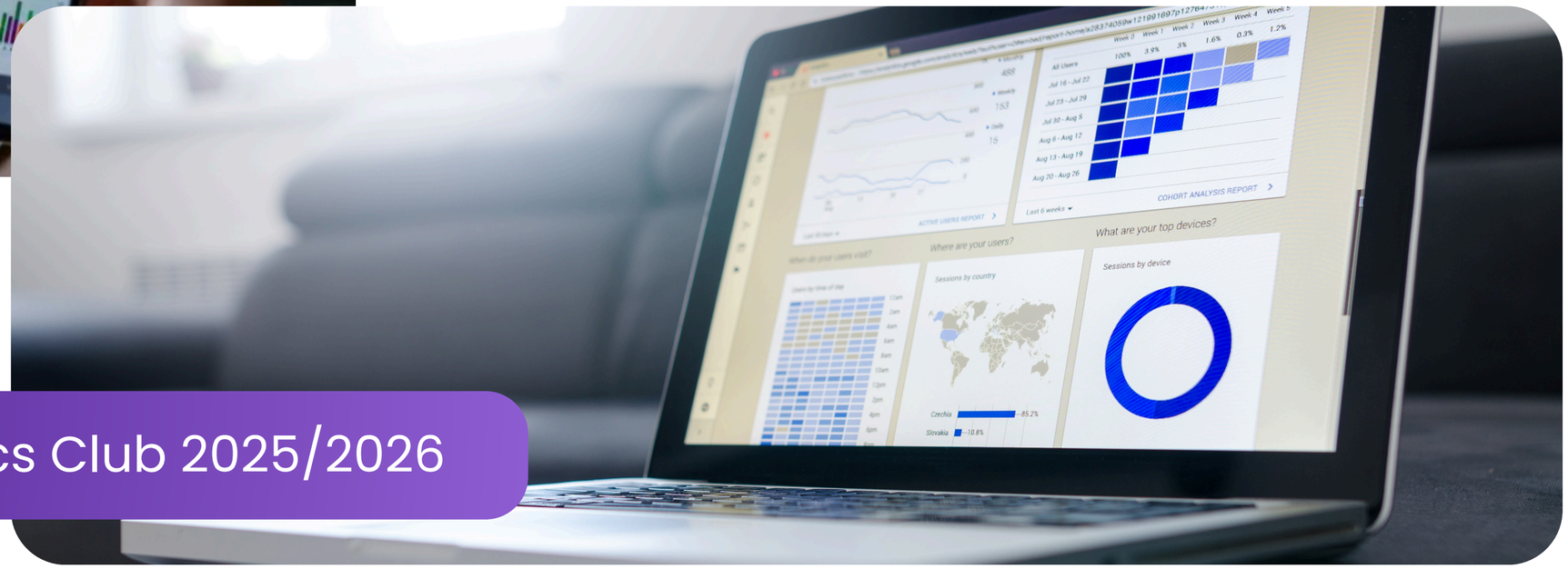
30 Oct 2025 Session

TABLEAU



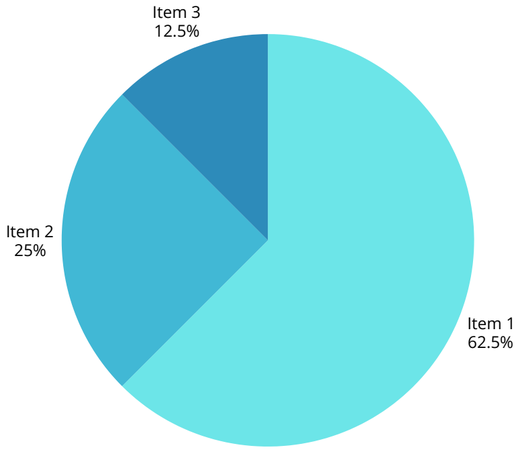
SIM Data Analytics Club 2025/2026

What is Tableau?

Tool for data visualisation and business intelligence. It helps users to analyse data, visually presents the data using charts and dashboards, to help the users gain insights.

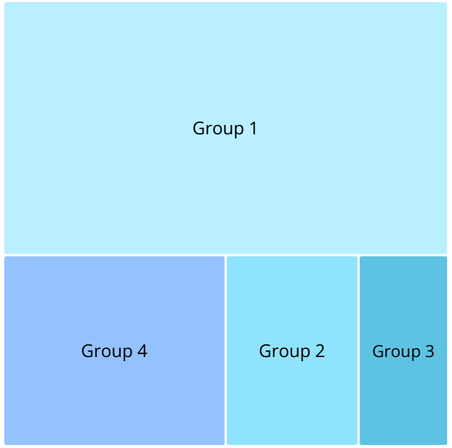
- Handles large data efficiently
- Connects to multiple data sources
- Interactive dashboards
- Wide range of charts

Charts



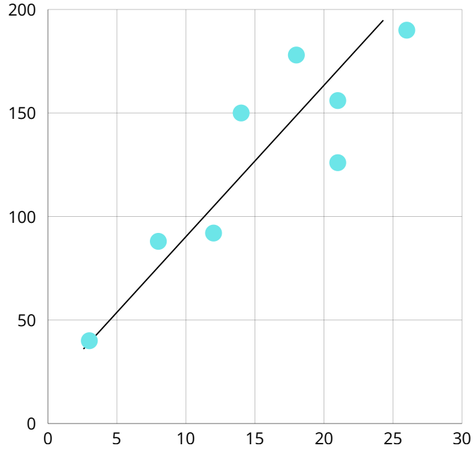
Pie Chart

- Show data as percentage of a whole



Tree Map

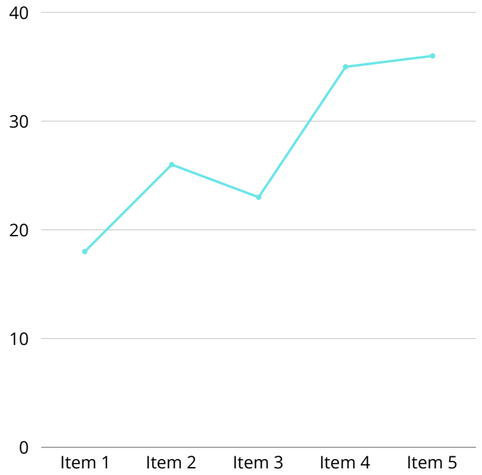
- Displays “tree-structured” data using nested rectangles
- Each rectangle represents a category or sub-category



Scatter Plots

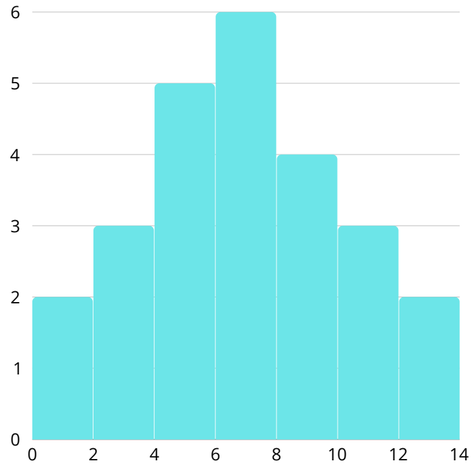
- Correlation between variables
- Usually combined with trendlines

Charts



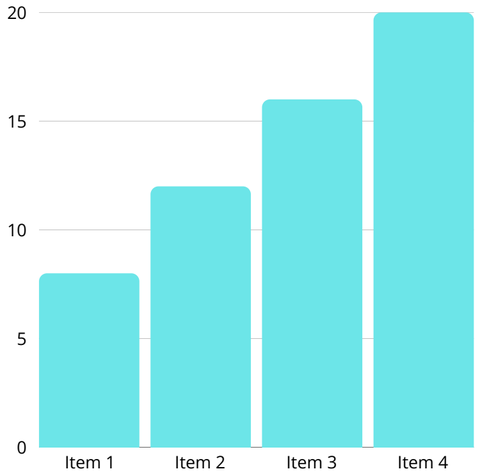
Line Chart

- Displays trend over time



Histogram

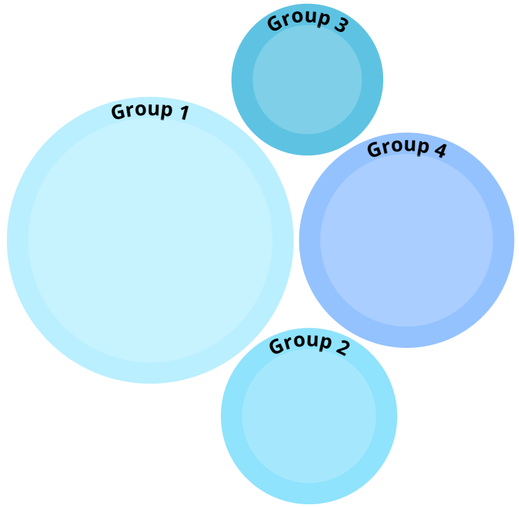
- Displays “tree-structured” data using nested rectangles
- Each rectangle represents a category or sub-category



Bar Chart

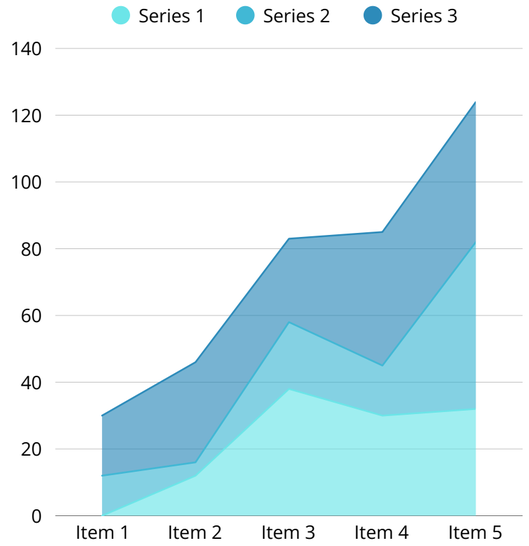
- Correlation between variables
- Usually combined with trendlines

Charts



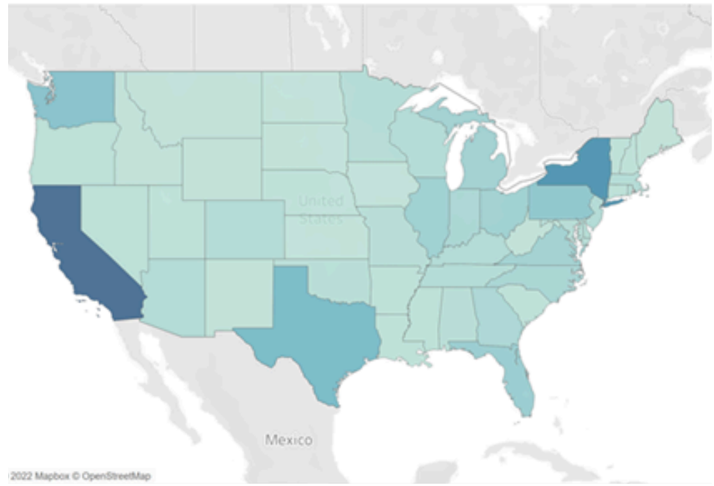
Packed Bubble Chart

- Uses bubble size to compare between categories



Area Chart

- To show trends over time while emphasising the changes in volume

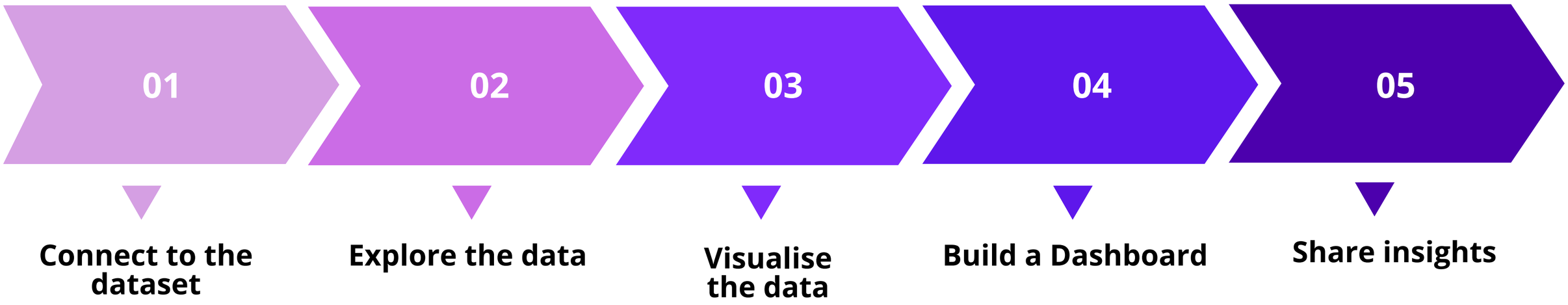


Filled Map

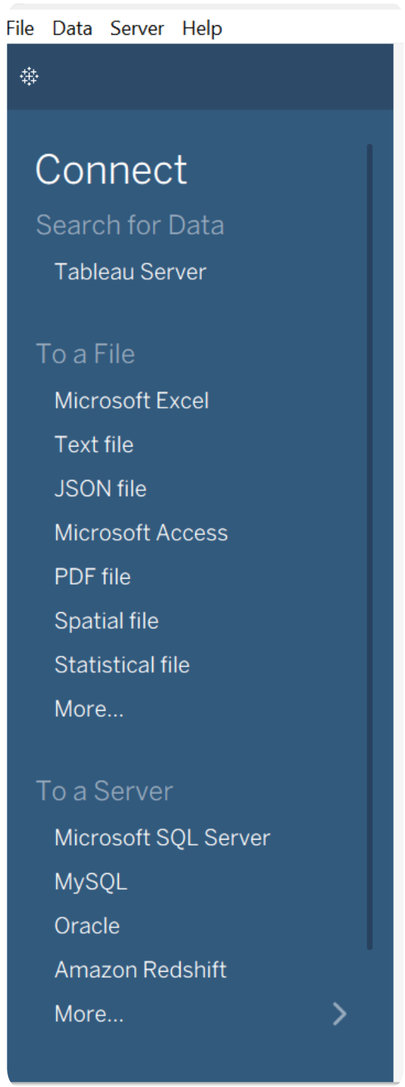
- Show the geographical distributions of the data

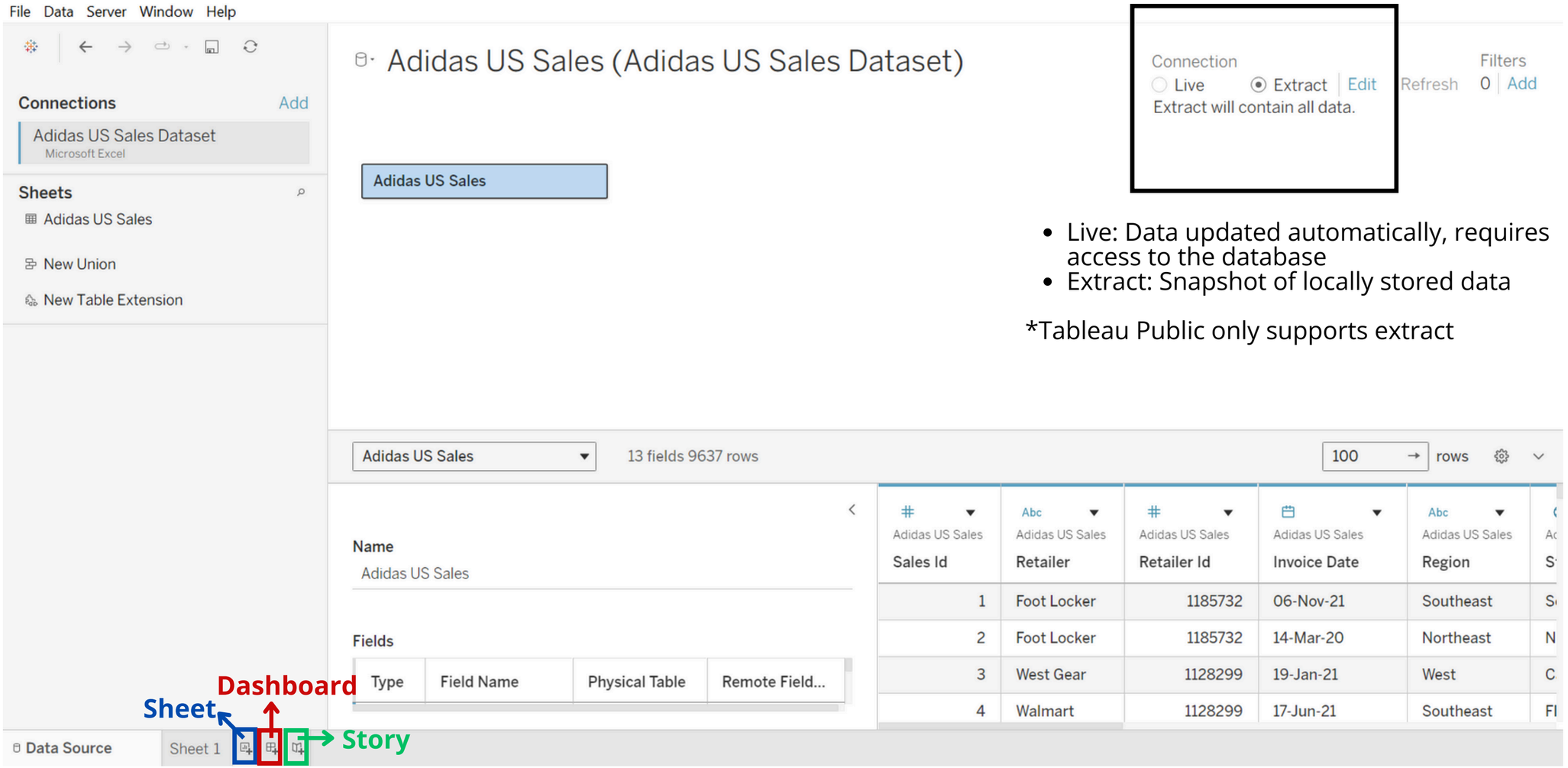
For more charts: Build Common Chart Types in Tableau

Overall Workflow in Tableau



Connect & Explore the data

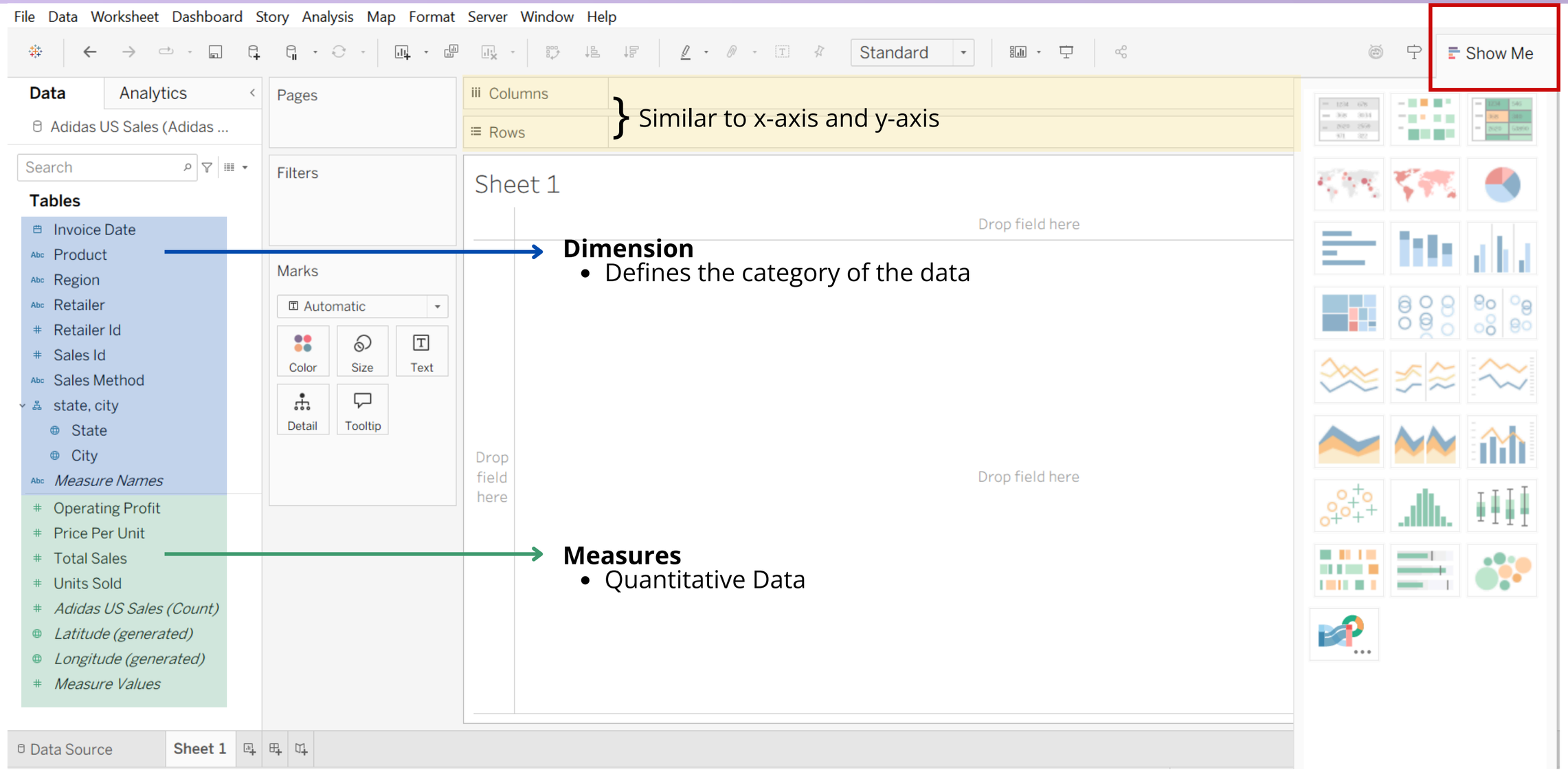




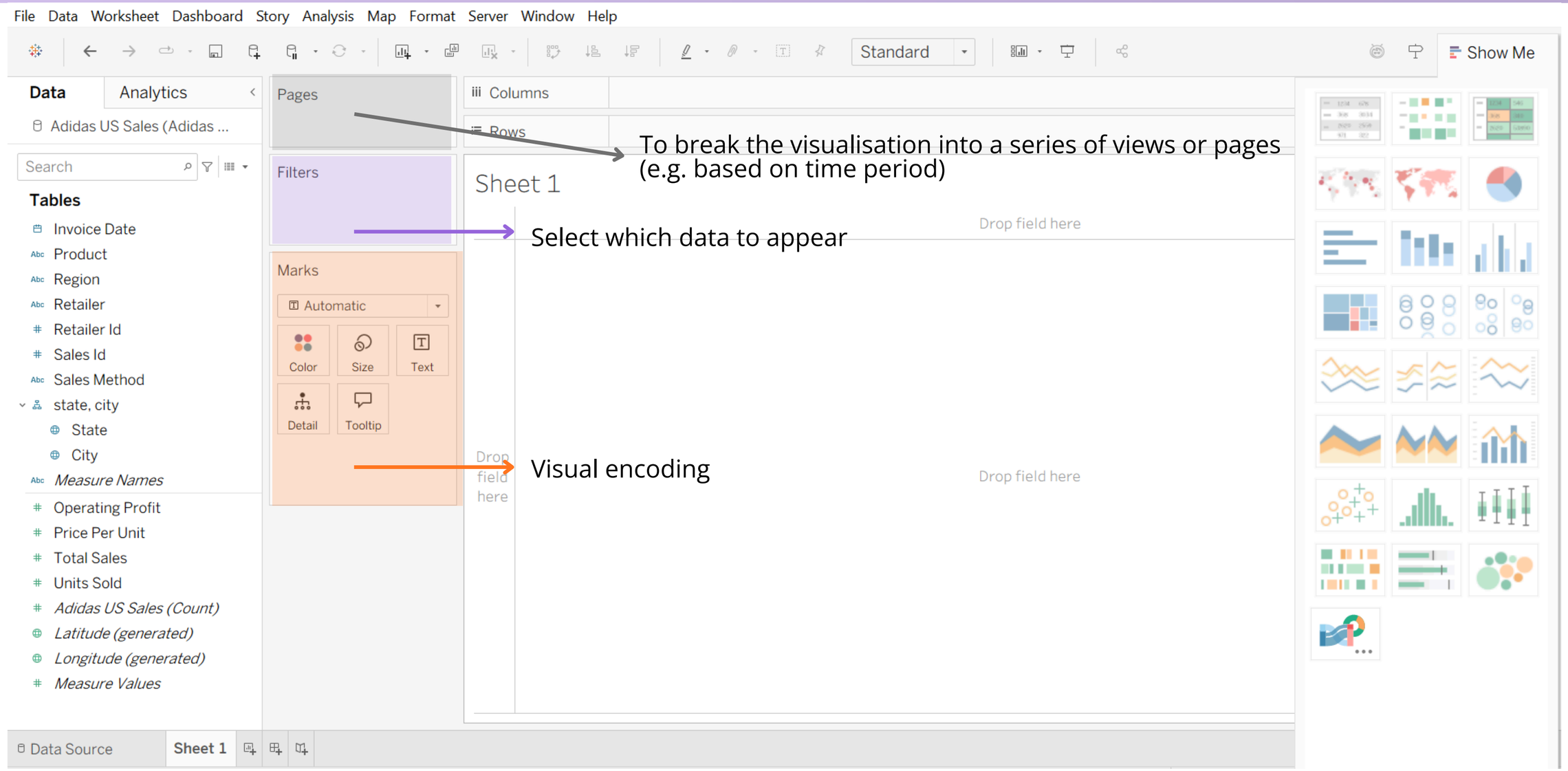
- Live: Data updated automatically, requires access to the database
- Extract: Snapshot of locally stored data

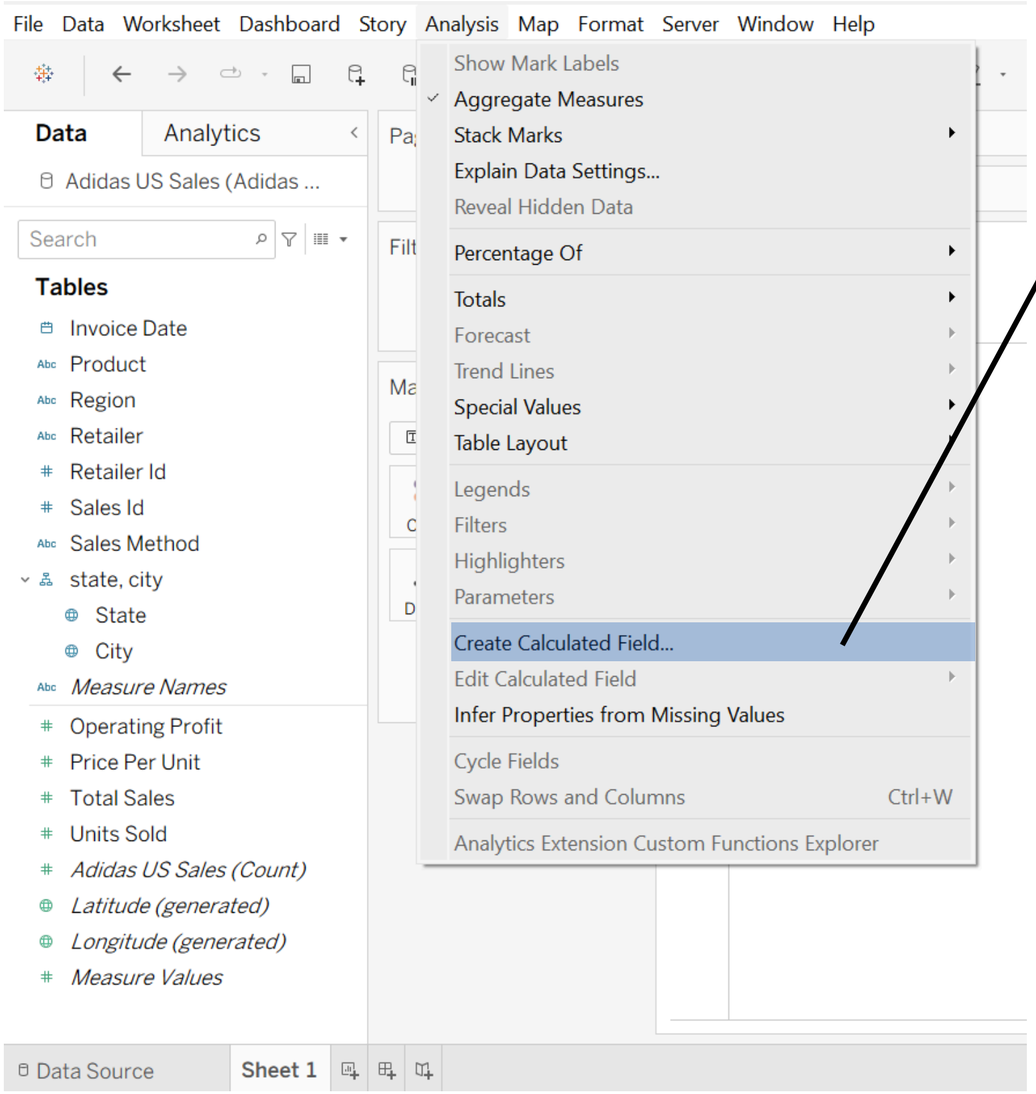
*Tableau Public only supports extract

Navigate through Tableau



Navigate through Tableau





Calculation Field

- A formula to perform calculations based on the existing data

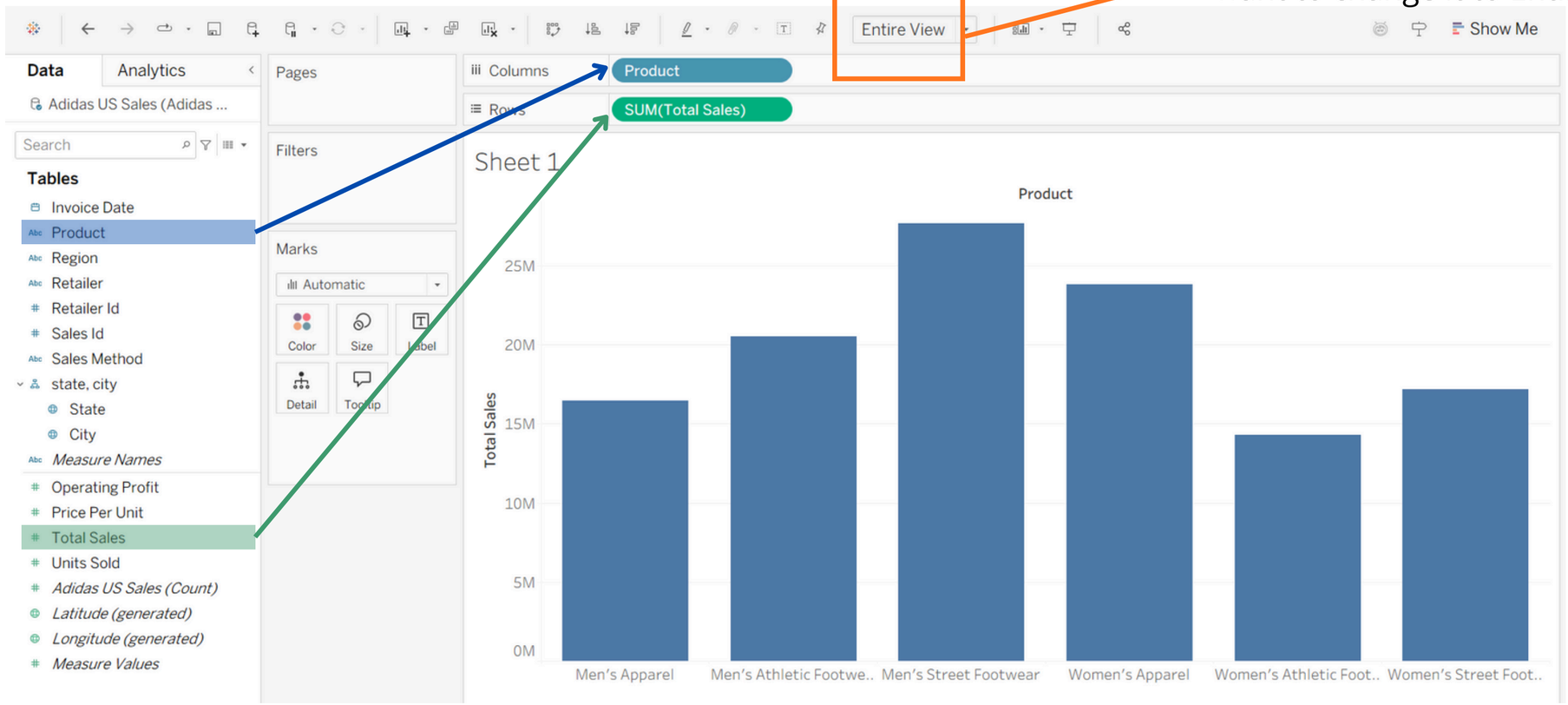
Example

How to build the charts?

Bar Chart

Drag the “Product” dimension to the Columns shelf
Drag the “Total Sales” measure to the Rows shelf

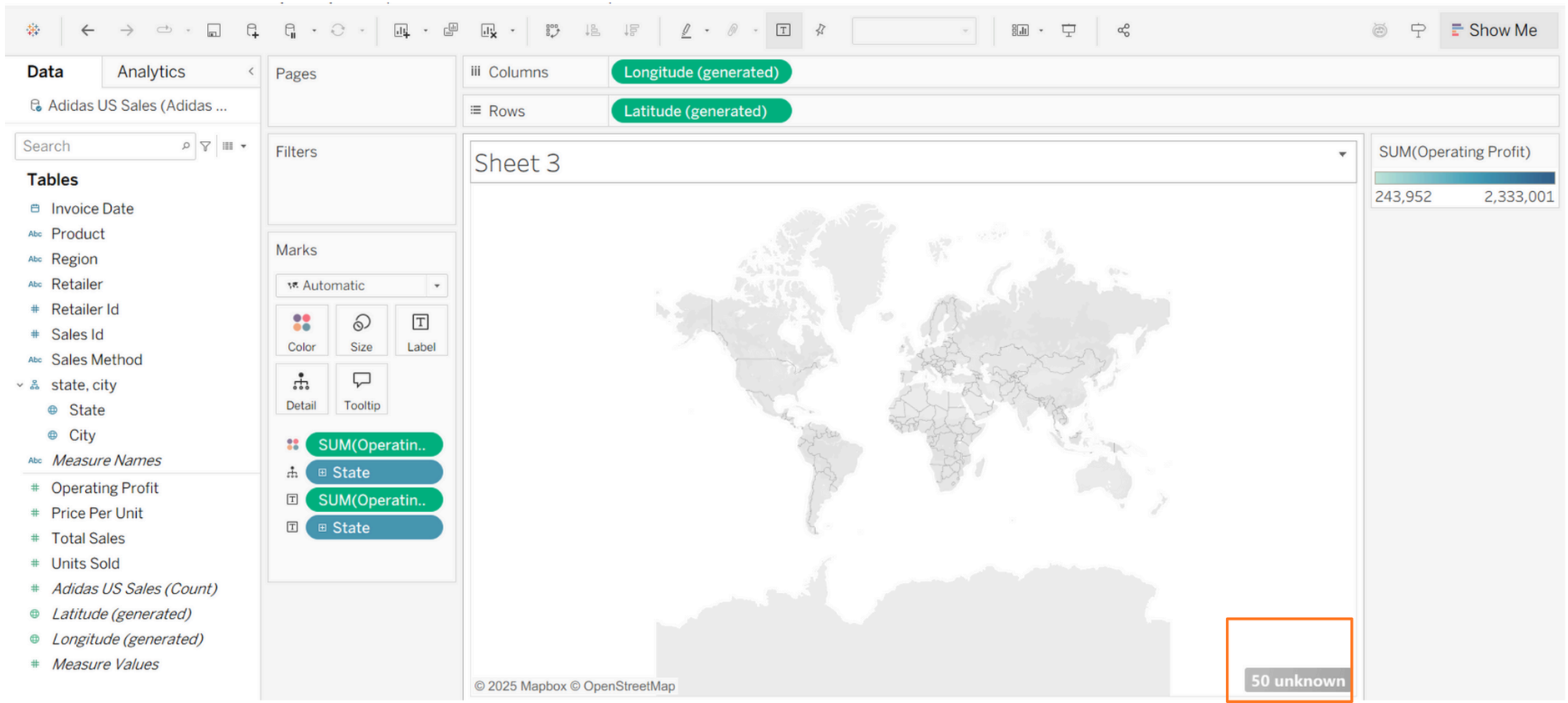
Use this feature to adjust the chart's size.
By default, it is set to Standard view; you may want to change it to Entire view



How to build the charts?

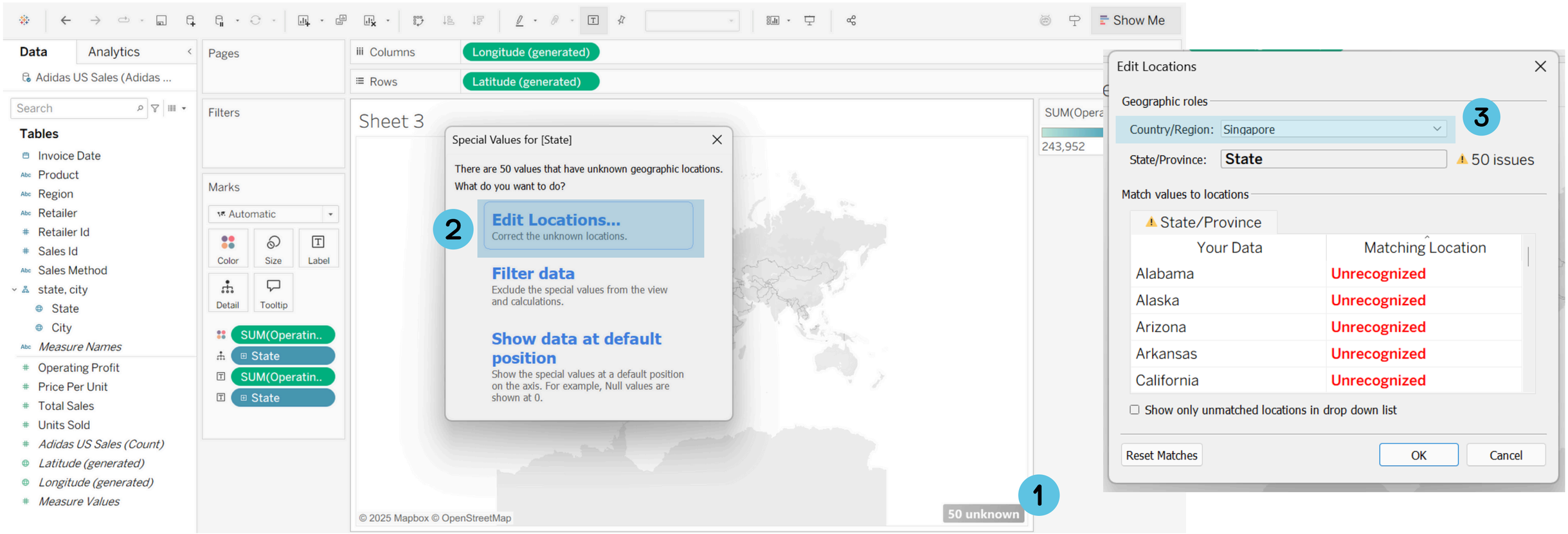
Filled Map

Drag the “Logtitude” to the Columns shelf
Drag the “Latitude” to the Rows shelf
Drag the “State” to the Detail button in Marks and Color button in Marks
Drag the “Operating Profit” to the Color button in Marks and Label button in Marks,

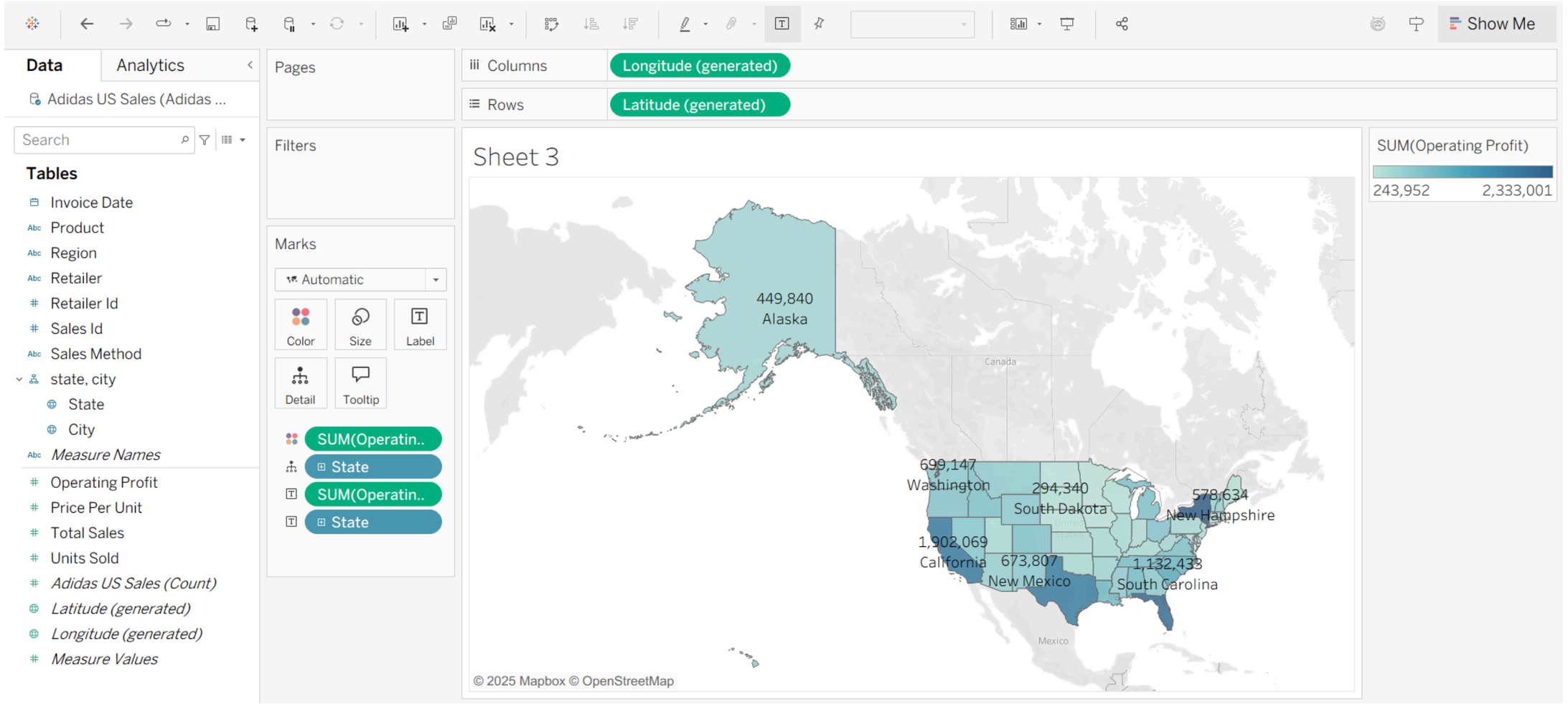


How to build the charts?

1. Click the “50 unknown”
2. Choose Edit Locations
3. Under geographic roles, change the country/region to the United States
4. Then, select OK



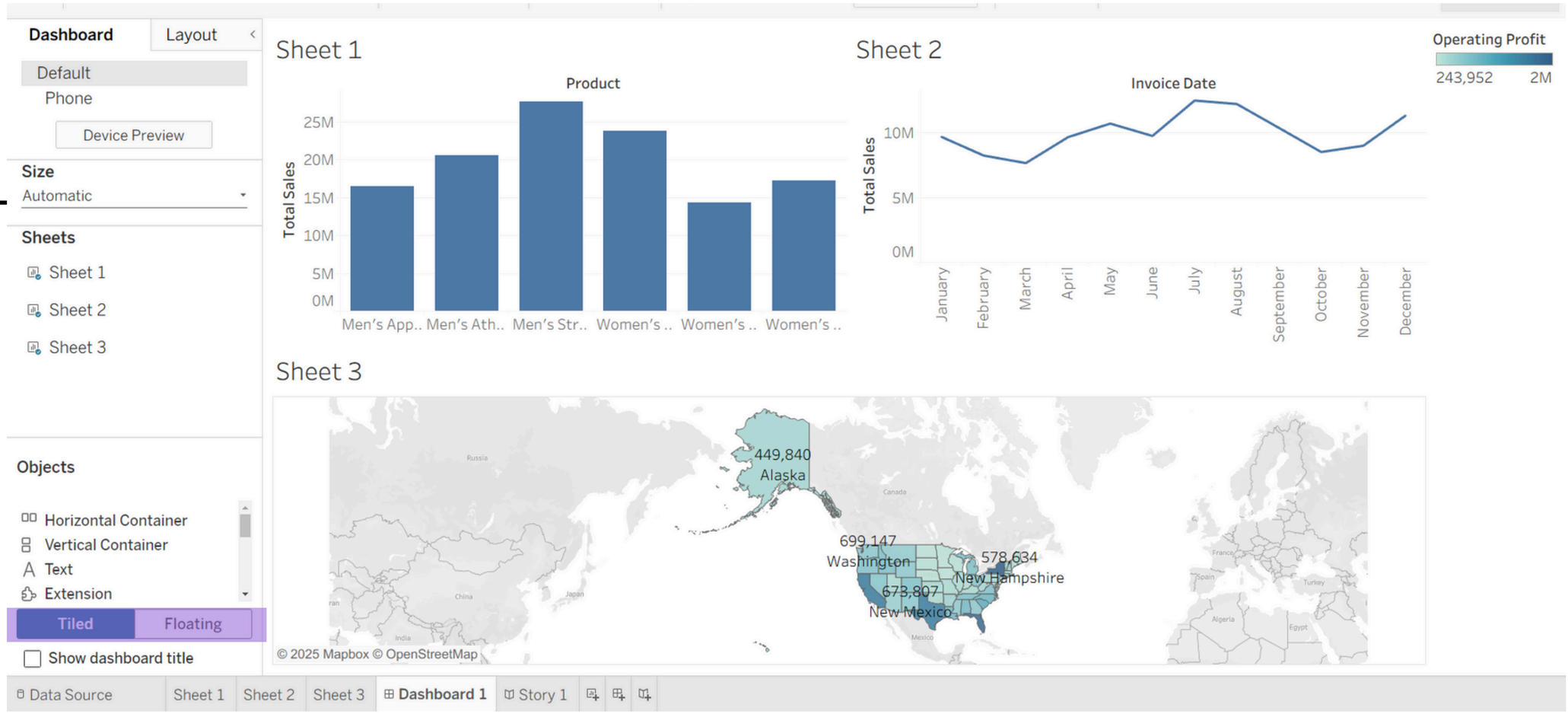
How to build the charts?



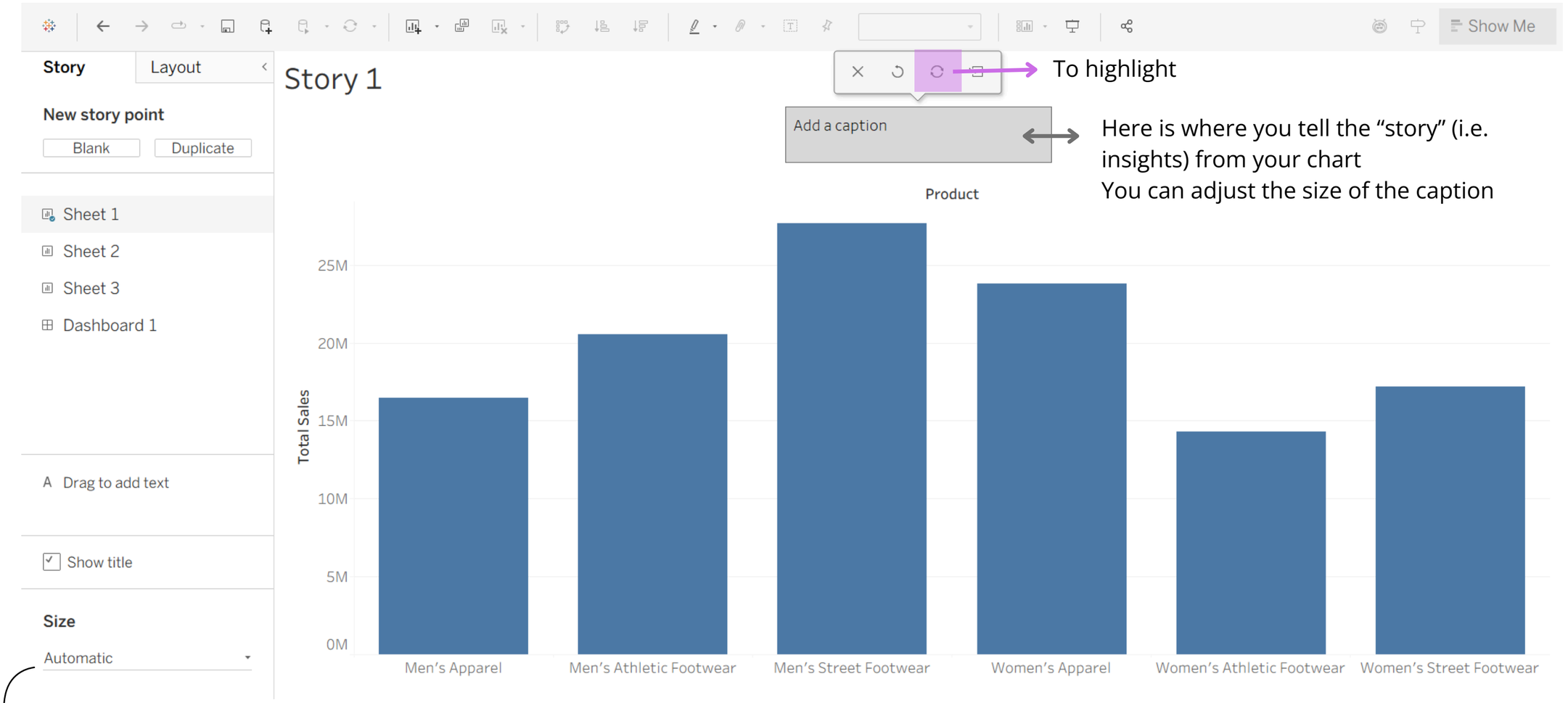
Build a Dashboard

Dashboard
- Combine multiple sheets into a single view

Use this feature to adjust the size.
By default, it is set to Desktop size (i.e. Fixed size), you may want to change it to Automatic size



Story



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