Was this page helpful?

Yes No

> > > Build a Histogram

Build a Histogram

A histogram is a chart that displays the shape of a distribution. A histogram looks like a bar chart but groups values for a continuous measure into ranges, or bins.

In Tableau you can create a histogram using **Show Me**.

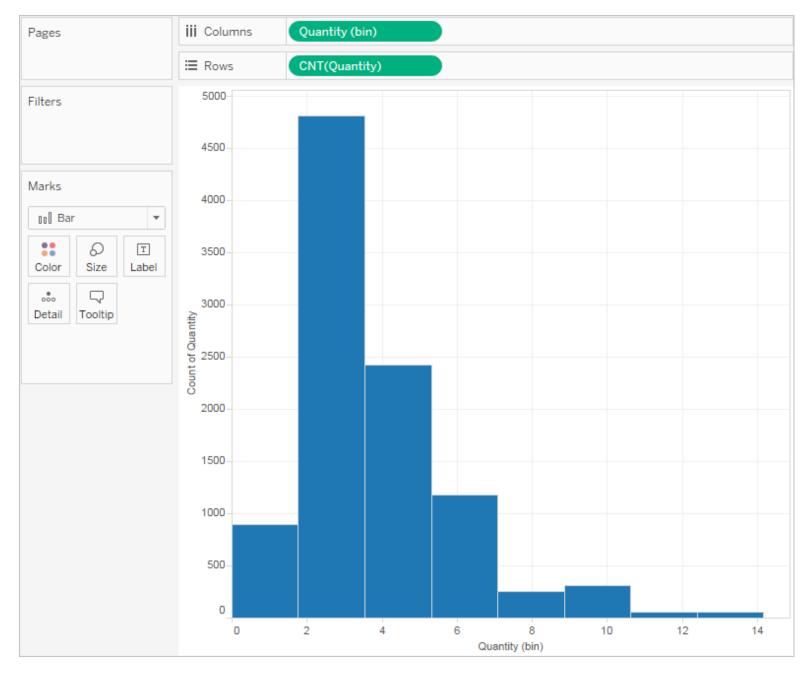
- 1. Connect to the **Sample Superstore** data source.
- 2. Drag **Quantity** to **Columns**.
- 3. Click **Show Me** on the toolbar, then select the histogram chart type.



The histogram chart type is available in **Show Me** when the view contains a single measure and no dimensions.

Three things happen after you click the histogram icon in ${f Show}$ ${f Me}$:

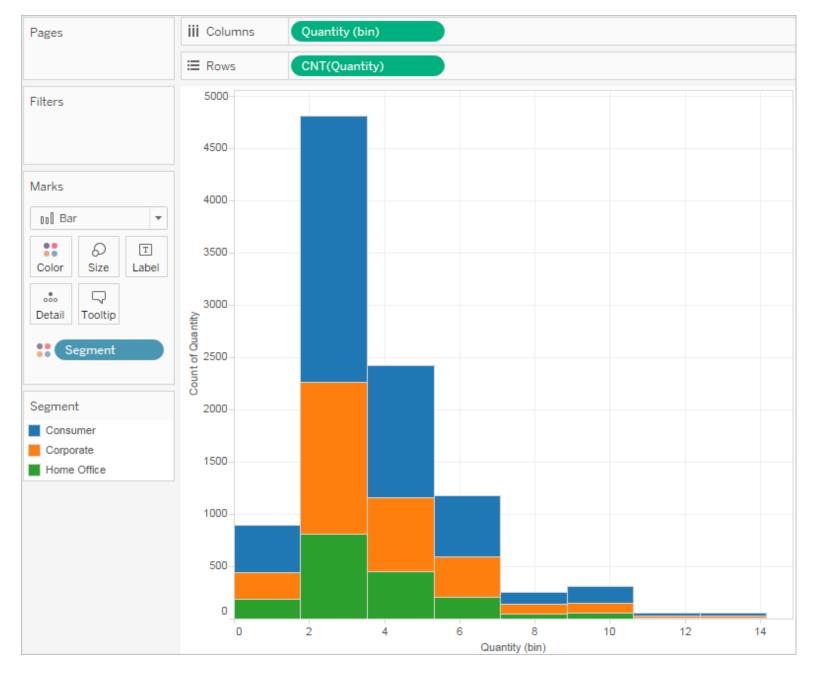
- The view changes to show vertical bars, with a continuous x-axis (1 14) and a continuous y-axis (0 5,000).
- The **Quantity** measure you placed on the **Columns** shelf, which had been aggregated as SUM, is replaced by a continuous **Quantity (bin)** dimension. (The green color of the field on the **Columns** shelf indicates that the field is continuous.)
- The **Quantity** measure moves to the **Rows** shelf and the aggregation changes from SUM to CNT (Count).



The **Quantity** measure captures the number of items in a particular order. The histogram shows that about 4,800 orders contained two items (the second bar), about 2,400 orders contained 4 items (the third bar), and so on.

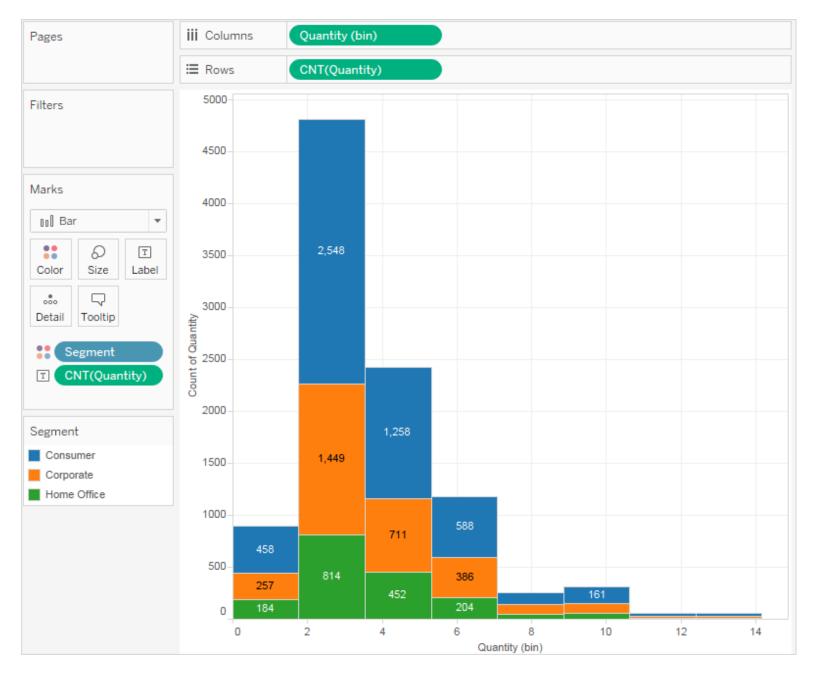
Let's take this view one step further and add **Segment** to **Color** to see if we can detect a relationship between the customer segment (consumer, corporate, or home office) and the quantity of items per order.

4. Drag **Segment** to **Color**.



The colors don't show a clear trend. Let's show the percentage of each bar that belongs to each segment.

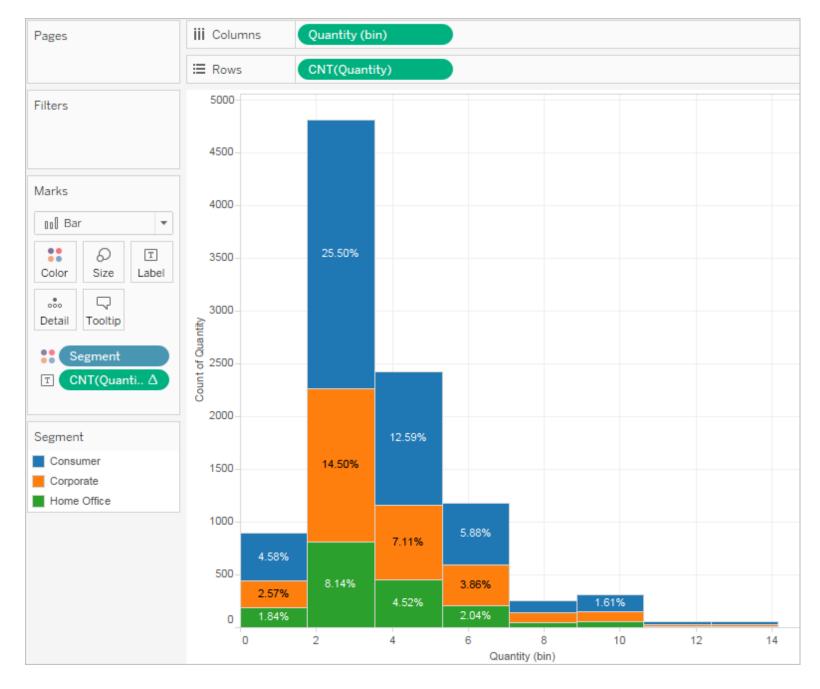
5. Hold down the Ctrl key and drag the **CNT(Quantity)** field from the **Rows** shelf to **Label**.



Holding down the Ctrl key copies the field to the new location without removing it from the original location.

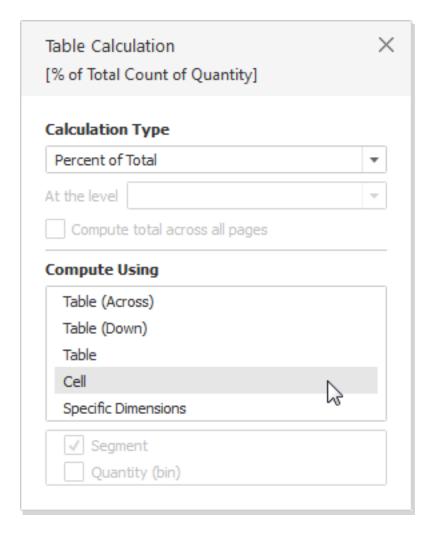
6. Right-click (Control-click on a Mac) the **CNT(Quantity)** field on the **Marks** card and select **Quick Table Calculation** > **Percent of Total**.

Now each colored section of each bar shows its respective percentage of the total quantity:

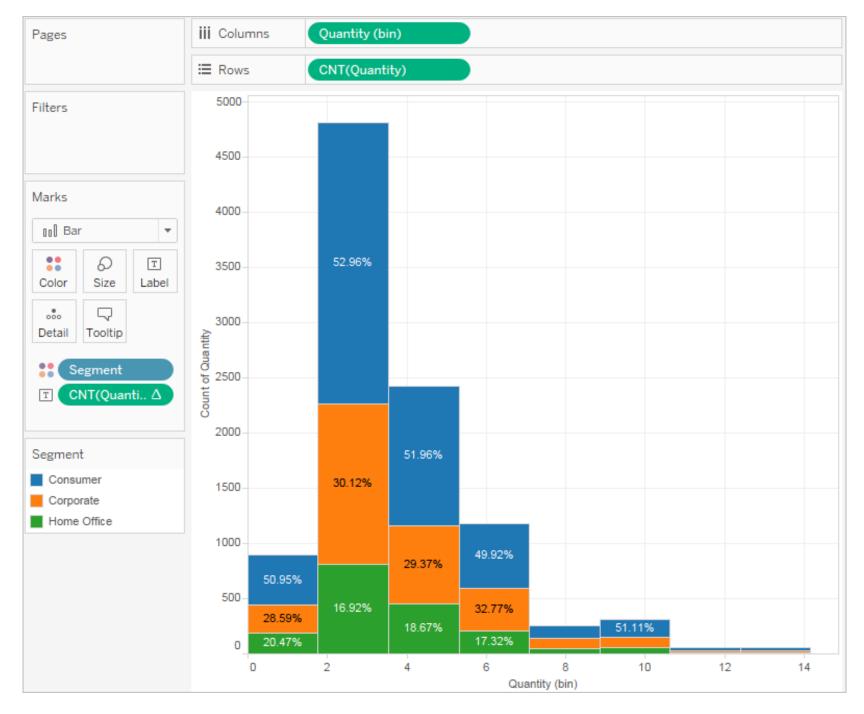


But we want the percentages to be on a per-bar basis.

- 7. Right-click the **CNT(Quantity)** field on the **Marks** card again and select **Edit Table Calculation**.
- 8. In the Table Calculation dialog box, change the value of the **Compute Using** field to **Cell**.



Now we have the view that we want:



There is still no evidence that the percentages by customer segment show any trend as the number of items in an order increases.

For information on how to create a binned dimension from a continuous measure, see Create Bins from a Continuous Measure. If you create a binned dimension, place it on Columns, and then place the initial measure that you used as the basis for the binned dimension on Rows. Set the aggregation to Count (Distinct) to create a histogram.