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Free Training Transcript: Additional Ways to Group

Welcome to this video on additional ways to group. You can download the Exercise workbook to follow along in your own copy of Tableau.

In this video, we'll cover two ways of defining groups beyond Tableau's basic grouping feature: using calculations and working with bins.

Using Calculations to Define Groups

Visual grouping has a downside that the grouping is static. Let's say, for example, we want to have a group of Sub-Categories whose Profits are over $100,000. We currently have a visual group for this, but it's static, and if we remove our filter, we see it's no longer accurate. Instead, let's create a calculation. In the data pane, right click and select "Create Calculated Field". We'll name this "High Profit Sub-Categories", and for the formula we'll put IF SUM([Profit]) > 100000 THEN "Above 100k" ELSE "below 100k" END. Now if we put this field on color, unlike before, as our data updates, any Sub-Category whose summed profits are at least $100,000 will be colored appropriately.

Parameterized Calculated Groups

The example we just did is dynamic as the data changes, but the calculation itself is static. Parameters can be used to make the calculation interactive. We'll add a threshold parameter to determine our cutoff for being in the High Profit Sub-Category group. First, right click in the data pane and select Create parameter. We'll name the parameter "Threshold". We'll leave the data type as float and All for allowable values. But we'll set the current value to 100,000. Click ok, and then right click on the parameter and select show parameter control.

Next, we need to create the calculated field – otherwise, this parameter isn't connected to anything and changing the value won't make an impact. We'll right click in the data pane and select "Create Calculated Field". We'll name it Parameter High Profit, and for the formula, we'll use a variation of what we did before. IF SUM([Profit]) > [Threshold] THEN "True" ELSE "False" END. Here, instead of typing in 100,000, we'll bring in our parameter.

Now, if we bring this field to color, not only will the group update as the data is refreshed, but the end user can modify the parameters controlling the cutoff for membership in that group.

Creating and Using Bins

Sometimes an analysis calls for grouping values of a measure into bins. A classic example is age groups. A person's age can fall anywhere on a spectrum, so it's continuous, but we often see surveys asking us if we're 18–25, 55 or over, etc.

It's very easy to create bins. Here, we'll create bins for our Sales measure. Right click on that field in the data pane and select Create > Bins. We see the range of values for this field automatically, and Tableau has suggested a default size for the bins, but this is easily edited. Let's make it 1,500. When we click OK, we've created a new dimension because dimensions are how we break out measures into categories, which is exactly what we want the bins to do. Now we can use this new field. We'll bring the bin field to Columns and the Sales field to Rows. As a note, bins labels indicate the inclusive lower limit.

Conclusion

Thank you for watching video on additional grouping methods. We invite you to continue with the Free Training videos to learn more about using Tableau.