# Netflix Data Analysis

This project involves the creation of a comprehensive Power BI dashboard that analyses Netflix's catalogue of movies and TV shows from 1953 to 2022. The dashboard provides valuable insights into content trends, user ratings, runtime patterns, and distribution across age certifications and decades. The analysis is based on key performance indicators (KPIs) such as IMDb scores, IMDb votes, runtime, and count of titles.

**📊 Dashboard Overview**

The Power BI dashboard is divided into four core analytical sections:

**1. General Overview**

* **Avg Runtime**: 38.63 minutes
* **Avg IMDb Score**: 7.02
* **Total Titles Analysed**: 1,876 (Movies & Shows combined)

**Key Insights:**

* Titles like *Breaking Bad*, *Avatar: The Last Airbender*, and *Reply 1988* stand out for high IMDb scores.
* *TV-MA* category has received the highest number of IMDb votes (~19M), followed by *TV-14* and *TV-PG*.

**2. Rating Analysis**

* **Top Rated Titles**: Include *Khawatir*, *My Mister*, *Arcane*, and *The Last Dance*.
* **Bottom Rated Titles**: Include *Richie Rich*, *The Goop Lab*, *Hype House*, *Racket Boys*, and *He's Expecting*.
* **Rating by Age Certification**:
  + *TV-14*, *TV-MA*, and *TV-PG* consistently achieve higher average ratings (~7+).
  + Ratings tend to slightly decline for younger age certifications like *TV-Y*, *TV-G*.
* **Rating by Release Year**:
  + Surge in ratings from 2015 to 2020, peaking around 2020, followed by a slight drop.

**3. Runtime Analysis**

* **Runtime by Release Year**:
  + There is a noticeable downward trend in average runtime post-2010, with the lowest averages seen in the 2020s.
* **Runtime by Age Certification**:
  + Titles rated *PG-13*, *R*, and *NC-17* tend to have the longest average runtimes (~100+ mins).
  + Shortest runtimes are observed in *TV-Y*, *TV-G*, and *TV-Y7*.
* **Runtime by Decade**:
  + 1990s titles had the highest average runtimes, followed by 2000s.
  + 2020s titles have shorter durations, aligning with the modern content consumption trend.

**4. Count Analysis**

* **Age Certification-wise Count**:
  + *TV-MA* has the highest number of titles, followed by *R*, *TV-14*, and *PG-13*.
* **Year-on-Year (YoY) Count**:
  + A significant spike in content production between 2015–2020, with a slight decline post-2021.
* **Decade-wise Count**:
  + Highest content volume produced during the 2010s, followed by the 2020s and 2000s.
* **Type-wise Count**:
  + TV Shows: 1,670 titles
  + Movies: 1,328 titles

**🔧 Key Features and Tools Used**

* **Platform**: Power BI Desktop
* **Visualizations**: Line charts, bar charts, pie/donut charts, cards, slicers
* **Data Transformation**: Power Query for data cleaning and shaping
* **DAX Measures**:
  + Average IMDb score
  + Total IMDb votes
  + Year-wise and certification-wise aggregations
* **Interactive Filters**:
  + Type Selector (Movie/Show)
  + Release Year Slider

**📈 Insights & Conclusion**

This analysis highlights content trends on Netflix over seven decades. High-performing titles often have longer runtimes and fall under mature certifications like *TV-MA* and *TV-14*. However, there's a recent industry shift towards shorter content. The surge in content production post-2015 coincides with Netflix's global expansion. The dashboard equips decision-makers and analysts with data-driven insights into content performance, helping inform future content strategies.