Netflix Data Visualization

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Data and Method: The data for this project was obtained from an open-source Netflix dataset. All visualizations were created using Python, employing various libraries such as Matplotlib and Seaborn for charts, and Pandas for data manipulation. The dataset includes Netflix content metadata, which was analyzed and processed to produce insights into trends and patterns.
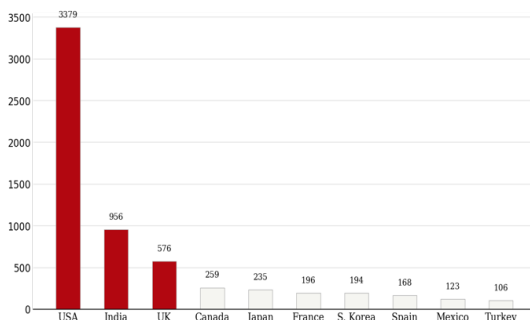

Figure 1: word cloud of Netflix

Figure 1 shows prominent words extracted from the titles or descriptions of Netflix content. Words like "Love," "Story," and "World" appear larger, suggesting they are frequently associated with Netflix's show or movie library. This highlights the platform's focus on genres such as romance, adventure, and fantasy.

Figure 2: Top 10 countries on Netflix

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

	Movie	TV Show
India	92.4%	7.64%
Turkey	73.6%	26.4%
Spain	70.8%	29.2%
France	69.9%	30.1%
USA	68.8%	31.2%
Canada	67.6%	32.4%
Mexico	64.2%	35.8%
UK	59.2%	40.8%
Australia	52.8%	47.2%
Japan	31.9%	68.1%
S. Korea	21.6%	78.4%

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.

South Korean Netflix on the other hand is
almost entirely TV Shows.

The underlying resons for the difference
in content must be due to market research
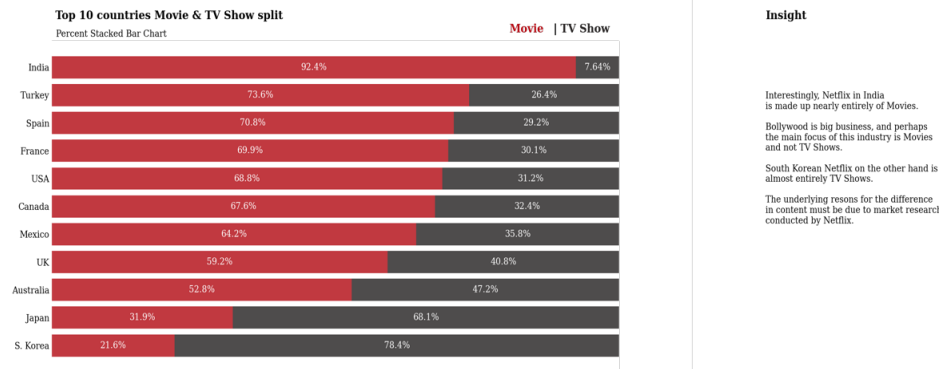conducted by Netflix.

Figure 3: Top 10 countries Movie & TV shows

1. **Figure 2 (Bar Chart - Genre Distribution)**:
   o **Content**: This bar chart represents the count of Netflix titles across various genres. The highest bar represents genres with the most content, such as "Drama," with a count significantly surpassing other genres like "Comedy" or "Thriller." The genre distribution highlights Netflix's strategic focus on user-preferred categories.
   o **Analysis**: The high count for certain genres suggests a strong audience demand. Lesser-represented genres could reflect niche interest or underinvestment in diverse content.
   o **Insight**:The most prolific producers ofcontent for Netflix are, primarilythe USA, with India and the UK a significant distance behind. It makes sense that the USA producesthe most content as, afterallNetflix is a US company.
2. **Figure 3 (Stacked Bar Chart - Movies vs. TV Shows by Country)**:
   o **Content**: A horizontal stacked bar chart showing the proportion of movies (red) versus TV shows (gray) in Netflix's content library, categorized by country. The highest percentages of movies are observed in certain regions, whereas others emphasize TV shows more prominently.
   o **Application**: Demonstrates how Netflix tailors content distribution based on regional viewer demand, influencing its acquisition and production strategy.
   o **Insights**: Interestingly, Netflix in Indiais made up nearly entirely of Movies. Bollywood is big business, and perhapsthe main focus of this industry is Moviesand not TV Shows. South Korean Netflix on the other hand isalmost entirely TV Shows. The underlying resons for the differencein content must be due to market researchconducted by Netflix.
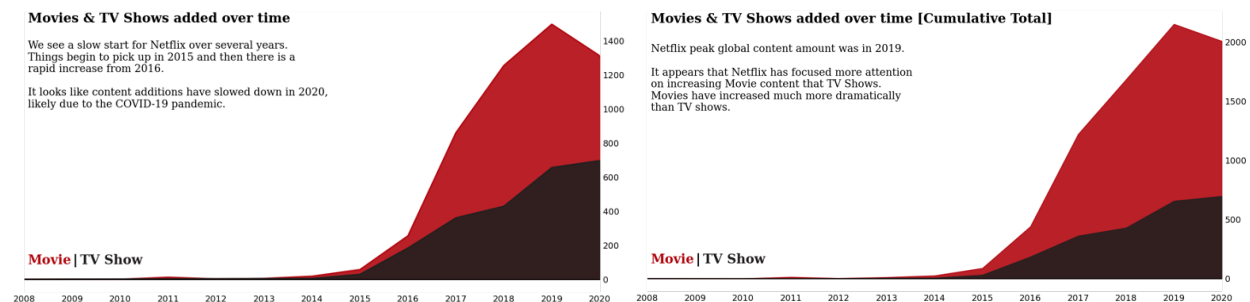

Movies & TV Shows added over time

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.

It looks like content additions have slowed down in 2020,
likely due to the COVID-19 pandemic.

Movie | TV Show

Movies & TV Shows added over time [Cumulative Total]

Netflix peak global content amount was in 2019.

It appears that Netflix has focused more attention
on increasing Movie content that TV Shows.
Movies have increased much more dramatically
than TV shows.

Movie | TV Show

Figure 4: Movies & TV Shows added over time.
Figure 5: Movies & TV Shows added over time [Cumulative Total]

3. **Figures 4 and 5** analyze the growth of Netflix's library over time. Figure 4 shows the yearly addition of movies (red) and TV shows (black), highlighting a significant rise post-2015 and a

slowdown in 2020, likely due to COVID-19. Figure 5 illustrates the cumulative total of added content, with a sharp increase in movies compared to TV shows, peaking in 2019. Together, these figures reveal Netflix's strategic focus on rapid content expansion, particularly in movies, and external factors influencing its growth trajectory.
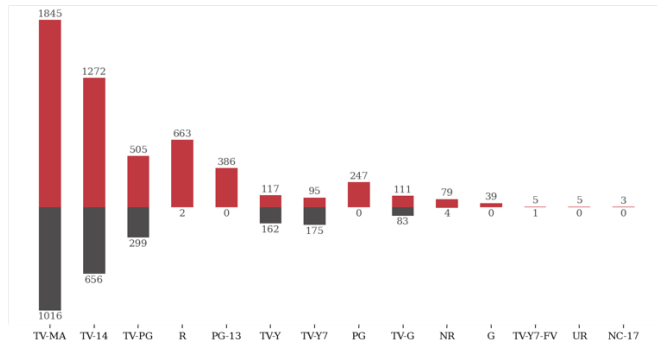
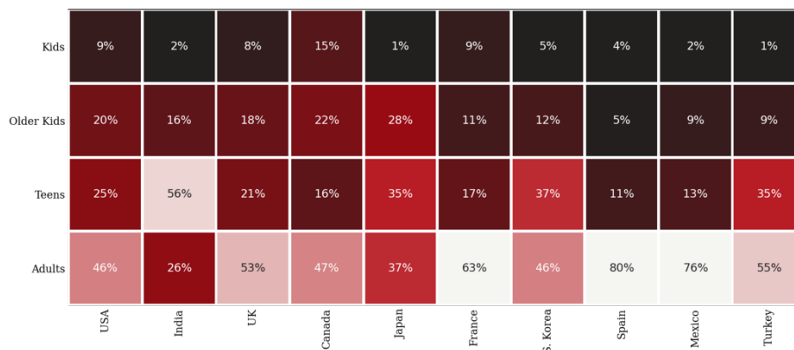Figure 6: Rating distribution by Film & TV Show

Figure 7: Target ages proportion of total content by country

4. **Figure 6: Rating Distribution by Film & TV Show**

   - **Content**: This bar chart shows the distribution of Netflix content ratings for movies (red) and TV shows (black). The most common ratings are TV-MA and TV-14, indicating a focus on mature audiences and young adults. Certain ratings, like "PG-13," apply only to movies, while others, like "TV-Y," are specific to TV shows.
   - **Insights**: The dominance of TV-MA and TV-14 reflects Netflix's significant focus on mature and teenage audiences, with fewer offerings targeted at younger children.

5. **Figure 7: Target Age Proportion of Total Content by Country**

   - **Content**: This heatmap visualizes the distribution of Netflix content by target age group across countries. For instance, Mexico and Spain have a dominant focus on adult audiences (76%-80%), while India has a substantial share (56%) for teens.
   - **Insights**: Netflix tailors its content offerings based on regional audience preferences. The focus on adults is prevalent across most regions, while India prioritizes content for teens, showcasing market-specific strategies.

Github Link: https://github.com/peterrrhan/Netflix-Data-Visualization