#### **#NETFLIX BUSINESS CASE**

The objective of this project is to analyze the given Netflix dataset and generate insights that could help Netflix in deciding which type of shows/movies to produce and how they can grow the business in different countries.

# **#Importing Libraries**

```
import numpy as np #importing libraries
import pandas as pd
import matplotlib.pyplot as plt
from wordcloud import WordCloud
import seaborn as sns
```

## **#Loading the Data Set**

```
!qdown 1K uNafhCB5fIeanKh8qmEnSSDeK01eFI #Download dataset
Downloading...
From: https://drive.google.com/uc?id=1K uNafhCB5fIeanKh8qmEnSSDeK01eFI
To: /content/netflix.csv
   0% 0.00/3.40M [00:00<?, ?B/s] 100% 3.40M/3.40M [00:00<00:00,
118MB/s]
df = pd.read csv("netflix.csv") # load dataset
df.head() #display first 5 rows
                                    title
                                                   director \
  show id
              type
0
             Movie
                     Dick Johnson Is Dead
                                           Kirsten Johnson
       s1
1
       s2
          TV Show
                            Blood & Water
                                                        NaN
          TV Show
2
       s3
                                Ganglands
                                           Julien Leclerca
3
       s4
           TV Show Jailbirds New Orleans
                                                        NaN
       s5 TV Show
                             Kota Factory
                                                        NaN
                                                 cast
                                                             country \
                                                       United States
                                                  NaN
   Ama Qamata, Khosi Ngema, Gail Mabalane, Thaban...
1
                                                        South Africa
2
   Sami Bouajila, Tracy Gotoas, Samuel Jouy, Nabi...
                                                                 NaN
3
                                                                 NaN
4
   Mayur More, Jitendra Kumar, Ranjan Raj, Alam K...
                                                               India
           date_added release_year rating
                                              duration \
  September 25, 2021
                               2020
                                     PG-13
                                                90 min
   September 24, 2021
                               2021
                                     TV-MA
                                             2 Seasons
1
  September 24, 2021
                                     TV-MA
                               2021
                                              1 Season
   September 24, 2021
                               2021
                                     TV-MA
                                              1 Season
  September 24, 2021
                               2021
                                     TV-MA
                                            2 Seasons
                                            listed in \
0
                                        Documentaries
```

```
International TV Shows, TV Dramas, TV Mysteries
Crime TV Shows, International TV Shows, TV Act...

Docuseries, Reality TV
International TV Shows, Romantic TV Shows, TV ...

description
As her father nears the end of his life, filmm...
After crossing paths at a party, a Cape Town t...
To protect his family from a powerful drug lor...
Feuds, flirtations and toilet talk go down amo...
In a city of coaching centers known to train I...
```

## **#Primarily Observations**

```
df.shape #shape of data
(8807, 12)
df.info() #data types of all the attributes
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 8807 entries, 0 to 8806
Data columns (total 12 columns):
     Column
                   Non-Null Count
                                   Dtype
     -----
 0
     show id
                   8807 non-null
                                   object
 1
     type
                   8807 non-null
                                   object
 2
     title
                   8807 non-null
                                   object
 3
                   6173 non-null
     director
                                   object
 4
     cast
                   7982 non-null
                                   object
 5
                   7976 non-null
                                   object
     country
 6
     date_added
                   8797 non-null
                                   object
 7
     release_year 8807 non-null
                                   int64
 8
                   8803 non-null
                                   object
     rating
 9
     duration
                   8804 non-null
                                   object
10
    listed in
                   8807 non-null
                                   object
     description
                   8807 non-null
 11
                                   object
dtypes: int64(1), object(11)
memory usage: 825.8+ KB
df.describe() #statistical summary
       release year
        8807,000000
count
mean
        2014.180198
std
           8.819312
        1925.000000
min
25%
        2013.000000
        2017.000000
50%
```

```
75%
        2019.000000
        2021.000000
max
df.describe(include = 'object') #statistical summary of categorical
variables
       show id
                                                   director \
                 type
                                       title
          8807
                 8807
                                        8807
count
                                                       6173
unique
          8807
                    2
                                        8807
                                                       4528
            s1
                Movie Dick Johnson Is Dead
                                              Rajiv Chilaka
top
freq
             1
                 6131
                                                 date_added rating
                      cast
                                   country
duration \
                      7982
                                      7976
count
                                                       8797
                                                              8803
8804
unique
                      7692
                                       748
                                                       1767
                                                                17
220
top
        David Attenborough United States January 1, 2020 TV-MA 1
Season
                        19
                                      2818
                                                        109
freq
                                                              3207
1793
                           listed in \
count
                                 8807
unique
                                  514
top
        Dramas, International Movies
                                 362
freq
                                               description
count
                                                      8807
                                                      8775
unique
top
        Paranormal activity at a lush, abandoned prope...
freq
df.isnull().sum() #missing value detection
                   0
show id
type
                   0
title
                   0
director
                2634
                 825
cast
                 831
country
date added
                  10
release year
                   0
rating
                   4
                   3
duration
listed in
                   0
description
                   0
dtype: int64
```

```
df.nunique() #unique count of each variable
                8807
show id
type
title
                8807
director
                4528
                7692
cast
                 748
country
date added
                1767
                  74
release year
                  17
rating
duration
                 220
listed in
                 514
description
                8775
dtype: int64
```

## #Data Cleaning

###(i) Calculating the Missing Data

```
for i in df.columns:
   null_values = round(100* df[i].isnull().sum()/ len(df),2)
   if null_values > 0:
        print("{} missing percentage : {}%".format(i, null_values))

director missing percentage : 29.91%
   cast missing percentage : 9.37%
   country missing percentage : 9.44%
   date_added missing percentage : 0.11%
   rating missing percentage : 0.05%
   duration missing percentage : 0.03%
```

###(ii) Dealing with the Missing Data

```
df.country.replace(np.nan, "Unknown Country", inplace = True) #replacing
null values of country with Unknown Country
df.cast.replace(np.nan, "Unknown Actor", inplace = True) #replacing null
values of cast with Unknown Actor
df.director.replace(np.nan, "Unknown Director", inplace = True)
#replacing null values of director with Unknown Director

df.dropna(inplace = True) #dropping rows having null values
df.drop_duplicates(inplace = True) #dropping duplicates rows
```

###(iii) Unnesting cast, director, company & listed\_in coulumn's data.

```
df_cast = df["cast"].str.split(", |,| ,", expand = True).stack()
#splitting and expending cast column and making new dataframe for cast
```

```
df cast = df cast.reset index(drop = True, level = 1).to frame("cast")
df cast["show id"] = df["show id"]
df_director = df["director"].str.split(", |,| ,", expand =
True).stack() #splitting and expending director column and making new
dataframe for director
df director = df director.reset index(drop =True, level =
1).to frame("director")
df director["show id"] = df["show id"]
df_country = df["country"].str.split(", |, | , ", expand = True).stack()
#splitting and expending country column and making new dataframe for
country
df country = df country.reset index(drop =True, level =
1).to frame("country")
df country["show id"] = df["show id"]
df_genre = df["listed_in"].str.split(", |,| ,", expand = True).stack()
#splitting and expending listed in and making new dataframe for
listed in
df genre = df genre.reset index(drop =True, level =
1).to frame("genre")
df genre["show id"] = df["show id"]
```

#### ###(iv) Data Transformation

```
df.date_added = pd.to_datetime(df.date_added) # changing datatype of
    date_added column

df['month_added'] = df['date_added'].dt.month
    df['month_name_added'] = df['date_added'].dt.month_name()

df['year_added'] = df['date_added'].dt.year
    df['week_added'] = df['date_added'].dt.isocalendar().week
```

#### #Analysis

## #Count of each categorical variable using non- graphical analysis.

```
df count = df.nunique().reset index()
df_count.columns = ["variable", "total_count"]
df count.T
                              2
            show id type title director cast country date added
variable
               8790
                        2
                            8790
                                            7679
total count
                                      4527
                                                      749
                                                                 1713
                                         9
                              8
                                                   10
                                                                11 \
variable
             release year
                           rating duration listed in description
```

```
total count
                        74
                                14
                                         220
                                                     513
                                                                 8758
                                                                  15
                       12
                                         13
                                                      14
variable
             month added
                          month name added
                                             year added
                                                          week added
total count
                                                                  53
                      12
                                         12
                                                      14
print("This dataset is from ",
df.date added.dt.date.min().strftime("%d-%m-%Y"), "to
",df.date added.dt.date.max().strftime("%d-%m-%Y"))
This dataset is from 01-01-2008 to 25-09-2021
```

Insight - As per the dataset, there are total 8790 unique show\_ids(includes Movie & TV Shows).

The count of director is 4992. So we can conclude that one director directed more than one Movie or TV Show.

Total cast members are 36393.

This is consolidated dataset of 124 countries.

Release year is the year when particular Movie & TV Show get released.

Rating is the ratings of the content.

Duration is the duration of specific Movie or TV Show.

Listed\_in is the genre list of Movies & TV Shows.

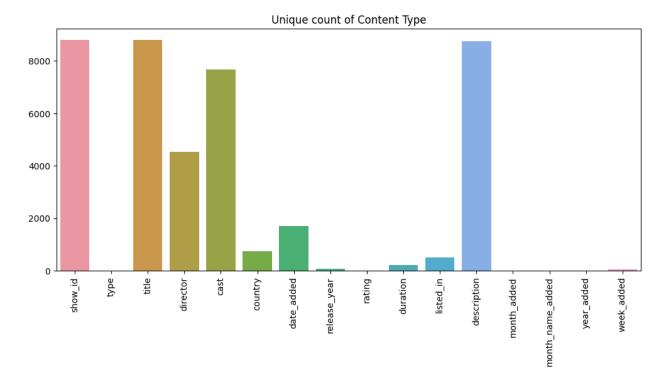
Description is the details of Movie & TV Show.

Few more columns are generated for further analysis in depth.

This is the dataset from 2008-01-01 and 2021-09-25.

#Count of each categorical variable using graphical analysis.

```
plt.figure(figsize = (12,5)) #change figure size
sns.barplot(x = df.nunique().index, y = df.nunique()) #plot x and y
values
plt.xticks(rotation = 90) #rotate x ticks on 90 degree
plt.title("Unique count of Content Type")
plt.show() #show bar plot
```



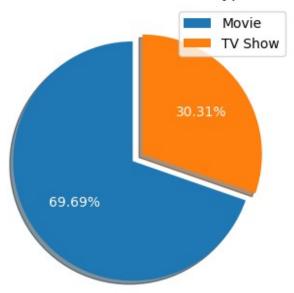
**Insight** - This barplot shows count of all the variables of the dataset.

# #Comparison of TV Show vs Movie.

```
plt.figure(figsize = (4,4))
x = df.groupby("type")["type"].count()
y = len(df)
r = (x/y*100).round(2)
perc_data = pd.DataFrame(r)
plt.pie(x = perc_data["type"], labels = perc_data.index, autopct =
"%1.2f%%", startangle = 90, shadow = True, explode=(0.1,0),
textprops={'color': 'white'})

plt.title('Distribution of Content Types') #Pie chart for distribution
of Movies & TV Shoes
plt.legend(loc='upper right')
plt.show()
```

# Distribution of Content Types

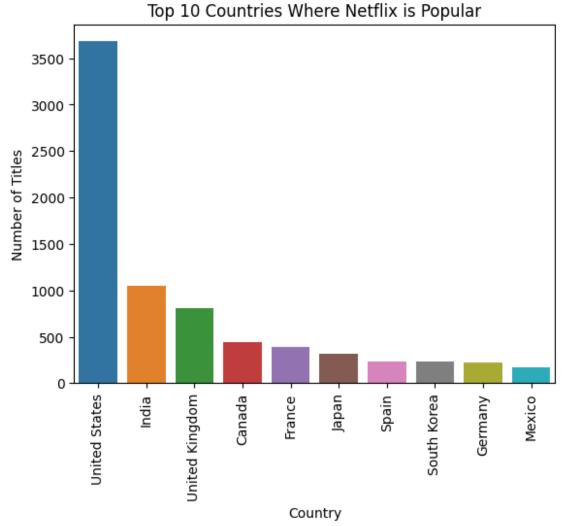


**Insight** - From the above analysis, we can clearly see that movie counts for countries are far greater than TV show.

Seems, Netflix should focus of TV Shows as well to uplift the market of this type.

# **#Top 10 Countries Where Netflix is Popular**

```
df_country = df_country.loc[df_country["country"]!="Unknown Country"]
top_10_country = df_country["country"].value_counts().head(10)
sns.barplot(x = top_10_country.index, y = top_10_country.values)
plt.xlabel('Country')
plt.ylabel('Number of Titles')
plt.title('Top 10 Countries Where Netflix is Popular')
plt.xticks(rotation = 90)
plt.show()
```



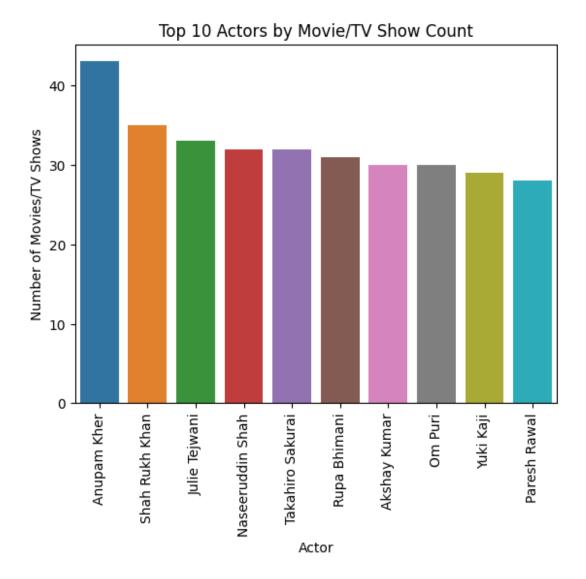
**Insight** - Above graph clearly depicts that US is the top most country where people are fond of

Netflix should work on the country where popularity is weak.

# **#Top 10 Actor by Movie/TV Show count.**

Netflix, followed by India & then UK.

```
df_cast = df_cast.loc[df_cast["cast"]!="Unknown Actor"]
top_10_actor = df_cast["cast"].value_counts().head(10)
sns.barplot(x = top_10_actor.index, y = top_10_actor.values)
plt.xlabel('Actor')
plt.ylabel('Number of Movies/TV Shows')
plt.title('Top 10 Actors by Movie/TV Show Count')
plt.xticks(rotation = 90)
plt.show()
```

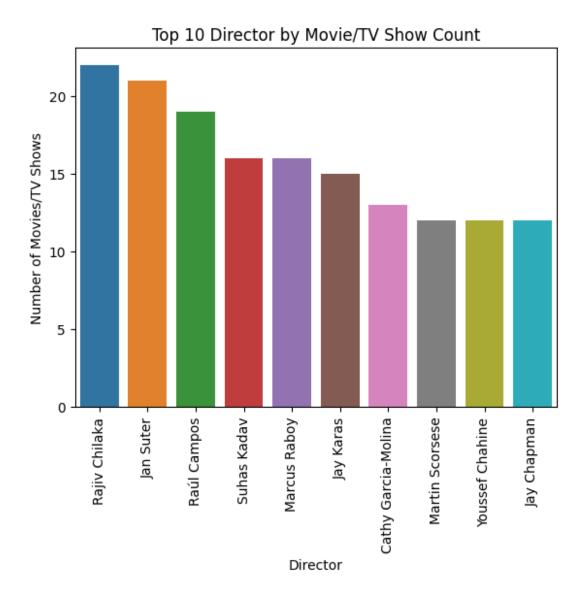


**Insight** - Clearly visible that Anupam kher is the best choice for most of the people, followed by SRK & then Julie Tejwani.

Netflix can focus on adding more content of the preferred actors by the majority of the people.

# **#Top 10 Directors by Movie/TV Show Count**

```
df_director = df_director.loc[df_director["director"]!="Unknown
Director"]
top_10_director = df_director["director"].value_counts().head(10)
sns.barplot(x = top_10_director.index, y = top_10_director.values)
plt.xlabel('Director')
plt.ylabel('Number of Movies/TV Shows')
plt.title('Top 10 Director by Movie/TV Show Count')
plt.xticks(rotation = 90)
plt.show()
```

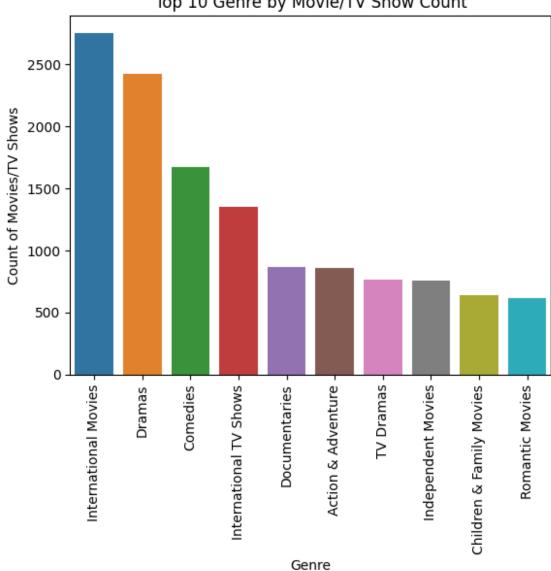


**Insight** - Rajiv Chilaka is the best Director amoungest all the directors followed by Jan Suter & then Raul Campos.

Netflix can add more content directed by the popular directors.

# **#Top 10 Genre by Movie/ TV Show Count**

```
df_genre = df_genre.loc[df_genre["genre"]!="Unknown Director"]
top_10_genre = df_genre["genre"].value_counts().head(10)
sns.barplot(x = top_10_genre.index, y = top_10_genre.values)
plt.xlabel('Genre')
plt.ylabel('Count of Movies/TV Shows')
plt.title('Top 10 Genre by Movie/TV Show Count')
plt.xticks(rotation = 90)
plt.show()
```



Top 10 Genre by Movie/TV Show Count

Insight - Genre which is topping the list is International Movies, followed by Dramas, & then Comedies.

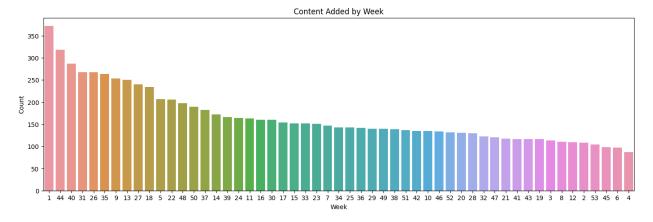
Netflix should keeps on adding more content of these Genres.

# **#Best week to add Content.**

```
plt.figure(figsize = (17,5))
result = df.groupby(["week_added"])
['title'].count().reset_index().sort_values('title', ascending =
False)
weekly df = df["week added"].value counts()
sns.barplot(x = weekly_df.index , y = weekly_df.values, order =
result["week added"])
```

```
plt.xlabel('Week')
plt.ylabel('Count')
plt.title('Content Added by Week')
plt.show()

# result = df.groupby(["Id"])
['Speed'].aggregate(np.median).reset_index().sort_values('Speed')
# sns.barplot(x='Id', y="Speed", data=df, order=result['Id'])
# plt.show()
```



**Insight** - From the above analysis we can conclude that the best week to add the movie is 1st which further followed by 44th , 40th & 9th week of the year.

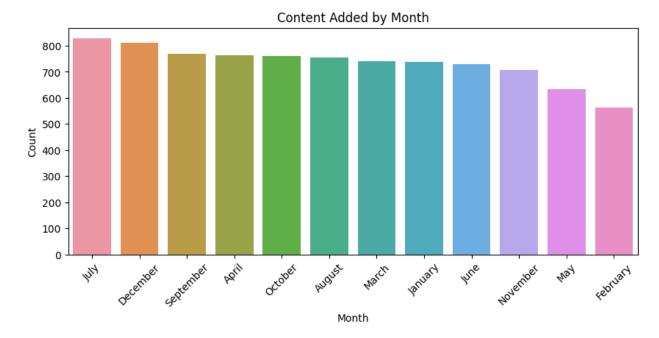
This analysis shows that people tend to watch more content in the beginning of the year, followed by the last quater of the year. The reason can be the winter break for students and year ending leaves for the employees.

So, Netflix should add more content at the preferable time of the subscribers.

#### **#Best month to add Content.**

```
plt.figure(figsize = (10,4))
month_df = df["month_name_added"].value_counts().reset_index()
sns.barplot(x = "index", y = "month_name_added", data = month_df)

plt.xlabel('Month')
plt.ylabel('Count')
plt.title('Content Added by Month')
plt.xticks(rotation = 45)
plt.show()
```



**Insight** - Above analysis shows that July is the best month to add a movie, which can further followed by December & September.

# ##Popularity of Genre.

```
text = ",".join(genre for genre in df_genre.genre) #creating list of
all the values of listed_in column

word = text.split(",")
dic = {}
for item in word:
    if item in dic:
        dic[item] += 1
    else:
        dic[item] = 1

wordcloud = WordCloud(width = 400, height = 300)
wordcloud.generate_from_frequencies(dic)
plt.figure()
plt.imshow(wordcloud, interpolation="bilinear")
plt.axis("off")
plt.show()
```

```
TV Comedies Anime Features
Children & Family Movies
Reality TV TV Mysteries
Action & Adventure Thrillers
Comedies Docuseries
Independent Movies Music & Musicals
Horror Movies
Romantic TV Shows
TV Dramas
Crime TV Shows
Stand-Up Comedy
Documentaries
International TV Shows
TV Thrillers

TV Thrillers

Stand Dramas
Stand-Up Comedy
TV Shows
TV Thrillers
TV Thrillers
Spanish-Language TV Shows
Sports Movies Dramas
Sci-Fi & Fantasy
Sports Movies TV Shows
To Shows
TV Thrillers
TV Shows
TV Shows
TV Thrillers
TV Shows
TV Thrillers
TV Shows
TV Shows
TV Thrillers
TV Shows
TV Action & Adventure
```

**Insight** - From the above generated Word Cloud, we can clearly see that the first category which is topping the list is 'International Movies'. But the list is not ending here and with very small difference International Movies are followed by Dramas, International TV Shows, Comedies and so on.

It is advisable that Netflix should work on the genre which is not getting popularity. Also, Netflix can shift the focus from less popular genre to the popular genre and can make labour, time, money and resources more productive.

##Years after the release Movie should be added to Netflix.

```
df["added_release_diff"] = df.year_added - df.release_year #difference
between added_year and release year

df.added_release_diff.mode().reset_index() #mode of year difference
between release date and added date

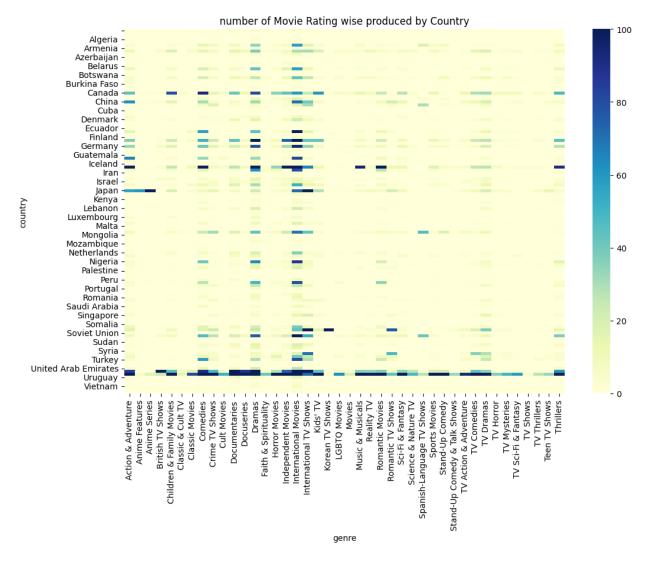
index added_release_diff
0 0 0
```

**Insight** - From the past data analysis, we can conclude that content should be added to the Netflix in the same year when the content gets released.

The early the content will be avaliable for the subscribers, people will be more eager to watch the Movies & TV Shoes.

#Type of content available in different countries.

```
country_content = pd.merge(df_country, df_genre)
country content = country content[["country", "genre"]]
country content["serial number"] = country content.index
country_content.reset_index(drop=True, inplace=True)
country content
=country_content.pivot_table(index="country",columns=["genre"],
aggfunc ="size", fill value = 0)
country_content[country_content != 0].dropna()
country content reset = country content.reset index()
plt.figure(figsize=(12, 8))
sns.heatmap(country_content_reset.set_index('country'), fmt='d',
cmap='YlGnBu', vmin=100, vmax=0)
plt.title('number of Movie Rating wise produced by Country')
plt.xlabel('genre')
plt.ylabel('country')
plt.show()
```

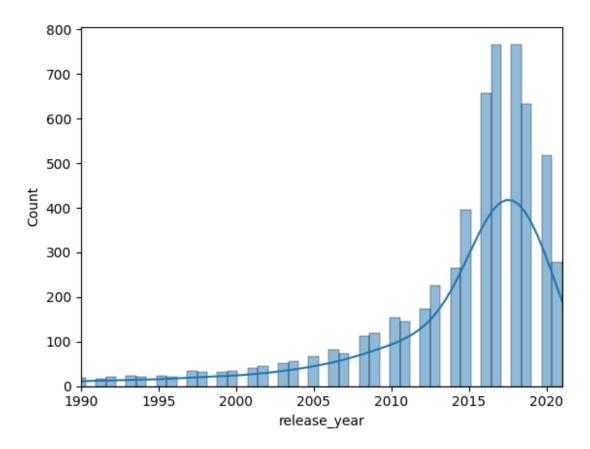


**Insight** - Above heatmap of Country & Genre shows that more or less count of particular genre in the countries.

From the above analysis it is advisable that Netflix should stop listing those genre which are not getting any views as per the country.

#Number of movies released per year changed over the last 20-30 years.

```
movie_df_trend = df.loc[df.type=="Movie"]
sns.histplot(movie_df_trend.release_year, kde = True)
plt.xlim([1990, 2021])
plt.show()
```



**Insight** - Above histplot and kdeplot shows the graph of movie release goes up rapidly over the last 20-30 years. but the count came down in the 2020 due to the pendamic of Corona & Lockdown.

# #Content added over the years.

```
movie_df = df[df.type=="Movie"]
tvshow_df = df[df.type=="TV Show"]

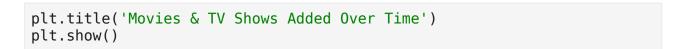
movie_count = movie_df["year_added"].value_counts().sort_index()
tvshow_count = tvshow_df["year_added"].value_counts().sort_index()

plt.plot(movie_count.index,movie_count.values, label = "Movies")
plt.plot(tvshow_count.index,tvshow_count.values, label = "TV Show")

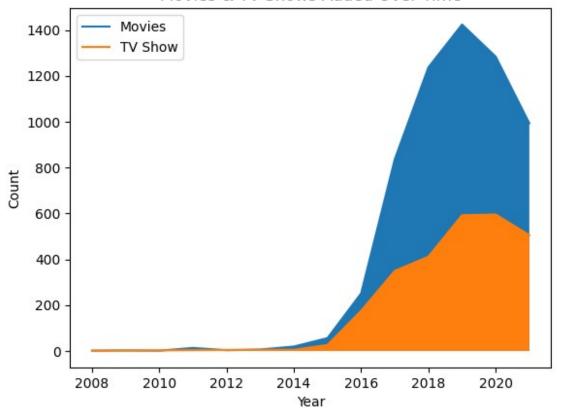
plt.legend(loc = "upper left")

plt.fill_between(movie_count.index,movie_count.values, label = "Movies")
plt.fill_between(tvshow_count.index,tvshow_count.values, label = "Movies")

plt.xlabel('Year')
plt.ylabel('Count')
```



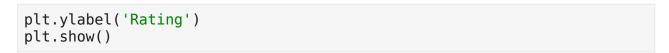


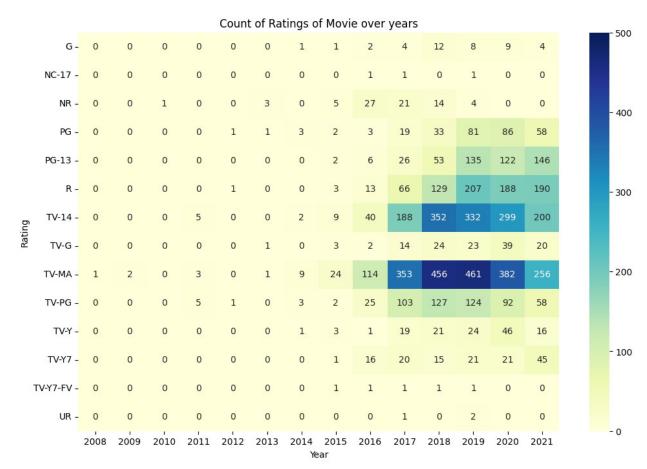


**Insight** - Above plot shows that the count of TV Shows are very less in comparison of Movies.

Definitely Netflix have to work on TV Shows part to increase revenue from this area of the business.

# #Rating count of TV Show over years.





**Insight** - Above heatmap clearly shows the count of Movies rating across all the years.

Netflix should work on the rating which are not at all choice of the subscribers.

## #Rating count of TV Show over years.

```
df_rating_year = df[["rating", "type", "year_added"]]

df_rating_year = df_rating_year[df_rating_year["type"] == "TV Show"]

df_rating_year = df_rating_year.pivot_table(index='rating',
    columns='year_added', aggfunc='size', fill_value=0)

df_rating_year[df_rating_year != 0].dropna()

df_rating_year_reset = df_rating_year.reset_index()

plt.figure(figsize=(12, 8))

sns.heatmap(df_rating_year_reset.set_index('rating'),
    fmt='d',annot=True, cmap='YlGnBu', vmin=500, vmax=0)

plt.title('Count of Ratings of TV Show over years')
```

```
plt.xlabel('Year')
plt.ylabel('Rating')
plt.show()
```



 $\textbf{Insight} \ \textbf{-} \ \textbf{Above heatmap clearly shows the count of TV Shows rating across all the years.}$ 

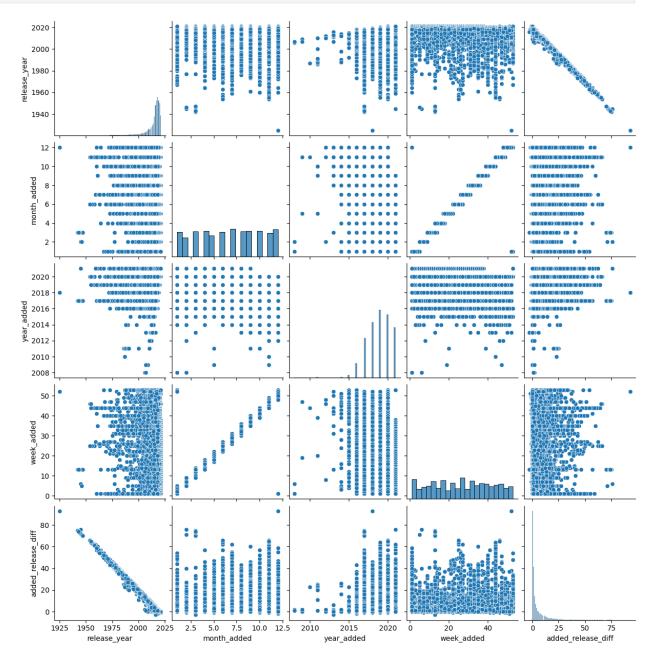
Netflix should work on the rating which are not at all choice of the subscribers.

## **#Pairwise Relationship**

```
sns.pairplot(df)
plt.show()

/usr/local/lib/python3.10/dist-packages/seaborn/distributions.py:499:
FutureWarning: In a future version, the Index constructor will not infer numeric dtypes when passed object-dtype sequences (matching Series behavior)
   pd.Index(edges, name="edges"),
/usr/local/lib/python3.10/dist-packages/seaborn/distributions.py:500:
FutureWarning: In a future version, the Index constructor will not infer numeric dtypes when passed object-dtype sequences (matching)
```

```
Series behavior)
  pd.Index(widths, name="widths"),
```



**Insight** - Above pairplot visualize relationships among variables of the dataset. With this, each plot shows the relationship between a pair of variables.

This shows distributions of a single variable and relationships between two variables.

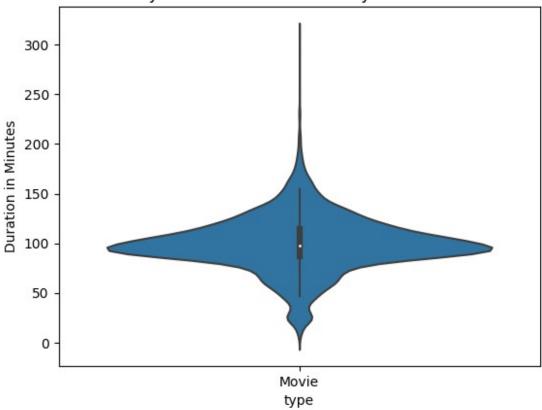
```
duration_df_movie = df.loc[df.type=="Movie"]
duration_df_movie["duration_new"] =
duration_df_movie["duration"].str.split(" ").str[0].astype("int")
sns.violinplot(x = duration_df_movie.type, y =
```

```
duration_df_movie.duration_new)
plt.ylabel("Duration in Minutes")
plt.title("Summary Statistics and the Density of Movie Duration")
plt.show()

<ipython-input-112-dae64e198ccf>:2: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation:
https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#
returning-a-view-versus-a-copy
    duration_df_movie["duration_new"] =
duration_df_movie["duration"].str.split(" ").str[0].astype("int")
```

# Summary Statistics and the Density of Movie Duration



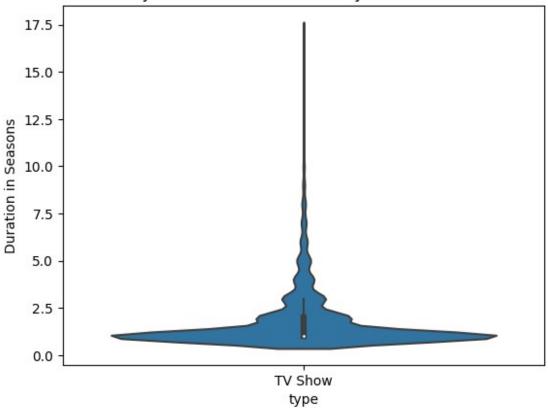
**Insight** - Above violinplot shows that the duration of most of the Movies is between 75 to 150 minutes. So Netflix can continue with this approach for further streamings.

```
duration_df_tvshow = df.loc[df.type=="TV Show"]
duration_df_tvshow["duration_new"] =
duration_df_tvshow["duration"].str.split(" ").str[0].astype("int")
sns.violinplot(x = duration_df_tvshow.type, y =
duration_df_tvshow.duration_new)
```

```
plt.ylabel("Duration in Seasons")
plt.title("Summary Statistics and the Density of TV Show Duration")
plt.show()
<ipython-input-113-572ffe459f6e>:2: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation:
https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#
returning-a-view-versus-a-copy
    duration_df_tvshow["duration_new"] =
duration_df_tvshow["duration"].str.split(" ").str[0].astype("int")
```

# Summary Statistics and the Density of TV Show Duration



**Insight** - Above violinplot shows that the duration of most of the TV Shows is between 1 to 3 Seasons. So Netflix can continue with this approach for further streamings.

## **#CONCLUSIONS**

**Quantity**: This analysis revealed that Netflix had added more movies than TV shows, aligning with the expectation that movies dominate their content library.

**Content Addition**: July emerged as the month when Netflix adds the most content, closely followed by December, indicating a strategic approach to content release.

**Genre Correlation**: Strong positive associations were observed between various genres, such as TV dramas and international TV shows, romantic and international TV shows, and independent movies and dramas. These correlations provide insights into viewer preferences and content interconnections.

**Rating Distribution**: The distribution of ratings over the years offers insights into the evolving content landscape and audience reception.

**Continued Relevance**: As the streaming industry evolves, understanding patterns and trends becomes increasingly essential for navigating the dynamic landscape of Netflix and its vast library.

#### #Recommendations

We have 6126 Movies compared to 2664 TV Shows which is like 2.3x of TV Shows, But in recent years, the trend has changed. In the last 5 years, the Movies proportion has reduced from  $\sim$ 75% to  $\sim$ 47% while TV Show's share has increased from  $\sim$ 25% to  $\sim$ 53%. This reflects that over the period a smaller number of Movies are getting released while more and more TV Shows are getting aired.

Netflix is currently serving mostly Mature audiences or Children with parental guidance (around 80% of content on Netflix). It has scope to cater to other audiences as well such as family men, Senior citizens, kids of various ages, etc.

It is observed that shorter-duration content is on the rise in the last 10 years. (duration 75 to 150 minutes and seasons 1 to 3). This can be considered while production of new content on Netflix.

Netflix has the majority of content which is released after the year 2000. It is observed that content older than the year 2000 is very scarce on Netflix. Senior Citizens could be the target audience for such content, which is almost missing currently.

Very limited genres are focussed in most of the countries except the US. It seems the currently available genres suit best for the US and a few countries but maximum countries need some more genres which are highly popular in the region. eg. Indian Mythological content is highly popular in India. We can create more country-specific genres and It might also be liked across the world just like Japanese Anime.

Japan has only 3 ratings of content largely served - TV-MA, TV-14, and TV-PG. Japan has a high population of age above 60, and this can be served by increasing the content suitable for this age group.

Country-specific insights - The content needs to be targetting the demographic of any country. Netflix can produce a higher number of content in a particular rating as per the demographic of the country. Eg. A country like India, which is highly populous, has maximum content available only in three ratings TV-MA, TV-14, and TV-PG. It is unlikely to serve the below 14 age and above 35 year age group with only these ratings being available.

Maximum content of Netflix which is around 75%, is coming from the top 10 countries. The United States is the highest contributor, followed by India and the United Kingdom. The rest of the world only contributes 25% of the content. More countries with suitable genres and ratings can be focussed on in the future to grow the business.