Microsoft Movie Budget Analysis

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Summary

Microsoft would like to invest in a movie, so we will be analyzing if the production budget has a relationship or affect with a movie's average rating, popularity, and profit. They hope to conclude production budget is a significant variable in having a successful movie.

Outline

- Business Problem
- Data
- Methods
- Results
- Conclusions

Business Problem

Microsoft would like to have a production budget less than $100 million while having a successful movie. Microsoft has minimum values for average rating(7.5), popularity(12.693), and profit(150%) for what they consider a "success" in each category. We will compare production budget relation on average rating, popularity, and profit separately to observe relation and trends.

Data

Microsoft has given data on movies on past movies to analyze budget. Data is used on movie's budgets under 100 million and compared to:

- Average ratings with minimum rating of 7.5 and number of votes 10,000,
- Popularity more than 12.693 (the top 75% rated values)
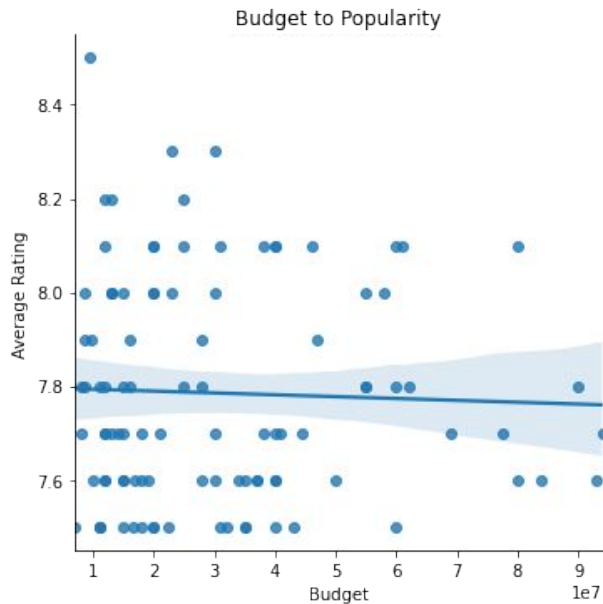- Worldwide gross to calculate profit more than 150%

Methods

This project uses correlation and descriptive analysis to look for trends that find how budget is related to other data. The data was filtered and sorted to fit Microsoft's parameters.
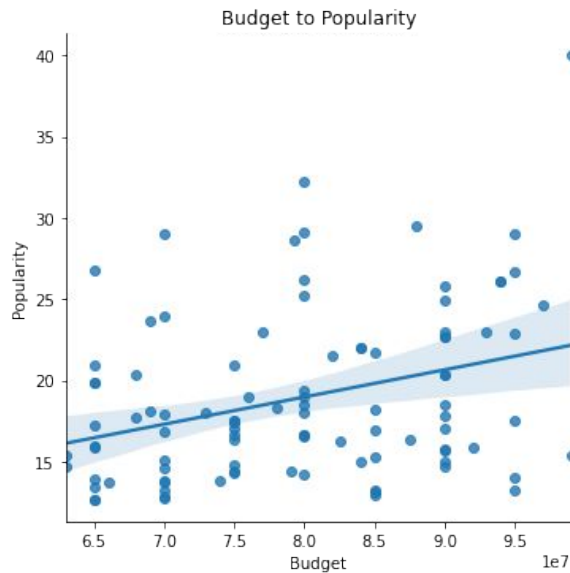
Results

Looking at the top 100 there is no relation (-0.066), and top 10 production budget appears to have no trend on a movie's average rating.
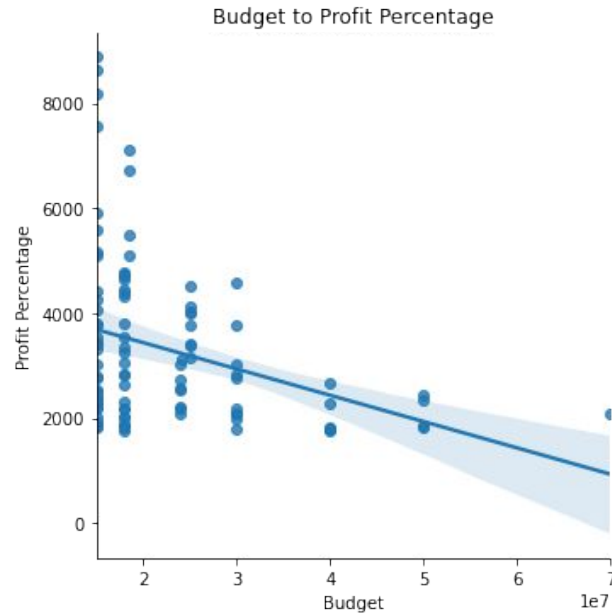

Budget to Popularity

Results

Looking at the top 100 there is a weak relation (0.328), and top 10 production budget appears to have no trend on a movie's popularity.

Results

Looking at the top 100 there is a weak relation (-0.327), and top 10 production budget appears to have no trend on a movie's profit percentage.

Budget to Profit Percentage

Conclusions

Looking into budgets under 100 million dollars, it has no effect or relation to average rating, popularity, and profit.

- Budget has no relation or trend to a movie's 7.5 average rating .
- Budget has a weak relation or trend to a movie's popularity.
- Budget has a weak relation or trend to a movie's a profit percentage.

Next Steps

Though production budget showed no relation or effect on the subjects analyzed. Further analysis on production budget could show its value to predicting a successful movie.

- Analyze other variables in relation to average rating, popularity, and profit.
- Determine other possible variables as indicators for a successful movie.
- Find which studio has the highest average rating, popularity, and profit collectively with production budget.

Thank You!

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