Homework Assignment: Filters and Parameters

**Netflix Content Analysis - Viewing Hours by Title**

Chart 1: Average Hours Viewed by Title (English Content)

Visualization Description

A screenshot of a graph

Description automatically generated

The first visualization presents a horizontal bar chart displaying the average viewing hours for English-language content on Netflix. The chart implements two interactive filters:

1. Content Type Filter: Allows users to filter between All Content, Movies, and TV series
2. Language Type Filter: Enables switching between All languages, English, and Non-English content

Interactive Elements Justification

The implementation of these filters serves several analytical purposes:

* Content Type segregation helps in understanding performance across different format categories
* Language filtering enables analysis of market penetration and content performance across linguistic boundaries
* The combination of both filters allows for granular analysis of specific content segments

Key Business Insights

1. Top Performers Analysis
   * "Wednesday" leads the English content with approximately 1.719M viewing hours
   * "Stranger Things" follows closely with 1.277M viewing hours
   * "DAHMER" rounds out the top three with 1.031M viewing hours
2. Viewership Distribution
   * There's a significant drop-off between the top 3 shows and the rest
   * The viewing hours show a gradual decline pattern, with most content falling between 200M-800M hours
   * Top 5 titles account for a disproportionate share of total viewing hours, suggesting strong hit-driven consumption
3. Content Performance Tiers
   * Premium Tier (>1B hours): Wednesday, Stranger Things, DAHMER
   * High Performance Tier (500M-1B hours): Bridgerton, The Night Agent, The Queen's Gambit
   * Mid-Performance Tier (300M-500M hours): Red Notice, Don't Look Up, Bird Box
   * Base Performance Tier (<300M hours): Remaining titles

Business Recommendations

1. Focus on developing content similar to top-performing shows, particularly in the thriller/drama genre represented by the top performers
2. Investigate success factors of the Premium Tier content to replicate their performance
3. Consider optimal resource allocation between creating new content and promoting existing successful titles

Chart 2: Average Hours Viewed by Title (Non-English Content)

Visualization Description

A screenshot of a graph

Description automatically generated

The second visualization maintains the same horizontal bar chart format but focuses on Netflix's non-English content performance, demonstrating viewing hours across international titles. This chart shares the same interactive filters as Chart 1:

1. Content Type Filter: All Content, Movies, TV series
2. Language Type Filter: All languages, English, Non-English content

Interactive Elements Justification

The parallel structure between Charts 1 and 2 enables effective comparative analysis:

* Allows direct comparison between English and Non-English content performance
* Facilitates understanding of global content consumption patterns
* Enables identification of successful international content strategies

Key Business Insights

1. International Content Leadership
   * "Squid Game" dominates with an exceptional 2.205M viewing hours, surpassing even the top English content
   * "Money Heist" secures second place with 710M viewing hours
   * "All of Us Are Dead" shows strong performance with 679M viewing hours
2. Market Performance Analysis
   * Korean content shows solid performance (Squid Game, All of Us Are Dead)
   * Spanish content (Money Heist, Through My Window) demonstrates consistent viewership
   * There's a substantial viewership gap between the top performer (Squid Game) and other content
3. Viewing Pattern Trends
   * The top 3 non-English titles are all series rather than movies
   * Korean dramas dominate the upper tier of viewing hours

Comparative Analysis (Chart 1 vs Chart 2)

1. Performance Comparison
   * Squid Game (2.205M) outperforms Wednesday (1.719M), the top English show
   * Non-English content shows more variance in viewing hours
   * The drop-off pattern is steeper in non-English content
2. Market Implications
   * Strong performance of non-English content suggests significant global audience engagement
   * Success of international content demonstrates Netflix's effective global content strategy
   * Potential for cross-market content adaptation and localization

Business Recommendations

* + Leverage successful non-English content to build global audience engagement
  + Develop marketing strategies to promote non-English content to English-speaking audiences
  + Create content discovery features to help viewers find international content

Conclusion

Netflix's Global Content Strategy: An Analysis of English and Non-English Content The success of international content, especially from South Korea, also shows that the service can serve up popular programming without cultural or language barriers. This implies the potential for increased investment in the cross-border production of international content and content promotion across cultures.

**Chart 3: Viewer Engagement Analysis (Time Series with Interactive Elements)**

**Visualization Description**

A screenshot of a graph

Description automatically generated

This visualization presents a time-series line chart showing viewer engagement from May 2021 to November 2024, with separate lines for Movies (blue) and TV Series (green). The chart includes several interactive elements:

1. **Parameter:**
   * Metric Selector allowing users to switch between:
     + Total Hours Viewed
     + Weekly Hours Viewed
2. **Filters:**
   * Language Type (All, English, Non-English)
   * Content Type distinction (Movies vs. TV Series shown in different colors)
   * Month/Week temporal granularity

**Interactive Elements Justification**

The combination of parameter and filters provides:

* Flexibility in analyzing different time-based metrics
* Ability to compare performance across content types
* Capability to analyze linguistic market segments
* Temporal analysis at different granularities

**Key Business Insights**

1. **Viewing Pattern Trends**
   * TV Series consistently outperform Movies in viewing hours
   * Peak engagement occurred around November 2021 (approximately 45M hours for TV Series)
   * TV Series show higher volatility in viewing patterns compared to Movies
   * Movies maintain a more stable viewing pattern, typically between 8-15M hours
2. **Seasonal Patterns**
   * Regular peaks appear around November/December periods
   * Viewing hours typically dip during mid-year periods
   * TV Series show stronger seasonal fluctuations than Movies
   * Notable cyclical pattern with higher engagement during winter months
3. **Long-term Trends**
   * Overall declining trend in peak viewing hours for TV Series from 2021 to 2024
   * Movie viewing hours remain relatively stable throughout the period
   * Narrowing gap between TV Series and Movies over time
   * Recent upward trend noticed in late 2024

**Business Recommendations**

* + Investigate factors behind successful TV Series peaks for replication
  + Develop targeted promotions during historically lower-engagement periods
  + Consider special programming or events during mid-year to boost viewership
  + Focus on maintaining the recent upward trend observed in late 2024

**Chart 4: Weekly Viewer Engagement Analysis (Detailed Time Series)**

**Visualization Description**

A screenshot of a graph

Description automatically generated

This visualization presents a more granular view of viewer engagement, focusing on weekly hours viewed from June 2023 to October 2024. Like the previous chart, it maintains the same interactive elements but provides a more detailed temporal analysis.

**Interactive Elements**

1. **Parameter:**
   * Metric Selector toggling between:
     + Total Hours Viewed
     + Weekly Hours Viewed (currently selected)
2. **Filters:**
   * Language Type (All, English, Non-English)
   * Content Type (Movies - blue line, TV Series - green line)
   * Month/Week temporal view

**Key Business Insights**

1. **Weekly Viewing Patterns**
   * Movies show higher weekly viewing hours (5M-6M) compared to TV Series (3M-4M)
   * Movies demonstrate more dramatic fluctuations in weekly viewership
   * Notable crossover point in October 2023 where TV Series temporarily matched movie viewership
   * Recent upward trend for both content types in late 2024
2. **Seasonal Performance**
   * Peak viewing periods for movies occur around:
     + December 2023 (approximately 6.5M hours)
     + June 2024 (approximately 6.2M hours)
     + October 2024 (upward trend to 6M+ hours)
   * TV Series show more moderate peaks:
     + February 2024 (4.5M hours)
     + June 2024 (4.3M hours)
3. **Comparative Analysis**
   * Unlike total hours viewed, weekly viewing shows movies maintaining higher engagement
   * TV Series demonstrate more stable week-to-week viewing patterns
   * The gap between movies and TV series varies between 1.5M-2.5M hours per week
   * Both content types show resilience in maintaining base viewership levels

**Comparison with Previous Chart (Chart 3)**

1. **Temporal Resolution Insights**
   * Weekly view reveals more nuanced viewing patterns
   * Different perspective on content type performance
   * Better identification of short-term trends and immediate impact of content releases
2. **Pattern Recognition**
   * Confirms seasonal trends but provides more precise timing
   * Shows the importance of both long-term and short-term analysis
   * Reveals weekly volatility masked in monthly views

**Business Recommendations**

1. **Content Release Strategy**
   * Time movie releases to capitalize on peak viewing periods (December, June)
   * Plan TV Series releases to maintain steady engagement during movie viewing lulls
   * Consider staggered release schedules to maintain consistent platform engagement
2. **Engagement Optimization**
   * Develop targeted weekly promotional campaigns based on content type performance
   * Create hybrid viewing experiences that leverage the strengths of both formats
   * Implement strategies to smooth out weekly viewing fluctuations
3. **Platform Enhancement**
   * Optimize recommendation algorithms based on weekly viewing patterns
   * Develop features that encourage sustained weekly engagement
   * Create content discovery tools that balance movie and TV series promotion

Reference:

Nussbaumer Knaflic, C. (2015). *Storytelling with data* (C. N. Knaflic, Ed.). John Wiley & Sons.