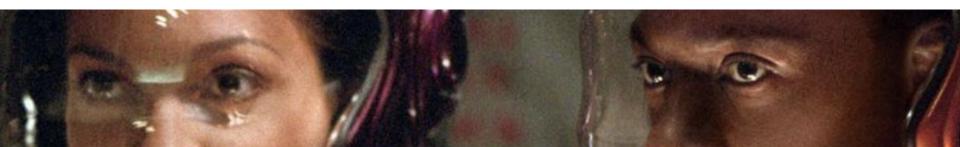


Overview

After a series of movie flops in the first months of 2019, Zara Nordstrom Warners' Bros Chairman of Board called for a meeting with her team to discuss the planning for 2020/2021.

Zara wants to use a model that can predict a movie gross amount based on the cast, directors and genres.



Methodology and Model Results

- 1 IMDB data scraped for movies produced from 2015 to 2018
- The model is using more than9K rows of data
- To avoid data leakage, the model is using data on actors, directors, genres and duration
- R square(using Lasso) is 0.23.
 - Linear Regression scored a negative
 R square
 - Feature Engineering helped removing Directors as a feature

Fab 4's Team Gross Movie Prediction



Movie 1: Dotun's Movie

Actor/Actress: Keanu Reeves,
 Ethan Hawke

• Genre: Family



Movie 2: La La Land 2

Actor/Actress: Naomi Watts,
 Natalie Portman, Tom Cruise

• Genre: Action



Movie 3: Whiplash

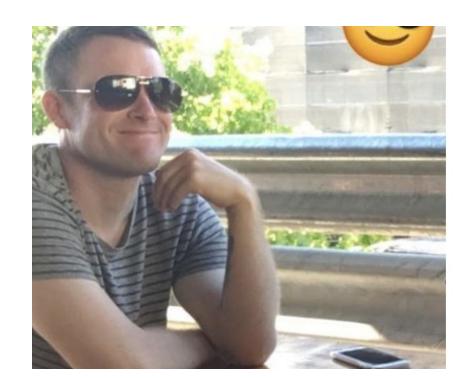
- Actor/Actress: Meryl Streep,
 Keanu Reeves, Anna Kendrick
- Genre: Documentary, Drama



Movie 4: Mother Brain

Actor/Actress: Meryl Streep,
 Morgan Freeman, Tom Hanks

• Genre: Thriller, Sci-Fi



The biggest gross amount for 2019 goes to the...

- Dotun's Movie: \$8.71Mil
- La La Land 2: \$72.96Mil
- Whiplash: \$35Mil
- Mother Brain: \$ 1.79Mil
- For fun:

Top Gun: Maverick \$71.68Mil



Spoiler

If you have an unlimited budget and you want a cast of 2 actresses and 2 actors that generate the biggest gross amount, you can pick from:

- **Actresses:** Dakota Johnson, Jennifer Lawrence
- Actors: Chris Pratt, Hugh Jackman



Future work

- Include data on the movies release dates, budget, actor/actress salary etc
- Try other machine learning models



Thank you!