Netflix Data Analysis Report

Internship: Unified Mentor – Data Analyst

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Tools Used: Power BI, Power Query, Microsoft Excel, Python, Google Colab

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1.Intoduction: -

This project aims to examine the structure and distribution of movies and TV shows available on Netflix. The dataset contains details about each title, including type, director, country of origin, release year, rating classification, duration, date added to Netflix, and genre categories. The objective of this analysis is to understand how Netflix builds its content library, identify dominant trends, and observe patterns in the types of content added over time.

2. Dataset Overview: -

The dataset consists of 8,790 records with 10 key attributes, including show type, title, director, country, date added to platform, release year, rating, duration, and genre listings. Before analysis, the dataset was cleaned by removing duplicates, filling missing values, converting date fields into a standard format, and extracting year and month information for trend analysis.

3. Data Cleaning Summary: -
- Duplicate entries removed
- Missing values replaced with 'Unknown'
- Date format standardized- Extracted year, month, and day
- Duration column cleaned

4. Exploratory Data Analysis (EDA): -

4.1 Content Type Distribution:
Netflix contains more movies than TV shows, suggesting a focus on film-based content.
4.2 Rating Distribution:
TV-MA is the most frequent rating, indicating Netflix's focus on mature content.

4.3 Country Contribution:
The United States contributes most of the content, followed by India and the UK.

4.4 Monthly Release Trends:
Higher number of titles added between August and December.

4.5 Yearly Release Trends:
Significant growth after 2017, matching Netflix's global expansion.

4.6 Genre Analysis:
Drama, International Movies, and Comedy genres dominate Netflix's catalog.

4.7 Word Cloud Interpretation:
Frequent words like 'Love', 'Girl', and 'Man' highlight recurring title themes.

5. Key Insights: -

- Netflix has more movies than TV shows.
- TV-MA is the most common rating category.
- The USA, India, and UK contribute the most content.
- Monthly additions peak in the last quarter of the year.
- Content additions grew rapidly after 2017.
- Drama and International genres are highly popular.

6. Business Recommendations: -
- Increase family-friendly content to diversify audience segments.
- Expand regional content production in emerging markets.
- Invest more in Drama and International genres to maximize engagement.

7. Conclusion: -
Netflix's library is dominated by movies and adult-rated content, with strong contributions from the United States. The platform has experienced rapid growth since 2017 and continues to focus on globally appealing genres. These insights help understand Netflix's content structure and future content opportunities.
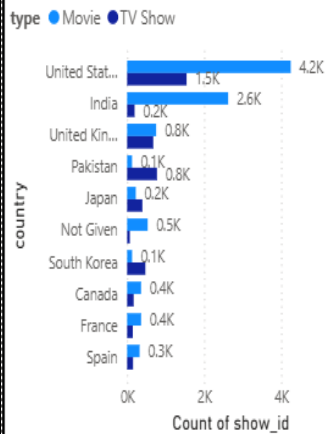
8. Dashboard Snapshot (Power BI)
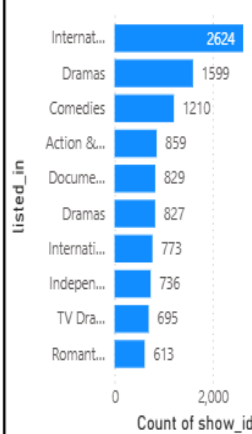Figure: Netflix Content Analytics Dashboard (Power BI)

Note: Interactive features such as scrolling and filters are available in the Power BI file.
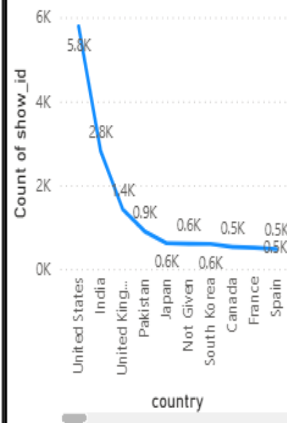
Netflix Content Analytics Dashboard

Movies vs TV Shows by Country on Netflix

type ● Movie ● TV Show

- United Stat... — 4.2K / 1.5K
- India — 2.6K / 0.2K
- United Kin... — 0.8K
- Pakistan — 0.8K / 0.1K
- Japan — 0.2K
- Not Given — 0.5K
- South Korea — 0.1K
- Canada — 0.4K
- France — 0.4K
- Spain — 0.3K

country — Count of show_id (0K, 2K, 4K)

Top 10 Genres on Netflix

listed_in — Count of show_id (0, 2,000)

- Internat... — 2624
- Dramas — 1599
- Comedies — 1210
- Action &... — 859
- Docume... — 829
- Dramas — 827
- Internati... — 773
- Indepen... — 736
- TV Dra... — 695
- Romant... — 613

Top Countries by Number of Titles on Netflix

Count of show_id (0K–6K)

5.8K, 2.8K, 0.9K, 0.6K, 0.6K, 0.5K, 0.5K, 0.5K

country: United States, India, United King..., Pakistan, Japan, Not Given, South Korea, Canada, France, Spain

Total Titles

8,791

Count of show_id

Movies

13,184

Count of type

TV Shows

6,109

Count of type

Movies vs TV Shows Content Distribution on Netflix

2.66K (30.3%)
6.13K (69.68%)

type
- ● Movie
- ● TV Show
- ● William Wyler
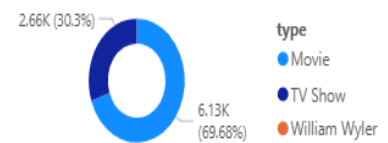
Top 10 Directors on Netflix

director — Count of show_id (0, 1, 2, 3)

- Kongkiat Khomsiri — 3
- Marwan Nabil — 3
- Seema Pahwa — 3
- Takashi Shimizu — 3
- Yılmaz Erdoğan, ... — 3
- MIKIKO, Daito Ma... — 2
- Rindala Kodeih — 2
- Santhosh Viswana... — 2
- Selçuk Aydemir — 2
- Selçuk Aydemir, B... — 2

Top 10 Countries by Number of Titles on Netflix

country — Count of show_id (0, 2,000, 4,000, 6,000)

- United States — 5790
- India — 2816
- United Kingdom — 1431
- Pakistan — 901
- Japan — 619
- Not Given — 603
- South Korea — 601
- Canada — 530
- France — 509
- Spain — 476
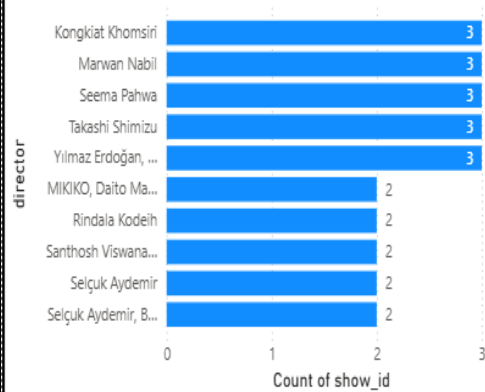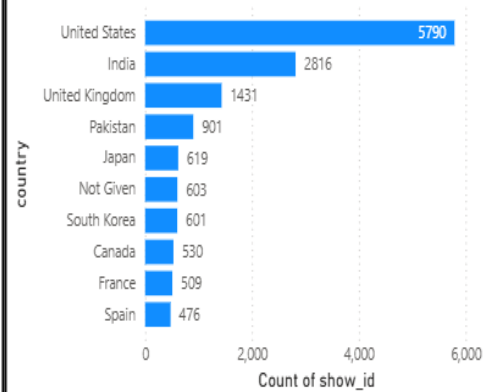
Titles Added on Netflix Over the Years

type ● Movie ● TV Show

Count of show_id (0, 500, 1,000, 1,500, 2,000) vs release_year (1900, 2000)