



WHAT MAKES CONTENT POPULAR?

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PROBLEM STATEMENT

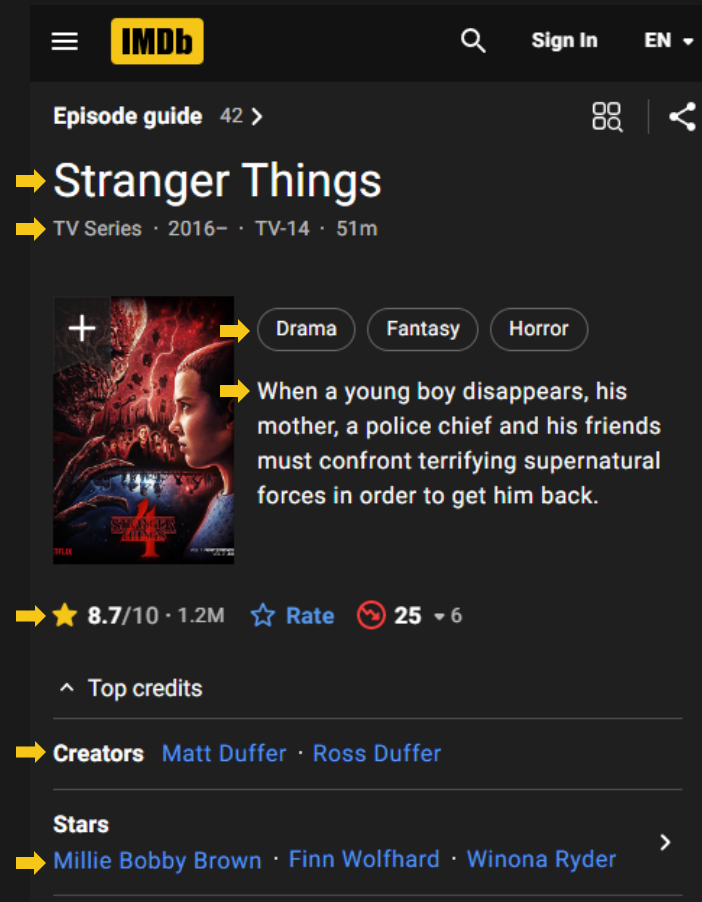
Predicting Netflix Top 10s

Data source

- List of titles available on Netflix from 2020 onwards, and whether each title was Netflix Top 10
- [Netflix Top 10](#) data by time and region
- [IMDb Datasets](#)

Features

- **Basic title information** - movie or TV, genre, run time etc.
- **Popularity of cast and crew**
- **Plot line**
- **Content explicitness and controversy** - Sex & Nudity, Violence & Gore, Profanity, Alcohol, Drugs & Smoking, Frightening & Intense Scenes
- **Topicality** – IMDb rating, number of votes



DATA AND FEATURE ENGINEERING

Actor / Director / Writer Ranking

- For each person, sum the number of votes across all titles they led in
- Create a ranking based on total number of votes received
- Average top 3 actors / writers, top director rank for title ranking

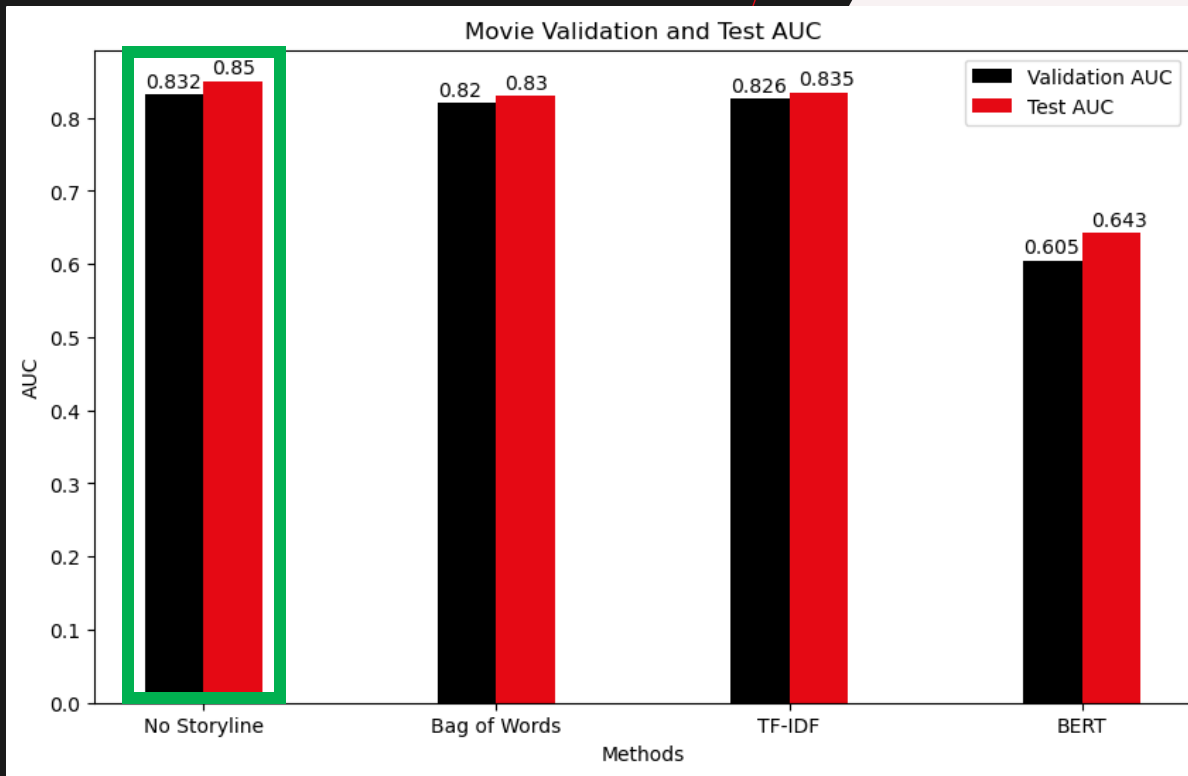
Plot Line

- Bag of words
- TF-IDF (term frequency–inverse document frequency)
- BERT (Hugging Face all-MiniLM-L6-v2 which maps sentences & paragraphs to a 384-dimensional dense vector space)

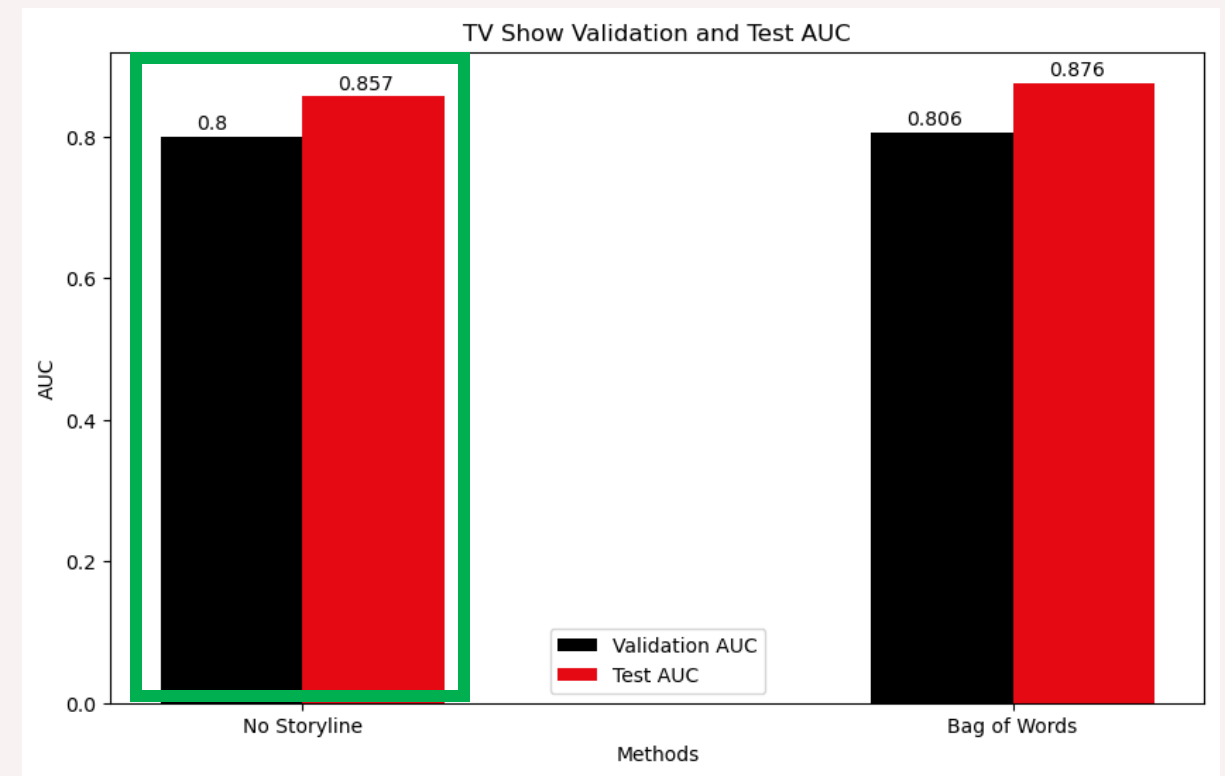
MOVIES & TV SHOWS

PERFORMANCES

MOVIES



TV SHOWS



MOVIES & TV SHOWS

FEATURES

SIMILARLY IMPORTANT FEATURES

- Runtime (minutes)
- Profanity
- Release timings (late releases)

RECIPE FOR A 'HIT' MOVIE

- Longer runtimes
- Genre: Adventure, action, family
- High ranking *actors* and *directors*

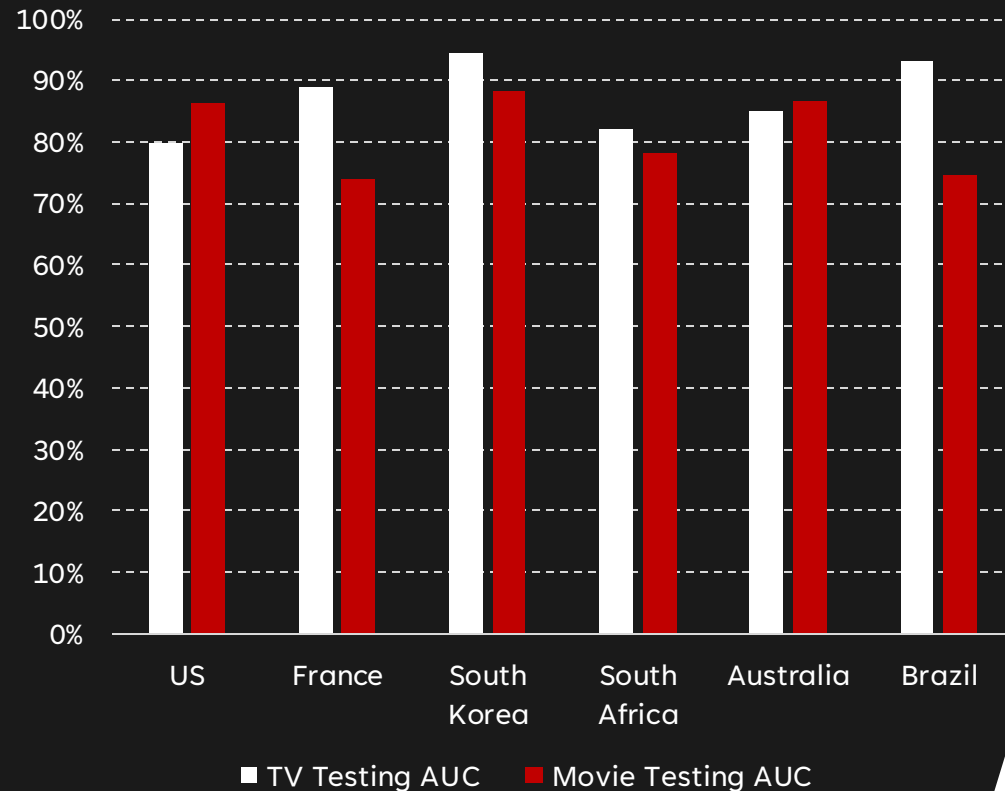
RECIPE FOR A 'HIT' TV SHOW

- Shorter runtimes
- Genre: Drama, Crime, Romance
- High ranking *directors* and *writers*
- Nudity, moderate frightening

MODELS BY MARKET

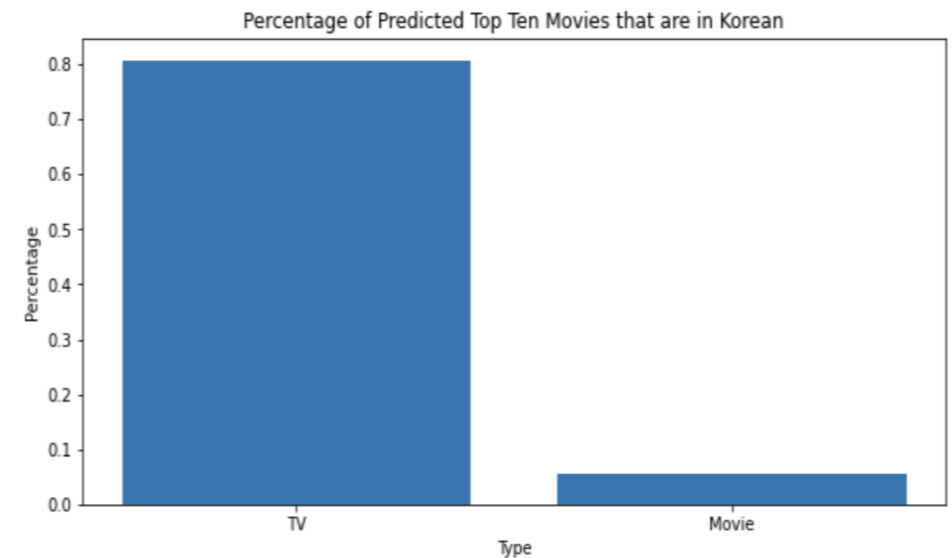


RESULTS AND LANGUAGE THEMES



Language of title one of most important predictors

- Even more so for TV Shows than movies
- Native language most important for romance movies and least important for action



SOUTH KOREA



BRAZIL



SOUTH AFRICA AND AUSTRALIA

SIMILAR MARKETS



IMPACT

- Estimates suggest Netflix spent **\$18 Billion** on original content for 2022
- Pairing our model's finding with Netflix's internal budget data can save millions of dollars by creating content more likely to be successful
 - Releasing bigger budget projects later in the year
 - TV Shows: Spend on well-known writers, and creating shows with shorter runtimes that are specific to their market
 - Movies: Spend on popular acting talent, as movies with globally famous cast members perform well everywhere

THANK YOU

