DATA VISUALISATION

IMPACT OF COVID-19 ON NETFLIX RELEASES

GROUP - 1

Group Members

- ► ATHIRA REGHUNATH (W9561613)
- ► DIANAT HUSSAIN (B1905010)
- ► MIDHUN MATHEW (P1011103)
- ► TAPASWI CHAVA (W9599522)



Project Brief

Purpose

We all know that Netflix is one of the most widely used online streaming platforms. Our visualisation is primarily based on movies and TV shows that Netflix has released over the period 2015 to 2021. In 2020 and 2021, COVID 19 made a breakthrough all over the world. In our visualisation, we focus the data in terms of pre-COVID 19 releases and releases during COVID 19. The main aim is to find out if there were any significant trends in the releases of Netflix platform during this period.

Through visualisation using the dataset we are trying to get at the following.

- Explain the trends of Netflix over the period 2015 to 2020
- What are the major trends related with Netflix during COVID-19.

Audience

- Anyone interested in watching movies and TV shows through OTT platforms. Here, especially the Netflix platform
- Anyone working in the Entertainment industry especially film producers, TV Shows Broadcasting companies

Data Description

<u>Data</u>

This dataset is taken from Kaggle(https://www.kaggle.com/datasets/shivamb/netflix-shows?select=netflix_titles.csv), and it has 8807 rows and 12 columns.

Dataset variables

Qualitative data:- show_id, type, director, cast, country, rating, description

Quantitative data:- date_added, release_year, duration

Qualitative information	Quantitative information
Top 7 categories of movies and TV Shows added over 2015-2021	Total number of Movies and TV Shows added over 2015-2021
Top 5 Ratings of movies and TV Shows added over 2015-2021 Number of Movies and TV Shows released over 2015-2021	
Top 5 Countries of movies and TV Shows added over 2015-2021	

Data Preprocessing

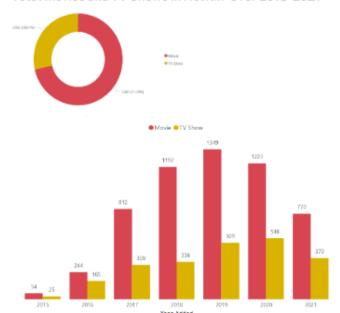
Microsoft Excel and Power BI are use for the data cleansing process, during data cleaning phase we removed rows before 2015 to improve visualization and data processing.

The raw dataset contains of null values being deleted (null values are only below 10%)

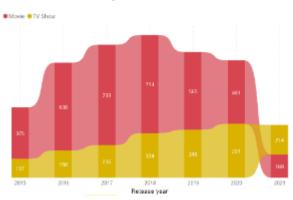
As the description column is out of scope for our visualization so it was removed.

Infographics

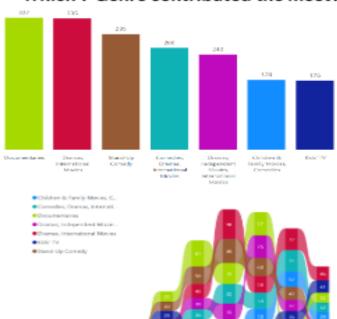
Total Movies and TV Shows in Netflix Over 2015-2021



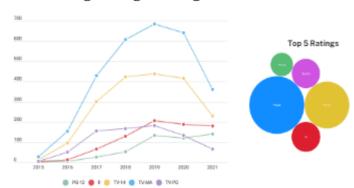
Trend in the release year of Movies and TV Shows added



Which 7 Genre contributed the most?



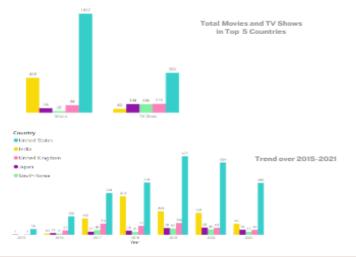
Has Ratings Changed During COVID-19





Top 5 releasing countries





Visualisation Justifications

We use a number of visualisation in our infographics to help the audience for a better understanding of large dataset.

We use the following visualisation charts

Visualisation	Justification
Donut Chart	To get a first look about the total number of Movies and TV Shows added
Clustered Bar Chart	Clustered bar chart analyses quantitative values according to major and minor categories, so it is used to visualise the Number of Movies and TV Shows year wise, top 5 country wise.
Ribbon Chart	Since ribbon chart can be used to shows how values for different categories change over time, the fluctuations in the top 7 genre over the year 2015 to 2021 can be effectively visualised using this.
Bar Chart	Bar chart visualises categorical data, the different genre can be meaningfully visualised using bar chart as genre is discreate in nature.
Line Chart	Since it shows how values change over time, the fluctuations in the top 5 rating over the year 2015 to 2021 can be effectively visualised
Sized Bubble Chart	Since Bubble chart Represents quantitative values through the areas of circles for different categories, we use this chart for showing top 5 ratings.
Map	World wide Netflix releases visualised through map, because map shows different regions across the globe.
Proportional size chart	Top 5 countries based on total number of releases are represents through the size of circular shaped flag symbols.

Critical Reflection

- Initially we used Microsoft excel for data pre-processing and try to make some pivot tables ,but we face some difficulties to make charts using the pivot table.
- We felt that Power BI is more effective and easier to make different charts for our Visualisation, our major charts were created using Power BI
- Since some charts cannot generate in a satisfactory range using Power BI we tried different online tools including Infogram, Venngage, Piktochart and Canva.
- Attractive and meaningful charts can be generated using Infogram. So we made some charts in Infogram.
- Canva is very friendly to work with infographics, so we made the infographics using Canva.
- Our infographics represents the trend in Netflix releases over 2015-2021, our story is the 'Impact of COVID-19 on Netflix releases' we thought this is achieved through this infographics.
- We tried to visualise the trend in subscription in our infographics, but this data is not available with required format so it is not there in our story.

Project Workplan and Individual Contribution

Week 2 & 3 :- Analysed 4 datasets given and selected Netflix dataset for our visualisation

Week 4 :- Data preprocessing

Week 5 :- Discussed about the charts for visualising the story

Week 6 :- Divided the charts for each group member

Week 7 & 8 :- Chart making

Week 9 & 10:- Infographics creation

Week 11 :- Slide preparation for presentation

Database selection and data preprocessing steps are done by group, and then divided the whole graphs for the story visualisation into 4 and each member made their own graphs. After completed the individual charts, we made an infographic with those graphs. At last, we created a presentation that included each one's thoughts and ideas.

Group Member	Contribution
ATHIRA REGHUNATH (W9561613)	Data pre-processing, Design Ideas, Two bar charts, Infographics creation, Slide preparation
DIANAT HUSSAIN (B1905010)	Data pre-processing, Design Ideas, one line chart and one sized bubble chart, design idea for Infographics.
MIDHUN MATHEW (P1011103)	Data pre-processing, Design Ideas, One Donut chart, one ribbon chart, one bar chart, one proportional size chart and infographics creation
TAPASWI CHAVA (W9599522)	Data pre-processing, Design Ideas, Description table for rating, one ribbon chart and one bar chart, and Ideas for slide preparation.