**Netflix User Subscription Analysis Report (June–December 2023)**

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**2. Introduction**

**Objective of the Project**

To analyze Netflix user subscription data from June to December 2023, identify key revenue drivers by country, age, gender, device, and subscription type, and uncover actionable business insights.

**Problem Being Addressed**

Which demographics, regions, devices, and subscription types generate the most revenue, and how can Netflix leverage these insights to optimize its marketing, product, and pricing strategies?

**Key Datasets and Methodologies**

* **Datasets Used:** Subscription data (monthly revenue, user demographics, device usage)
* **Excel Methods:** Pivot Tables, Charts, Slicers, Conditional Formatting, SUMIFS, and Date functions

**3. Story of Data**

**Data Source**

Data was sourced from Netflix’s internal user subscription records between June and December 2023.

**Data Collection Process**

Collected via automated backend logs capturing user activity and subscription payments.

**Data Structure**

* **Rows:** Individual subscription transactions
* **Columns:** User demographics (age, gender, country), device used, subscription type, payment amount, and date

**Important Features and Their Significance**

* **Country & Device:** Identify revenue hotspots and preferred viewing platforms
* **Age & Gender:** Target demographics for marketing
* **Subscription Type:** Revenue from Basic, Standard, Premium plans
* **Payment Date:** Revenue trends over time

**Data Limitations or Biases**

* No insight into user churn or engagement time
* Limited to seven months of data
* Device type may not reflect all viewing behavior (multi-device use)

**4. Data Splitting and Preprocessing**

**Data Cleaning**

Duplicates and incomplete entries were removed. Formatting of dates and currency was standardized.

**Handling Missing Values**

Missing demographic fields (e.g., age) were excluded from analysis. Revenue values were validated for accuracy.

**Data Transformations**

* Monthly aggregation of revenue
* Categorization of devices
* Age grouped into bins for clarity

**Data Splitting**

* **Dependent Variable:** Monthly revenue
* **Independent Variables:** Age, gender, country, device, subscription type

**Industry Context**

Streaming and entertainment industry. The data provides strategic insights for subscriber acquisition and retention.

**Stakeholders**

Netflix Marketing, Product Development, Finance, and Strategy teams.

**Value to the Industry**

Helps improve content delivery methods, optimize subscription pricing, and enhance regional marketing strategies.

**5. Pre-Analysis**

**Key Trends Identified**

* Revenue peaked in **October ($9,844)**, with significant growth from September.
* **Laptops and Tablets** dominate device revenue (~$8,000 each).
* The **United States** and **Spain** are top-revenue countries (~$5,664 each).
* **Females** generated slightly more revenue than males.

**Potential Correlations**

* Users aged **30** had the highest revenue contribution.
* Higher device mobility (Laptop/Tablet) aligns with higher revenue.

**Initial Insights**

* **Basic Plan** is the highest revenue generator.
* Payment volumes surge in October, suggesting possible promotions or content releases.

**6. In-Analysis**

**Unconfirmed Insights**

* A correlation between **age (30–41)** and higher spending, possibly due to financial independence.
* Device type impacts revenue—higher usage of **portable devices** suggests a trend in mobile streaming.

**Recommendations**

* Focus marketing on age **30–41**, especially in the **U.S. and Spain**.
* Promote **Basic plans** more, as they have broad appeal.
* Optimize app experience for **laptops and tablets**.

**Analysis Techniques Used in Excel**

* **Pivot Tables** for summarizing revenue
* **Slicers** for filtering by demographics
* **Charts** (bar, pie, line) for visual storytelling
* **SUMIFS/VLOOKUP** for aggregations and data joins

**7. Post-Analysis and Insights**

**Key Findings**

* Total revenue: **$31,271** over 7 months
* **October** recorded the **highest revenue** spike.
* **Top revenue sources:**
  + **Device:** Laptop
  + **Age:** 30
  + **Gender:** Female
  + **Country:** U.S.
  + **Subscription Type:** Basic

**Comparison with Initial Findings**

Initial assumptions of Premium plans and Smart TVs dominating revenue were refuted—Basic plans and portable devices outperformed.

**8. Data Visualizations & Charts**

**Visuals Used**

* **Line Chart:** Revenue trend by month
* **Bar Charts:** Revenue by age, device, subscription type, country, payment date
* **Pie Chart:** Revenue by gender
* **Dashboard:** Consolidated KPIs and slicers for interactive analysis

**Explanation of Visuals**

* The **line chart** shows revenue growth with peaks and troughs.
* **Bar charts** provide easy comparison of revenues across categories.
* The **dashboard** enables dynamic exploration of revenue factors.

**9. Recommendations and Observations**

**Actionable Insights**

* Focus on **Basic subscription promotions** in **U.S., Spain, and Canada**.
* Develop marketing campaigns targeting **30-year-old females**.
* Enhance Netflix app performance for **laptops and tablets**.

**Optimizations or Business Decisions**

* Introduce **regional pricing models** in top revenue countries.
* Incentivize **laptop/tablet usage** with device-specific offers.
* Track device trends for potential content optimization.

**Unexpected Outcomes**

* **Smart TVs** contributed the **least** revenue—contrary to expected high engagement from home streaming.

**10. Conclusion**

**Key Learnings**

* Portable devices drive the highest revenue.
* Basic plans outperform premium tiers in revenue volume.
* Demographic focus (Age 30, Female) can guide future campaigns.

**Limitations**

* Short analysis period (7 months)
* Limited behavioral insights beyond revenue
* Does not account for subscription renewals or churn

**Future Research**

* Long-term trend analysis across years
* Customer Lifetime Value (CLV) study
* Cross-device engagement analysi

**11. References & Appendices**

**References**

* Netflix Internal User Data (2023)
* Microsoft Excel Documentation
* Data Visualization Best Practices (Excel Charts)

**Appendices**

* Raw Data Tables
* Pivot Table Screenshots
* Formula Breakdown: SUMIFS, VLOOKUP, Date Functions