Pivot in Tableau

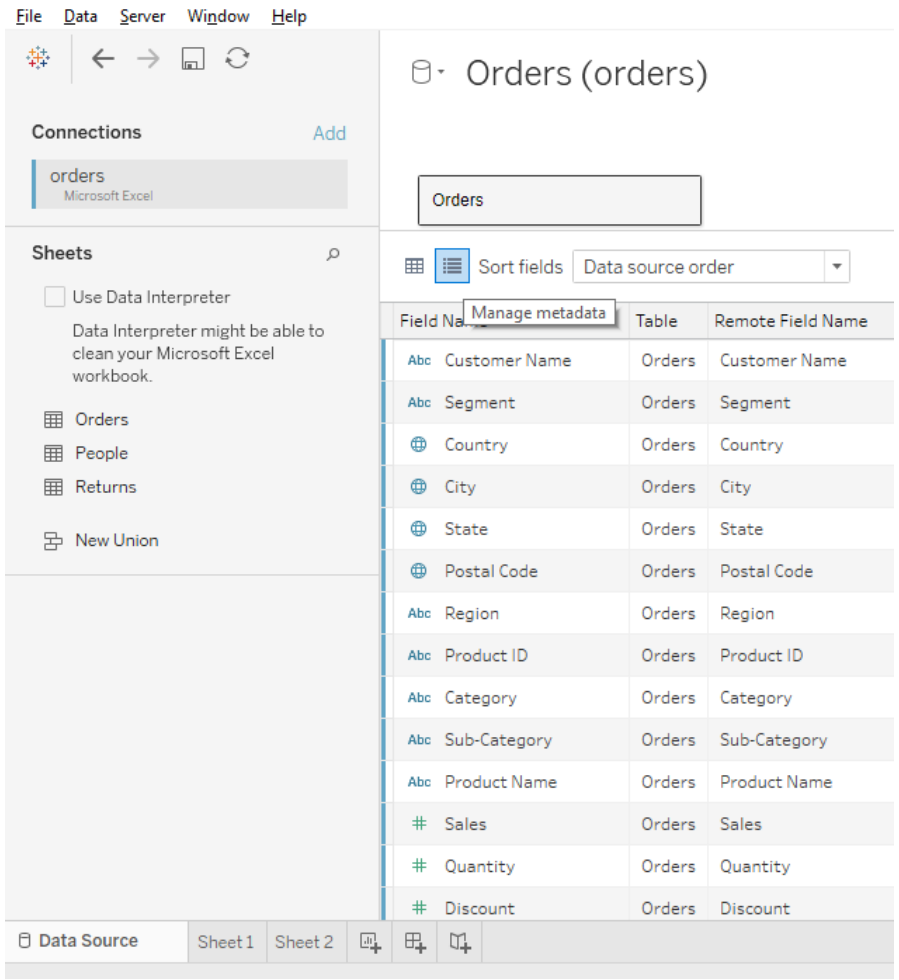
As Pivot is commonly used in Excel to summarise the data. Similarly in Tableau Pivot is used to visualize a measure on the basis of multiple dimensions in a same plot area.

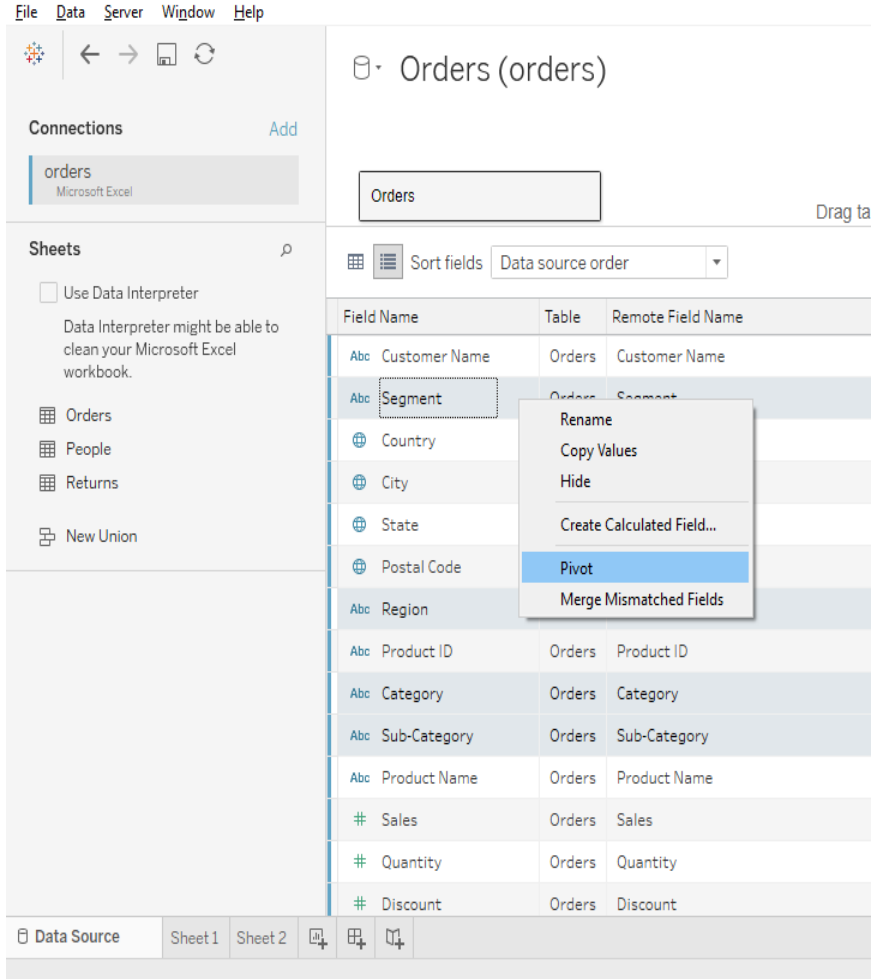
Key Points regarding Pivot:

- Tableau Pivot is offered from the data grid.
- All fields within the pivot should be from an identical association.
- Only one pivot is allowed.

Pivot in Tableau

To initiate the pivot we need to click on “**Manage Metadata**”

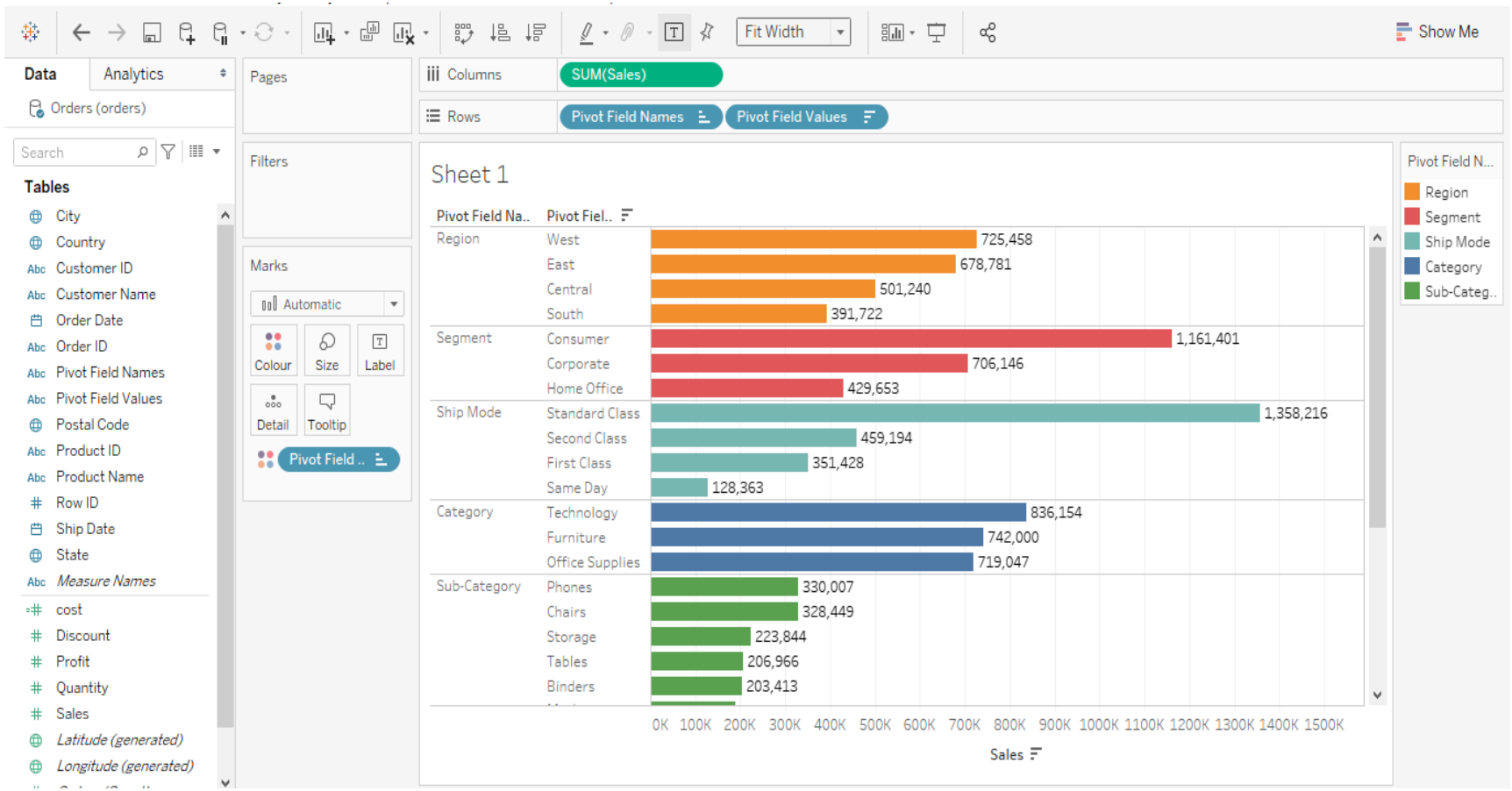




Pivot in Tableau

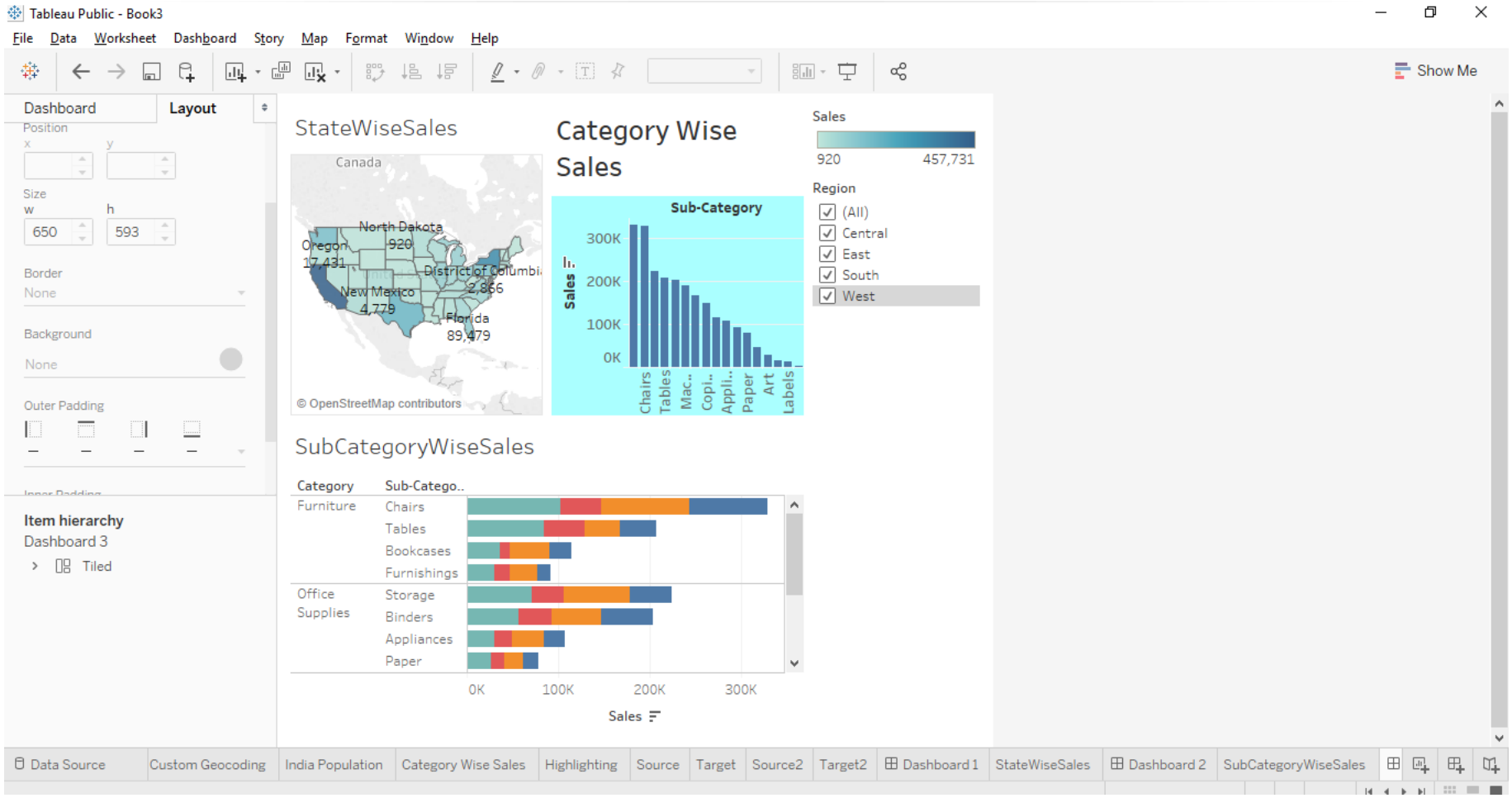
Finally visualize the Pivot using Pivot Filed Names & Pivot Filed Values

Pivot Field Names
Pivot Field Values



Dashboards

Dashboards are the collection of sheets at one place which are used for better analysis.



We can also add the webpage to our dashboard. Multiple charts can be made interactive at same time.

Dashboards Objects

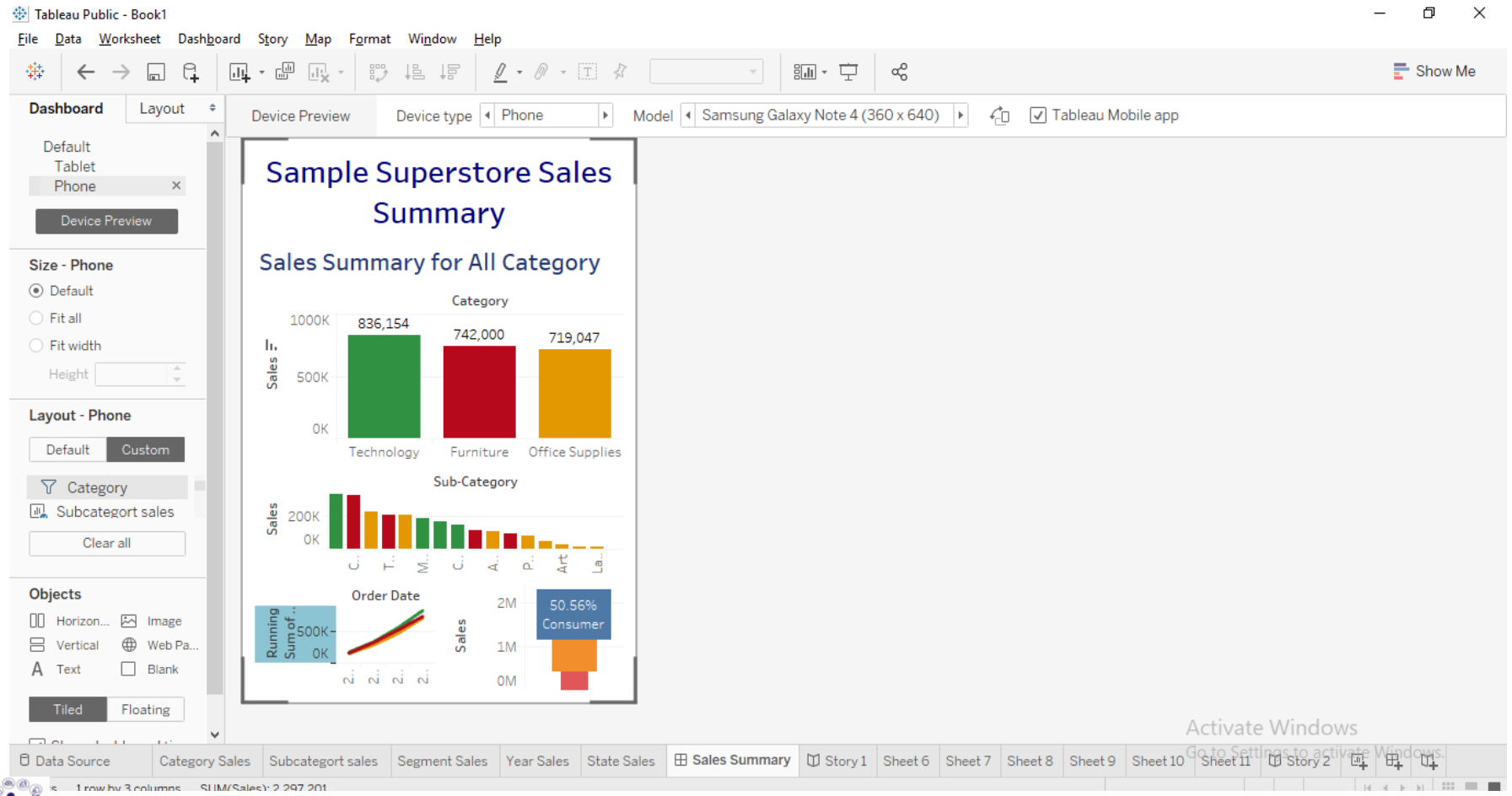
- Text – Add a customized text in the dashboard
- Image – To add a image such as company logo
- Webpage – Add a webpage to the dashboard
- Blank - Gives a gap between the visuals
- Navigation – To navigate between the dashboards
- Download – enable the download option for the user
- Extension - get additional visuals
- Vertical & Horizontal Alignment - provides dynamic plot area

Formatting Dashboards

- Tiled / Floating Sheets
- Vertical & Horizontal Alignment impact on Filters
- Dashboard Titles
- Dashboard Actions

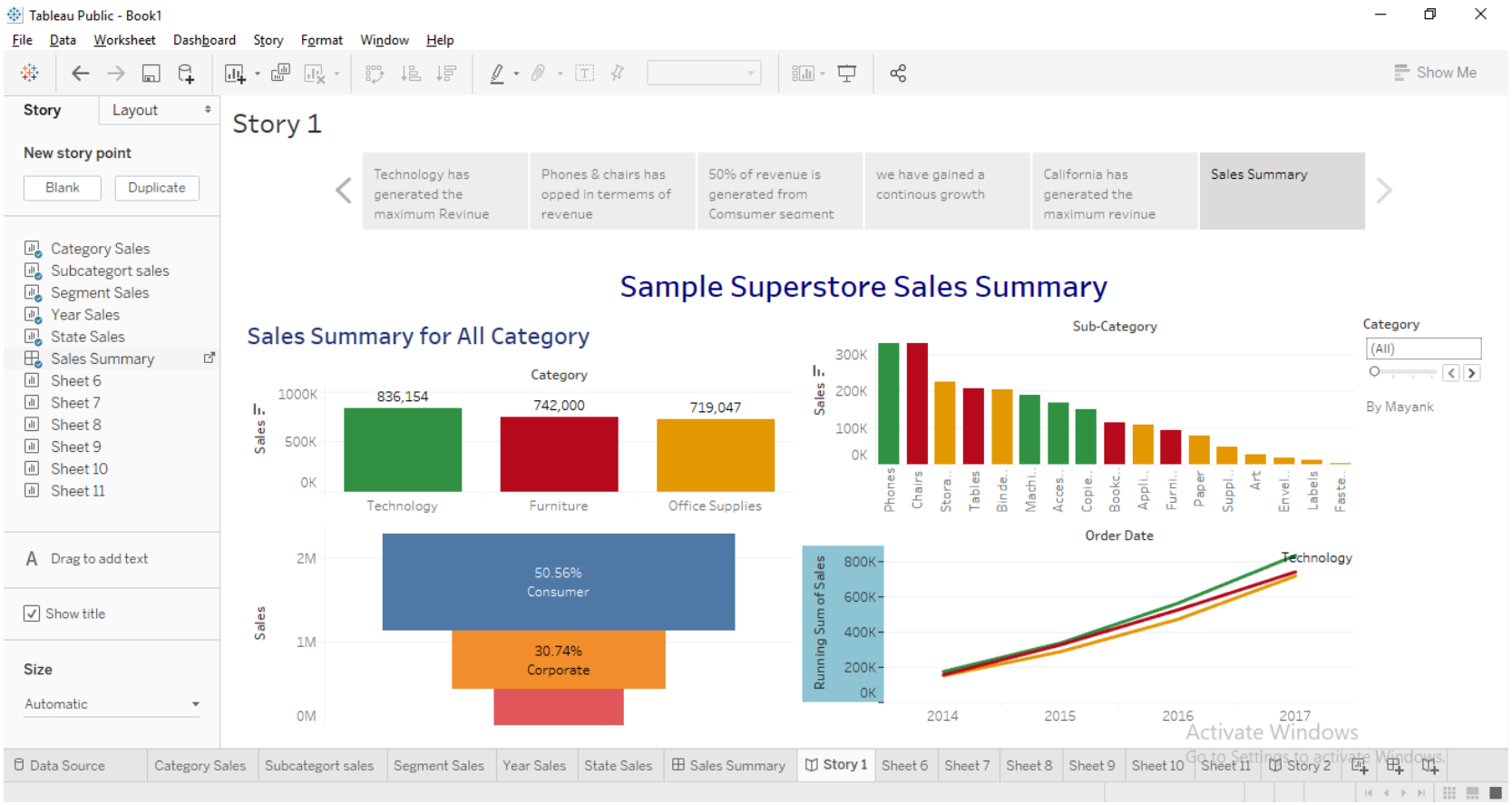
Device Designer

Tableau helps us to design the layout so that it is properly visible on different devices - desktops, Cell Phones & Tablets.



Story Point

Story point is sequential way of analyzing the visualized data. This will give us different analysis at one place.



Create a dashboard for sample superstore sales summary which should present:

- Year Wise sales for each region,
- Percentage contribution of each region in over all sales.
- State wise revenue earned.
- Category wise Sales with region details.
- Subcategory sales region wise.

The dashboard should be interactive on the basis of Region.

ASSIGNMENT

Create a Interactive dashboard for sample superstore Profit summary which should present:

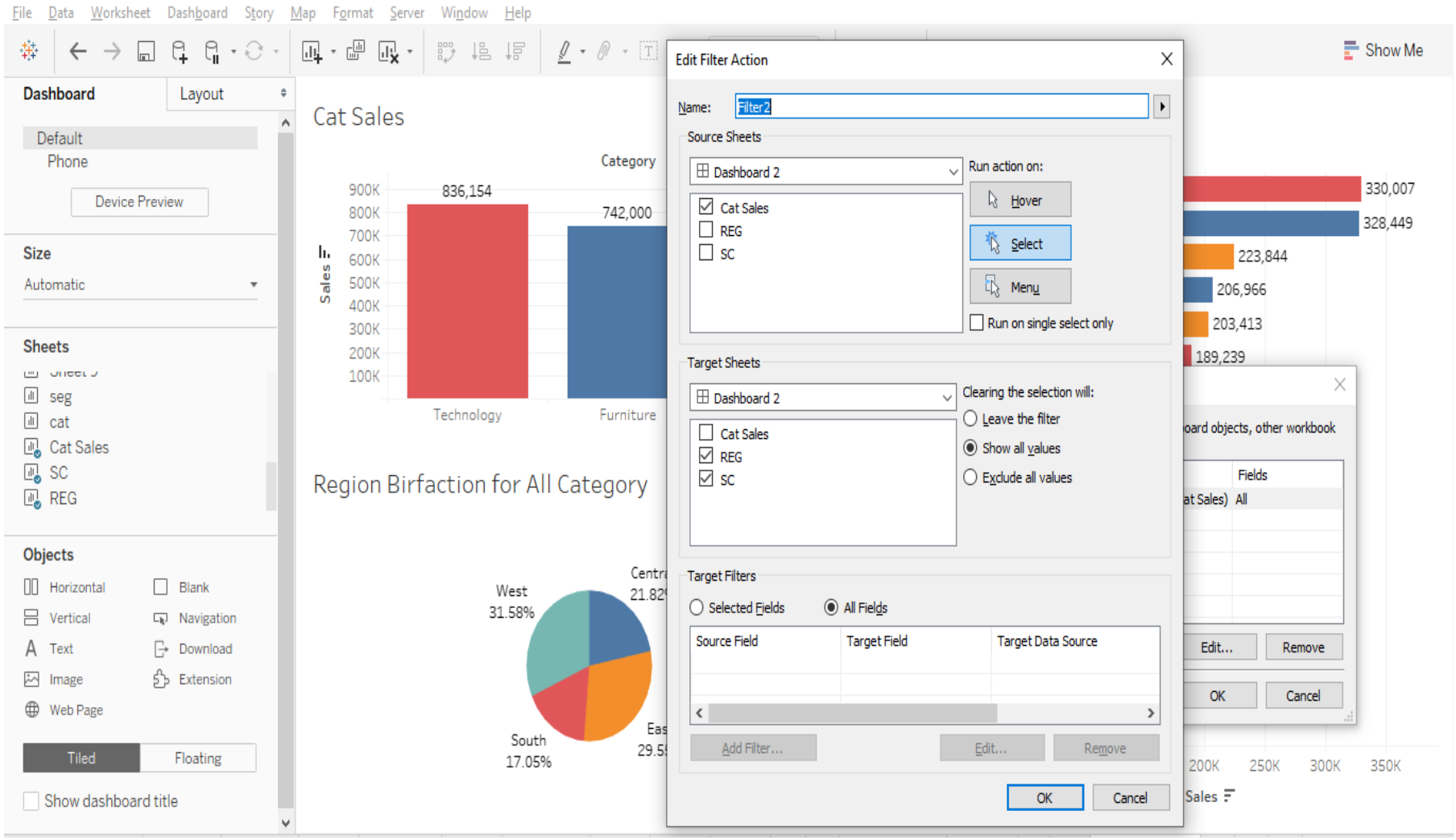
- Month Wise profit earned in each category, Min & Max profit should be displayed.
- Category wise Profit with region details.
- Subcategory wise profit (use waterfall chart).
- Segment wise profit percentage.
- Percentage contribution of each region in over all profit.
- State wise profit earned (Word Map)

The dashboard should be interactive on the basis of Category.

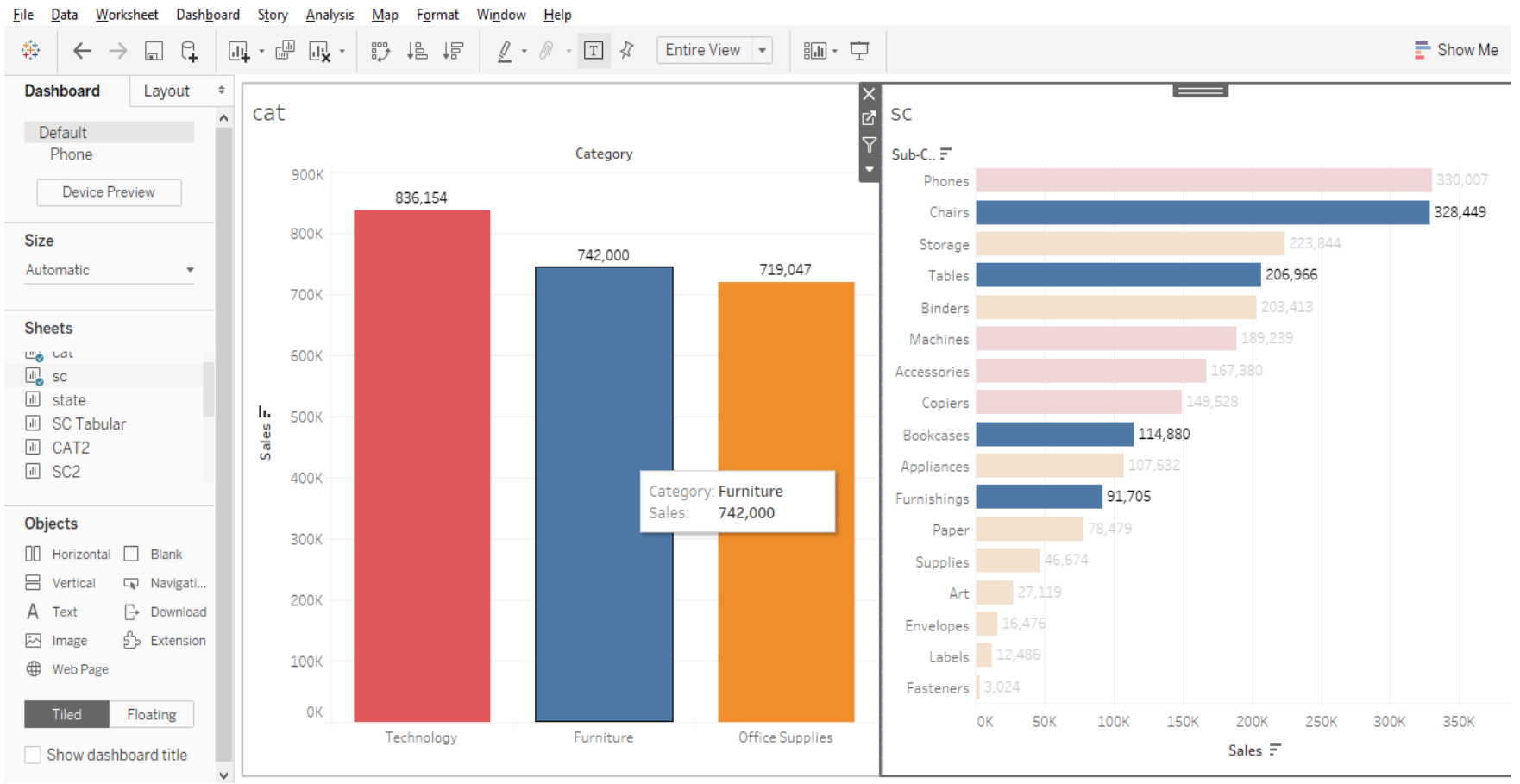
Dashboard Actions

- Action Filter
- Action Highlight
- Action URL
- Navigation Actions
- Parameter Action
- Action Set

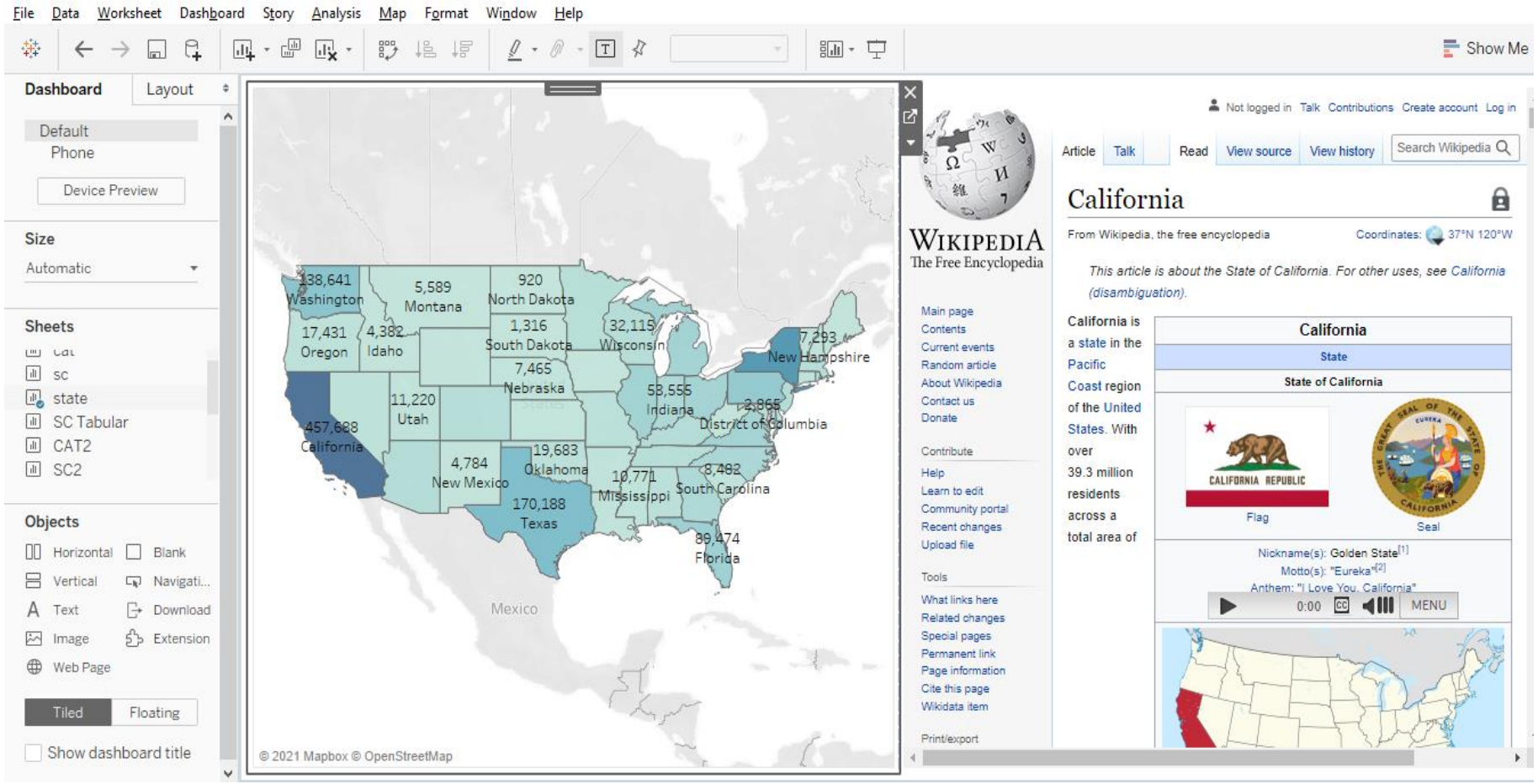
Dashboard Actions -Action Filter



Dashboard Actions -Action Highlight

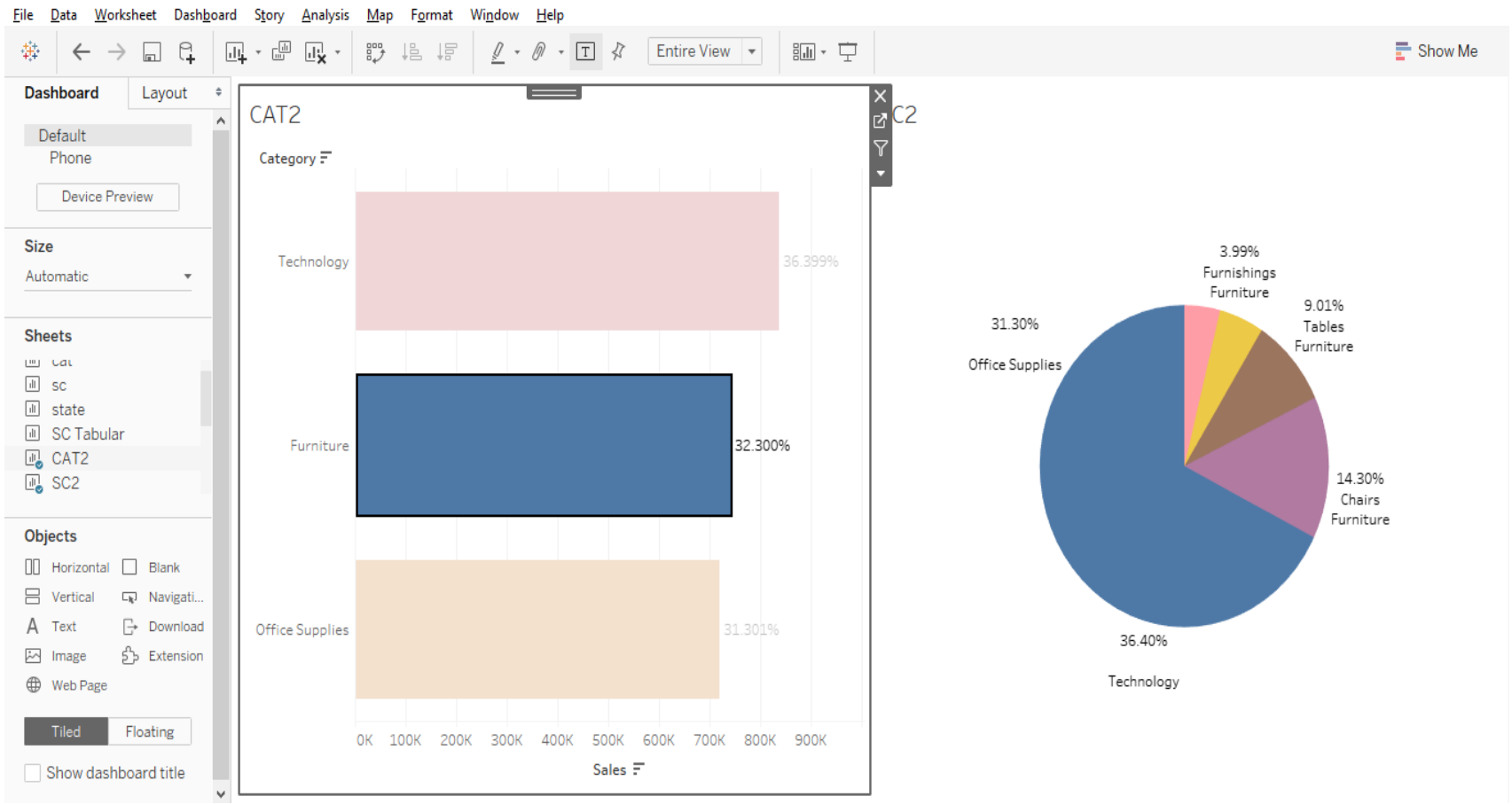


Dashboard Actions -Action URL



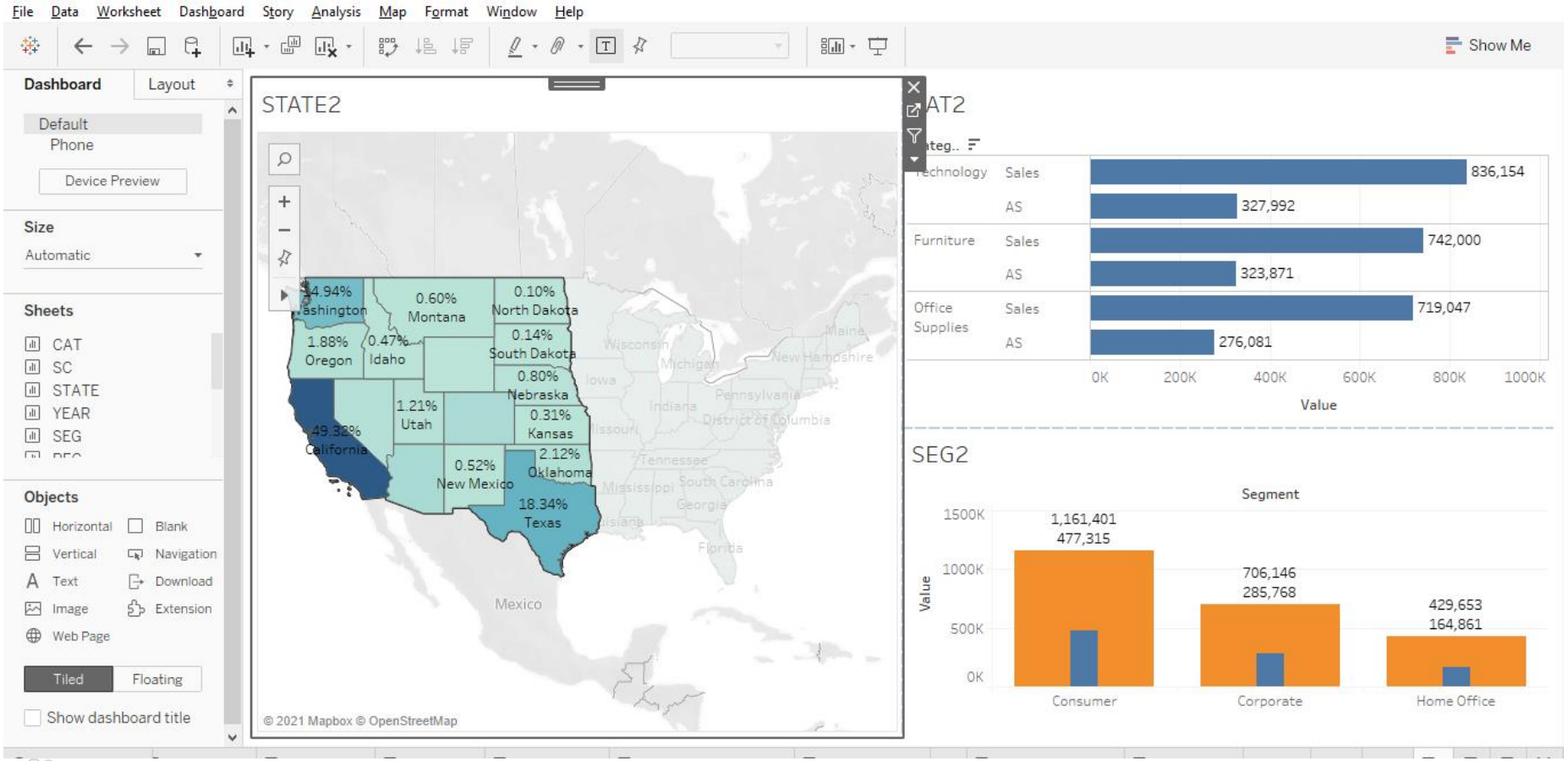
Dashboard Actions -Action Parameter

- Create a Parameter
- Create a calculated field using parameter
- Use Parameter Action to assign the value to parameter



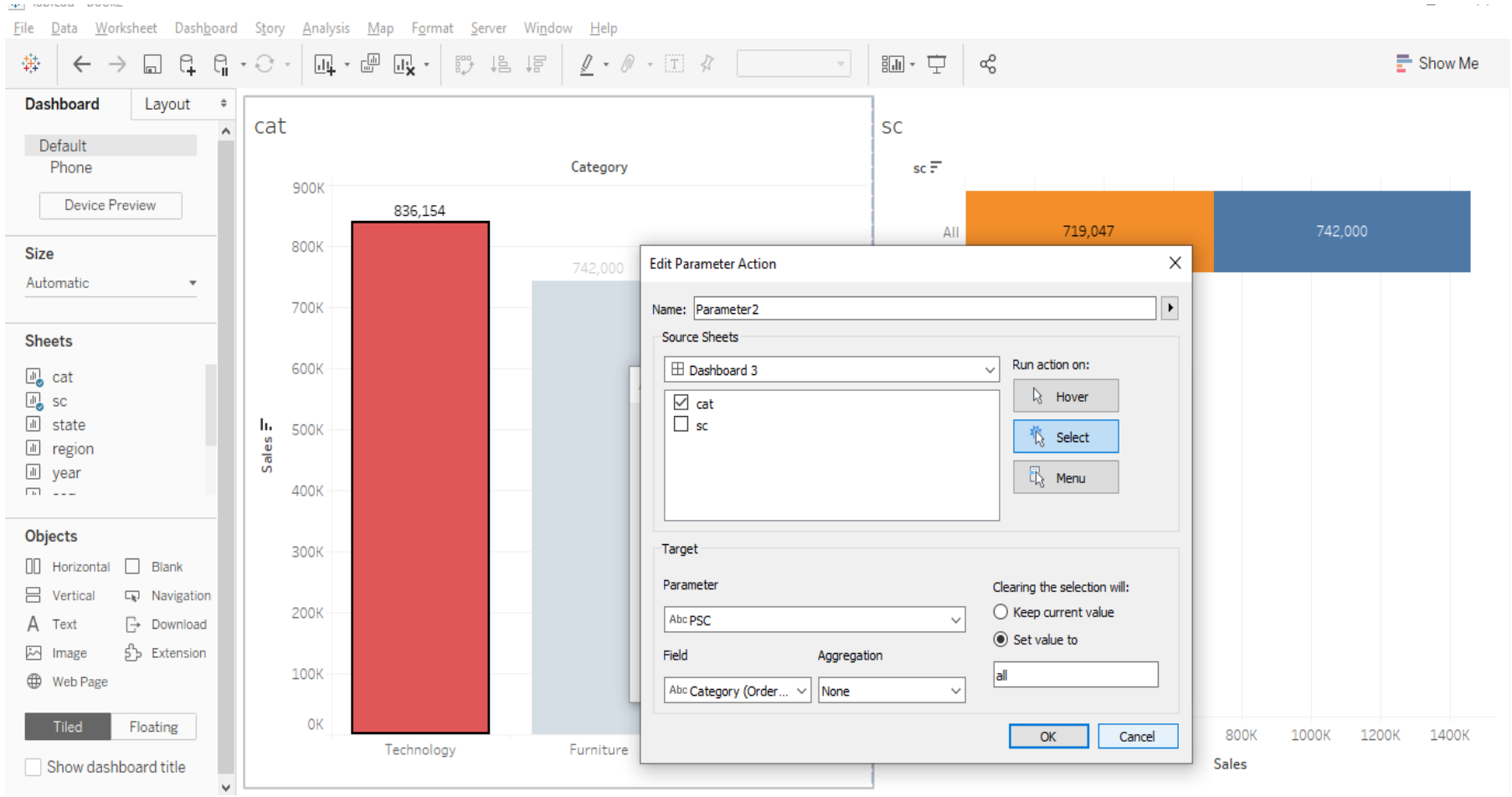
Dashboard Actions -Action Set

- Create a empty Set
- Created a calculated field using Set
- Assign the set to color
- Use set Action to change the value of set



Dashboard Actions

Parameter Action

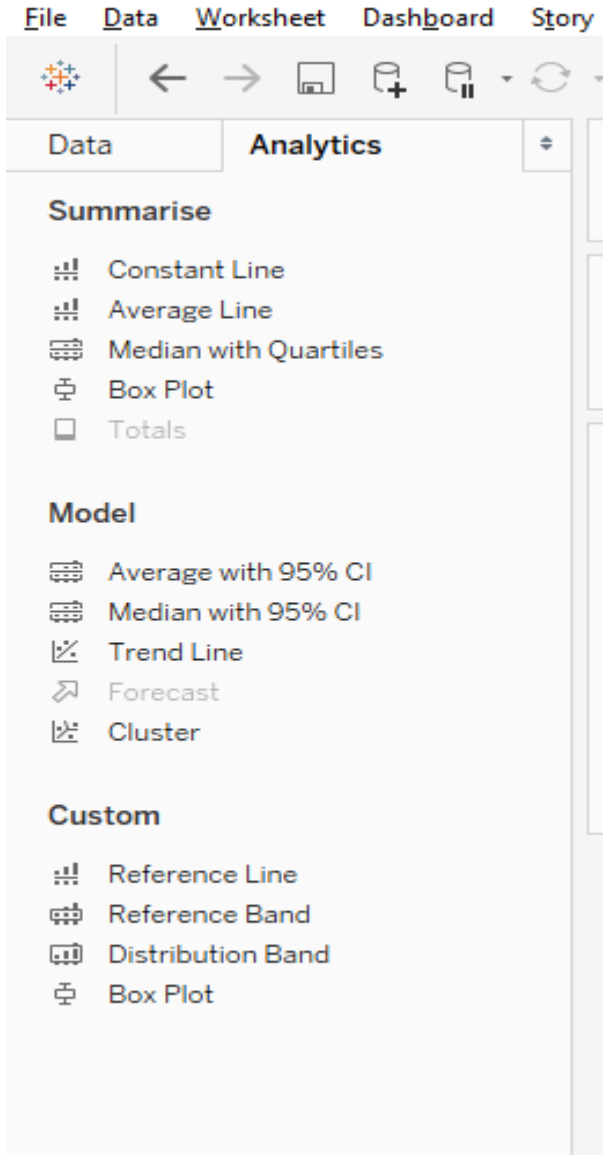


Analytics Pane

The Analytics Pane in Tableau gives you the various tools to analyze your data on the basis of different statistical model.

Analytics Pane has three sections:

- Summarise
- Model
- Custom



Forecasting

Forecasting is a process of predicting the future trend by identifying regular patterns in measure values.

Forecasting is a process of predicting the future trend by identifying regular patterns in measure values.

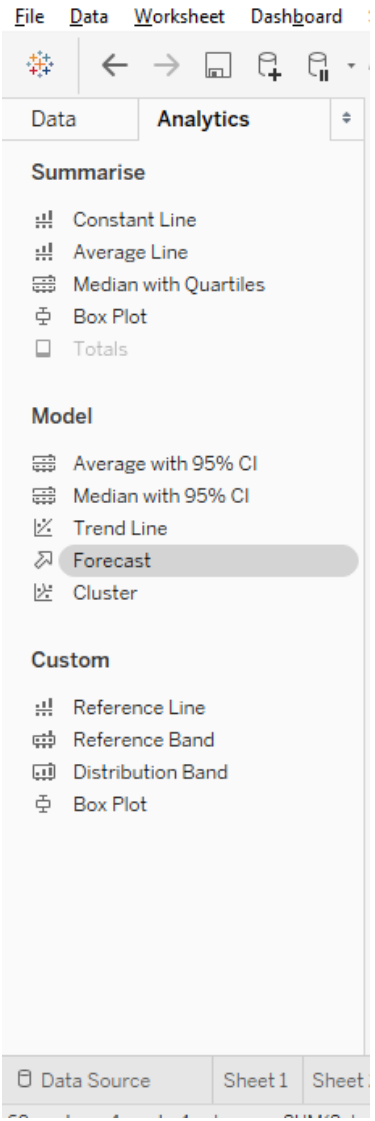
This technique of identifying regular patterns from existing data values and giving a forecast is known as **Exponential Smoothing.**

There are two important concepts on which the process of forecasting is based:

Trends - increase or decrease in data over time

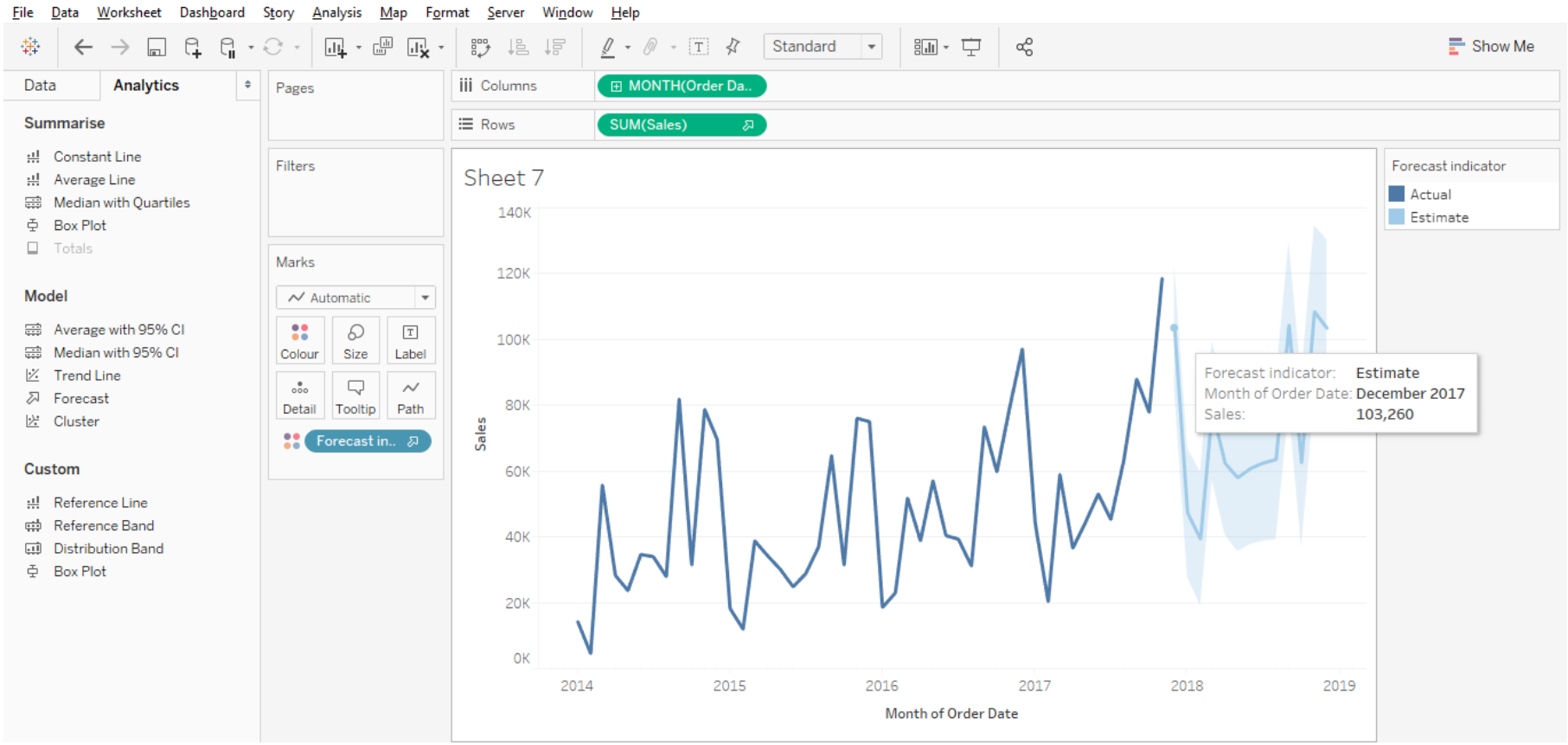
Seasonality - repeating variation in values over a determined period of time (such as weekly, quarterly, yearly, etc) known as seasons

In Tableau forecasting is automatic. We just need to drag the forecasting option from Analytics pane



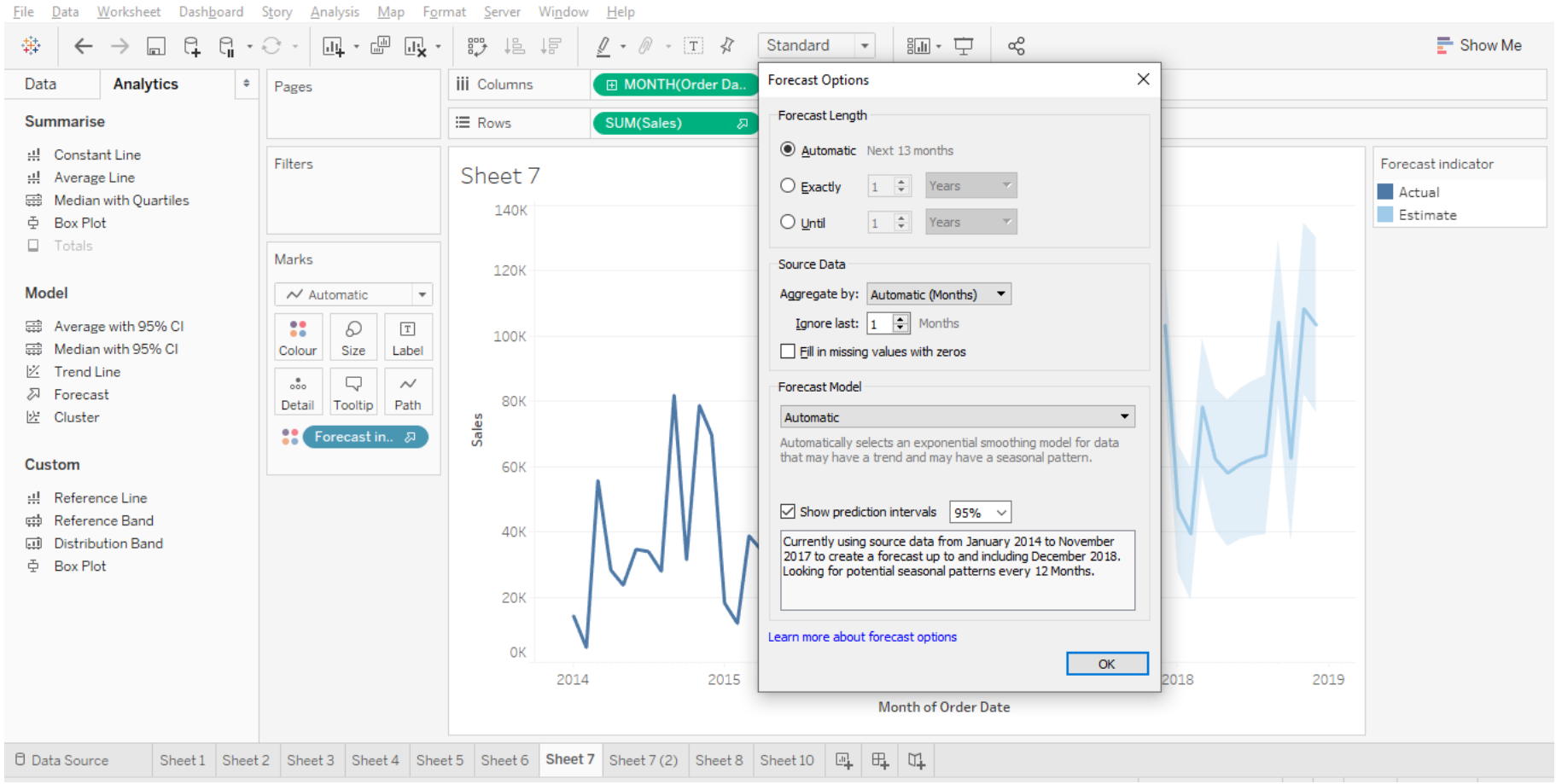
Forecasting

To create a forecast you need to have a line chart, Tableau will extend the line chart to add forecast to it



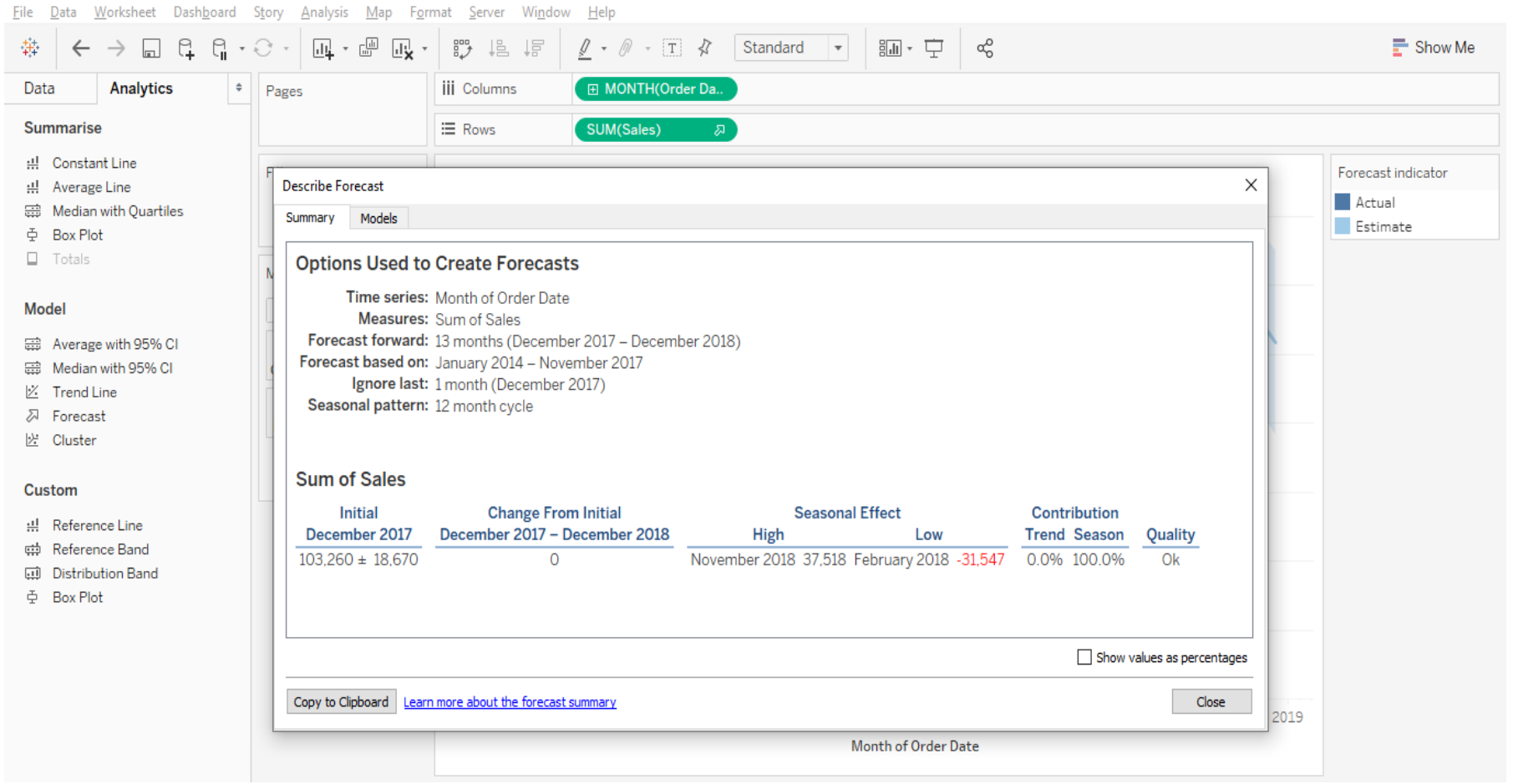
Forecasting

To get more information about forecast you can go to the Forecast options



Forecasting

Describe Forecast can also be used to get more information about forecast

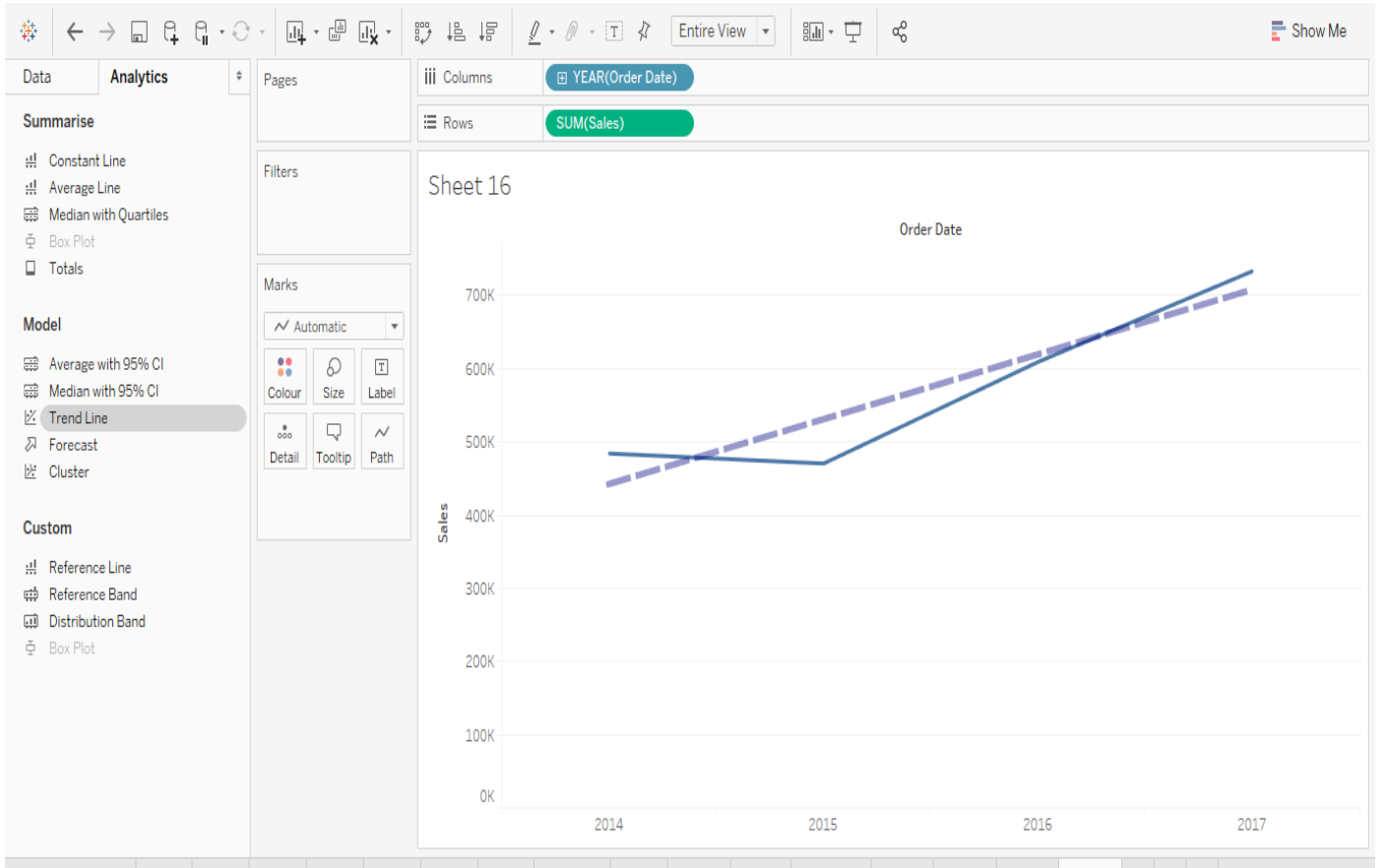


Trend Lines

A trend line is a line showing the patterns or trends emerging from data points. In Tableau, we can have straight or curved trend lines depending on the model you select.

Tableau has a total of five types of trend lines:

- Linear
- Exponential
- Logarithmic
- Polynomial
- Power



Clustering

Clustering means dividing a data set into segments or clusters having relevant data values. Clustering helps us conduct a comparative analysis of data in Tableau. A cluster contains similar data values of a dimension that is the values in a cluster are more related to each other than the data in other clusters.

Clustering allows you to statistically group similar dimension members

In Tableau clustering is done on the basis of K-means clustering algorithm.

To Create a cluster you just need to drag the cluster from Analytics pane to visualization.

Clustering

To Create a cluster you just need to drag the cluster from Analytics pane to visualization.