

## Q1. Defining Problem Statement and Analysing basic metrics

### Business Context

Netflix operates in multiple countries and invests heavily in content creation and acquisition. To grow subscribers and optimize content spending, Netflix needs to understand **what type of content performs best across regions and time**.

### Problem Statement

*Using the Netflix dataset, analyse the content library to identify patterns in content type, geography, release trends, and ratings. The goal is to generate data-driven insights that help decide which types of shows or movies Netflix should prioritize to grow its global business.*

### Key Business Questions

1. What type of content (Movies vs TV Shows) dominates the platform?
2. How is content distributed across different countries?
3. How has Netflix's content addition changed over time?
4. Which genres and ratings are most common?
5. What insights can guide future content strategy?

### Content Type Distribution

#### Metric

- Count of Movies vs TV Shows

#### Insight

- Movies usually make up ~65–70% of the catalogue.
- TV Shows are fewer in number but often drive **long-term user engagement**.

### Business Meaning

- Movies help attract users quickly.
- TV shows help **retain subscribers** over time.

### Country-wise Content Availability

#### Metric

- Number of titles produced per country

### Typical Findings

- United States dominates content production.

- India, UK, Canada, Japan are fast-growing contributors.

### Business Meaning

- Netflix is increasingly investing in **regional and local-language content**.
- High-growth countries represent strong opportunities for localized shows.

### Content Growth Over Time

#### Metric

- Titles added per year (using date\_added or release\_year)

#### Typical Trend

- Sharp increase in content after 2016.
- Slower growth in recent years, indicating **focus on quality over quantity**.

### Business Meaning

- Netflix shifted from library expansion to **strategic content investment**.

### Genre Analysis

#### Metric

- Frequency of genres from listed\_in

### Most Common Genres

- Dramas
- International Movies
- Comedies
- Documentaries

### Business Meaning

- Dramas and international content appeal to a **broad global audience**.
- Documentaries are cost-effective with strong niche engagement.

## 7. Business Insights

### 1 Movie-Dominant Content Library

**Pattern Observed:**

Movies significantly outnumber TV Shows in the catalog.

**Inference:**

Movies are used to **attract a broad audience quickly**, while TV Shows are fewer but likely focused on retention.

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### 2 Strong Focus on Mature & Teen Audiences

**Pattern Observed:**

TV-MA and TV-14 ratings dominate the dataset.

**Inference:**

Netflix primarily targets **teen and adult viewers**, suggesting higher engagement and monetization potential from these segments.

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### 3 Rapid Content Expansion After 2015

**Pattern Observed:**

Sharp increase in titles released after 2015.

**Inference:**

Netflix accelerated original and licensed content to support **global expansion and subscriber growth**.

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### 4 Preference for Standard Movie Durations

**Pattern Observed:**

Most movies fall between **90–120 minutes**.

**Inference:**

Standardized runtimes improve **viewer completion rates** and reduce production risk.

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### 5 Short-Season TV Show Strategy

**Pattern Observed:**

Majority of TV Shows have **1–2 seasons**.

**Inference:**

Netflix follows a **test-and-scale approach**, renewing only high-performing shows.

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**6 Drama as the Core Genre**

**Pattern Observed:**

Drama consistently appears as the most frequent genre.

**Inference:**

Drama provides **high engagement and cross-cultural appeal**, making it a safe investment globally.

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**7 Growing Importance of International Content**

**Pattern Observed:**

Significant contributions from India, UK, and other non-US countries.

**Inference:**

Localized content is critical for **regional market penetration and subscriber growth**.

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**8 Genre and Rating Are Strongly Linked**

**Pattern Observed:**

Dramas and Documentaries skew toward mature ratings; kids genres toward lower ratings.

**Inference:**

Netflix deliberately aligns **genre selection with target age groups** to improve recommendation accuracy.

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**9 TV Shows Are More Recent Than Movies**

**Pattern Observed:**

Median release year for TV Shows is higher than Movies.

**Inference:**

Netflix invests more aggressively in **original series** to drive long-term engagement.

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## **10 Outliers Represent Strategic Content, Not Errors**

### **Pattern Observed:**

Very long movies and multi-season TV Shows exist as outliers.

### **Inference:**

These represent **premium or flagship content**, which should be retained as they add brand value.

## **8. Actionable items for business. No technical jargon. No complications. Simple action items that everyone can understand**

### **1 Increase Investment in High-Quality TV Series**

TV Shows help retain subscribers longer.

👉 Focus on creating strong multi-season original series.

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### **2 Expand Family and Kids Content**

Most content targets adults and teens.

👉 Add more kids and family-friendly shows to attract complete households.

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### **3 Continue Producing Strong Drama Content**

Drama is the most popular genre.

👉 Invest consistently in drama across different languages and regions.

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### **4 Strengthen International Content Production**

International titles are growing and important.

👉 Increase local-language content in India, Europe, and emerging markets.

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### **5 Maintain Standard Movie Length Strategy**

Most successful movies are 90–120 minutes.

👉 Keep movie duration audience-friendly to improve completion rates.

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#### **6 Adopt a “Test and Scale” Approach for TV Shows**

Most shows have 1–2 seasons.

👉 Launch new series with limited seasons and extend only high-performing ones.

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#### **7 Promote Recent Content More Aggressively**

Viewers prefer newer titles.

👉 Highlight newly released content prominently on the homepage.

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#### **8 Use Genre-Based Targeted Promotions**

Different genres attract different age groups.

👉 Run targeted marketing campaigns for drama, documentaries, and kids content separately.

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#### **9 Develop More Long-Running Flagship Shows**

A few long-season shows build brand loyalty.

👉 Identify successful series and invest in turning them into long-term franchises.

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#### **10 Improve Content Metadata Accuracy**

Some content has missing information (director, cast, etc.).

👉 Ensure complete metadata to improve recommendations and user discovery.