

ABOUT:

Netflix, Inc. is an American streaming service and production company, offering a vast library of films and TV series, including Netflix Originals. As of March 31, 2023, it has 232.5 million paid memberships in over 190 countries. Founded by Reed Hastings and Marc Randolph in 1997, Netflix started as a DVD rental business before shifting to streaming in 2007, transforming home entertainment.

Features of the dataset:

- Show_id: Unique ID for every Movie / Tv Show
- Type: Identifier A Movie or TV Show
- Title: Title of the Movie / Tv Show
- **Director:** Director of the Movie
- Cast: Actors involved in the movie/show
- Country: Country where the movie/show was produced
- Date_added: Date it was added on Netflix

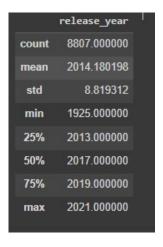
- Release_year: Actual Release year of the movie/show
- Rating: TV Rating of the movie/show
- **Duration:** Total Duration in minutes or number of seasons
- Listed_in: Genre
- **Description:** The summary description

```
RangeIndex: 8807 entries, 0 to 8806
Data columns (total 12 columns):

# Column Non-Null Count Dtype
-------
0 show_id 8807 non-null object
1 type 8807 non-null object
2 title 8807 non-null object
3 director 6173 non-null object
4 cast 7982 non-null object
5 country 7976 non-null object
6 date_added 8797 non-null object
7 release_year 8807 non-null object
8 rating 8803 non-null object
9 duration 8804 non-null object
10 listed_in 8807 non-null object
11 description 8807 non-null object
11 description 8807 non-null object
12 dtypes: int64(1), object(11)
memory usage: 825.8+ KB
```

- From the analysis above, we can see that the dataset. contains 12 features with a mix of alphanumeric data.
- Additionally, five of the columns have missing data.
- There are a significant number of missing values in the "cast" and "director" columns.
- The "type of rating" and "date_added" columns are currently classified as "object" data types, but they should be converted to categorical and datetime types, respectively.

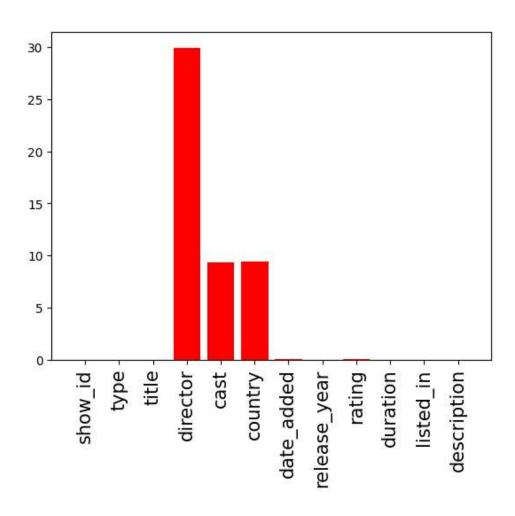
Statistical Summary



- The "release_year" column has 8,807 entries, with an average year of 2014. The release years range from 1925 to 2021.
- Most releases are recent, with 25% before 2013, 50% before 2017, and 75% before 2019.



Detecting Missing Values

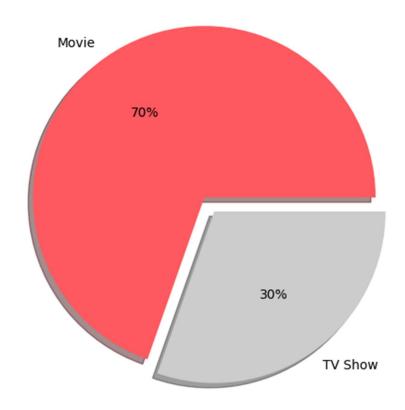


Insights:

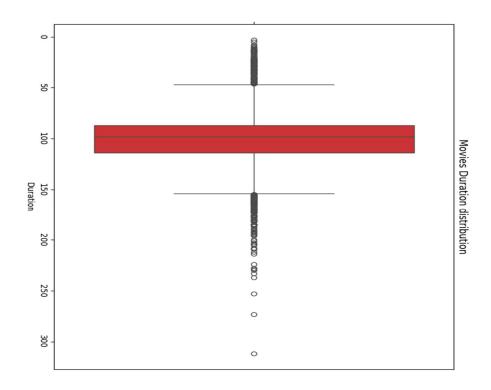
Our analysis shows six columns with missing values: 'director' has the most, followed by 'cast' and 'country'. 'Date added', 'ratings', and 'duration' have significantly fewer missing values (<1%).

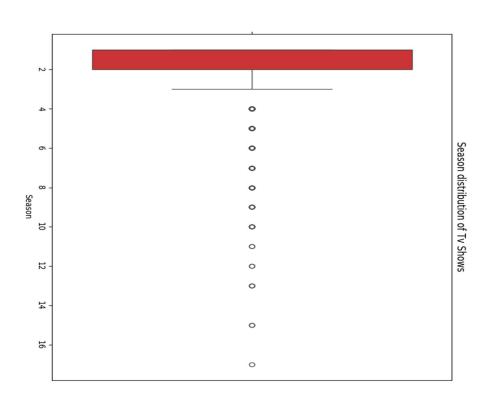
Pata Visualization & Analysis

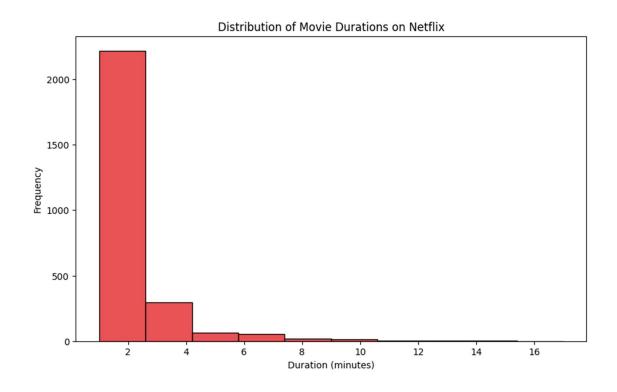
Content Distribution

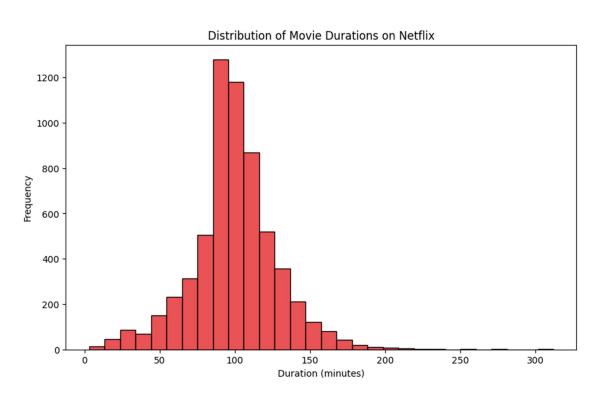


• Duration of Movies and TV Shows on Netflix





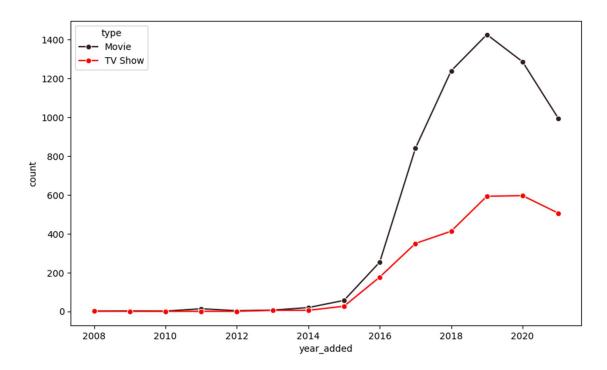




- Movies typically have an average duration of around 100 minutes, with more outliers compared to TV shows.
- TV shows usually have 1 or 2 seasons.

Movies and Tv Shows Added and Released Over time

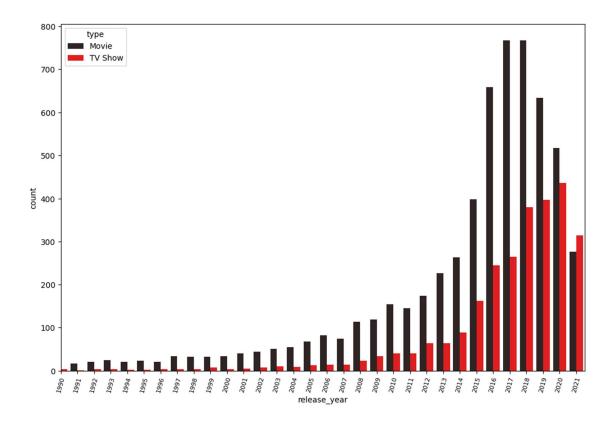
Movies and Tv Shows Added Over time



Insights:

Netflix's growth was gradual over several years, with a noticeable uptick starting in 2015.
 From 2016 onwards, there was a significant surge.

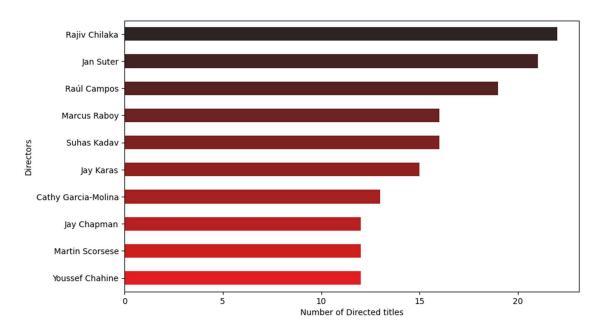
Movies and Tv Shows Released Over time



- TV Shows Peak in 2020:
 - 2020 had the most TV shows released, followed by 2019 and 2021, driven by pandemic-induced demand.
- Movie Trends Post-2015:
 - Movie releases increased after 2015, but dropped significantly in 2021, likely due to COVID-19 impacts.

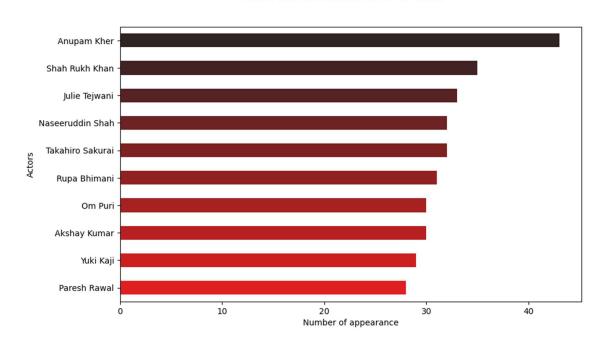
Directors with the Most Movies or TV shows

Directors with the Most Movies or TV shows



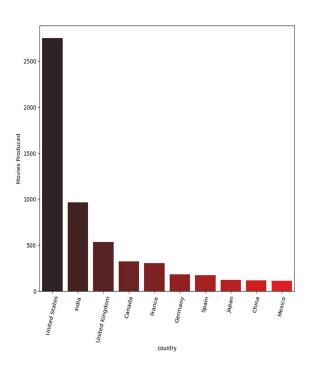
Most Appeared Actors

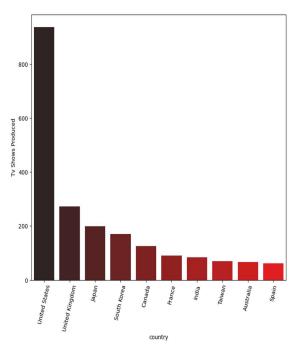
Actors with the Most Movies or TV shows



• It is noticeable that the majority of actors are of Indian origin.

Overview of Movies and TV Shows by Country

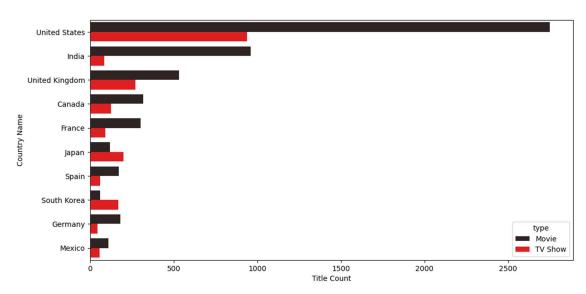




- Strategic Content Investment: Netflix emphasizes content production in the USA and India, reflecting its focus on key markets for subscriber growth.
- Diverse Global Content: Netflix curates a diverse catalog with shows from the UK, Canada, France, Japan, etc., catering to varied cultural preferences worldwide.
- Regional Viewing Preferences: Preferences in India lean towards movies over TV shows, contrasting with South Korea's preference for TV shows, shaping Netflix's regional content strategies.
- Cultural Relevance: By featuring content from various countries, Netflix enhances cultural resonance and audience engagement globally.
- Market Adaptation: Netflix's strategy adapts to local preferences, leveraging regional content consumption habits to optimize user experience and retention.

Comparison between Movies **EXECUTE** & Tv Shows **EXECUTE** On Country Basis

Movies And TV Shows Country Wise Comparision (TOP 10)



Insights:

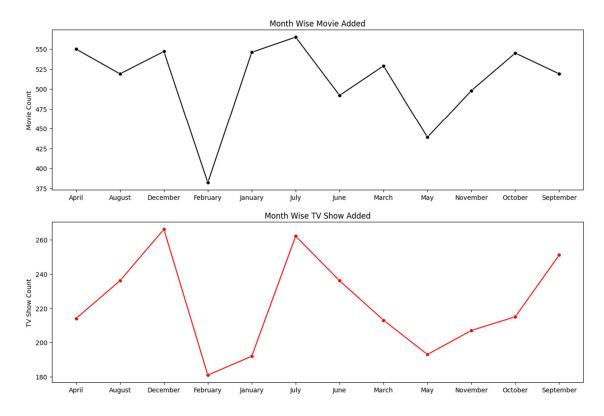
Content Preferences

- Asia: TV shows are more popular than movies, especially in South Korea and Japan.
- Europe: Movies are preferred over TV shows.
- India and North America: India has a strong preference for movies, while North American countries show a balanced interest in both movies and TV shows.



Best Month to launch a TV Show / Movie?

Movie and TV Show Launch On Platform, Month



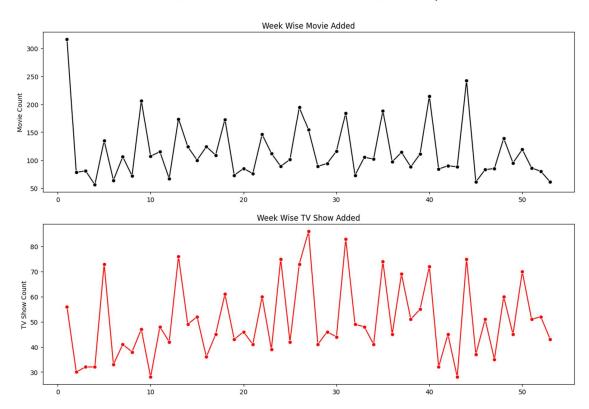


- Seasonal Trends: Both movies and TV shows experience a significant drop in February, with peaks in July and December, indicating a seasonal content addition strategy.
- High Activity Months: July and December are the peak months for adding both movies and TV shows, suggesting a coordinated effort to boost content during these periods.
- Low Activity Months: February and May are low activity months for content addition, presenting opportunities to increase content during these times to maintain user engagement.
- Consistent Trends: The similar trends in content addition for both movies and TV shows imply a unified content strategy, potentially based on user engagement data and seasonal considerations.



Best Week to Launch a Movie / TV Show

Movie and TV Show Launch On Platform , Week

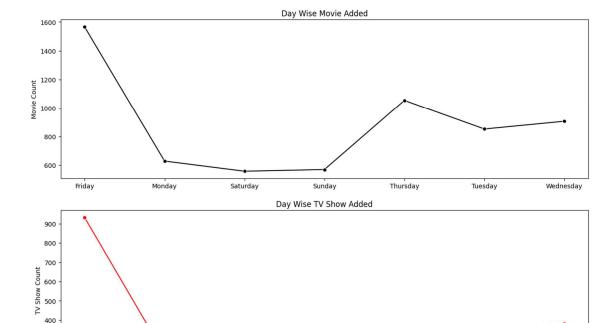


- Consistent Patterns: Both Movies and TV shows on Netflix exhibit consistent weekly
 upload patterns, showing noticeable spikes and dips. These patterns suggest a cyclic trend
 where content uploads surge during specific weeks, followed by quieter periods.
- Peak Upload Times: Movies tend to have their highest volume of uploads during the initial week of the year. TV shows see their peak uploads around the 26th week, typically towards the end of June.



Best Day to Launch a Movie / TV Show

Movie and TV Show Launch On Platform, Day



Insights:

Friday

Monday

Saturday

200

Peak Content Addition Day: Most movies and TV shows are added on Fridays, indicating a strategic end-of-week release.

Sunday

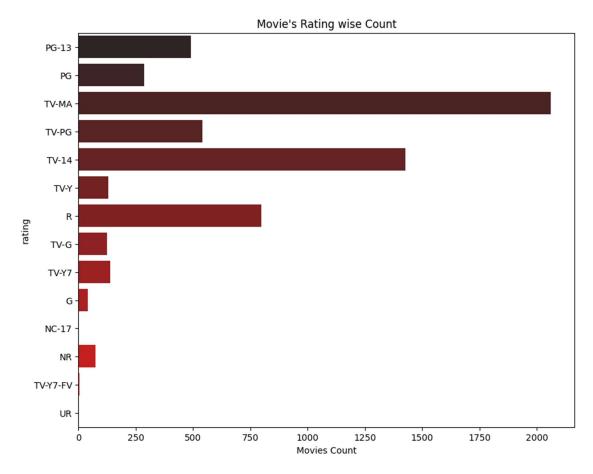
Thursday

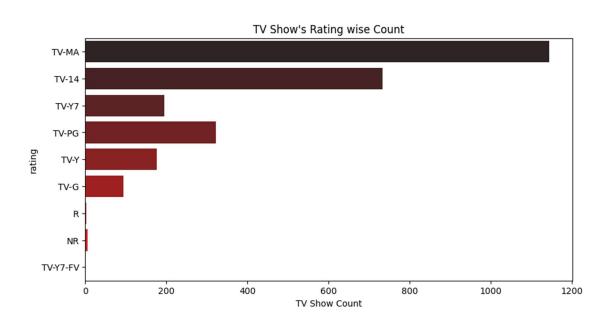
Tuesday

Wednesday

- Low Activity Days: Sundays see the fewest movies, and Mondays have the fewest TV shows, marking these as less active days for content addition.
- Midweek Trends: Content additions increase midweek, with significant upticks for both movies and TV shows on Thursdays.
- Consistent Patterns: The similar patterns in content release for movies and TV shows suggest a coordinated strategy to maximize engagement towards the end of the week.

© Content Ratings





- The majority of Netflix's movies and TV shows are aimed at adult audiences, with significant content rated TV-MA.
- Following adult content, a considerable amount of Netflix's offerings are rated TV-14, targeting teenage viewers.
- There is also a notable portion of content rated TV-PG, suitable for older children.
- Content rated TV-Y and TV-Y7, designed for younger children, makes up a smaller segment of Netflix's library.
- This distribution indicates Netflix's strategic focus on appealing to a wide audience, with a particular emphasis on adults and teens due to their substantial purchasing power.

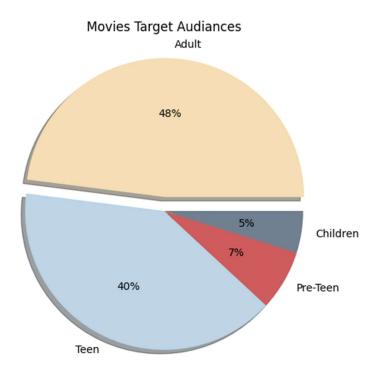
Various Genres of Movies and TV Shows available on Netflix.

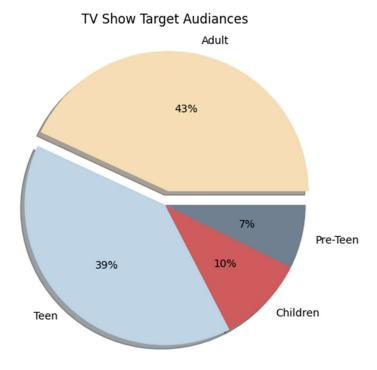




- Netflix's popular movie genres span International Movies, Comedies, Dramas, Family, Action, and Romantic films.
- Among Netflix International series, TV shows, popular genres include Drama, Crime,
 Romance, Kids' content, Comedies, Anime, and Reality Shows.

Targeted Audience





Q Insights:

- Movies: Netflix's movie collection is predominantly geared towards adult viewers, with a significant portion also catering to teenagers and a smaller segment tailored for children.
- TV Shows: Netflix's TV show lineup follows a similar trend, with a notable emphasis on content for children alongside offerings for adult and teenage audiences, including popular anime series.

Rating Wise Countries Demographic Analysis

1.1 0 1.2 6.6 12 18
1.2 6.6 12
6.6 12 18
12 18
18
14
2.4
30
8.2
3.4
4
0.1
0
United States -

- High TV-MA Content in the U.S. and Spain: The United States (73%) and Spain (60%) have the highest percentages of TV-MA content, indicating a preference for mature content in these countries.
- Dominance of TV-14 in India: India has an exceptionally high percentage (55%) of TV-14 rated content, suggesting a significant focus on content suitable for teenagers and older audiences.
- R and TV-MA Content Popularity: TV-MA and R-rated content are notably popular across
 multiple countries, with the U.S., France, and Spain showing high percentages, highlighting
 a trend towards mature and adult content.
- Low NC-17 Content: NC-17 content is almost negligible across all countries, indicating either low production or limited acceptance of this rating category globally.

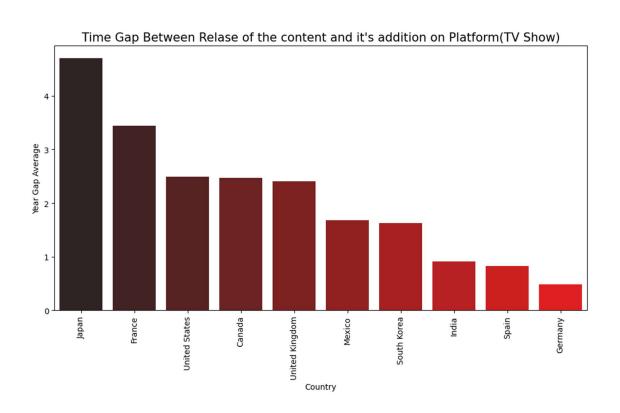
Correlation Heatmap of Content Distribution Among Countries

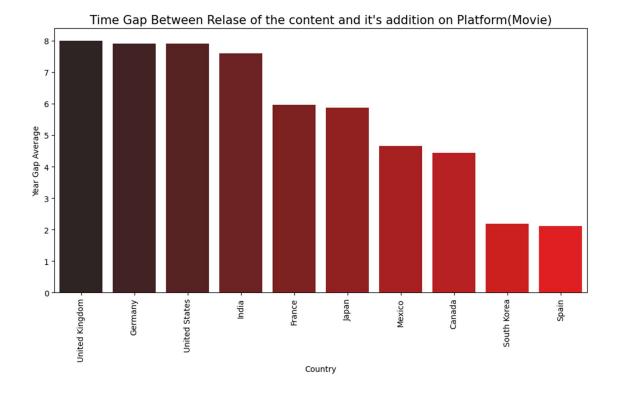
Correlation Heatmap of Content Distribution Among Countries

Correlation Heatmap of Content Distribution Among Countries											
Canada -	1	0.9	0.9	0.46	0.69	0.78	0.67	0.74	0.93	0.94	
France -	0.9	1	0.96	0.49	0.74	0.96	0.78	0.94	0.93	0.95	
Germany -	0.9	0.96	1	0.48	0.7	0.89	0.7	0.85	0.98	0.99	
India -	0.46	0.49	0.48	1	0.9	0.52	0.9	0.42	0.54	0.54	
Japan -	0.69	0.74	0.7	0.9	1	0.78	0.97	0.7	0.75	0.74	
Mexico -	0.78	0.96	0.89	0.52	0.78	1	0.82	0.99	0.87	0.86	
South Korea -	0.67	0.78	0.7	0.9	0.97	0.82	1	0.76	0.73	0.73	
Spain -	0.74	0.94	0.85	0.42	0.7	0.99	0.76	1	0.83	0.82	
United Kingdom -	0.93	0.93	0.98	0.54	0.75	0.87	0.73	0.83	1	0.98	
United States -	0.94	0.95	0.99	0.54	0.74	0.86	0.73	0.82	0.98	1	
	Canada -	France -	Germany -	India -	Japan -	Mexico -	South Korea -	Spain -	United Kingdom -	United States -	

- High Correlation Among Western Countries: The United States, United Kingdom, Canada, France, and Germany exhibit very high correlations in content distribution, indicating similar content preferences.
- Distinct Content Preferences in India: India shows lower correlations with other countries, especially Western ones, highlighting unique content consumption patterns.
- Similar Content Preferences Between Mexico and Spain: Mexico and Spain have a high correlation (0.99), reflecting similar content distributions, likely due to shared language and cultural ties.
- Moderate Correlation for Japan and South Korea: Japan and South Korea show moderate correlations with Western countries, suggesting a blend of unique and shared content preferences.

∑ Time Gap Between Release of the content and it's addition on Platform





- In general, movies are added to Netflix with a longer delay compared to TV shows, suggesting a higher demand for recent TV shows among viewers.
- Spain stands out with a minimal delay of 2 years for movies and 1 year for TV shows, indicating a preference for more recent content.
- India, the United Kingdom, the United States, and France show significant delays of 6 to 8
 years for movies and only 1 to 3 years for TV shows, reflecting a preference for recent TV
 content over older movies.
- Japan maintains a consistent delay of 5 to 6 years for both movies and TV shows, possibly influenced by considerations related to dubbing or language barriers, ensuring a stable release pattern.

Strategic Business Recommendations for Netflix

1. Enhanced Investment in Localized Content:

- Cultural Relevance: Continue investing in content that aligns with diverse cultural and linguistic preferences globally.
- Asian Market Focus: Increase production and acquisition of Asian TV shows, particularly from South Korea and Japan.
- European Movie Curation: Prioritize building a diverse and engaging movie library tailored to European tastes.
- Market Emphasis: Maintain focus on content production in the USA and India due to significant investment and market potential.

2. Optimized Release Timing Strategies

- Monthly Focus: Concentrate on high-quality releases during peak viewer demand months (January, July, August, October, December).
- Weekly Highlight: Designate the first week of each month as a "Featured Release Week" to launch major TV shows or movies. Use subsequent weeks to promote existing content effectively.

3. Targeted Age-Specific Content Expansion

- Teen-Centric Content: Partner with local studios in India and Japan to develop original series and movies that resonate with teenage audiences.
- Adult-Centric Content: Create sophisticated and culturally aligned original content for mature audiences in Spain, Mexico, Germany, and France.

4. Diverse Content Runtimes

- Movie Formats: Continue producing standard-length films while exploring medium-length formats to cater to varied viewer preferences.
- TV Series Formats: Focus on producing limited series and shorter seasons to accommodate audience preferences for manageable episodic content.

5. Streamlined Content Acquisition Strategy

 Timely Access: Improve acquisition of recent movies to reduce the gap between theatrical release and availability on the platform, aligning with viewer expectations for up-to-date content.

Additional Point:

 Data-Driven Decision-Making Analytics Integration: Utilize viewer data to inform content acquisition, production, and release strategies, ensuring decisions are aligned with audience preferences and market trends