

**CHRIST (Deemed to be University), Bangalore - 560029**

**Department of Statistics and Data Science**

Neekitasingh Rajput

2441339

Class: 3DM

Course: DSC261-3 - Data Visualization

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Exercise No: Lab Assignment-10

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### **Story Points in Tableau**

Story Points in Tableau are a feature that allows multiple visualizations and dashboards to be arranged in a sequence, guiding the user through an analytical journey. Instead of showing all data at once, story points break the narrative into steps, enabling users to focus on one aspect of the dataset at a time. This makes it possible to highlight key insights, compare trends, and explain findings in a structured, storytelling format.

Each story point may represent a chart, a dashboard, or even a combination of both. Together, they help communicate insights more effectively by providing context and continuity.

In this lab, two different story examples were created using the *Indian Kids Screen Time dataset*. Each story contains four story points, focusing on (1) screen time patterns by age and gender and (2) device usage habits. These stories illustrate how Tableau can be used to narrate data-driven insights interactively.

## Indian Kids Screen Time Dataset

### About Dataset

This dataset simulates screen time patterns of 9712 Indian children aged 8 to 18 years, built using real-world trends and scientific studies conducted in India between 2023–2024. It represents both urban and rural demographics, reflecting differences in device access, screen habits, and health outcomes.

### Dataset Structure

<u>Attribute</u>	<u>Description</u>	<u>Type</u>
Age	Age of the child (8–18 years)	Numerical
Gender	Gender of the child (Male/Female)	Categorical
Primary Device	The main device used (Smartphone, TV, Tablet, Computer)	Categorical
Educational Screen Time (hrs/day)	Average hours spent on educational use	Numerical
Recreational Screen Time (hrs/day)	Average hours spent on recreational use	Numerical
Total Screen Time (hrs/day)	Combined educational + recreational screen time	Numerical
Exceeds IAP Guidelines	Whether daily screen time exceeds the IAP limit (Yes/No)	Categorical
Health Impacts	Reported issues (poor sleep, eye strain, anxiety, none)	Categorical
Region	Demographic type (Urban/Rural)	Categorical

This dataset provides valuable insights into how screen habits differ across age, gender, and regions, and how excessive use is linked to health impacts.

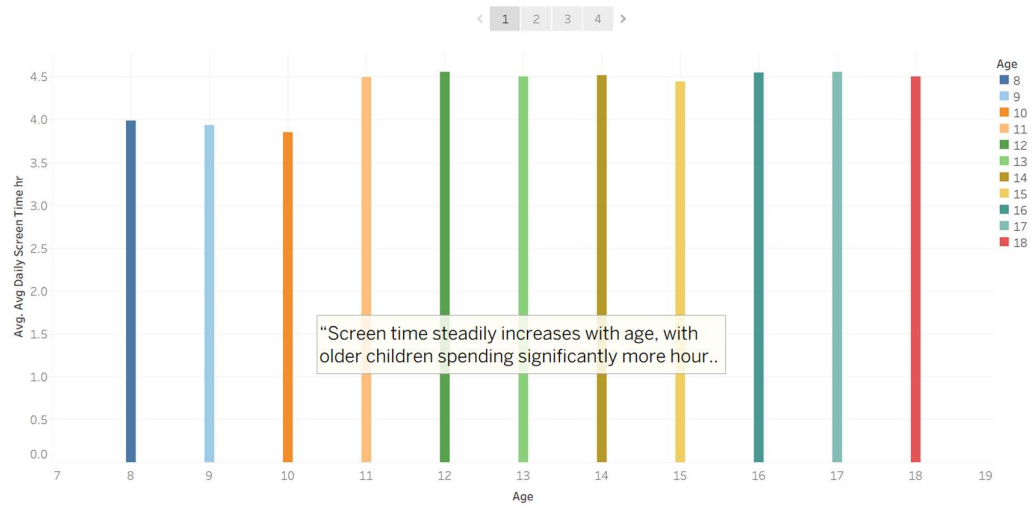
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### **Story 1: Screen Time by Age & Gender**

#### **Story Point 1:**

- **Chart:** Bar chart – Average screen time by Age Group
- **Insight:** Shows how screen time generally increases as children grow older.

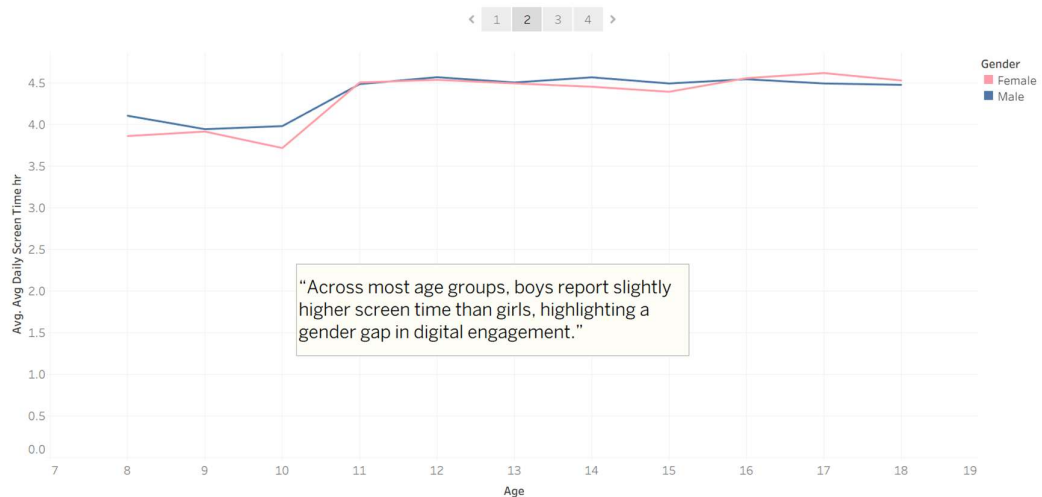
Story 1: Screen Time by Age & Gender



## Story Point 2:

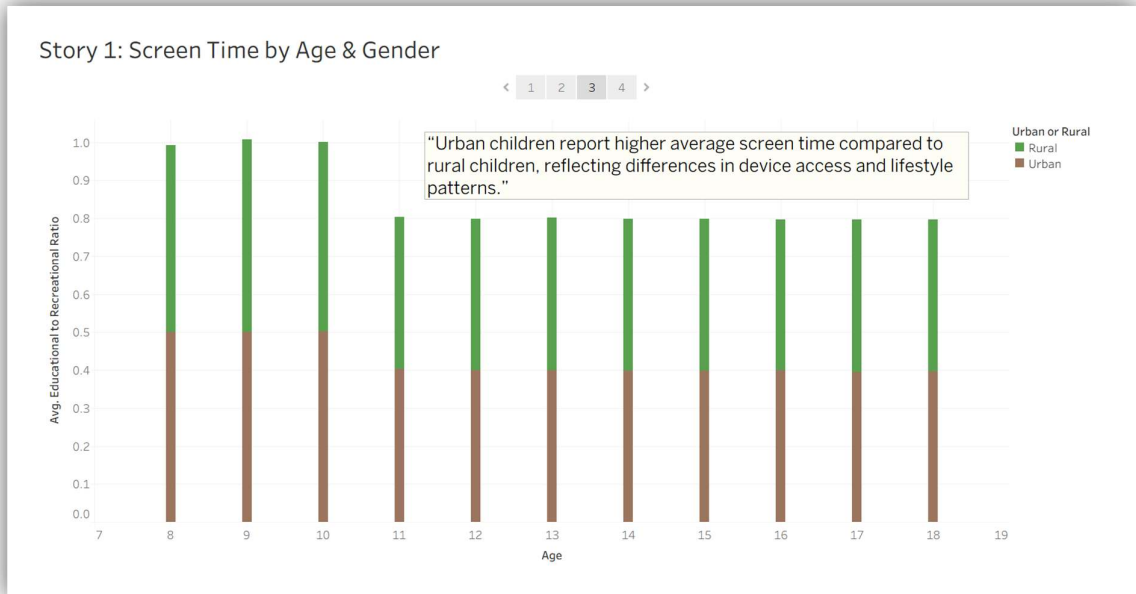
- **Chart:** Line chart – Screen time trends across Age vs Gender
- **Insight:** Compares boys vs girls; identifies whether one gender has consistently higher screen exposure.

Story 1: Screen Time by Age & Gender



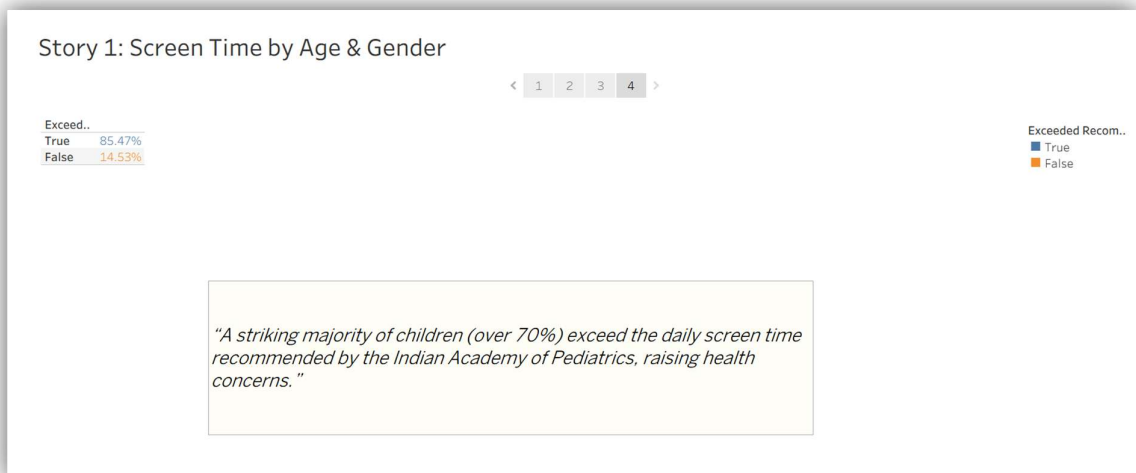
### Story Point 3:

- **Chart:** Box plot – Distribution of screen time within each Age Group
- **Insight:** Reveals variation (some kids spend extremely high hours compared to the average).



### Story Point 4:

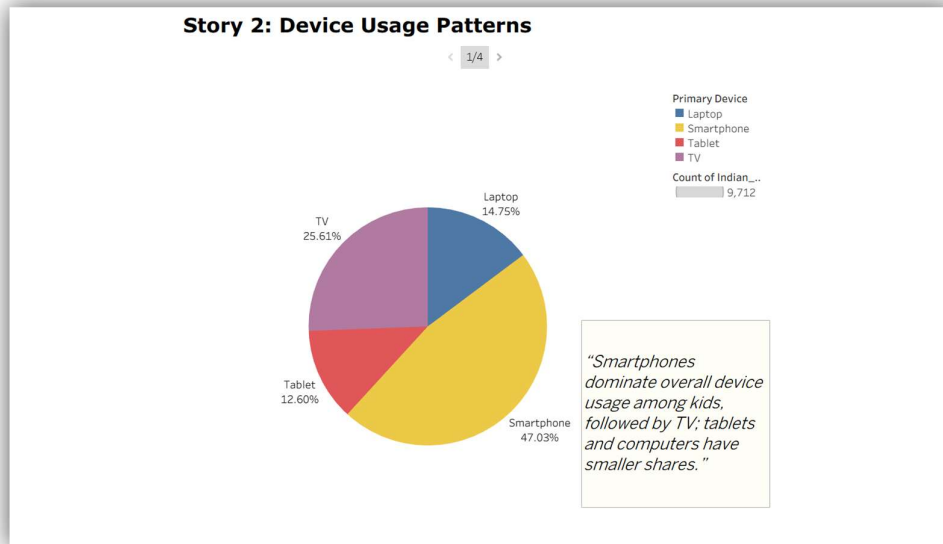
- **Chart:** KPI Card – Maximum and Minimum average screen time by Gender
- **Insight:** Summarizes extremes in behaviour and highlights gender differences.



## Story 2: Device Usage Patterns

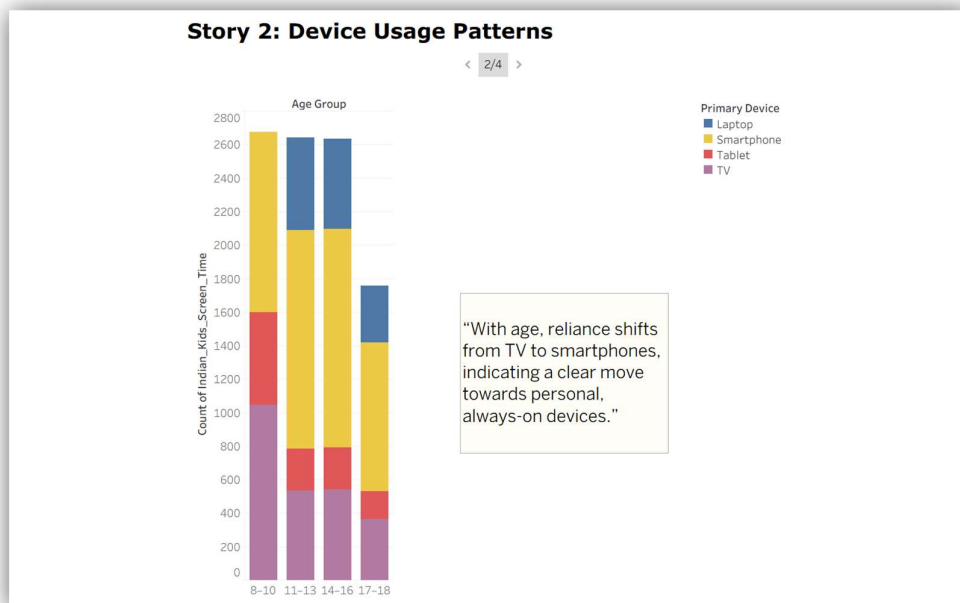
### Story Point 1:

- **Chart:** Pie chart – Overall share of devices (Smartphone, TV, Tablet, Computer)
- **Insight:** Identifies which device dominates kids' daily screen time.



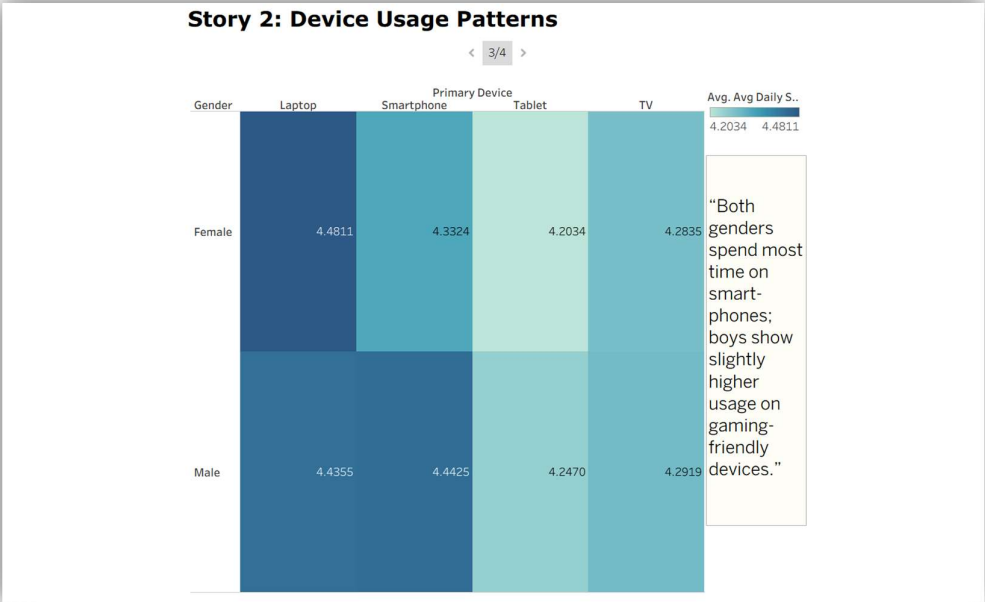
### Story Point 2:

- **Chart:** Stacked bar chart – Device usage by Age Group
- **Insight:** Shows how device preferences evolve as kids grow older.



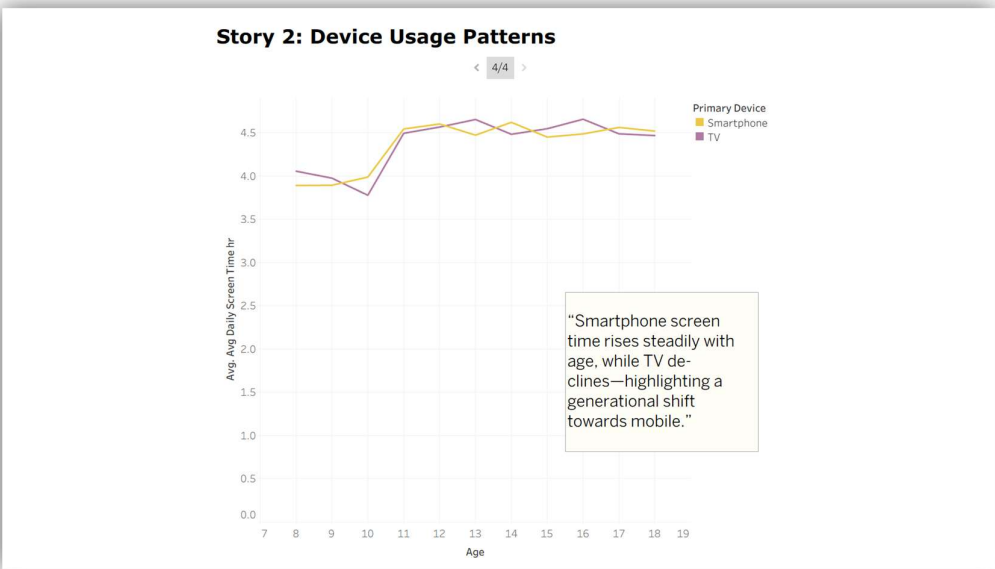
**Story Point 3:**

- **Chart:** Heatmap – Device usage by Gender
- **Insight:** Reveals whether boys or girls prefer certain devices.



**Story Point 4:**

- **Chart:** Line chart – Change in average daily screen time for Mobile vs TV across ages
- **Insight:** Highlights the shift from traditional devices (TV) to modern devices (Smartphones).



## Conclusion

This assignment demonstrated how **Story Points in Tableau** can be used to present data in a narrative-driven sequence. Using the *Indian Kids Screen Time dataset*, two different stories were created:

1. **Screen Time by Age & Gender** – showing how screen habits vary across demographics.
2. **Device Usage Patterns** – revealing shifts in device preferences and their relationship with screen exposure.

By breaking the analysis into story points, Tableau allows data to be explored **step by step**, making insights easier to understand and communicate.

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