Filtering Data

Filtering data allows you to focus on relevant information rather than having to show an entire data set. There are several filter options in Tableau, and multiple filters can be applied at the same time. Filtering on dimensions allows you to take a category and display the data for a subset of the members. Filtering on measures allows you to show a range of measure values.

To Filter by Dimension

1. Drag a dimension to **Filters**
2. In the **Filter** dialogue set the filter criteria then click **OK**.

Filter Option	Description
General	Shows members of the dimensions you can select for inclusion or exclusion.
Wildcard	Sets up a wildcard inclusion or exclusion of members matching the value entered.
Condition	Filters values based on specific conditions. This can be based on fields, range of values or formula.
Top / Bottom	Shows the top/bottom N where N is determined by the value or by formula.

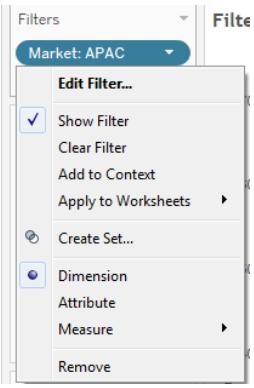
To Filter by Measure

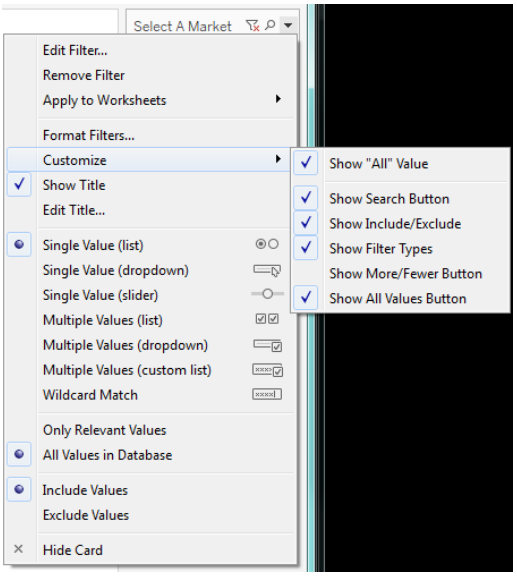
1. Drag a measure to **Filters**
2. In the **Filter Field** dialogue box select the method of aggregation then click **Next**.
3. In the **Filter** dialogue set the filter criteria then click **OK**.

Filter Option	Description
Range of Values	Include all values within the specified range.
At Least	Include all values above a specified value.
At Most	Include all values below a specified value.
Special	Set filter for null or non-null values.

Viewing and Editing Filters

Once a filter has been created it may be shown or hidden as needed. Clicking on the drop-down for the filter will allow you to edit the filter or to show it as a *quick filter* in the main worksheet window. Quick filters allow users to apply and edit filters rapidly without having to redefine them.





A quick filter also has a drop-down, which allows you to select how the user can interact with the filter – selecting one or multiple items, as a list or a slider, whether you should include values that have no records relating to them etc.

Creating Date Filters

Date filters form a special case of filters. They can be used to filter for specific time/dates or to define a date range.

Adding a Date Filter

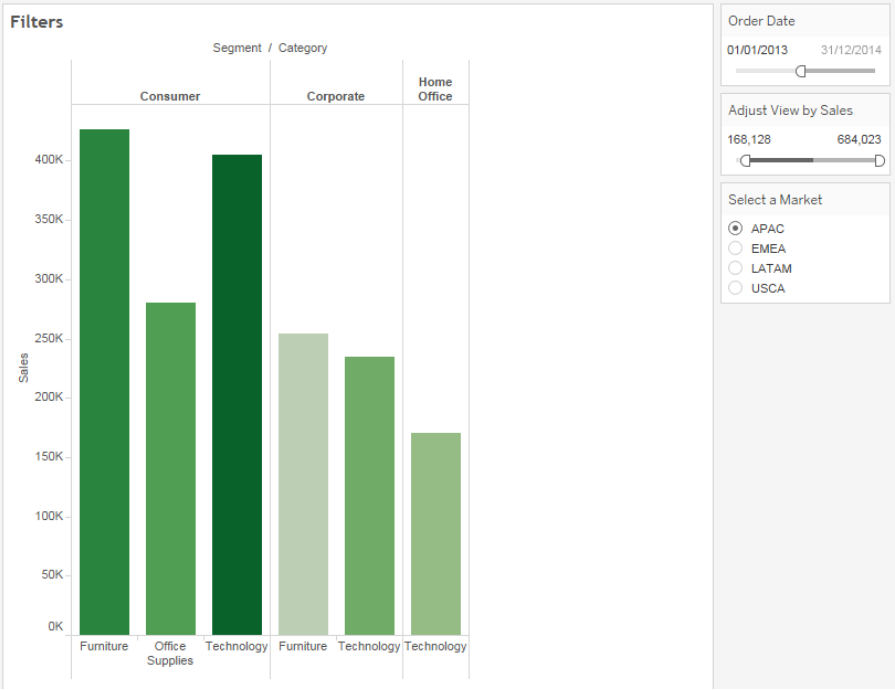
1. Drag a date field to **Filters**
2. In the **Filter Field** dialogue box select the type of date you want (e.g. day, month, quarter, year) then click **Next**.
3. In the **Filter** dialogue set the filter criteria then click **OK**.

Adding a Relative Date Filter

1. Drag a date field to **Filters**
2. In the **Filter Field** dialogue box select **Relative date** and the time unit you want to use.
3. Set the specific time to target, e.g. **Previous quarter**, **This quarter**, **Next quarter**.
4. To set the filter relative to a fixed date select **Anchor relative to** and choose a date from the menu.
5. Click **OK**.

Tasks

1. Open the packaged workbook **Workshop3.1 - Filtering Starter.twbx**
2. Create a quick filter for Market, displayed as a single value list, removing the All option, and titled “Select a Market”.
3. Create a quick filter for Sum of Sales, displayed as a slider, and titled “Adjust View by Sales”.
4. Create a quick filter for Order Date starting at the fixed date 01/01/2013.
5. Experiment with the sliders and notice the AND logic being used.



Sorting Data

Tableau provides several different ways of sorting data, both automatic and manual. Computed sorts update automatically as the data behind the chart changes (either due to changes in the data source or via the application of filters).

Sort	Description
Default	The default sort order determines how a field will be sorted when it is first added to a view. You can set the default sort order to either ascending or descending order, as well as control whether it is sorted alphabetically, by data source order or even by a specified manual sort.
Right-click sorting on a dimension	Performed on dimensions in a visualisation, this sort option appears when right-clicking a dimension. This type of sort overrides the default sort and can sort any aggregation on any data field. It is also dynamic – the sort order is modified as data changes.
One-click sorting on an axis	Use the toolbar icons for ascending and descending. Or hover over an axis and click the sorting icon when it appears. This sort overrides the default sort and is dynamic.

Manual sorts are an easy way to sort data quickly but are not dynamic, i.e. they will not change with the data.

Sort	Description
Drag and drop sorting	Apply by dragging headers or labels in a chart and dropping them in a new place. This sort is not dynamic and only applies to the sort field member of a single dimension.
Sorting on selected marks	Click and drag to select the marks in a chart that you want to sort, and then hover over the marks and choose the Sort icon that appears in the Tooltip. This sort overrides the default sort and is not dynamic.

To set a Default Sort

1. In the **Data** pane, right-click the dimension to sort.
2. On the context menu, choose **Default** properties and then choose **Sort**. The Sort dialogue box appears.
3. In the Sort dialogue box chose **Manual** then use the **Up** and **Down** buttons to manually sort the dimension members.
4. Click **OK**. This sort order is now part of the field properties of the dimension and can be used across multiple worksheets in the workbook.

To Use Right-Click Sorting on a Dimension

5. In the chart area, right-click the dimension to sort.
6. On the context menu, choose **Sort**. The Sort dialogue box appears.
7. Set the sort order (**Ascending** or **Descending**).
8. Set the Sort by option and click **OK**.

Tasks

1. Open the packaged workbook **Workshop3.2 - Sorting Starter.twbx**
2. Modify the sheet View One so that it uses
    a. A manual default sort for Category in the order: Technology, Office Supplies, and Furniture
    b. A local sort in the view to order Sub-Category by SUM(Sales) in descending order.
3. Modify the sheet View Two so that it uses a Sub-Category sort edited to sort by Profit in descending order.

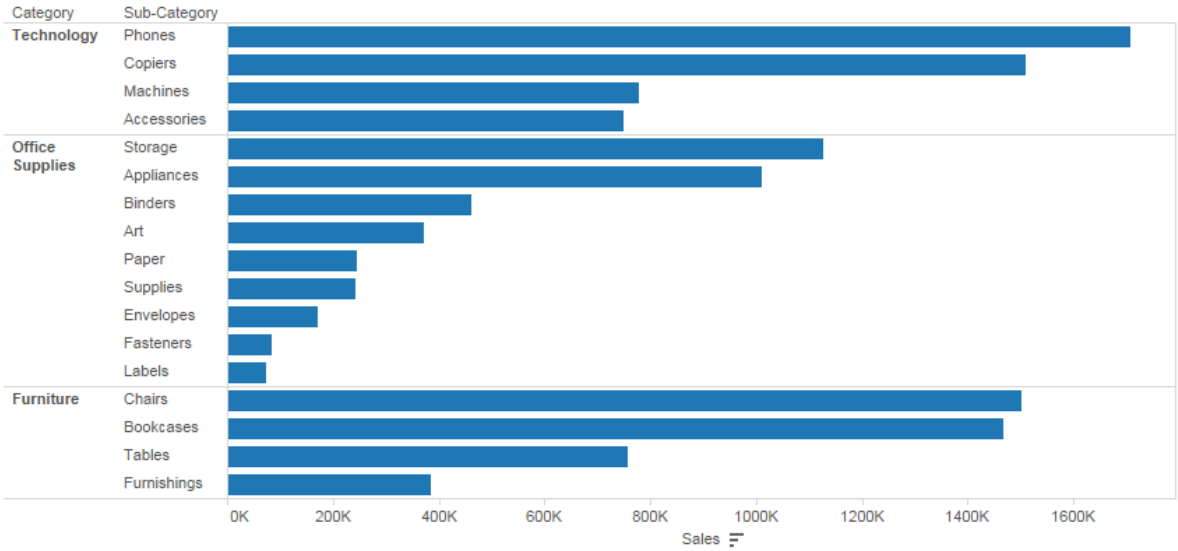


FIGURE 1: VIEW ONE

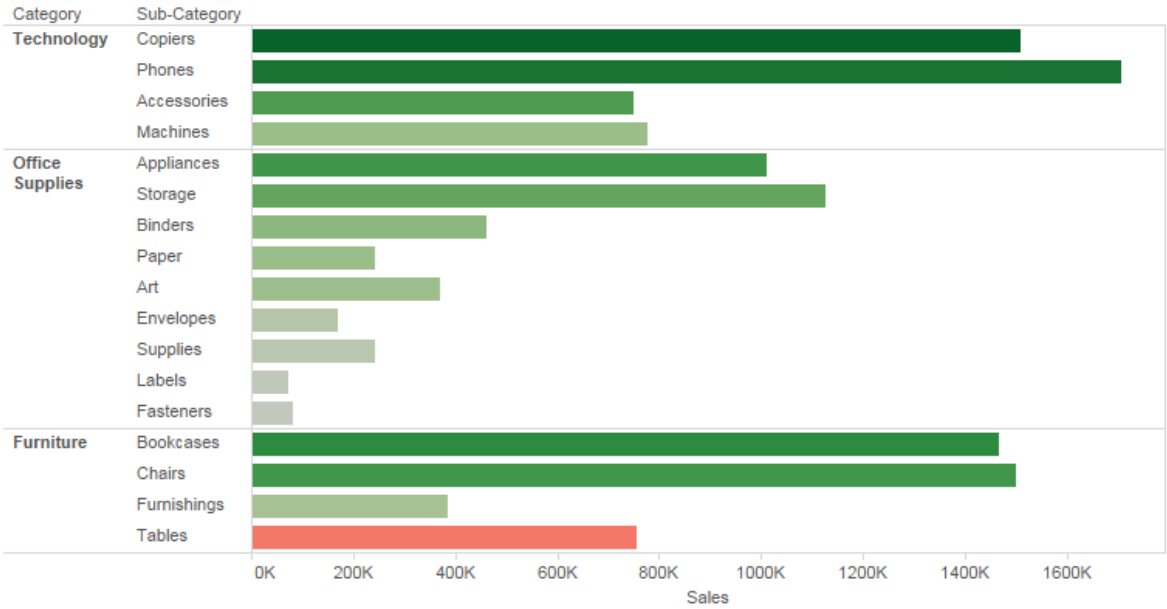


FIGURE 2: VIEW TWO