

# **Final Project**

## **Netflix Movies and TV Shows**

**Personal Project by:**  
**NGUYEN TRI THUC**

## Table Content:

- **Introduce dataset**
- **Data Preview**
- **Exploratory Data Analysis**
- **Conclusion**



# NETFLIX

**So, how has the distribution of  
Netflix content evolved by  
release year and rating?**

# Data overview:

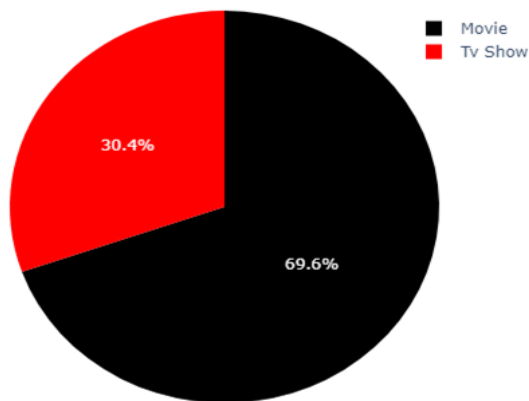
- The dataset used in this project comes from [Kaggle.com](#).
- Data size: 8807 rows and 12 columns.
- Null percentage in dataset (drop them): **country: 9.4%, rating: 0.7%, date\_added: 1.1%** - The null values in the dataset could be due to various reasons such as missing data, data corruption, or data entry errors
- Transform into **year\_added, month\_added, quarter\_added, day\_of\_week** from **date\_added**.
- New column **target\_ages** from column rating to Age ratings of TV shows and movies, top genres by age rank.

## Attribute Information:

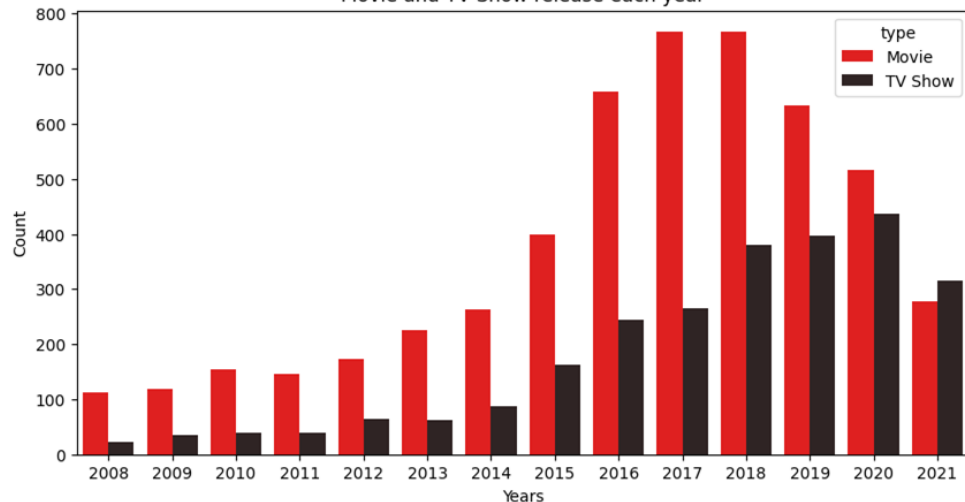
<ul style="list-style-type: none"><li>• <b>show_id</b>: Unique ID for every Movie/ TV Show</li></ul>	<ul style="list-style-type: none"><li>• <b>date_added</b>: date it was added on Netflix</li></ul>
<ul style="list-style-type: none"><li>• <b>type</b>: Identifier - a movie or tv show</li></ul>	<ul style="list-style-type: none"><li>• <b>release_year</b>: actual release year of the movie/ tv show</li></ul>
<ul style="list-style-type: none"><li>• <b>title</b>: title of the movie/ tv show</li></ul>	<ul style="list-style-type: none"><li>• <b>rating</b>: tv rating of the movie/ tv show</li></ul>
<ul style="list-style-type: none"><li>• <b>director</b>: director of the movie</li></ul>	<ul style="list-style-type: none"><li>• <b>duration</b>: minutes or number of seasons</li></ul>
<ul style="list-style-type: none"><li>• <b>cast</b>: actor/ actress involved in the movie/ tv show</li></ul>	<ul style="list-style-type: none"><li>• <b>listed_in</b>: genres</li></ul>
<ul style="list-style-type: none"><li>• <b>country</b>: country where the movie/ tv show was produced</li></ul>	<ul style="list-style-type: none"><li>• <b>description</b>: the summary description</li></ul>

# Movies are the dominant content offered by Netflix

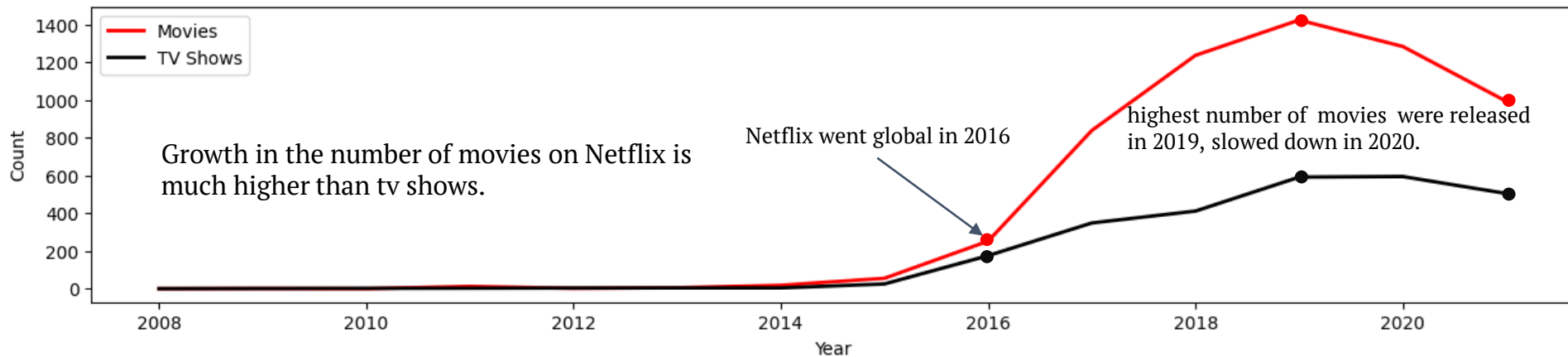
Content structure by Type on Netflix



Movie and TV Show release each year

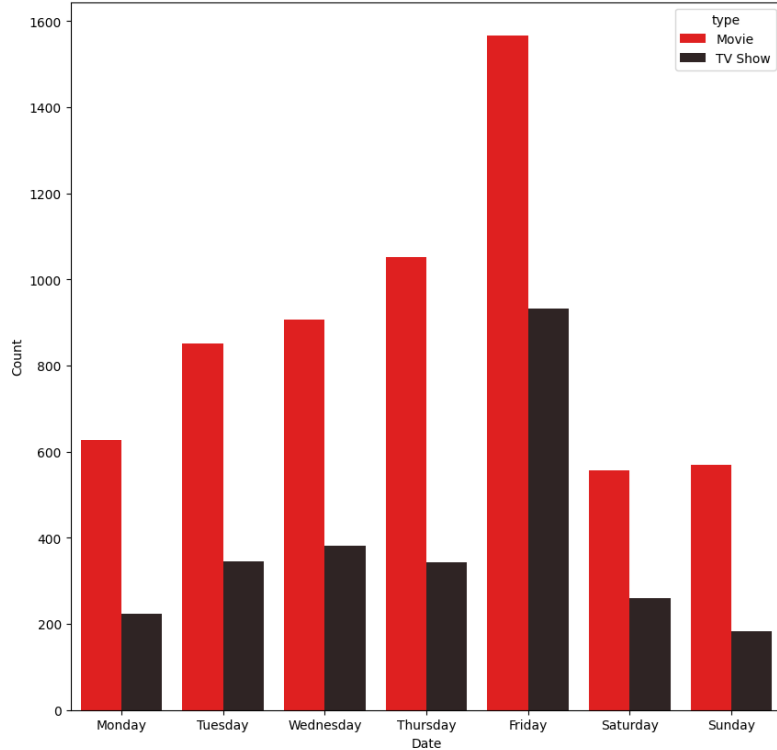


Movie and TV Show added over time

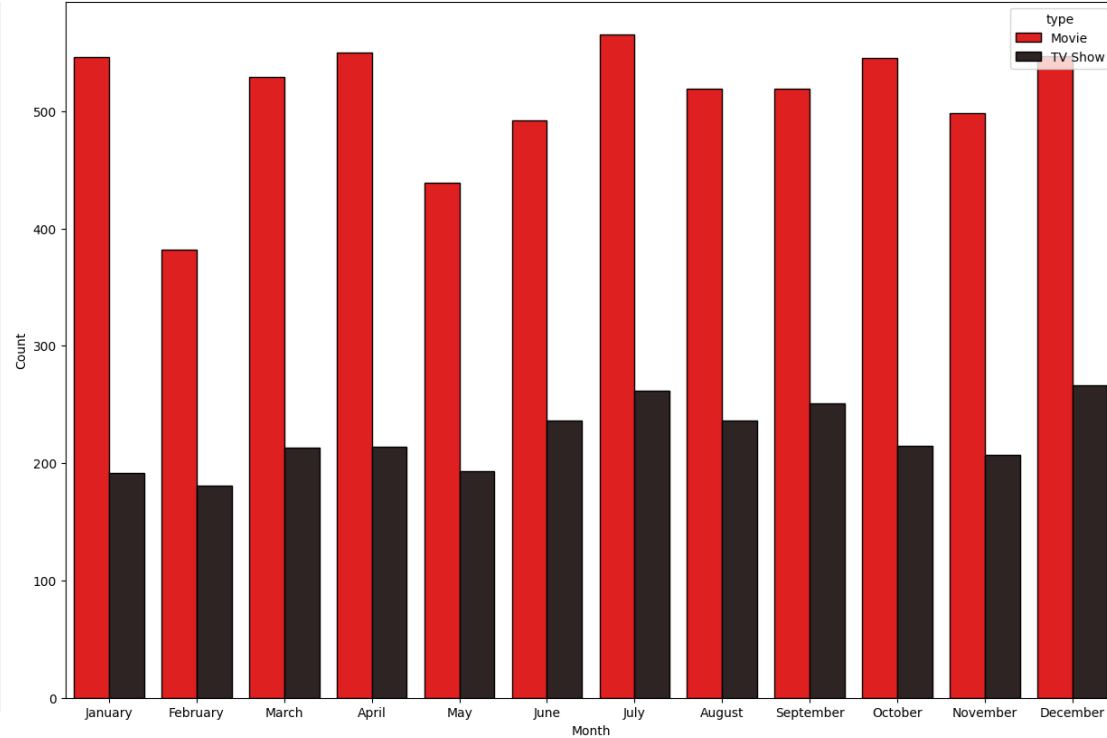


# Distribution content by **time**

Most content added per date

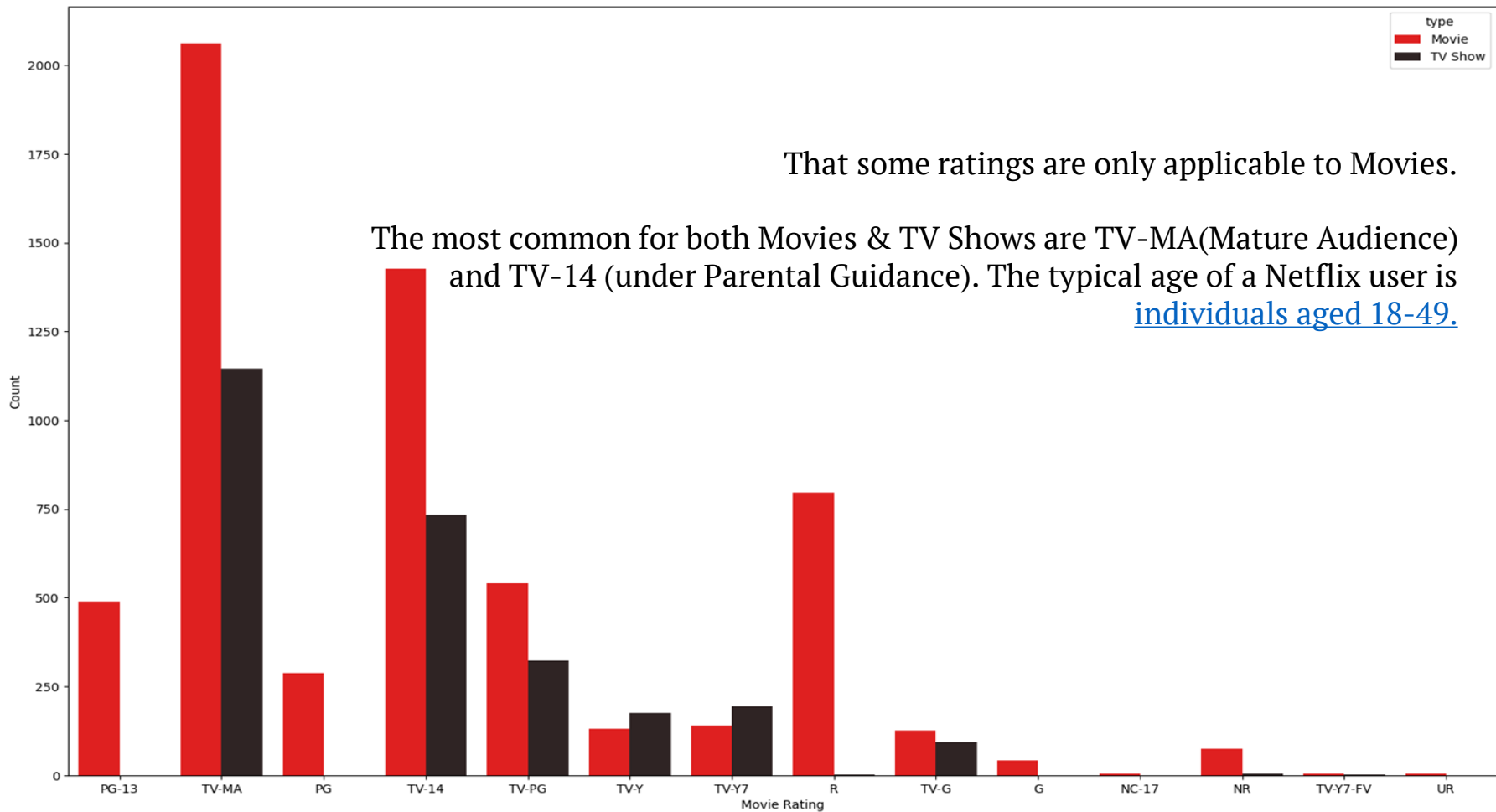


Most content added per month

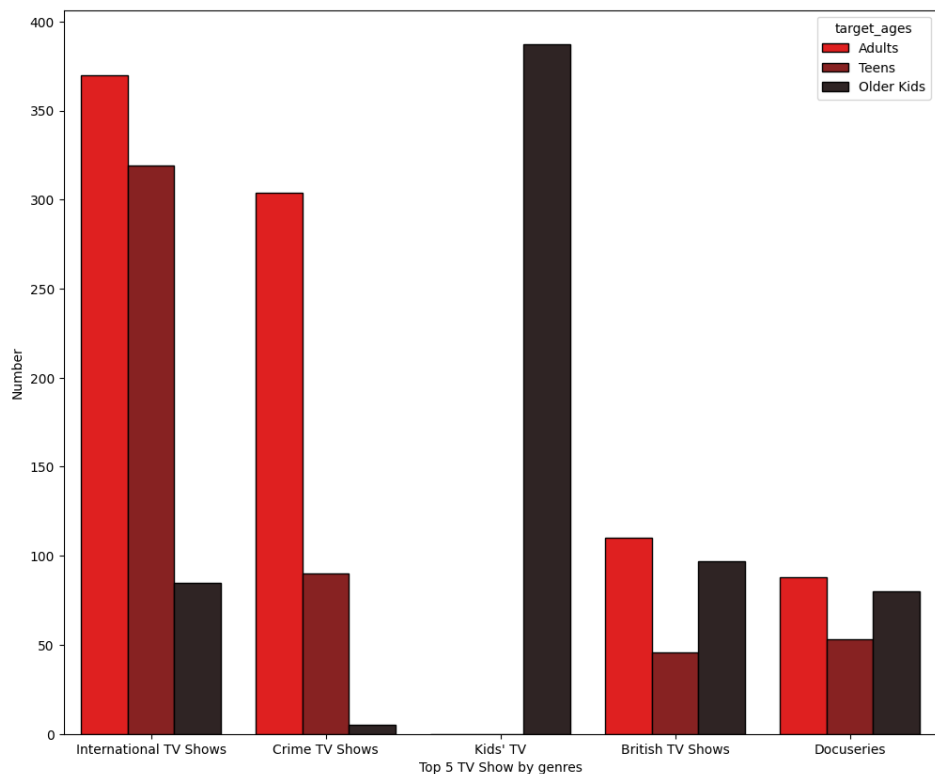
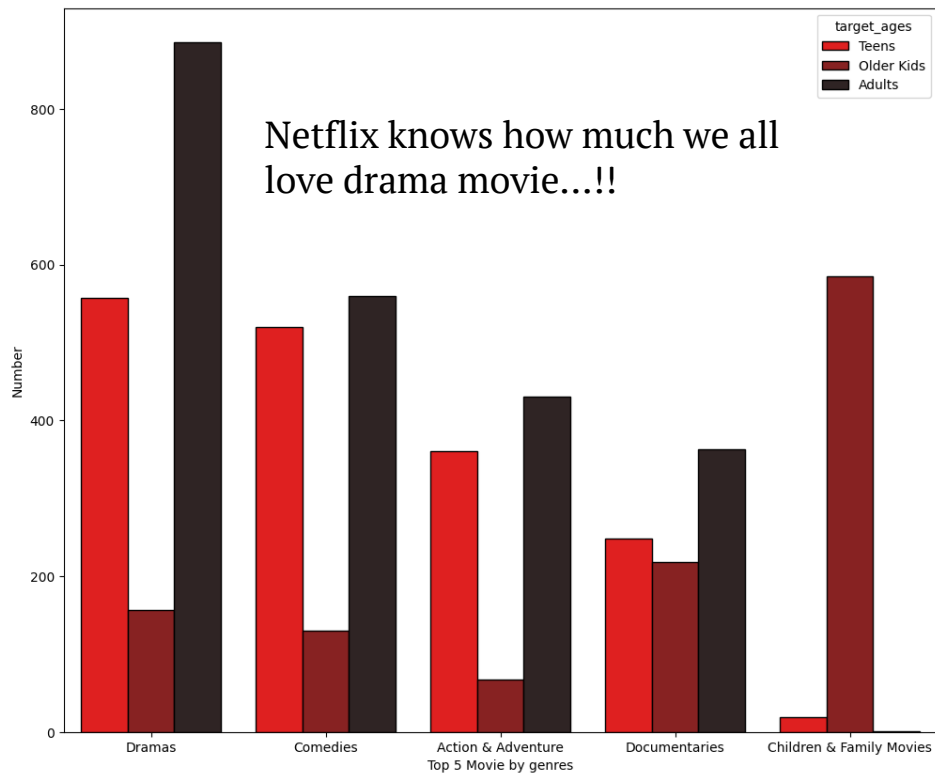


- The most movie additions on Netflix are **July and April** - In summer people have more leisure time, school vacations encourage family outings, the pleasant weather in western countries like US & UK attracts indoor activities, and international holiday periods widen the audience base.
- **December and January**, around Christmas and New Year, also see a significant number of additions, likely due to the festive season, making it a good time for movie releases on Netflix.
- For content added on Netflix, **Friday** is the best day followed by **Thursday**.

# Count of each rating

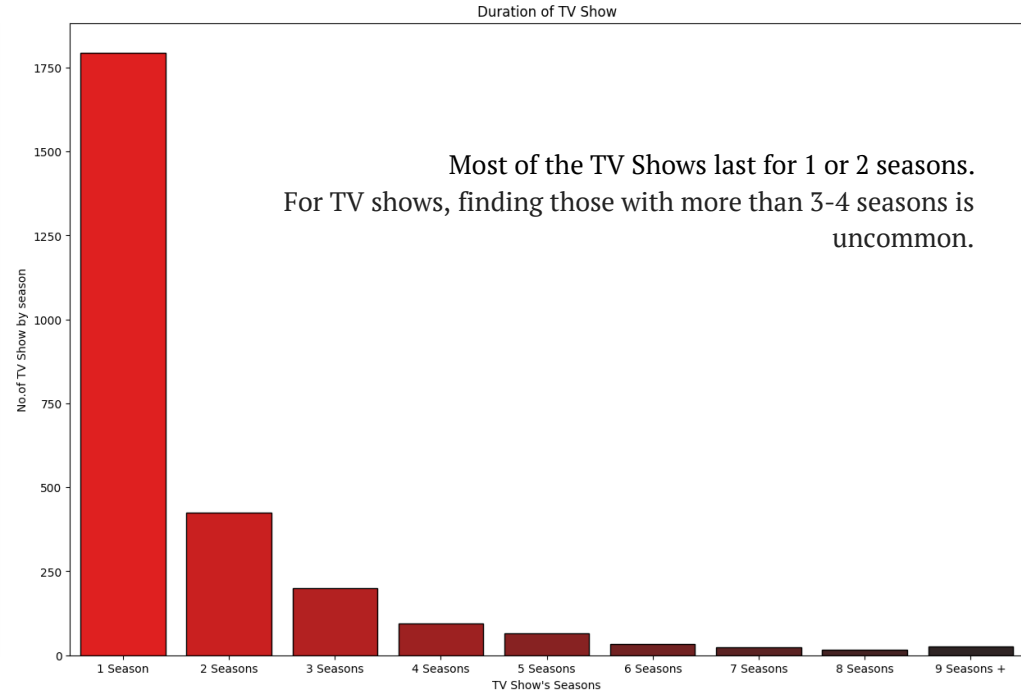
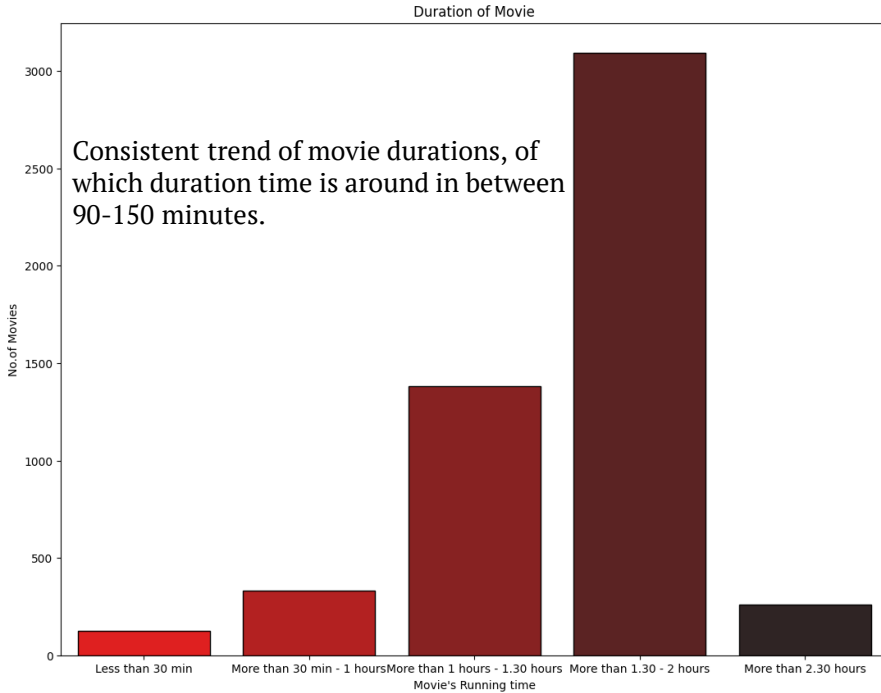


# Top genre by content type



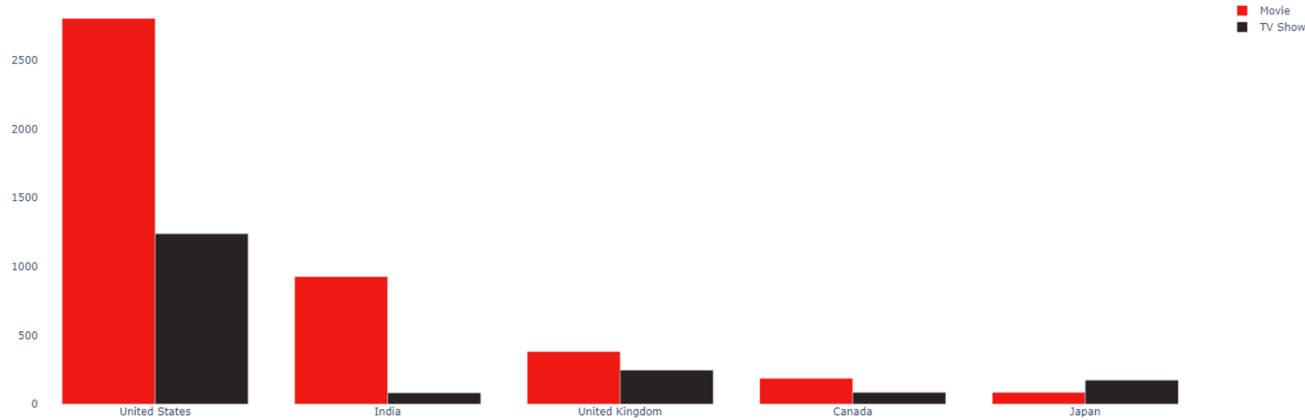


# Duration of Movie and TV show



# Trends of **countries** on netflix

Top 5 countries provide content on Netflix

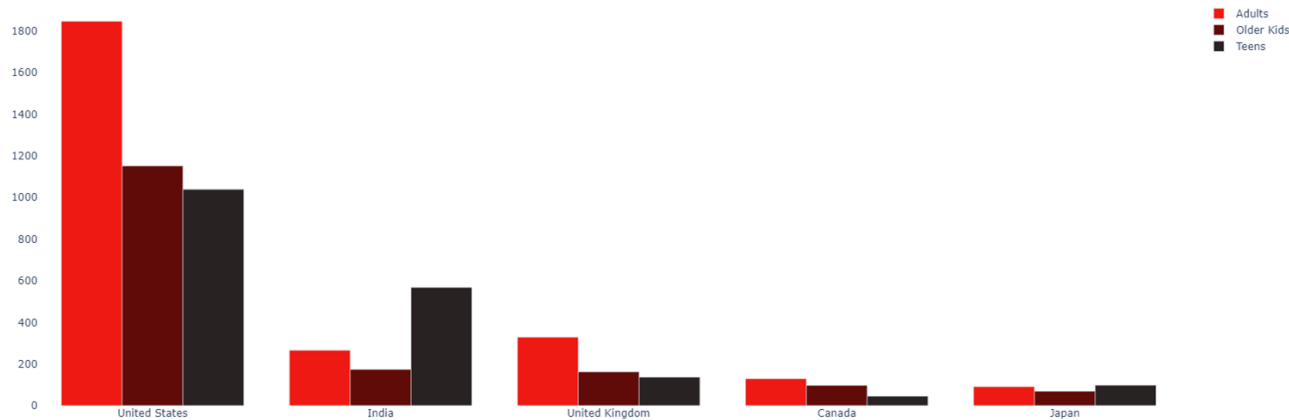


41.4% Share of all titles produced involving US.

Bollywood focus of this industry is Movies and not TV Shows - India is the ranked second largest contributor

The popularity of Japanese major players in the realm of television shows - Anime is an industry in Japan

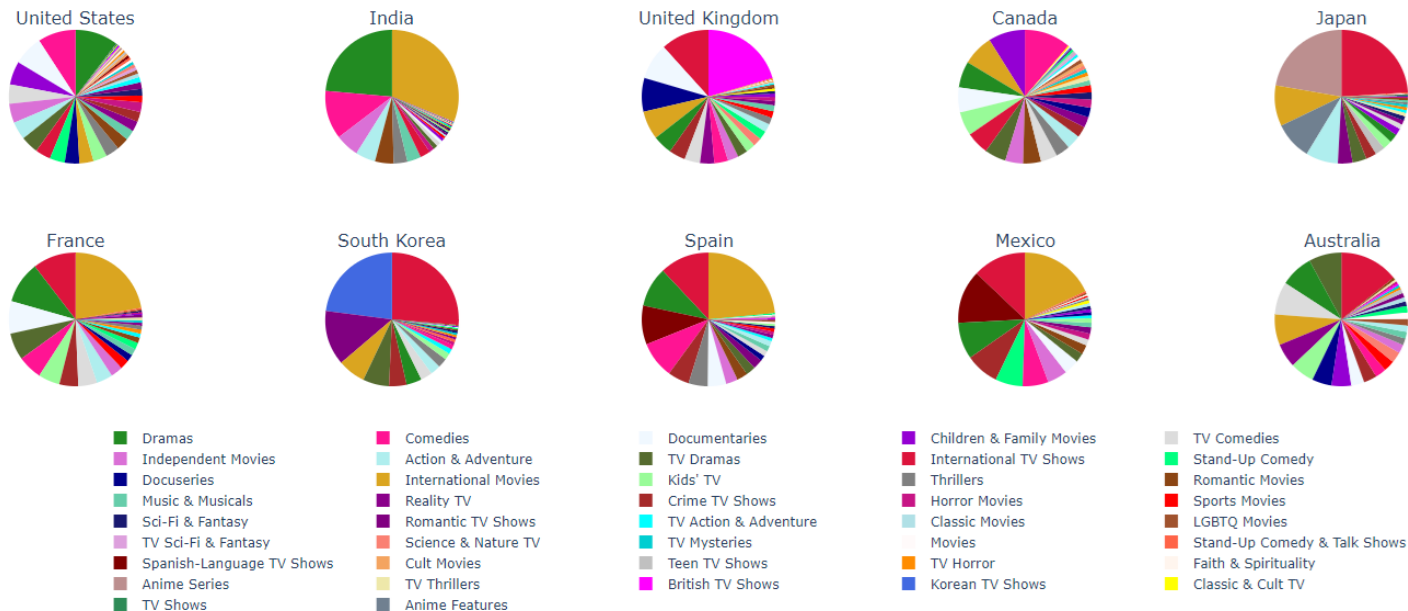
Target ages proportion of total content by country



Very interesting results.

It is also interesting to note similarities between culturally similar countries - the US & UK are closely aligned with their Netflix target ages, yet vastly different to say, India or Japan!

# The content top countries provide:



- **Drama, International Movies, and Comedies** seem popular choices in most countries.
- **British and International Tv Shows** dominate in the **United Kingdom**.
- Regional specialties such as **Anime in Japan** and **Korean Tv shows** in South Korea are more prominent in these countries.

## Title and Description:

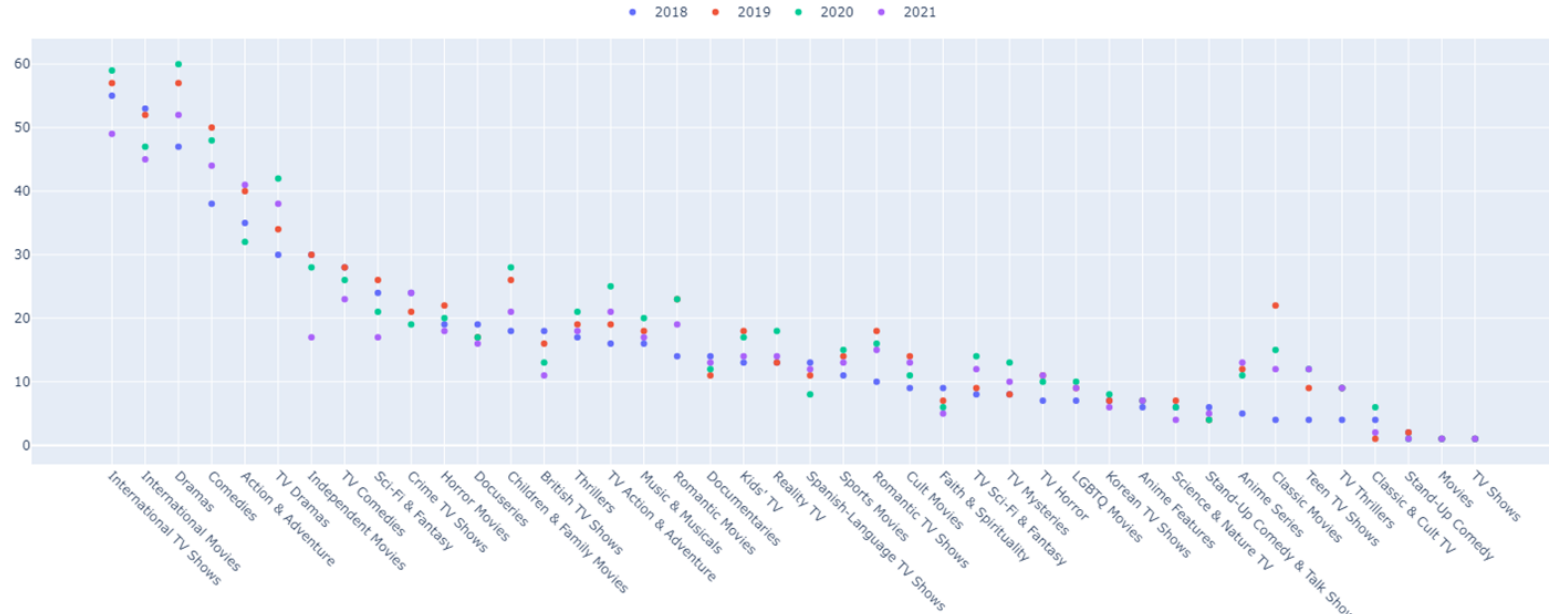


- Examining the word cloud for **titles**, we observe that terms like “**Love**,” “**Girl**,” “**Man**,” “**Life**,” and “**World**” are **frequently used**, indicating the presence of romantic, coming-of-age, and drama genres in Netflix’s content library.
- We saw that most of the movies and tv shows got added during the winters, which tells why **Christmas** appeared many times in the titles.
- Analyzing the word cloud for **descriptions**, we notice dominant words such as “**life**,” “**find**,” and “**family**,” suggesting themes of personal journeys, relationships, and family dynamics prevalent in Netflix’s content.

# Is Netflix has increasingly focusing on TV rather than movies in recent years?

## Hypothesis Testing to check is there is any relation between **year\_added** and **type**:

Most added Genres in recent years.



- There are more Movies than Tv Shows on Netflix, which might be enough to assume that Netflix focuses more on Movies than Tv Shows. But the data proves this assumption wrong.
- The above line plot shows that Netflix has been adding many International Tv Shows, Tv Dramas, Tv Comedy Shows and many more tv shows in the recent years compared to Movies.
- From this observation, we can say that Netflix might be shifting slowly towards Tv Shows.

### 3. Conclusions:

- It was interesting to find that majority of the content available on Netflix is **Movies**.
- But in the recent years it has been focusing more on **TV Shows**.
- Most of these **contents** are released either in the year ending or the beginning.
- **United States** and **India** are among the top 5 countries that produce all of the available content on the platform.
- **TV-MA** tops the charts, indicating that mature content is more popular on Netflix. The second largest type of rating watched by the audience is **TV-14** which is inappropriate for children younger than age 14. The conclusion is drawn here is most of the audience is of mature age.
- The distribution of **ratings** over the years offers insights into the evolving content landscape and audience reception.
- Words like **love**, **life**, **family**, and **adventure** were frequently found in titles and descriptions, capturing recurring themes in Netflix content.

### 4. Suggestion:

- Since TV Shows are in trending, we need to produce more shows in popular Genre.
- Has less shows being added to Netflix in February, that's best time to release more shows to have higher probability in more viewers.
- TV Shows with less seasons and movies with 90-120 mins duration on 'Dramas' & 'Comedies' Genre is preferable.
- Since, USA and Canada have similar popularity in Genre, but have less movies in Canada. We can produce more to increase business in Canada.
- Similarly, India and France has common interest. We can provide movies to attract both Audience.

The Netflix logo, consisting of the word "NETFLIX" in white, sans-serif capital letters on a red rectangular background.

NETFLIX

**Thank You For  
Attention**

December 2023