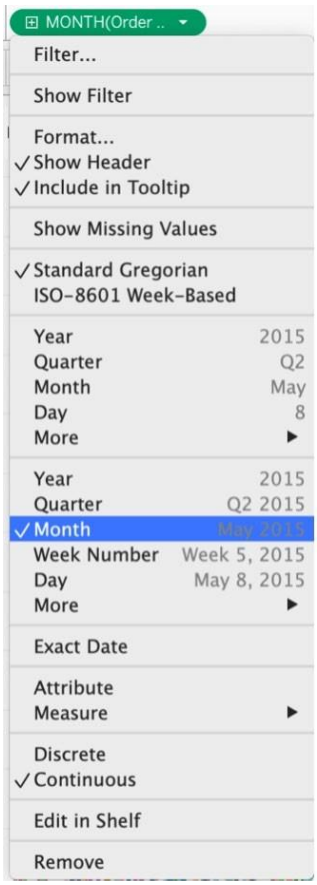
EXERCISE 09: Creating an Area Chart

The director of financial operations reaches out to you, looking to understand how the sales for each sub-category trends across each month. The director wants to know whether they sell more in July or August. As an analyst, your job is to create a color-coded area chart showing sales by month of the year and how sales trend across the year. You will continue to utilize the **Superstore** dataset for this exercise. You will also explore continuous as well as discrete area charts in this exercise, utilizing **Order Date**, **Sub-Category**, and **Sales**.

Perform the following steps to complete the exercise:

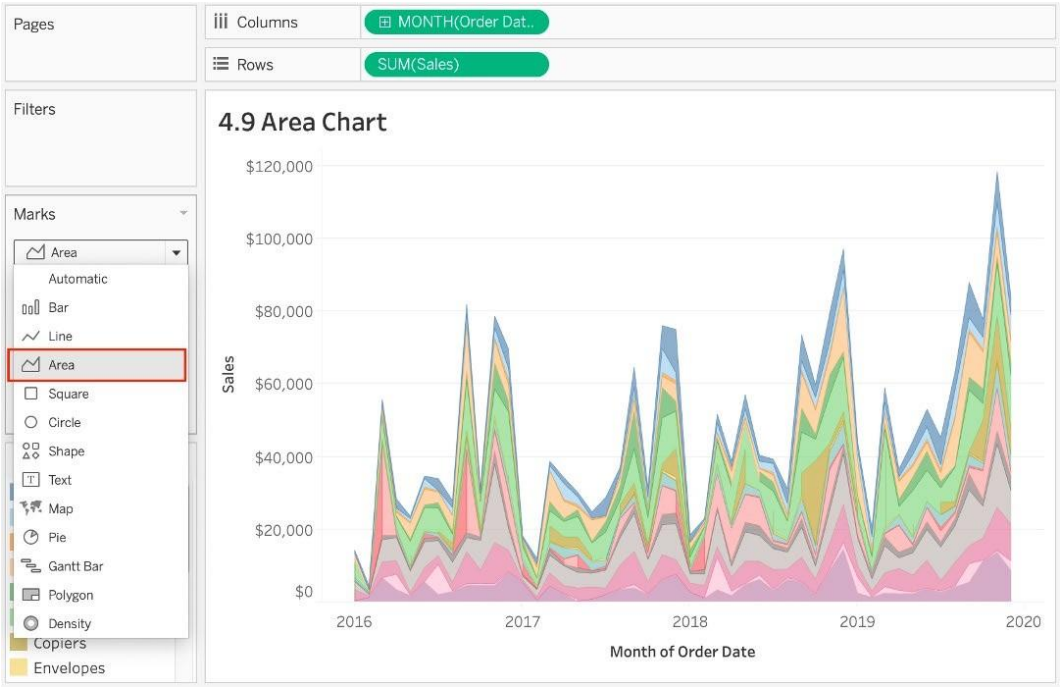
1) Open the sample **Superstore** dataset if it's not already open in your Tableau instance.

2) Drag **Order Date** to the **Columns** shelf and change the granularity from year to month by clicking the arrow on the **Order Date** capsule and selecting continuous **Month** (you will first create a continuous stacked area chart).



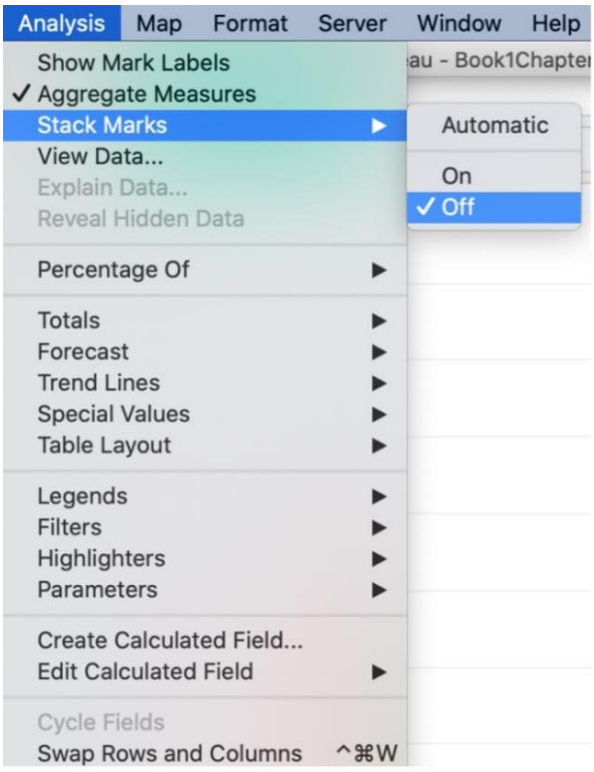
3) Drag **Sales** to the **Rows** shelf. As soon as you drop it onto the **Rows** shelf, a line chart is created.

4) Drag **Sub-Category** from data pane onto **Color Marks** card to and then change the **Marks** type from **Automatic** to **Area** using the dropdown:

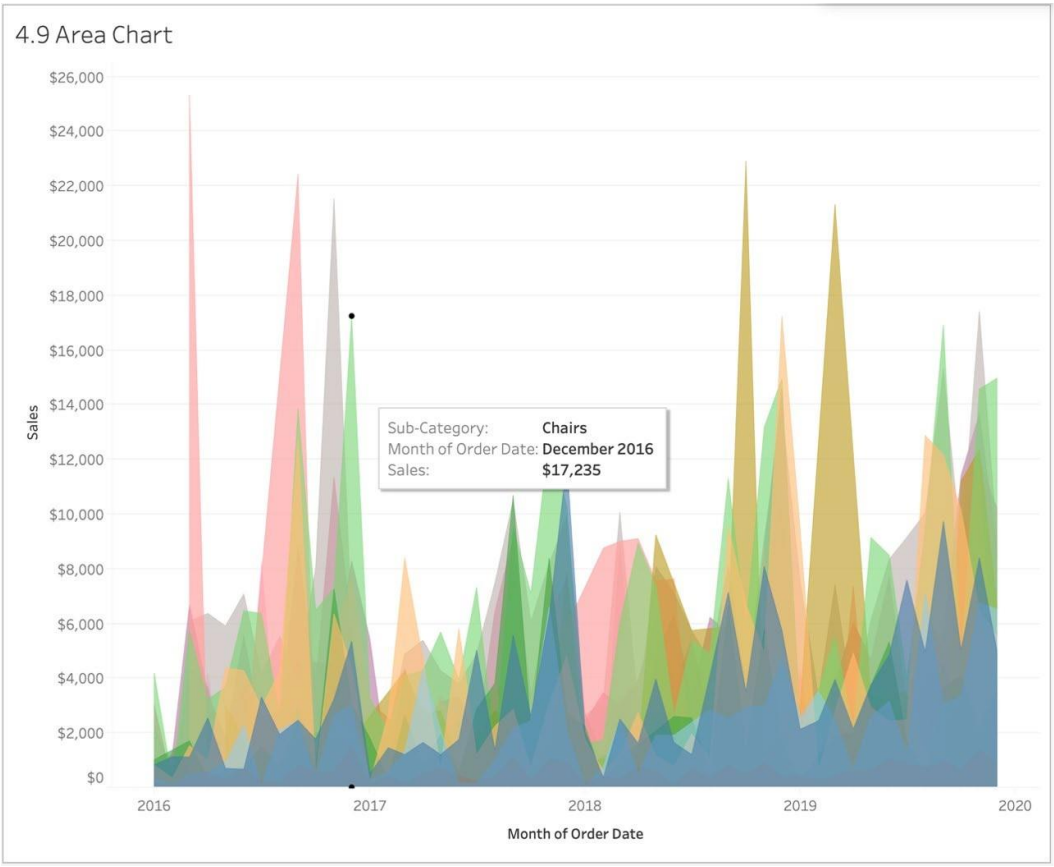


The preceding chart represents the continuous stacked area chart. If you don't want the areas to be stacked on top of each other, you can turn off stacking.

5) Navigate to **Analysis** in the menu and click on **Stack Marks** | **Off.** Similarly, you follow the same steps to turn the stack marks back on:



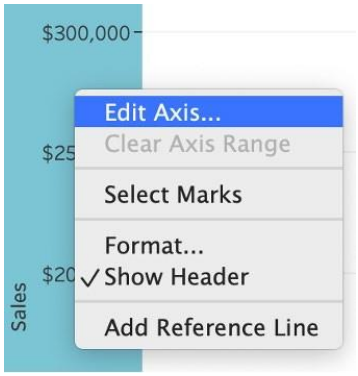
The only reason that someone would want to turn off **Stack Marks** in an area chart is if they want to look at individual trends for the dimension in question (in this case, Sub-Category). The limitation of an unstacked area chart is that it carries a risk of hidden data points because what the background area represents is not clear:



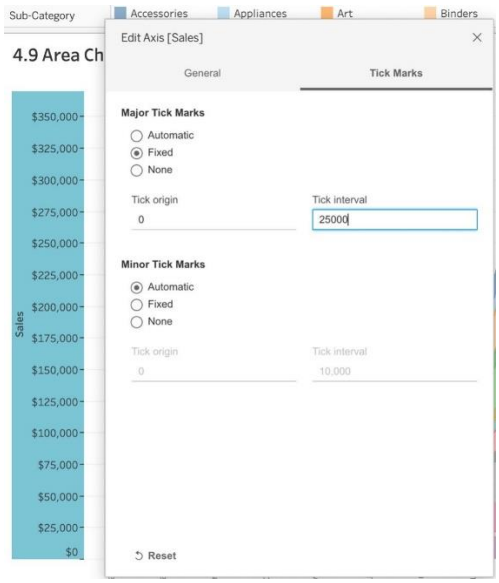
6) To change the area chart to be discrete, change the type of **Order Date** from **Continuous** to **Discrete**:

With discrete charts, instead of **Month** for each year, now you only show discrete months without considering the year in the view. The view is a less granular view compared to that of the continuous stacked area chart. You will change the axis tick marks from $50,000 to $25,000 increments.

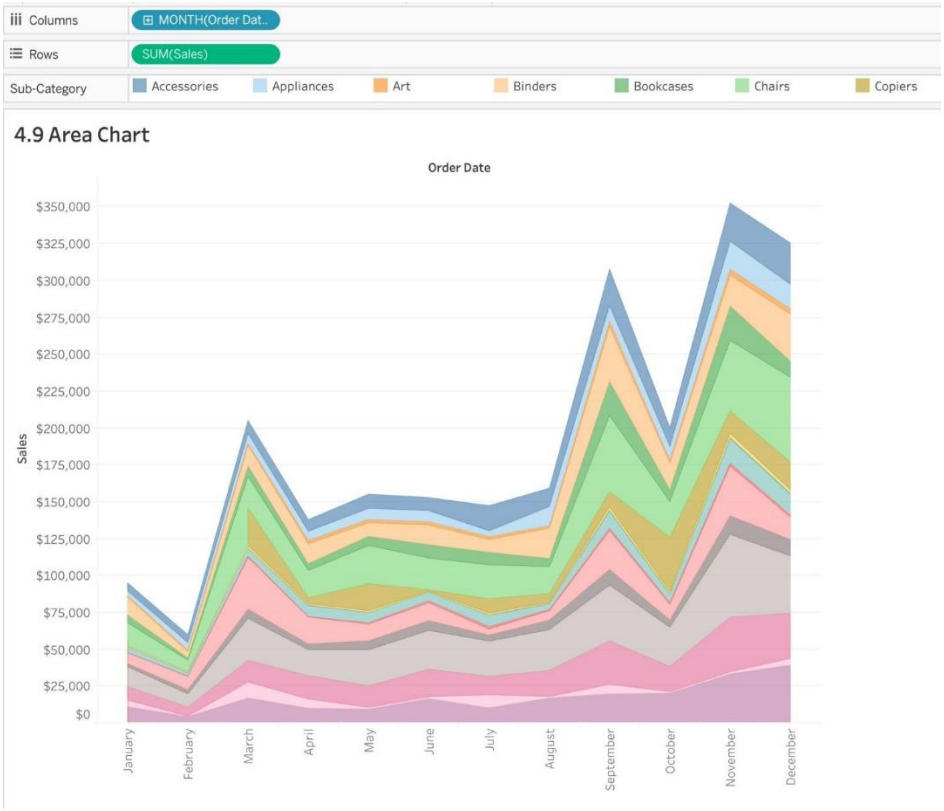
7) To change the axis tick marks, right-click on the **Sales** axis and click on **Edit Axis...**.



8) In **Edit Axis [Sales]**, click on **Tick Marks** (this may be **Major Tick Marks** in later versions) and select **Fixed**, then set **Tick interval** to **25000**, as shown here:



The final output is as follows:



In the preceding screenshot, each of the sub-categories is stacked on top of each other, while the sales trends are shown across months. From the given chart, you can easily make out that November is the highest-grossing month for the **Superstore** dataset.