DATA-DRIVEN INSIGHTS

NETFLIX CONTENT ANALYSIS USING PYTHON

Exploring trends, patterns, and insights from Netflix's vast content library through advanced data analysis techniques

Content Distribution | Genre Analysis | Global Trends | Python Insights

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ABOUT NETFLIX

Netflix is a **global streaming giant** offering a vast library of films, TV series, documentaries, and original content across multiple languages and genres. With **over 200 million subscribers** in more than 190 countries, Netflix has transformed how people consume entertainment worldwide, pioneering the binge-watching culture and revolutionizing content production and distribution.

Streaming Service

On-demand access to thousands of titles

Global Reach

Available in 190+ countries worldwide

Original Content

Award-winning Netflix originals

Multi-device

Watch on smart TVs, phones, tablets, and more

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PROJECT OBJECTIVE

To **clean**, **analyze**, and **visualize** Netflix's content data to gain actionable insights about content distribution, trends, and strategic patterns.

Data Cleaning

Transform raw Netflix data into a clean, consistent format ready for analysis

Data Analysis

Extract meaningful patterns and key insights from the processed data

Data Visualization

Create compelling visual representations of the findings

- Discover content distribution patterns
- Identify regional content preferences
- Track content growth over time

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STEP 1: DATA CLEANING

Loaded dataset using pandas

```
import pandas as pd
df = pd.read_csv('netflix.csv')
```

Removed duplicates

```
df.drop_duplicates(inplace=True)
```

Filled missing country with "Unknown"

```
df['country'] = df['country'].fillna('Unknown')
```

Filled director and cast with "Not Specified"

```
df['director'] = df['director'].fillna('Not Specified')
df['cast'] = df['cast'].fillna('Not Specified')
```

Standardized date_added

```
df['date_added'] = pd.to_datetime(df['date_added'])
```

Extracted year_added and month_added

```
df['year_added'] = df['date_added'].dt.year
df['month_added'] = df['date_added'].dt.month
```

Raw Data → Cleaning Process → Clean Data

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STEP 2: DATA ANALYSIS - KEY FINDINGS

Content Type Distribution

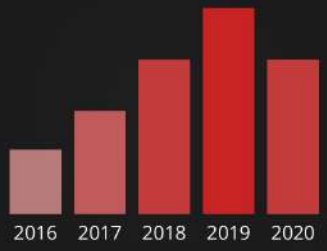
~70% Movies

~30% TV Shows

Content Growth

Steady increase from 2016-2020

Peak in 2019 with highest number of new titles



Top Producing Countries

1. **United States**
2. **India**
3. **United Kingdom**
4. **Japan**
5. **Canada**

Popular Genres

International TV Shows | TV Dramas | TV Comedies | Crime TV Shows | Docuseries | TV Action & Adventure | Children's & Family Movies | Kids' TV | Comedies | Dramas | Thrillers | Romantic TV Shows

Content Duration

Some movies exceed

200+ minutes

(Over 3 hours runtime)

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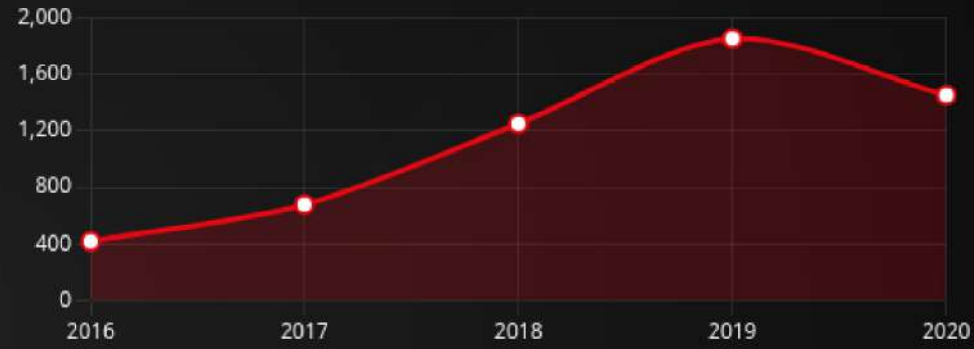
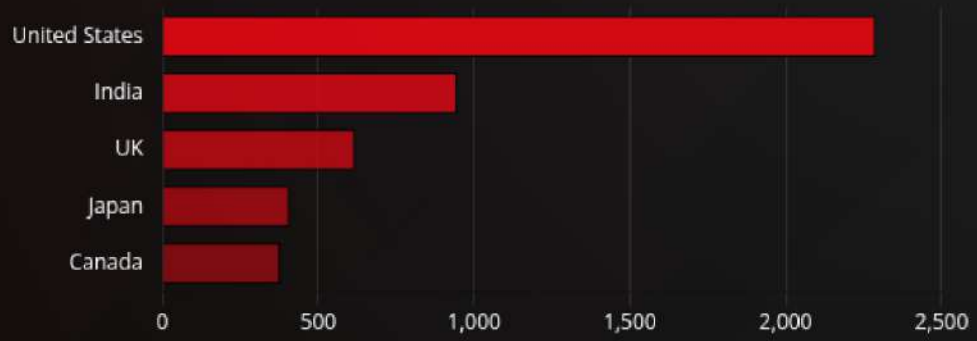
STEP 3: DATA VISUALIZATION

Content Type Distribution

Content Added by Year



Top Producing Countries



Popular Genres Word Cloud

International TV Shows
TV Dramas
TV Comedies
Crime TV Shows
Docuseries
Kids' TV
Children & Family Movies
Thrillers
Dramas
Comedies
Action & Adventure
TV Action & Adventure

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CONCLUSION

Key Insights

- Netflix's content library is predominantly **movies (70%)**, with TV shows making up the remaining 30%
- Significant **content growth from 2016-2020**, with peak additions in 2019, indicating strategic content acquisition
- **United States, India, UK, Japan and Canada** are the top content producers, reflecting Netflix's global content strategy
- International TV shows, dramas, and comedies are among the **most popular genres**, showing diverse viewer preferences

Business Impact

This analysis provides crucial insights into Netflix's content strategy, helping to understand:

- Regional content preferences and growth opportunities
- Optimal content type balance between movies and TV shows
- Genre popularity to guide future content acquisition and production
- Historical growth patterns to inform strategic planning

By leveraging these data-driven insights, Netflix can continue to refine its content strategy to better serve its global subscriber base.

THANKS FOR WATCHING

Are you still watching?

NEXT EPISODE