

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.

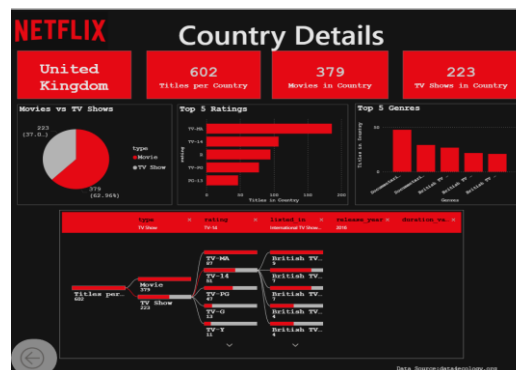
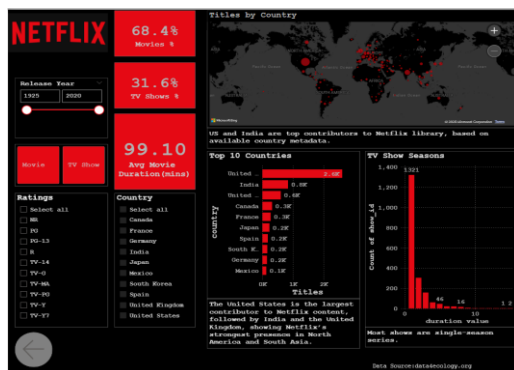
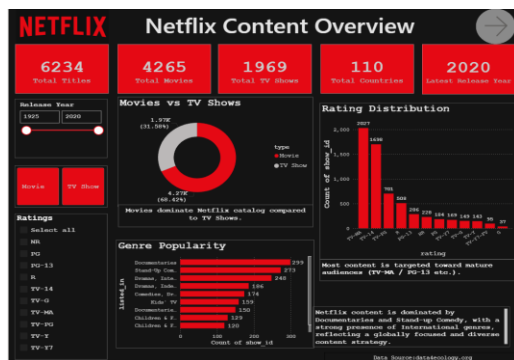
6. Screenshots

Excel:

Raw Data										
	show_id	type	title	director	cast	country	date_added	release_year	rating	duration
1	81145628	Movie	Norm of the North: King Sized Adventure	Richard Finn, Tim Maltby		United States	September 2019	TV-PG		90 min
2	80117401	Movie	Jandino: Whatever It Takes	Information Not Available		United States	September 2016	TV-MA		94 min
3	70234439	TV Show	Transformers Prime	Peter Cullen	United States	September 2013	TV-Y7-FV		1 Season	
4	80058654	TV Show	Transformers: Robot Wars	Will Friedell	United States	September 2016	TV-Y7		1 Season	
5	80125979	Movie	#realityhigh	Fernando Lebrija	Netherlands	September 2017	TV-14			99 min
6	80163890	TV Show	Apaches	Alberto Aranda	Spain	September 2016	TV-MA		1 Season	
7	70304989	Movie	Automata	Gabe Ibáñez	Bulgaria, United States	September 2014	R			110 min
8	80164077	Movie	Fabrizio Copano: Solo Pienso En Mi	Rodrigo Toro, Francisco Schultz	Chile	September 2017	TV-MA			60 min
9	80117902	TV Show	Fire Chasers	Information Not Available	United States	September 2017	TV-MA		1 Season	
10	70304990	Movie	Good People	Henrik Ruben Genz	United States	September 2014	R			90 min
11	80169755	Movie	Joaquín Reyes: Una Y No Más	José Miguel Contreras	Mexico	September 2017	TV-MA			78 min
12	70299204	Movie	Kidnapping Mr. Heineken	Daniel Alfredson	Netherlands	September 2015	R			95 min
13	80182480	Movie	Krish Trish And Baliboy: Battle Of Wits	Munjal Shroff, Tiak Shetty	India	September 2009	TV-Y7			58 min
14	80182483	Movie	Krish Trish And Baliboy: Best Friends Forever	Munjal Shroff, Tiak Shetty	India	September 2013	TV-Y7			62 min
15	80182596	Movie	Krish Trish And Baliboy: Comics Of India	Tiak Shetty	India	September 2016	TV-Y			65 min
16	80182482	Movie	Krish Trish And Baliboy: Oversmartness Never Pays	Tiak Shetty	India	September 2012	TV-Y7			61 min
17	80182597	Movie	Krish Trish And Baliboy: The Greatest Trick	Munjal Shroff, Tiak Shetty	India	September 2017	TV-Y7			65 min
18	80182481	Movie	Krish Trish And Baliboy: Part II	Information Not Available	India	September 2010	TV-Y7			58 min
19	80182621	Movie	Krish Trish And Baliboy: The Manhattan Romance	Tom O'Brien	United States	September 2013	TV-Y7			60 min
20	80057969	Movie	Love	Gaspar Noé	France	September 2015	NR			135 mi
21	80060297	Movie	Manhattan Romance	Tom O'Brien	United States	September 2014	TV-14			98 min
22	80046728	Movie	Moonwalkers	Antoine Bardou-Jacquet	France	September 2015	R			96 min
23	80046727	Movie	Rolling Pa	Mitch Dickman	United States	September 2015	TV-MA			79 min

Cleaned Data										
	show_id	type	title	director						
1	81145628	Movie	Norm Of The North: King Sized Adventure	Richard Finn, Tim Maltby						
2	80117401	Movie	Jandino: Whatever It Takes	Information Not Available						
3	70234439	TV Show	Transformers Prime	Information Not Available						
4	80058654	TV Show	Transformers: Robots In Disguise	Information Not Available						
5	80125979	Movie	#RealityHigh	Fernando Lebrija						
6	80163890	TV Show	Apaches	Information Not Available						
7	70304989	Movie	Automata	Gabe Ibanez						
8	80164077	Movie	Fabrizio Copano: Solo Pienso En Mi	Rodrigo Toro, Francisco Schultz						
9	80117902	TV Show	Fire Chasers	Information Not Available						
10	70304990	Movie	Good People	Henrik Ruben Genz						
11	80169755	Movie	Joaquin Reyes: Una Y No Mas	José Miguel Contreras						
12	70299204	Movie	Kidnapping Mr. Heineken	Daniel Alfredson						
13	80182480	Movie	Krish Trish And Baliboy	Information Not Available						
14	80182483	Movie	Krish Trish And Baliboy: Battle Of Wits	Munjal Shroff, Tiak Shetty						
15	80182596	Movie	Krish Trish And Baliboy: Best Friends Forever	Munjal Shroff, Tiak Shetty						
16	80182482	Movie	Krish Trish And Baliboy: Comics Of India	Tiak Shetty						
17	80182597	Movie	Krish Trish And Baliboy: Oversmartness Never Pays	Tiak Shetty						
18	80182481	Movie	Krish Trish And Baliboy: Part II	Information Not Available						
19	80182621	Movie	Krish Trish And Baliboy: The Greatest Trick	Munjal Shroff, Tiak Shetty						
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22	80046728	Movie	Moonwalkers	Antoine Bardou-Jacquet						
23	80046727	Movie	Rolling Pa	Mitch Dickman						

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.