Amazon Prime Video Content Analysis

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Abstract

Streaming services like Amazon Prime Video have revolutionized the entertainment industry by providing a vast collection of movies and TV shows worldwide. This report explores Amazon Prime Video's content trends from 1910 to 2021 using data visualization techniques. Key aspects such as content distribution, director analysis, ratings, regional influence, and generational trends are examined. The analysis is presented using **Tableau visualizations** and data analytics.

1 Introduction

Amazon Prime Video is a leading global streaming platform with over 200 million subscribers. With an extensive library, the platform caters to a diverse audience. Understanding content trends can provide insights into:

- Which content types (Movies vs. TV Shows) dominate the platform?
- What genres are most frequently produced?
- How have content trends evolved over time?
- How do viewer ratings influence content selection?
- Which countries contribute the most to the Prime Video library?

2 Dataset Description

The dataset used for this analysis contains metadata about movies and TV shows on Amazon Prime Video, including:

- Show ID: Unique identifier for each title.
- Type: Specifies whether the title is a Movie or TV Show.
- **Title:** Name of the movie or TV show.
- **Director:** Name of the director(s) associated with the content.
- Cast: List of actors featured in the title.
- Country: Country of origin for the content.

- Date Added: The date when the content was added to Amazon Prime Video.
- Release Year: The year in which the content was released.
- Ratings: Viewer ratings indicating age suitability.
- **Duration:** Duration of the content (for movies) or number of seasons (for TV shows).
- Category: Genre classification such as Comedy, Horror, Thriller, etc.
- **Description:** A brief plot summary of the content.

3 Exploratory Data Analysis (EDA)

3.1 Content Type Distribution

Prime Video primarily offers two types of content: Movies and TV Shows. The distribution of these content types helps understand the platform's focus.

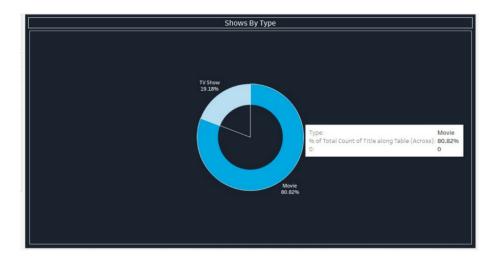


Figure 1: Content Type Distribution on Amazon Prime Video

Findings:

- Movies account for approximately **80.82%** of the content.
- TV Shows make up **19.18%**, indicating that Prime Video prioritizes movies over serialized content.

3.2 Genre Distribution

Understanding the most popular genres helps identify viewer preferences. Key insights:

- The most common genres include **Drama, Comedy, Suspense, Animation, Kids, and Documentary**.
- **Drama and Comedy** are the leading genres, appealing to a wide audience.

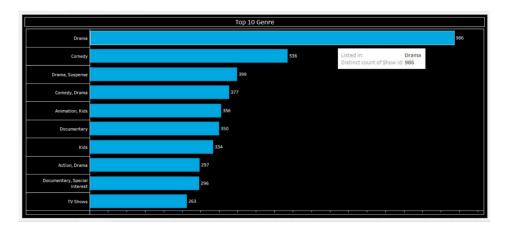


Figure 2: Top 10 Genres on Amazon Prime Video

3.3 Regional Analysis - Content by Country

A significant portion of Prime Video's content originates from certain key regions.



Figure 3: Total Shows By Country

Key findings:

- The United States, India, and the United Kingdom contribute the most content.
- The **US dominates** with the highest number of movies and TV shows.
- **India ranks second**, reflecting the growth of Bollywood and regional Indian content.

3.4 Ratings and Viewer Preferences

Analyzing content ratings helps understand what age groups are being targeted. Insights:

 \bullet **Most content falls under "13+" and "16+" ratings**, indicating a preference for teen and young adult audiences.



Figure 4: Viewer Ratings Across Content on Amazon Prime

• A significant portion is rated **"ALL" **, making it suitable for family viewing.

3.5 Directors and Their Work

By analyzing the dataset, we identified the most prominent directors based on the number of titles they have contributed.

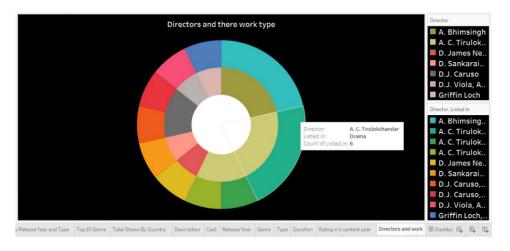


Figure 5: Top Directors and Their Work Type

Key insights:

- Certain directors specialize in particular genres.
- Drama-oriented directors have the highest contributions.

4 Tableau Dashboard

The analysis was visualized using **Tableau**, integrating multiple components for effective insights.

Tableau Dashboard Features:

DASHBOARD



Figure 6: Amazon Prime Video Dashboard (Tableau)

- Bar Chart: Distribution of Movies vs. TV Shows.
- Line Chart: Content trends by release year.
- Stacked Bar Chart: Viewer ratings across different years.
- Geospatial Map: Content production by country.
- Tree Map: Top directors based on movie/TV show count.
- Bubble Chart: Most featured actors in Amazon Prime content.

5 Conclusion and Future Work

This analysis provides insights into the **content landscape of Amazon Prime Video**. Key takeaways include:

- Amazon Prime **focuses more on movies** than TV shows.
- **Drama and Comedy** are the most dominant genres.
- The majority of content originates from the **United States, India, and the UK**.
- Viewer preferences are inclined toward **content rated 13+ and 16+**.

Future Work:

- Analyzing user watch patterns to predict content preferences.
- Comparing Prime Video with competitors like **Netflix and Disney+**.
- Examining the impact of **original productions vs. licensed content**.