



# Microsoft Movie Budget Analysis



## Summary

Microsoft is interested in 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. Extracted data 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%



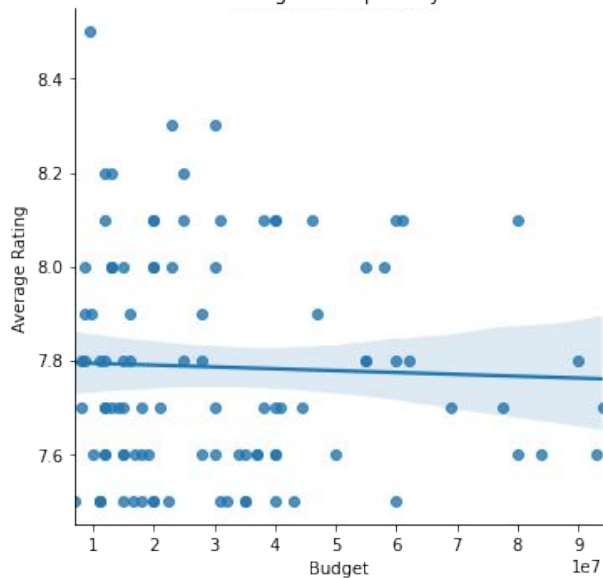
# Methods

This project uses correlation analysis to look for trends that find how budget is related to other data.

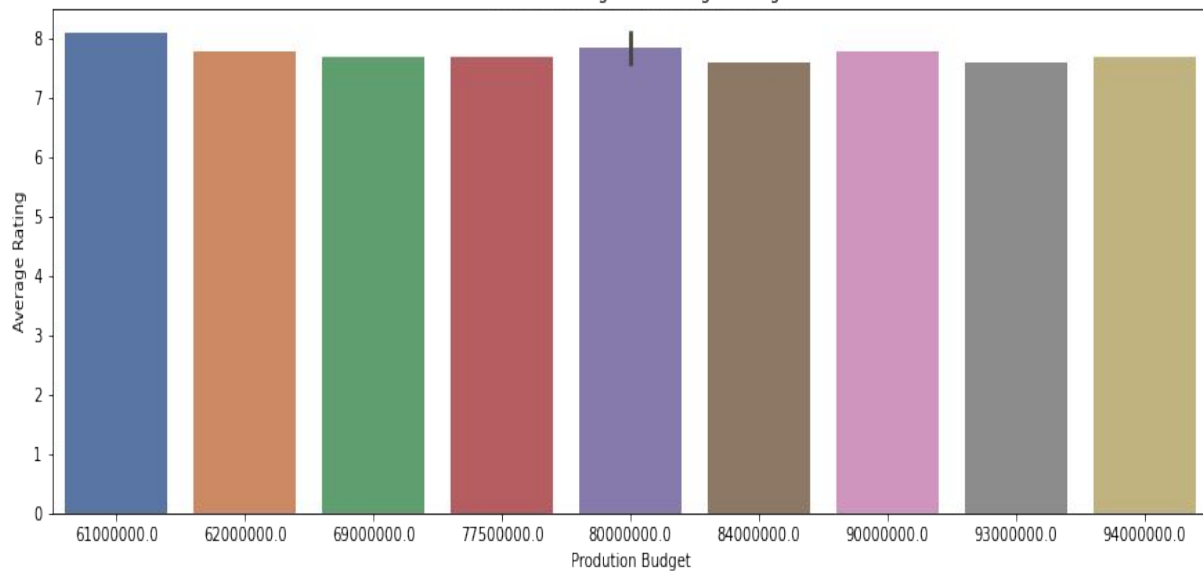
# Results

Looking at the top 10, as expected from the correlation above, production budget appears to have no trend on a movies average rating.

Budget to Popularity

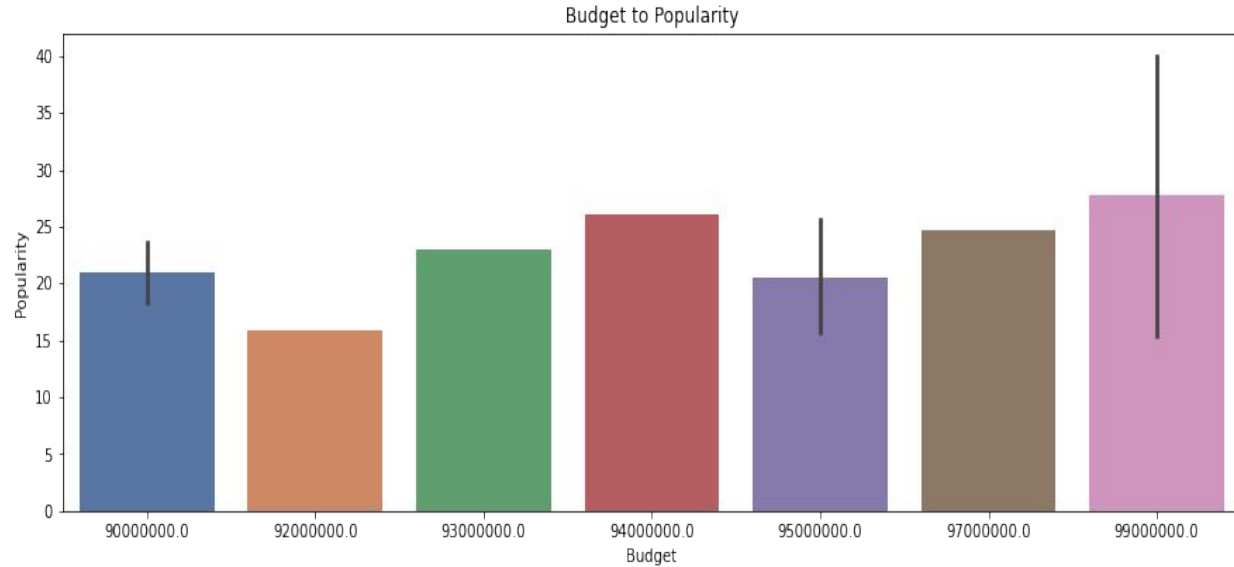
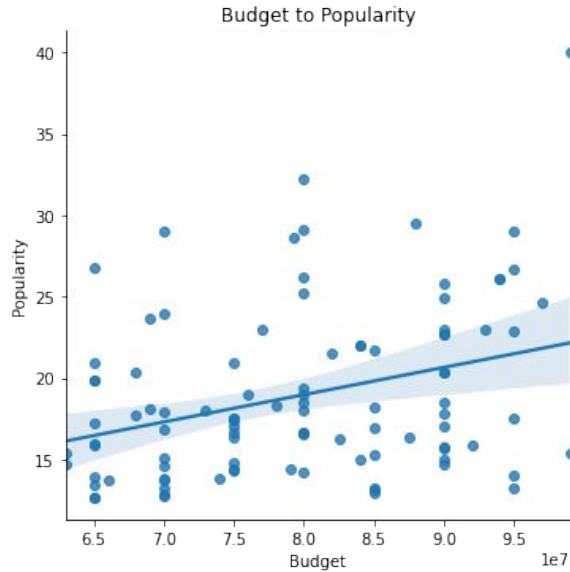


Production Budget to Average Rating



# Results

There appears to be no relationship or trend. between a movies production budget and popularity.

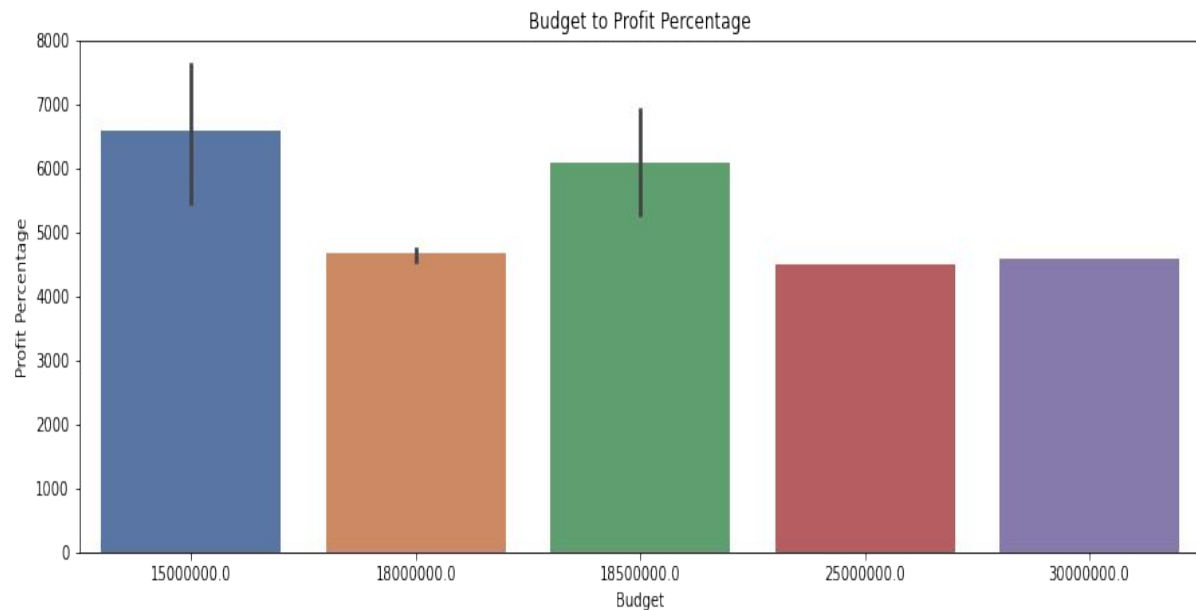
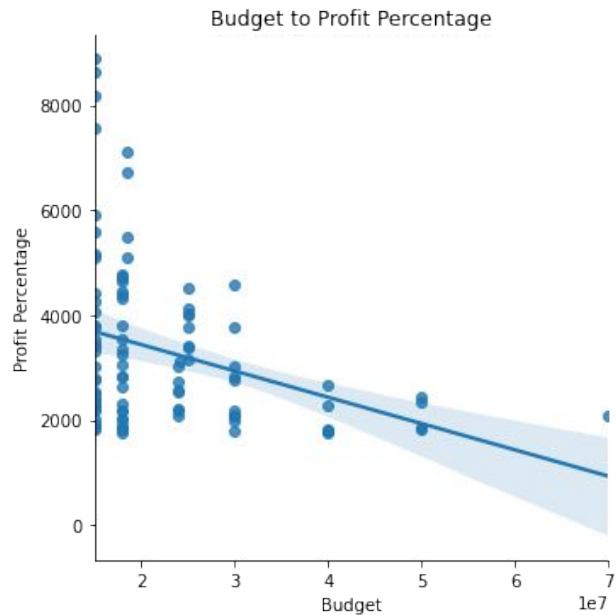






There appears to be no relationship, maybe even a weak negative trend, between a movies production budget and profit percentage.

## Results





## 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 no relation or trend to a movie's popularity.
- Budget has no 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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