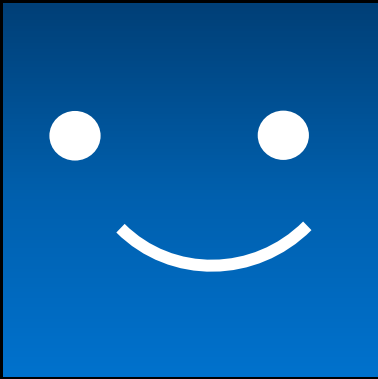
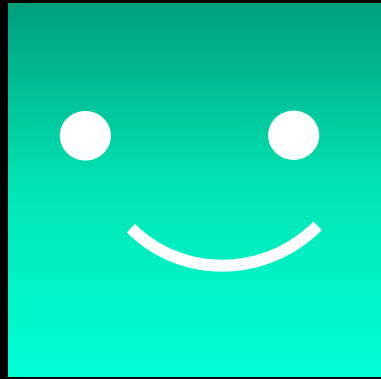




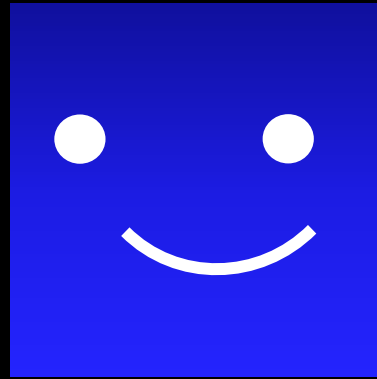
# Who's presenting?



**Xinyue**



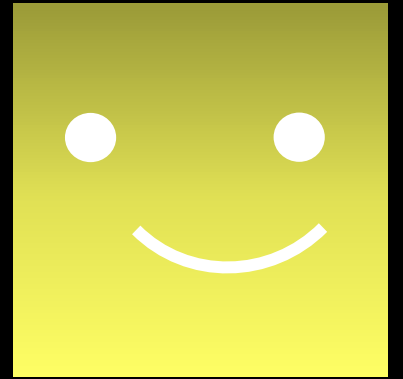
**Harsh**



**Nikos**



**Wei**



**Xenia**



# The Content



Netflix Analysis



Amazon Comparison



Conclusion

Enjoy the show!

START



# The data and goal of investigation:

## The Data:

1. Merger of two datasets from Netflix and Amazon prime and for another quantitative dimension we also merged data from IMDb on audience rating
2. Cleaning the data: Transforming date to the right data type, cleaning genre and rating variables to keep consistency, filtering out NAs of avg\_vote

## Goals of analysis:

- Descriptive analysis of the platform content
- Identify aspects in which Netflix and Amazon Prime differ
- Build a regression model to determine what affects audience ratings
- Content-based recommendation system

## Some Variables & Explanations

- **type & title:** content types (Movie/TV Show) and the name of each content
- **director & cast:** Names of directors and prominent actors & actresses
- **date added & release year:** date when the content was added on the platform and year when the content is released
- **rating & duration:** TV-MA, R, TV-14 etc, min/season
- **genre\_new:** drama, comedy, crime...
- **description:** few words describing
- **avg\_vote & votes:** average rating and number of votes for each content

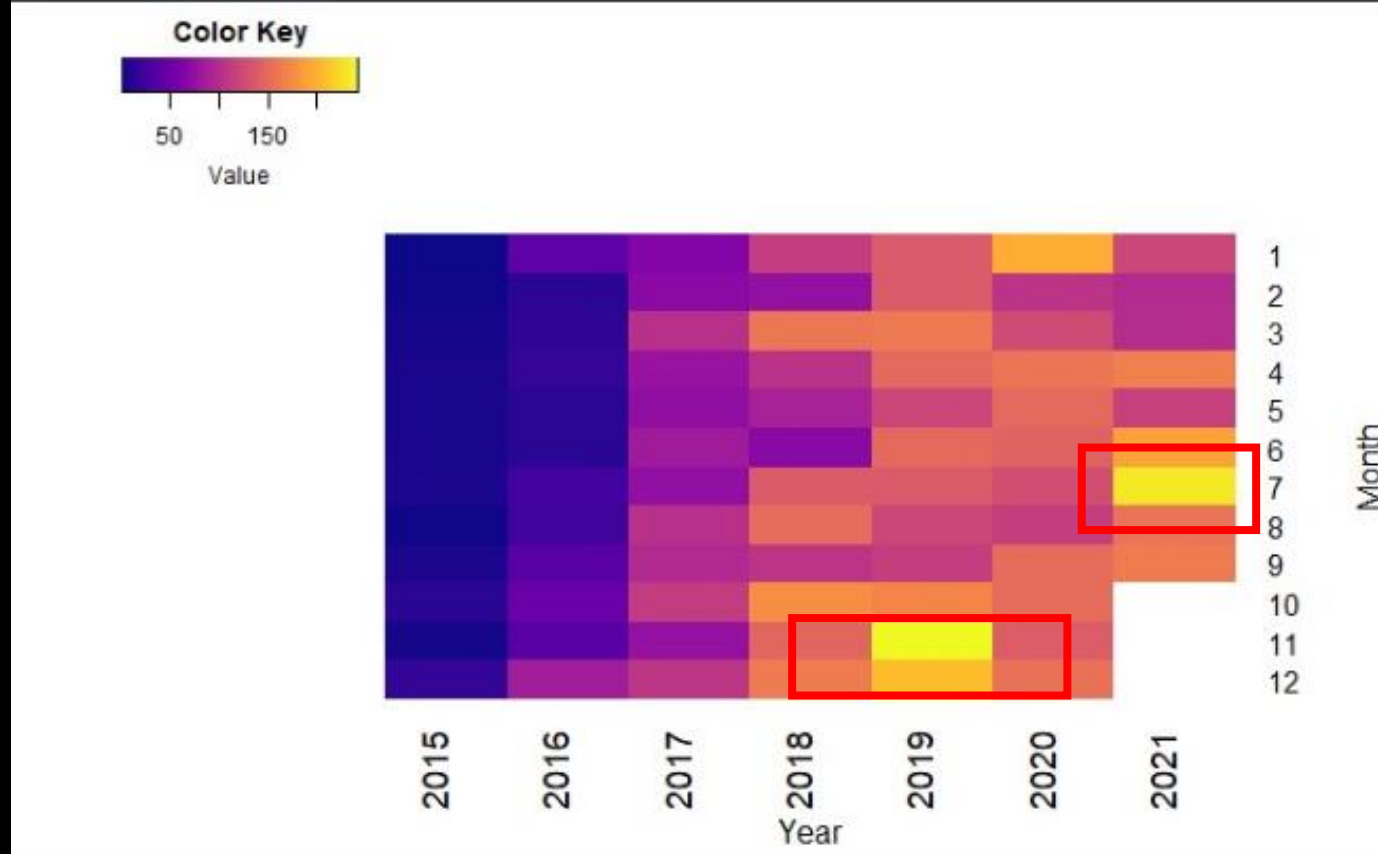


Netflix  
data



# When does Netflix update their content?

*More content updates during holiday season, and after lockdown was over*

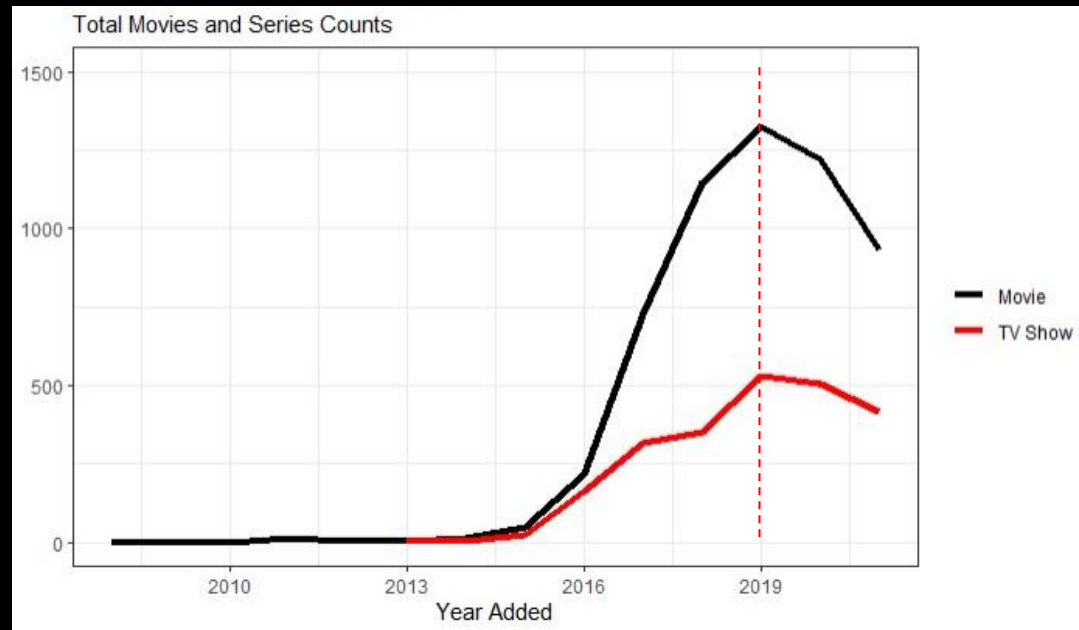




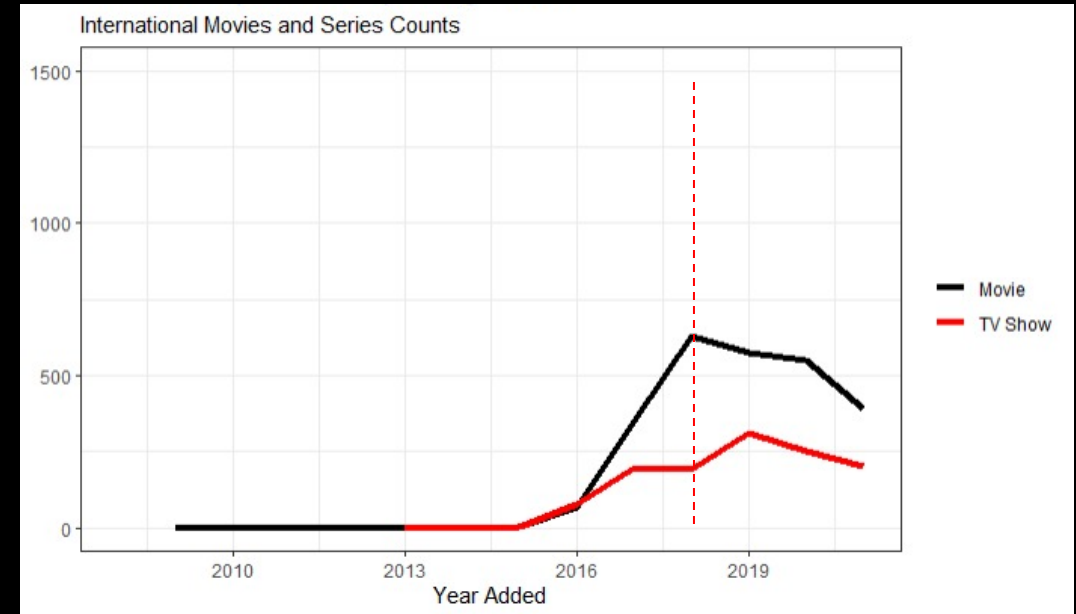
## Where is Netflix's content from?

- Twice as much content from English speaking countries
- Content had a sharp increase in 2016 and a dramatic drop after the pandemic hit

Number of shows added peaks in 2019



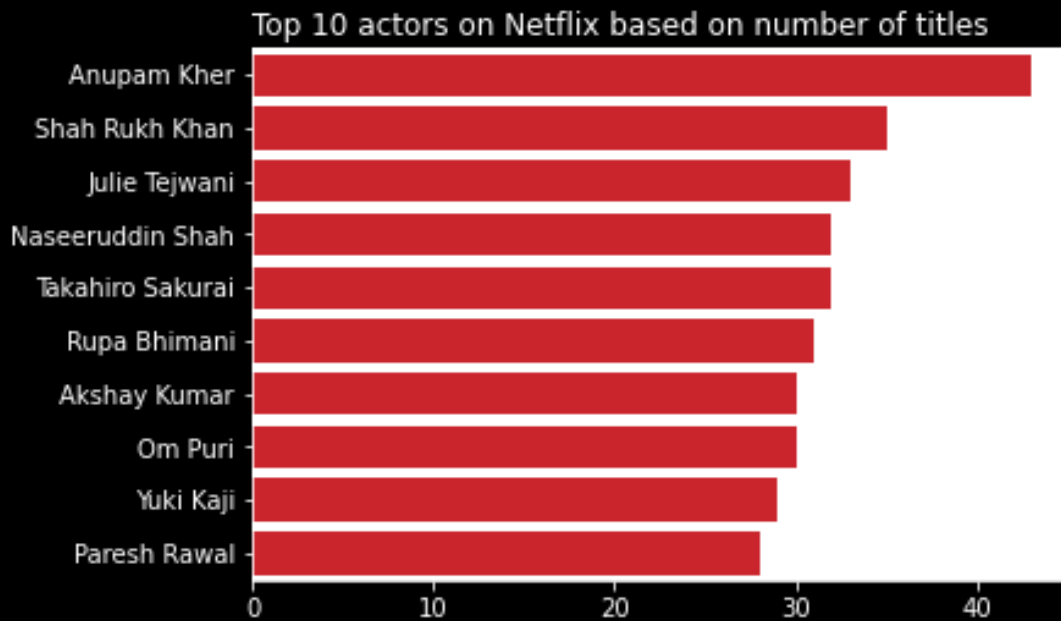
International production peaks in 2018





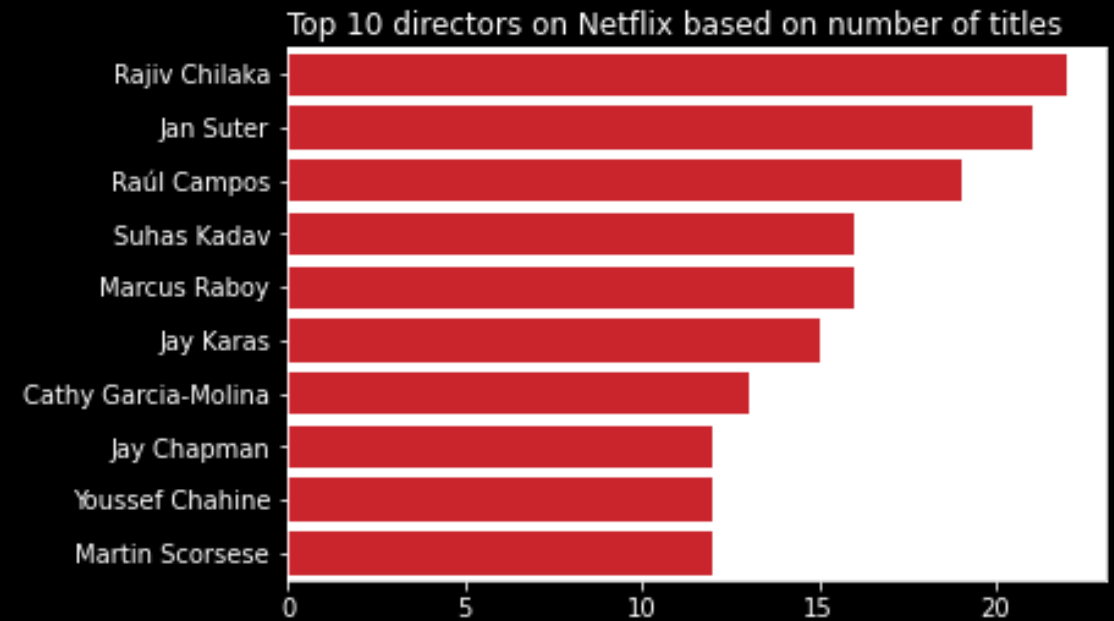
# Who are Netflix's most common actors and directors?

Indian actors are the busiest!



Netflix capitalizes on its own directors!

(Top two directors only produce Netflix content)

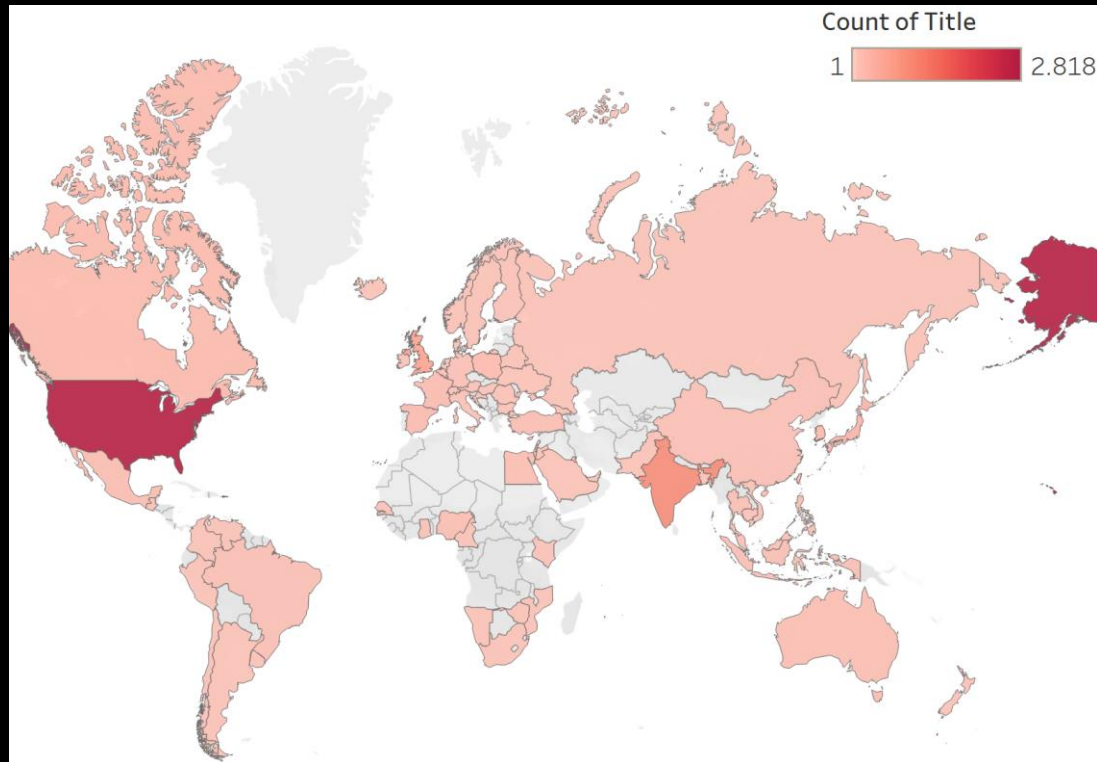




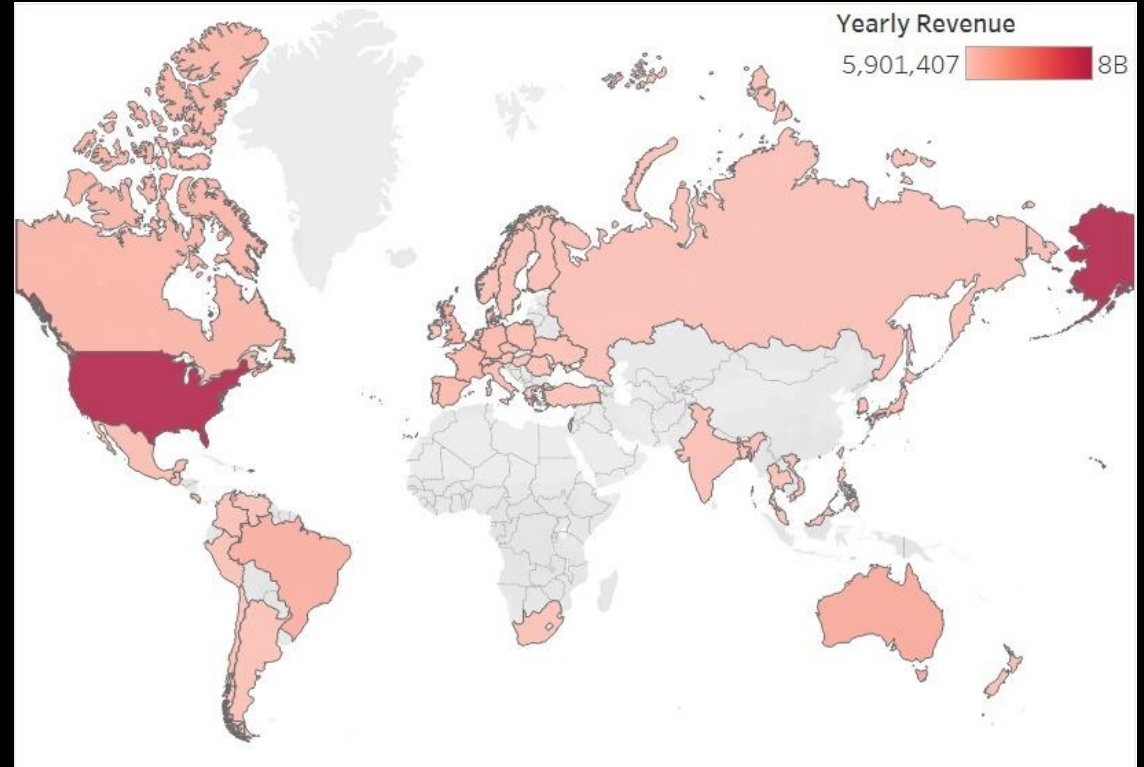
## What about production and revenue split?

*USA profits but also pays the most for Netflix content*

Most movies are produced in the USA and India



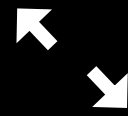
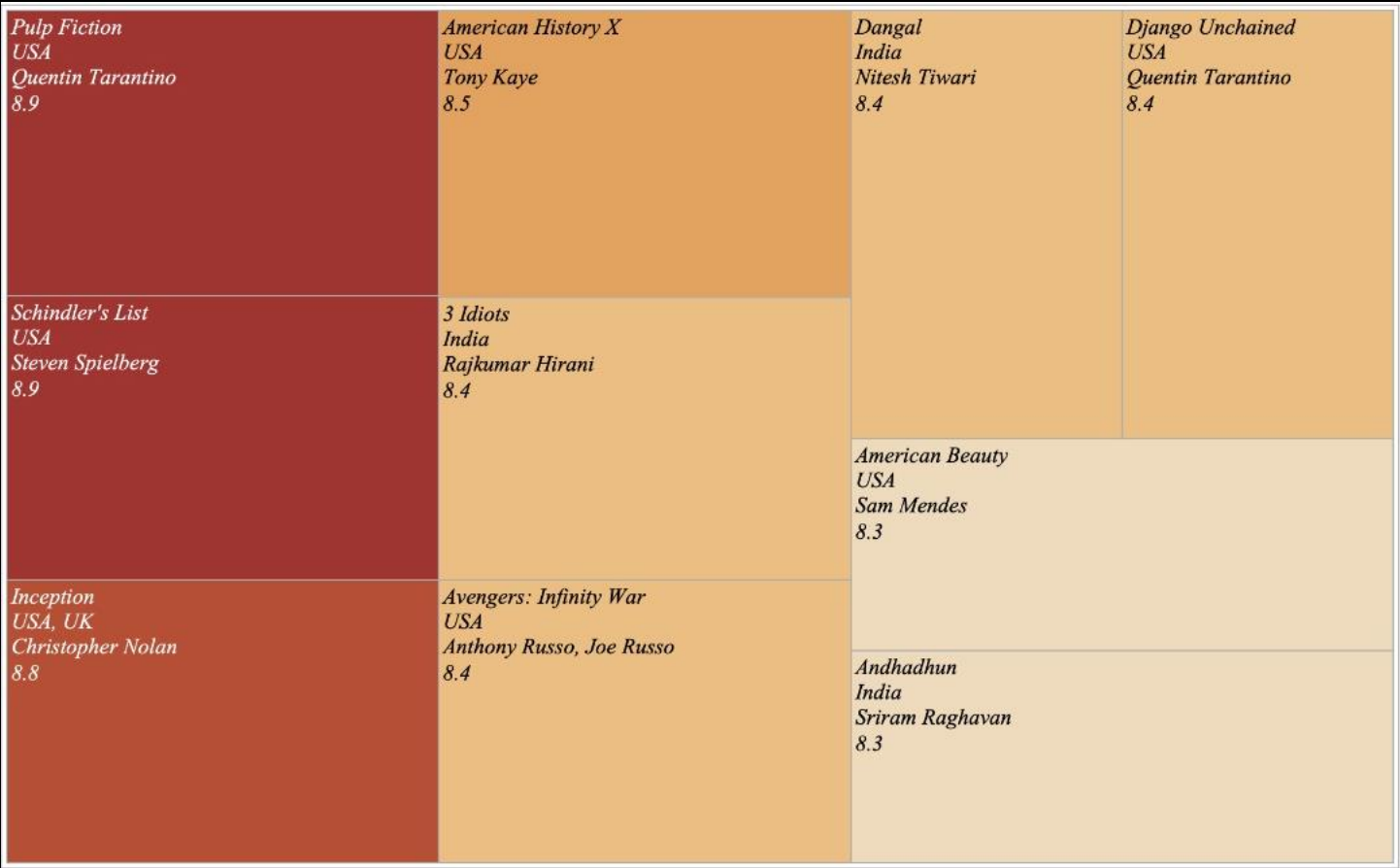
Maximum revenue is produced in the USA, UK, Brazil, and Australia





# What are the top ten movies on Netflix?

All top ten movies are from either the USA or India

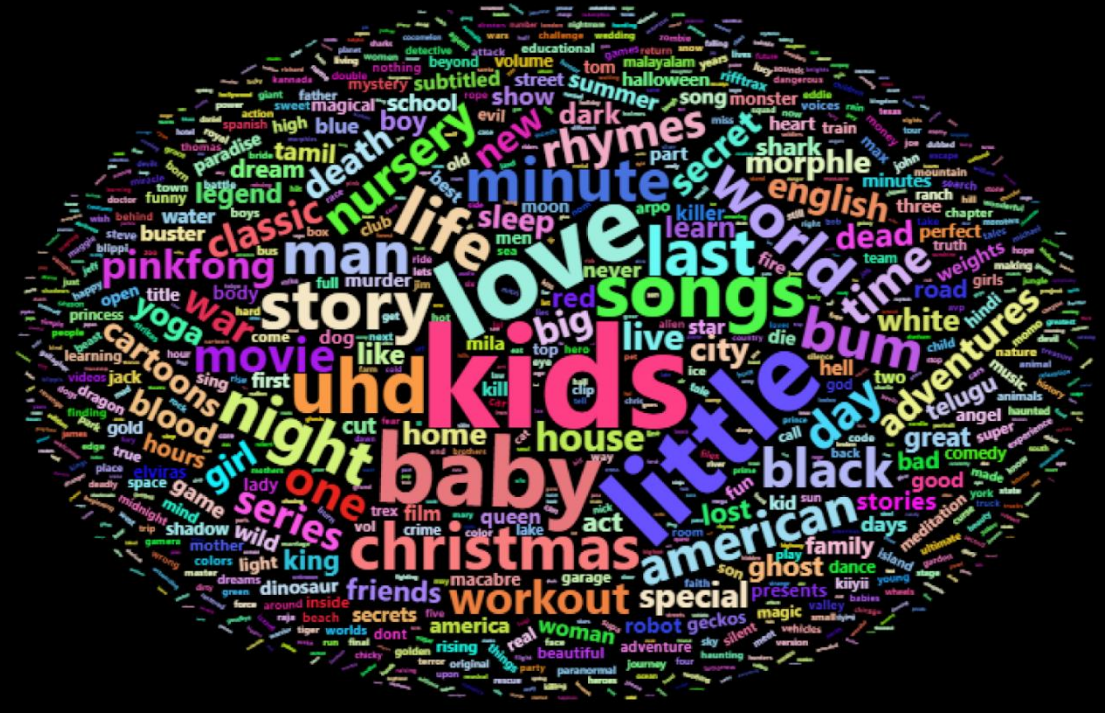


# Comparison





# Amazon Prime Video



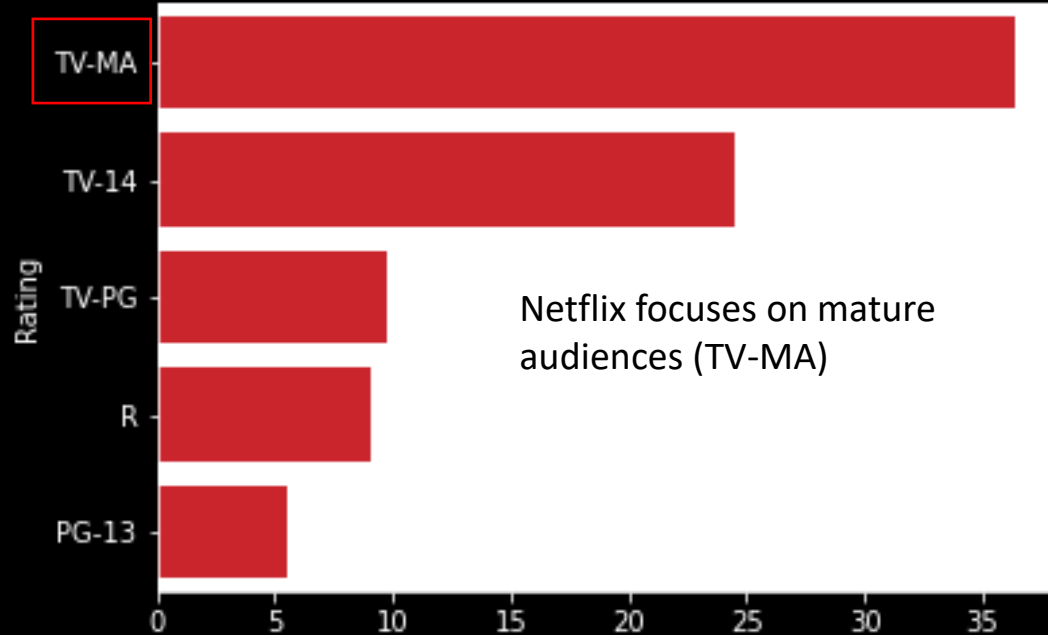


# Is the content of the show truly as it appears in the title?

*Yes! Rating of shows indicate that titles don't lie.*

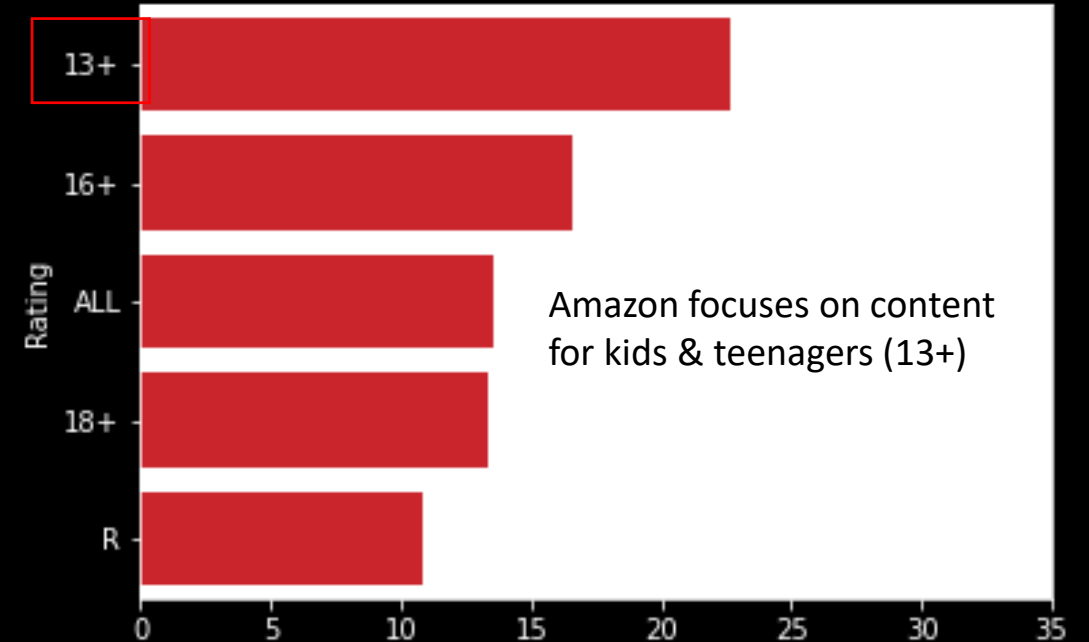
## Ratings for Netflix Content

Proportion of most common ratings



## Ratings for Amazon Content

Proportion of most common ratings



# Rating Comparison

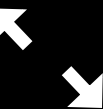
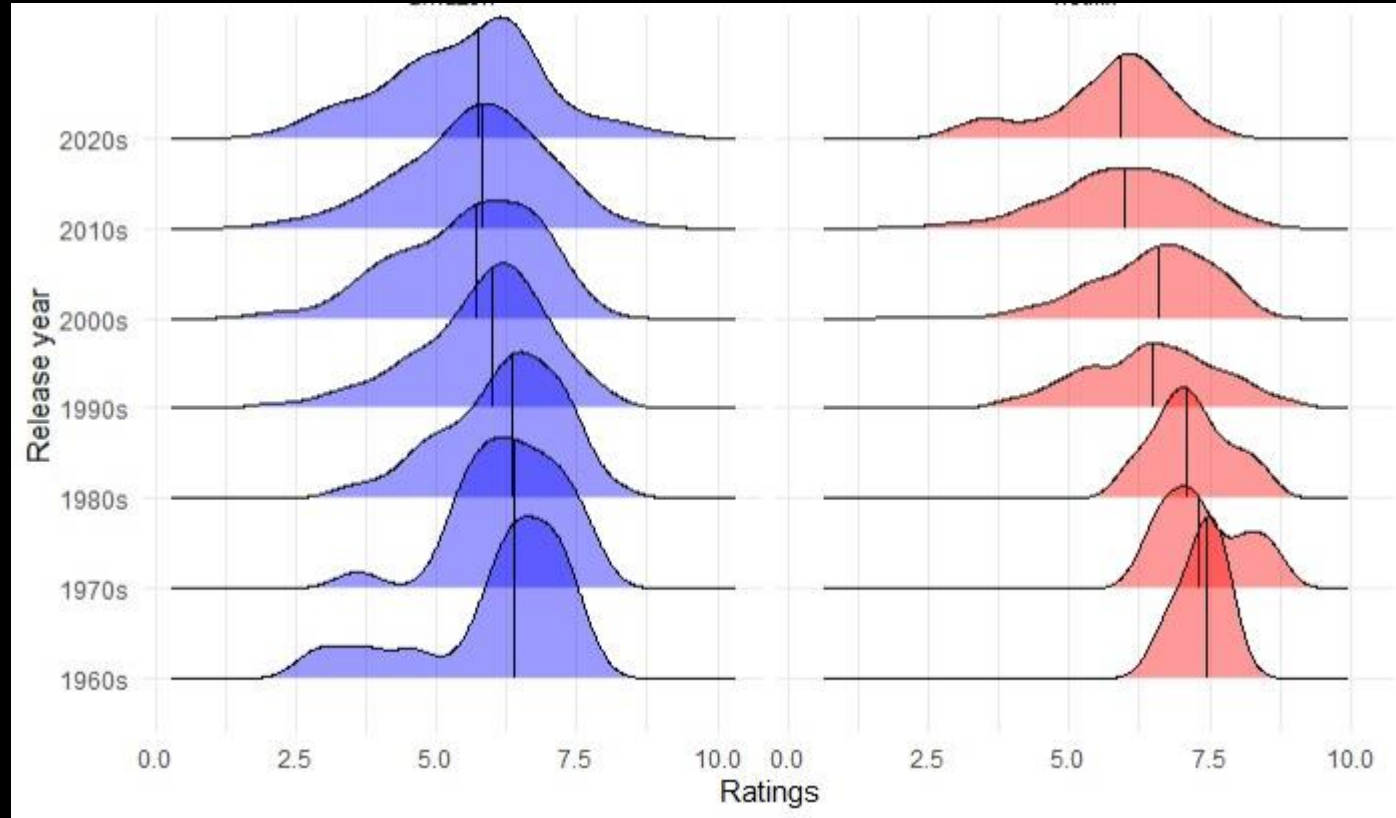


# What is the trend in average ratings?

*Average rating decreases with time but the variability increase*

## Amazon Prime Video

## Netflix



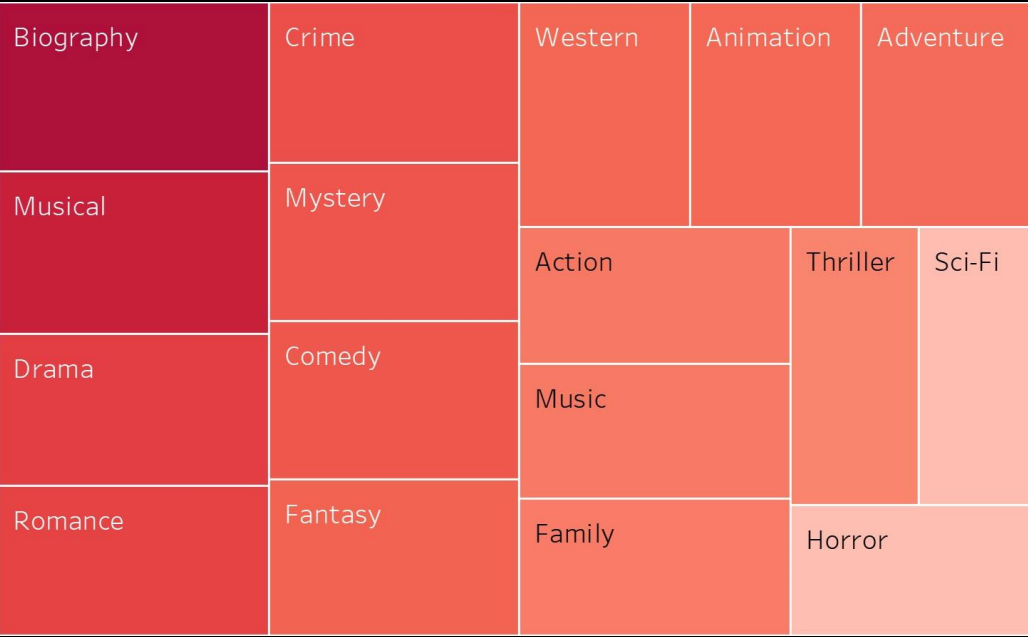




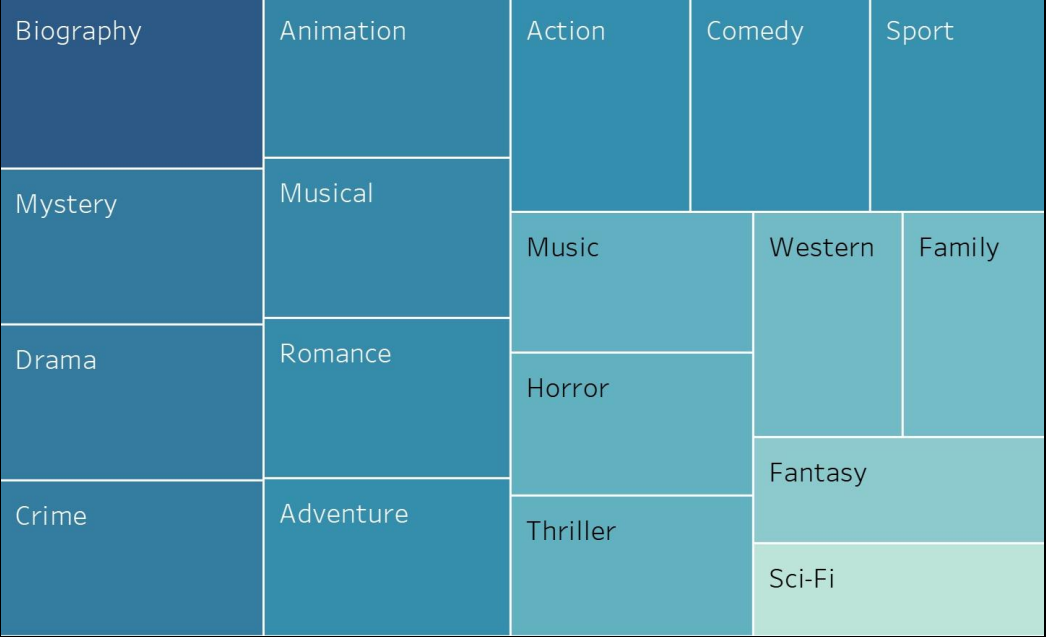
# Which genre has the highest average rating?

*Biography and Musical enjoy highest average ratings across both platforms*

## Netflix



## Amazon Prime Video





# Which factors have the most effect on ratings?

*After controlling for year, genre, and movie duration, Netflix has overall better rating by 0.27*

## All variables are significant

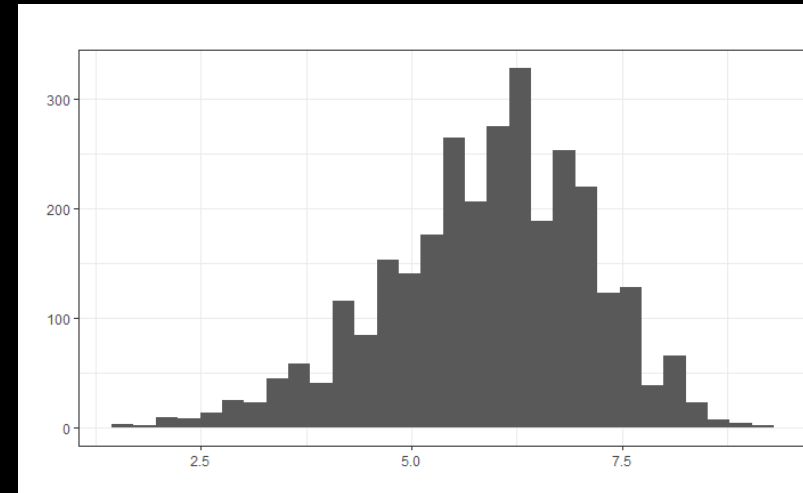
```

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  26.2201585   3.0391229   8.628 < 2e-16 ***
release_year -0.0112088   0.0015123  -7.412 1.61e-13 ***
platformnetflix 0.2681937   0.0414574   6.469 1.15e-10 ***
genreAdventure  0.3339406   0.1165681   2.865 0.004202 **
genreAnimation  0.6881483   0.1568382   4.388 1.19e-05 ***
genreBiography  1.1444138   0.1072151  10.674 < 2e-16 ***
genreComedy     0.3218162   0.0600940   5.355 9.19e-08 ***
genreCrime      0.5549347   0.0910887   6.092 1.26e-09 ***
genreDrama      0.6120545   0.0580316  10.547 < 2e-16 ***
genreFamily     -0.2501520   0.2227907  -1.123 0.261607
genreFantasy    0.0680936   0.2766006   0.246 0.805560
genreHorror     -0.3353884   0.0927352  -3.617 0.000303 ***
genreMusic      -0.0992196   0.7722480  -0.128 0.897776
genreMusical    0.0390230   0.3695618   0.106 0.915913
genreMystery    0.5579923   0.2420029   2.306 0.021194 *
genreRomance    0.2740779   0.2608575   1.051 0.293490
genreSci-Fi     -0.6164669   0.3485210  -1.769 0.077027 .
genreSport      0.5284498   0.5476723   0.965 0.334672
genreThriller   -0.0559172   0.1694831  -0.330 0.741477
genreWestern    0.0973672   0.3201903   0.304 0.761079
movie_duration  0.0160446   0.0008719  18.403 < 2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.09 on 3005 degrees of freedom
Multiple R-squared:  0.2192,    Adjusted R-squared:  0.214
F-statistic: 42.18 on 20 and 3005 DF,  p-value: < 2.2e-16

```

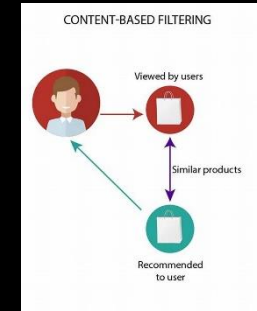
Average movie rating has an approx. normal distribution



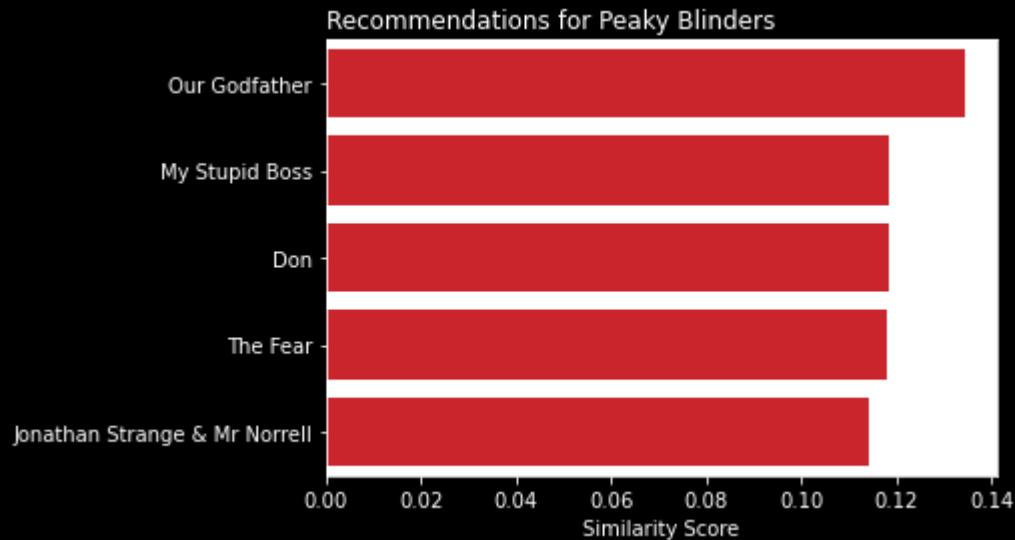


# For the way home: What should you watch next?

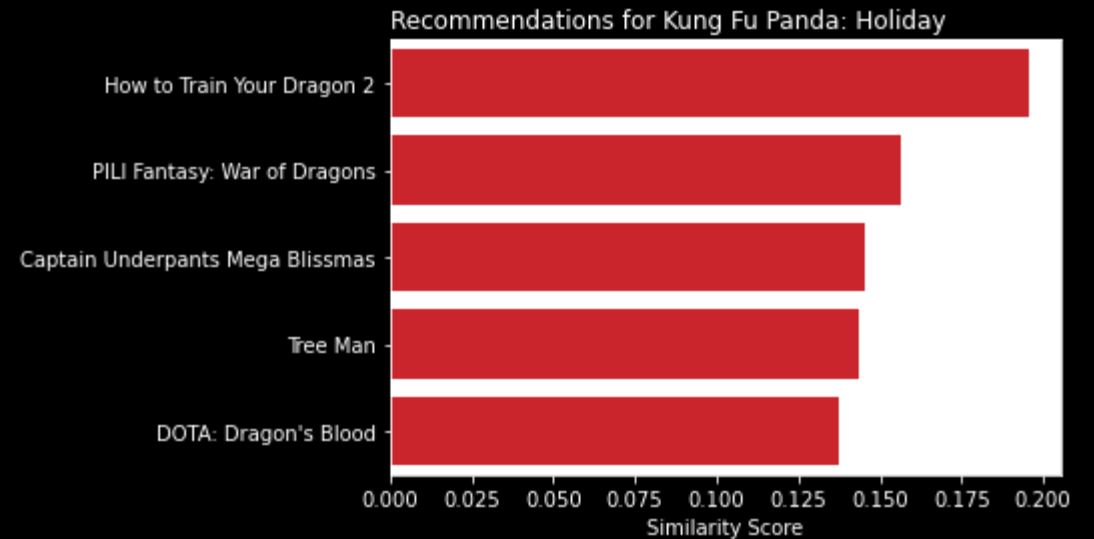
Our content-based recommendation system says -



...if you watched *Peaky Blinders*:



...if you watched *Kung Fu Panda*:





## Conclusion

### Netflix:

- Majority of content is from English speaking countries and gets added in winter months
- Top ten movies are all from the USA and India
- Netflix profits from a few directors that produce a lot of content

### The comparison:

- While Netflix has more diversified content, Amazon focuses on younger audiences
- Older movies enjoy higher ratings on both platforms
- Biographies enjoy highest ratings on both platforms
- Netflix contains higher rated movies on average compared to Prime, as seen through the regression model





# Netflix

Are you still watching?

Continue watching

Back

