

Business analysis for Microsoft Movie Pilot

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Analysis Goals

This analysis uses exploratory analysis to attempt to contribute to the strategic risk management planning of this project by:

- 1) Find the Movie Genre/s with a proven track record of delivering the highest Profit Ratio without requiring extremely large budgets.
- 2) Recommend a budget that optimises the chances of the films success without exposing the new venture to potential large capital losses.
- 3) Recommend a Movie Runtime that is associated with the highest profit Genre/s and will potentially be crucial to the films success.

Business Problem

Microsoft would like to enter the movie making business but have zero experience in this market. Because of the inherent risk of starting a new business venture, strategically mitigating risks could contribute to the success of their first ever movie project. This analysis attempts to control for three important variables that are part of the risk profile of this project.

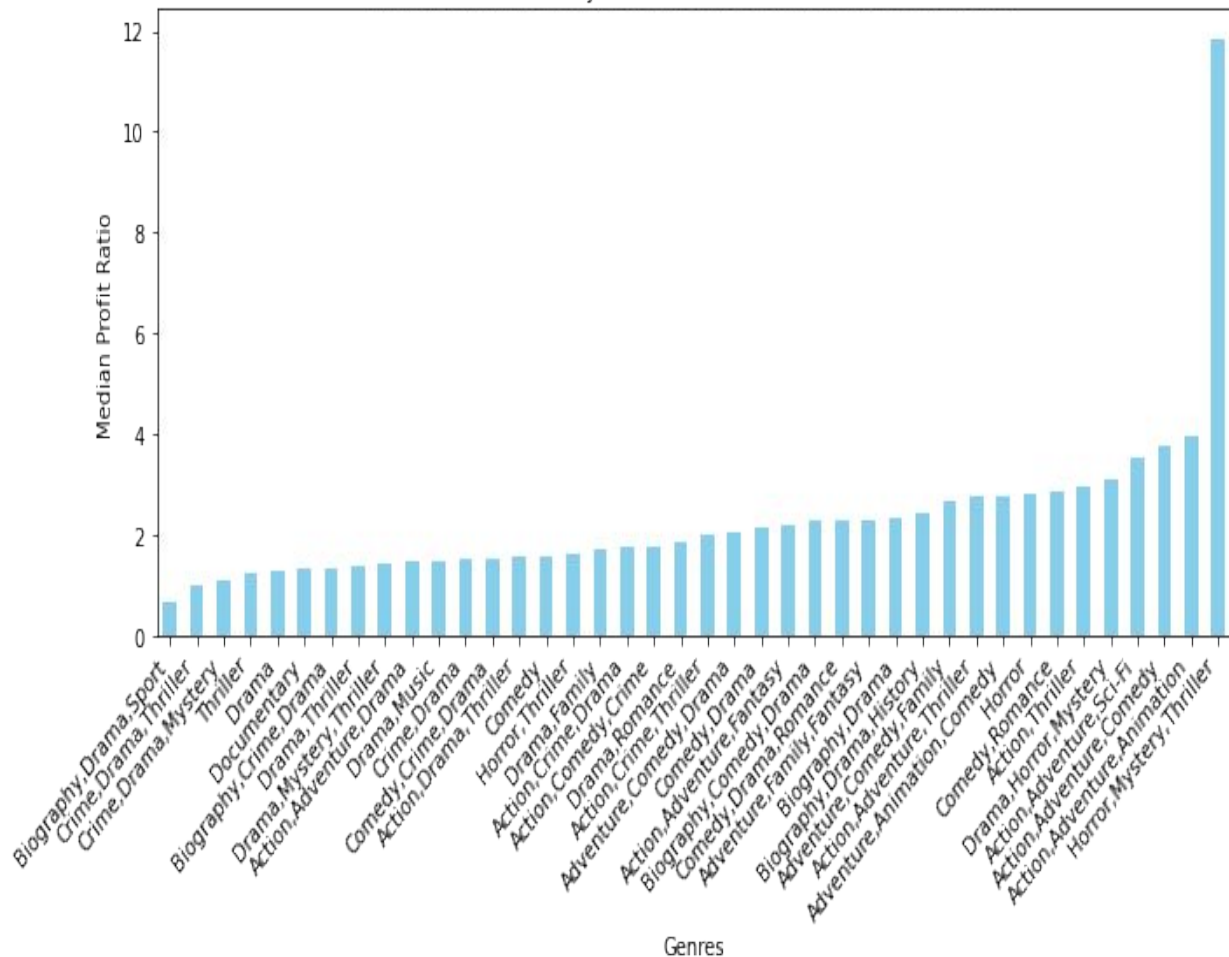
Strategic risk management is difficult with so many inputs into making a movie (Actors, screen writers, composers, directors, cinematography, special effects, marketing, genre, runtime, budget management etc. All inputs require strategic risk management to produce a profitable movie.

Data Description

Initially, all available data files were reviewed for suitability and viability of analysis. While some files provided possibilities of discovering the most popular films based on consumer ratings. From a viability viewpoint it is necessary to know if the film is going to be affordable and very likely to be profitable so that the movie business is self-sustaining.

- cleaned the data in 'imdb.title.basics.csv.gz' and 'tn.movies_budgets.csv.gz', and merged the data to make it possible to gain these essential insights.
- Genres with 10 or less movies were removed, prior to analysis, to avoid genres with a very limited track record.
- The median profit ratio for each genre was calculated to clearly compare each genres' profitability (See below graph).
- Top genre for profit ratio was then investigated for median budget and Runtime (See graphs below).

Median Profit Ratio by Genre (Genres with at least 10 movies)



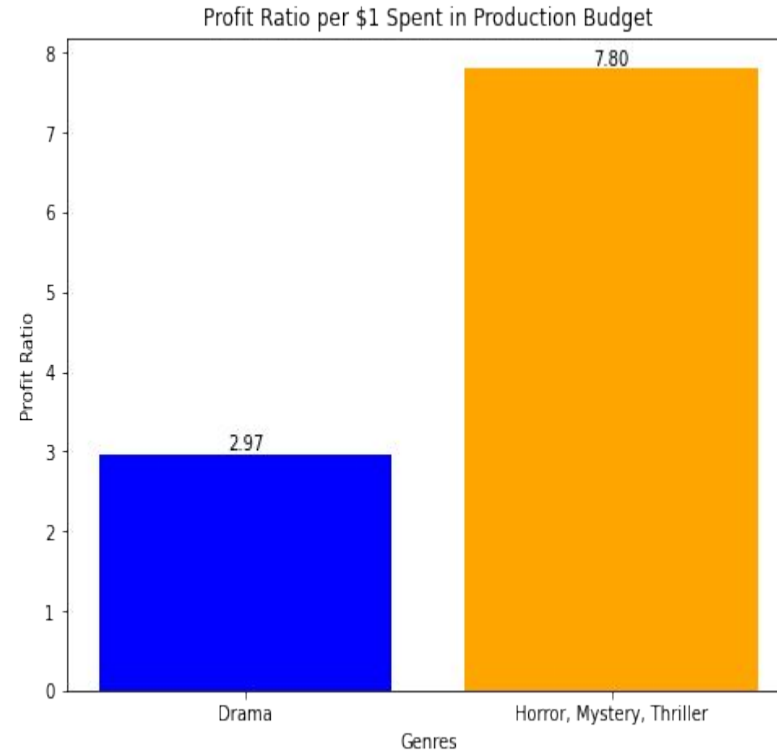
GENRE WITH THE HIGHEST PROFIT RATIO

The Movie Genre/s with a proven track record of delivering the highest Profit Ratio was found to be 'Horror, Mystery, Thriller'.

This genre was found to have a very favourable profit ratio of more than double all other genres.

CAPITAL INVESTMENT COMPARISON

One extreme outlier was removed from the Horror, Mystery, Thriller to make certain the median was not affected. The median was still around double the second highest genre by profit ratio.



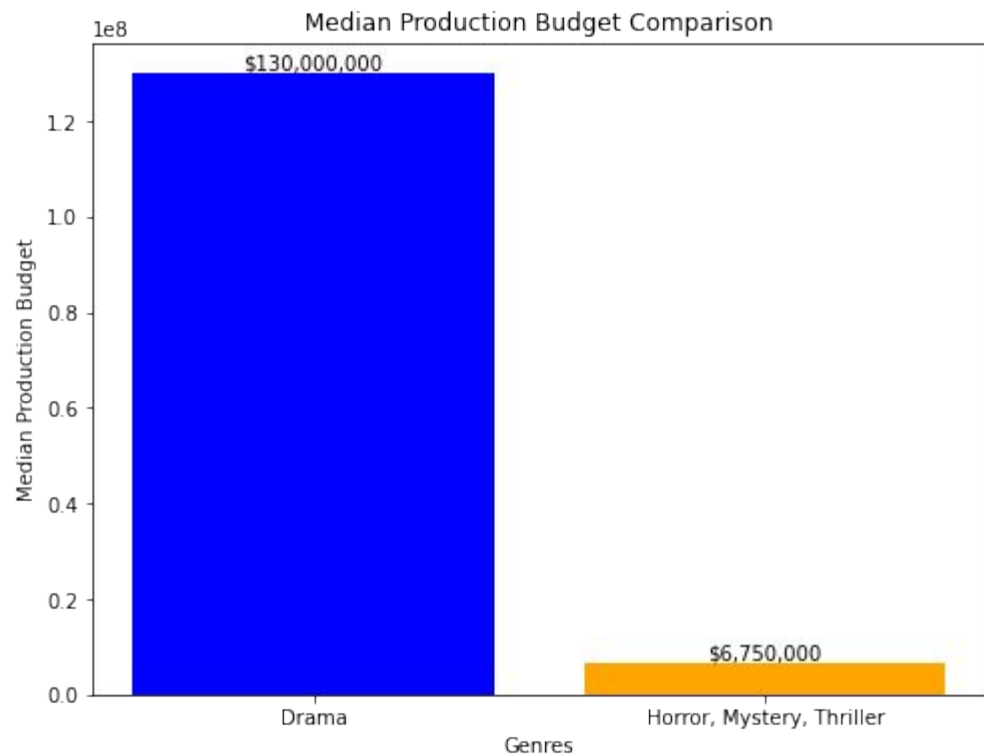
Extrapolating and comparing this genre's profit ratio with the most prolific genre (ie.Drama) could return:

DRAMA -
\$10,000,000 budget
could return \$29.7
million

**HORROR, MYSTERY,
THRILLER** -
\$10,000,000 budget
could return \$78 million.

PRODUCTION BUDGET

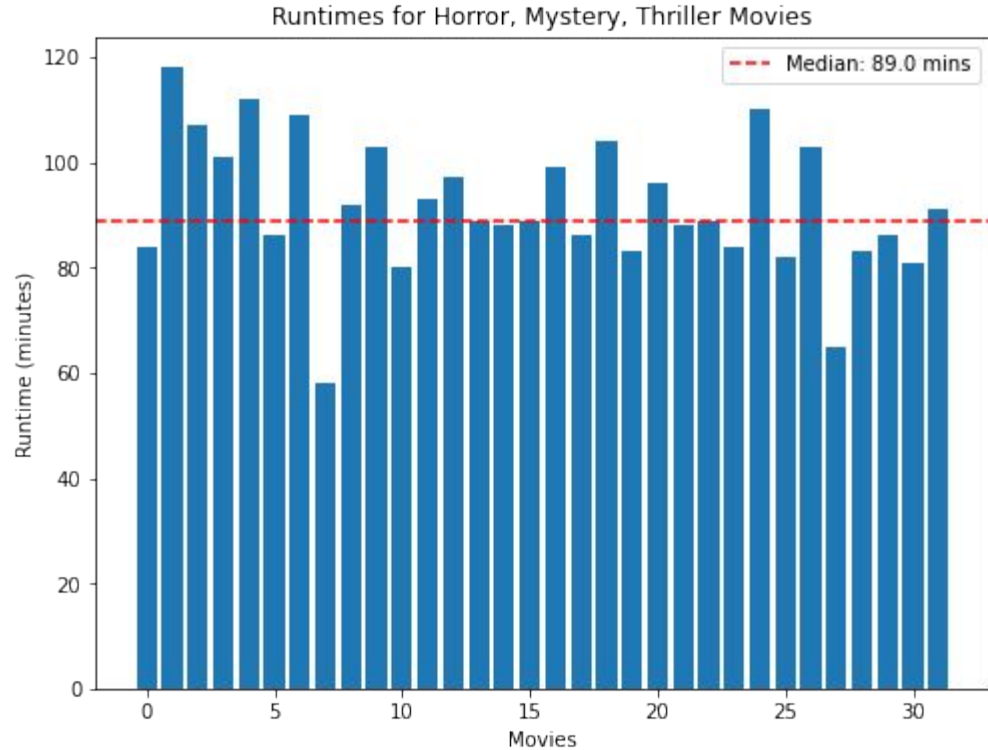
The Horror, Mystery, Thriller genre's median production budget was calculated and found to be \$6,750,000. This was then compared to the budget of the genre with the most movie titles (ie. Drama), and was found to require extremely low capital in comparison.



RUNTIME ANALYSIS

The median runtime for all movies in the Horror, Mystery, Thriller genre was calculated and can be seen in the graph below.

Approximately 90 mins is the median runtime for this genre.



Results Summary

- Horror, Mystery, Thriller median genre profit ratio was found to be around double the second highest genre by profit ratio. Outliers have been removed to improve accuracy.
- This genre was found to have a much lower median production budget in comparison to the most prolific genre. This would lower the risk of capital loss.
- The median runtime for this genre was found to be 89 mins.

These results could be integral in guiding the business' foray in movie making.

Business Recommendations

- 1) The first movie project is recommended to be in the Horror, Mystery, Thriller genre maximize the chance of high profitability. This will allow more ambitious projects to be attempted in the future with the success of the first project.
- 2) The recommended budget is \$6.75 million approximately. The analysis points to this as being enough to ensure the films success.
- 3) A runtime of 90 mins approximately would likely satisfy the audience.

Further analysis could explore the better screenwriters, composers, directors, and actors within this genre to add additional strategic insights.

This analysis was somewhat limited by the given datasets. It would prudent to complete a further analysis along similar line of enquiry as this analysis, but with the most current movie genre, earnings, budgets, and runtime datasets. With careful analysis this could assist in gaining a more complete understanding.

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