Filtering Data with Controls

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Dashboard (common definition)

A webpage with a collection of related charts
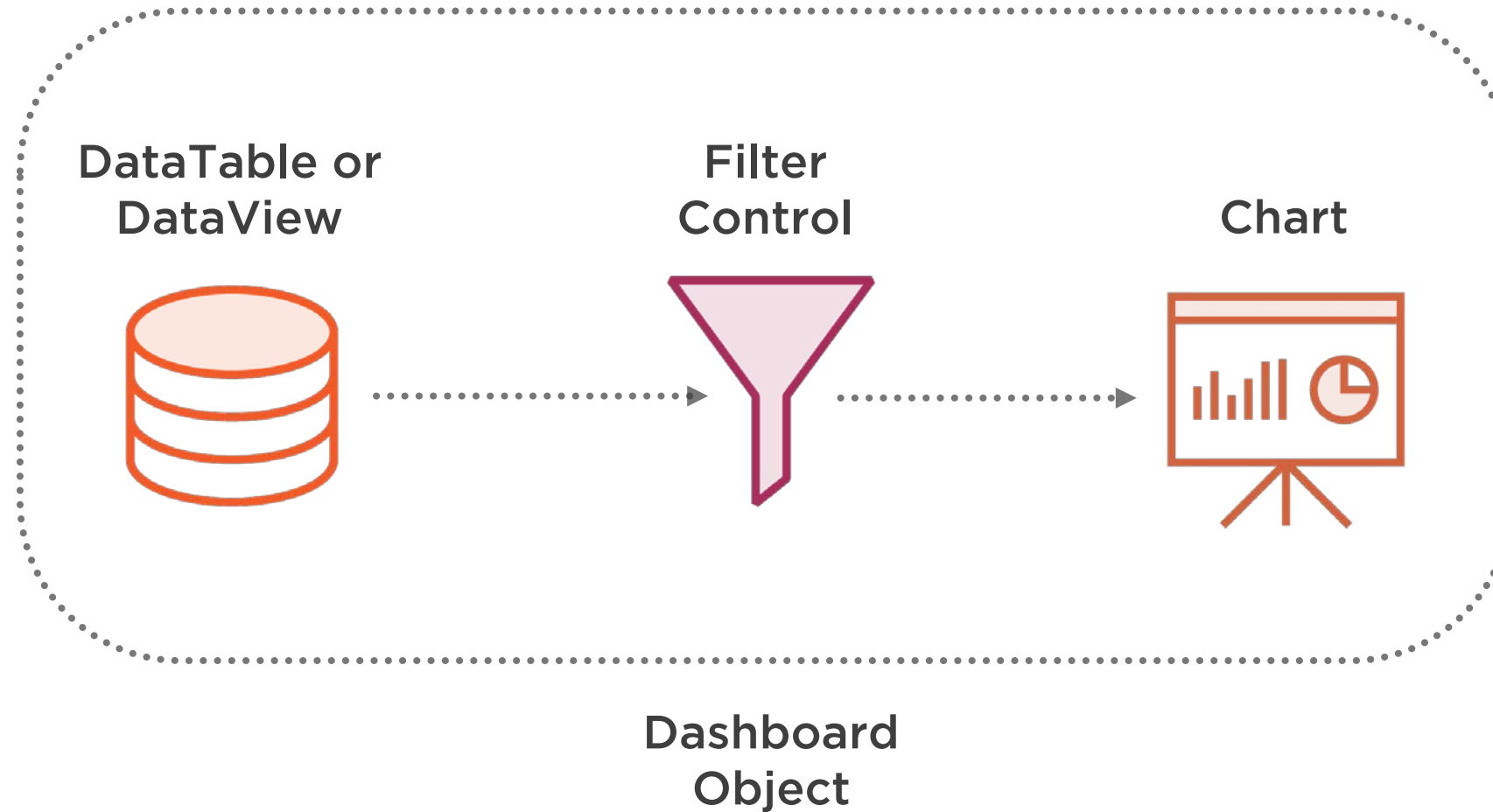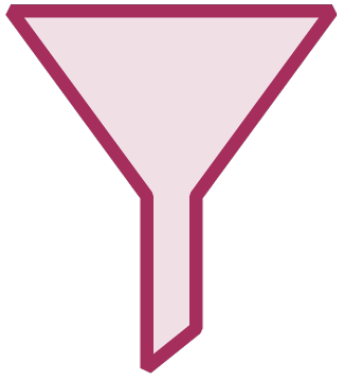
Dashboard Object

- Chart(s)
- Control(s)
- DataTable or DataView

The Dashboard Object

DataTable or DataView → **Filter Control** → **Chart**

Dashboard Object

Control Types

CategoryFilter

ChartRangeFilter

DateRangeFilter

NumberRangeFilter

StringFilter

Starting HTML for Dashboard Object

```html
<html>

    <head>
        <!- The usual script tags go here -->
    </head>

    <body>
        <div id="divContainer">
            <div id="divChart"></div>
            <div id="divControl"></div>
        </div>
    </body>

</html>
```

JavaScript for a Dashboard Object

```javascript
var container = new google.visualization.Dashboard(
    document.getElementById('divContainer'));

var chart = new google.visualization.ChartWrapper({
    chartType: 'PieChart',
    containerId: 'divChart',
    options: {}
});

var control = new google.visualization.ControlWrapper({
    controlType: 'DateRangeFilter',
    containerId: 'divControl ',
    options: {}
});

container.bind(control, chart);
container.draw(chartData);
```
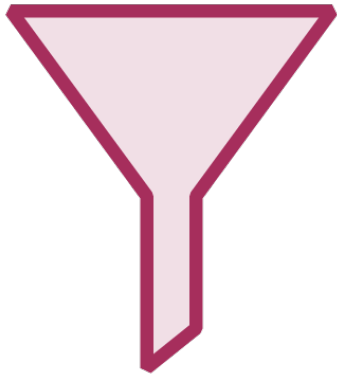
The ChartRangeFilter Control

Demo: Coding the ChartRangeFilter

The DateRangeFilter Control

Control Types

CategoryFilter

ChartRangeFilter

DateRangeFilter

NumberRangeFilter

StringFilter

Demo: Switching to DateRangeFilter

NumberRangeFilter & StringFilter Controls
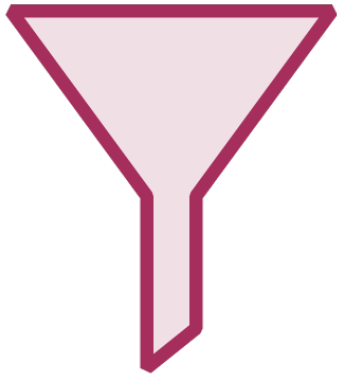
NumberRangeFilter & StringFilter

NumberRangeFilter

StringFilter

Demo: Coding NumberFilter

Control Types

CategoryFilter

ChartRangeFilter

DateRangeFilter

NumberRangeFilter

StringFilter

The CategoryFilter Control

CategoryFilter

SaleDate	ProductType	SalePrice
1/2/2016	Hardware	19680
2/1/2016	Hardware	4650
3/1/2016	Software	4999
4/2/2016	Support	2950
4/8/2016	Software	2500

DataTable

Categories
Hardware
Software
Support
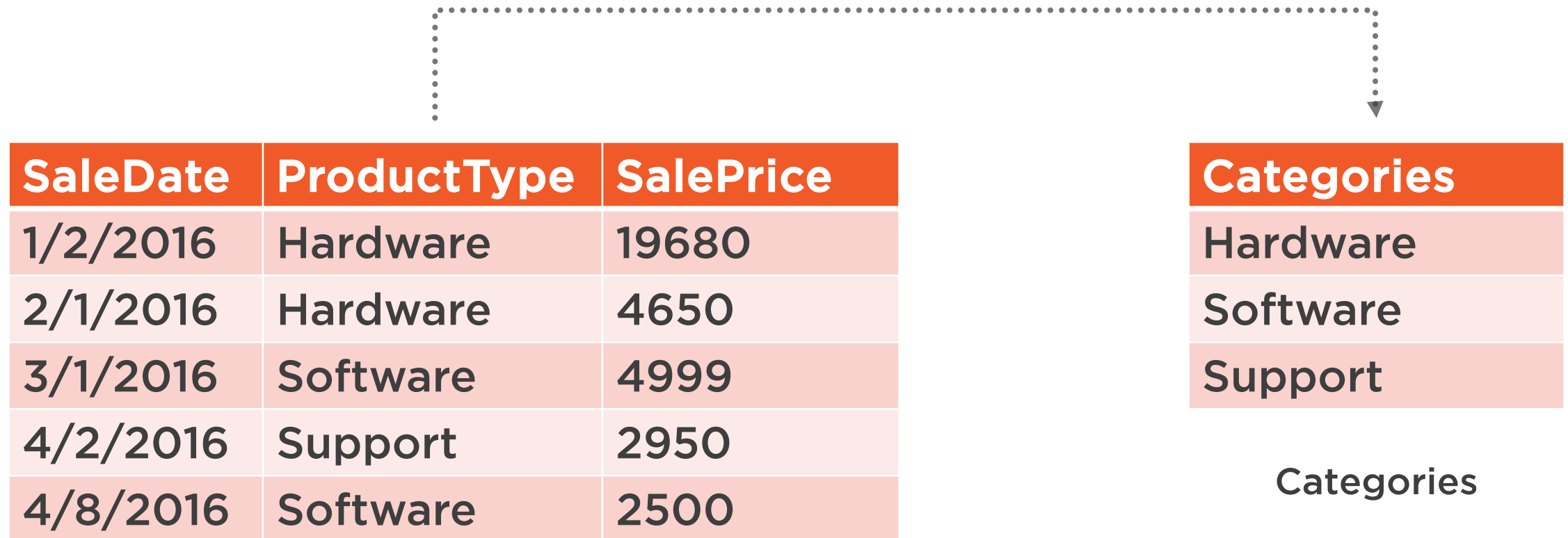
Categories

Demo: Dashboard – final chart demo

Summary

Filters We've Covered:

- CategoryFilter
- ChartRangeFilter
- DateRangeFilter
- NumberRangeFilter
- StringFilter

Next up:

- Combining charts into a dashboard
- Responsive Design