



MICROSOFT MOVIE STUDIO INSIGHT



Members:

- **Calistus Mwonga**
- **Samwel Kipkemboi**
- **Brian Kanyenje**
- **Hannah Nyambura**
DATE: 02/05/2025
- **Kelvin Mutua**



OVERVIEW

This project aims to guide a Microsoft Movie Studio making data-driven decisions about which movie films to produce by analyzing key factors that drive box office success. The analysis explores movie genres, viewer rating, director and actor influence and budget impact on revenue. The insights got from these analysis then help provide business recommendations to help the studio make right decision which would lead to the company's success.

OUTLINE

- ❖ Business problem
- ❖ Objectives
- ❖ Data overview
- ❖ Data cleaning and preparation
- ❖ Visualizations and Results
- ❖ Business recommendations
- ❖ Conclusions
- ❖ Contacts



BUSINESS PROBLEM

The company has decided to create a new movie studio, but they don't know anything about creating movies. Our task was exploring what types of films are currently doing the best at the box office then translate those findings into actionable insights that the company can use to help decide what type of films to create.



OBJECTIVES

- To determine which movie genres, perform highly in terms of revenue and viewer rating.
- To determine the top talents (directors and actors) that are linked to the highest performing movies.
- To determine whether movie budget affects the overall performance of a movie.



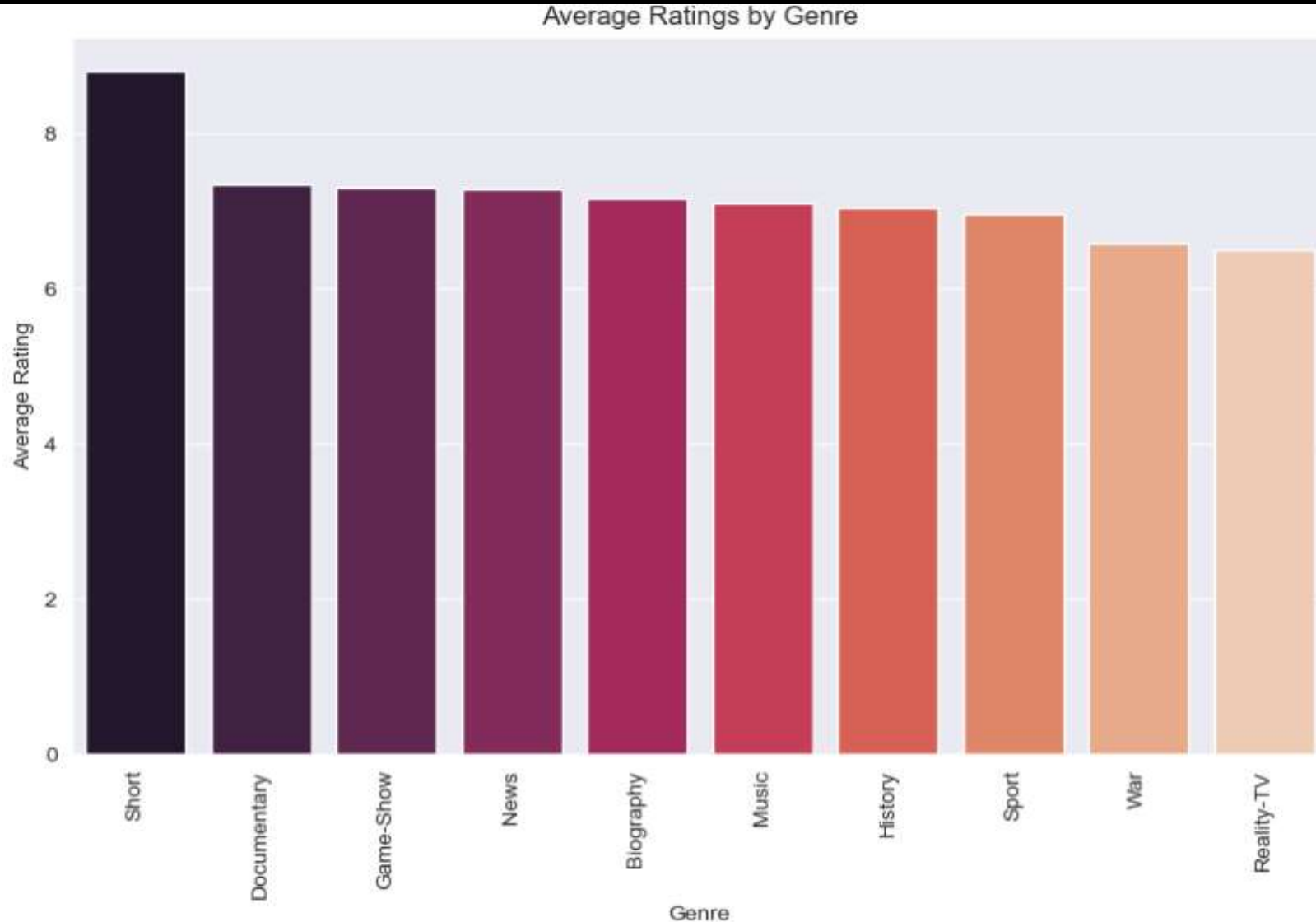
DATA OVERVIEW

Datasets used are:

1. IMDb (Database)
2. tn.movie_budgets.csv

VISUALIZATIONS

Determining movie genres perform based on average viewer rating

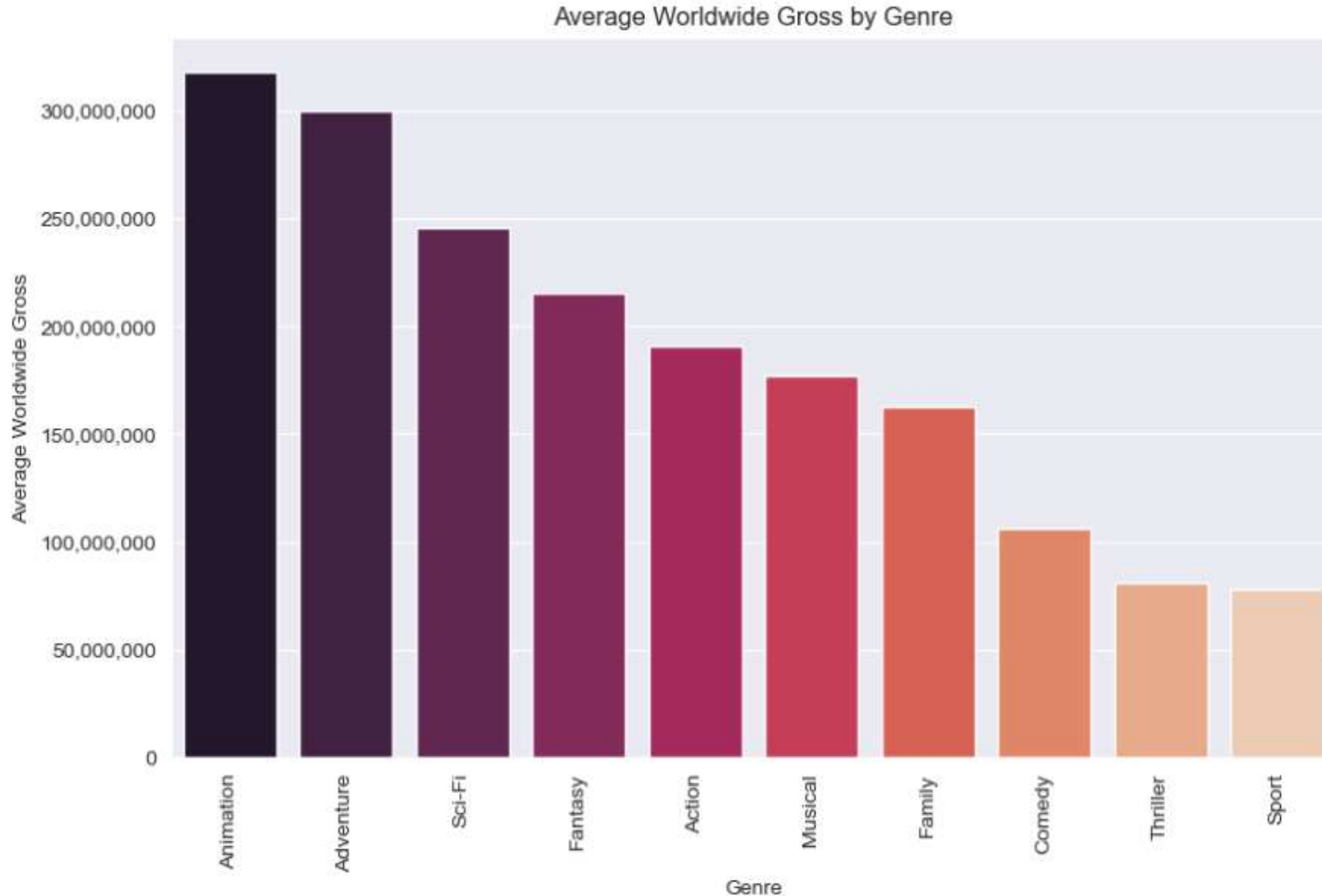


Insights:

Genres with high average ratings are:
Short films,
Documentary and
Game-shows

VISUALIZATIONS

Determining movie genres perform based on average viewer

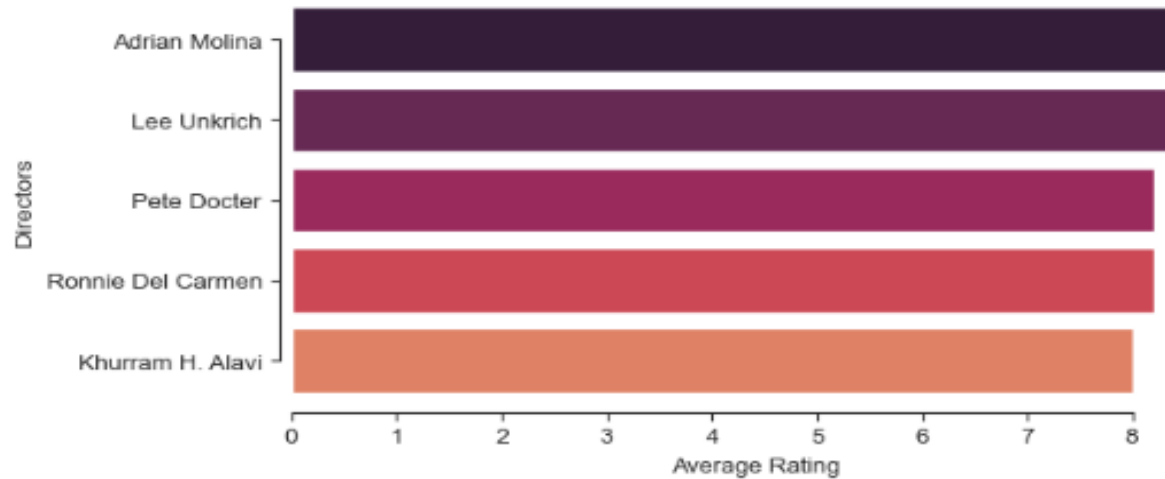


Insights:

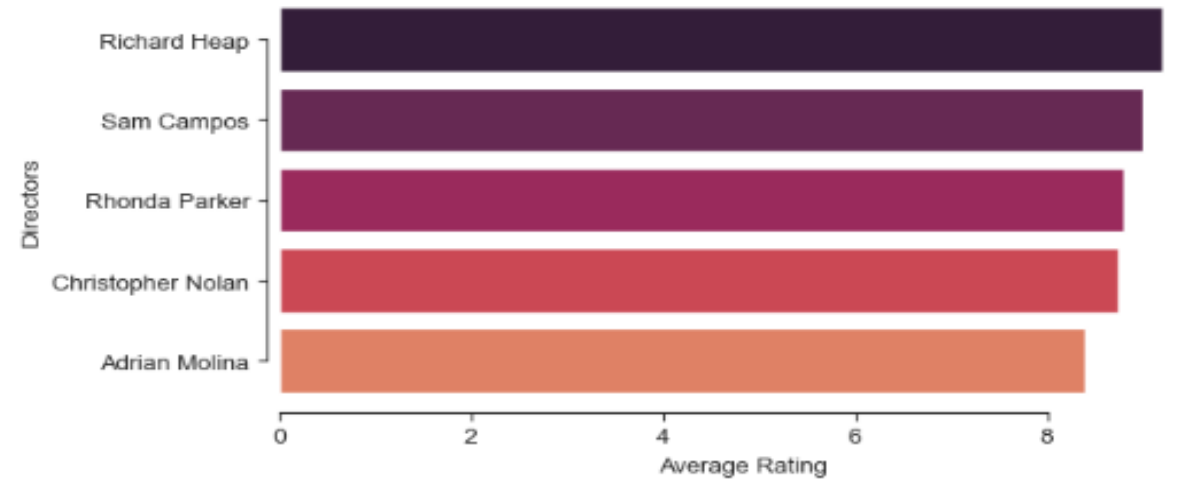
Top 3 Genre in terms of worldwide gross are: Animations, Adventure and Sci-Fi

Top directors linked to the highest performing movies :

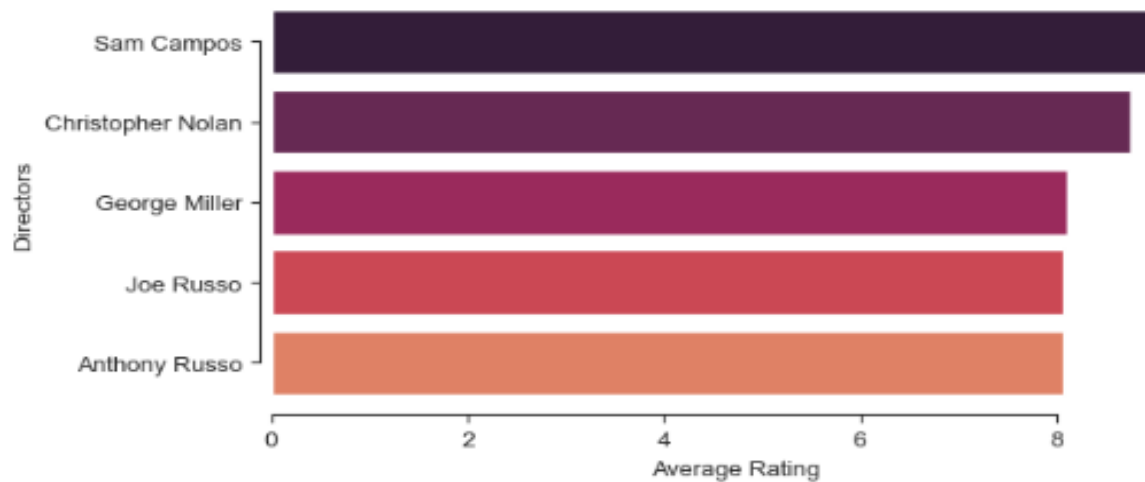
Top 5 Directors for Genre: Animation



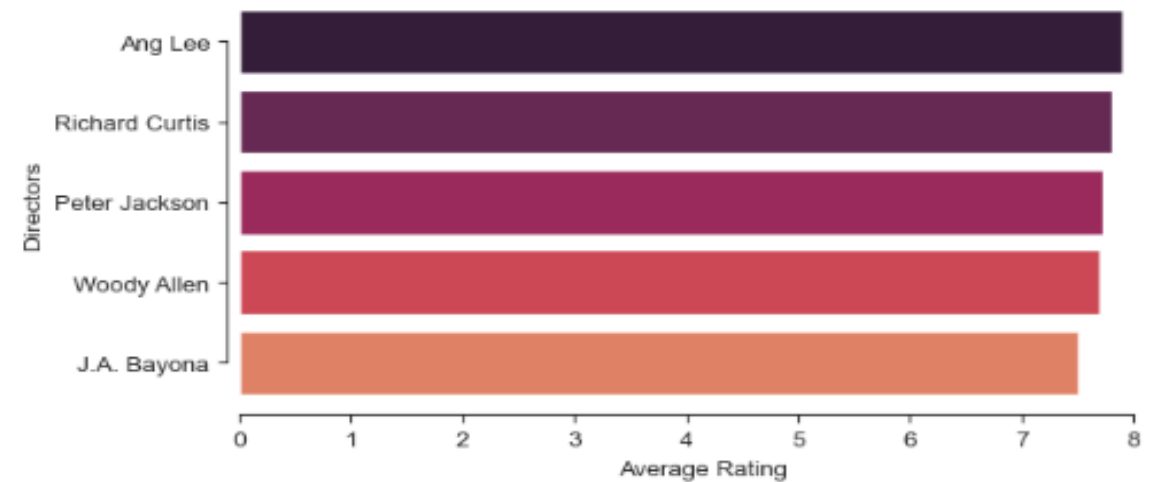
Top 5 Directors for Genre: Adventure



Top 5 Directors for Genre: Sci-Fi

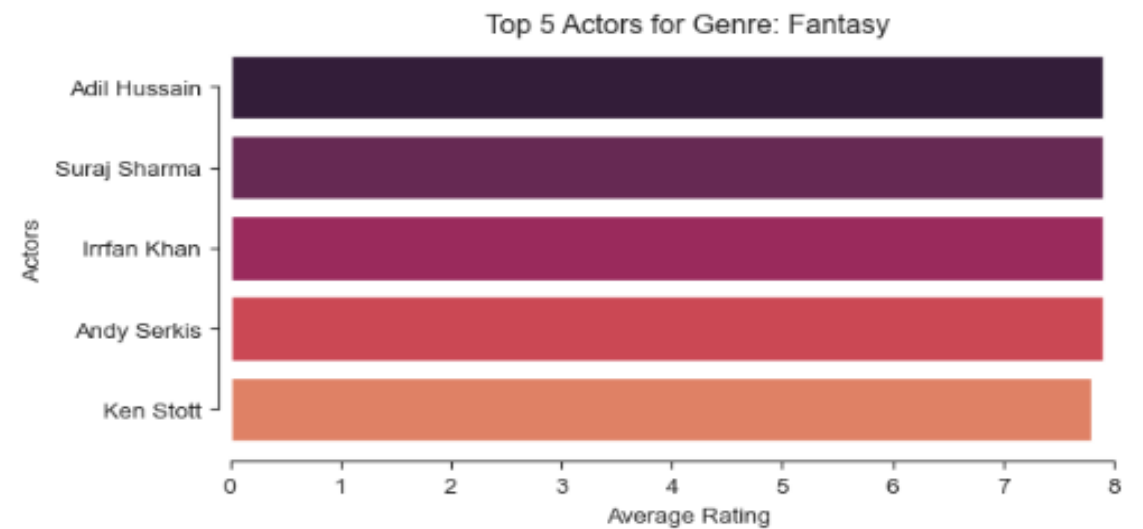
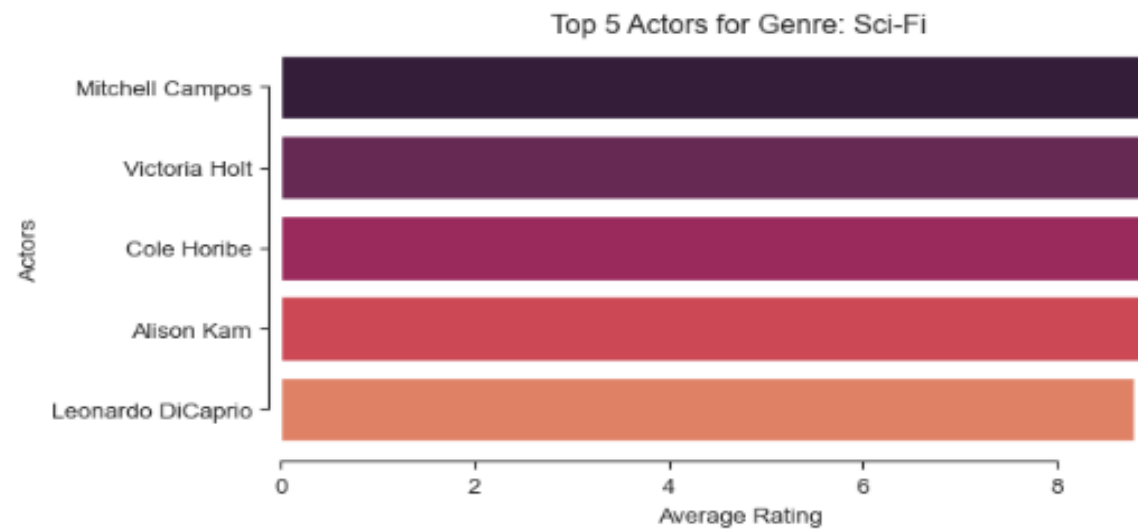
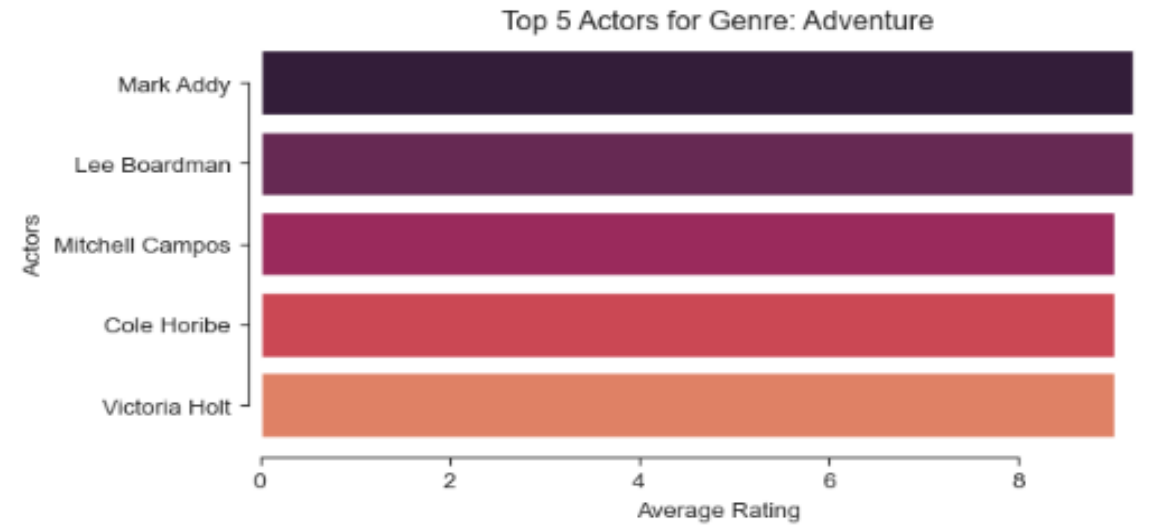
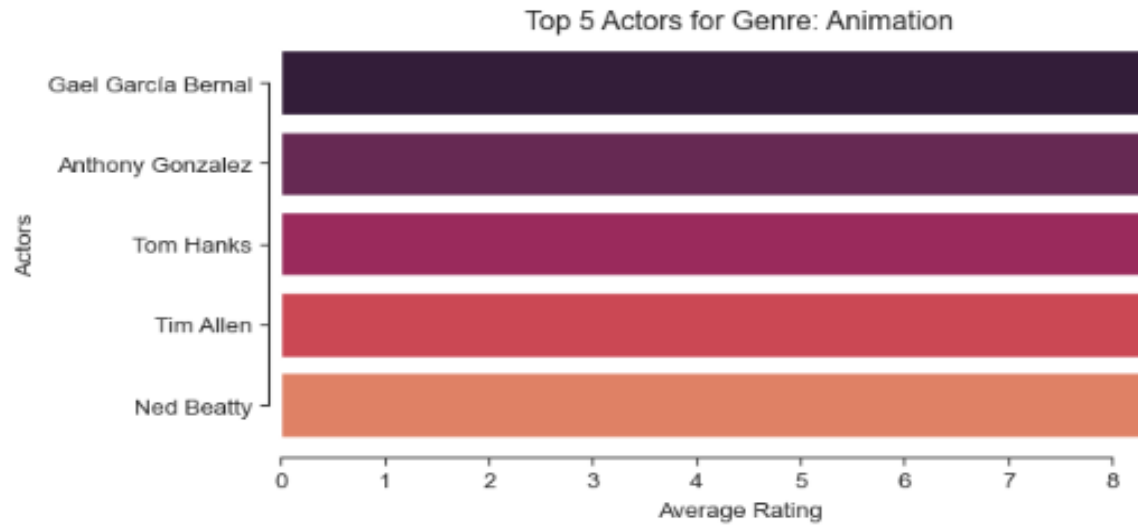


Top 5 Directors for Genre: Fantasy



- **Insights:** The chart shows the names of the top directors linked to the highest performing movies
-

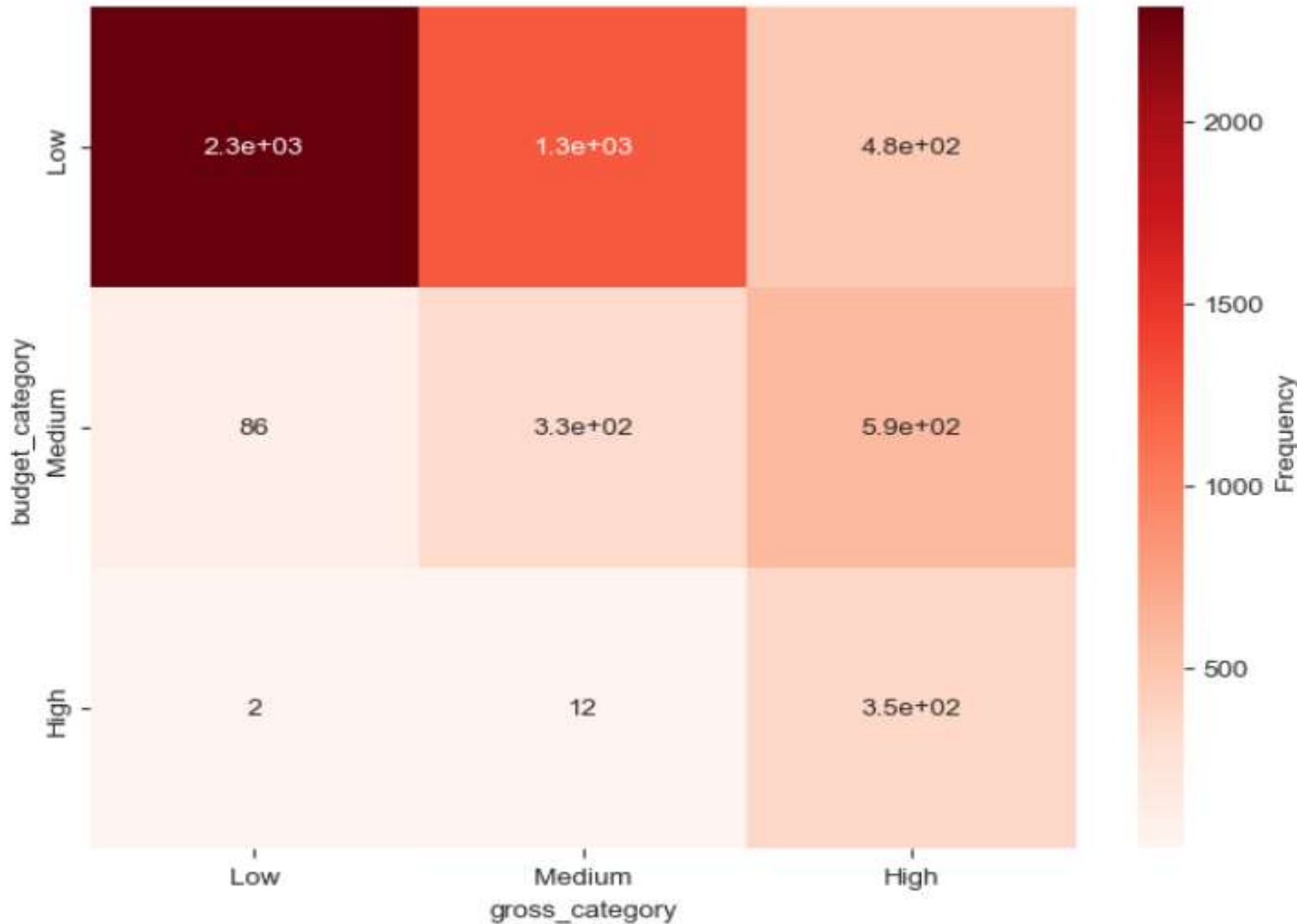
Top actors linked to the highest performing movies



○ **Insights:** The chart shows the names of the top actors linked to the highest performing movies

○

Relationship between movie production budget and worldwide gross categories :



Insights:

- The heatmap shows that production budget is significantly associated with worldwide revenue



BUSINESS RECOMMENDATION

- The studio should focus on producing films in the genre of Animations, Adventure and Sci-Fi because they have the highest worldwide revenue potential
- The studio should focus on producing films that have higher viewer satisfaction/rating which are Short films, Documentary and Game-Shows
- The studio should focus on working with top actors and directors that excel in their respective fields
- The studio should consider investing in higher budget movies, as there is statistical evidence to show that higher-budget films are linked to an increased revenue potential. This can maximize financial returns thus ensuring a successful production.



CONCLUSION

This analysis provides valuable insights into movie success factors, helping Microsoft Movie Studio make data-driven decisions on film production

Future work can include creating predictive models which consider these factors (genre, budget, director, and actor) to estimate box office success. These models can help refine decision-making for movie production ensuring even higher chances of success.



CONCLUSION

For any additional questions, please contact these members:

- **Calistus Mwonga**, calistusmwonga@gmail.com
- **Samwel Kipkemboi**, samkemboi201@gmail.com
- **Brian Kanyenje**, bkanyenje@gmail.com
- **Hannah Nyambura**, anngachuhpg1@gmail.com
- **Kelvin Mutua**, kelvinmutua787@gmail.com



THANK YOU

