# Executive Summary - Netflix Content Distribution Analysis

**Objective:** The primary objective of this project was to gain comprehensive insights into Netflix's content distribution, specifically focusing on movies and TV shows. The investigation aimed to unravel trends in Netflix's content library, including factors such as ratings, genres, international distribution, and the platform's evolving emphasis on TV shows versus movies.

**Overview**: The project employed extensive exploratory data analysis (EDA) using Python, harnessing libraries such as pandas, matplotlib, seaborn, and scikit-learn. The Netflix dataset was meticulously explored, revealing its structural nuances. Key analytical tasks included:

1. **Top Rated Movies:**
    - Explored top-rated movies on Netflix based on different content ratings, providing a visual representation through a bar chart. This offered insights into the distribution of highly rated content on the platform.
2. **Decadal Analysis of Ratings:**
    - Transformed release years into decades and created a stacked bar chart illustrating the count of top ratings for each decade. This analysis unveiled the evolution of top-rated content over different time periods.
3. **Content Distribution by Country:**
    - Investigated the geographical distribution of Netflix content, presenting a bar chart highlighting the top 10 contributing countries. This analysis provided a global perspective on the availability of Netflix content.
4. **Content Similarity Analysis:**
    - Utilized natural language processing techniques, including TF-IDF and cosine similarity, to identify similar content based on textual features. This system generated recommendations for similar titles, enhancing user engagement and content discoverability.
5. **Netflix's Focus on TV Shows vs. Movies:**
    - Examined Netflix's focus on TV shows versus movies over recent years. A stacked bar chart illustrated the count of TV shows and movies released each year, shedding light on the platform's shifting emphasis.
6. **Director or Actor Preferences:**
    - Introduced a novel aspect by identifying directors and actors known for producing or starring in content with specific ratings. This code aimed to uncover any potential bias in viewership towards certain directors or actors.

**Results:** The investigation yielded several key findings:

- The top-rated movies analysis highlighted the prevalence of TV-MA ratings, followed by TV-14 and TV-PG.
- Decadal analysis showcased shifts in the prominence of specific ratings over different decades.
- Content distribution by country identified the United States, India, and the United Kingdom as leading contributors to Netflix's diverse content library.
- The content similarity analysis successfully provided recommendations, improving user experience and content discovery.
- The focus analysis indicated a notable increase in TV show production compared to movies in recent years.

**Conclusions:**

- **Strategic Content Adaptation**: Netflix has strategically evolved its content library, making significant adjustments over the years to cater to changing viewer preferences and market dynamics.
- **Genre and Rating Focus**: The platform's content strategy involves a keen focus on specific genres and ratings, reflecting a targeted approach to meet diverse viewer demands and preferences.
- **Format Preference:** The investigation reveals a noteworthy shift in focus towards TV shows in recent years, indicating a strategic emphasis on episodic content over traditional movies.
- **Enhanced User Engagement**: The recommendations generated through content similarity analysis contribute to an enriched user experience, fostering higher engagement by aligning content suggestions with viewer preferences.
- **Actionable Insights**: The insights gained from this analysis provide valuable guidance for content creators, platform managers, and decision-makers within Netflix, offering actionable strategies to further optimize content offerings and viewer satisfaction.