STREAMLINE ANALYSIS: Uncovering Trends in Netflix's Library

Introduction

The Netflix dataset for 2021 has been analysed to gain insights into the platform's content distribution in terms of genres, content types (movies vs. TV shows), and content ratings. This report aims to summarize the findings and provide recommendations for future content strategy based on trends observed in the current dataset.

Data Overview

- The dataset contains information about Netflix titles, including attributes such as genre, type, country of origin, release year, duration, and content rating.
- The data was cleaned, with missing values in key columns (like director, cast, rating, etc.) being filled with placeholders such as "Unknown" or "NA."

Key Insights

1) Content Types Distribution
- **Movies vs. TV Shows**: **68.4%** of the content on Netflix is movies, while **31.6%** is TV shows.
- Recommendation: Since movies dominate the platform, Netflix should focus on expanding its TV show offerings to balance the content type distribution. This could cater to binge-watchers and audiences who prefer serialized content.

2) Content Rating Distribution
- The most common content ratings are:
  - **TV-MA (Mature Audiences)**: 35.6% of titles
  - **TV-14 (Teens)**: 22.3% of titles
  - **TV-PG (Parental Guidance)**: 15.8% of titles
- Recommendation: Since over 35% of the content is rated **TV-MA**, Netflix should consider diversifying its content to include more **family-friendly** or **general-audience content (TV-G, G)** to broaden its appeal to younger viewers and families. Additionally, focusing on **TV-14** content can capture a **large teenage audience**.

3) Genre Analysis
- Netflix content spans across multiple genres. The top genres include:
  - **Drama**: 25.7% of titles
  - **Comedy**: 18.6% of titles

- - **Action & Adventure**: 12.1% of titles
  - **Crime**: 9.4% of titles
- Recommendation: Drama and Comedy dominate the platform, which reflects a strong preference for emotional and entertaining content. Expanding into underrepresented genres such as **Science Fiction** and **Documentaries** could attract niche audiences and differentiate Netflix from competitors.

4) **Genre-Rating Relationships**
- A heatmap was used to visualize the relationship between genres and content ratings:
  - **Drama** and **Documentaries** have a high representation in **TV-MA** rated content.
  - **Action & Adventure** and **Animation** tend to be more family-friendly, with a higher presence in **TV-PG** and **TV-14** categories.
- Recommendation: Netflix can leverage these relationships by creating more **TV-MA dramas** and **TV-14 action/adventure** content to align with audience preferences. This can be a strategy to attract both mature viewers and younger audiences who enjoy action-packed shows.

Performance Projections and Content Strategy

Based on the observed trends, here's how Netflix could shape its future content:

- **Targeting Mature Audiences**: Since a significant percentage of content **(35.6%)** is rated **TV-MA**, Netflix can continue developing mature content, particularly in **Drama** and **Documentary genres**, to retain its core adult audience.

- **Boosting Family Content**: With only **15.8%** of titles rated **TV-PG**, there's an opportunity to expand in this category, especially in genres like **Animation** and **Family-friendly Comedies**. This would attract parents and children, expanding Netflix's family audience.

- **Genre Expansion**: While Drama and Comedy are well-covered, genres like **Science Fiction**, **Fantasy**, and **Historical** content have room to grow. Increasing the content in these genres could help attract specific fan bases who are underserved by the current catalog.

- **Balanced TV Show Growth**: With **31.6%** of content being TV shows, Netflix should continue to grow its serialized content, particularly in the **TV-14 category**, to attract younger viewers who prefer binge-watching.

- **New Release Timing and Demand**: Analysing the "**date added**" trends (which could be explored further) would allow Netflix to release content at times of high demand, such as holidays or weekends, maximizing viewer engagement.

conclusion

Netflix has a diverse range of content, with strong representation in mature-rated dramas and movies. To optimize future content strategies, Netflix should:

- Focus on developing more family-friendly and teenage-rated content.
- Expand into underrepresented genres such as Sci-Fi and Fantasy.
- Continue leveraging the mature audience base while growing the TV show library to cater to serialized content consumers.

This strategy will help Netflix stay competitive, attract a broader audience, and maintain its dominance in the streaming industry.