NETFLIX CONTENT ANALYSIS

Tableau Project – DATA230

Abstract
A tableau workbook which illustrates and analyze the content available on Netflix and insights gained from the visualization

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Acknowledgement

I would like to take this opportunity to thank Professor Andrew Bond for his direction and assistance with the Tableau assignment for the Data visualization class. Understanding the difficulties of Tableau visualization design and execution was made much easier for us thanks to Professor Bond's skill and understanding in the subject. I am grateful for his readiness to respond to our inquiries and offer comments on our work. He helped us study and develop as students, and I am grateful for that. Thank you for your guidance and support, Professor.

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Introduction

Jeff Weiner, EC at LinkedIn aptly said "Data really powers everything that we do." This statement is a true embodiment of the entertainment giant Netflix. Netflix is able to collect astronomical amounts of data on its customer's viewing choices and trends and show them useful recommendations on their landing page. In this project, I will try to analyse the Netflix data to understand the various reasons why Netflix is so popular among the global population. This project will also try to answer questions such as:

❖ Understanding what content is available in different countries

❖ What type of content is available on Netflix?

❖ How much content is present in different categories as a function of time – meaning when it was added to the platform

❖ Which country is producing the most content?

As of the middle of 2021, Netflix had more than 8000 entertainment titles available on its platform and had more than 200 million users worldwide. This tabular dataset includes listings for all of the Netflix movies and TV episodes, together with information about the actors, directors, ratings, release year, duration, and other factors. Many other types of plots, including bar graphs, geo-spatial analysis, bubble chart, line charts will be used to draw conclusions from the data. These resources may all be used to build an engaging and educational dashboard.

Data Sources:

The dataset has been sourced from Kaggle and has 12 features and 8807 samples. The data doesn't consist of a lot of null values. All the features have different datatypes

Dataset 1: Netflix_titles.csv – This dataset contains different aspects related to tv shows and movies such as Director, Cast, Country, Title, Data added etc.

Dataset 2: Netflix prices in different countries.csv – Subscription fees and quantity of tv shows and movies globally

Sheet 1 - Months when Netflix adds Titles to the platform
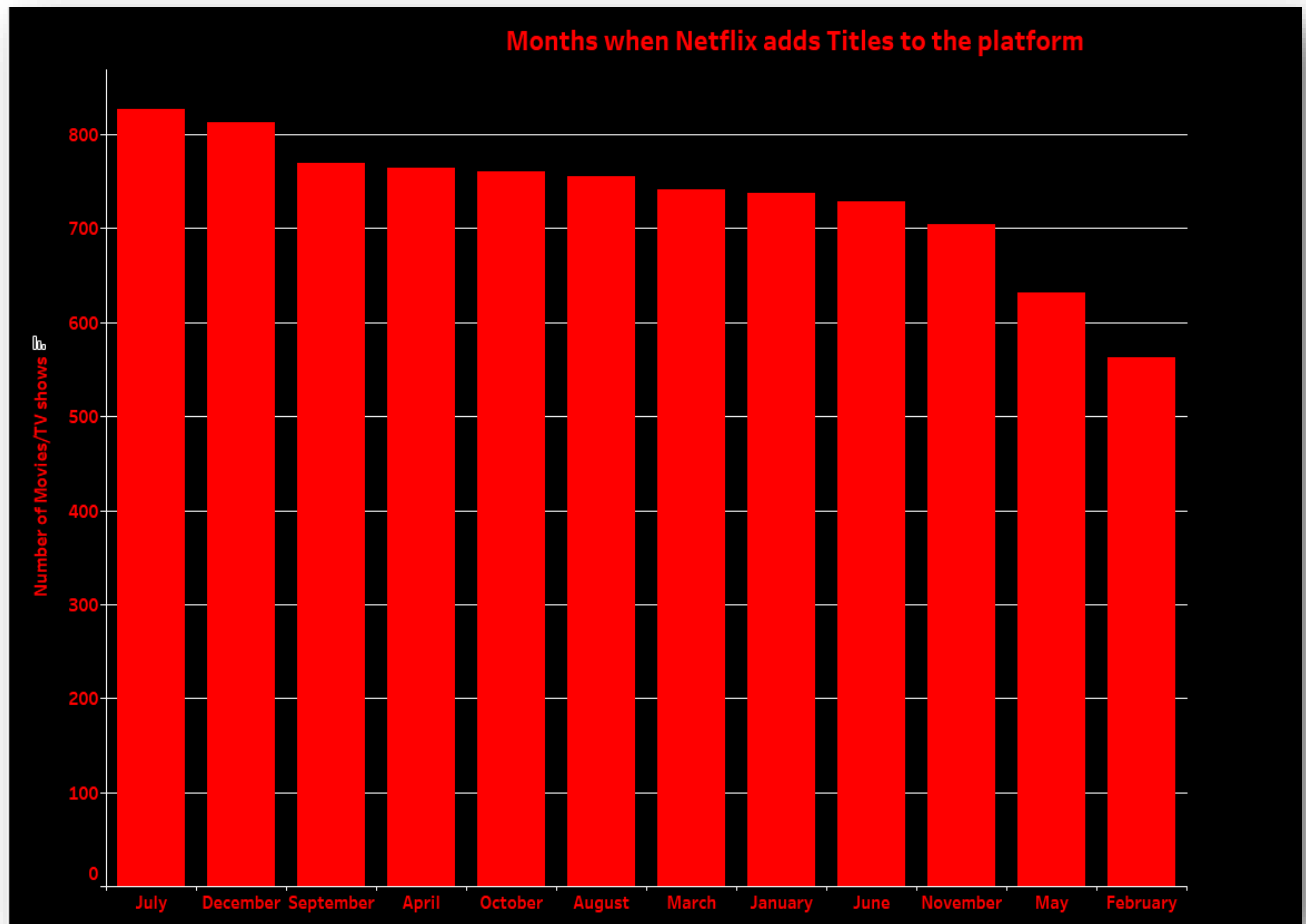
This sheet tells us about the about the number of titles added by Netflix as a function of time i.e., titles added each month on the platform. "July" and "December" are the months when there is peak addition to the platform in terms of the quantity of the titles. This makes sense, as this is the time when there are summer and winter holidays around the world and majority of the viewers have a lot of free time, Netflix encourages binge watching by adding tv shows and movies, and keeping the viewers attached to the platform through these new entertainment additions to the platform.

Sheet 2 - Movie/TV Shows Duration

Movie/TV Shows Duration
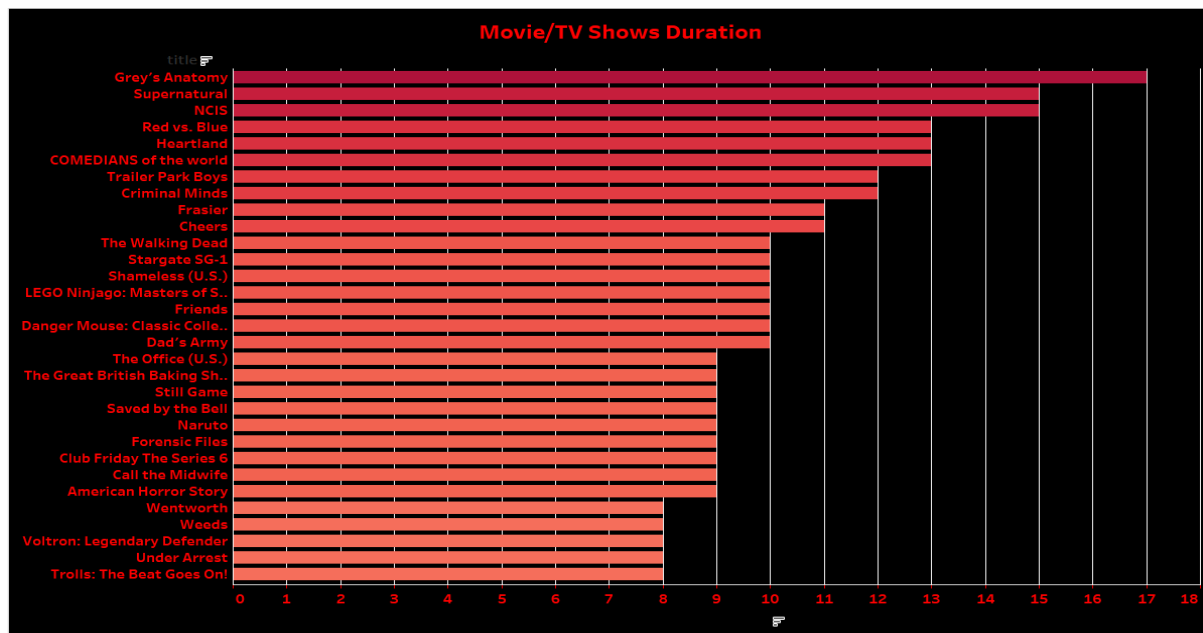
Netflix tends to bet on Binge-watching, a phenomenon which has been popularised by the platform as they tend to release all the episodes of a season together, giving the audience an adrenaline rush to keep on watching until the last episode. We can see from the above visualization, number of tv shows that have more than 8 seasons is huge, which showcases the company's strategy of publishing shows continuously on the platform to keep the viewers engrossed on Netflix. In case of movies illustrated below, Netflix consists of a lot of movies with running time of 3+ hours, signalling towards keeping the user engrossed in the content and keep them interacting with Netflix continuously.

Movie/TV Shows Duration
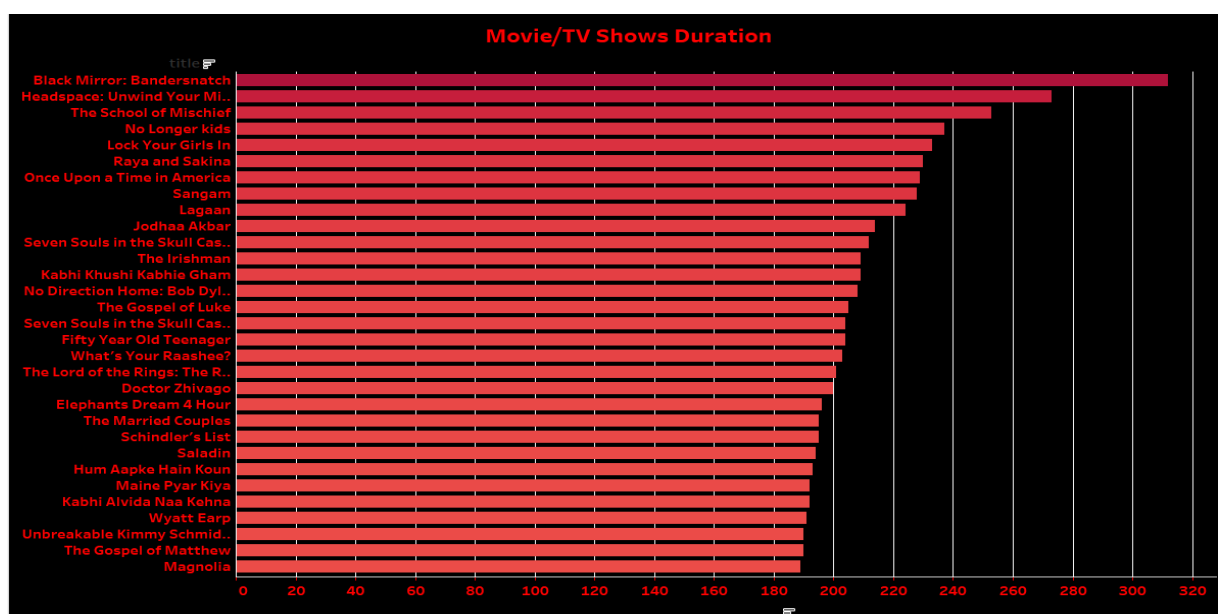
Sheet 3 – Release date of titles available on Netflix
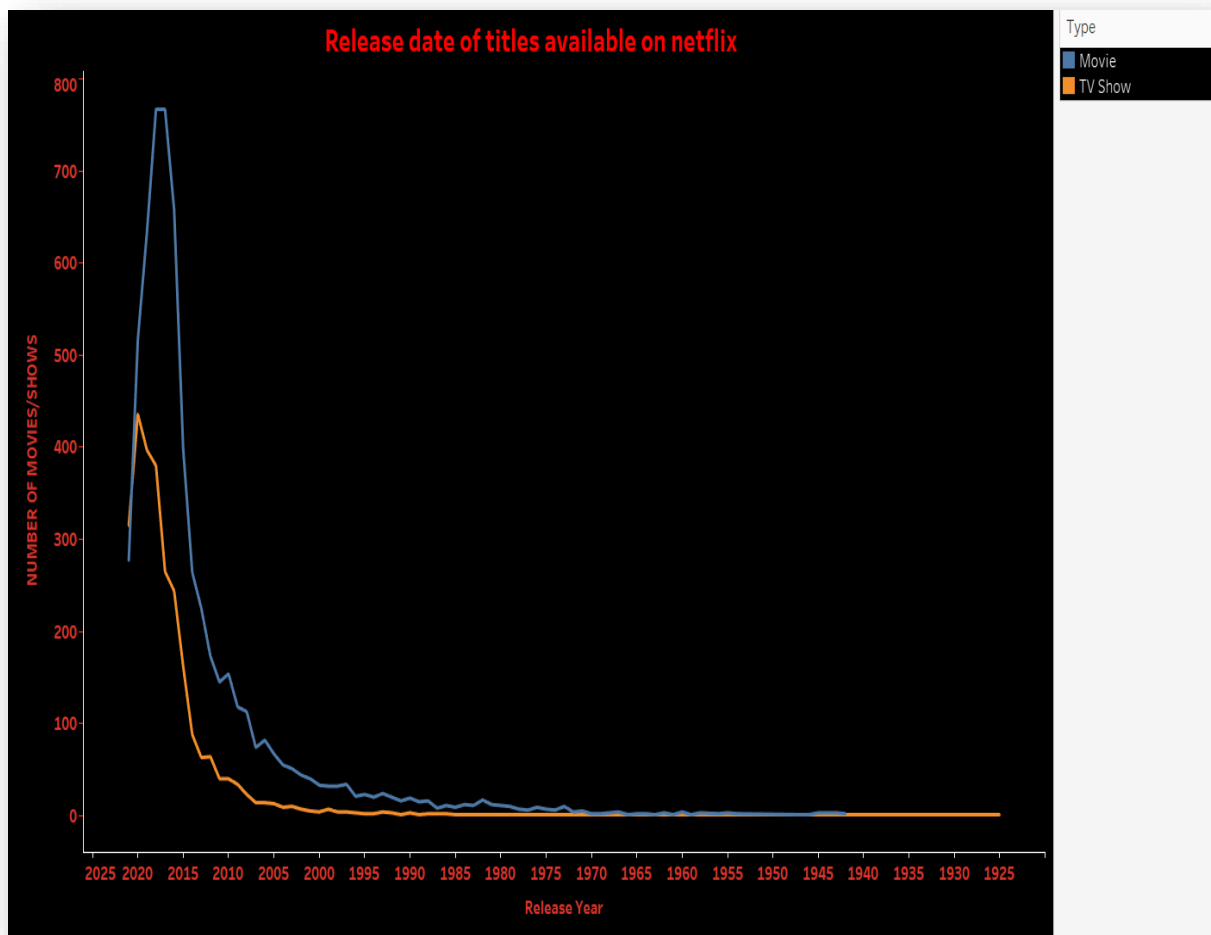
In this visualization, we can see two separate line plots which basically explains the origin year of the titles currently available on the platform. We can see that Netflix started adding titles produced in the last decade and in record numbers. That can be attributed to a majority of reasons like, how the internet penetration increased tremendously resulting in rise in the number of viewers for Netflix which resulted in more titles being added. Movies have almost 2 times the peak of tv shows until 2020. In 2020, the number of titles decreased exponentially, due to the pandemic which delayed the release many tv shows and movies.

Sheet 4 - Title Ratings available on Netflix
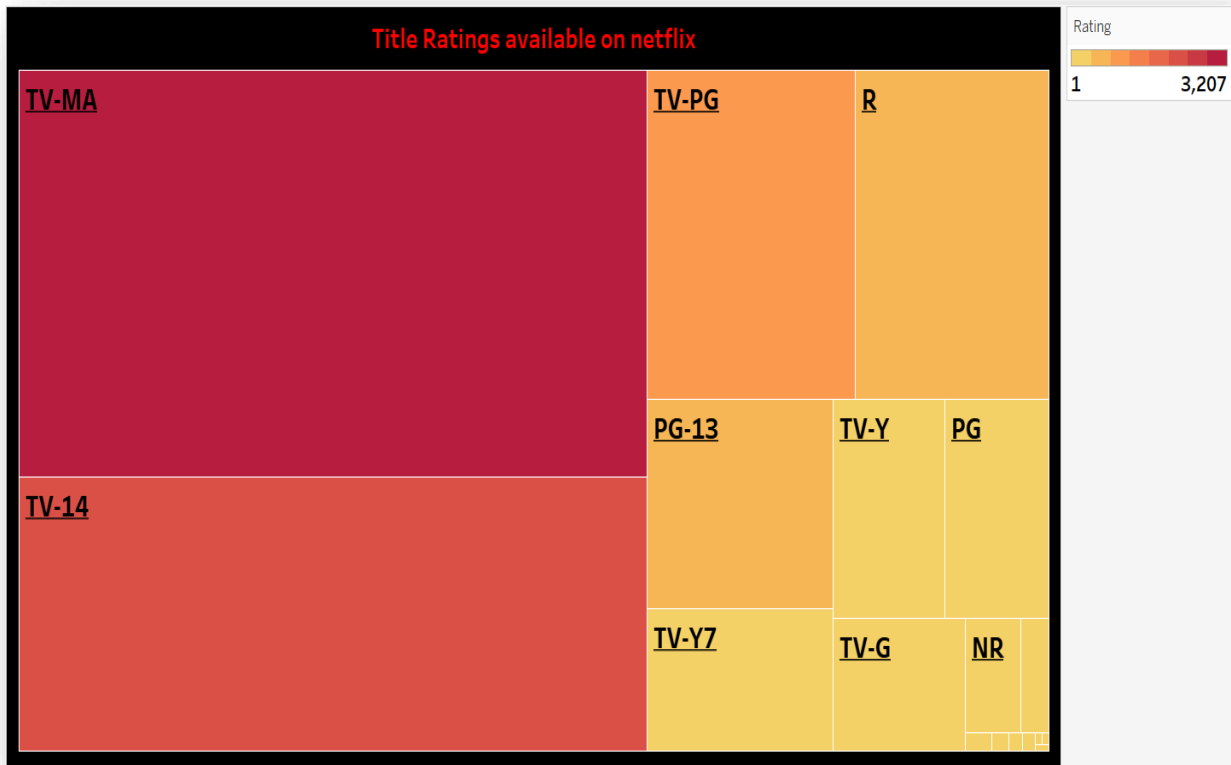
This sheet describes the ratings received by the movies and tv shows present on Netflix. Netflix has been adding content aimed at mature adults and 14+ teenagers, which is also evident from their recent tv show "Stranger things" which is in the top 5 most profitable projects of Netflix in terms of profit and number of viewers[1]. Mature adults are the main target audience and Netflix doesn't shy away from adding record titles which have a deep genre like crime dramas. Also, as the platform is available globally, international content must be a priority for Netflix to function profitably in other countries. Now, we'll take a look on the genres of the titles available on the platform, in the next sheet.

Sheet 5 – Distribution of genre in different countries
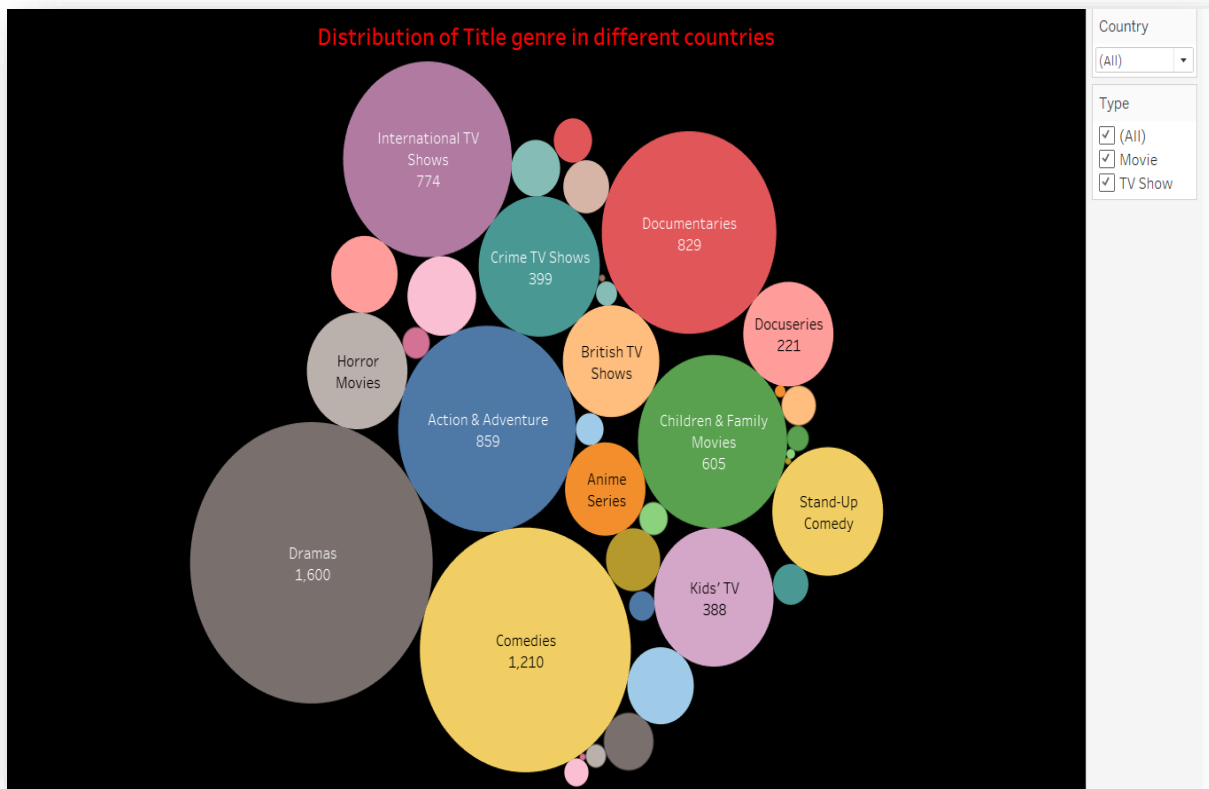
In this infographic, I've created filters for the country and on the type of the content. It is evident from the plot above, that "Dramas" and "Comedies" are on the top followed by "Action & Adventure", "Documentaries", and "International TV". This makes sense as the top four genres are usually associated with mature adults' category which is also the rating given to a major chunk of titles available on the platform. Also, these genres are generic in nature and loved by majority of the population which explains why Netflix keeps an enormous stock of shows and movies in these particular genres.

Sheet 6 – Mean Subscription Cost Per Month in USD

This visualization demonstrates the mean subscription cost around different countries. The average costs range from 3 USD to 21 USD per month. Lowest average cost per month is in Turkey under 3 USD and the highest average monthly cost is in Switzerland for 20.93 USD. Developing countries tend to have a lower monthly rate than the developed countries to make it affordable for the mass population. This plot also displays the global presence of Netflix, almost all countries have Netflix except the African continent, which can be due to many reasons such as data not available for African countries or as the majority of Central African countries are in bad shape economically, signalling towards less internet penetration, hence less viewers for Netflix making it unprofitable to operate in many African countries.

# Sheet 7 – Mean Cost per title in different countries
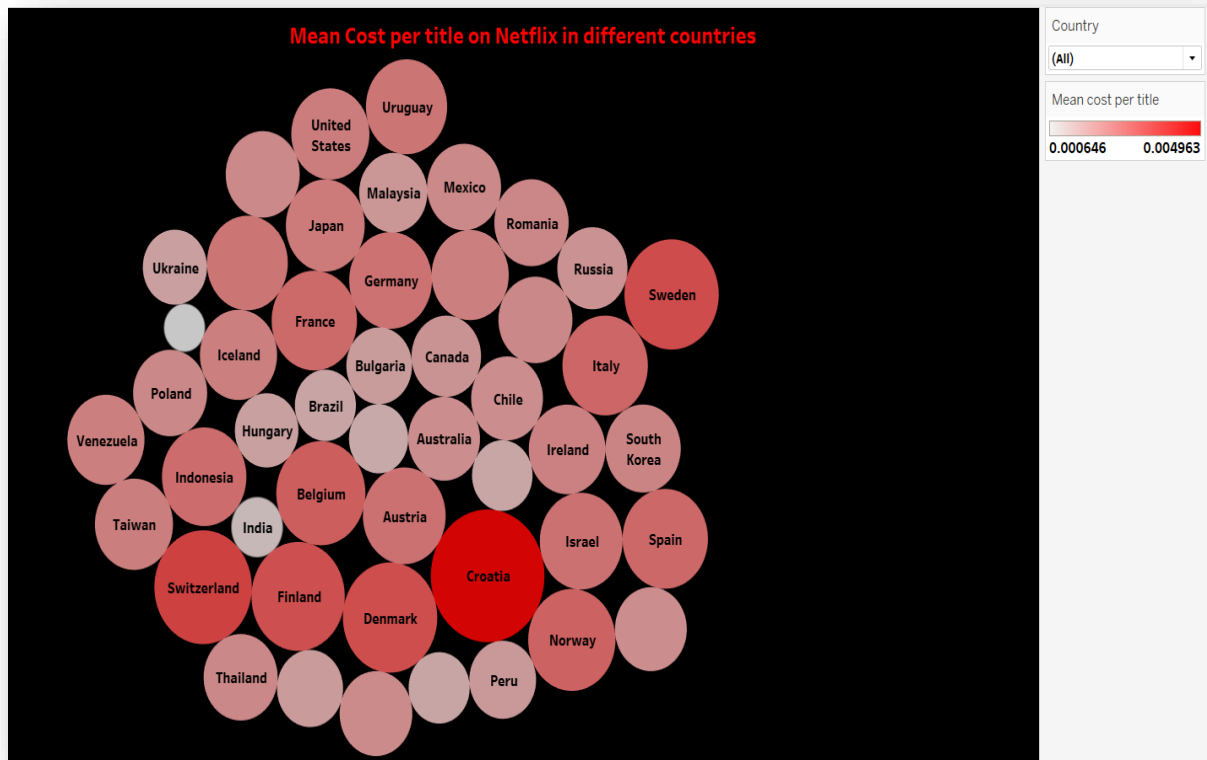
This visualization demonstrates the mean cost per title in various countries around the globe. We observe that European countries tend to pay more per title on Netflix. Let's take the example of Croatia, which has the highest mean cost per title. Even though European countries pay more per title, the mean cost of subscription per month is 11.29 USD but the cost per title comes out to be 0.0049USD in Croatia. Contrastingly, Denmark has a higher average monthly fee of 15.55 but the mean cost per title is lower than Croatia at 0.0034 USD which is not obvious. The reason behind this can be due to the fact that Croatia is relatively weaker economically, hence less investment by Netflix in local Croatian content. Another plausible reason can be a smaller number of viewers in the country contributing to low number of titles available to the Netflix users in the country.

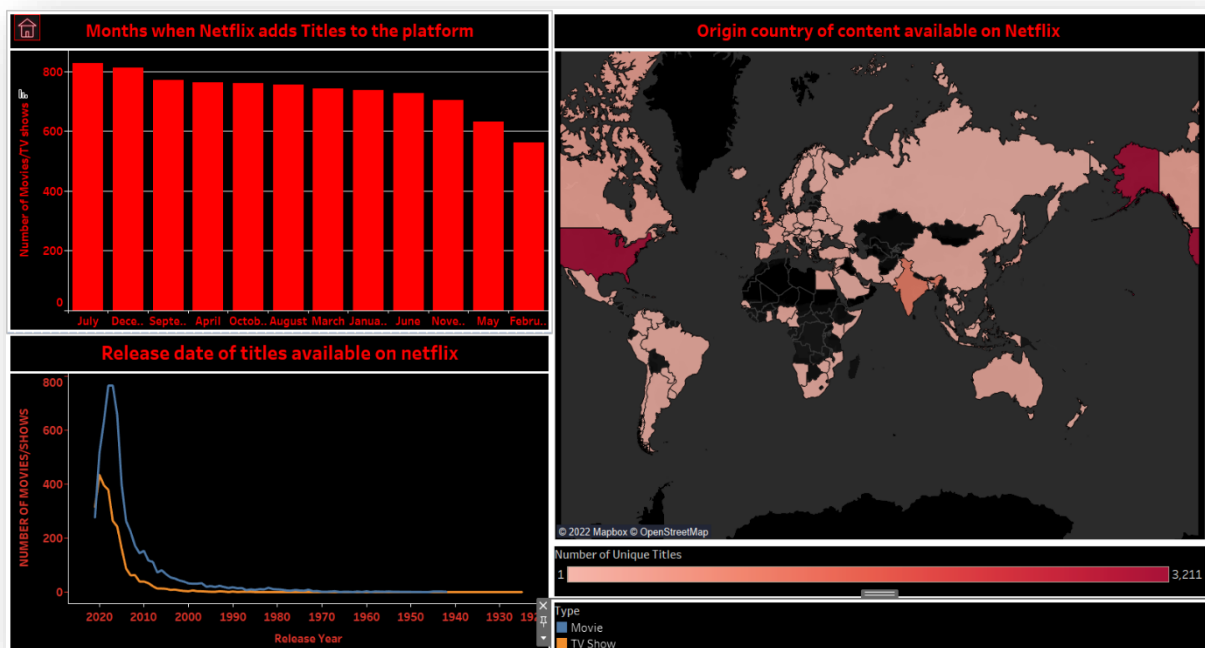# Sheet 8- Origin country of content available on Netflix
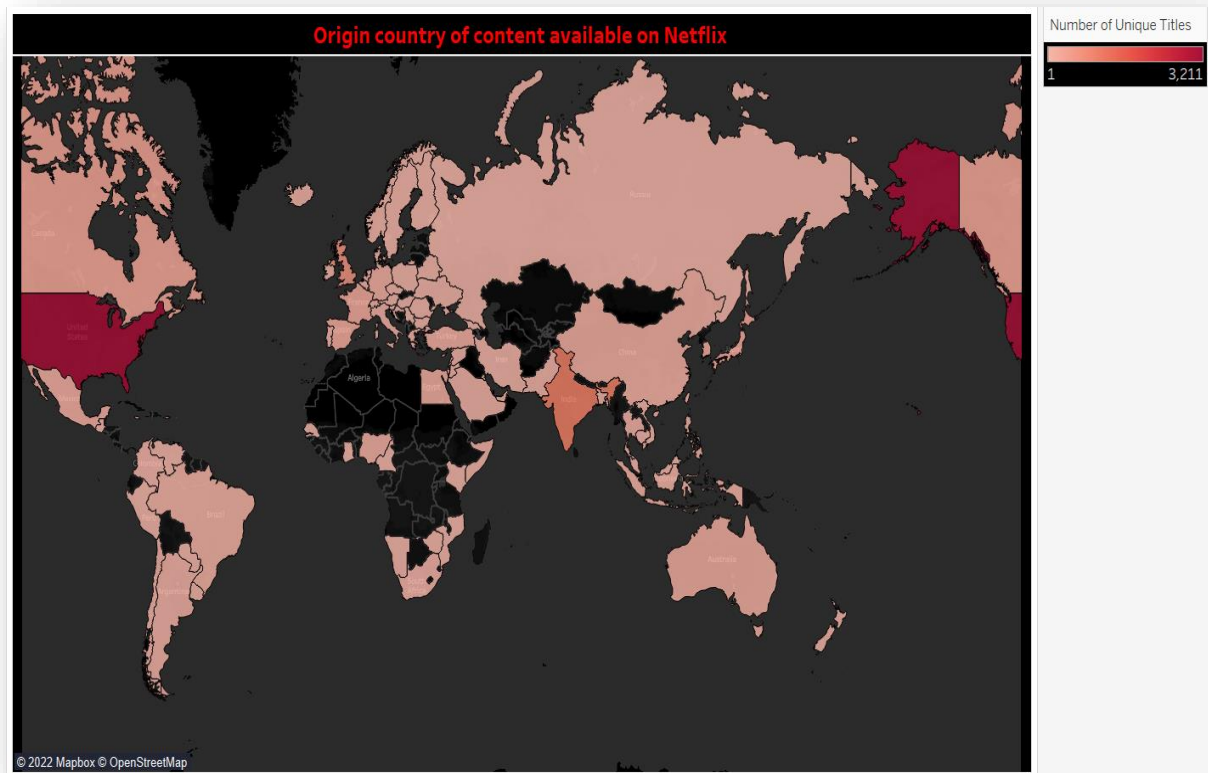
This plot describes the origin country of the titles available on Netflix. This map shows how enormous Netflix has become in the last decade. It has expanded exponentially to become a giant powerhouse in Entertainment technology. As the platform originated in the USA, it occupies the top spot in the origin country for a major number of titles available to watch on Netflix. It has the record revenue generating entertainment industry, which is believable as the budget for Hollywood tends to be astronomical. India comes at the second spot, which is also reasonable as after Hollywood, Indian entertainment industry is renowned globally for the number of films produced and record growth in the revenue generated[2]. At the third spot is the United Kingdom, which is also the house of a bustling entertainment business signalling high number of titles belonging to the British Isles.
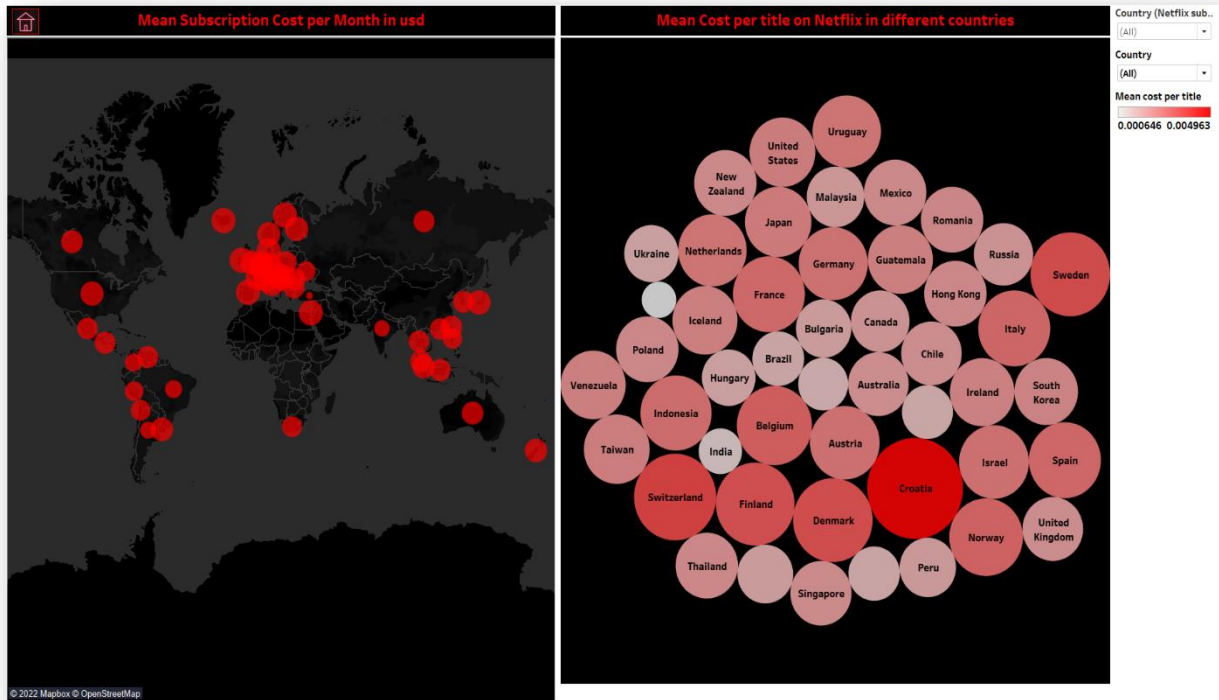
Dashboard
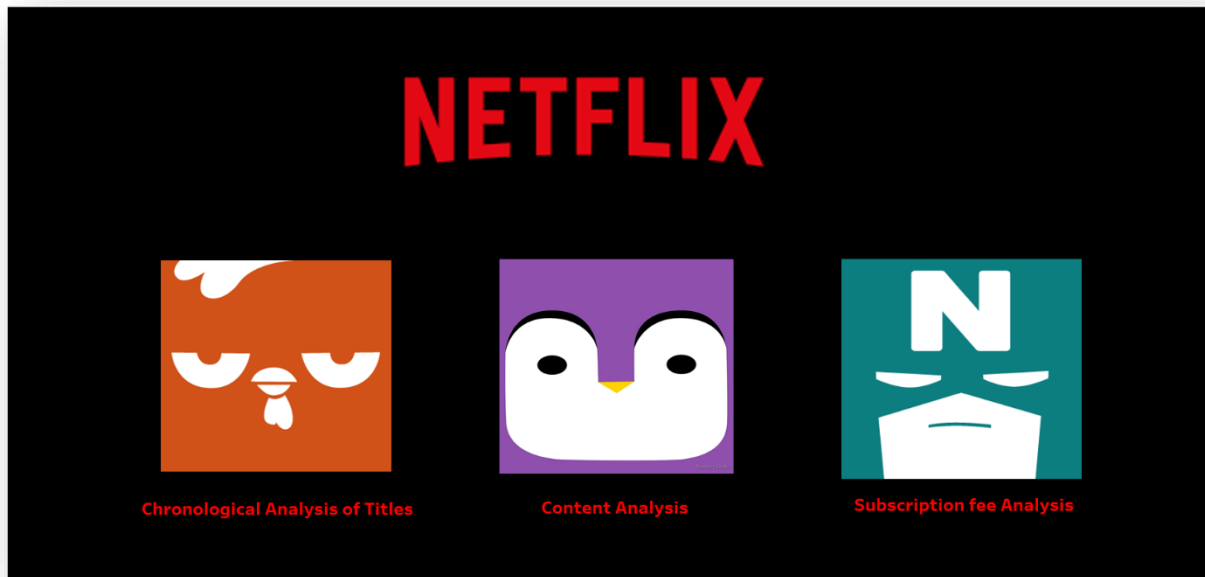
This is the home dashboard of my project. I created buttons which will link to three different separate dashboards analysing the content and the subscription fee in different countries. I've also created a small home button which links to the home page for the viewer to return to the home page from each dashboard. This gives the flexibility of connecting dashboards and navigating them with just a single click.
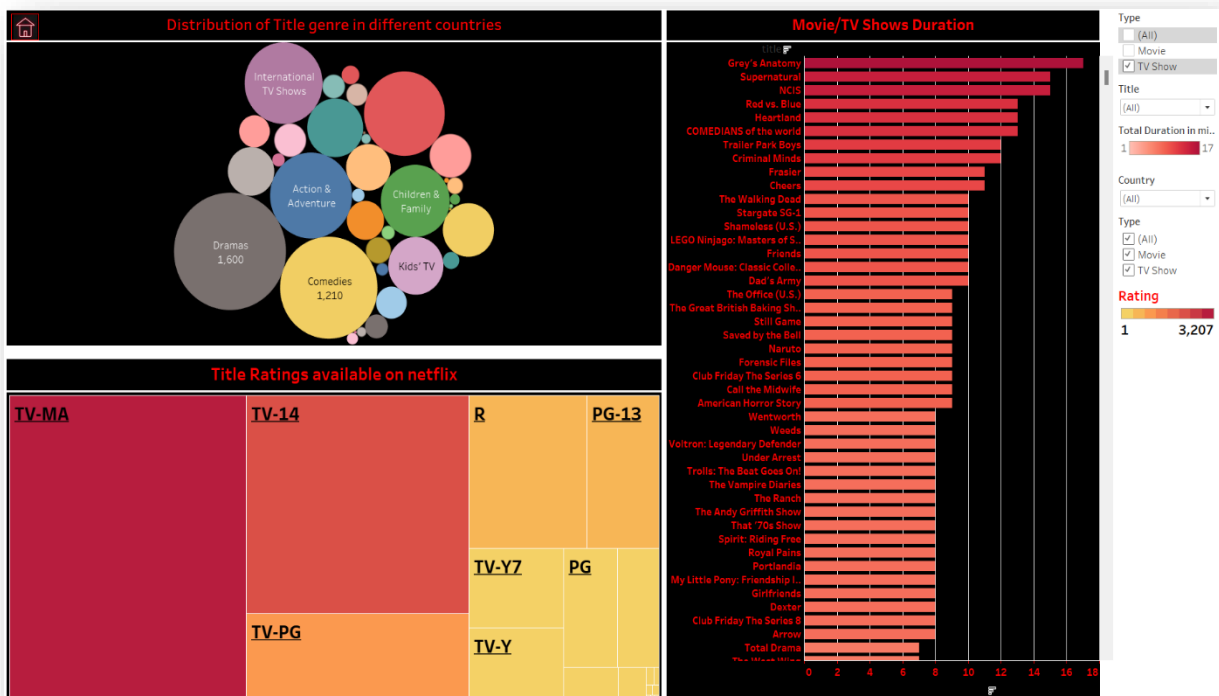
Dashboard 1 – Chronological Analysis of titles

Dashboard 2 - Content Analysis

Dashboard 3 - Subscription fee analysis

References:

1. https://www.latimes.com/entertainment-arts/business/story/2022-07-19/lat-et-ct-netflix-second-quarter-earnings

2. https://www.ibef.org/industry/media-entertainment-india