TABLEAU

Day 24

Bump Chart

Bump Chart is a line chart where the rank changes based on the time. They are helpful in exploring the rank of a value over a time dimension or place dimension or some other dimension relevant to the analysis.

If you want to understand the use of bump charts in real life, then take reference from the following chart.



There are three segments in the above chart: **Consumer**, **Corporate** and **Home Office**.

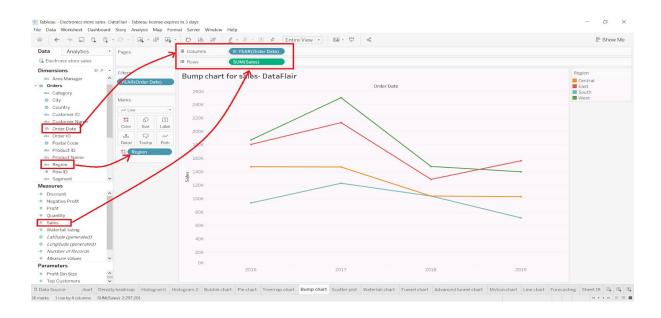
On the basis of their sales over the months, ranks are allotted. It tells us how specific product categories have ranked in sales for the company from year to year. From the above chart, we can see that the **Consumer** segment has done well from Jan-Sept, then for one month the **Corporate** segment outperformed every segment and ranked first position in sales. In overall, we can tell **Consumer** has been consistent with its sales and outperformed every segment while **Home Office** segment needs to focus on their sales as it has underperformed in almost every month.

Bump chart is one of the easiest charts that can be created in mere 30 seconds.

How to create a Bump Chart in Tableau?

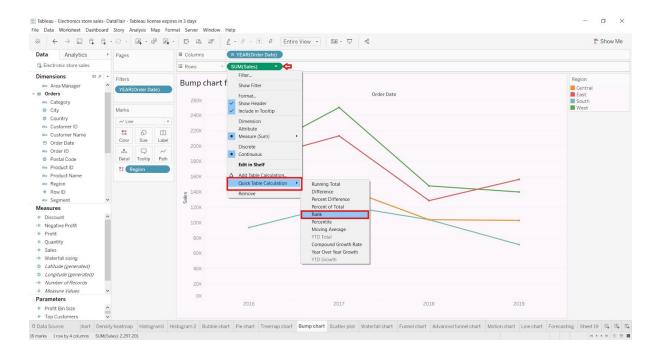
Step 1: Add dimension and measures

Firstly, we need to add two dimensions and a measure. Since, ranking will be analysed on time so there will be one dimension - Order Date. We add Order Date and Region from the Dimensions section and Sales from the Measures section and Region into the color box of Marks pane.



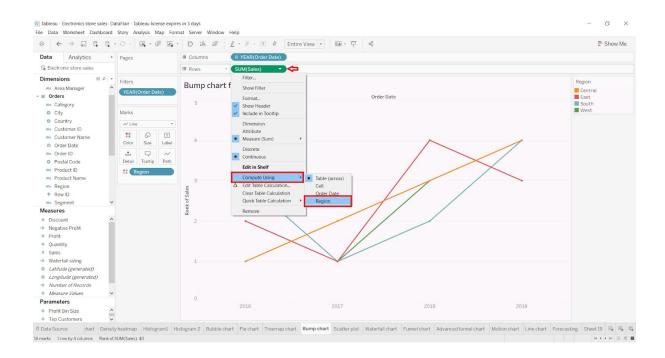
Step 2: Select a Quick Table Calculation

Right-click on the SUM(Sales) field to access options for it. From the drop-down list, we select a Quick Table Calculation option and then select Rank.

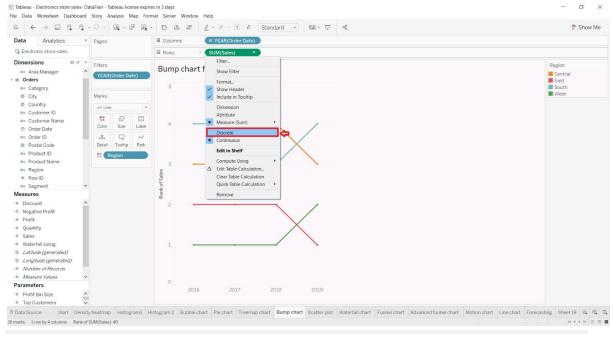


Step 3: Select a field to compute

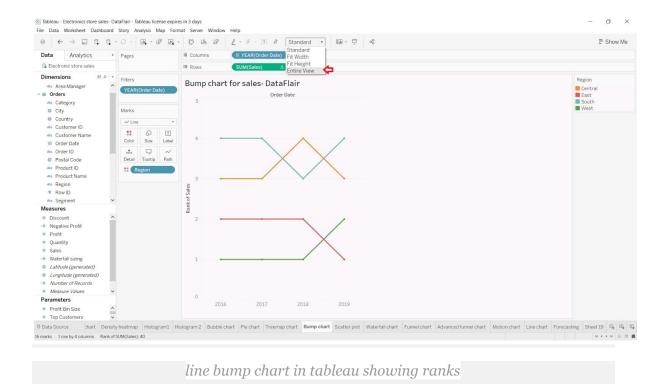
Right-click on the SUM(Sales) pane and click on the drop-down button, from there choose the Compute Field and select Region from the different options available.



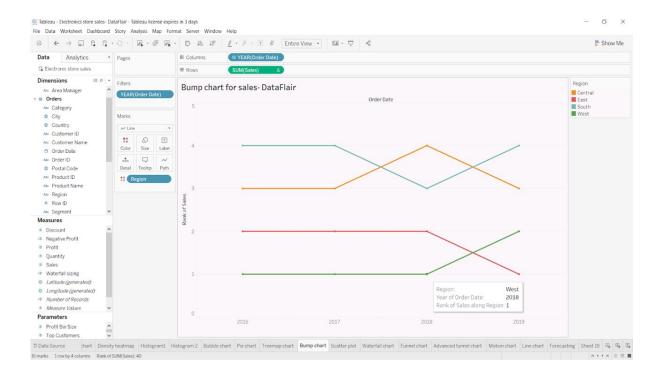
This will arrange the lines of the *line chart* according to the ranks of their data points. Also, right now that measure values are continuous type which we need to make Discrete.



discrete measure values

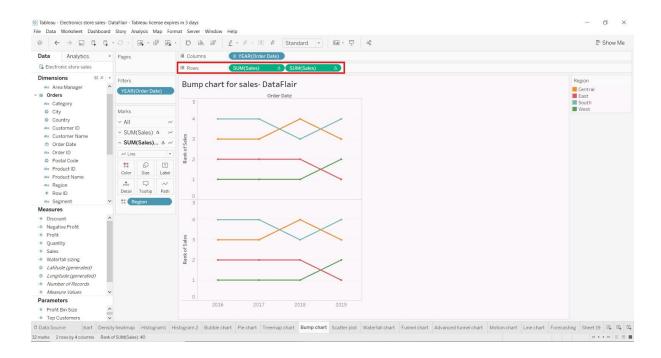


The chart we have by default is set in a Standard view mode, we can change the mode to Entire View to fit the chart on the editing canvas.



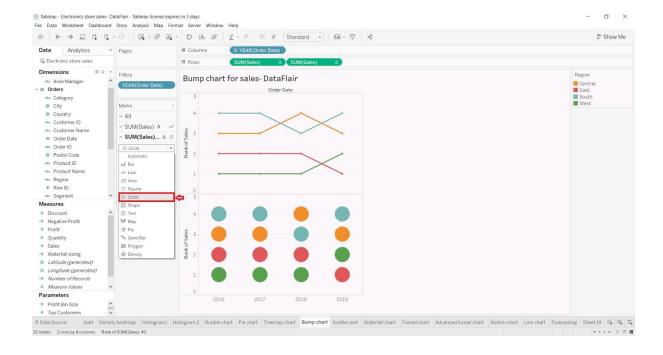
Step 4: Duplicate measure

In the next step, we duplicate our measure SUM(Sales). This will give us two separate line charts as shown in the screenshot below.

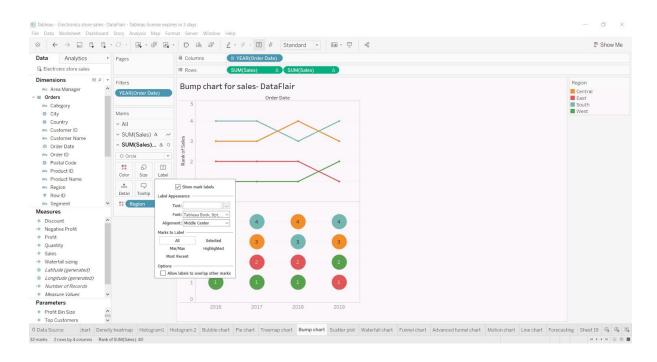


Step 5: Change mark type

In order to create a bump chart, we need to convert the mark type of the second (duplicate) line chart measure SUM(Sales). We change the mark type of this measure from lines to circles. Select the option Circle from the drop-down list of mark types.

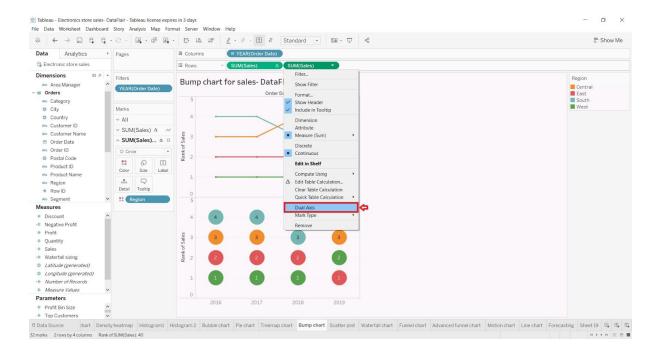


Next, we click on the Show mark labels from the Labels box so that the rank labels appear on the circles of the second chart. You can format the labels with more options given in the label editor.

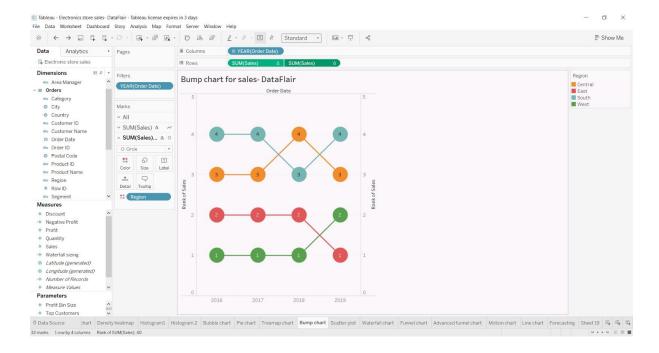


Step 6: Select Dual Axis

Now, so far we have two different charts one showing the data trends by a line and another showing data points by circles and ranks on them. To make a bump chart, we need to merge these two charts together. To do this, right-click on a measure field SUM(Sales) and select the option Dual Axis from the drop-down list.



This does two things, first, it merges the two charts into one and second, it adds one more axis on the right of the chart.



Now, you can create an awesome bump chart and analyse the rank in market, or game!

Happy learning, happy coding!