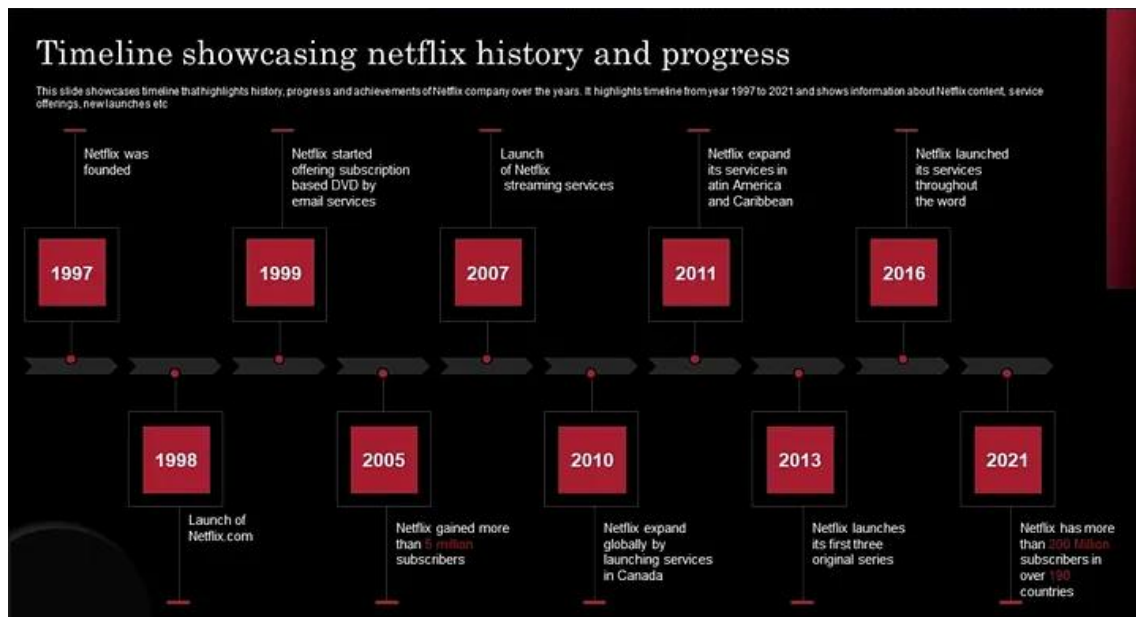# ANALYSIS OF VISUAL'S FOR NETFLIX DATA

### 1. Timeline representing history and progress of Netflix

Key Milestones and Achievements:

- **1997:** Netflix was founded.
- **1999:** Netflix started offering subscription-based DVD rental services by email.
- **2007:** Netflix launched its streaming services.
- **2011:** Netflix expanded its services in Latin America and the Caribbean.
- **2013:** Netflix launched its first three original series.
- **2016:** Netflix launched its services throughout the world.
- **2021:** Netflix had more than 200 million subscribers in over 190 countries.

### 2. Movies and TV Shows Distribution
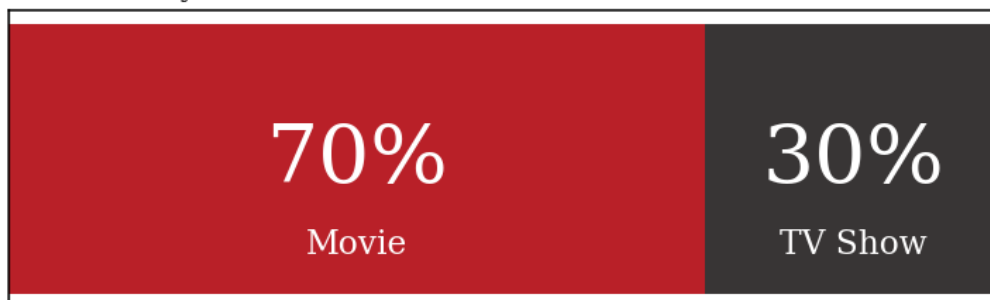
Netflix's catalogue is significantly weighted towards movies, with a majority of its offerings (70%) being films, while TV shows make up a smaller portion (30%). This suggests that Netflix users have more movies to choose from than TV series.

3. Top 10 Countries on Netflix by their content capture ratio

Top 10 countries on Netflix
The three most frequent countries have been highlighted.
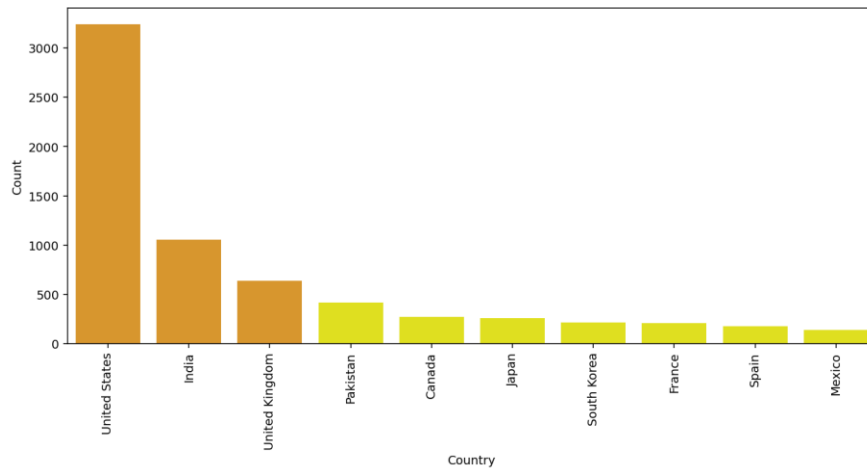
Insight

The most prolific producers of content for Netflix are, primarily, the USA, with India and the UK a significant distance behind.
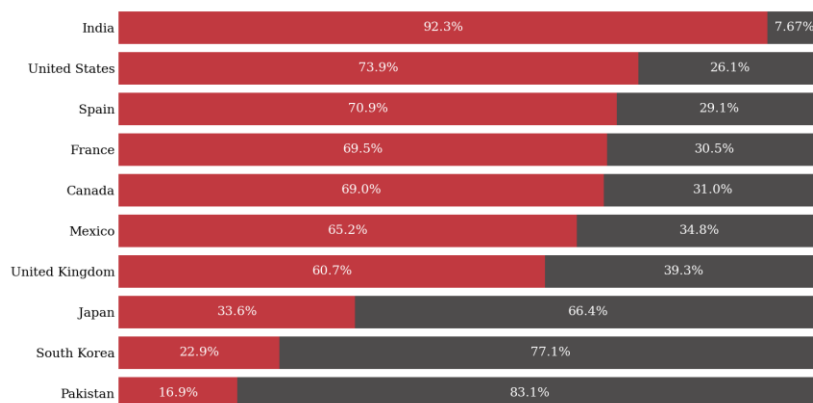
- Dominance of the USA: The United States leads significantly with over 3,000 content pieces, showcasing its dominance as the most prolific content producer for Netflix.
- India and the UK: These two countries follow, but at a much lower scale compared to the US. India has around 1,000 entries, and the UK slightly fewer than 500.
- Other Countries: Pakistan, Canada, Japan, South Korea, France, Spain, and Mexico also contribute, but in much smaller quantities (all below 500).
- Insight: The USA is the clear leader, while India and the UK are significant but distant contributors. The other countries lag far behind, indicating a concentrated production effort from a few major players.

4. Top 10 Countries Movies and TV Shows split

Top 10 countries Movie & TV Show split
Percent Stacked Bar Chart
Movie | **TV Show**

Country	Movie	TV Show
India	92.3%	7.67%
United States	73.9%	26.1%
Spain	70.9%	29.1%
France	69.5%	30.5%
Canada	69.0%	31.0%
Mexico	65.2%	34.8%
United Kingdom	60.7%	39.3%
Japan	33.6%	66.4%
South Korea	22.9%	77.1%
Pakistan	16.9%	83.1%

Insight

Interestingly, Netflix in India is made up nearly entirely of Movies.

Bollywood is big business, and perhaps the main focus of this industry is Movies and not TV Shows.
Pakistan Netflix on the other hand is almost entirely TV Shows.

- India: Dominated by movies (92.3%), with a very small proportion of TV shows (7.67%). This reflects the prominence of Bollywood and the heavy focus on films rather than TV content.
- United States: Though movies lead at 73.9%, there's a significant portion of TV shows (26.1%) compared to other countries.
- Pakistan: The reverse of India, with an overwhelming majority of TV shows (83.1%) and only 16.9% movies, marking it as a country where Netflix is more TV-focused.
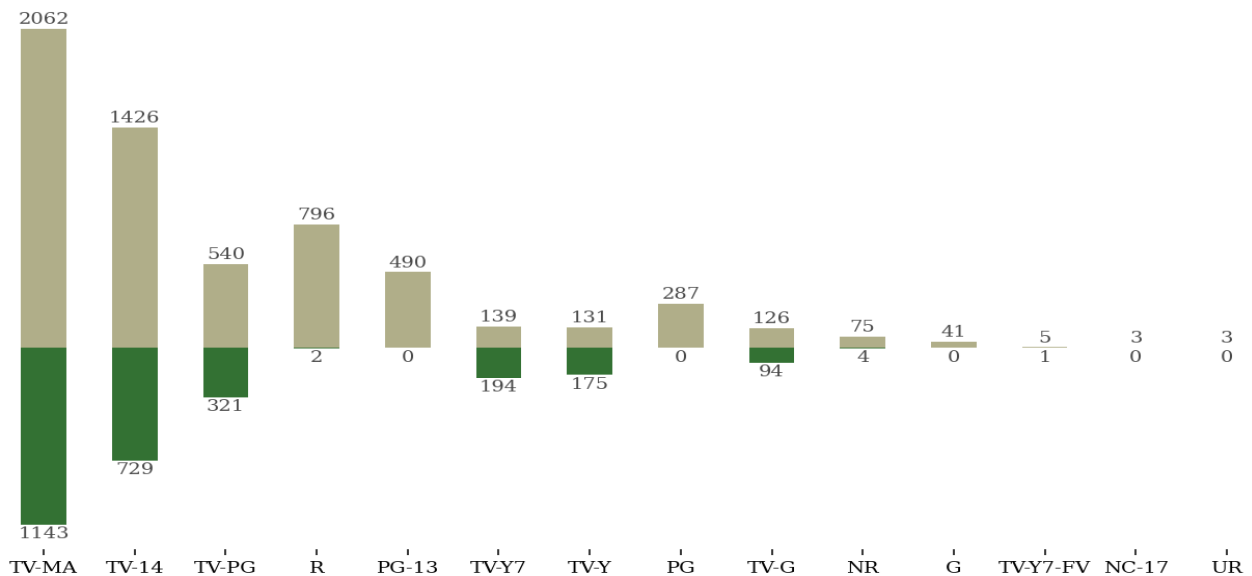
- Other Countries: Spain, France, Canada, and Mexico have around 65-70% of their content as movies.
  The UK shows a more balanced split, with about 60.7% movies and 39.3% TV shows.
  Japan and South Korea are more TV show-heavy, particularly South Korea with 77.1% TV shows.

5. Rating distribution by Movies & TV Shows

Rating distribution by Movies & TV Shows

We observe that some ratings are only applicable to Movies.
The most common for both Movies & TV Shows are TV-MA and TV-14.

Movie|TV Show

[Chart: Rating distribution by Movies & TV Shows]

| Rating	Movie	TV Show
TV-MA	2062	1143
TV-14	1426	729
TV-PG	540	321
R	796	2
PG-13	490	0
TV-Y7	139	194
TV-Y	131	175
PG	287	0
TV-G	126	94
NR	75	4
G	41	0
TV-Y7-FV	5	1
NC-17	3	0
UR	3	0

The most common ratings for both movies and TV shows on Netflix are TV-MA and TV-14, suggesting a strong presence of mature content. Movie ratings like R and PG-13 are significant, while TV shows have more kid-friendly ratings like TV-Y and TV-Y7, which are not found in movie.

6. Movies and TV Shows added over Years

Movies & TV Shows added over time

We see a slow start for Netflix over several years.
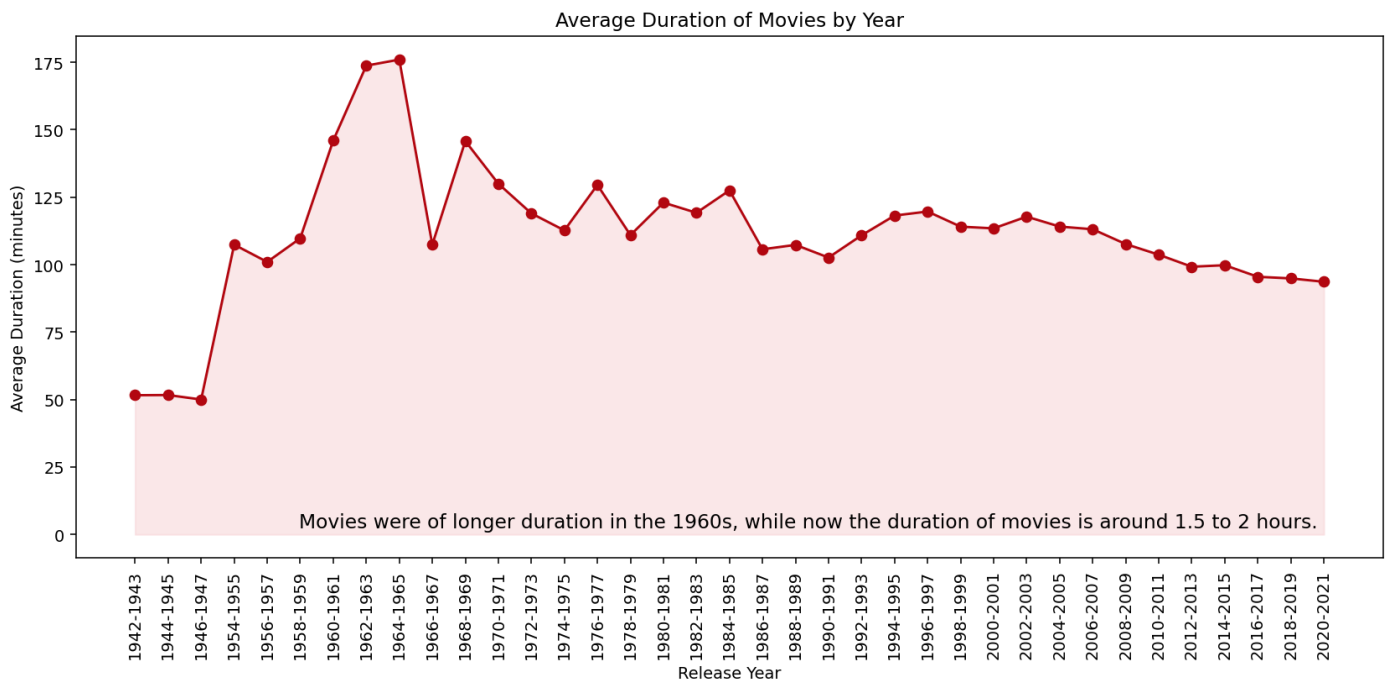Things begin to pick up in 2015 and then there is a rapid increase from 2016.

Movie|TV Show

[Chart: Movies & TV Shows added over time, years 2008–2020, values 0 to 1400]
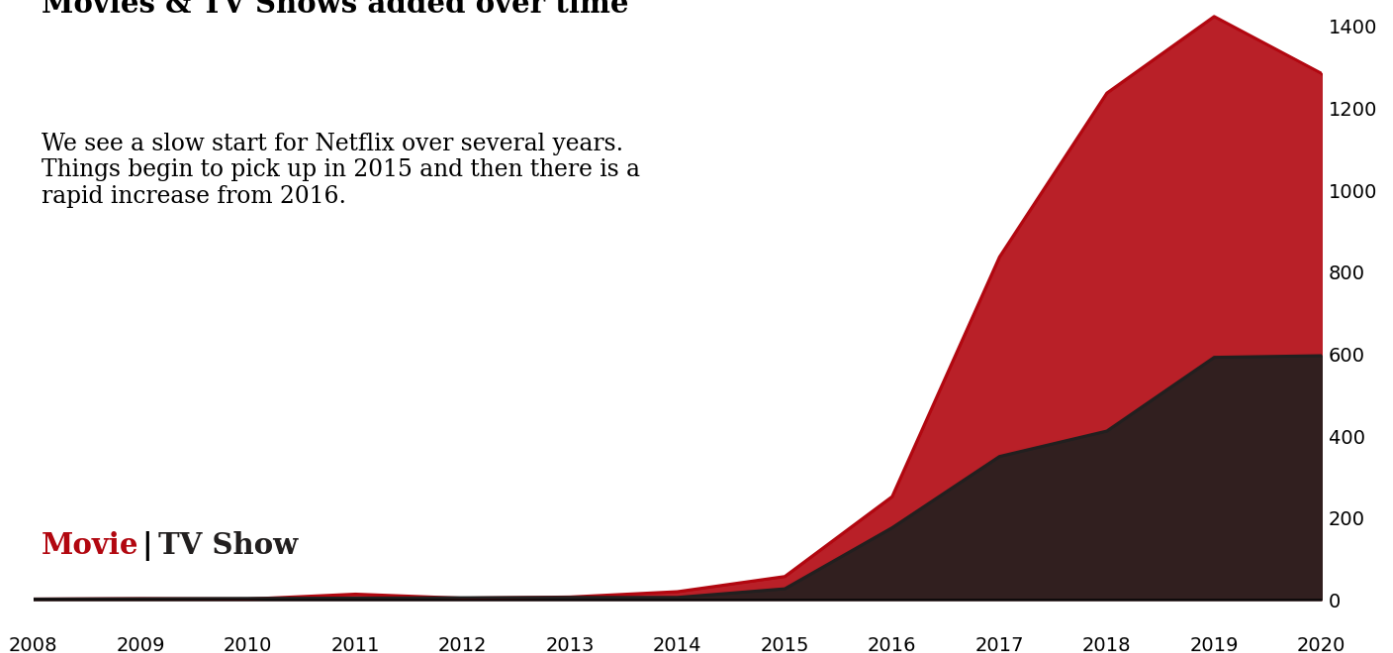
- Slow Growth (2008–2014): Netflix had a minimal number of additions during these early years, with very little increase in content.
- Steady Growth (2015): There was a noticeable rise in content added in 2015, marking a shift in Netflix's content strategy.
- Rapid Growth (2016–2019): After 2015, Netflix significantly ramped up its content, with a sharp increase, particularly in movies (shown in red). This rapid expansion continued until 2019.
- Decline in 2020: The number of additions appears to drop slightly in 2020 after reaching a peak in 2019.

7. Movies & TV shows added over time (Monthly)

Movies & TV Shows added over time (Monthly)

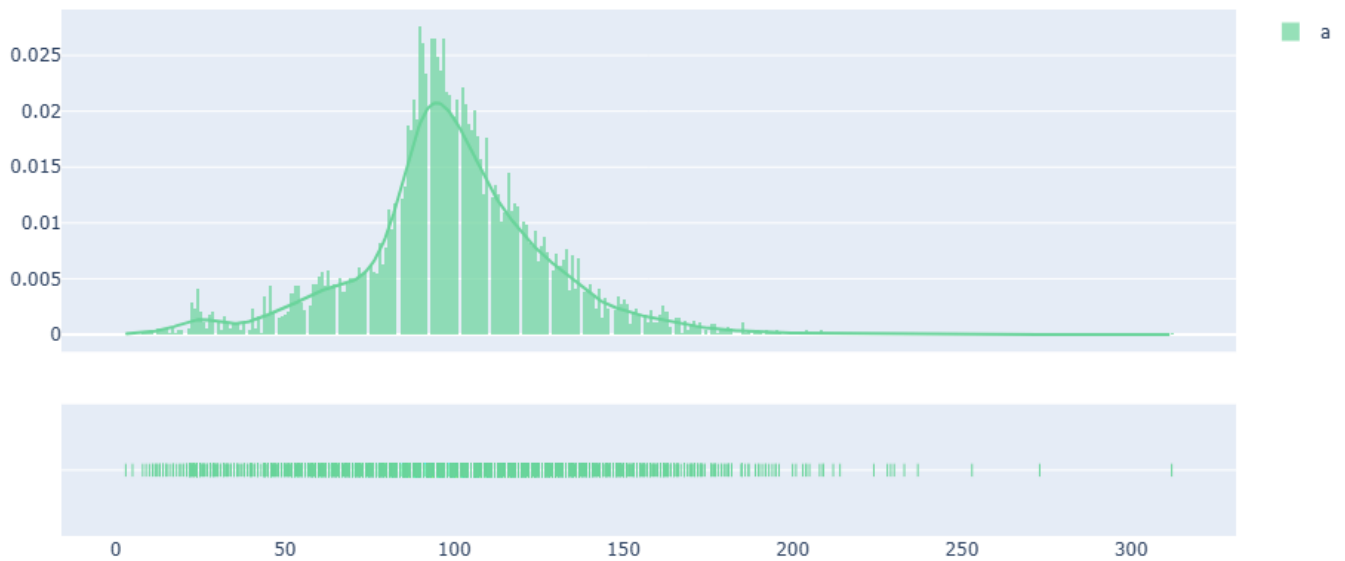There is no noticable difference in content release on netflix on monthly basis
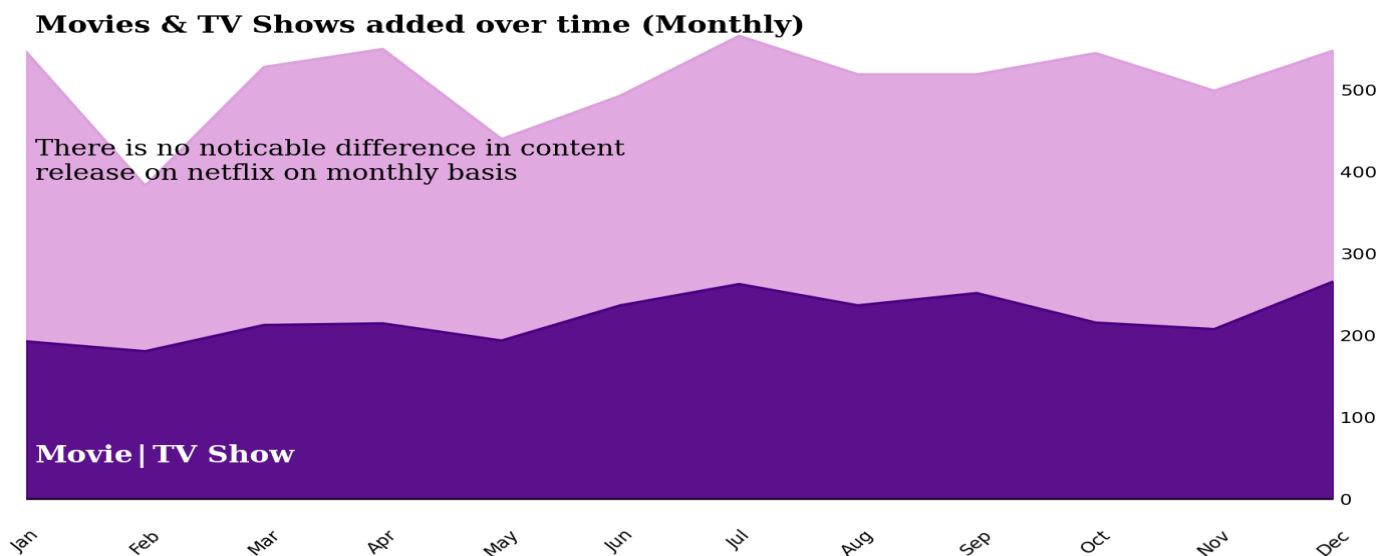
Movie|TV Show

- Minimal Variation: The chart shows that there is no significant variation in the content released on Netflix from month to month. Both movies (in a lighter colour) and TV shows (in a darker colour) are added relatively consistently throughout the year.
- Steady Content Release: While there are minor peaks in some months, like May and October, the overall trend appears stable, with no large fluctuations.
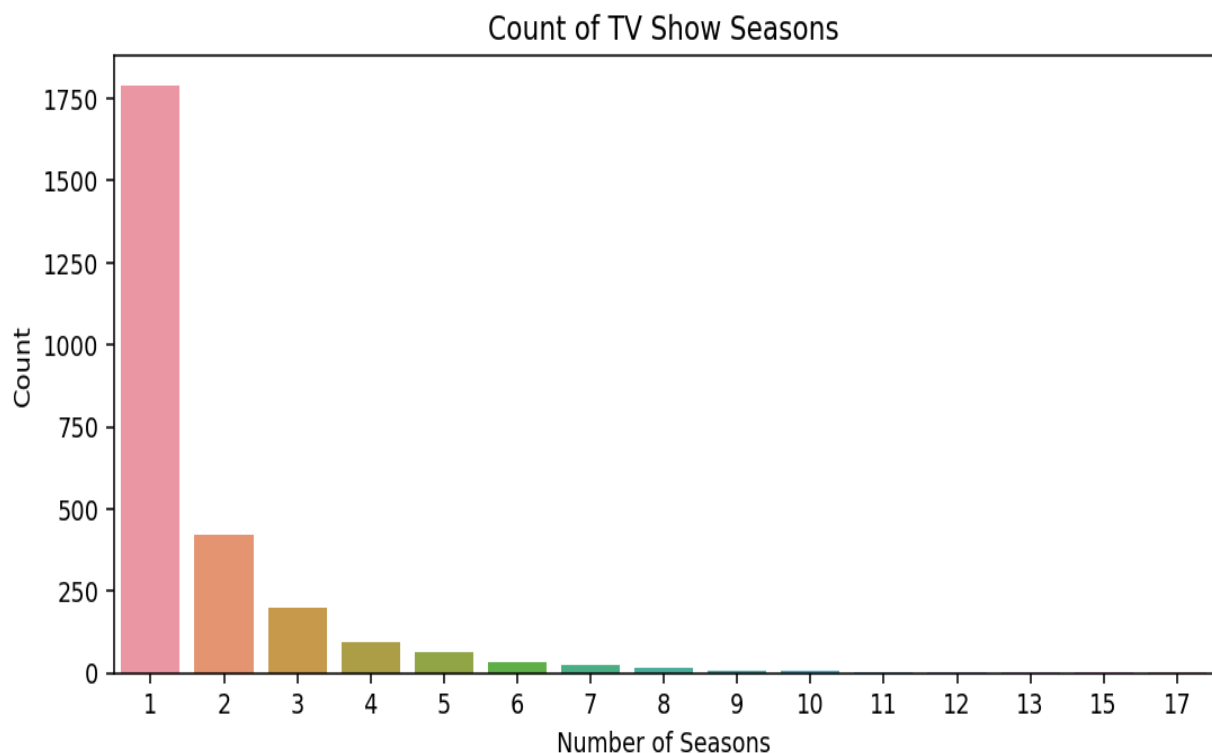
8. Average duration of Movies in 2 year interval

Average Duration of Movies by Year

Movies were of longer duration in the 1960s, while now the duration of movies is around 1.5 to 2 hours.

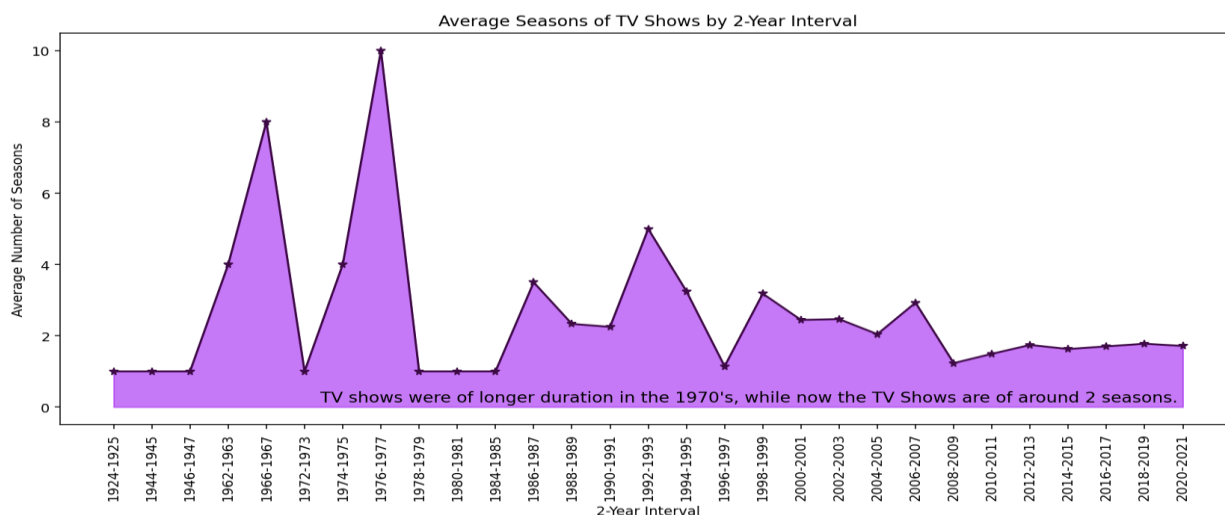# 9. Distribution of Movies length

Distribution of Movies duration

10. Count of TV Show Seasons
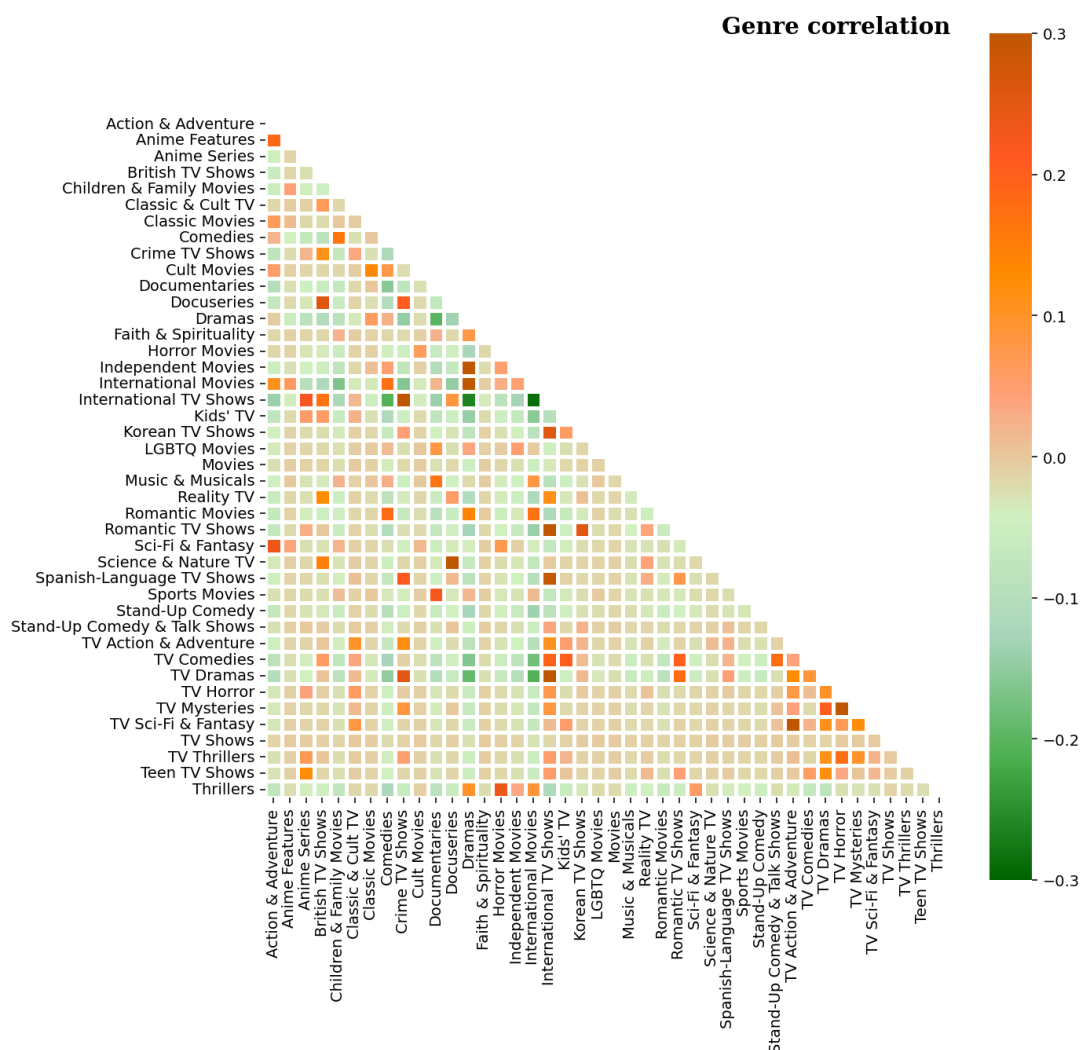

- Dominance of Single-Season Shows: The vast majority of TV shows on Netflix have only 1 season, with a count exceeding 1,750.
- Sharp Decline after 1 Season: There is a steep drop-off in the number of shows with 2 or more seasons. The count for 2-season shows is significantly lower, followed by an even more drastic decrease as the number of season's increases.

- Few Long-Running Shows: Very few TV shows have more than 6 seasons. There are sparse occurrences of shows with 7, 8, or more seasons, indicating that long-running series are quite rare.

11. Average Seasons of TV Shows released

Average Seasons of TV Shows by 2-Year Interval

TV shows were of longer duration in the 1970's, while now the TV Shows are of around 2 seasons.

12. Heatmap to show correlation between different Genre in which Movies are listed


Genre correlation

- Positive Correlations: Anime Features have a strong positive correlation with Anime Series, suggesting they share similar characteristics. TV Dramas and TV Mysteries show a moderate positive correlation, indicating they might often be combined or have overlapping themes.
TV Comedies and Stand-Up Comedy & Talk Shows have a slight positive correlation, suggesting they might share some comedic elements or target similar audiences.
- Negative Correlation: Anime Series and TV Mysteries have a moderate negative correlation, suggesting they might have distinct characteristics or target different audiences. TV Dramas and TV Thrillers have a slight negative correlation, indicating they might have contrasting tones or themes.
- Neutral Correlations: Most of the other genre pairs exhibit neutral correlations, suggesting they don't have strong associations with each other.

13. Heatmap to show correlation between different Genre in which TV shows are listed
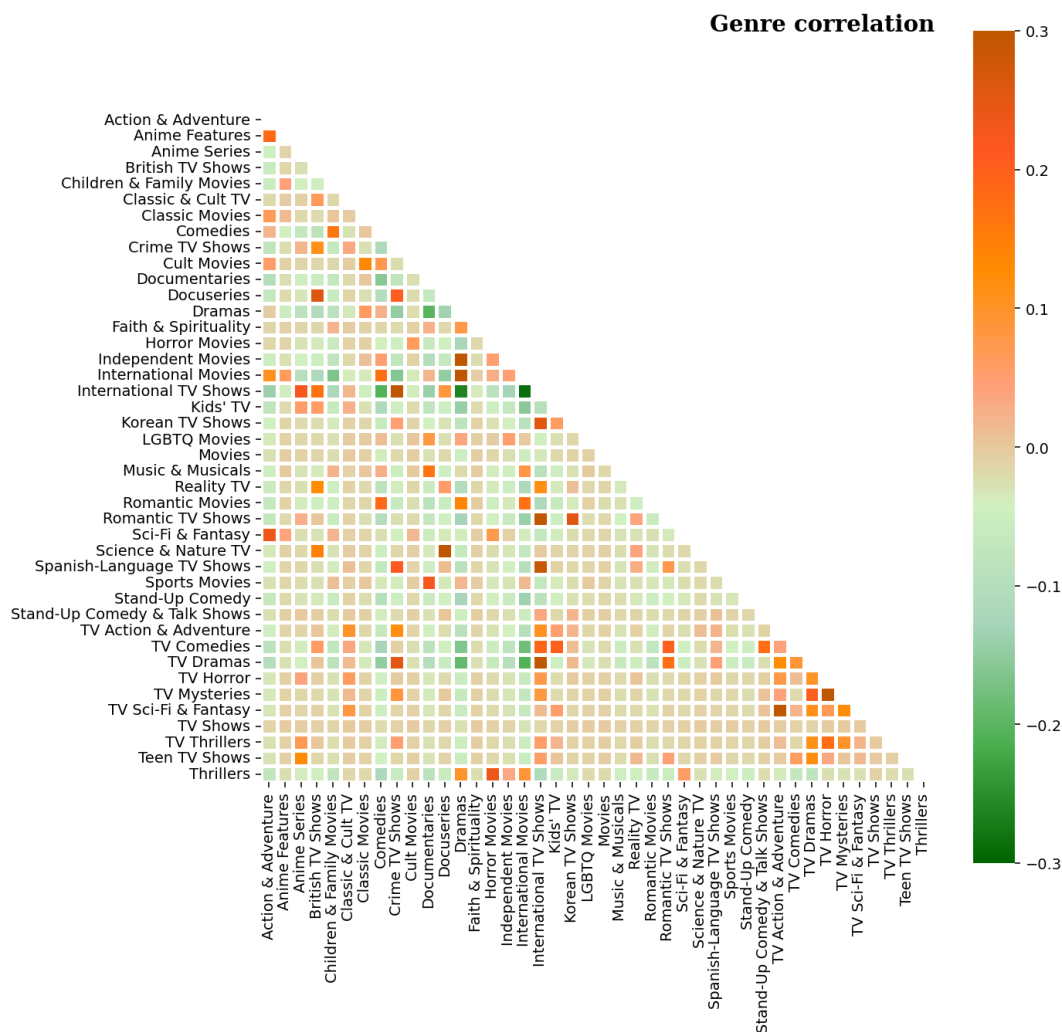

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14. Top 10 Directors by Number of Titles

Top 10 Directors by Number of Titles
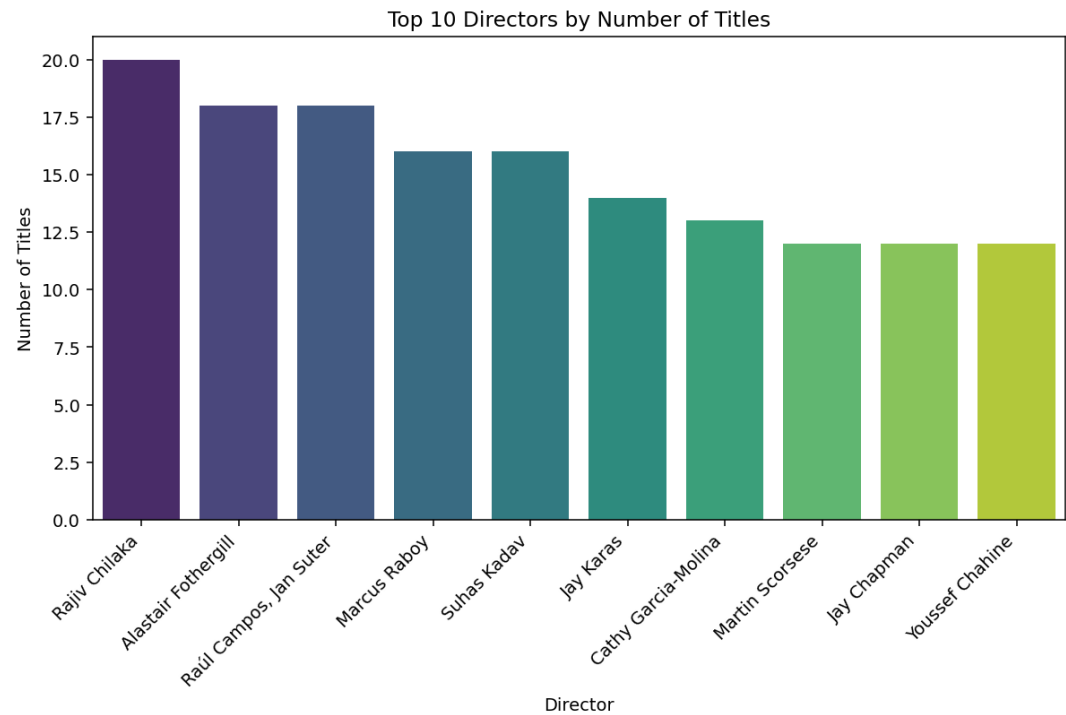
- Rajiv Chilaka is the director with the most titles, followed by Alastair Fothergill and Raúl Campos, Jan Suter.
- The number of titles directed by the top 10 director's ranges from approximately 12 to 20.
- The directors are from various countries, including India, the United Kingdom, and Spain.
- The chart does not provide information about the types of films or TV shows directed by the directors.

15. How the top genre varies in overall percentage of release in a lustrum

Stacked Bar Graph of Categories by 5-Year Intervals (Percentage)
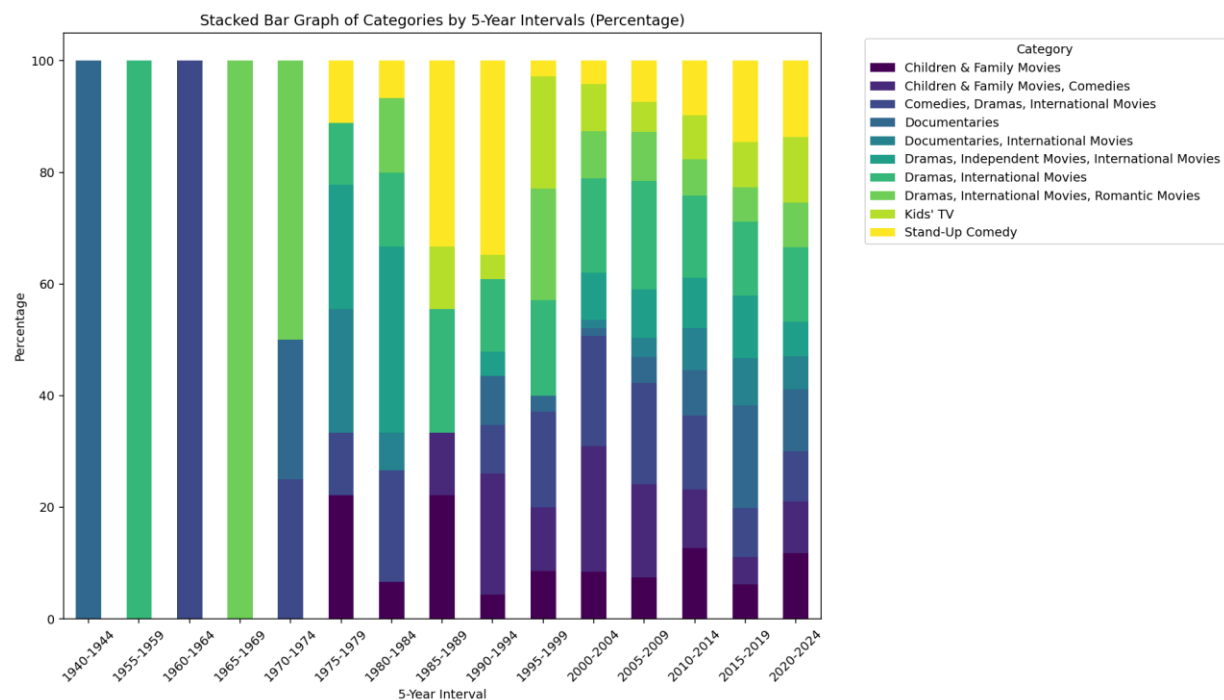
- 1940-1974: Early years (1940-1964) were primarily dominated by Children & Family Movies and Dramas, International Movies. This suggests a focus on more traditional forms of cinema, especially

content geared towards families and general audiences. The introduction of more categories, such as Comedies and International Movies, began to diversify after the 1950s.

- 1975-1989: A notable rise in Kids' TV content can be seen starting in the 1970s. There is also a growing presence of Documentaries and Independent Movies by this period, indicating the emergence of more niche and specialized forms of entertainment. Stand-Up Comedy also begins to show a presence around the 1980s, reflecting the growing popularity of this format.
- 1990-2019: From the 1990s onward, the chart shows increasing diversity in content types. Stand-Up Comedy, Dramas, International Movies, and Documentaries all have a substantial share. Children & Family Movies continue to maintain a significant share, but new categories like Dramas, Independent Movies begin to expand in prominence. The presence of Kids' TV grows in the 1990s and into the early 2000s, likely reflecting the expansion of television programming aimed at younger audiences.
- 2020-2024: This period shows significant growth in categories like Kids' TV, Stand-Up Comedy, and Dramas, International Movies. The chart suggests that content is becoming increasingly diverse, with a broader range of categories sharing space, likely due to the rise of streaming platforms offering a variety of content types.

Early dominance by family-friendly content like Children & Family Movies has given way to a much wider variety of categories over time.

Documentaries and International Movies have shown steady growth, reflecting increasing global and non-fictional content.

Kids' TV and Stand-Up Comedy have seen significant expansion from the 1980s onward, particularly as television and streaming content have flourished.

16. Trend of rating over time

Stacked Bar Graph of Ratings by 5-Year Intervals (Percentage)
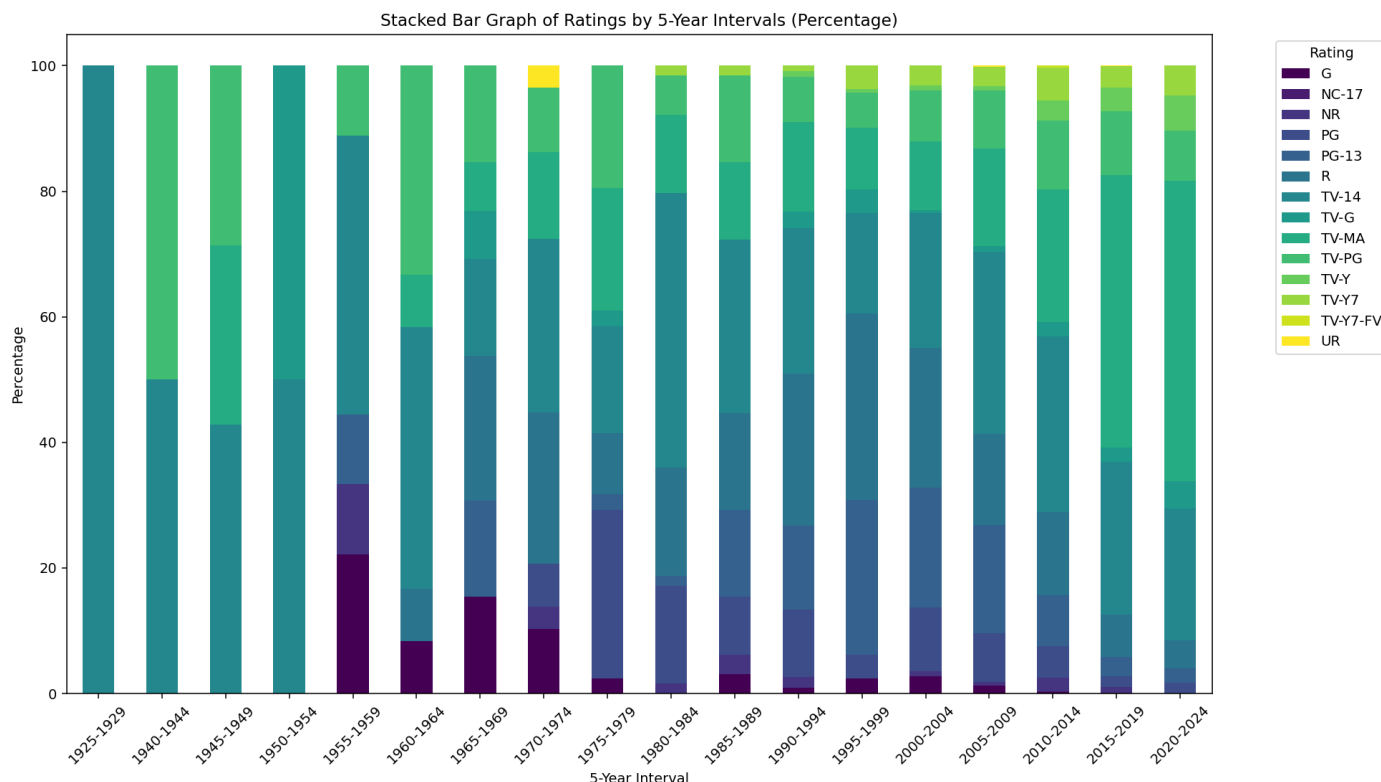
- 1925-1959 (early periods): Content was mostly rated as G (General Audience) or similar ratings like TV-G, indicating family-friendly content in these decades. As time progressed, particularly from 1955 to 1959, other ratings such as PG and R began to emerge, showing diversification in movie content.

- 1960-1999: The rise of more diverse content ratings like PG-13, R, and TV ratings (TV-14, TV-MA) occurred. This suggests a growing complexity and variety in content, catering to both general audiences and more mature viewers. Around the 1980s, we see a broader mix of ratings.
- 2000s onward: There's a strong presence of TV ratings (TV-MA, TV-14, TV-PG, etc.), possibly due to the rise of television content and streaming services. By the 2010s and 2020s, the chart shows the presence of almost every rating, though some (like NC-17 and NR) are less frequent.