## Advice For Microsoft's New Movie Studio

## OVERVIEW

Aim: Provide advice to Microsoft (hypothetically) on which types of movies to create for their new movie studio.

Methodology: Using exploratory data analysis, I tried to understand what are some important factors for being successful in the industry.

#### Summary of Results:

- Best movie genres for profit and ratings seem to be a mix in of adventure and drama.
- Best directors to work with for a new movie to get the highest profit are Adam
  Green, Chris, Buck and Joss Whedon.
- Interestingly, IMDB and TMDB ratings offer different genres and directors:

### Data

- Data Source: Box Office Mojo, IMDB, Rotten Tomatoes, and TheMovieDB.org. (The data is provided by Flatiron school and collected from the respective websites.)
- Data is about: movie titles, genres, directors, actors, profits, release year etc..
- Data size: 16,184 movies (when merged on common columns)
- Target variables: ratings and profit
- Some columns are dropped from analysis.
- Profit is calculated using worldwide gross and production budget.
- NaN values are omitted (not filled).

## Summary of Results

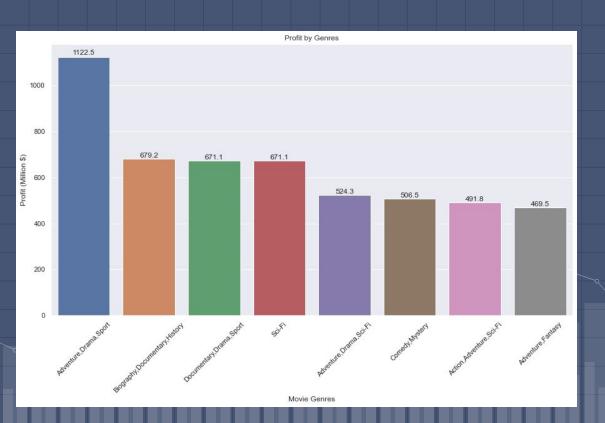
- Best movie genres for the highest profit:
  - Adventure, Drama, Sport
  - Biography, Documentary, History
  - 3. Sci-Fi
- Best directors to work with for the highest profit:
  - 1. Adam Green
  - 2. Chris Buck
  - 3. Joss Whedon
- Best movie genres by average votes on TMDB:
  - Documentary, History
  - Mystery, Thriller
  - 3. Biography, Drama, Musical
- Best movie genres by ratings on IMDB:
  - 1. Adventure
  - 2. Action, Sport
  - Crime, Documentary

# Analysis





## BEST PROFIT BY MOVIE GENRE



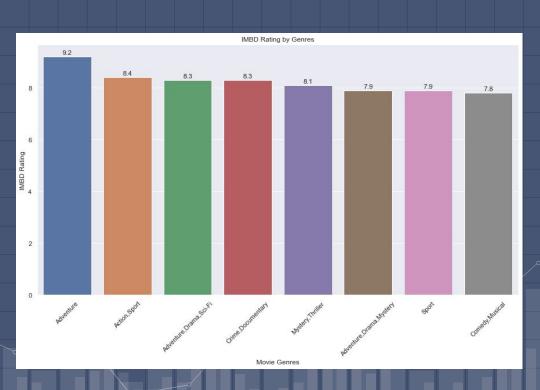
#### TOP 5 MOVIE GENRES FOR THE BEST PROFIT

- 1. Adventure, Drama, Sport
- 2. Biography, Documentary, History
- 3. Sci-Fi
- 4. Documentary, Drama, Sport
- 5. Adventure, Drama, Sci-Fi

Number of movies produced per genre:

- \* Action, adventure, sci-fi: 43
- \* Adventure, fantasy: 3
- \* Comedy, mystery:1
- \* All other genres:2

## BEST IMDB RATINGS BY MOVIE GENRE



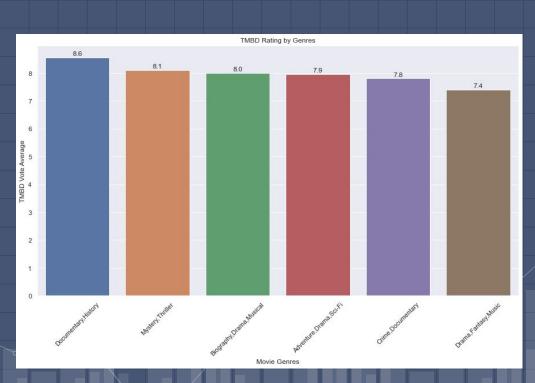
#### TOP 5 MOVIE GENRES FOR THE BEST IMDB RATINGS

- 1. Adventure
- 2. Action, Sport
- 3. Crime, Documentary
- 4. Adventure, Drama, Sci-Fi
- 5. Mystery, Thriller

Number of movies produced per genre:

- \* Sport: 2
- \* Adventure, drama, sci-fi: 2
- \* All other genres:1

## BEST TMDB RATINGS BY MOVIE GENRE



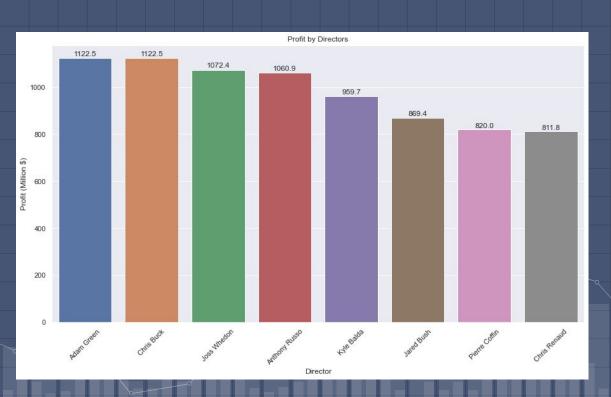
#### TOP 5 MOVIE GENRES FOR THE BEST TMDB RATINGS

- 1. Documentary, History
- 2. Mystery, Thriller
- 3. Biography, Drama, Musical
- 4. Adventure, Drama, Sci-Fi
- 5. Crime, Documentary

Number of movies produced per genre:

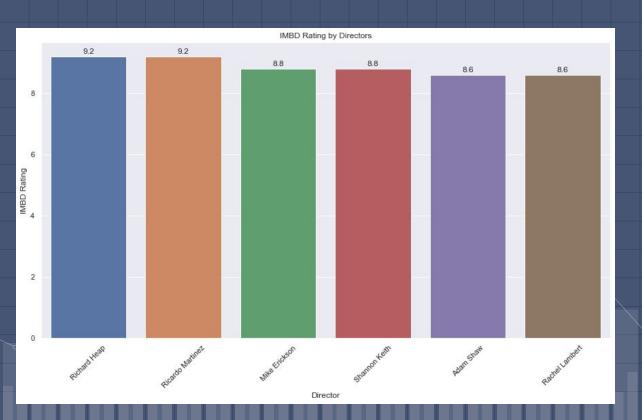
- \* Document, history: 2
- \* Adventure, drama, sci-fi: 2
- \* All other genres:1

## BEST PROFIT BY DIRECTORS



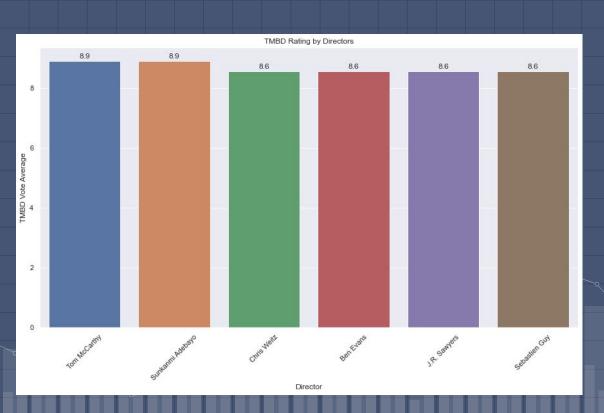
- 1. Adam Green
- 2. Chris Buck
- 3. Joss Whedon
- 4. Anthony Russo
- 5. Kyle Balda

## BEST IMDB RATINGS BY DIRECTORS



- 1. Richard Heap
- 2. Ricardo Martinez
- 3. Mike Erickson
- 4. Shannon Keith
- 5. Adam Shaw

## BEST TMDB RATINGS BY DIRECTORS



- 1. Tom McCarthy
- 2. Sunkanmi Adebayo
- 3. Chris Weitz
- 4. Ben Evans
- 5. J.R.Sawyers

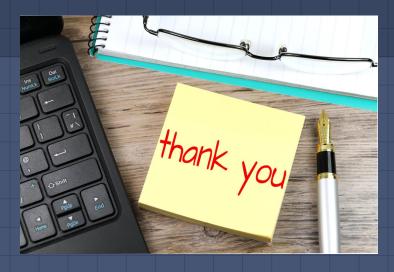
## Conclusion

#### Results

- This primary analysis gives a general idea about where to start, but more analysis should be done for better understanding of the industry.

#### Improvements

- Other factors to consider: the time of the year, the economy or any crisis going on, that are not included in analysis.
- Focus on writers or actors for more information.
- Separate genre categories and do a more comprehensive analysis.



Liked this presentation? Please visit my github for more details of the project:

https://github.com/nxbisgin/MovieStudio