

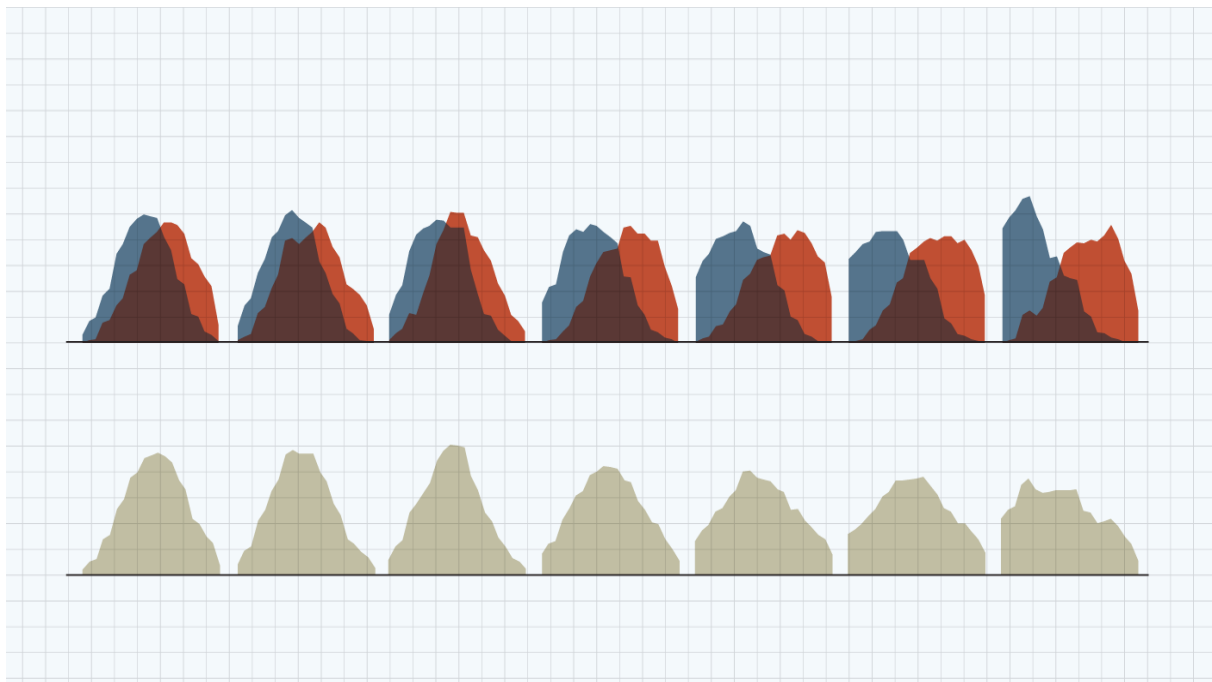
TABLEAU

Day 14

Small Multiples

Small multiples are a group of charts or graphs that share the same axes and scales, which allows the user to compare trends across dimensions in a single view.

Small multiples are somewhat like faceted information graphics.



A small multiple isn't itself a type of chart. Rather, it's a method for displaying several charts, diagrams, or pictures in a consistent manner, at a small size, and in a grid layout.

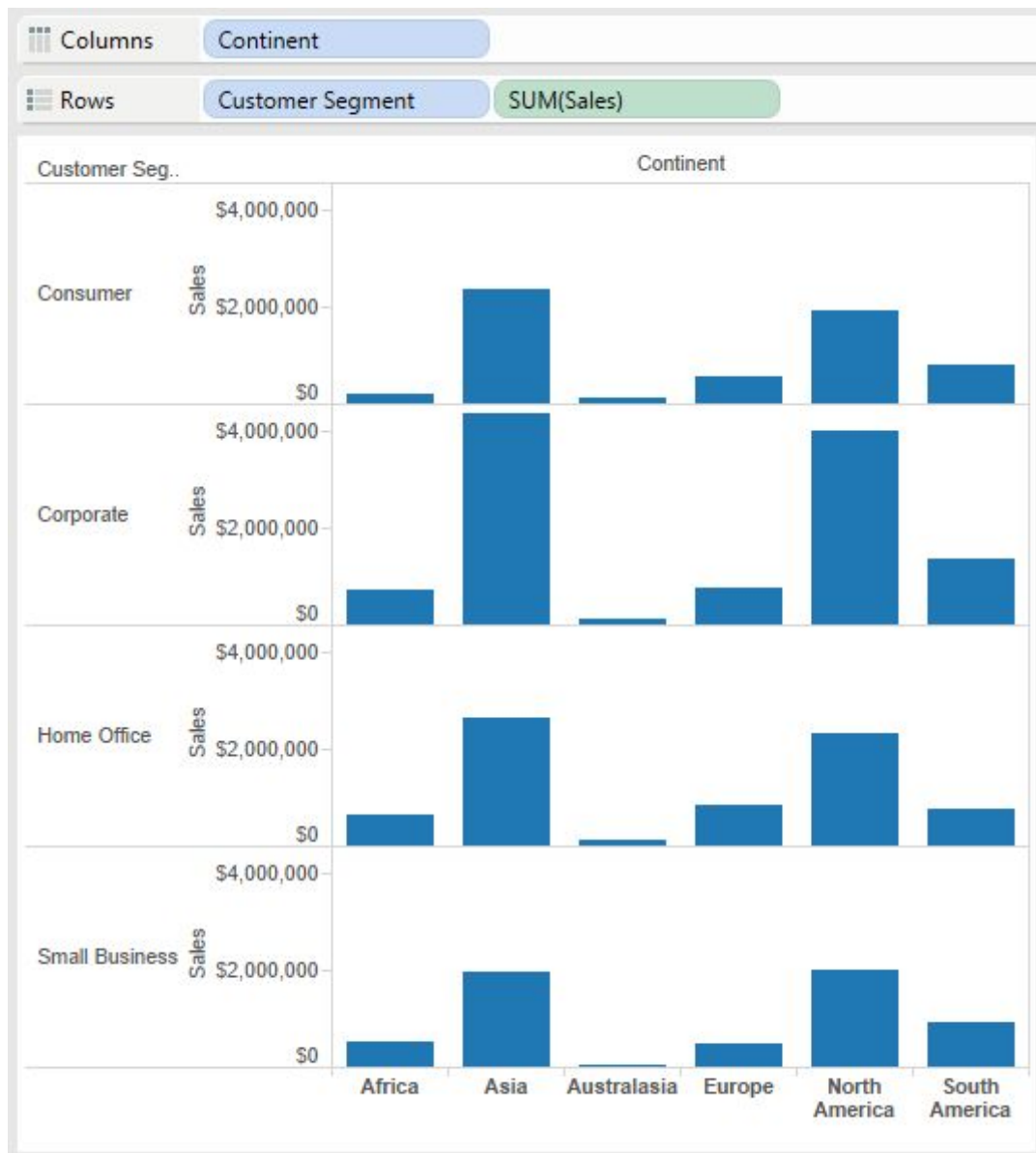
How to make small multiples?

To get started, select two dimensions and a measure. I have chosen the dimensions of 'Customer Segment' and 'Continent' and the measure of 'Sales' for the view to follow.

Step 1 – Place one dimension on the 'Columns' shelf and the other dimension and your measure on the 'Rows' shelf.

By default, Tableau has created a bar chart for you. By placing 'Customer Segment' on the 'Rows' shelf, performance for each customer segment is read left to right, in

rows. By placing 'Continent' on the 'Columns' shelf, each continent is represented vertically, in columns.



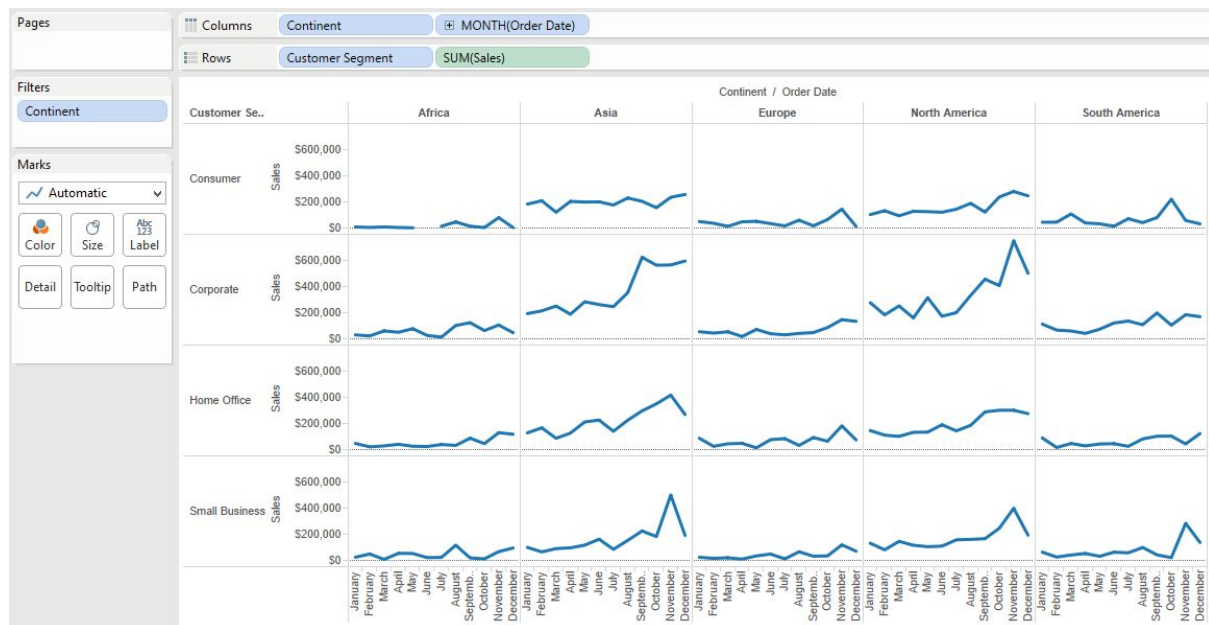
Small multiples may be a series of bar charts, but we still need to add an element of time to trend the 'Sales' measure.

Step 2 – Place a date field on the 'Columns' shelf.

Let's pretend that we would like to evaluate the seasonality of sales to answer a question such as, "Is there a certain month that I can expect a spike in sales?" For this type of analysis, we will use a discrete date field with a monthly aggregation, which will always show us the performance per distinct calendar month. By using discrete months, I know that I will always have twelve data points per small multiple, one for each calendar month (January, February, March, and so on). The

Superstore sample dataset contains four years of data, so if we used a continuous date field with a monthly aggregation, we would have up to 48 data points per small multiple (four years x 12 months = 48 points).

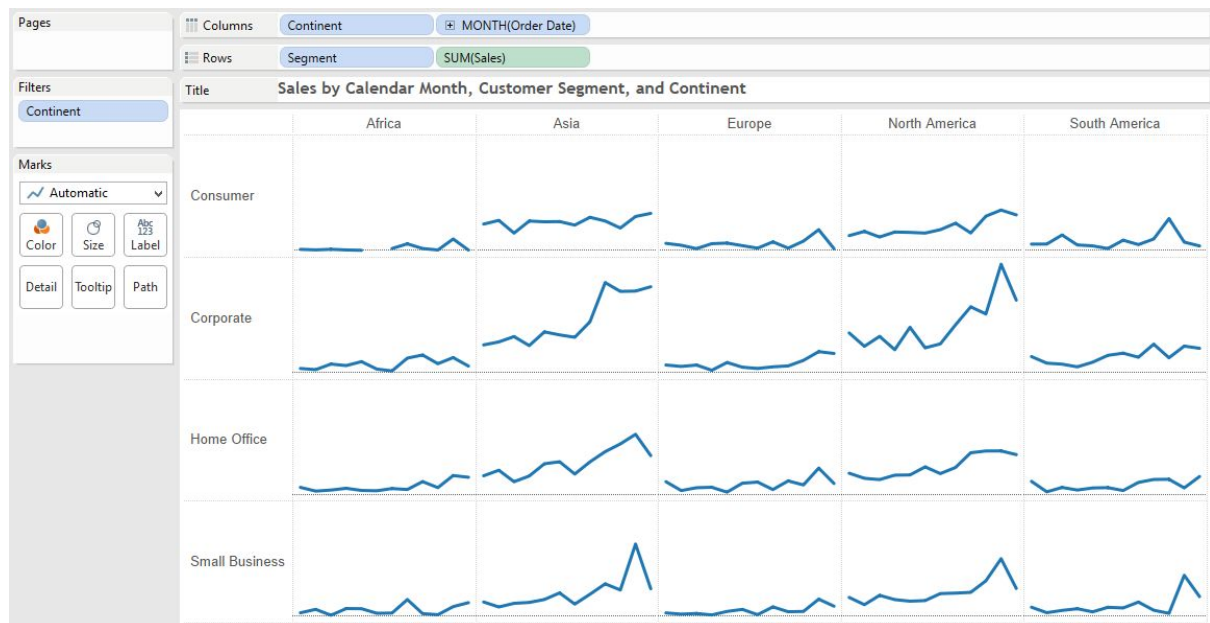
By right-clicking and dragging my 'Order Date' field onto the 'Columns' shelf, I was given an extra option to select the date aggregation (i.e. Year, Month, Week). To get the view to look as it does below, I chose the 'MONTH' option that was colored blue. The blue indicates that the date will be discrete.



Note that Australasia contained incomplete data, so I excluded it from the view by right-clicking Australasia's column header and selecting "Exclude".

Step 3 – Format the small multiples to your preference.

From here, all that is left to do is format the view to your liking.



Formatting changes I made to finalize this view include:

- Hid the field labels for columns by right-clicking on "Continent / Order Date".
- Hid the field labels for rows by right-clicking on "Customer Segment".
- Hid both the X and Y axes by right-clicking on them and deselecting "Show Header".

It's up to you whether you want to modify it or not.

- Increased the font size in the headers from 8pt to 10pt.
- Softened the column and row dividers by using dotted lines instead of solid lines.