

Project Documentation

Netflix Movies & TV Shows Analysis

1. Project Overview

This project analyses Netflix Movies and TV Shows data using Excel, Power Query, and Power BI to identify trends in content distribution, genres, ratings, and global availability. The goal of this project is to transform raw data into meaningful insights through interactive visualizations and dashboards.

2. Tools Used

- Microsoft Excel
- Power Query
- Power BI Desktop

3. Dataset

- **Source:** Public Netflix dataset (<https://www.data4ecology.org/>)
- **Data contains:**
 - Title
 - Content Type (Movie / TV Show)
 - Genre
 - Country
 - Release Year
 - Rating
 - Duration
 - Date Added

4. Steps Followed

Excel:

- Assigned appropriate data types to all columns based on their content.
- Removed unnecessary columns such as *Sl.No* and deleted empty rows.
- Trimmed and cleaned text fields to ensure consistent formatting.
- Corrected a small number of records where data entries were misaligned in the source file.
- Standardized categorical fields such as *listed_in* and duration units.
- Split the duration column into *duration value* and *duration type* for better analysis.
- Handled missing values using appropriate strategies:
 - Replaced missing text fields (director, cast, country) with “*Information Not Available*”.
 - Replaced missing ratings with “NR”.

- Left missing date and year values as null since they could not be reliably inferred from the source data.
 - Checked for duplicate records using **show_id** and confirmed no duplicates existed.
 - Converted **show_id** data type to text since it is an identifier and not used in calculations

Power BI:

- Imported the cleaned dataset into Power BI.
 - Verified and adjusted data types for accurate analysis.
 - Created a **reference table (Netflix_Country)** from the country column to properly analyze multi-country entries.
 - Established relationships between the main dataset and the country reference table for improved filtering and reporting.
 - Built interactive visualizations such as bar charts, line charts, and pie charts.
 - Added slicers to enable dynamic filtering by year, genre, and content type.
 - Applied formatting and layout enhancements for better dashboard presentation.

5. Key Insights

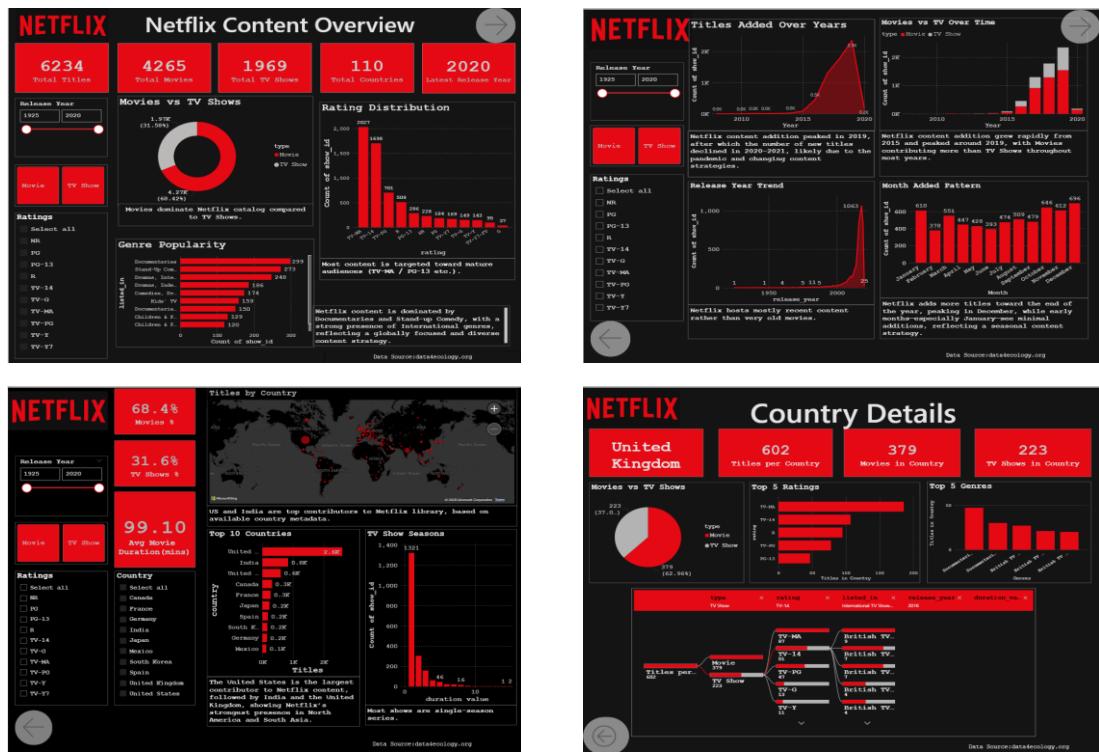
- Movies make up the majority of content available on Netflix compared to TV Shows.
 - There was a significant increase in content additions after 2015.
 - Most Netflix content belongs to a few dominant genres.
 - The United States contributes the highest number of titles.
 - TV Shows generally have higher maturity ratings compared to Movies.

6. Screenshots

Excel:

Raw Data								Cleaned Data							
show_id	type	title	director	cast	country	date_added	release_yr	rating	duration	show_id	type	title	director		
1_81145628	Movie	Norm Of The North: King Sized Adventure	Richard Finn, Tim Maltby							81145628	Movie	Norm Of The North: King Sized Adventure	Richard Finn, Tim Maltby		
2_80117401	Movie	Jandino: Whatever It Takes	Information Not Available							80117401	Movie	Jandino: Whatever It Takes	Information Not Available		
3_70234439	TV Show	Transformers Prime	Peter Culli	United States	September	2013	TV-Y7-FV	1 Season		70234439	TV Show	Transformers Prime	Information Not Available		
4_80058654	TV Show	Transformers: Robots In Disguise	Information Not Available							80058654	TV Show	Transformers: Robots In Disguise	Information Not Available		
5_80125979	Movie	#Realtyhigh	Fernando Lebría	Nesta Coo	United States	September	2017	TV-14	99 min	80125979	Movie	#Realtyhigh	Fernando Lebría		
6_80163890	TV Show	Apaches	Alberto Arbelaez	Spain	September	2016	TV-MA	1 Season		80163890	TV Show	Apaches	Information Not Available		
7_70304989	Movie	Automata	Gabe Ibáñez	Antonio Banderas	Bulgaria	September	2014	R	110 min	70304989	Movie	Automata	Gabe Ibáñez		
8_80164077	Movie	Fabrizio C Rodríguez	Fabrizio C	Chile	September	2017	TV-MA	60 min		80164077	Movie	Fabrizio Capano: Solo Pienso En Mi	Rodrigo Toros, Francisco Schultz		
9_80117902	TV Show	Fire Chasers	United States	September	2017	TV-MA	1 Season			80117902	TV Show	Fire Chasers	Information Not Available		
10_70304990	Movie	Good People	Henrik Ruben Genz	Rufus James Frazer	United States	September	2014	R	90 min	70304990	Movie	Good People	Henrik Ruben Genz		
11_80169755	Movie	Joaquín Y Los Reyes	José Miguel Contreras	Miguel Ángel Yáñez	September	2017	TV-MA	78 min		80169755	Movie	Joaquín Reyes: Una Vida No Más	José Miguel Contreras		
12_70299204	Movie	Kidnapping	Daniel Alfredson	Alfim Sturges	Netherlands	September	2015	R	95 min	70299204	Movie	Kidnapping Mr. Heineken	Daniel Alfredson		
13_80182480	Movie	Krish Trish And Balitboy	Damandeep Singh	B	September	2009	TV-Y7	58 min		80182480	Movie	Krish Trish And Balitboy	Information Not Available		
14_80182483	Movie	Krish Trish Munjal Sh	Damandeep Singh	B	September	2013	TV-Y7	62 min		80182483	Movie	Krish Trish And Balitboy: Battle Of Wit	Munjal Shroff, Tilak Shetty		
15_80182596	Movie	Krish Trish Munjal Sh	Damandeep Singh	B	September	2016	TV-Y	65 min		80182596	Movie	Krish Trish And Balitboy: Best Friends Forever	Munjal Shroff, Tilak Shetty		
16_80182482	Movie	Krish Trish Tilak Shett	Damandeep Singh	B	September	2012	TV-Y7	61 min		80182482	Movie	Krish Trish And Balitboy: Comics Of India	Tilak Shetty		
17_80182597	Movie	Krish Trish Tilak Shett Rishi Gambhir	Smita September	India	2017	TV-Y7	65 min			80182597	Movie	Krish Trish And Balitboy: Oversmarthness Never Pays	Tilak Shetty		
18_80182481	Movie	Krish Trish And Balitboy	Damandeep Singh	B	September	2010	TV-Y7	58 min		80182481	Movie	Krish Trish And Balitboy: Part Ii	Information Not Available		
19_80182621	Movie	Krish Trish Munjal Sh	Damandeep Singh	B	September	2013	TV-Y7	60 min		80182621	Movie	Krish Trish And Balitboy: The Greatest Trick	Munjal Shroff, Tilak Shetty		
20_80057969	Movie	Love	Gaspar Noé	Karl Glusman	France	September	2015	NR	135 mi	80057969	Movie	Love	Gaspar Noé		
21_80060297	Movie	Manhattan Romance	Tom O'Brien	Tom O'Brien	United States	September	2014	TV-14	98 min	80060297	Movie	Manhattan Romance	Tom O'Brien		
22_80046728	Movie	Moonwalkers	Antoine Bardou-Jacquet	Ron Perlman	France	September	2015	R	96 min	80046728	Movie	Moonwalkers	Antoine Bardou-Jacquet		
23_80046727	Movie	Rolling Paj	Mitch Dickman	United States	September	2015	TV-MA	79 min		80046727	Movie	Rolling Paj	Antoine Bardou-Jacquet		

Power BI:



7. Files Included

- Netflix_Movies_and_TV_Shows.csv – Original uncleaned dataset
- Netflix_Movies_and_TV_Shows_Cleaned.xlsx – Cleaned dataset.
- Netflix_Movies_and_TV_Shows_Report.pbix – Power BI dashboard file.

8. How to Use

- Open the Excel file to view the cleaned dataset.
- Open the .pbix file using Power BI Desktop to explore the interactive dashboard.
- Use slicers to filter data by year, type, genre, and country.