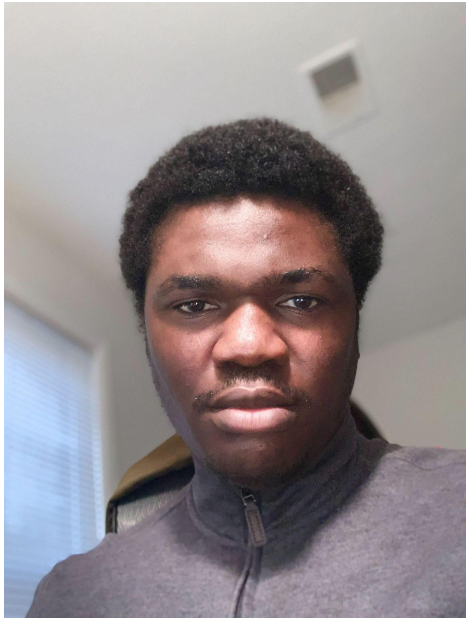
Microsoft Film Studios

Analytical Suggestions for Film Development

Microsoft

Meet the Team

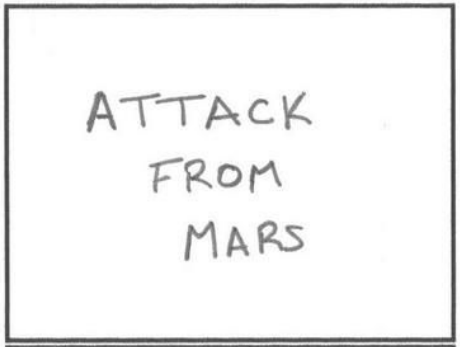
Brian Reynolds
Aspiring Data Scientist



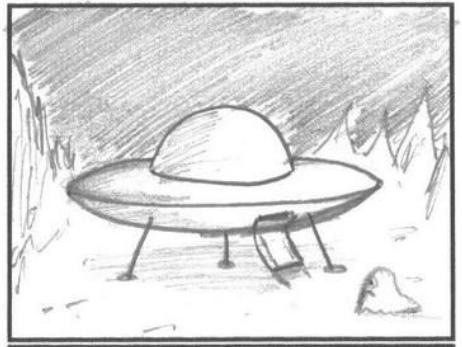
Timi Adejumo
Aspiring Data Scientist

Elijah Jarocki
Aspiring Data Scientist

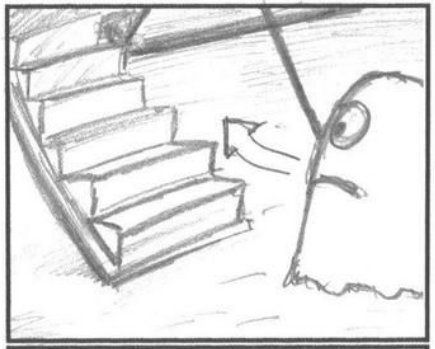
Agenda



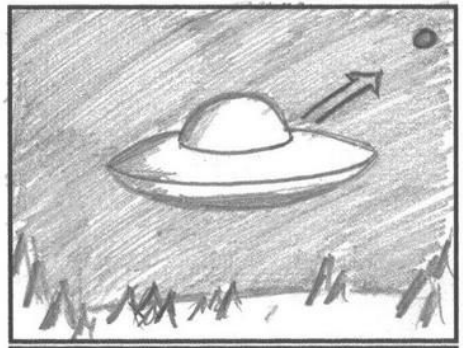
Goals



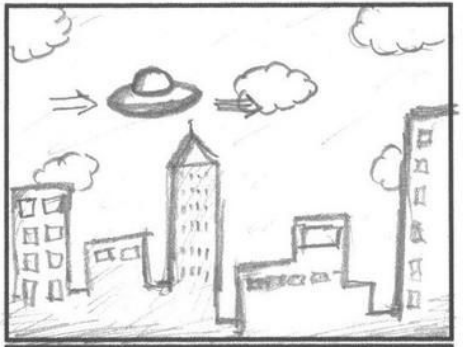
Data



Analysis



Results

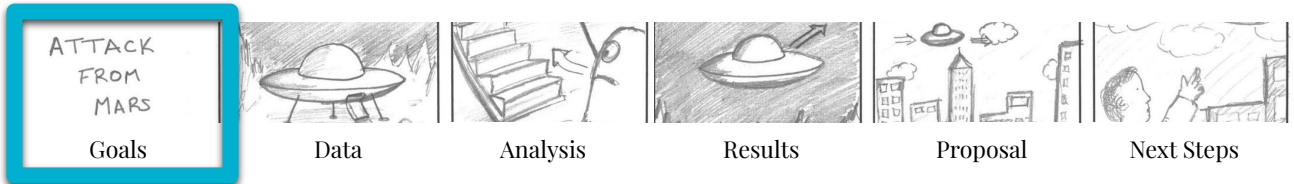


Proposal

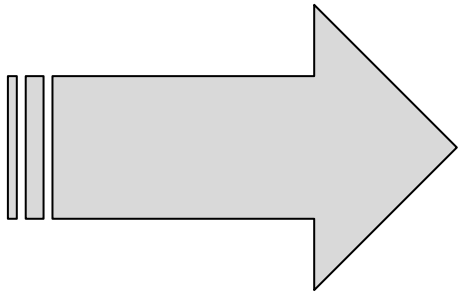
Next Steps

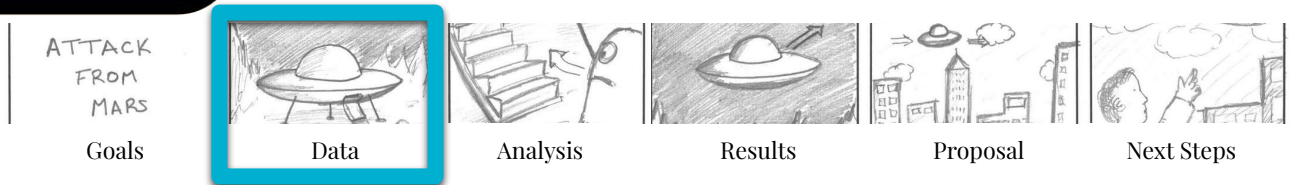
Project Goals

- Data Analysis
- Generate Insights
- What films do best?
- Concrete recommendations



Project Data





Data Methods

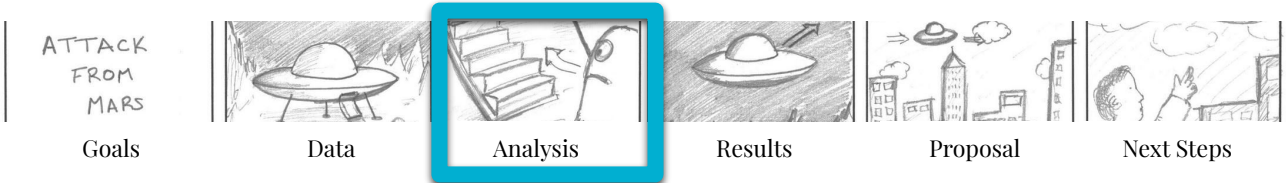
- Python
- Pandas
- SQL
- Seaborn
- MatPlotLib

Aggregating by Genre

Averaging (Mean)

Cleaning

Visualizing



Results

Results

After cleaning and visualizing the data, we came to three conclusions:

Genre

+

Production budget

→

- Profits & Profitability
- World Wide Gross Revenue
- Popularity

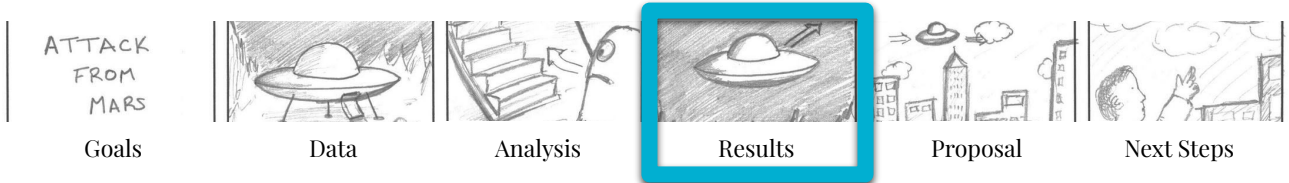
Bottom Line

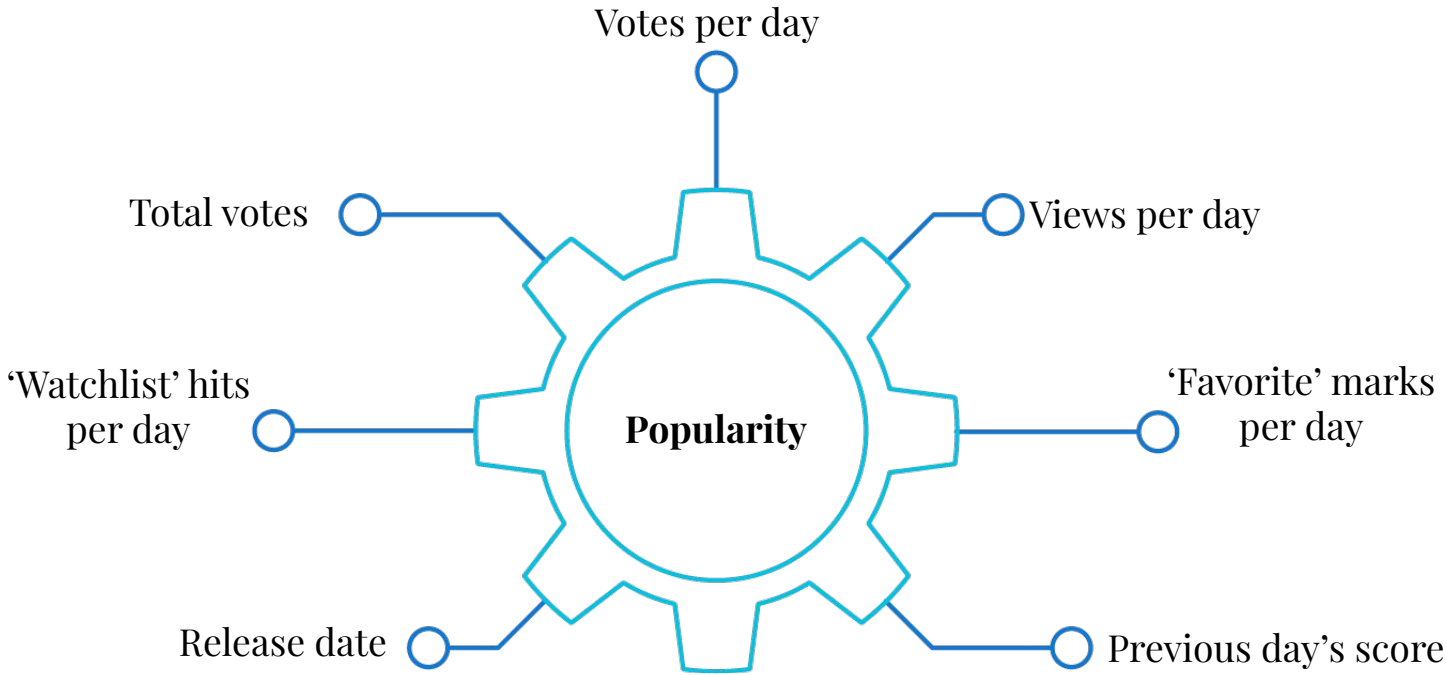
On average the highest grossing genres are:

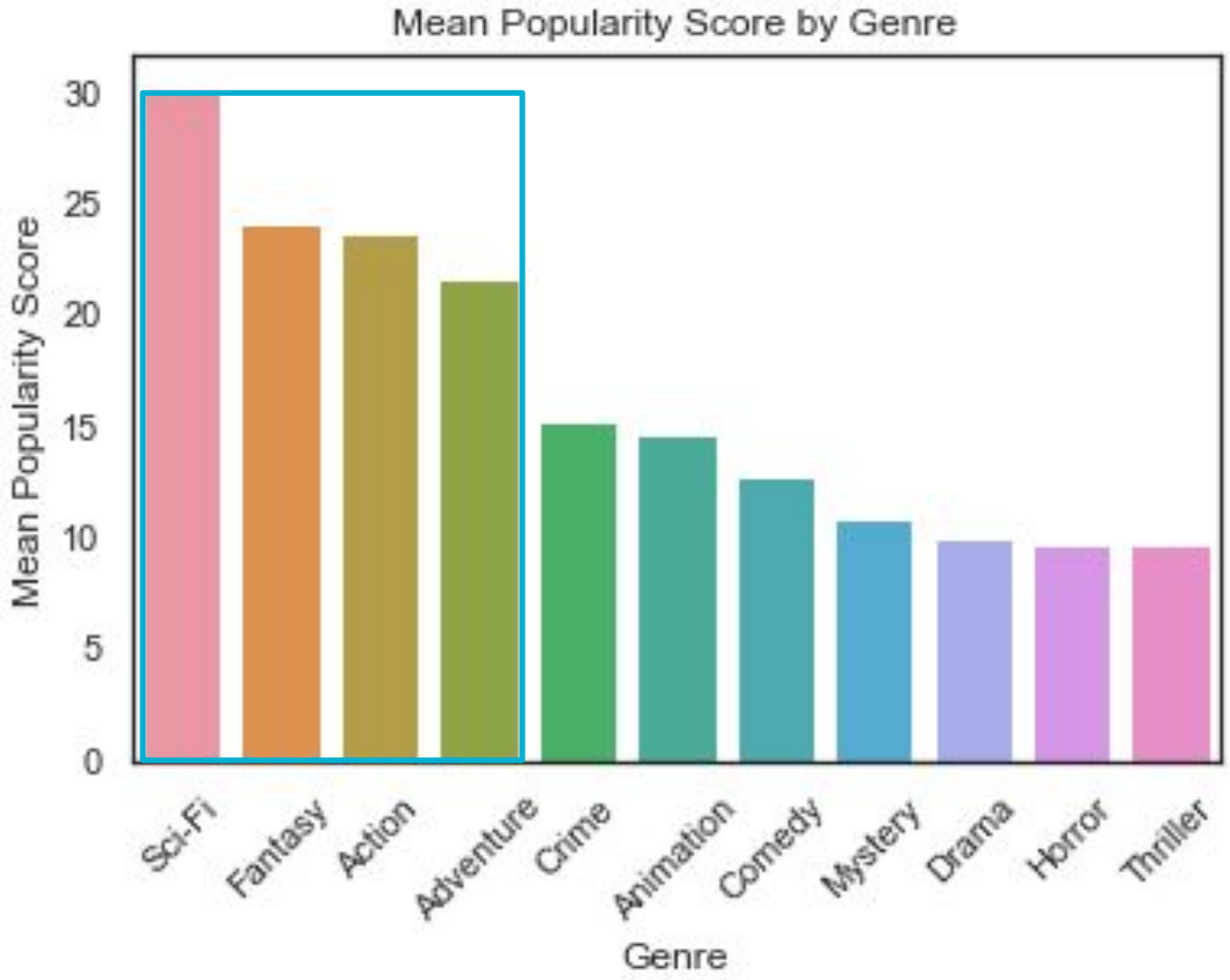
- Scifi
- Adventure
- Fantasy
- Action

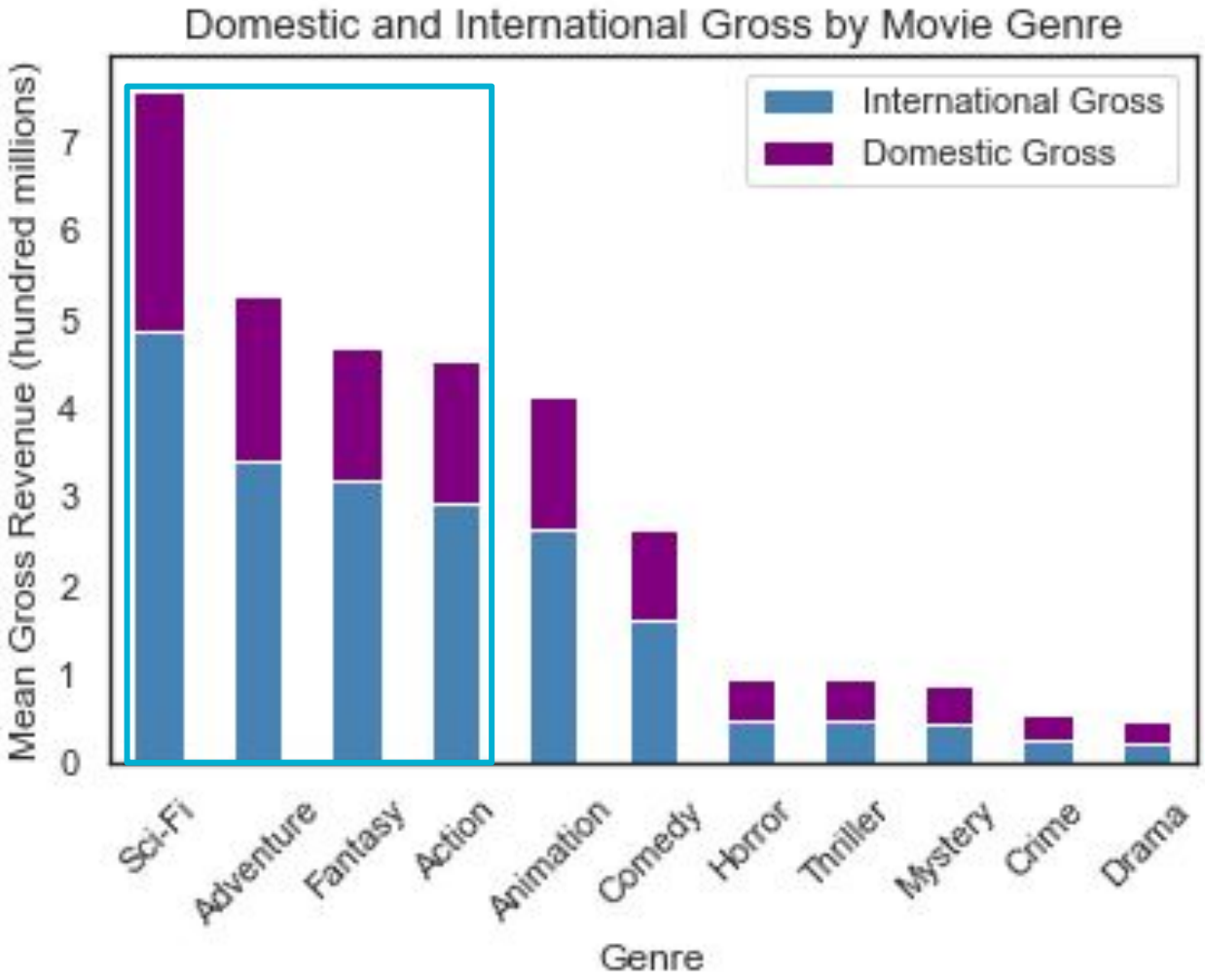
Genre has a large influence over popularity

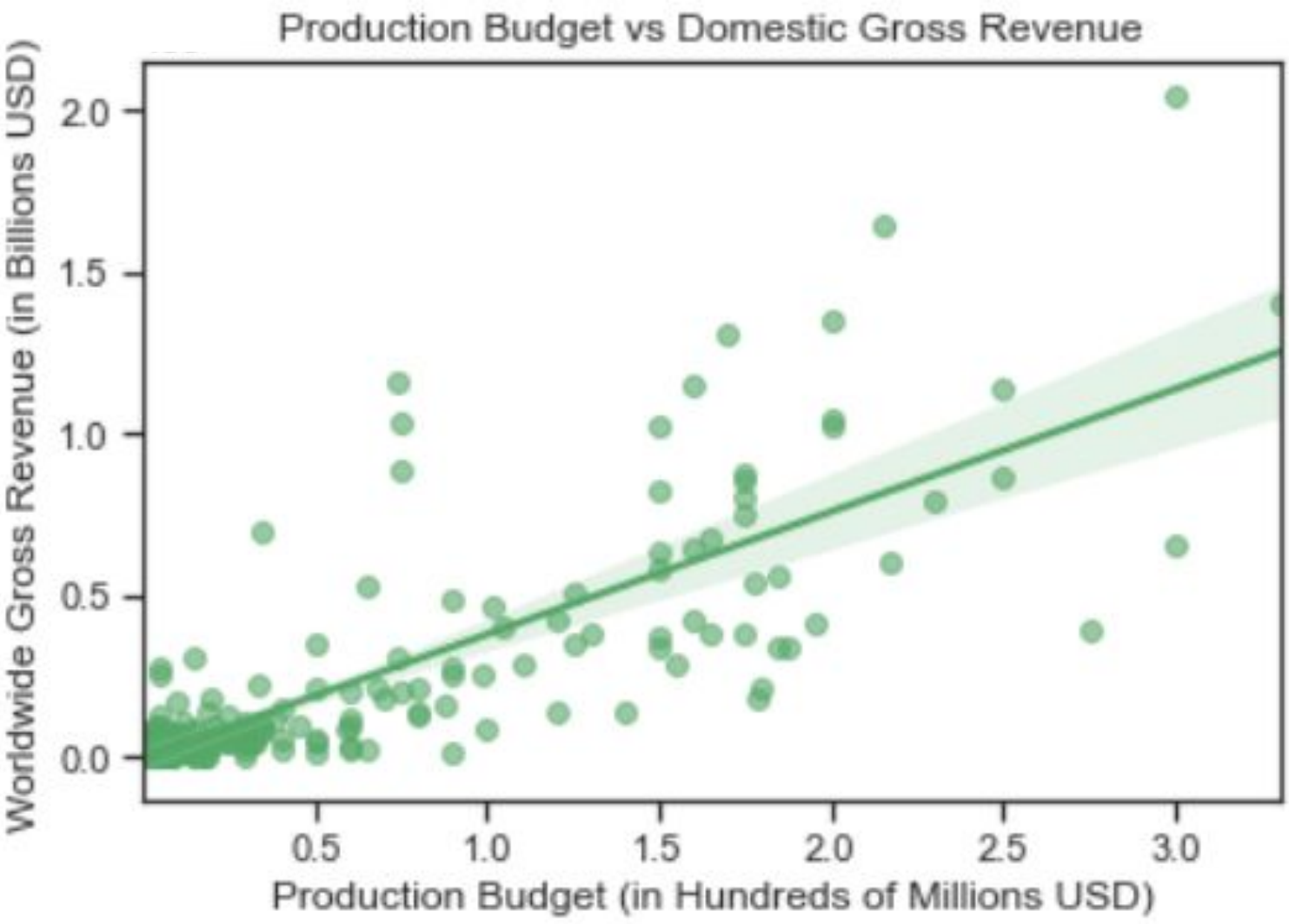
IndieWire




Votes per day
Total votes
Views per day
'Watchlist' hits per day
Popularity
'Favorite' marks per day
Release date
Previous day's score


Mean Popularity Score by Genre
Mean Popularity Score
30
25
20
15
10
5
0
Sci-Fi
Fantasy
Action
Adventure
Crime
Animation
Comedy
Mystery
Drama
Horror
Thriller
Genre

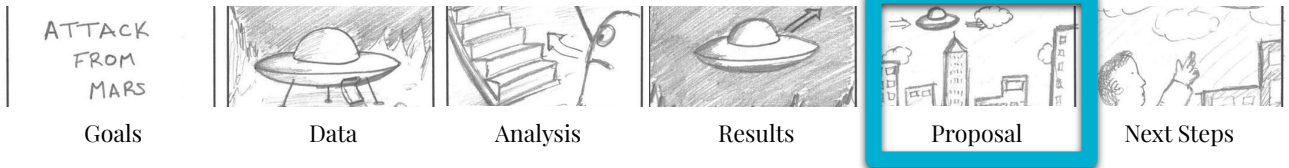

Domestic and International Gross by Movie Genre
International Gross
Domestic Gross
Mean Gross Revenue (hundred millions)
0
1
2
3
4
5
6
7
Sci-Fi
Adventure
Fantasy
Action
Animation
Comedy
Horror
Thriller
Mystery
Crime
Drama
Genre


Production Budget vs Domestic Gross Revenue
Worldwide Gross Revenue (in Billions USD)
2.0
1.5
1.0
0.5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Production Budget (in Hundreds of Millions USD)

Conclusion

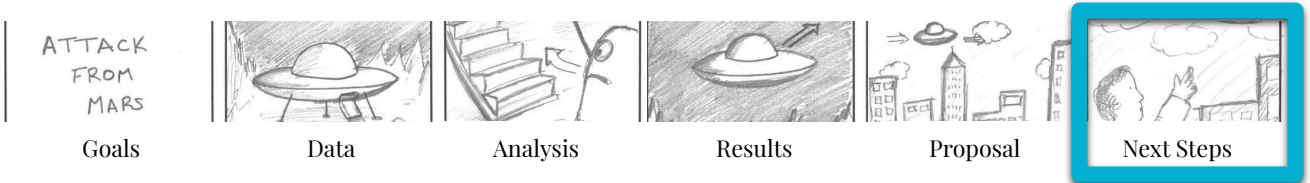
Recommendations

- Use owned properties for movies
- Focus on Sci-Fi and Adventure
- Spend money up front to make a large return
- Acquiring other franchises is a good area of growth



Next Steps

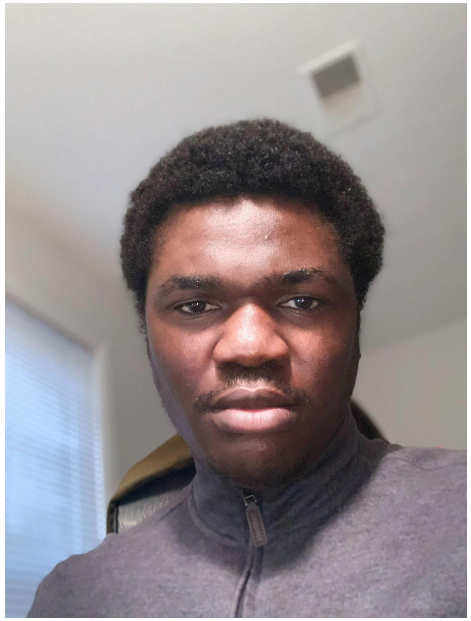
- Test focus groups
- Look at different production crews and writers
- Best time of year to release a movie?



Thank You! Q&A

We will now be taking questions.

Brian Reynolds
Aspiring Data Scientist
https://github.com/NaavSD



Timi Adejumo
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https://github.com/timiadejumo

Elijah Jarocki
Aspiring Data Scientist
https://github.com/ejarocki/

Appendix

TECHNOLOGIES:
To analyze the dataset we had, we made use of the following language and libraries:

1. Python 3.9.10
2. Pandas 1.3.5
3. Numpy 1.22
4. Seaborn 0.11.2
5. Sqlite3 3.37.2
6. Shutil 3.10.2
7. Regular Expressions (RE) 3.10.2
8. Matplotlib 3.5.1