Title: The Role of Data Visualization in Communicating Viewer Trends to Decision Makers in OTT Platforms: A Netflix Case Study

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Overview:

In the rapidly evolving landscape of Over-The-Top (OTT) streaming platforms, data-driven decision-making is essential for understanding audience preferences, content performance, and engagement trends. Netflix, as a global leader in the industry, generates vast amounts of data on viewer behavior, content popularity, and ratings. However, raw data alone is not enough; effective data visualization is crucial in translating these insights into actionable business strategies. This paper/project explores how data visualization techniques in Power BI can help decision-makers at Netflix better understand content trends, genre popularity, and audience segmentation.

Dataset:

This study will utilize the **Netflix TV Shows and Movies** dataset available on Kaggle: https://www.kaggle.com/datasets/victorsoeiro/netflix-tv-shows-and-movies

The dataset includes information on movies and TV shows available on Netflix, such as title, genre, IMDb scores, release year, runtime, production country, and popularity metrics.

Key Research Questions we want to address:

1. How has Netflix's content library evolved over time in terms of genre diversity and release trends?
2. What are the most popular and highest-rated genres?
3. What patterns exist between runtime, IMDb scores, and audience engagement?
4. How can Power BI visualizations aid decision-makers in optimizing content strategy?

Planned Data Analysis & Visualization Approach:

Using **Power BI**, this project will create interactive dashboards to analyze:

- **Content Trends Over Time:** showing the number of movies and TV shows released per year.
- **Genre Popularity & Viewer Ratings:** comparing IMDb scores across different genres..
- **Movie vs. TV Show Performance:** A scatter plot analyzing runtime vs. IMDb scores and a column chart comparing IMDb ratings of movies vs. TV shows.

Expected Business Insights:

- Identification of high-performing genres that drive viewer engagement.
- Understanding of Netflix's content expansion trends and global presence.
- Data-driven recommendations for content investment strategies.
- Demonstration of how visualization tools enhance decision-making for streaming services.

Conclusion:

This study will highlight the critical role of data visualization in OTT platforms, demonstrating how Netflix can leverage **Power BI** to transform raw data into meaningful insights. By enabling decision-makers to track viewer trends, content performance, and audience segmentation, data visualization becomes a powerful tool for shaping future content strategies and maintaining a competitive edge in the streaming industry.