

EXP NO: 8	<h1 style="text-align: center;">INTERACTIVE DASHBOARDS WITH TABLEAU</h1>
DATE: 23/09/25	

## Aim:

To create an interactive dashboard in Tableau using the *Sample – Superstore* dataset from Kaggle that includes:

- Bar chart (Sales by Category)
- Line chart (Sales over Time)
- Scatter plot (Profit vs Sales by Sub-Category)
- Interactive filters and dashboard actions

## Procedure:

**Step 1:** Open Tableau and load the *Sample–Superstore* dataset.

**Step 2:** Explore the data and identify key fields such as *Category*, *Sub-Category*, *Sales*, *Profit*, and *Order Date*.

### Worksheet 1 – Bar Chart (Sales by Category)

1. Create a new worksheet and rename it to **Bar\_Sales\_by\_Category**.
2. Drag **Category** to *Columns*.
3. Drag **Sales** to *Rows*.
4. Sort bars in descending order.
5. Drag **Region** to *Color* to differentiate regional data.
6. Enable *Show Mark Labels*.
7. (Optional) Add **Region** to *Filters* for interactivity.

### Worksheet 2 – Line Chart (Sales Trend Over Time)

1. Create another worksheet and rename it to **Line\_Sales\_Trend**.
2. Drag **Order Date** to *Columns* and set it to *Month(Continuous)*.
3. Drag **Sales** to *Rows*.
4. Drag **Region** to *Color* to separate lines by region.
5. Add *Show Mark Labels* for better readability.

### Worksheet 3 – Scatter Plot (Profit vs Sales)

1. Create a new worksheet and rename it to **Scatter\_Profit\_vs\_Sales**.
2. Drag **Sales** to *Columns* and **Profit** to *Rows*.
3. Drag **Sub-Category** to *Detail* and *Category* to *Color*.
4. Optionally drag **Segment** to *Shape*.
5. Add a reference line showing average profit and average sales.

## Step 4 – Build the Dashboard

1. Click **New Dashboard** and rename it to **Sales Dashboard**.
2. Drag the three worksheets into the dashboard area:
  - o Line chart → top
  - o Bar chart → bottom-left
  - o Scatter plot → bottom-right
3. Use *Containers* for cleaner alignment and adjust size (e.g., 1200×800).
4. Add title: **‘Sales and Profit Dashboard’** .

## Step 5 – Add Interactivity

### (a) Add Filters

- Enable *Show Filter* for fields like **Region**, **Category** , or **Year** in each sheet.

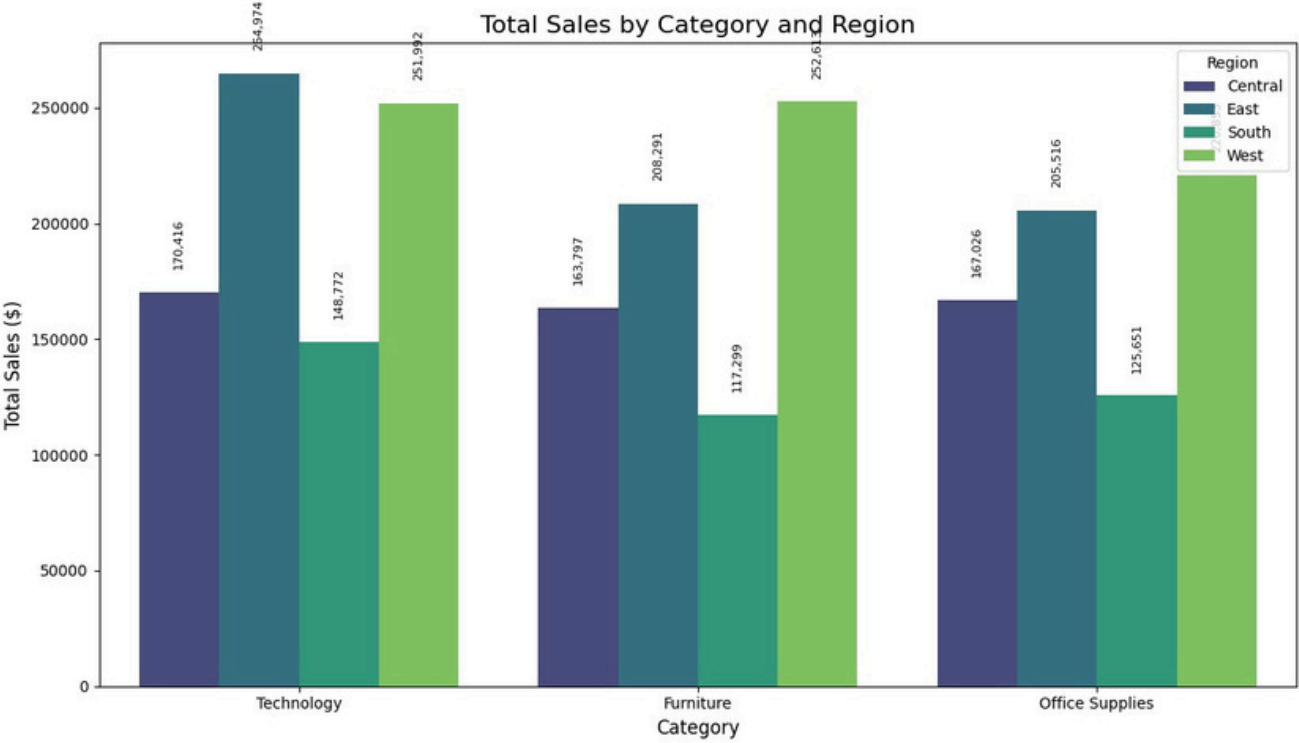
### (b) Add Actions

1. From menu → *Dashboard* → *Actions* → *Add Action* → *Filter*
2. Set *Bar Chart* as Source and *Line + Scatter* as Target.
3. Run action on *Select* and clear selection to show all values.
4. Add *Highlight Action* to highlight matching categories across charts.

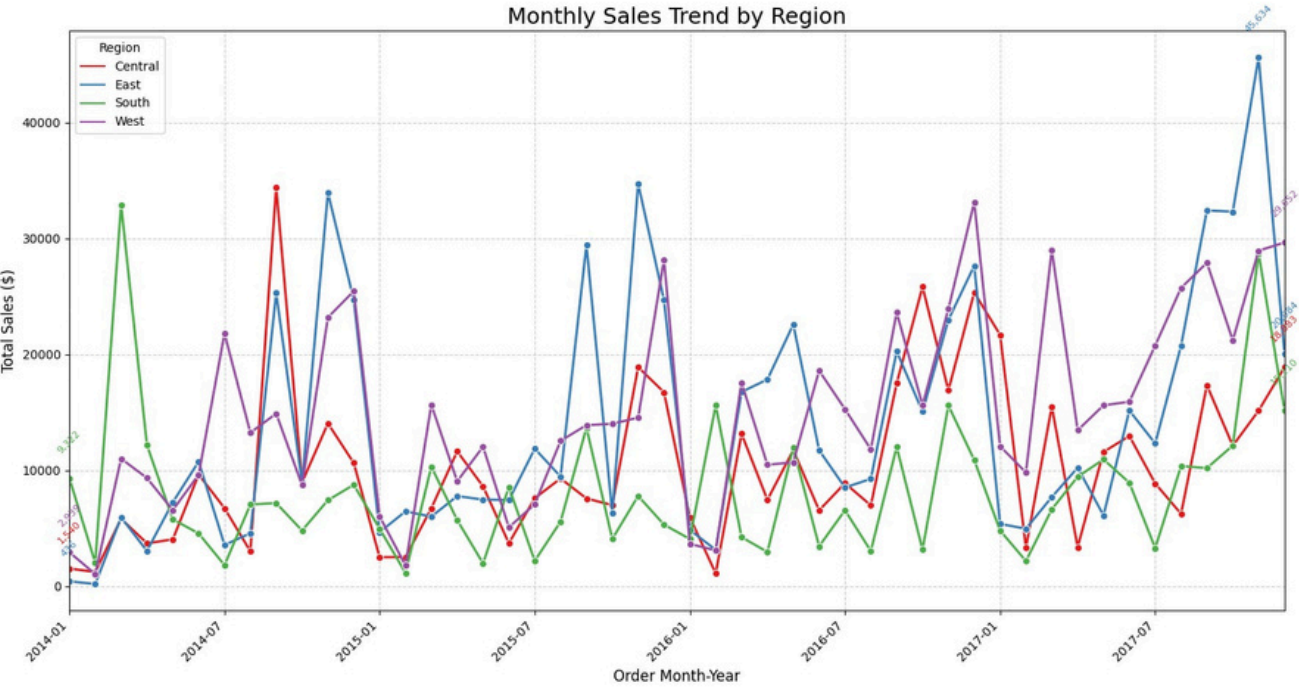
## Step 6 – Publish or Export

- To Tableau Public: **File** → **Save to Tableau Public** → **Sign in** → **Publish**
- To PDF/Image: **File** → **Export** → **Image/PDF**

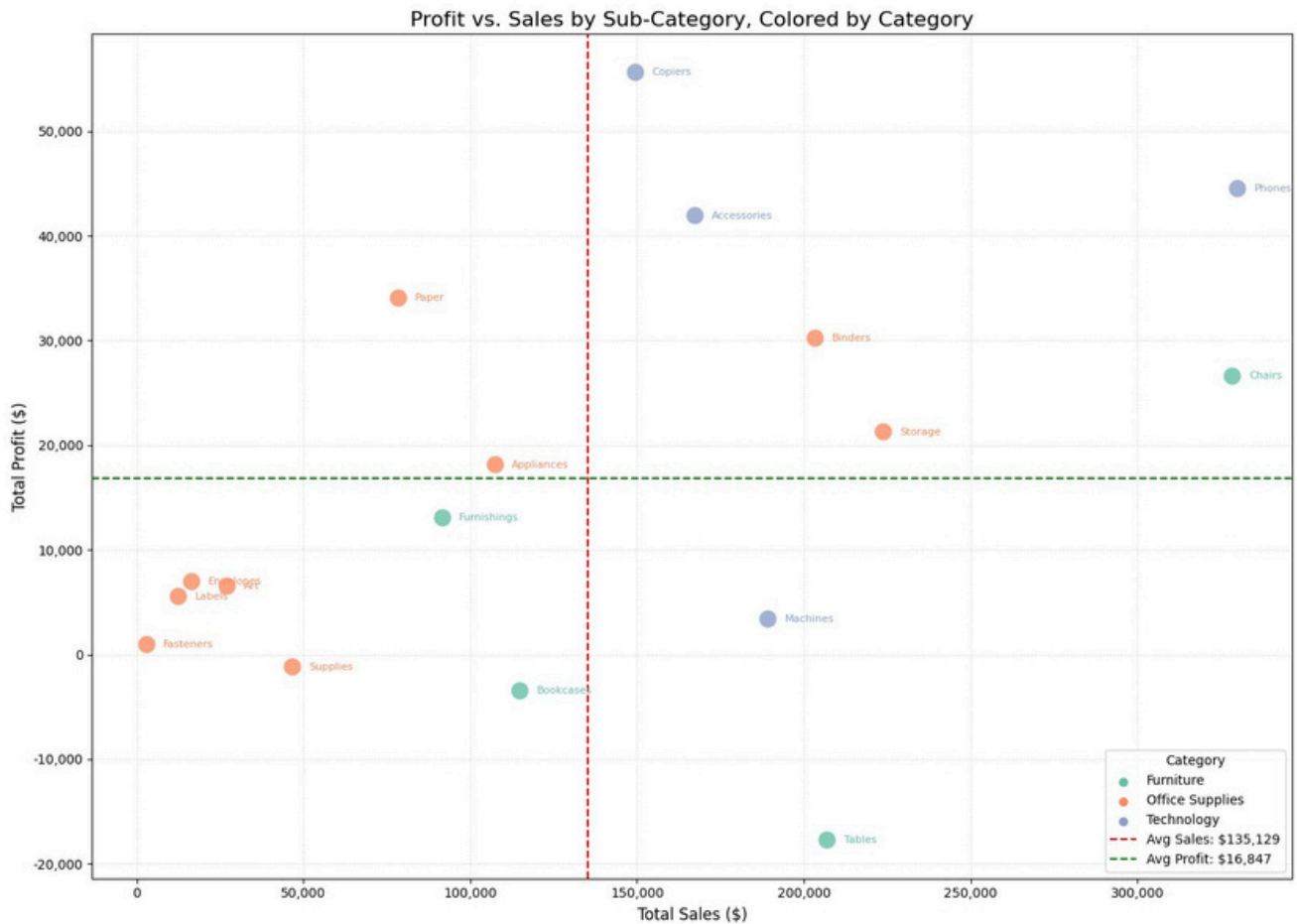
Output:



Bar Chart (Sales by Category)



Line Chart (Sales Trend Over Time)



**Scatter Plot (Profit vs Sales)**

**Result:**

The Sample – Superstore dataset was successfully visualized using Tableau through interactive dashboards containing bar charts, line charts, and scatter plots. Filters and actions were implemented to enable dynamic data exploration and analysis.