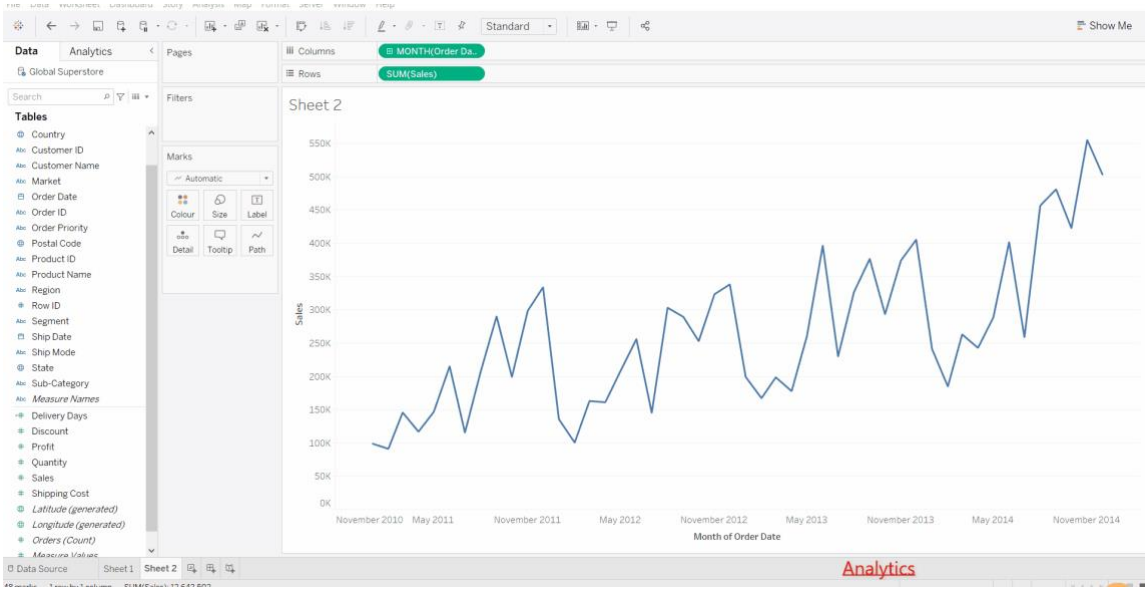
# A Step-by-Step Guide for Data Visualization using Tableau

## PART-2

## Data Analytics in Tableau

In the Analytics tab, we have several analytical tools like forecasting, clustering, trend line, Average line, constant line, etc. let's see in action.



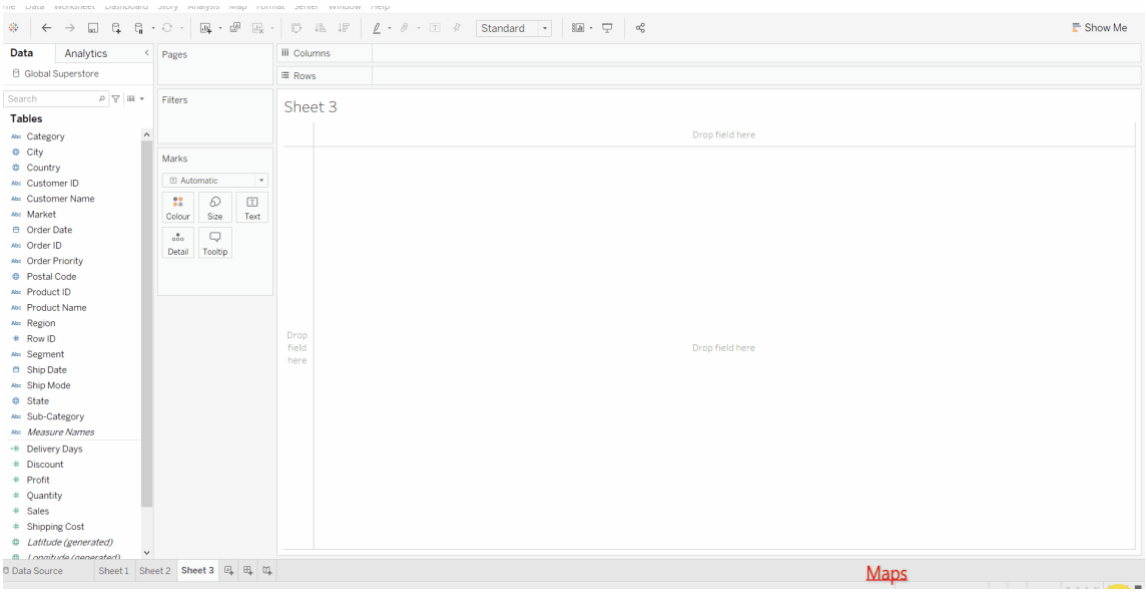

**Steps to perform Analytics:**

1. From the Analytics tab on the left side, you can choose various options.

2. Dragging and dropping a **constant line** on a particular X, or Y-axis draws a line at a given constant value.
3. Dragging **forecast** on your sheet will give you a time forecasting of a given measure, which you can edit by clicking right click on the forecasted part, there you can choose the confidence interval, time steps to be forecasted and forecast model, etc.
4. The trend line is not the same as forecasting. The trend line only tells us if the overall trend is increasing or decreasing.

## Maps in Tableau

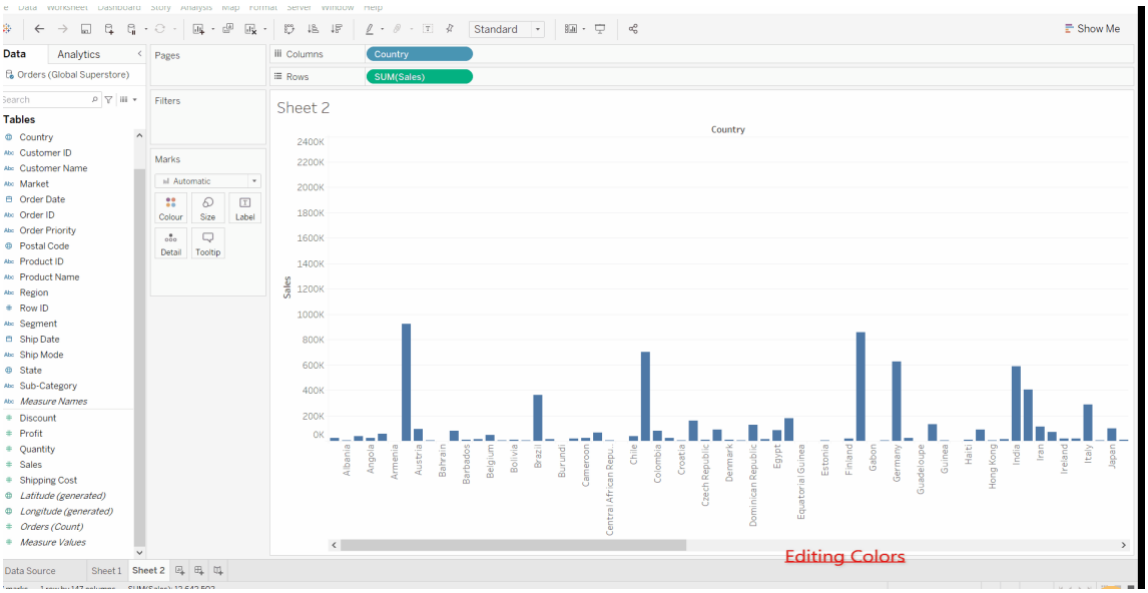
We can easily draw maps in Tableau if we have geographical data aka a location field (country, city, state, etc). Tableau has 2 types of maps, symbol map, filled map.



**Steps to create Maps:**

1. Drag Country field in the worksheet, it will draw a symbol map.
2. you can choose a symbol map or a filled map by clicking on the **show me** button.
3. Adjust the size of the points on the map by clicking on the **size** button from the marks card. the size of points was determined by the magnitude of sales.
4. Dropping city on **Details** will show the names of cities on the map.

Then, You can also decide the colors of different states based on the sales amount on the filled map. Also, You can adjust colors of visualization based on categories and on the magnitude of measure values.

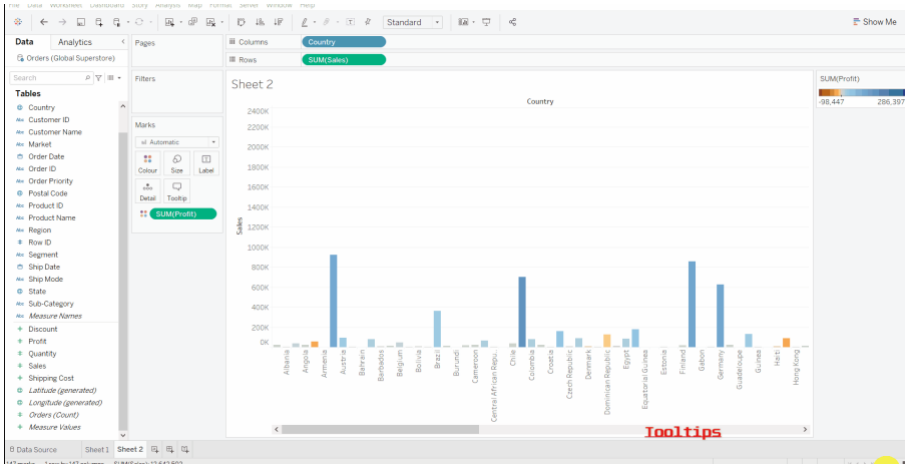


From the above image you see that the color of bars has decided by the profit amount, more profit means more bluish in color, more loss means more reddish in color

Adjusting colors is so simple in Tableau:

1. Drag a dimension or measure in the color shelf under the marks card.
2. Now you see colors are now visible as a legend.
3. Now click on the legend and then choose **edit colors**.
4. you can choose a wide variety of colors, modes of coloring like stepped or continuous bar and
5. you can edit the range of colors as well.

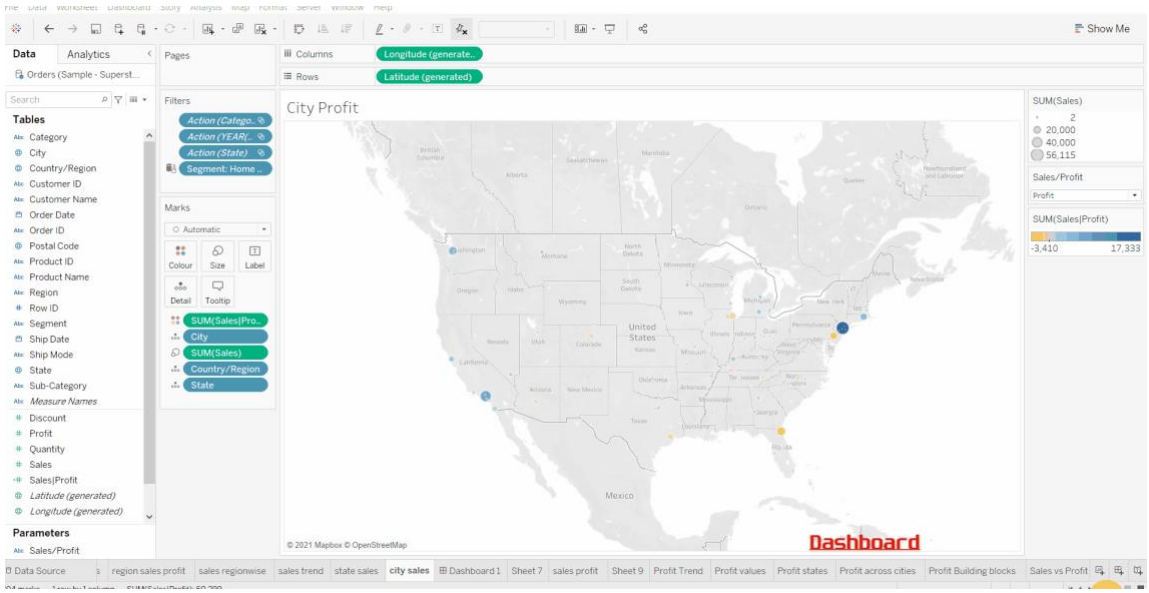
**Tooltip:** When we hover over a particular point on the graph we see a box showing up details about that particular point, this is basically a tooltip. we can add information to show as a tooltip, let's see an example.



As you can see dragging a field on the Tooltip button adds details in the tooltip which can be seen on hover, we can also customize the text, color, font of the tooltip.

## Designing a Dashboard in Tableau

Combining multiple views with filters, interactivity, legends on the same page is simply our dashboard. it helps us to see all views on the same page with fully interactive features. Let's see an example.



**Steps to create a dashboard in Tableau:**

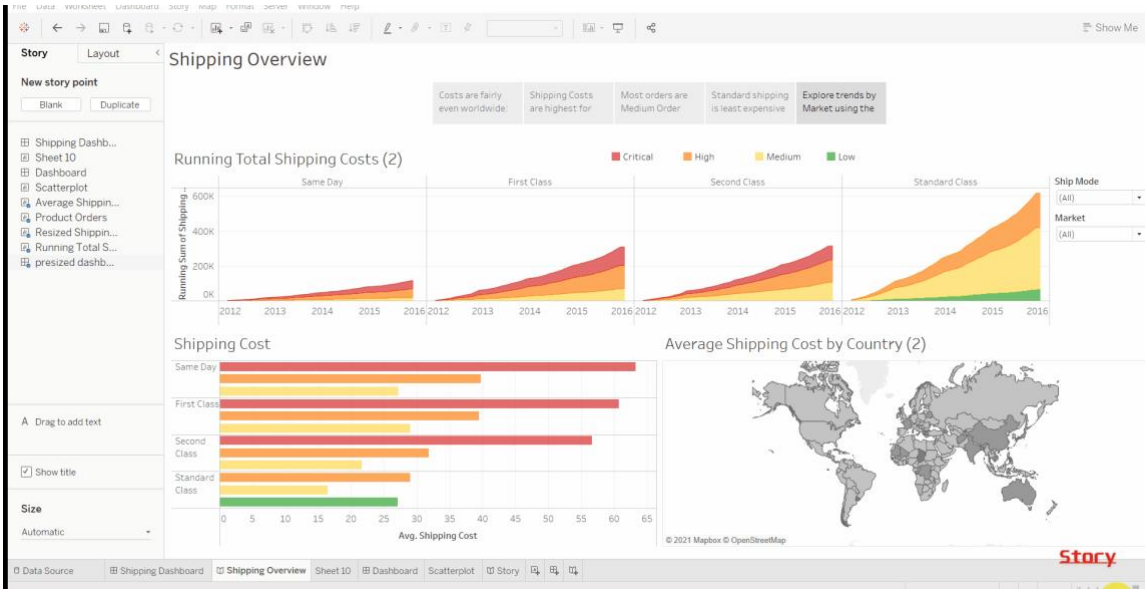
1. Click on the new dashboard button and it will create a new blank dashboard.
2. Adjust the layout of the dashboard. you get fixed or automatic sizes based on the screen size to choose from.
3. On the left-hand side, you can see that our all graphs (viz) are visible so you simply need to drag and drop them into the dashboard.
4. You can drag as many as sheets you want to include in our dashboard.
5. Clicking on the sheet and then change into **floating** converts into a floating object which can be placed anywhere in the dashboard.
6. On the lower left side, you get options to format our dashboard. you can include images, weblinks, change color, title & text of our dashboard. If you find managing spaces and layout difficult in the dashboard try floating sheets.

## Storytelling in Tableau

The story in the Tableau is narrated walkthrough of one or more sheets or dashboards. each view in the story is called a **Story Point**.

In storytelling, we take a visual and write a narration about the insight that has found from visual.

Creating a story is the same as creating a dashboard, just drag our visual on the story page and give narration. You can add as many visuals as you want along with narration.




## Saving your Tableau Work:

Tableau comes with autosave features so you don't need to worry if you couldn't save your work manually.

You can save your work in various ways:

### Tableau Public

With Tableau Public all the views and data are made public and anybody on the internet has access to it. **Select Server > Tableau Public > Save to Tableau Public** and give your credentials. before accessing Tableau public you should have a Tableau public account.

**Tips**:

- When in Doubt, Right-Click
- The Undo Button Is Your Friend
- Pay Attention to Visual Cues
- Save Early and Often

### Final Thoughts on Tableau

This is all you need to know about Tableau in order to create good-looking charts and dashboards with to cover as much as could. You can learn more about formatting, calculated field, pages, animation, extensions, etc. in order to go in-depth with Tableau uses practice different kinds of data and it will help to analyze and present data efficiently and in a nice manner.