

Crafting Microsoft's cinematic success story

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 Glimpes



Project Status

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

Conclusion

My analysis of the movie databases reveals valuable insights for Microsoft's new movie studio venture. 1.Genre Analysis: Certain genres such as action, adventure, fantasy and science fiction tend to generate higher average domestic gross while genres like documentary, biography, drama and history receive higher average ratings from audiences 2.Audience Engagement: There is moderate positive correlation between domestic gross and the number of votes, indicating that movies with higher revenue also tend to attract more viewer engagement. 3. Quality Perception: While there is a weak positive correlation between average rating and the number of votes, indicating that movies with higher ratings may attract slightly more viewer engagement, there is also a weak positive correlation between average rating and domestic gross, suggesting that movies with higher ratings tend to perform slightly better in terms of revenue

Recommendation

Microsoft should consider producing mix of genres focusing on action, adventure, fantasy and science fiction to maximize gross domestic revenue while also exploring opportunities in biography, drama and history genres to cater to audience seeking higher quality content.

Microsoft should collaborate with experienced and successful directors specializing in genres with highest average ratings.

To enhance decision-making further, future research could explore the strategies employed by high-ranking movie studios to achieve success

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.

Contact

Created by [@najma abdi](https://github.com/najmaabdi99) (<https://github.com/najmaabdi99>) - feel free to contact me!