

![Director shot](C:\Users\ADMIN\Desktop\Template-mvp\Template-mvp\images)

## # MICROSOFT MOVIE ANALYSIS

### ## Overview

This repository contains a Jupyter notebook that analyzes three movie databases containing data points across thousands of movies to provide insights for Microsoft's new movie studio.

The analysis focuses on key characteristics such as runtime minutes, genre, average rating, and gross earnings to guide movie production decisions.

### ## Business understanding

This project aims to solve the problem faced by Microsoft, which aims to enter the movie production industry without prior experience by providing data-driven insights to inform strategic decisions about the types of films to produce, maximizing the studio's chances of success in the highly competitive market.

### ## Technologies used

- Python
- Pandas
- NumPy
- Matplotlib
- Seaborn

### ## Features

- Data cleaning and preprocessing
- Exploratory Data Analysis (EDA)
- Visualization of movie genre preferences, ratings, and gross earnings
- Identification of successful genres and studios

### ## Overall glimpse

![Overall glimpse](C:\Users\ADMIN\Desktop\Template-mvp\Template-mvp\images)

### ## Project status

The project is complete and has provided actionable insights for Microsoft's movie studio.

### ## Conclusion

Our analysis of the movie databases reveals valuable insights for Microsoft's new movie studio venture.

Adventure movies emerge as the most lucrative genre, with high average ratings and gross earnings. Action and Sci-Fi genres also show strong performance.

The analysis also highlights the importance of runtime duration, indicating that movies with durations ranging from 90 to 140 minutes tend to receive higher ratings.

Additionally, the data underscores the significance of selecting the right studio partner.

### ## Recommendations

- Action, adventure, and sci-fi movies attract the largest audiences both domestically and internationally, suggesting they should be prioritized in Microsoft's movie studio venture.
- To enhance decision-making further, future research could explore the strategies employed by high-ranking movie studios to achieve success
- Conducting additional analysis comparing production budgets to viewer ratings could offer valuable insights into the relationship between investment in production values and audience reception.

### ## Room for improvement

- Further analysis could explore trends over time or consider additional factors influencing movie success.
- Integration of machine learning models for predictive analysis could enhance decision-making.

## ## Acknowledgements

- The project was inspired by the need to provide data-driven guidance for Microsoft's movie production decisions.
- Data was sourced from IMDb and Box Office Mojo databases.

## ## Contact

Created by [[@Wambui-Githinji](https://github.com/Wambui-Githinji)](https://github.com/Wambui-Githinji) - feel free to contact me!