

Netflix Content Analysis – Trends and Insights from the Netflix Dataset

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A. Executive summary

Objective :

The aim of this project is to analyze the Netflix dataset to extract insights regarding the type, genre, duration, and release patterns of content available on Netflix. This helps understand content trends, user preferences, and global distribution.

Dataset overview:

- **Total Entries:** 8,790
- **Columns (Features):** 10
 - **show_id:** Unique ID for each show
 - **type:** Movie or TV Show
 - **title:** Title of the show
 - **director:** Director's name
 - **country:** Country of origin
 - **date_added:** Date when added to Netflix
 - **release_year:** Year of original release
 - **rating:** Age rating (e.g., TV-MA, PG-13)
 - **duration:** Duration in minutes or number of seasons
 - **listed_in:** Genre(s)

B. Data Cleaning & Preprocessing

1. Handling Missing Values :

- Missing values were observed in columns like director, cast, and country.
- Imputed with 'Not Given' or dropped if non-essential.

2. Duplicates :

- Duplicate rows were checked and removed.

3. Feature Engineering :

- duration was split into numerical and unit parts.
- date_added converted to datetime for time-based analysis.

C. Exploratory Data Analysis

1. Content type distribution:

- Movies : 6126 (70%)
- Tv shows : 2664 (30%)

2. Release Year Trend :

- Content ranges from 1925 to 2021.
- Major surge observed from 2016 onward.
- Peak content release years: 2018, 2019, 2020.

3. Top Contributing Countries :

1. United States
2. India
3. United Kingdom
4. Canada
5. Japan

4. Popular Ratings :

- TV-MA (Mature Audiences)
- TV-14, R, PG-13 → Indicates majority content is aimed at mature audiences.

5. Genre Distribution :

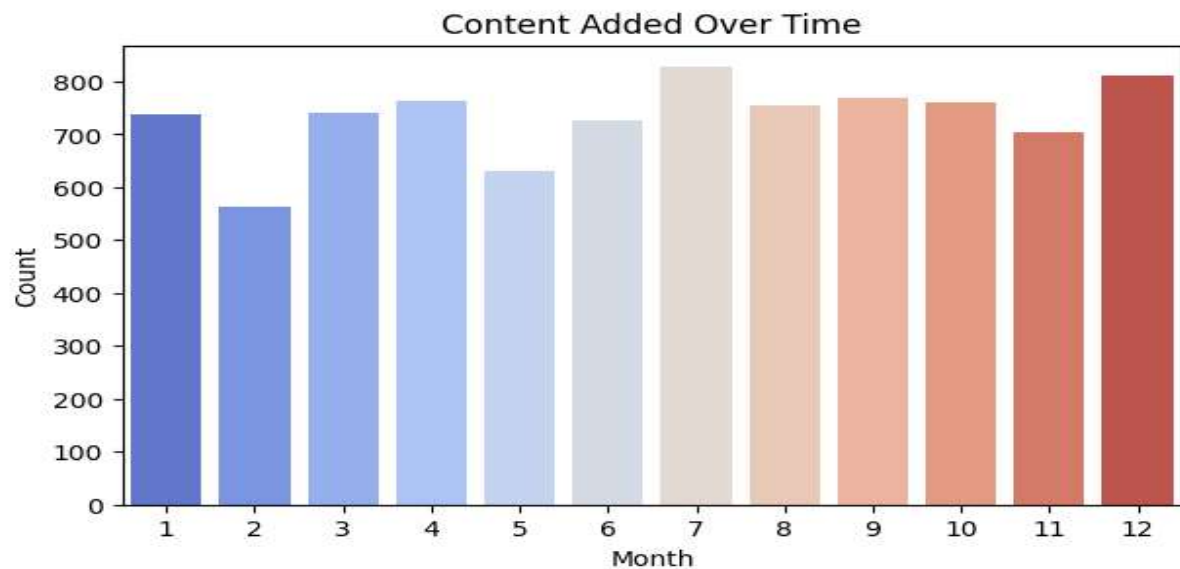
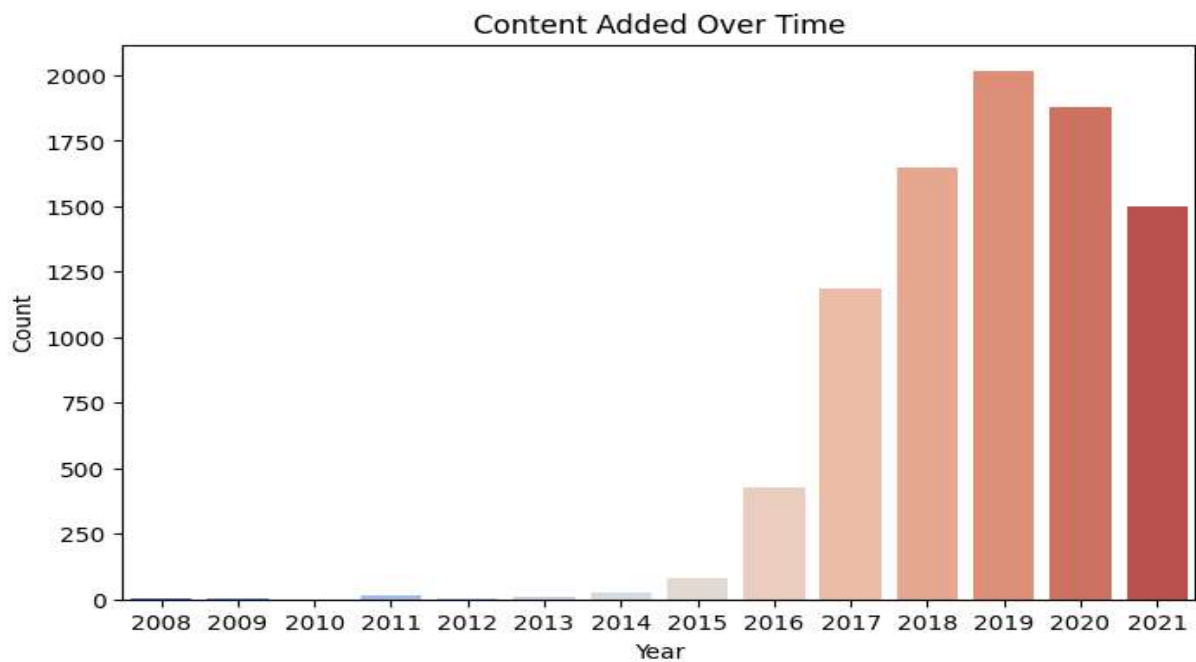
- Most common genres: Drama, International Movies, Comedy, Action.
- Content is often multi-genre (entries tagged with multiple categories).

6. Content Duration :

- **Movies:** Most range between 60–120 minutes.
- **TV Shows:** Typically, 1 or 2 seasons.

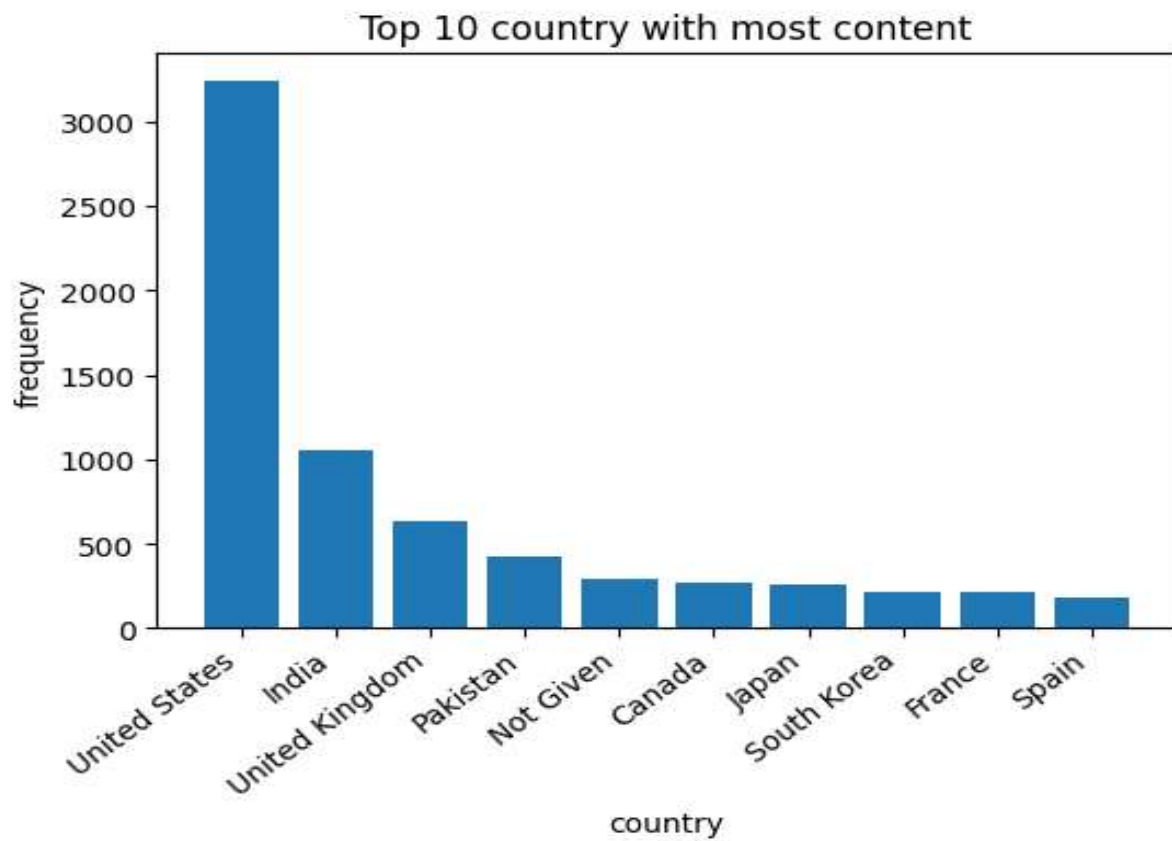
D. Key Analytical Tasks & Insights

Trend of Content Addition Over Time :



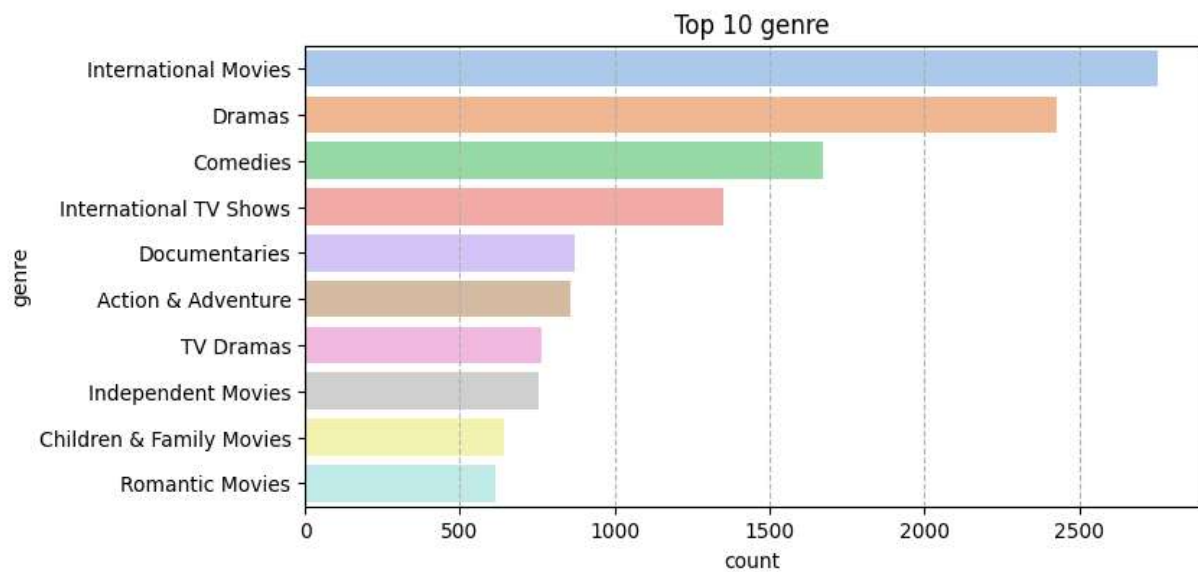
- Observed strong growth after 2015.
- Almost the content is added in every month

Country-wise Content Production :



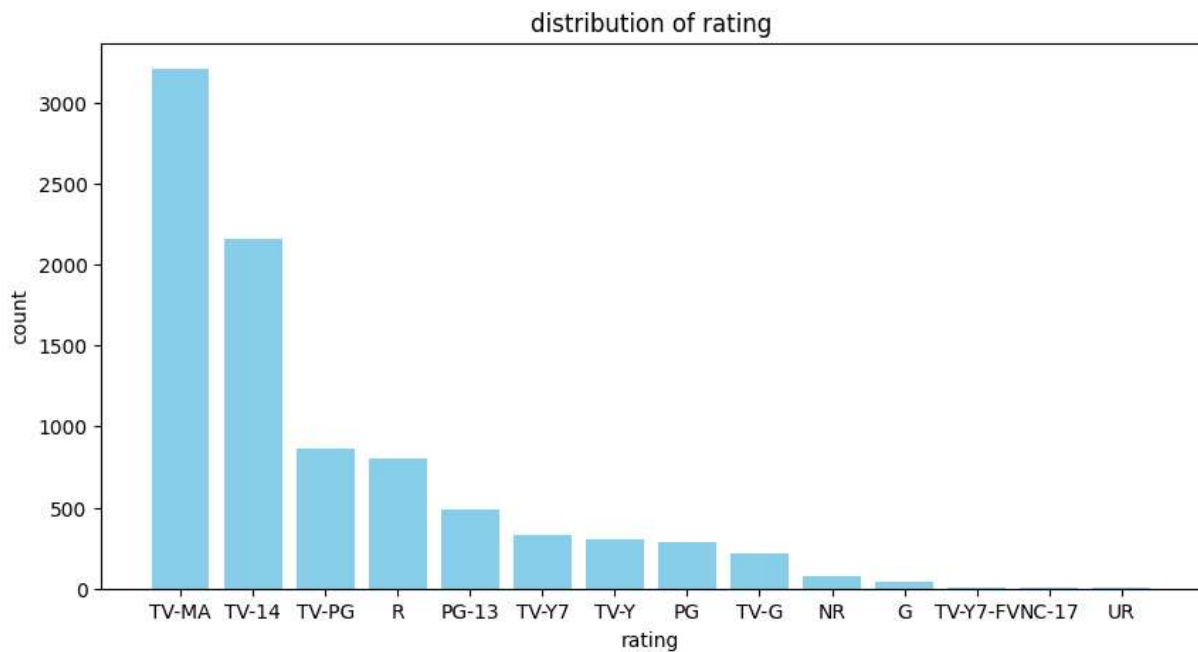
- **U.S.** leads significantly in content count.
- **India and U.K.** are major non-U.S. contributors.

Genre :

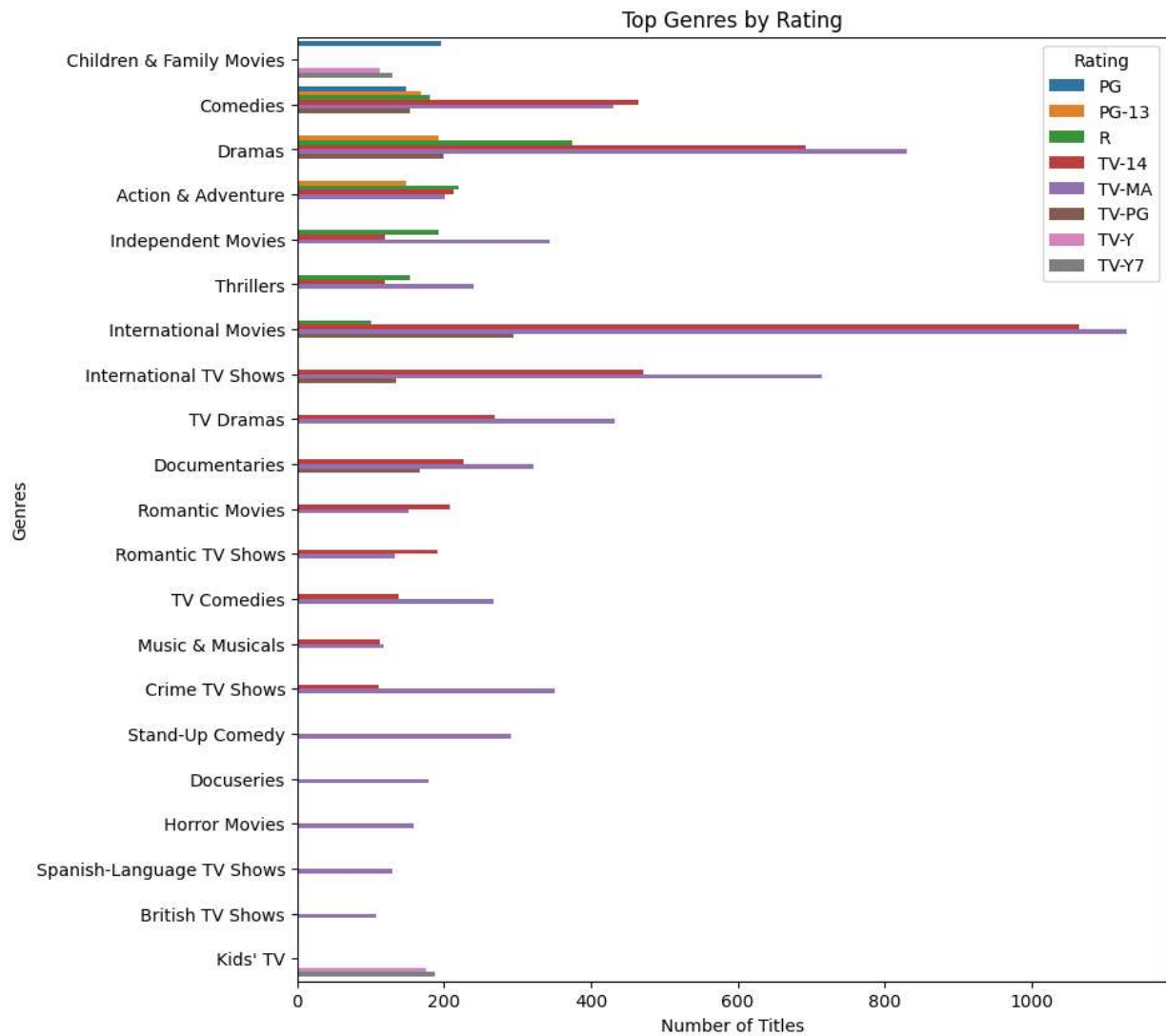


- **International Movies** is the most type of genre in Netflix
- Followed by **dramas and comedies** are most in Netflix

Rating :

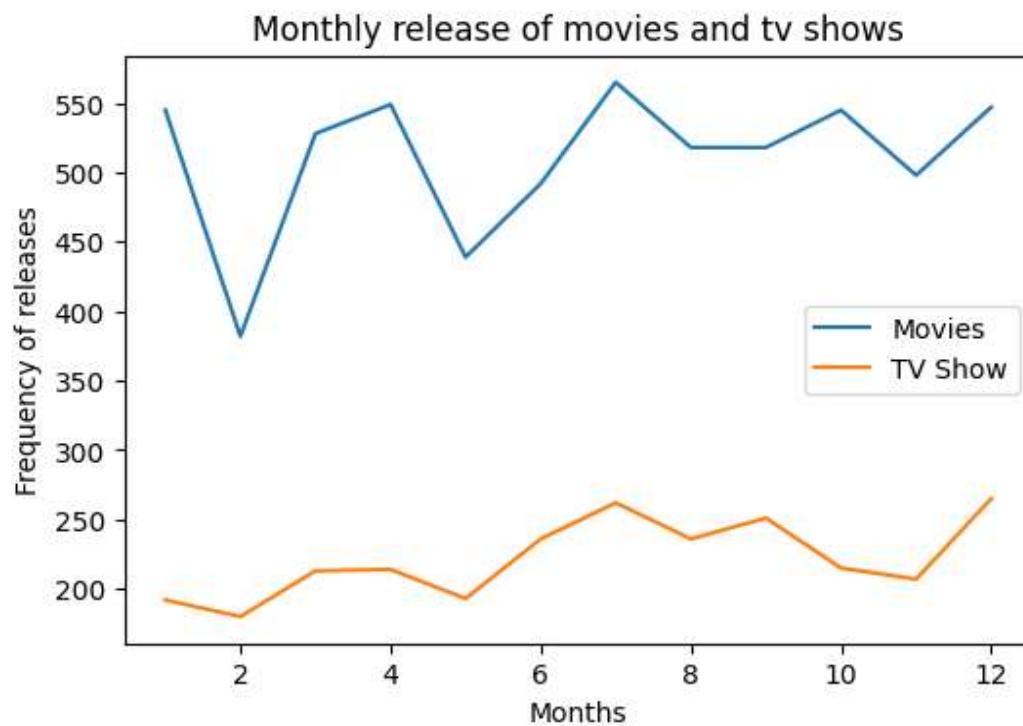


Gebre and Rating distribution :

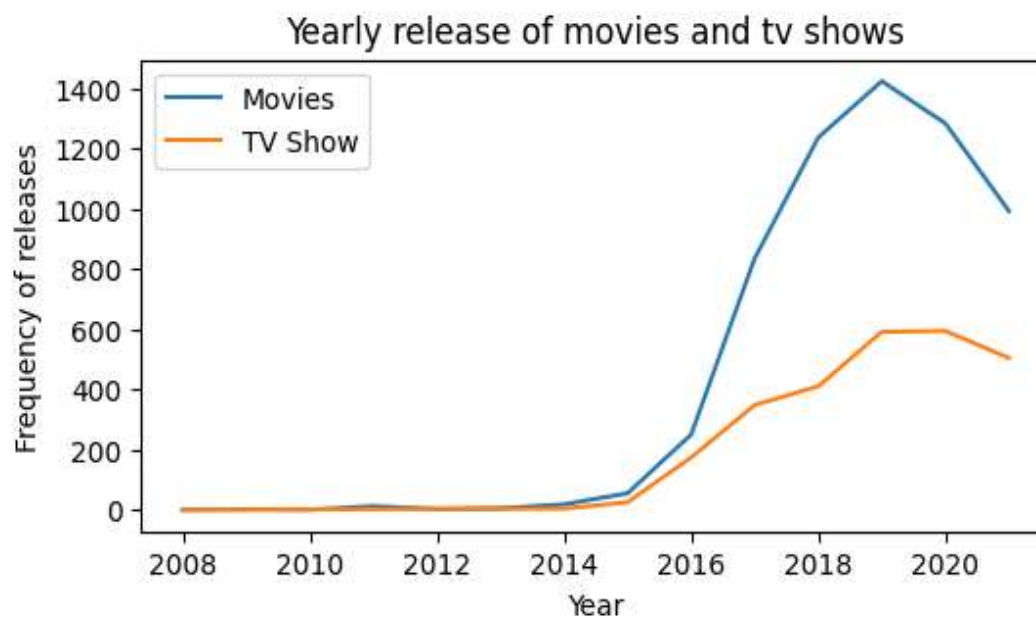


- Most of the genre are rated as **TV-MA**
- **International movies** are most rate as **TV-MA & TV-14**.

Monthly release :



Yearly release :



- The **monthly** release of **movies** is high compared to tv shows
- **Yearly** release of **movies** is also high after 2015.

Conclusion

1. **Netflix has more Movies than TV Shows.**

About 70% of the content is movies, and 30% is TV shows.

2. **Most content was added after 2015.**

Netflix really started growing fast around 2016 and added lots of new shows and movies since then.

3. **The United States makes most of the content.**

But other countries like India, the UK, and Canada also contribute a lot.

4. **Popular content ratings are for adults.**

Ratings like **TV-MA** and **R** are common, meaning many shows are made for mature audiences.

5. **Drama and Comedy are the most popular genres.**

These two genres appear the most across all ratings and countries.

6. **Netflix is investing more in TV shows recently.**

Especially after 2016, they added many more series.