

Free Training Transcript: Getting Started in Visual Analytics

Welcome to Getting Started in Visual Analytics. Visual Analytics is the process of gaining knowledge and insight from data from interactive, visual interfaces. This video covers the fundamentals on working with marks and building views. You can download the Exercise workbook to follow along in your own copy of Tableau.

Working with Marks

There are two ways to start analyzing data in Tableau. You can either jump in and start exploring, or you can ask questions of your data and attempt to answer them.

We'll start by asking of this dataset, Superstore, what are our sales like over time? If we simply double click Sales and Order Date, Tableau uses best visual practices to create a timeline, and we can see our sales are increasing over time.

Changing Mark Types

Note that the mark type, here, says Automatic. This illustrates how thinking of a practical question can be a good starting point for analysis, and how Tableau will try to automatically leverage best practices using the fields we're interested in.

We could change this to be another mark type if we had a reason to do so. There's a long list of mark types available to work with, each of which has specific characteristics. One thing to note is that if the mark type is automatic, it may change as the view is modified.

Aggregation & Number of Marks

Let's ask another question – what is the relationship between Shipping Cost (double click to bring it out) and Profit? (double click again). This time, we're given what looks like the start of a scatter plot. However, Tableau is aggregating our data to the overall SUM(Shipping Cost) and the SUM(Profit), so we have one mark – sum of Profit by sum of Shipping Cost. If we'd like to see more marks, we can either disaggregate the data by going to the Analysis menu and unchecking aggregate measures to see each row of data plotted as a point, or we can bring another field out into the view to change our breakdown of marks. This is an important concept in Tableau.

Building the View

Measures, here, are automatically aggregated to the granularity of the view. The granularity is set by the dimensions and how they're asked to interact with the marks. For example, if we bring Product > Category out to the Color shelf, we now get a uniquely colored mark per Category, showing the sum of shipping cost and profit for that category. If we bring another field, say Market, to Shape, we get a mark per Category per Market, for 15 marks.

Dimensions define the number of marks, which we can always see down here at the bottom left. It's easy to change our minds and color by something else. If we want to have Order Priority on color instead, we could drop it on the Category pill with that color icon. Note that when we added Order Priority to Color, we wound up with a mark per Order Priority per Market, for 20 marks. There are 4 levels of Order Priority and only 3 Categories, so we wind up with more marks when we use Order Priority instead of Category. Again, dimensions define the number of marks, or the granularity of the view.

Level of Detail

If we want to make marks at a certain granularity, but without encoding by color or shape, we can bring the field to the Level of Detail shelf.

It's important to know how adding dimensions to the marks card impacts the visual; the better understanding we have over this behavior, the more precisely we can build graphs manually or leverage what Tableau can do automatically.

Highlighting

When we hover over the legend for Order Priority, note that this highlight icon is shaded. This means highlighting is on for Order Priority. If we click on a priority, say Critical, Tableau will lighten the other colors to pull out Critical orders visually.

The Category legend does not have highlighting turned on. If we click on Furniture, nothing happens. Clicking on the highlight icon turns this feature on – now clicking on Furniture will highlight the marks in the view.

We can also show a highlighter for one or more dimensions that are not encoded by color or shape just by turning on the data highlighter. Right click on a dimension in the view, such as Market on the detail shelf, and select Show highlighter. Now we can highlight a Market such as Asia Pacific, or any other market in the view.

Highlighting can be a great way to call attention to specific marks. In Dashboards, highlighting actions can provide interactivity-even across worksheets using that field. In Stories, highlighting can be saved to preserve a specific selection by updating the point.

Show Me

Another way to get started with visual analysis is to use Show Me. Control click multiple fields you want to use, we'll use the same ones we were working with, Order Priority, Market, Shipping Cost, and Profit, then open Show Me. Here we can see the one-click graphical options for representing the fields we selected. The orange box indicates visual best practices.

Remember, Show Me is just a starting point for creating visual analysis in Tableau. Once we have the basis of the visualization, we can use the marks card and many other features to modify the view to make it exactly what we want.

Conclusion

Thank you for watching the Visual Analytics Getting Started video on working with marks. We invite you to continue with the Visual Analytics video series to learn more.