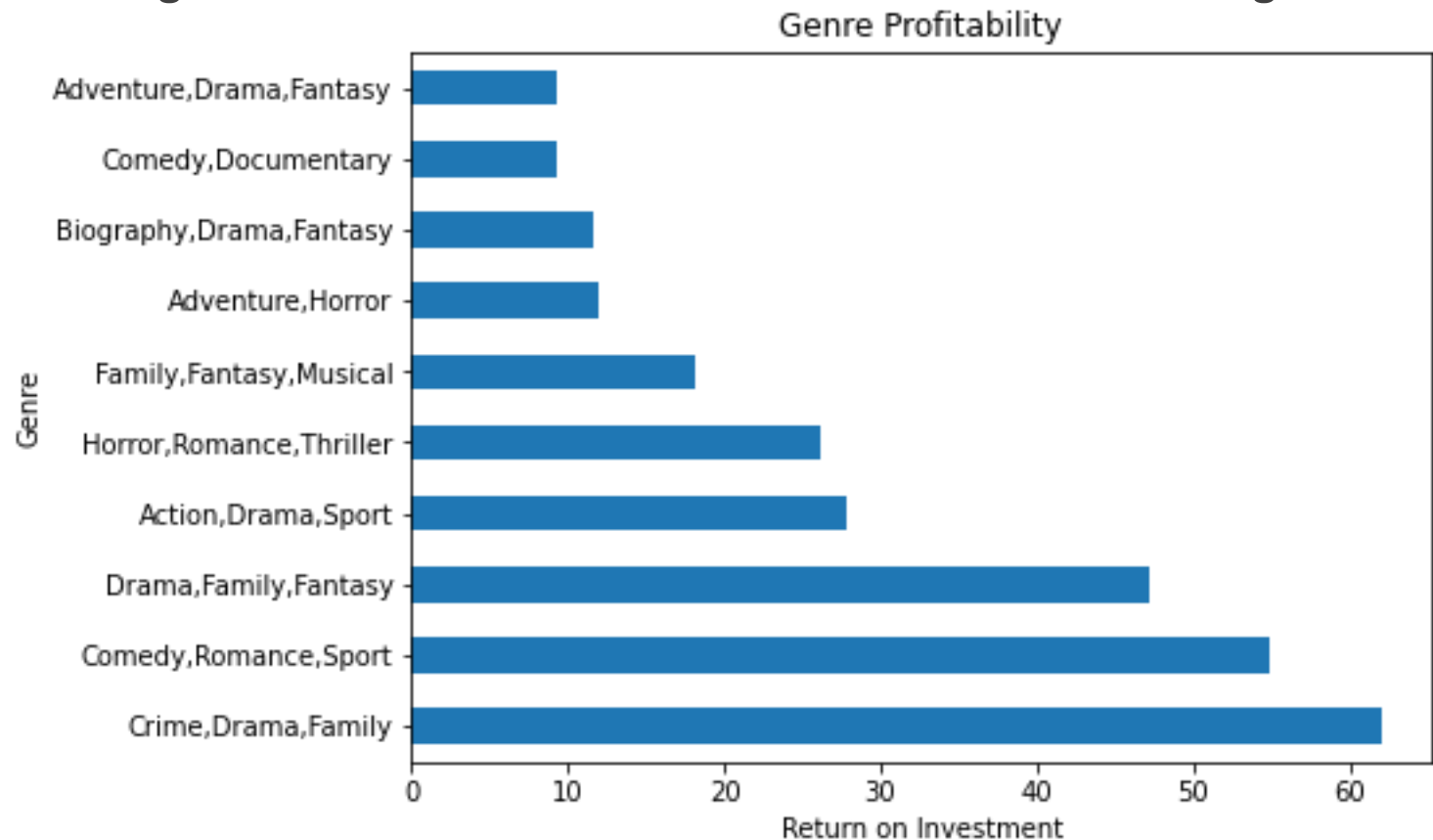
To limit their production budget at \$150 million per movie to ensure profitability while reducing the chances of making losses.



Recommendation 3

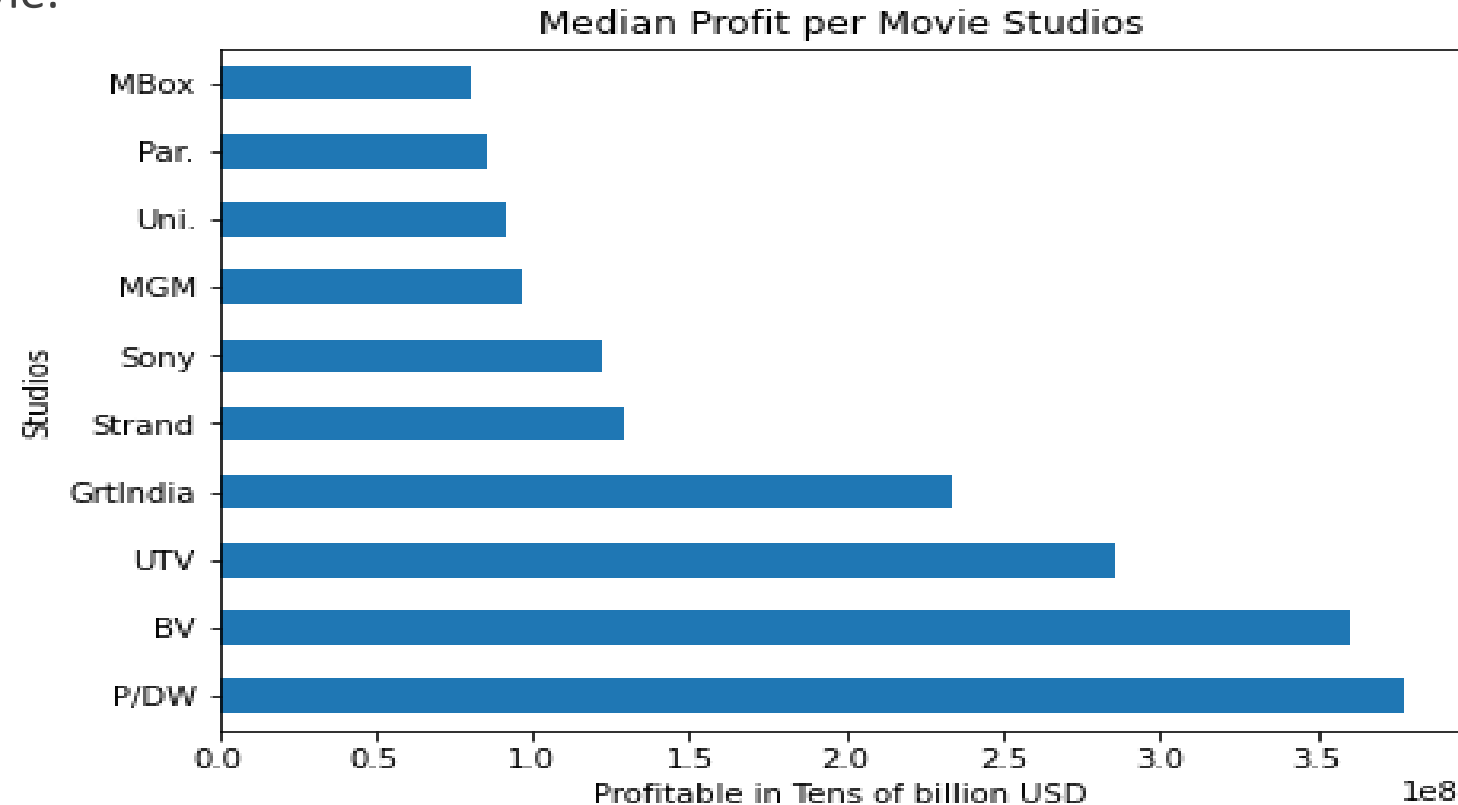
The following top 6 most profitable genre combinations should be considered in creating movies:

- i. Crime, Drama, Family
- ii. Comedy, Romance, Sport
- iii. Drama, Family, Fantasy
- iv. Action, Drama, Sport
- v. Horror, Romance, Thriller
- vi. Family, Fantasy, Musical



Recommendation 4

To rank among the top 10 studios, Microsoft should aim for profit margin of slightly over \$81 million per movie.



Next Steps

- Further analysis to determine the correlation between the popularity of a movie genre and profitability as well as the correlation between the vote average of a movie genre and profitability.
- Further analysis to determine the profitability of individual genres.

THANK YOU !

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