## Microsoft Movie Recommendations

Charlotte Basch with Rachel Beery

### Methods

- Data were gathered from IMDB, TMDB, and The Numbers
- Information about movie title, profit, domestic and worldwide gross, runtime, and IMDB user ratings was collected.



\$42.5B

2019 Global Box Office

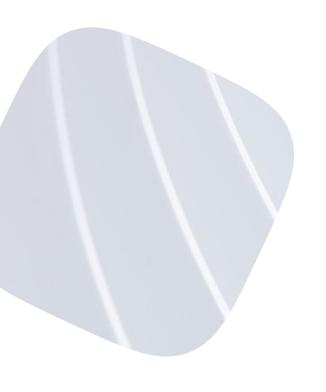
46,504,883

Mean Budget

148,474,440

Mean Gross Profit

#### **Questions**



What genres are the most profitable?

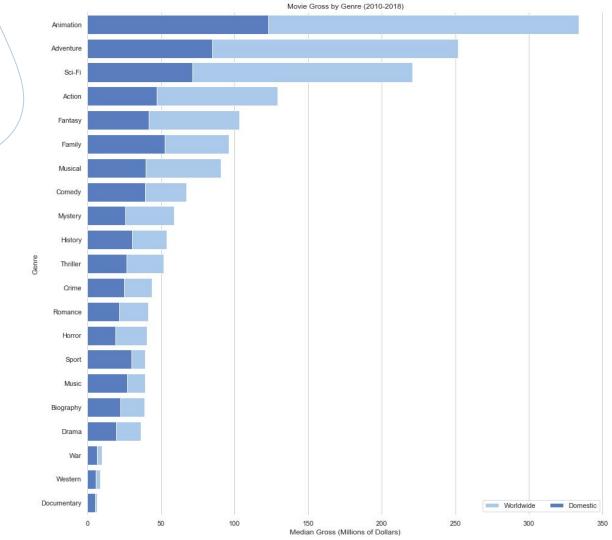
Do movie ratings affect profitability?

Does a movie's runtime affect profitability?

## What genres are the most profitable?

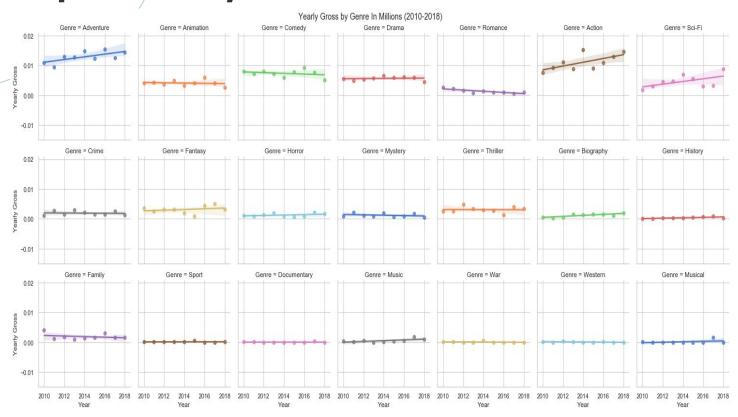
## How much money has each genre made?

- Adventure, animation, sci-fi, and action are the most profitable genres domestically and internationally.
- I recommend focusing on these genres to make the majority of your profit.



## The current highest grossing genres are on track to continue their profitability.

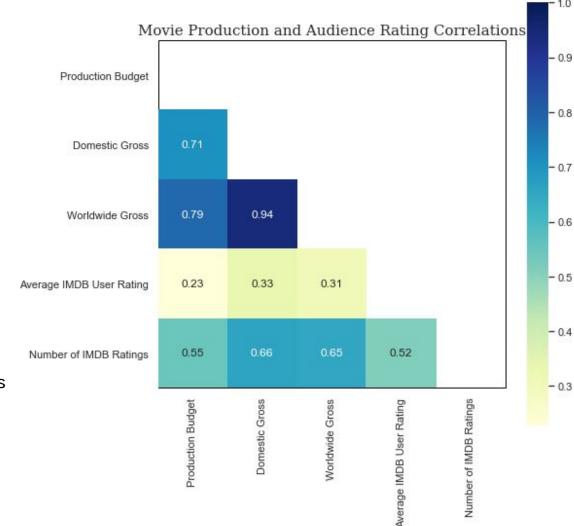
 Action and adventure movies are the most profitable.
 Animation, sci-fi, and other genres also show a positive return of investment.



# Do movie ratings affect profitability?

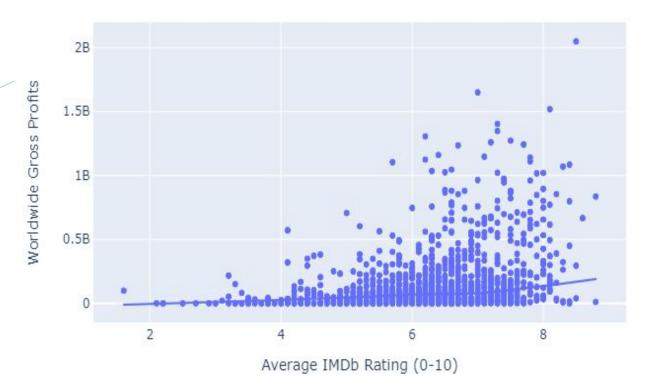
User Ratings (i.e. whether people think the movie is good) are not strongly related to profit or increased budget.

- There is not a strong positive correlation between movie ratings and gross profitability.
- I do not recommend using subjective user ratings, which consist of a small portion of moviegoers, to make decisions.



**Overall** ratings of movies do not have a significant effect on profit

 This supports not basing movie-making choices on online ratings Worldwide Grossing by Average IMDb Rating

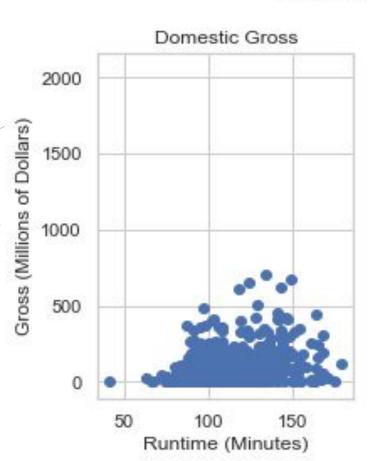


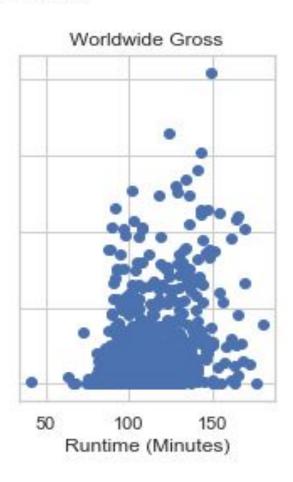
## Does a movie's runtime affect profitability?

#### Gross by Runtime

As long as a movie is more than 75 minutes long, length does not seem to impact profit.

- Movies over 75
  minutes in length are
  the most profitable.
- I recommend only considering length when making a movie to ensure that it is more than 75 minutes long.





#### **Conclusion**

- Making action, animation, sci-fi, and/or adventure movies increases the likelihood of making large profits. However multiple other genres are also continuing to bring in impressive box offices.
- Online rating systems such as IMDB do not accurately reflect the viability of a movie.
- Once runtime hits approximately 75 minutes, it is not an important predictor of profit.

### **Future Work**



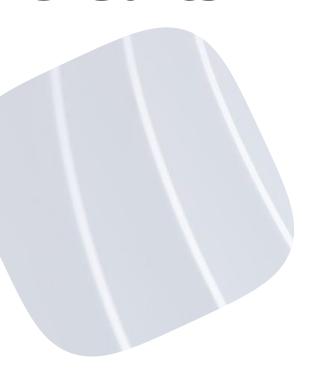
Franchises are an integral part of the movie industry's profit. What attributes do successful franchises share?

Which audiences prefer what types of movies? Does this differ between domestic and international moviegoers?

What story attributes beyond genre are related to higher movie profitability?

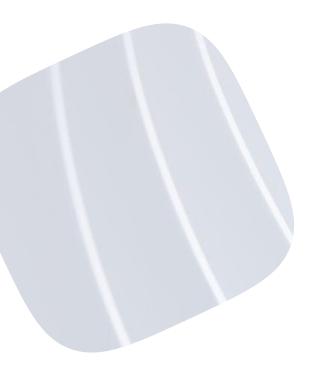


### **Credits**



Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by SlidesCarnival
- Photographs by <u>Unsplash</u>



## Appendix

How many movies of each genre are getting made?

