Comprehensive Analysis Report of YouTube Statistics and OTT Platforms Power BI

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Introduction:

Global entertainment consumption has changed due to the explosive growth of Over-the-Top (OTT) platforms and the widespread popularity of YouTube. To analyze the trends and consumption of various patterns and provider services including Netflix, Amazon Prime, Hotstar, Apple TV, and YouTube. A comprehensive data analysis was done by using the Kaggle dataset. The main goal of this project was to use a set of interactive dashboards and insight analysis of the data by using Microsoft Power BI (Business Intelligence) to provide stakeholders relevant information on platform performance and viewer preferences as needed.

Project Overview:

This project comprises the creation of six visualization dashboards (YouTube Statistics, Netflix, Amazon Prime, Hotstar, and Apple TV) each dashboard is customized to visualize key performance indicators (KPIs) and analytics of YouTube statistics and OTT platforms. The data set was cleaned, transformed, and enriched for effective analysis to the viewers and created many measures from the dataset fields that are used for the analysis of visualization. The dashboards were designed to be very friendly and facilitate the needs of the viewers for an intuitive exploration of data through bar graphs, column charts, pie charts, maps, scatter plots, filters, and slicer capabilities. The dashboard visualizations are dynamic, customizable, and insightful summaries.

Data Handling and Processing:

The project's initial phase involved extensive data preprocessing to ensure the data is accurate and relevant for the project insight generation. This includes data cleaning so that the redundant and unnecessary data was erased and modified according to the project insights, data transformation like modifying few format datatypes of the fields, and data enrichment which helped in deeper segmentation and trend analysis.

Data Cleaning: In the process of data cleaning, the data is addresses with missing values, changes made for inconsistent data, removed the fields that are duplicated, deleted, and hide some unwanted fields in the report view to enhance the reliability of data.

Data Transformation: In this process, the data is transformed by aggregating at various levels to support several types of analysis. This includes modifying data formats of a few fields, creating measures and adding them to the columns to align with analytical goals.

Data Enrichment: Integrating with external data sources to enrich the dataset and analysis by adding pictures related to the visualization to provide a broader context to the analysis. This also included global YouTube penetration data which helped to compare the existing data of deeper trend analysis for the viewers.

Description of Data Sets:

In this project there are eight datasets (YouTube Statistics, Country Statistics, Category Statistics. Netflix, Amazon Prime, Hotstar, Apple TV, and Rotten Tomatoes dataset).

Tables Overview:

YouTube statistics data set is tailored to facilitate a deep dive into YouTube analytics including geographical analysis, categorical based analysis, and detailed channel insights.

Country Stats: This table provides statistics aggregated by country, relevant to YouTube channel performance.

Attributes:

longitude: Geographical longitude of the country.

number_of_channels: Total number of YouTube channels registered in the country.

population: Total population of the country.

total_subscribers: Aggregate number of subscribers across all channels in the country.

total_video_views: Total video views across all channels in the country.

unemployment_rate: The unemployment rate of the country, which could be relevant in analyzing content consumption patterns.

urban_population: Number of people living in urban areas within the country.

views_per_population: Ratio of total video views to the population, indicating average viewers.

views_per_subs: Average number of views per subscriber, which can indicate viewer engagement.

Category Stats: This field focuses on categorizing channel data to provide insights into specific content types or genres on YouTube.

Attributes:

category: The genre or type of content (e.g., Entertainment, Education, etc.).

number_of_channels: Number of channels associated with each category.

total_subscribers: Total subscribers for all channels within a specific category.

total_video_views: Total views accumulated by videos within the category.

views_per_subs: Average views per subscriber within the category, a metric of engagement and popularity.

YouTube Stats: This field contains detailed data about individual YouTube channels and their categorization.

Attributes:

category: The content category of the channel.

channel_name: Name of the YouTube channel.

channel_type: Type of channel, which could be based on ownership and other classification.

country: Country in which the channel is based or primarily targets.

created_date: Date the channel was created.

created_date_avail: Indicates whether the creation date was available in the dataset.

created_day: The day of the week the channel was created, which could provide insights into strategic launch timing.

titles: This table contains apple tv data.

Attributes:

age_certification: Official age rating of a show.

description: Synopsis or description of the show.

genres: which genres the show belongs to.

id: A unique identifier for each show.

imdb_id: Identifier of IMDb for each show.

imdb_score: IMDb rating of the show.

imdb_votes: Number of votes the title received on IMDb.

production_countries: Countries where the title was produced.

release_year: The year the title was released.

runtime: Length of the title in minutes.

seasons: Applicable to series; the number of seasons.

title: The name of the show.

imdb_popularity: Popularity metric from IMDb.

tmdb_score: Scoring metric from TMDb.

type: Differentiates between movies and series.

netflix_titles, amazon_prime_titles, and disney_plus_titles: Focuses on content on OTT platforms.

Attributes:

cast: Actors involved.

country: Country of origin.

date_added: When the title was added to the platform.

description: Description of the title.

director: Who directed the film or series.

duration: Total runtime.

listed_in: Categories the title is listed under.

rating: Rating given to the title.

release_year: Release year.

show_id: Unique identifier for the title on Netflix.

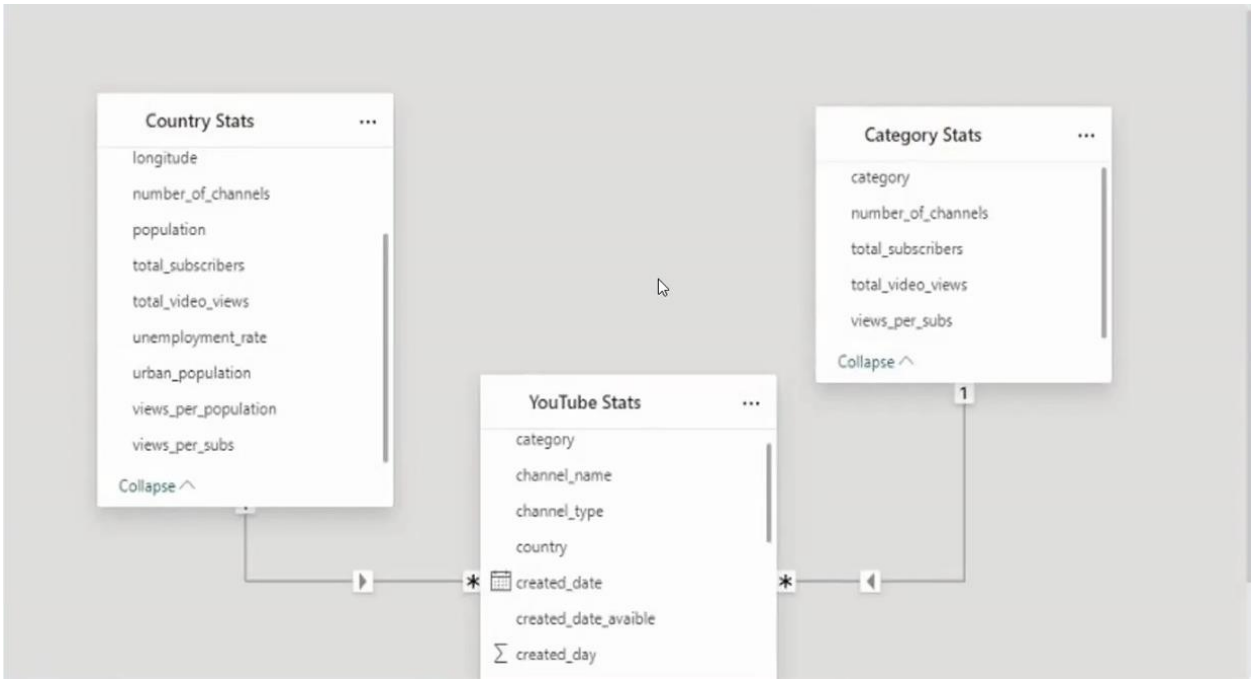
title: Name of the show.

type: Specifies whether it is a movie or series.

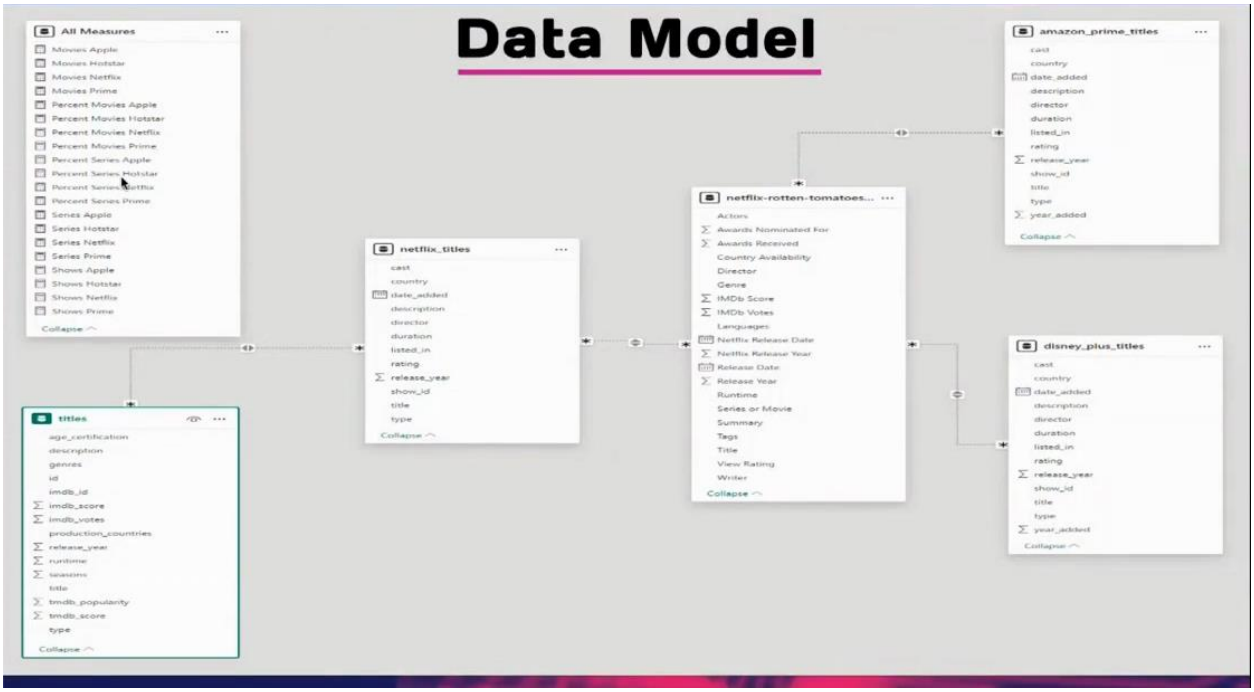
netflixrotten_tomatoes: Provides enriched metadata by integrating Netflix, Amazon Prime, Hotstar and Apple TV overall ratings data with information from Rotten Tomatoes.

Attributes: Actors, Awards Nominated For, Awards Received, Country Availability, Director, Genre, IMDB Score, IMDB Votes, languages, release date, release year, runtime, summary, tags, titles, view rating and writer.

YouTube Statistics Data Model:



OTT Platforms Data Model:



Key Items for Analysis:

When analyzing dashboards for multiple streaming platforms like Hotstar, Netflix, Amazon Prime, Apple TV and YouTube in Power BI, several key items can be considered for analysis. Below are some key items to focus on:

Total Number of Shows (Movies and Series): Aggregating the total number of shows that include both movies and series available on each platform. We can identify the differences in content libraries by comparing volume of content across platforms like HotStar, Netflix, Amazon Prime, and Apple TV.

IMDB Ratings: We considered average IMDb scores for movies and series across platforms to understand the quality of the content.

Video Performance Metrics: In YouTube dashboards, we analyzed metrics related to video performance like views. Identifying the performance and reach of video over time.

Time-based Analysis: We conducted time-based analysis to visualize and identify various trends and patterns over different time periods and to understand how these factors affect channel growth.

Engagement Metrics: We evaluated metrics around user engagement like likes and dislikes, user ratings, total time spent etc. to analyze and identify the opportunities for improvement.

Genre Analysis: We tried exploring content distribution by genre for understanding user preferences and platform analysis.

Questions:

YouTube Statistics:

Question 1: What are my top 10 channels by subscribers?

After analyzing the data, we got top 10 YouTube channels-based subscribers. The top 10 channels are "T-Series, MrBeast, Cocomelon, SET India, Kids Diana Show, PewDiePie, etc "

Question 2: Top 10 channels by yearly earnings

After analyzing the data, we got top 10 YouTube channels-based yearly earnings. The top 10 channels are "KimPro, Dafuq!?Boom, T-Series, MrBeast, Cocomelon, SET India, ZEE Tv, StarPlus, Sony SAB, GR6 EXPLODE"

Question 3: Top 10 channels by monthly earnings

After analyzing the data, we got top 10 YouTube channels-based monthly earnings. The top 10 channels are "KimPro, Dafuq!?Boom, T-Series, MrBeast, Cocomelon, SET India, ZEE Tv, StarPlus, Sony SAB, GR6 EXPLODE"

Netflix:

Question 1: How many movies and series are in the Netflix dataset and how much percentage of movies and series are there?

When examining the Netflix dataset, there are 10,400 movies and 3,109 TV series. This means that Netflix is made up of 77% movies and 23% TV series.

Question 2: How many total TV shows and movies are there in the genre "Action, Adventure"?

After examining the dataset, there are a total of 18 TV shows and 18 movies in the genre, "Action, Adventure." The 18 movies have an average rating of 100% and the 18 TV shows have an average IMbd rating of 6.27.

Question 3: For “22 Jump Street,” what was the IMBd rating and duration?

When trying to understand what IMBd score “22 Jumo Street” received, we must first select “22 Jump Street” from the list of shows on the dashboard. When “22 Jump Street” is selected from the slicer, we see that “22 Jump Street” received an IMBd score of 7.0. Additionally, 22 Jump Street’s duration is between 1-2 hours long.

Amazon Prime:

Question 1: How many total TV shows and movies are there on Amazon Prime? Also, what is the average IMBd score of all TV shows on Amazon Prime?

There are 7,814 movies and 9,684 total TV shows on Amazon Prime. Out of the 9,684 total TV shows on Amazon Prime, the average IMBd score is 6.49.

Question 2: What is the rating and duration of the show “Mixed Up”? Who directed it?

The show “Mixed Up” has an IMBd rating of 6.49 and a total duration of 106 minutes. Additionally, the show was directed by Nishi Chawla.

Question 3: Which shows did the directed named “A.R Murugados” direct? Also, what is the average IMBd score of shows directed by him?

The directed named “A.R Murugados” directed the shows “Darbar (Malayalam)”, “Darbar (Tamil),” and “Darbar (Telugu).” A.R Murugados has an average IMBd rating of 6.49.

Apple TV:

Question 1: How many “G” rated movies are there in the “Animated, Comedy, Family” genre?

In order to determine how many “G” rated movies there are in the “Animated, Comedy, Family” genre, we must look at the Apple TV dashboard and examine the data. After Selecting “G” for the rating and

"Animated, Comedy, Family" for the genre, we see that there are a total of 5 movies that are "G" rated and in the "Animated, Comedy, Family" genre.

Question 2: When analyzing all 62 movies, what was the average rating?

After further examination of the data set, when selecting all 62 movies, we have a collective average rating of 36%. According to the dataset, the movies on Apple TV are not extremely popular and are rated low.

Question 3: In 2020, how many "TV14" rated shows are there in the "crime, drama, thriller" genre?

When selecting "TV14" for the rating and "crime, drama, thriller" for the genre, it is shown that there is one show with the "TV14" rating and "crime, drama, thriller" genre. Given that most 14yearolds are not interested in the "crime, drama, thriller" genre, it makes sense that Apple TV only has one show in the "crime, drama, thriller" genre that is rated "TV14."

Question 4: What was the IMBd score of the show, "A Charlie Brown Christmas"?

In order to understand what IMBd score the show, "A Charlie Brown Christmas" received, we must first select "A Charlie Brown Christmas" from the list of shows on the dashboard. After selecting "A Charlie Brown Christmas" from the list of shows, its IMBd score of 8.30 is shown in the upper left portion of the dashboard. "A Charlie Brown Christmas" is a popular movie that is liked by many.

Disney Hotstar:

Question 1: How many 10minute movies exist on Disney Hotstar?

When examining the Disney Hotstar dataset, to sort the movies based on the desired time we must select the "10-min" option from the slicer. After the "10-min" option is selected, you will see that there are 6 10-minute movies on Disney Hotstar. Every one of these 6 10-minute movies have a rating of 100%.

Question 2: What is the average rating of a movie directed by Adam Shankman?

In order to determine the average rating of a certain director on Disney Hotstar, such as Adam Shankman, select Adam Shankman from the “List of directors” slicer. When Adam Shankman is selected from the slicers, we see that he has directed 3 movies with an average rating of 100%. According to the dataset provided by Kaggle, Adam Shankman is a great director based on his ratings!

Question 3: What is the average IMBd score of shows in the “Action-Adventure-Animation" genre?

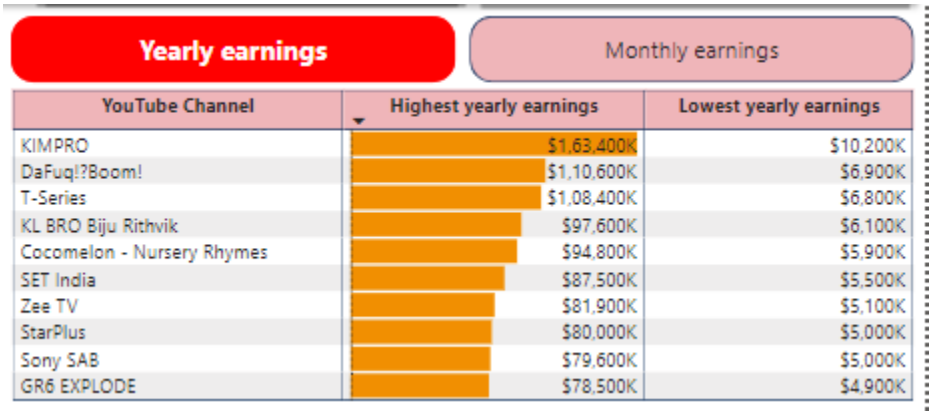
When examining shows of certain genres, such as the “Action-Adventure-Animation" genre, we can interact with the dataset by selecting different genre options, like the “Action-Adventure-Animation” genre for example and determine certain things about the shows and movies in that genre such as total number of shows and average IMBd score. After selecting “Action-Adventure-Animation" from the genre slicer, you will see that there are a total of four shows with an average IMbd rating of 6.49.

Dashboard Design and Visualization Analysis:

YouTube Statistics Dashboard Visualization:

The first set of visuals on the first page of this dashboard discusses a few key KPI's along with top performing channels. The first KPI shows channel with the highest number of subscribers along with the actual number of subscribers, second KPI shows the channel with highest number of views along with the actual view count, third KPI shows top channel with subscribers' growth in a month. The next visual discusses the top 10 channels by number of subscribers.

The visual below was used to show the top 10 channels based on highest monthly and highest yearly earnings. We can also see the lowest monthly earnings for the same channels. A vertical bar chart helps us do the comparison of revenue across channels.

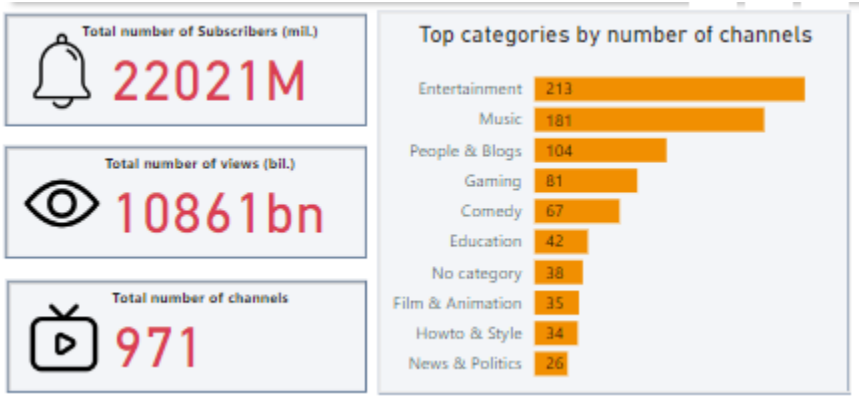


YouTube Channel	Highest yearly earnings	Lowest yearly earnings
KIMPRO	$1,63,400K	$10,200K
DaFuq!?Boom!	$1,10,600K	$6,900K
T-Series	$1,08,400K	$6,800K
KL BRO Biju Rithvik	$97,600K	$6,100K
Cocomelon - Nursery Rhymes	$94,800K	$5,900K
SET India	$87,500K	$5,500K
Zee TV	$81,900K	$5,100K
StarPlus	$80,000K	$5,000K
Sony SAB	$79,600K	$5,000K
GR6 EXPLODE	$78,500K	$4,900K

The visual below shows the number of YouTube channels by country. This visual can be used to identify the current reach and can be used to understand the geographic distribution of YouTube channels. Countries like India and United States showing the greatest number of channels while African and north Asian countries showing the channels close to none.

The “Total views and subscribers by YouTube channel” visual helps us identify the correlation between the number of subscribers and the number of views for a channel. It is clearly seen that a linear growth in views can be seen as the number of subscribers increases. There are few outliers as well.

The first set of visuals on the second page of this dashboard discusses a few key KPI's along with top performing channels. The first kpi shows the total number of subscribers across YouTube, the second kpi shows the total number of views across YouTube, third KPI shows total number channel. The next visual discusses the top categories by number of channels.

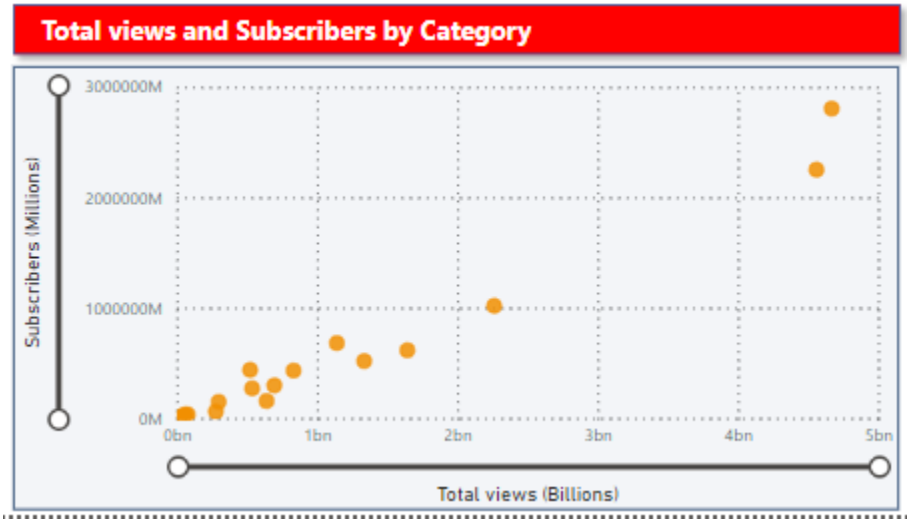


The visual below helps us with demographic data analysis. Top 10 countries with highest user engagement are shown and the bar chart helps us compare the engagement metric between countries. Barring few countries the engagement metric is comparable within total views to population ratio.

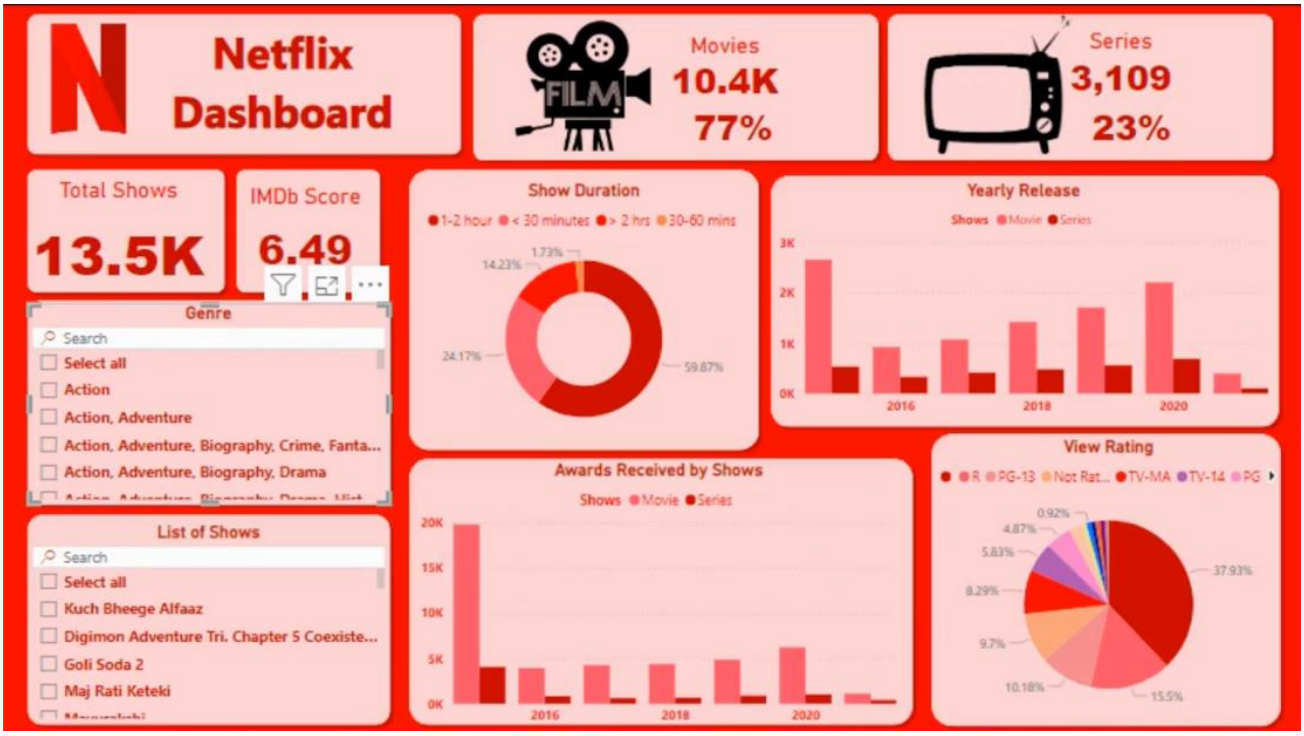
Country	Total views	Population	Country engagment
Barbados	22478M	89K	2,51,342
Samoa	6638M	36K	1,86,519
Latvia	20919M	1305K	16,031
United States	3690292M	270663K	13,634
United Arab Emirates	75321M	8480K	8,882
United Kingdom	430567M	55908K	7,701
Thailand	264318M	35295K	7,489
Canada	191321M	30628K	6,246
Jordan	53090M	9213K	5,762
South Korea	225592M	42107K	5,358

The visual below shows the total number of views per country. This visual can be used to identify the current reach and can be used to understand the geographic distribution of view on YouTube. Countries like India and United States as shown in previous map visualization shows the greatest number of view while African and north Asian countries showing the views close to none.

The “Total views and subscribers by category” visualization helps us identify the correlation between the number of subscribers and the number of views for a particular category. It is clearly seen that a linear growth in views can be seen as the number of subscribers increases. There are few outliers as well.



Netflix Dashboard Visualization:



This dashboard effectively serves as a powerful tool for both Netflix's internal team for strategic decision-making and for viewers for personalized content discovery and evaluation.

In this Netflix dashboard visualization, the schema is organized that supports effective analysis and aggregates all the features that are provided by the data set. The visualization is created in such a way that the viewers can easily navigate and analyze the insights of the Netflix dashboard. The color and format of the dashboard is created that aligns with Netflix brand and enhances readability. The dashboard included many key performance indicators and used visuals from Power BI like clustered column chart, slicers, and pie chart. These visuals are immensely helpful for the viewers to interact and analyze the dashboard.

Total Shows:

Type: Measure "Shows Netflix = COUNT('netflix-rotten-tomatoes-metacritic-imdb'[Title])", Numeric.

Purpose: Displays the total number of shows available on Netflix.

Usage: Provides a quick snapshot of the quantity of shows, enabling an immediate grasp of the content volume.

IMDb Score:

Type: Numeric Value.

Purpose: Shows the average IMDb score across all content on Netflix.

Usage: Indicates the overall quality of content as rated by viewers, giving a sense of the platform's performance in terms of viewer satisfaction.

Movies:

Type: Measure, “Movies Netflix = CALCULATE ([Shows Netflix],'netflix-rotten-tomatoes-metacritic-imdb'[Series or Movie] = "Movie")”, Percentage value.

Purpose: Indicates the total number of movies and the percentage they represent of the total content.

Usage: Highlights the proportion of movies compared to series, offering insight into the type of content that dominates the platform.

Series:

Type: Measure, Series Netflix = CALCULATE ([Shows Netflix],'netflix-rotten-tomatoes-metacritic-imdb'[Series or Movie] = "Series") Percentage value.

Purpose: Shows the total number of series and their percentage of the total content.

Usage: Provides balanced information, complementing the movies data by showing the extent of serialized content.

Genre:

Type: Slicer visual with searchable vertical list.

Purpose: Allows users to filter the displayed content on the dashboard based on selected genres.

Usage: Enables viewers to customize the displayed data to see content in genres they prefer, enhancing user interaction and engagement.

List of Shows:

Type: Slicer visual with searchable vertical list.

Purpose: Lists all shows available on Netflix.

Usage: Users can search and select shows, potentially to view more detailed information or simply to explore available content.

Show Duration:

Type: Donut chart.

Purpose: Categorizes shows by their duration.

Usage: Helps in analyzing the distribution of show lengths, useful for viewers looking for content that fits specific viewing times.

Yearly Release:

Type: Clustered column chart.

Purpose: Displays the number of shows and movies released each year.

Usage: Offers insights into the volume and trend of content production over the years, highlighting growth or shifts in content strategy.

Awards Received by Shows:

Type: Clustered column chart.

Purpose: Shows the number of awards received by shows and movies over the years.

Usage: Helps gauge the recognition and quality of content as acknowledged by award giving bodies.

View Rating:

Type: Pie chart.

Purpose: Represents the distribution of viewer ratings across the content.

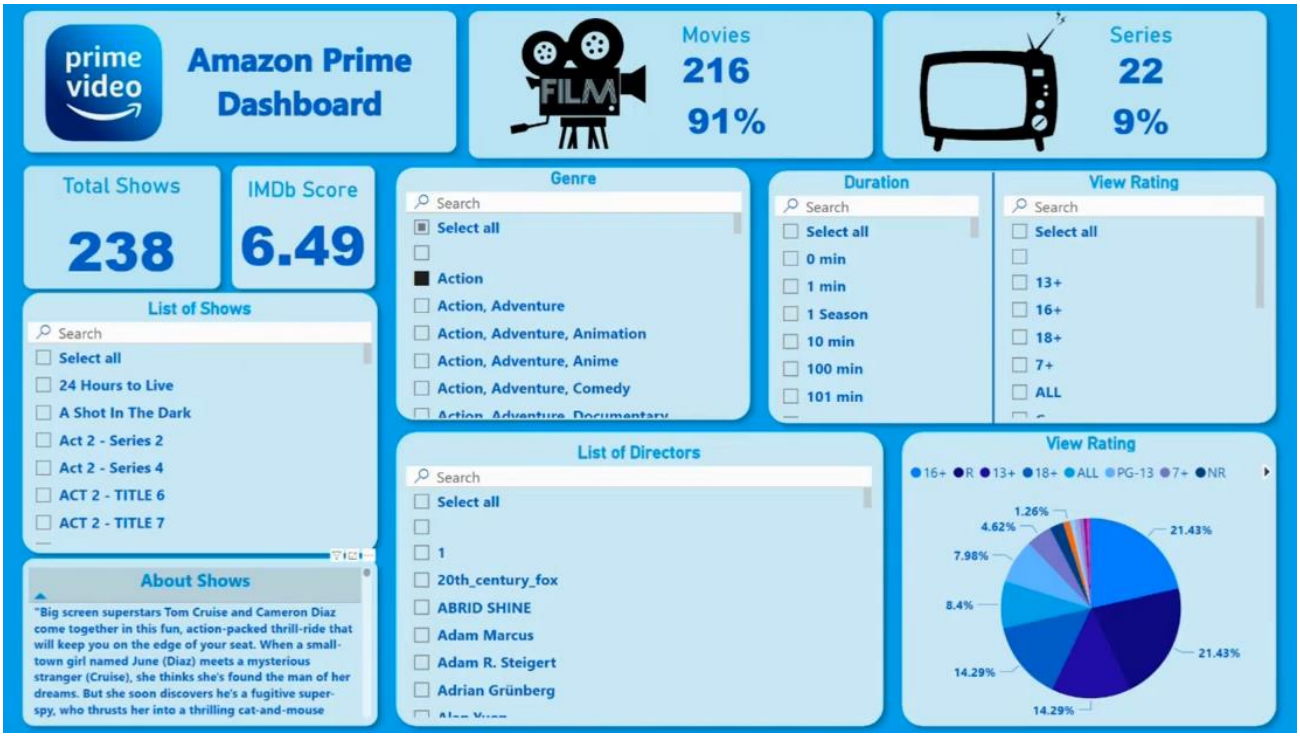
Usage: Allows analysis of content maturity and appropriateness, showing how much content is available for various viewer age groups.

The dashboard is divided into nine widgets and each widget is customized. The Top three widgets are for the Netflix brand logo and name, next to that widget shows the total number of movies and series in the Netflix data set. The total shows and IMDb score widgets tell the total number of shows and average IMDb score of all the shows on Netflix. These four widgets are obtained from the measures created at the data level.

The genre tells the type of genre that the show belongs to, and the list of shows tells all the shows in the data set. These two visuals are slicer and connected to all the visuals in the dashboard. When the viewer selects any slicer the visualization changes according to the selected slicer. The remaining show duration, yearly release, show awards received by year, and rating visuals are created to analyze the data based on Netflix data. Based on the slicer selection these four visuals change accordingly.

This dashboard effectively serves as a powerful tool for both Netflix's internal team for strategic decision-making and for viewers for personalized content discovery and evaluation.

Amazon Prime Dashboard Visualization:



This dashboard is structured to provide a detailed overview of the content available on Amazon Prime Video, focusing on various metrics such as total number of shows and movies, average IMDb scores, content distribution by genre, duration, director, and viewer ratings.

Total Shows:

Type: Measure, "Shows Prime = DISTINCTCOUNT (amazon_prime_titles[show_id])", Numeric value.

Purpose: Displays the total number of shows available on Amazon Prime.

Usage: Gives a quick snapshot of the volume of content in terms of shows.

IMDb Score:

Type: Numeric value.

Purpose: Shows the average IMDb score across all content on Amazon Prime.

Usage: Provides IMDb score average of all the shows that are selected by the slicer

Movies:

Type: Measure, “Movies Prime = CALCULATE ([Shows Prime],amazon_prime_titles[type] = "Movie")”, Percentage indicator.

Purpose: Indicates the total number of movies by percentage they represent of the total shows in prime.

Usage: Highlights the proportion of movies to shows that are selected by the slicer visuals.

Series:

Type: Measure, Series Prime = CALCULATE ([Shows Prime],amazon_prime_titles[type] = "TV Show"). Numeric indicator with a percentage.

Purpose: Indicates the total number of series and their percentage of the total content.

Usage: Highlights the proportion of type series to shows that are selected by the slicer visuals.

Genre:

Type: Slicer visual with searchable vertical list.

Purpose: Allows users to filter the content displayed in other parts of the dashboard based on selected genres.

Usage: Enables viewers to tailor the dashboard to show only content from specific genres they are interested in.

List of Shows:

Type: Slicer visual with searchable vertical list.

Purpose: Displays a list of show titles available on Amazon Prime.

Usage: Users can search and select shows to see more detailed data and explore available shows.

Duration:

Type: Slicer visual with searchable vertical list.

Purpose: Allows filtering of content based on its duration.

Usage: Useful for viewers looking for content that fits specific time slots, such as short or longer films.

View Rating:

Type: Slicer visual with searchable vertical list.

Purpose: The dropdown allows filtering by viewer age rating, while the pie chart visually represents the distribution of these ratings across all content.

Usage: Helps in understanding what percentage of the content is suitable for different age groups, which is useful for targeting specific demographics or ensuring content appropriateness.

List of Directors:

Type: Slicer visual with searchable vertical list.

Purpose: Displays a list of directors for the available content.

Usage: Viewers can filter the dashboard to show only content directed by selected directors, useful for fans of specific filmmakers.

About Shows:

Type: Text box.

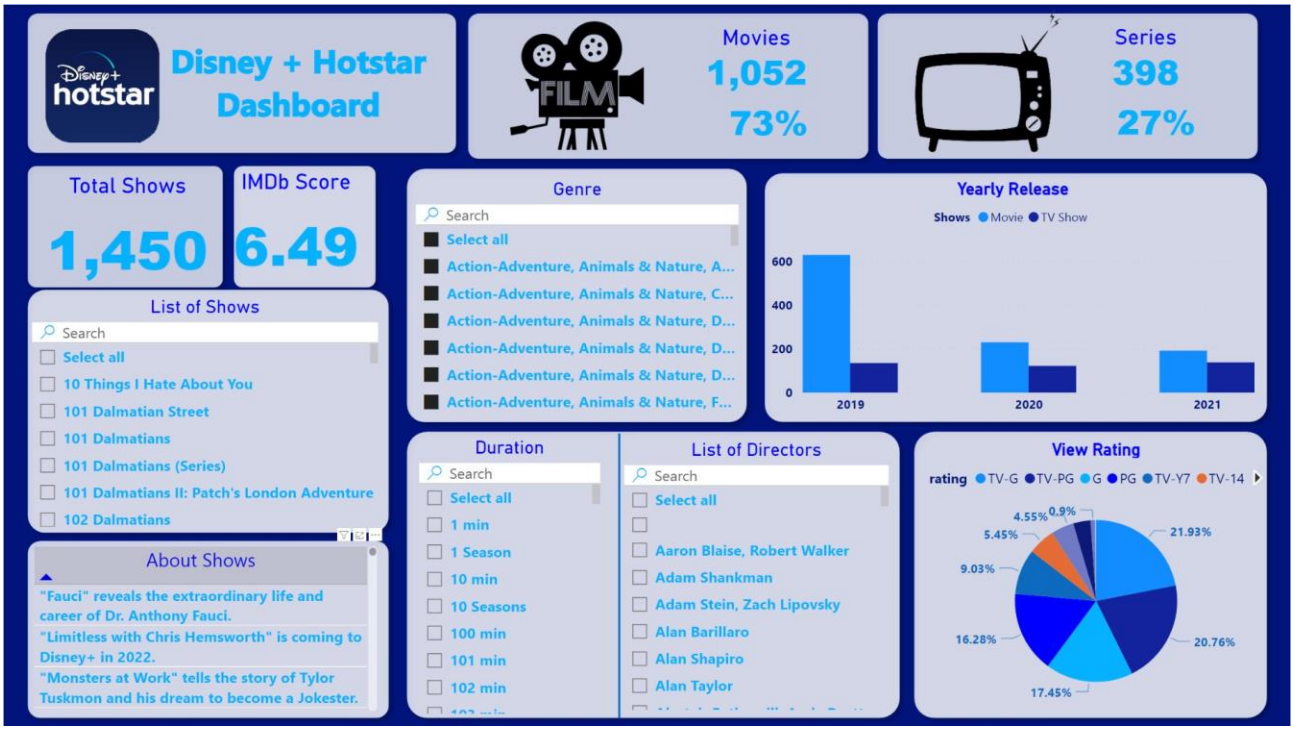
Purpose: Provides detailed descriptions or selected highlights about shows or movies.

Usage: Offers additional insights into the content, enhancing viewer engagement and interest.

The dashboard provides quick insights into the content strategy of Amazon Prime Video, such as the balance between movies and series, the variety in genres offered, and the distribution of content by viewer ratings and directors. This can inform both viewers and content managers.

In this dashboard visualization viewers can interact with the dashboard through filters like genre, duration, and viewer ratings to customize the display according to their preferences. When any slicer is selected the visuals and numeric changes accordingly. This customization can help users quickly find content that matches their interests or availability. This dashboard can reveal trends in viewer preferences and content performance, guiding future content acquisitions, production decisions, and marketing strategies.

Hotstar Dashboard Visualization:



Total Shows:

Type: Measure, “Shows Hotstar = DISTINCTCOUNT (disney_plus_titles[show_id])”, Numeric value.

Purpose: Displays the total number of shows available on disney plus hotstar.

Usage: Gives a quick snapshot of the volume of content in terms of shows.

IMDb Score:

Type: Numeric value.

Purpose: Shows the average IMDb score across all content on hotstar.

Usage: Provides IMDb score average of all the shows that are selected by the slicer

Movies:

Type: Measure, “Movies Hotstar = CALCULATE ([Shows Hotstar],disney_plus_titles[type] = "Movie")”, Percentage indicator.

Purpose: Indicates the total number of movies by percentage they represent of the total shows in hotstar.

Usage: Highlights the proportion of movies to shows that are selected by the slicer visuals.

Series:

Type: Measure, Series Hotstar = CALCULATE ([Shows Hotstar],disney_plus_titles[type] = "TV Show"). Numeric indicator with a percentage.

Purpose: Indicates the total number of series and their percentage of the total content.

Usage: Highlights the proportion of type series to shows that are selected by the slicer visuals.

Genre:

Type: Slicer visual with searchable vertical list.

Purpose: Allows users to filter the content displayed in other parts of the dashboard based on selected genres.

Usage: Enables viewers to tailor the dashboard to show only content from specific genres they are interested in.

List of Shows:

Type: Slicer visual with searchable vertical list.

Purpose: Displays a list of show titles available on hotstar.

Usage: Users can search and select shows to see more detailed data and explore available shows.

Yearly Release:

Type: Clustered column chart.

Purpose: Displays the number of shows and movies released each year.

Usage: Offers insights into the volume and trend of content production over the years, highlighting growth or shifts in content strategy.

Duration:

Type: Slicer visual with searchable vertical list.

Purpose: Allows filtering of content based on its duration.

Usage: Useful for viewers looking for content that fits specific time slots, such as short or longer films.

View Rating:

Type: Pie chart.

Purpose: The pie chart shows the rating of the shows selected by slicer.

Usage: Each show has different ratings and ratings are used for who can watch the show. This pie chart visual shows the viewers who can watch the film.

List of Directors:

Type: Slicer visual with searchable vertical list.

Purpose: Displays a list of directors for the available content.

Usage: Viewers can filter the dashboard to show only content directed by selected directors, useful for fans of specific filmmakers.

About Shows:

Type: Text box.

Purpose: Provides detailed descriptions or selected highlights about shows or movies.

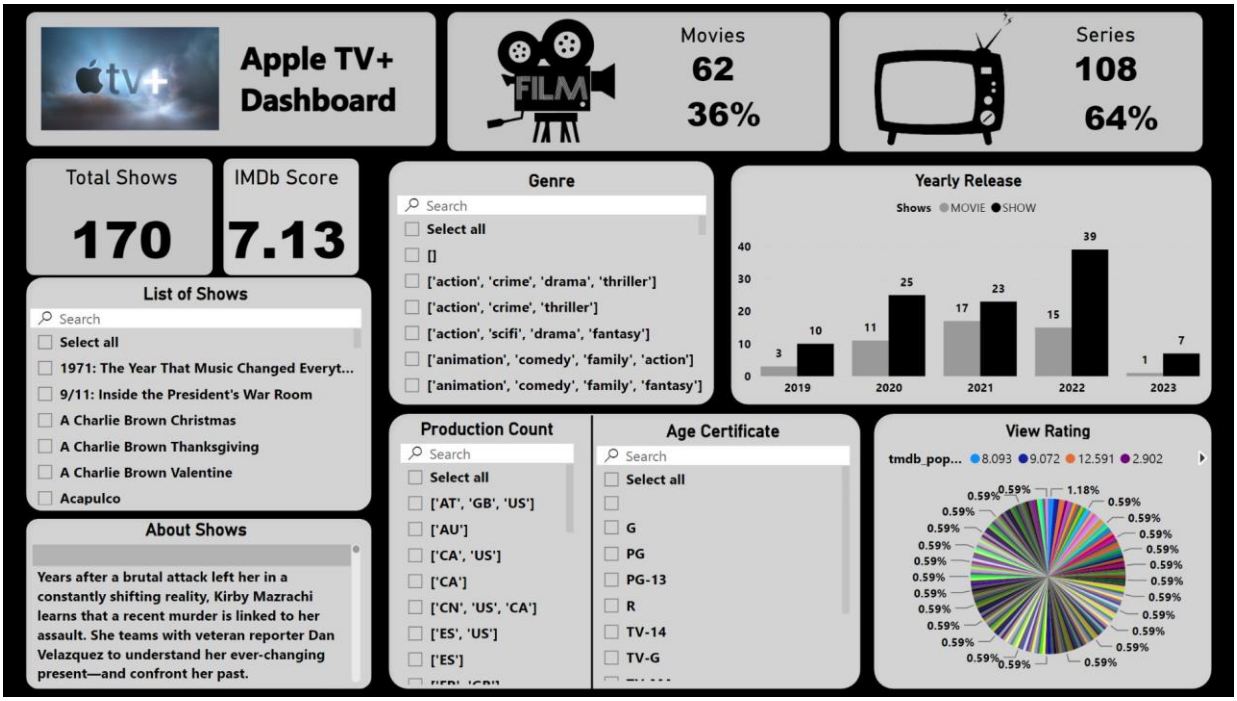
Usage: Offers additional insights into the content, enhancing viewer engagement and interest.

This dashboard effectively serves as a powerful tool for both Hotstar internal team for strategic decision-making and for viewers for personalized content discovery and evaluation.

In this Hotstar dashboard visualization, the schema is organized that supports effective analysis and aggregates all the features that are provided by the data set. The visualization is created in such a way that the viewers can easily navigate and analyze the insights of the Netflix dashboard. The color and format of the dashboard is created that aligns with Netflix brand and enhances readability. The dashboard included many key performance indicators and used visuals from Power BI like clustered column chart, slicers, and pie chart. These visuals are immensely helpful for the viewers to interact and analyze the dashboard.

This dashboard effectively serves as a powerful tool for both Hotstar internal team for strategic decision-making and for viewers for personalized content discovery and evaluation.

Apple TV Dashboard Visualization:



Total Shows:

Type: Measure, “Shows Apple= DISTINCTCOUNT (titles[show_id])”, Numeric value.

Purpose: Displays the total number of shows available on Apple TV.

Usage: Gives a quick snapshot of the volume of content in terms of shows.

IMDb Score:

Type: Numeric value.

Purpose: Shows the average IMDb score across all content on Apple TV.

Usage: Provides IMDb score average of all the shows that are selected by the slicer

Movies:

Type: Measure, “Movies Apple TV = CALCULATE ([Shows Apple], titles[type] = "Movie")”, Percentage indicator.

Purpose: Indicates the total number of movies by percentage they represent of the total shows in Apple TV.

Usage: Highlights the proportion of movies to shows that are selected by the slicer visuals.

Series:

Type: Measure, Series Apple TV = CALCULATE ([Shows Apple], titles[type] = "TV Show"), Percentage value.

Purpose: Indicates the total number of series and their percentage of the total content.

Usage: Highlights the proportion of type series to shows that are selected by the slicer visuals.

Genre:

Type: Slicer visual with searchable vertical list.

Purpose: Allows users to filter the content displayed in other parts of the dashboard based on selected genres.

Usage: Enables viewers to tailor the dashboard to show only content from specific genres they are interested in.

List of Shows:

Type: Slicer visual with searchable vertical list.

Purpose: Displays a list of show titles available on Apple TV.

Usage: Users can search and select shows to see more detailed data and explore available shows.

Duration:

Type: Slicer visual with searchable vertical list.

Purpose: Allows filtering of content based on its duration.

Usage: Useful for viewers looking for content that fits specific time slots, such as short or longer films.

View Rating:

Type: Slicer visual with searchable vertical list.

Purpose: The dropdown allows filtering by viewer age rating, while the pie chart visually represents the distribution of these ratings across all content.

Usage: Helps in understanding what percentage of the content is suitable for different age groups, which is useful for targeting specific demographics or ensuring content appropriateness.

List of Directors:

Type: Slicer visual with searchable vertical list.

Purpose: Displays a list of directors for the available content.

Usage: Viewers can filter the dashboard to show only content directed by selected directors, useful for fans of specific filmmakers.

About Shows:

Type: Text box.

Purpose: Provides detailed descriptions or selected highlights about shows or movies.

Usage: Offers additional insights into the shows, enhancing viewer understanding.

Outcomes and Impact:

The deployment of these dashboards provided the stakeholders with Power BI tool to derive meaningful insights into the operational effectiveness and consumer behavior across different OTT platforms and YouTube. The analytics facilitated by these dashboards are instrumental in strategic decision-making processes such as content strategy refinement, marketing spend allocation, and customer retention strategies. Through the effective use of Power BI, this project not only enhanced the accessibility of data analytics but also enabled a culture of data-driven decision-making within the organization.

Conclusion:

The Comprehensive Analytics on OTT Platforms and YouTube Statistics project stands as a testament to the capabilities of Power BI in transforming raw data into a strategic asset. This initiative has set a benchmark for future analytics projects by highlighting the potential to drive business intelligence through tailored data visualization and robust data management practices.

References:

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Rotten Tomatoes Dataset - https://www.kaggle.com/datasets/poornimamarini/movies-on-netflixprimevideo-hulu-disney-plus