Free Training Transcript: Measure Names and Measure Values

Welcome to this video on Measure Names and Measure Values. You can download the Exercise workbook to follow along in your own copy of Tableau.

Have you ever wondered what those "Measure Names" or "Measure Values" fields are? These are fields that Tableau automatically creates to enable certain types of analyses.

Text Tables

Let's make a classic text table—we bring a dimension, like category, to the rows shelf, then another dimensions, like order priority, to the columns shelf, and finally, a measure—shipping cost—to text. There we have it!

But what if we want to see multiple measures instead of just one? For instance, if we want to see sales and profit for each of our regions. How would we do that?

Ok, we'll bring Region to rows, and sales and profit to text. Hmm, this isn't what I was imagining. I wanted to have my measures next to each other, in a column each like in Excel, not as two marks in the same cell, like they are here. But Tableau uses different logic than Excel—the functionality of Measure Names and Measure values allows for greater flexibility when dealing with different data structures.

Remember with our first text table, the columns were set by the dimension, order priority, with a column for each dimension member. To break sales and profit out into their own columns, we need a dimension. That's what Measure Names is for—it's a dimension whose members are our measures.

We'll remove sales and profit from text, and bring out Measure Names to Columns. It says "No Measure values"—measure names and Measure Values work hand-in-hand. Measure names can be thought of like the labels for the measures, so we need to have values associated with those labels, too. We'll bring Measure Values to text.

By default, all measures are brought into the view, and they show up on a new "measure values" card. We can simply drag off the ones we don't want.

A Shortcut

To bring out only specific measures to the Measure Values card, we can ctrl+click the measures we want, along with a dimension, then, using Show me, select text table. This automatically brings out Measure Names and Measure Values into the appropriate places, with just the measures we selected.

Other Chart Types

Measure Names and Measure Values are useful for more than text tables. Here we have a line chart with sales broken out by segment. If we want to compare all the segments together on the same axis, we can simply move that dimension to color, and we now have all three lines together.

But what if we want to look at three measures on the same axis? We can dual axis two measures, but not three. So how can we get three measures in the same line chart?

With Measure Names and Measure values.

First, let's bring Measure Names to the filter shelf. We only want to look at Sales, Profit, and Shipping Cost, as those are measures with units of dollars. It wouldn't make sense to put "discount", which is a percentage, on the same axis as Profit, which is dollars.

Now, we'll bring Measure Values to Rows, and Measure Names to Color. Note that we only get the three we selected in our filter. And we have three measures on the same axis!

Measure Names as Field Labels

Measure Names can also be used to provide labels for text tables. Let's see what that means. We have Region on Rows, and Sales on Text. The word "Region" appears above the regions, letting us know what those are, but there's nothing above the numbers. How can we easily display the field label for the measure?

If we bring out Measure Values and drop it on top of the sales values, Measure Values will replace Sales on Text, Measure Names will automatically filter for only Sales, and Sales will move to the Measure Values card—and more to our point, the label "Sales" appears above the column of numbers.

To come full circle, if we wanted to add more measures to this table, we could simply add them to the Measure Values card.

Conclusion

Now that we understand why Tableau is doing this, we have a greater understanding of how to put our new skills to use when building pivot tables and controlling our visualizations in Tableau.

Thank you for watching this video on Measure Names and Measure Values. We invite you to continue with the Free Training videos to learn more about using Tableau.