Netflix Content Trends Analysis for Strategic Recommendations

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PROBLEM STATEMENT

Netflix, one of the world's leading streaming platforms, continuously expands its global content library to cater to diverse audiences. However, with rising competition from platforms like **Amazon Prime Video**, **Disney+**, and regional OTT providers, it faces a key challenge:

How can Netflix analyze its existing content catalog to identify strengths, weaknesses, and opportunities for strategic content planning and global expansion?
This project focuses on performing a **comprehensive content trends analysis** of Netflix's dataset (7,789 records, 11 features) to understand:
- The evolution of **Movies vs. TV Shows** over the years
- Shifts in **popular genres and emerging categories**
- **Country-wise content contributions** and diversity patterns

The goal is to derive **data-driven strategic insights** that help Netflix optimize its **future content acquisition, production, and regional expansion** strategies.
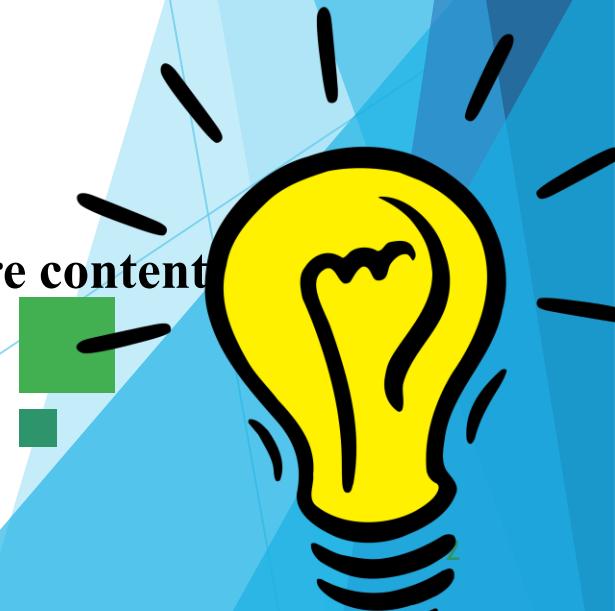
Project Description

This project analyzes the **Netflix dataset** containing details of Movies and TV Shows to understand how Netflix's content strategy has evolved over time.

It focuses on exploring **content trends**, **genre popularity**, and **country-wise contributions** using **data cleaning, feature engineering, and visual analytics**.

The insights help identify **viewer preferences** and provide **strategic recommendations** for Netflix to improve its future **content acquisition and production strategies**.

Objectives
- Analyze the distribution of **Movies vs. TV Shows** on Netflix.
- Identify **top and emerging genres** over the years.
- Examine **country-wise content contributions** and diversity.
- Apply **data visualization and machine learning** for insights.
- Provide **strategic recommendations** for future content planning.

Expected Outcomes
- Clear understanding of **Netflix's content evolution**.
- Identification of **popular genres and regional trends**.
- Insights into **global content diversity** and market expansion.
- Predictive model to classify **Movies or TV Shows**.
- Data-driven **recommendations** for Netflix's content strategy.

WHO ARE THE END USERS?

- **Netflix Content & Strategy Tem** – to plan future content production and acquisitions.
- **Data Analysts & Business Intelligence Teams** – to explore content trends and viewer preferences.
- **Marketing & Regional Expansion Teams** – to identify target markets and audience segments.
- **Researchers & Students** – to study OTT content distribution patterns and global media trends.
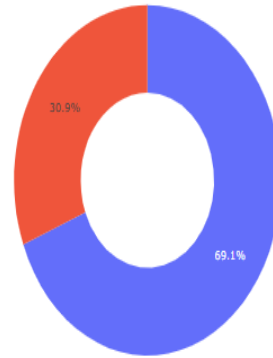
Technology Used

Tools and Technologies Used
•**Python** – for data analysis and machine learning
•**Pandas & NumPy** – for data cleaning and preprocessing
•**Matplotlib, Seaborn & Plotly** – for data visualization and trend analysis
•**Scikit-learn** – for building predictive ML models
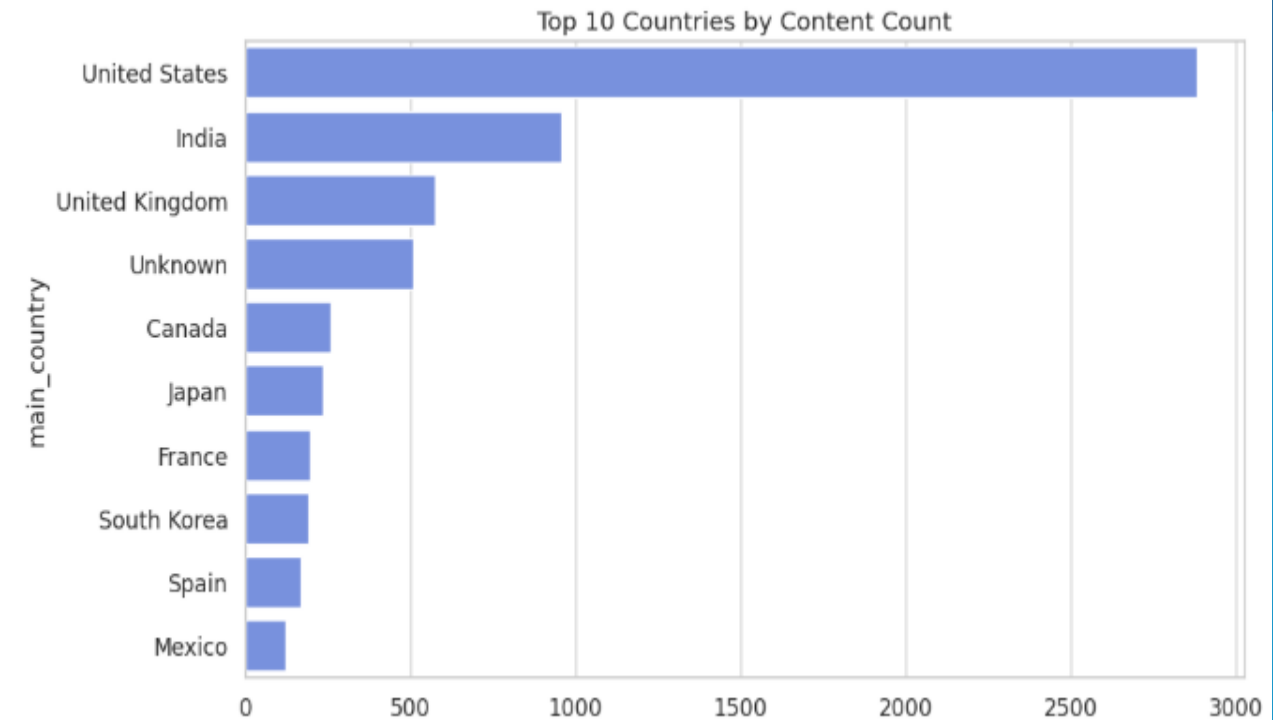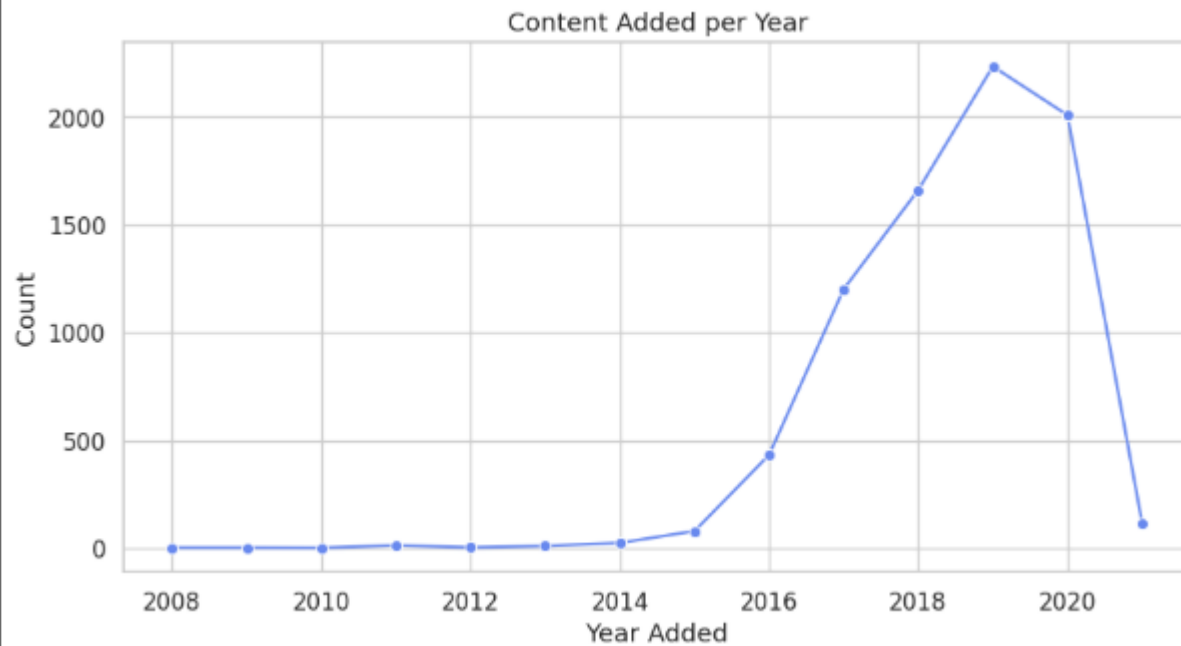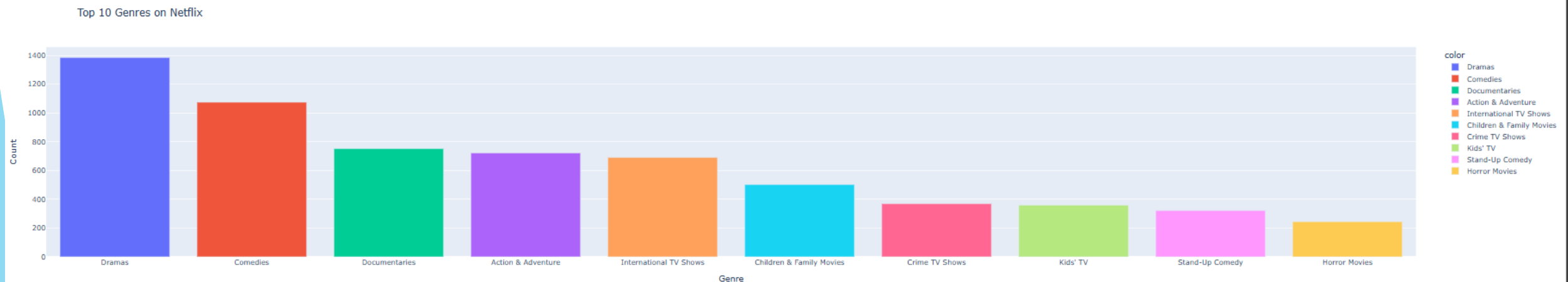•**Google Colab / Jupyter Notebook** – for implementation and experimentation
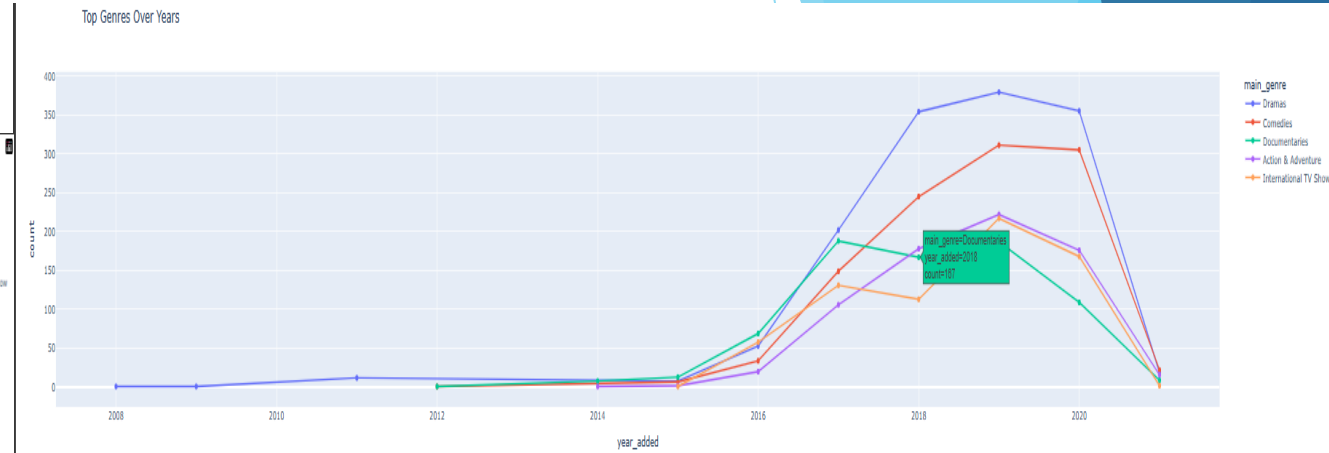
RESULTS 1, 2 & 3

Distribution: Movies vs TV Shows

Movie
TV Show
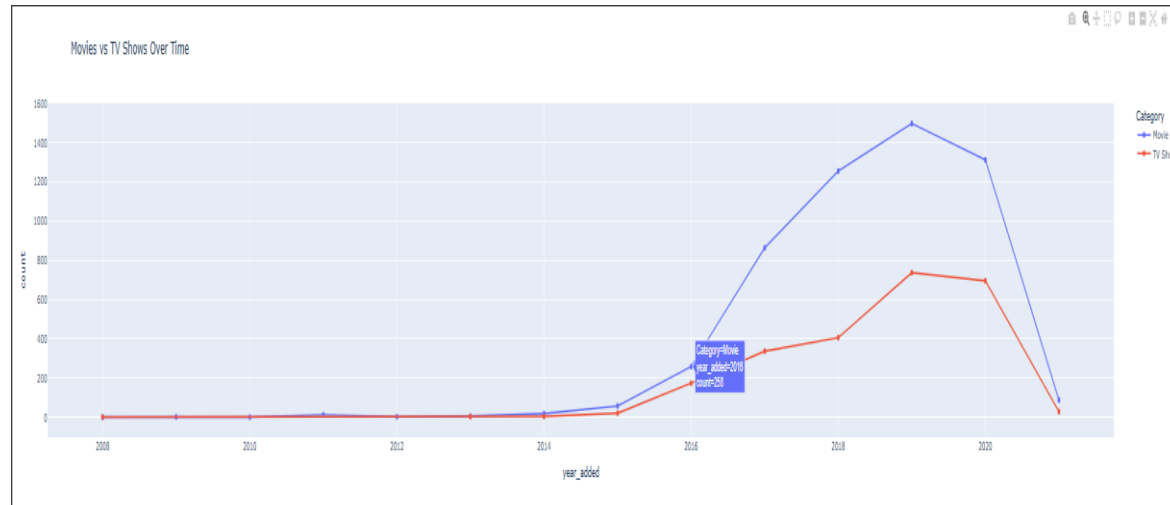
30.9%

69.1%

Content Added per Year

Count

2000

1500

1000

500

0

2008   2010   2012   2014   2016   2018   2020

Year Added

Top 10 Countries by Content Count

United States
India
United Kingdom
Unknown
Canada
Japan
France
South Korea
Spain
Mexico

main_country

0   500   1000   1500   2000   2500   3000

RESULTS 4, 5 & 6

RESULTS 7, 8 & 9

Most Common Words in Netflix Titles

Top Countries: Movies vs TV Shows

Confusion Matrix

GitHub repository

- GitHub Link:
https://github.com/SahanaPriyaG/VOIS_AICTE_Oct2025_MajorProject_SahanaPriyaG.git

Getting started with Basics of Python Certificate

Data Visualization Certificate

Thank you