

MR.B

Disney+

VS

NETFLIX



A Comparative Analysis of Netflix and Disney+ Content

Microsoft power BI

Data Analytics

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❖ Introduction:

➤ THE STORY:

Streaming platforms like Netflix and Disney Plus are keen to understand the dynamics behind their content releases and user preferences across different markets. They have provided a dataset and want to investigate key factors such as the countries with the most content releases, the trends in content additions over time, the distribution and evolution of content ratings, and the preferences of users by region. The dataset also raises questions about which directors and actors appear most frequently, and which movies have the longest durations. By analyzing these patterns, the platforms aim to optimize content strategies and understand which types of content are gaining traction across various regions. A thorough exploration of these elements will help identify trends and provide data-driven insights for decision-making, which can be visualized effectively in a dashboard for management.

❖ THE BUSINESS QUESTIONS ABOUT DATA:

➤ Business Questions on Netflix & Disney +:

- What are the top 5 countries by content release?
- How many shows/movies were added each year?
- What is the distribution of content ratings (e.g., TV-MA, PG-13, PG)?
- Which ratings are most common in each listed in?
- Which listed in are gaining popularity over time?
- Which Movies have the highest average duration (in minutes)?
- What is the monthly trend for Netflix content additions?
- What is the release trend for Netflix content in the last 5 years?
- How do listed in preferences vary by country?
- How has the number of releases changed over the years?
- Which directors have the most titles on Netflix?
- Which actors appear most frequently in Netflix titles?
- what are the common movies in both datasets?
- what is the release date of the common movies, and the first one added to the platform?
- select the first movie added on each platform based on date added column?
- what is the Average duration for each category in listed in column based on date added and its release date?



❖ Steps to Reach the Final Product:

1. Data Cleaning:

- **Null Values:**
Checked for and handled null values in key columns like date_added, rating, country, director, cast, and listed_in.
- **Standardization:**
Standardized text formatting for categorical fields such as country, listed_in, and rating to ensure consistency (e.g., correcting misspellings, ensuring uniform case).
- **Duplicates:**
Removed duplicate records, particularly in join tables like netflix_listed_in, disney_listed_in, netflix_country, and disney_country to avoid inflated counts in aggregations.

2. Data Transformation:

- **Normalization:**
Created separate tables for country, listed_in, cast, country, and directors to normalize data and reduce redundancy. This improved data integrity and optimized queries involving joins across multiple dimensions.
- **Date Formatting:**
Converted date columns (date_added, release_year) to a consistent date format for better handling of time-based queries.
- **Duration Conversion:**
For movie duration, converted string-based formats (e.g., "100 min") into integers for analysis of duration averages and sums.

3. Query Modelling:

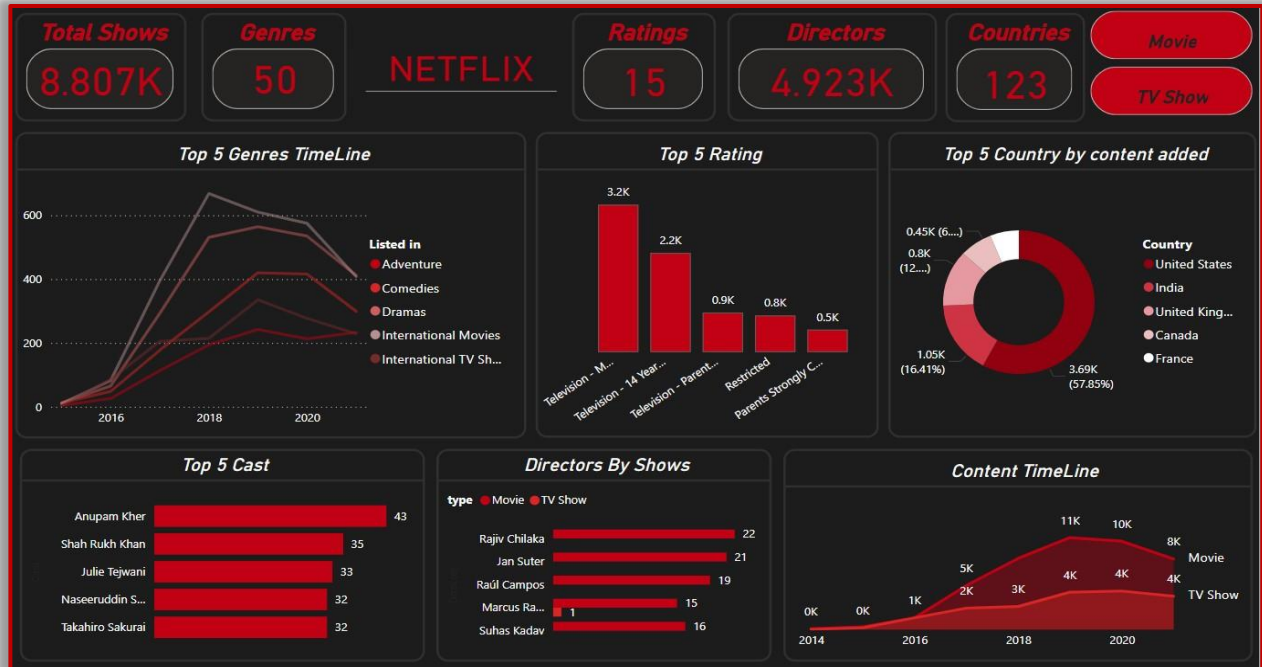
- **Content Release by Country:**
Used partitioning and window functions to rank countries by the number of shows available.
- **Yearly Additions:**
Applied window functions and groupings to extract trends on the yearly addition of movies and TV shows, comparing Netflix and Disney Plus.
- **Content Ratings Distribution:**
Grouped by rating to examine the frequency of each rating across the platforms and detect the most common ones.
- **Trending Categories:**
Analyzed popularity over time by grouping content in listed_in categories and counting the number of shows/movies added per year.
- **Average Movie Duration:**
Aggregated by listed_in to calculate the average duration for movies across categories.
- **Monthly Trends:**
Ranked content additions on a monthly basis, identifying peak content release periods.
- **Frequent Directors and Actors:**
Grouped and counted occurrences of each director and actor to determine the most prolific contributors.

4. Data Insights:

- Used these queries to analyze patterns in content strategy, such as identifying which genres are gaining or losing popularity, regional preferences in content categories, and which directors or actors contribute significantly to Netflix's and Disney Plus's catalog.

❖ Dashboards:

1. NETFLIX Dashboard:

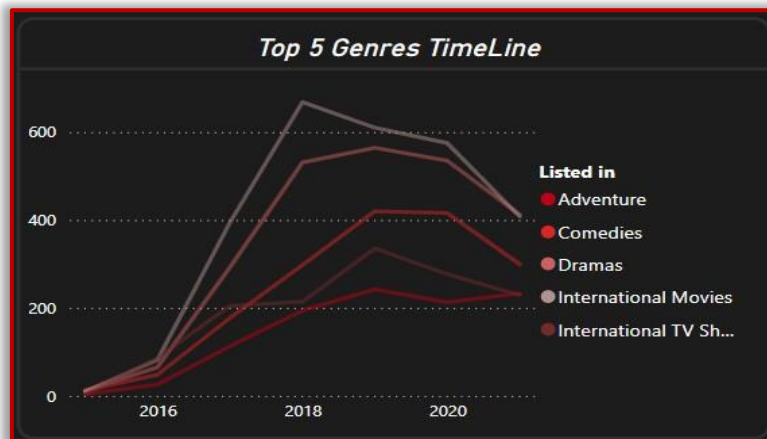


This Power BI dashboard provides a comprehensive overview of Netflix's content library, showing key metrics such as the total number of shows, genres, ratings, directors, and countries represented. It includes various visualizations to analyze trends in content addition, ratings distribution, and the contributions of specific countries and cast members.

➤ Dashboard Components:

- **Total Shows: 8.807K**
This metric represents the total number of titles available on Netflix.
- **Genres: 50**
The total number of different genres in which Netflix titles are categorized.
- **Ratings: 15**
Indicates the different rating classifications available for content.
- **Directors: 4.923**
The total number of directors associated with the Netflix library.
- **Countries: 123**
The total number of countries from which Netflix content is sourced.

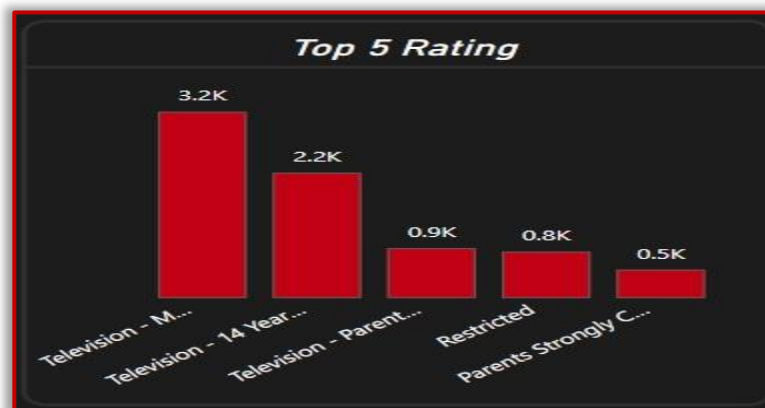
1. Top 5 Genres Timeline:



A line graph visualizing the trend of the top five genres over time (from 2016 to 2020). The graph displays the number of shows in each genre for the years listed, helping to identify growth or decline in popularity.

- Genres Listed:
 - Adventure
 - Comedies
 - Dramas
 - International Movies
 - International TV Shows

2. Top 5 Ratings:

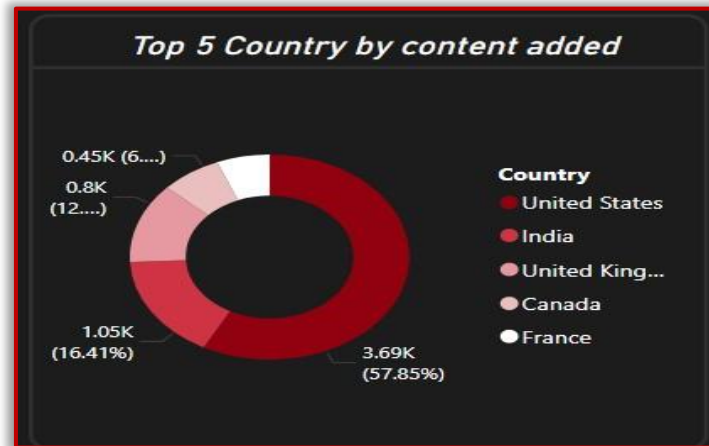


A bar chart representing the top five ratings assigned to Netflix content. This visualization helps to understand the distribution of content based on age appropriateness.



- Rating Types:
 - Television - Mature (3.2K)
 - Television - 14 Years (2.2K)
 - Television - Parent (0.9K)
 - Restricted (0.8K)
 - Parents Strongly Cautioned (0.5K)

3. Top 5 Countries by Content Added:



A donut chart illustrating the top five countries contributing to Netflix's content library. This chart provides insights into the geographic diversity of Netflix's content library.

Country Contributions:

- United States: 3.69K (57.85%)
- India: 1.05K (16.41%)
- United Kingdom: 0.8K (12%)
- Canada: 0.45K (6%)
- France: 0.4K (6.5%)

4. Top 5 Cast:

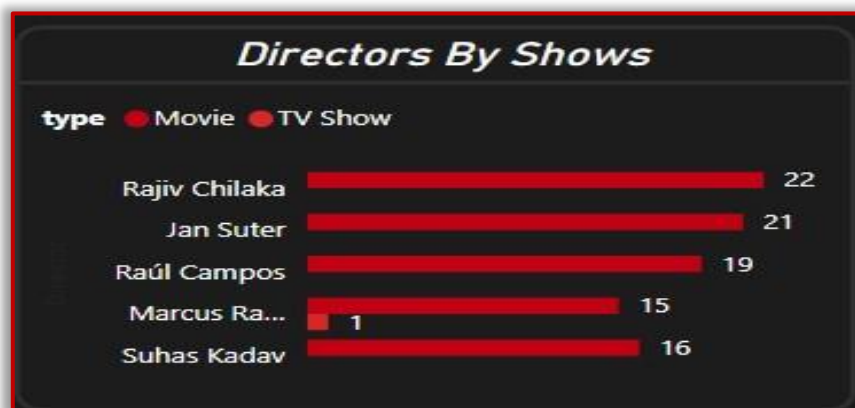


A horizontal bar chart showing the top five cast members in terms of appearances in Netflix shows.

This visualization highlights the most featured actors in Netflix's catalog.

- Cast Members:
 - Anupam Kher: 43 appearances
 - Shah Rukh Khan: 35 appearances
 - Julie Teiwani: 33 appearances
 - Naseeruddin Shah: 32 appearances
 - Takahiro Sakurai: 32 appearances

5. Directors by Shows



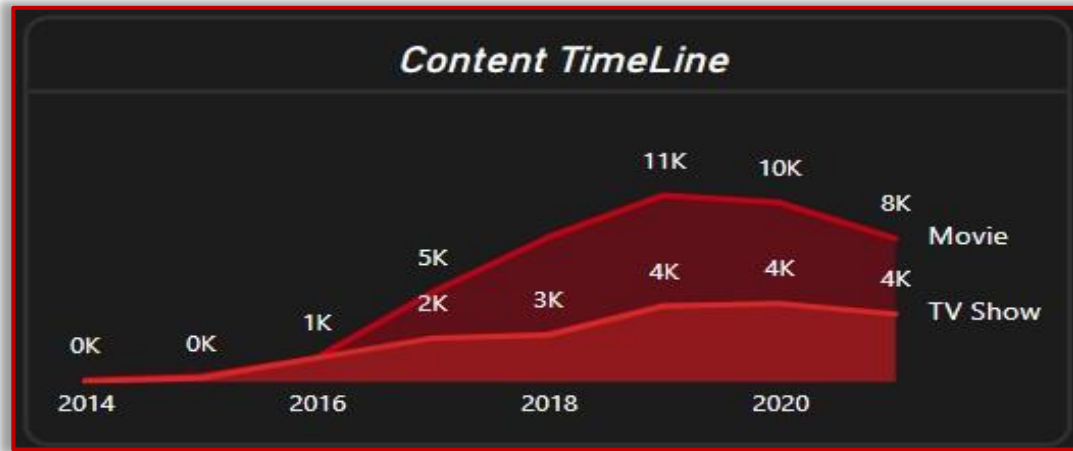
A horizontal bar chart displaying the top directors and the number of shows they have directed. This chart illustrates the contribution of various directors to the Netflix library.

- Directors:
 - Rajiv Chilaka: 22 shows
 - Jan Suter: 21 shows
 - Raúl Campos: 19 shows



- Marcus Ra: 15 shows
- Suhas Kadav: 16 shows

6. Content Timeline:



A line graph depicting the timeline of content added to Netflix over the years (from 2014 to 2020).

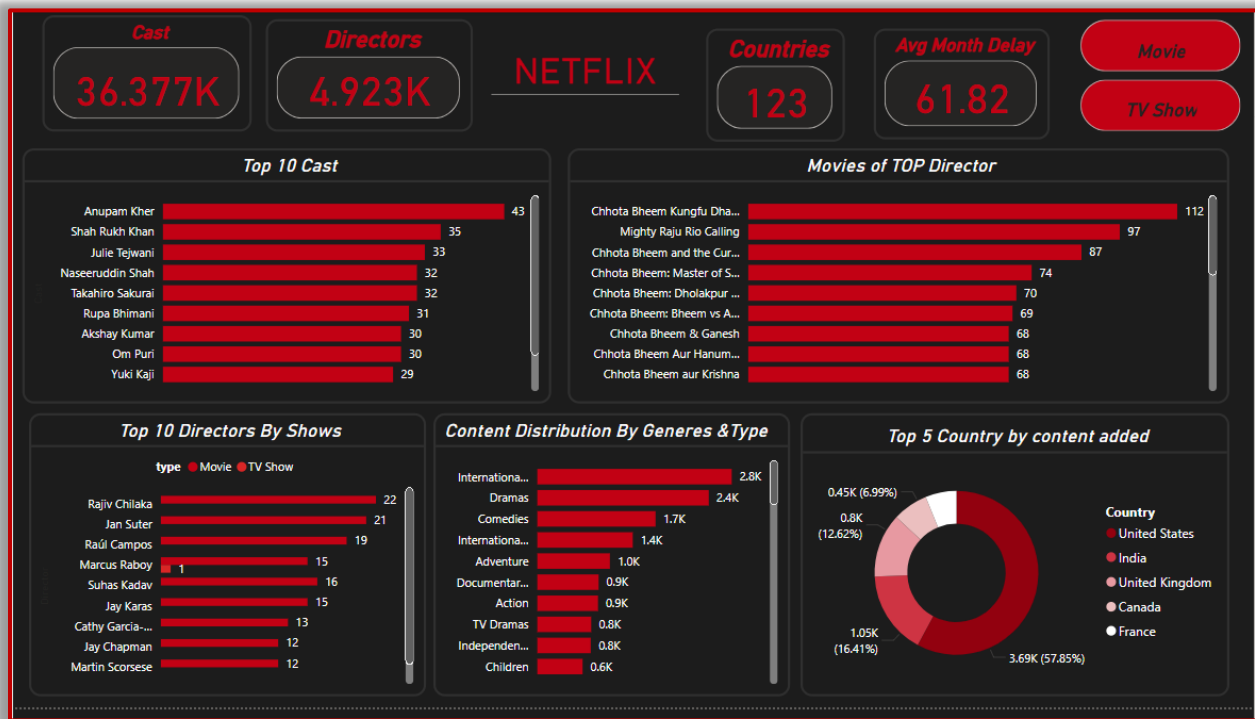
The graph differentiates between movies and TV shows, providing insights into content growth trends.

- Content Types:
 - Movie
 - TV Show

✚ *Insights:*

- The Top Genres visualization:
can help identify which genres are gaining popularity, potentially guiding content acquisition and production strategies.
- The Top Ratings section:
shows that most content is rated for mature audiences, which is significant for understanding target demographics.
- The Countries by Content Added chart:
indicates that the United States is the largest contributor, reflecting the origin of many Netflix productions.
- The Top Cast and Directors sections:
highlight key talent associated with Netflix, which can be leveraged for marketing and promotional purposes.
- The Content Timeline visualization:
is crucial for tracking Netflix's growth and planning future content strategies.

Second Page:

➤ **Dashboard Overview:**

This dashboard provides an in-depth analysis of Netflix's content, focusing on cast and directors, genre distribution, content type, and regional contributions. The insights drawn from the visuals allow us to understand Netflix's content production strategy, casting patterns, directorial involvement, and the regional focus of its content.

➤ **Key Metrics:**1. **Cast (36.377K):**

This shows the total number of actors/actresses featured in Netflix's catalog.

Business Insight:

A large and diverse cast base allows Netflix to produce a wide array of content to cater to global tastes. It highlights Netflix's inclusivity and its commitment to producing content across different regions and genres.

2. **Directors (4.923K):**

This represents the total number of directors involved in Netflix productions.

Business Insight:

Netflix's engagement with a large number of directors indicates its focus on innovation, creativity, and exploring various storytelling styles. More directors also lead to a broader range of content offerings.

3. **Countries (123):**

This metric showcases the number of countries contributing content to Netflix.

Business Insight:

Netflix is a truly global platform, leveraging content from numerous countries to appeal to a vast international audience. Localization through regional content is crucial for subscriber growth and retention.

4. Average Monthly Delay (61.82 days):

The average delay between content release and availability.

Business Insight:

Netflix must manage content release timelines effectively to avoid significant delays, ensuring new content reaches viewers in a timely fashion to maintain engagement.

➤ **Top Visuals and Insights:**

1. Top 10 Cast:

Notable actors include Anupam Kher (43 movies/shows), Shah Rukh Khan (35), Julie Tejawani (33), and others.

Business Insight:

The prominence of Bollywood actors like Shah Rukh Khan and Anupam Kher highlights Netflix's strategic focus on the Indian market. Bollywood content is gaining traction not only in India but also among global audiences, contributing to the platform's subscriber growth in Asia.

2. Top 10 Directors by Shows:

Directors like Rajiv Chilaka (22 shows), Jan Suter (21), and Ralí Campos (19) lead Netflix's content creation.

Business Insight:

These directors are primarily involved in creating TV shows, with significant representation from India and other international markets. This shows Netflix's shift towards localized, regional content creation, especially in India, where the demand for TV shows is strong.

3. Movies by Top Director (Rajiv Chilaka):

Rajiv Chilaka leads with 112 movies, notably from the Chhota Bheem franchise, a popular animated series for children.

Business Insight:

Animation and children's content are key parts of Netflix's strategy in markets like India. Content such as Chhota Bheem not only attracts younger audiences but also helps Netflix maintain a family-oriented user base, broadening its reach across different demographic groups.

4. Content Distribution by Genre & Type:

International Movies (2.8K), Dramas (2.4K), Comedies (1.7K), and Adventure are the top genres.

Business Insight:

Netflix's catalog is balanced between international content, drama, and comedy, ensuring it has something for every type of viewer. The rise in international movies highlights the importance of global productions and Netflix's strategy to source and create non-English content to tap into different cultures and markets.

5. Top 5 Countries by Content Added:

The leading content contributors are the United States (57.85%), India (16.41%), the United Kingdom (12.62%), Canada (6.99%), and France (6.99%).

Business Insight:

The U.S. dominates in content creation, but the strong presence of India and the U.K. emphasizes Netflix's effort to expand its influence beyond traditional markets. India's growth in particular reflects Netflix's ongoing investment in Bollywood and regional Indian films and series to capture the large and diverse Indian market.

➤ **Strategic Recommendations:**

1. Focus on Emerging Markets:

With India showing significant content contribution and strong cast representation, Netflix should continue investing in localized content to expand its market share in emerging economies like India, Indonesia, and Latin America. Collaborations with regional directors and actors are crucial in growing these markets.

2. Diversify Genre Focus:

While drama, comedy, and international movies lead, other genres like documentaries and children's content show steady growth. Netflix should continue to diversify its genre mix, particularly in niche genres like independent films and documentaries, which could appeal to a more mature or intellectually inclined audience.

3. Optimize Content Release Times:

The 61.82-day average release delay suggests a potential area for improvement. Netflix should optimize its release pipeline to ensure fresh content is delivered consistently and with minimal delays, particularly in highly competitive markets where timely releases are crucial.

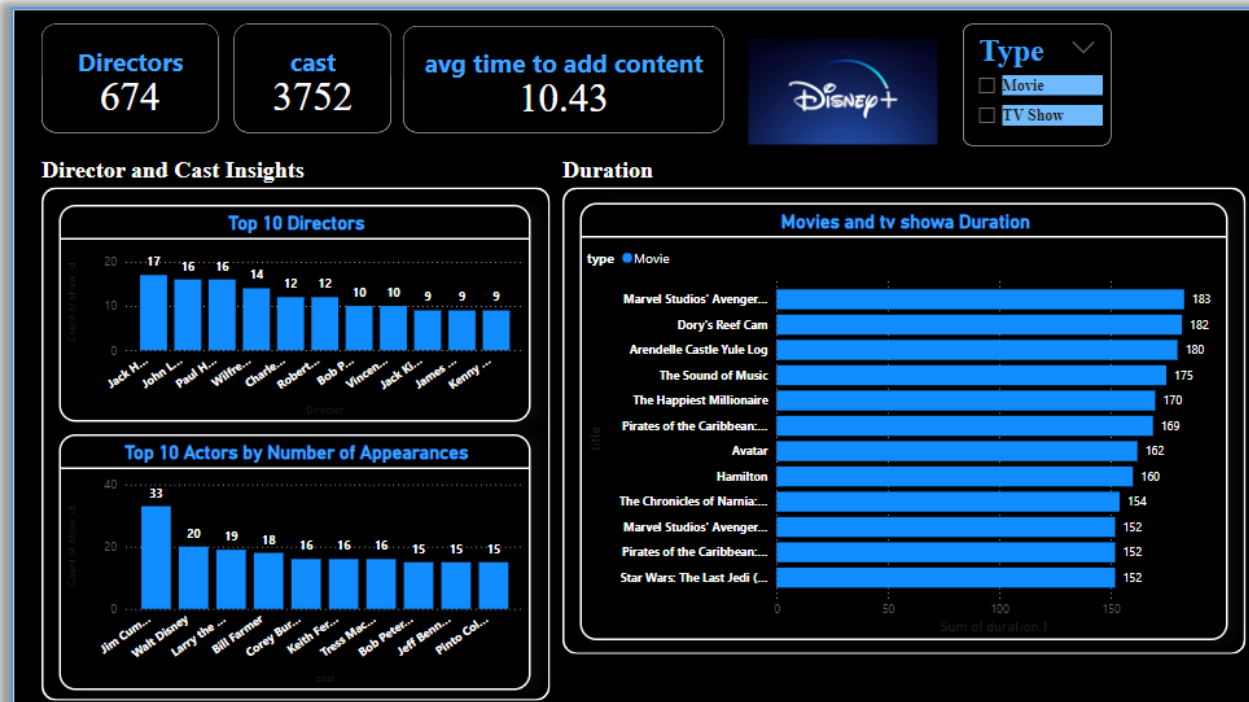
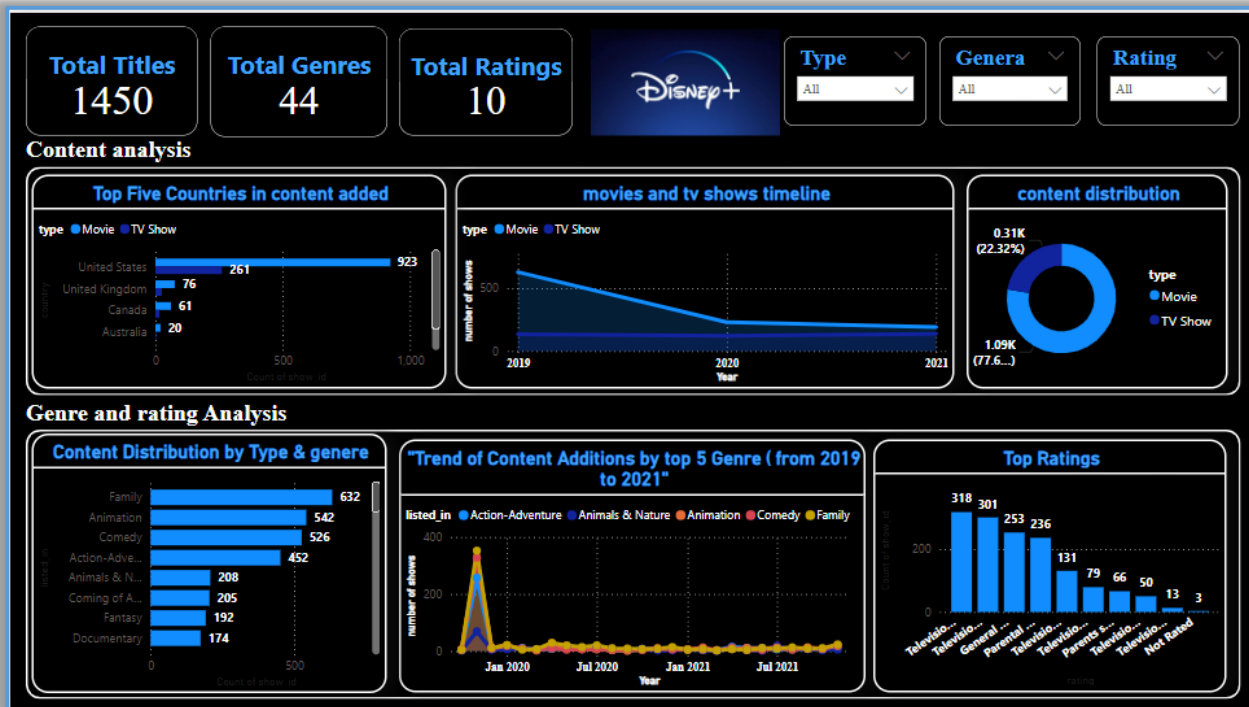
4. Strengthen Collaboration with Leading Cast and Directors:

Netflix should continue building relationships with prominent actors and directors from India, the U.K., and other international regions. Strong ties with well-known personalities will ensure a steady stream of high-quality content, especially for local markets where these actors and directors have a loyal following.

➤ **Conclusion:**

This dashboard provides a comprehensive view of Netflix's global content strategy. It highlights the platform's investment in diverse genres, its reliance on both regional and international talent, and its expansion into emerging markets like India. For Netflix, continued success will depend on its ability to cater to local markets while maintaining a globally appealing content library. By addressing content delays and exploring more niche genres, Netflix can strengthen its competitive edge and continue to lead in the global streaming space.

2. Disney+ Dashboard:



- **Overview**

This dashboard provides a comprehensive analysis of Disney+'s content, offering insights into titles, genres, ratings, and contributions from directors and actors. The data is segmented to support strategic decision-making for content acquisition, marketing, and audience engagement.

- 1. **Total Titles, Genres, and Ratings:**

- Description:**

- This section displays the total number of titles available on Disney+ (1450), the variety of genres (44), and an average rating (10).

- Key Insights:**

- A diverse range of titles and genres indicates a broad appeal to various audience segments.

- Business Decisions:**

- Maintain and expand content variety to cater to a diverse audience. Consider exploring additional genres based on viewer demand.

- 2. **Content Analysis**

- **Top Five Countries in Content Added:**

- **Description:** A bar chart showing the top five countries contributing to Disney+ content.
 - **Key Insights:** The U.S. contributes the most content (923 titles), indicating a strong production base.
 - **Business Decisions:** Focus marketing efforts in regions with high content contributions while exploring partnerships for content creation in emerging markets.

- **Movies and TV Shows Timeline:**

- **Description:** A line graph illustrating the release timeline of movies versus TV shows.
 - **Key Insights:** The steady release of content suggests a consistent strategy for audience engagement.
 - **Business Decisions:** Plan future releases to maintain audience interest, balancing between movies and TV shows.

- **Content Distribution:**

- **Description:** A stacked bar chart displaying the distribution of content by type (movie vs. TV show).
 - **Key Insights:** The distribution shows a preference for tv shows (31.1%) compared to Movies (71.4%).
 - **Business Decisions:** Consider investing more in TV show development, given the higher viewer engagement observed in this format.



3. Genre and Rating Analysis

- **Content Distribution by Type & Genre:**
 - **Description:** A detailed chart outlining the distribution of content by genre.
 - **Key Insights:** Family (622 titles) and Animation (452 titles) genres dominate, indicating strong viewer preferences.
 - **Business Decisions:** Enhance content in popular genres, especially family and animation, while exploring potential expansions into underrepresented genres.
- **Trend of Content Additions by Top 5 Genres:**
 - **Description:** A timeline graph showcasing content additions in the top five genres from 2019 to 2021.
 - **Key Insights:** A significant spike in content additions around Nov 2019 highlights a responsive strategy to market demand.
 - **Business Decisions:** Analyze what led to the spike to replicate successful strategies for future content additions.
- **Top Ratings:**
 - **Description:**
A bar chart displaying the top-rated titles on the platform based on categories such as PG, G, and others.
 - **Key Insights:**
the highest ratings (318), indicating strong viewer approval within family-friendly and age-appropriate categories.
 - **Business Decisions:**
Utilize high-rated titles in promotional campaigns, highlighting their family-friendly nature. Consider developing sequels or spin-offs for the highest-rated properties to further capitalize on viewer interest and maintain audience engagement.

4. Director and Cast Insights

- **Directors and Cast Overview:**
 - **Description:** This section lists the number of directors (674) and total cast members (3752) involved in content creation.
 - **Key Insights:** A large pool of directors indicates a diverse creative team.
 - **Business Decisions:** Continue to collaborate with a diverse group of directors and consider initiatives to attract new talent.
- **Top 10 Directors and Actors by Number of Appearances:**
 - **Description:** Bar charts highlighting the most prolific directors and actors on the platform.
 - **Key Insights:** Specific directors and actors appear frequently, suggesting their popularity and viewer loyalty.

- **Business Decisions:** Foster relationships with top directors and actors to create more content, ensuring alignment with audience preferences.

5. Duration Analysis

- **Movies and TV Shows Duration:**

- **Description:** A bar chart detailing the duration of the top movies and shows.
- **Key Insights:** Most popular titles tend to be longer in duration, with "Marvel Studios' Avengers" being the longest at 182 minutes.
- **Business Decisions:** Analyze viewer engagement relative to content duration to optimize future productions, balancing lengthy cinematic experiences and shorter episodes.

❖ Challenges Faced During the Analysis:

- **Handling Multiple Categorizations:**

- **Content Categorization:** Shows and movies often fell under multiple listed_in categories (e.g., "Drama, Thriller"), which could skew the results when counting by category. We had to develop a method to handle these multi-category titles correctly, ensuring they weren't double-counted or misrepresented in aggregations.

- **Complex Joins:**

- **Normalization:** The normalization of the country, cast, directors, and listed_in tables required multiple joins to bring the information back together. These joins became computationally expensive as the tables grew larger, making it necessary to optimize the SQL queries to reduce execution time.
- **Cross-Platform Comparisons:** Comparing Netflix and Disney Plus data wasn't straightforward because the platforms use slightly different structures, especially for fields like cast, listed_in, and country. This required extra work to align the datasets for meaningful comparisons.

- **Calculating Trends Over Time:**

- **Seasonality and Trends:** Tracking trends such as the monthly and yearly content additions required careful handling of the date_added field. In some cases, the lack of data from specific years or months led to incomplete trend graphs. Additionally, for content added years ago, where records might be scarce, the analysis had to be weighted appropriately.



❖ Findings and Insights from the Analysis:

1-Top 5 Countries by Content Release:

Both platforms can focus on these regions for aggressive content marketing and acquisition strategies to maintain their market dominance.

2-Trends in Content Additions Over Time:

This trend indicates that Netflix is likely focusing on year-end releases to capture holiday viewers, while Disney is quickly expanding its catalog to compete. Platforms can leverage these insights to better time their content releases for maximum impact.

3- Distribution of Content Ratings:

This difference in content strategy highlights the distinct brand identities, with Netflix catering more to adult audiences and Disney Plus appealing to families. Understanding this can help in refining their content acquisition and production strategies.

4-Content Categories Gaining Popularity:

Netflix can continue to focus on niche, high-demand genres such as documentaries, while Disney should continue leveraging its stronghold in animation and family-oriented content.

5- Common Directors and Actors:

By identifying these frequently appearing directors and actors, both platforms can strengthen partnerships, leading to more exclusive content deals and higher user engagement.

6- Average Movie Duration:

This insight helps the platforms understand viewer engagement with long vs. short-form content and make decisions about the types of movies to invest in.