

# Topic 7

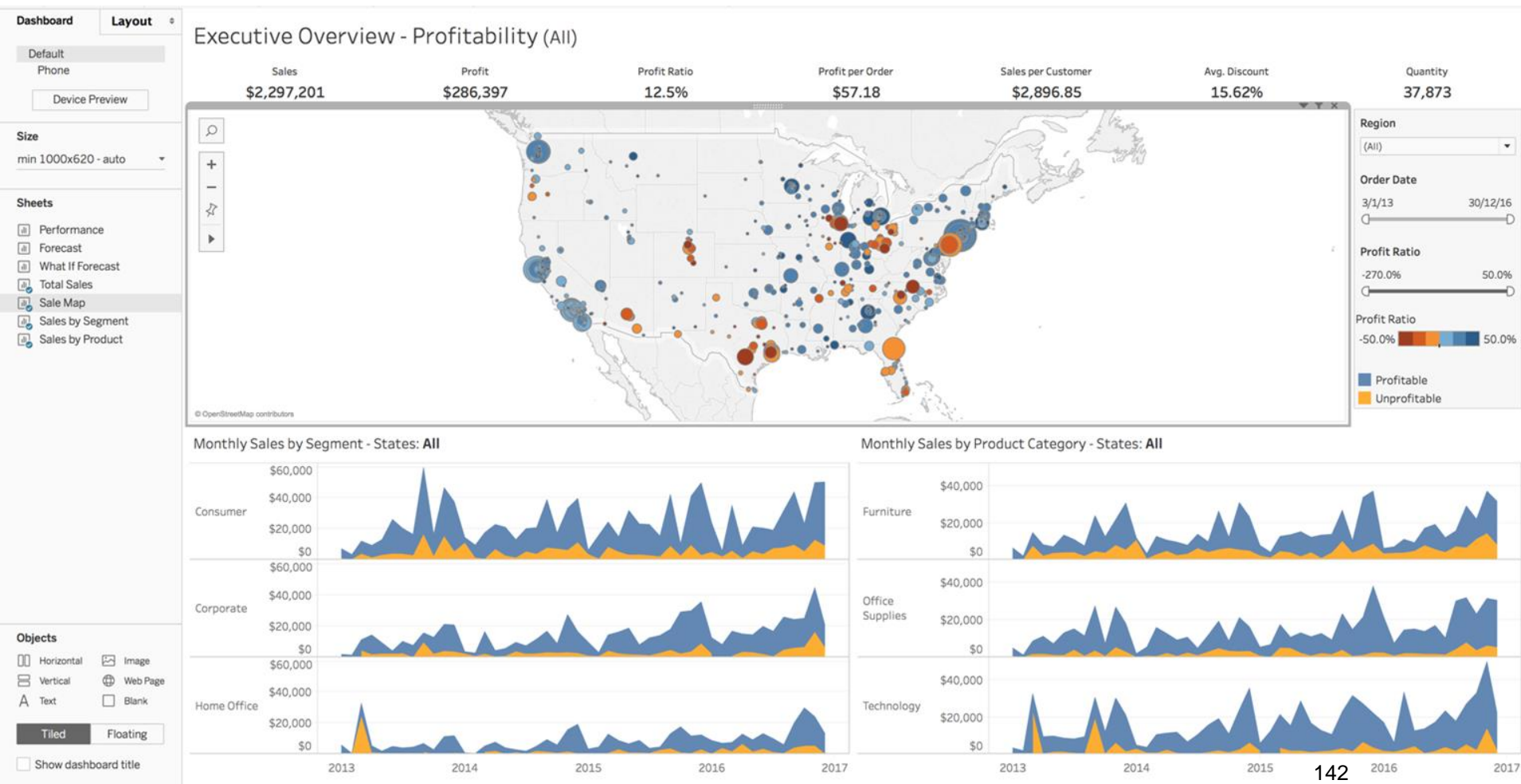
## Dashboard and Story

# Dashboard

- A dashboard is a collection of several worksheets and supporting information shown in a single place so you can compare and monitor a variety of data simultaneously
- Each view you add to the dashboard is connected to its corresponding worksheet. That means when you modify the worksheet, the dashboard is updated and when you modify the view in the dashboard, the worksheet is updated.

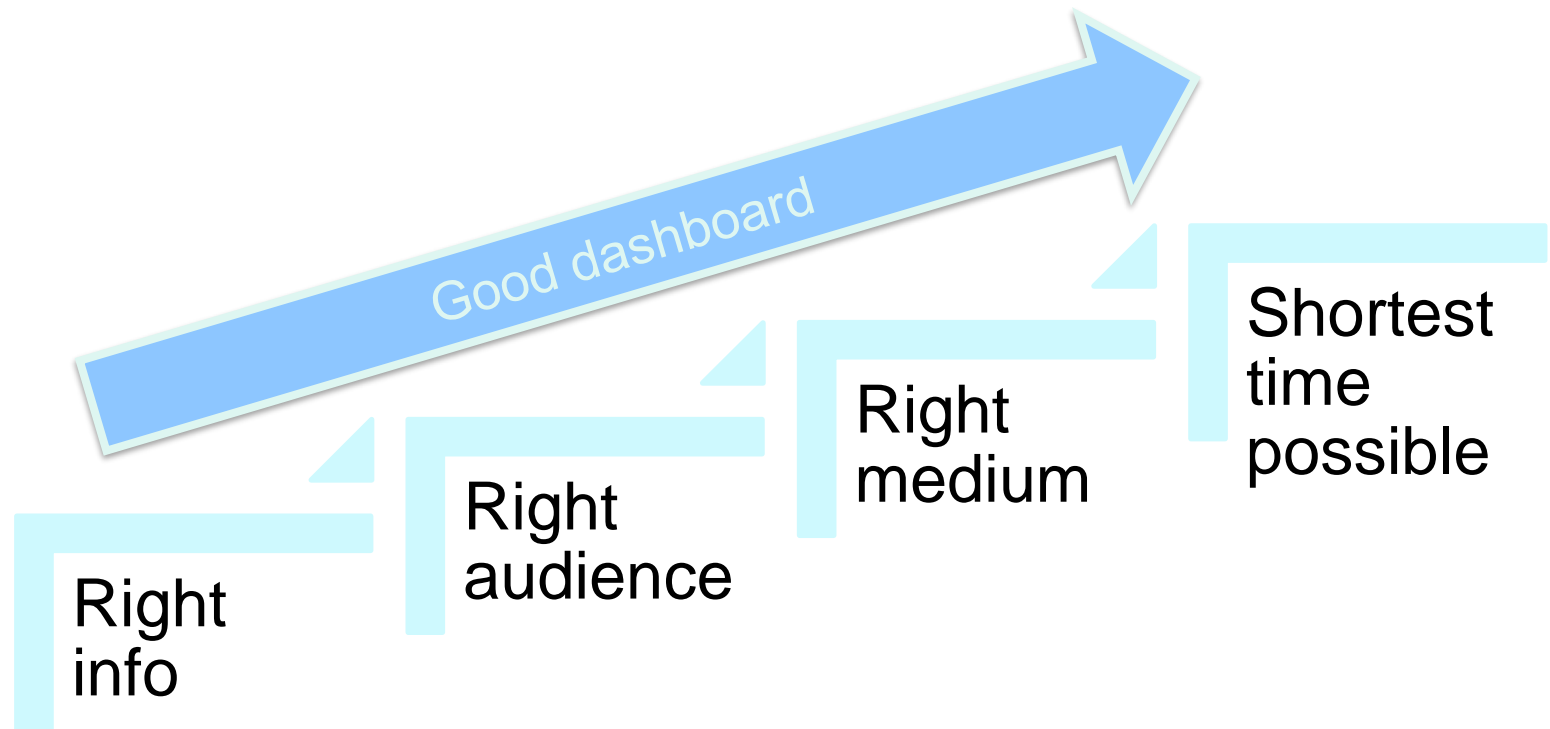
# Dashboard Example

Dashboard is good for displaying all relevant data and info on one page



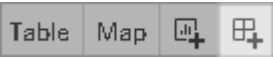
# 4Ws of a Good Dashboard

- Who is your target audience?
- Where will they view the dashboard?
- Why are you building it?
- What elements do you want?



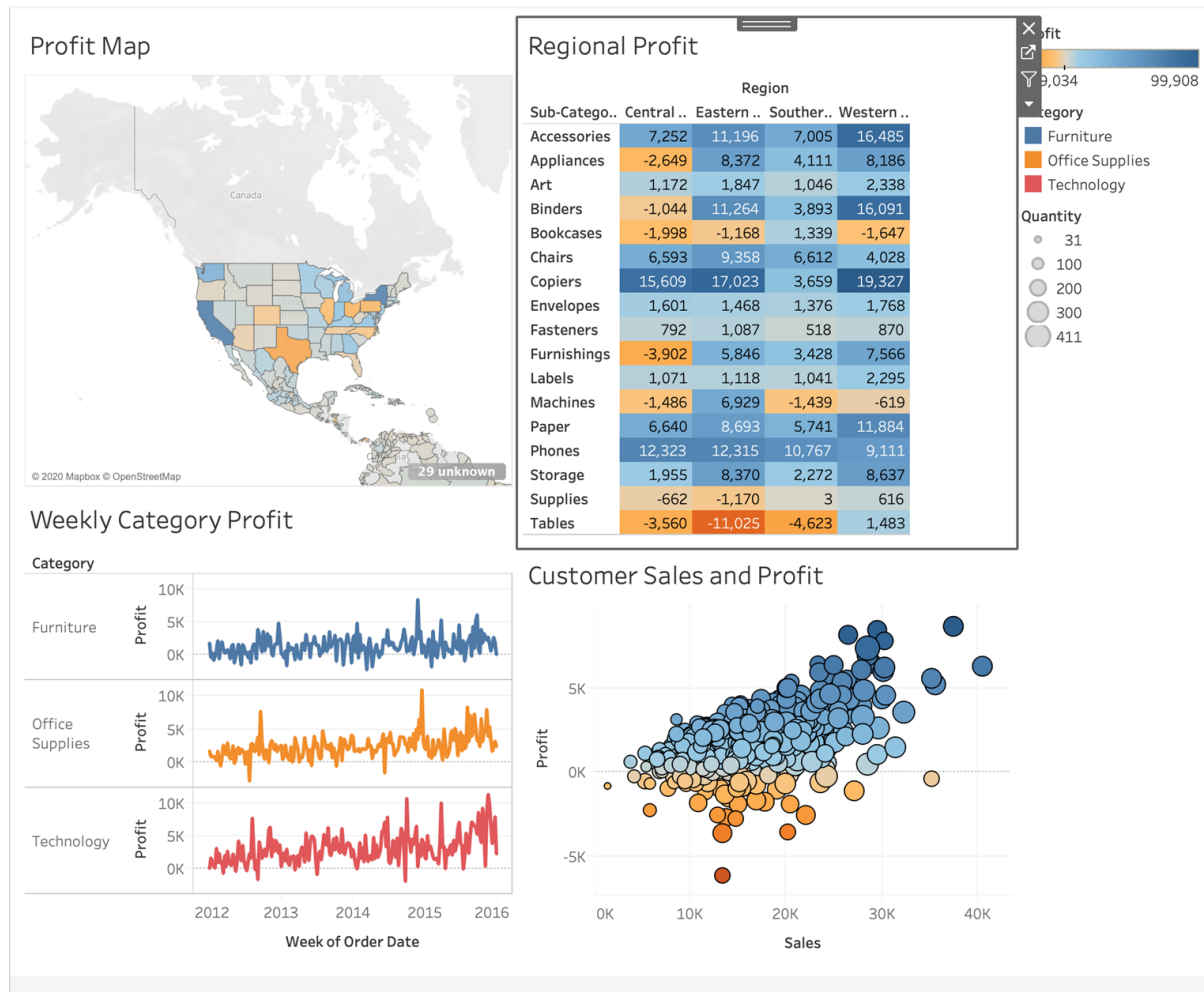
- *The Big Book of Dashboard* (2017)

# Create Dashboard

- At the bottom of the workbook, click the New Dashboard icon The icon shows a row of four buttons: 'Table', 'Map', a chart icon, and a dashboard icon (a grid with a plus sign).
- From the Sheets list at left, drag views to your dashboard at right.
- To replace a sheet, select it in the dashboard at right. In the Sheets list at left, hover over the replacement sheet, and click the Swap Sheets button.

# Activity: Dashboard

- Connect to global\_superstore\_2016.xls
- Create a dashboard that looks like below



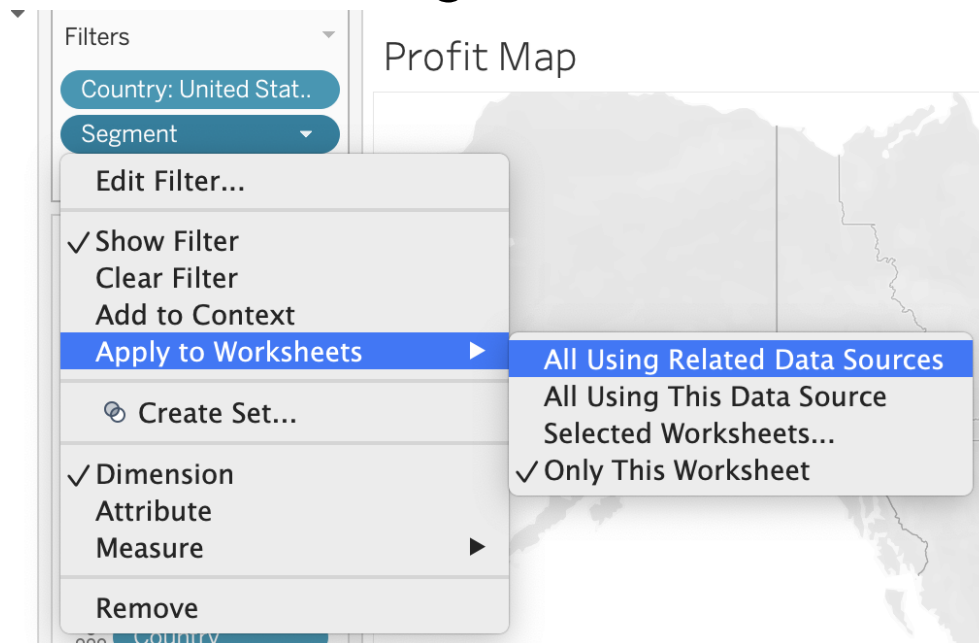
# Add Dashboard Objects

In addition to sheets, you can add dashboard objects that add visual appeal and interactivity

- **Horizontal and Vertical objects** provide layout containers that let you group related objects together and fine-tune how your dashboard resizes when users interact with them.
- **Text objects** can provide headers, explanations, and other information.
- **Image objects** add to the visual flavor of a dashboard, and you can link them to specific target URLs.
- **Web Page objects** display target pages in the context of your dashboard.
- **Blank objects** help you adjust spacing between dashboard items.
- **Navigation objects** let your audience navigate from one dashboard to another, or to other sheets or stories.
- **Export objects** let your audience quickly create a PDF file, PowerPoint slide, or PNG image of a dashboard. Formatting options are similar to Navigation objects.

# Apply Filters to Multiple Worksheets

- When you add a filter to a worksheet, by default it applies to the current worksheet. Sometimes, however, you might want to apply the filter to other worksheets in the workbook.
- To apply a filter to all worksheets, On the Filters shelf, right-click the field and select Apply to Worksheets > All Using Related Data Sources.

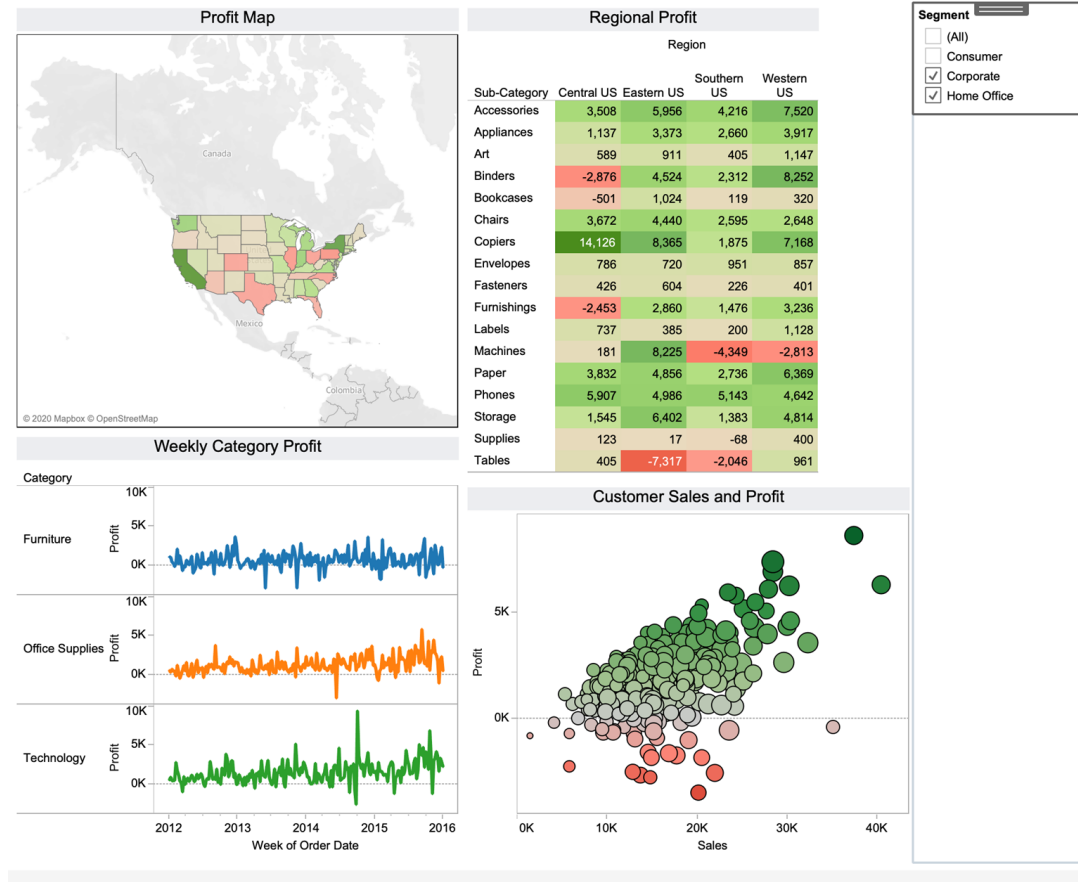




# Activity: Filter the Dashboard

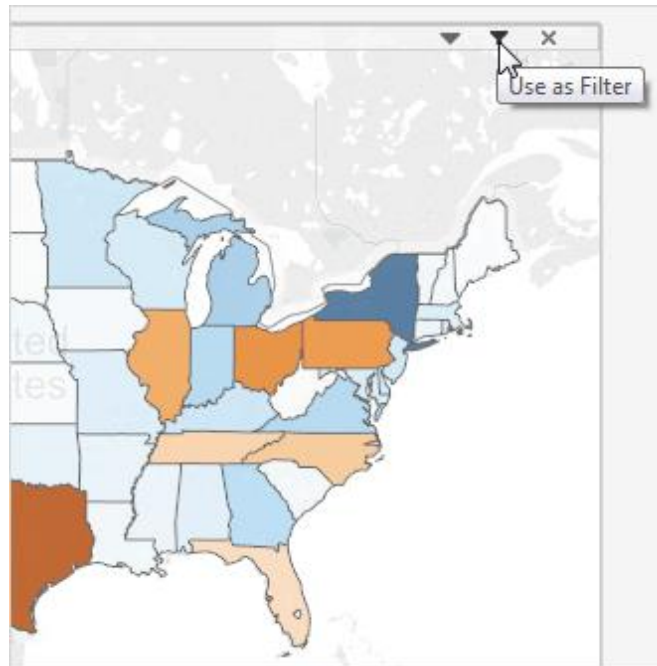
- Connect to global\_superstore\_2016.xls
- Add Segment filter to the Profit Map worksheet, and set to apply to all related worksheets
- Add the filter in the dashboard

Time: 5 mins



# Use a single view to filter other views in a dashboard

- Imagine you have a dashboard that contains three views about profitability: a map, a bar chart, and a table of customer names. You can use a filter action to make one of the views in your dashboard, such as the map, the "master." When your users select a region in the map, the data in the other views is filtered so that it relates to just that region.
- On the dashboard, select the view you want to use as a filter.
- On the view's shortcut menu, choose Use as Filter. You can perform the same action by clicking the Use as Filter icon



# Add Interactivity Using Actions

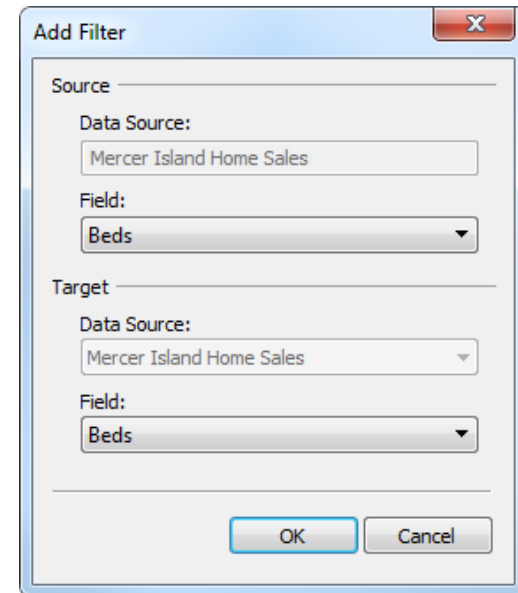
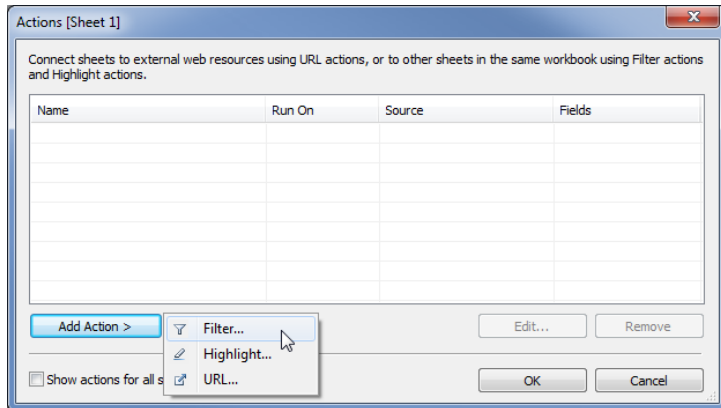
- You can add interactivity to dashboards to enhance users' data insights.
- When authoring in Tableau Desktop, add actions to use multiple sheets as filters, navigate from one sheet to another, display web pages, and more
- There are 6 action types
  - Filter
  - Highlight
  - URL
  - Goto
  - Set
  - Parameter

# Filter Actions

- Filter actions send information between worksheets. Typically, a filter action sends information from a selected mark to another sheet showing related information. Behind the scenes, filter actions send data values from the relevant source fields as filters to the target sheet.
- For example, in a view showing the sales price of houses, when you select a particular house, a filter action can show all comparable houses in a different view. The source fields for the filter might contain sales price and square footage.

# Create a Filter Action

1. On a worksheet, select Worksheet > Actions
2. In the Actions dialog box, click Add Action, and then select Filter. Or select an existing action, and choose Edit.



3. Specify a name for the action.
4. Select a source sheet or data source.
5. Specify how the action runs
6. Select a target sheet. When you select a dashboard, you can select one or more sheets within it.
7. Specify what happens when the selection is cleared in the view:
8. Specify the data that you want to show on the target sheets. You can filter on All Fields or Selected Fields.
9. If you chose Selected Fields, click Add Filter.

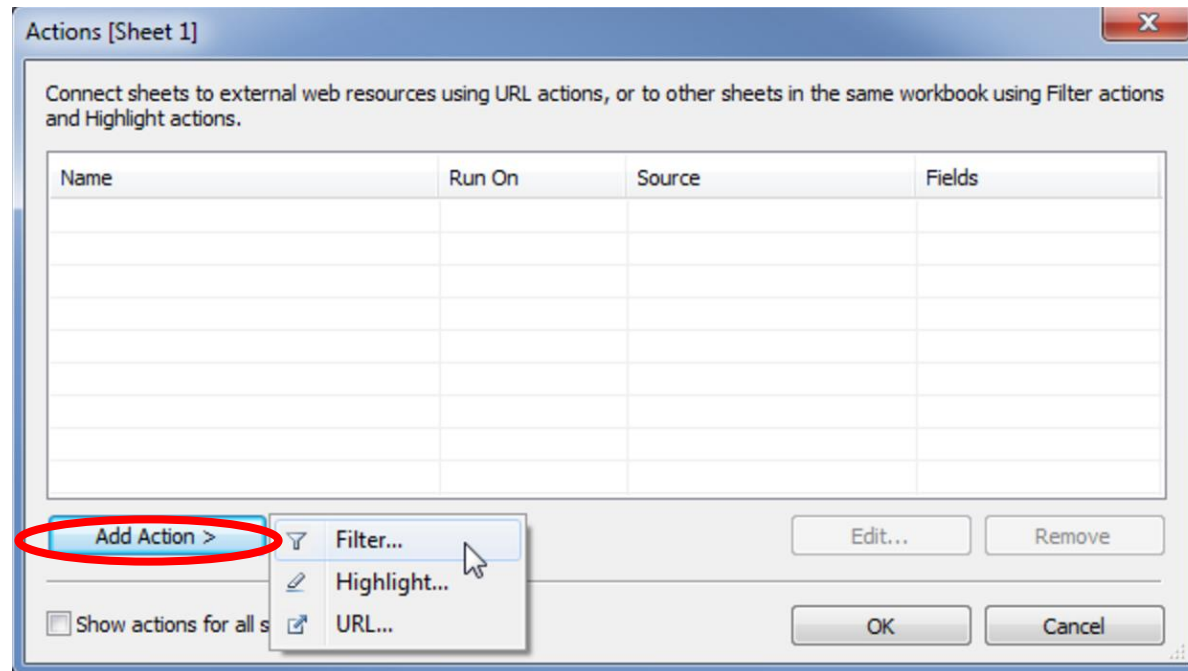
# Activity: Filter Actions

- Connect to global\_superstore\_2016.xlsx
- Add Filter action to create interaction around the worksheets

Time: 5 mins

# Highlight Action

- Highlight actions allow you to call attention to marks of interest by coloring specific marks and dimming all others. You can highlight marks in the view using a variety of tools. For example, you can manually select the marks you want to highlight, use the legend to select related marks, use the highlighter to search for marks in context or create an advanced highlight action.
- Highlight actions allow you to call attention to marks of interest by coloring specific marks and dimming all others.
- From a dashboard, select Dashboard -> Actions.



# URL Action



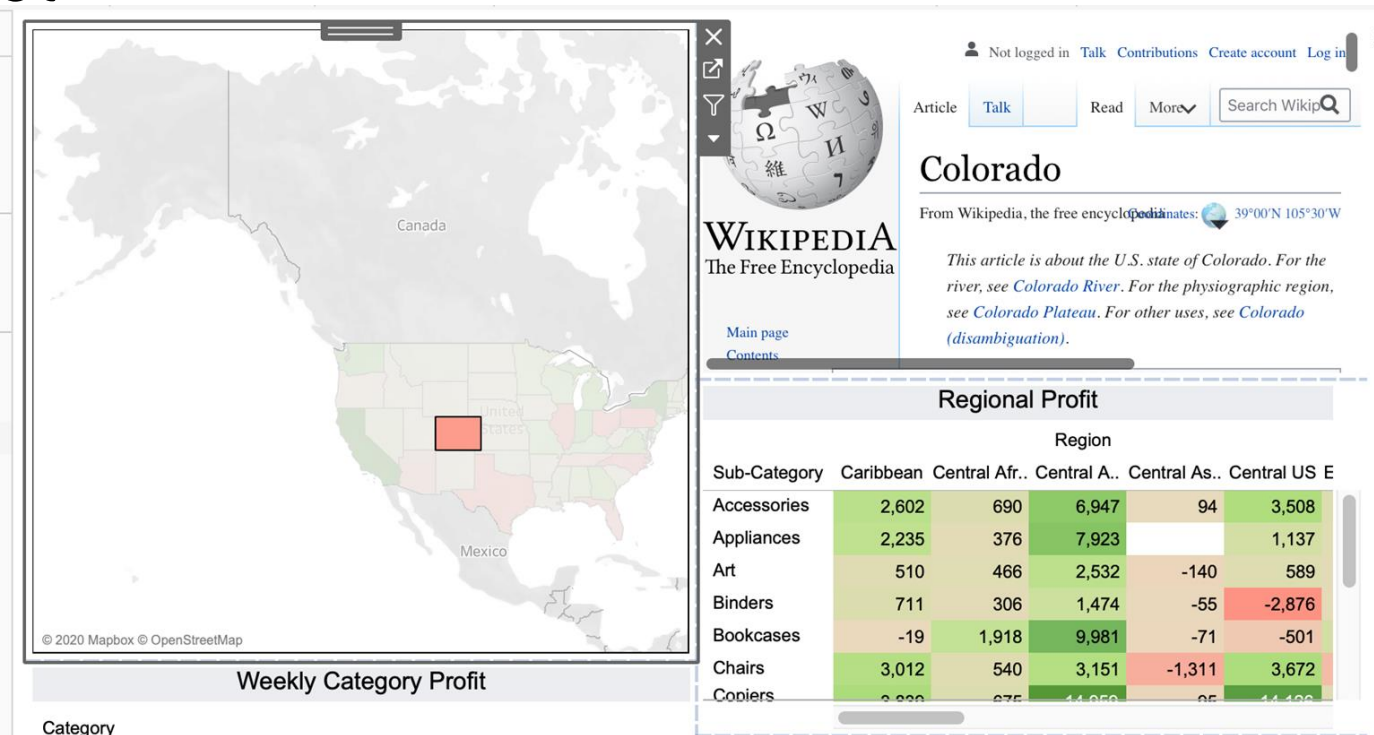
- A URL action is a hyperlink that points to a web page, file, or other web-based resource outside of Tableau.
- On a worksheet, select Worksheet >Actions. From a dashboard, select Dashboard >Actions.
- In the Actions dialog box, click Add Action and then select Go to URL.
- In the next dialog box, specify a name for the link.
- Use the drop-down list to select a source sheet or data source. If you select a data source or dashboard you can select individual sheets within it.
- Select how users will run the action.
- Specify the URL.
- For URL Target, specify where the link will open:



# Activity: URL Action

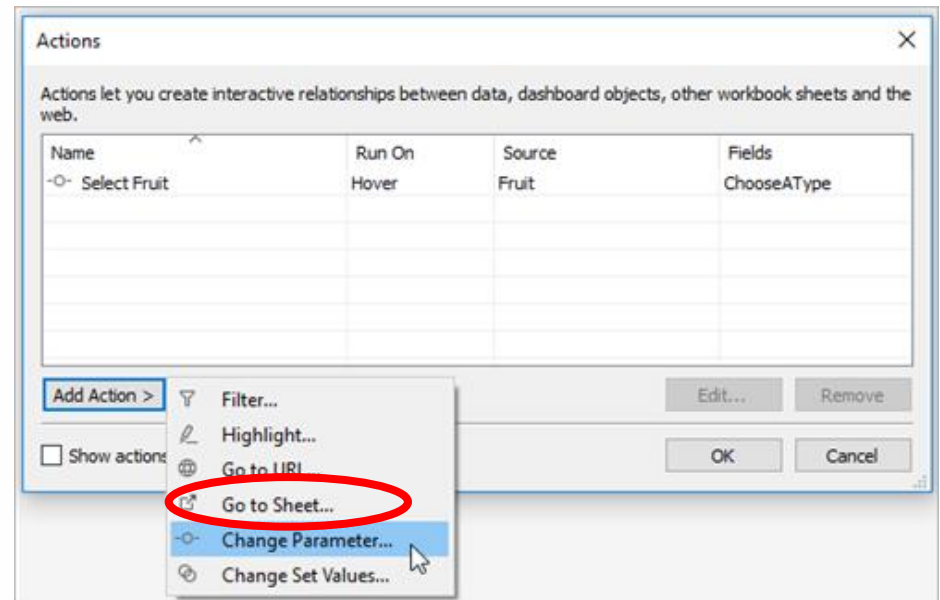
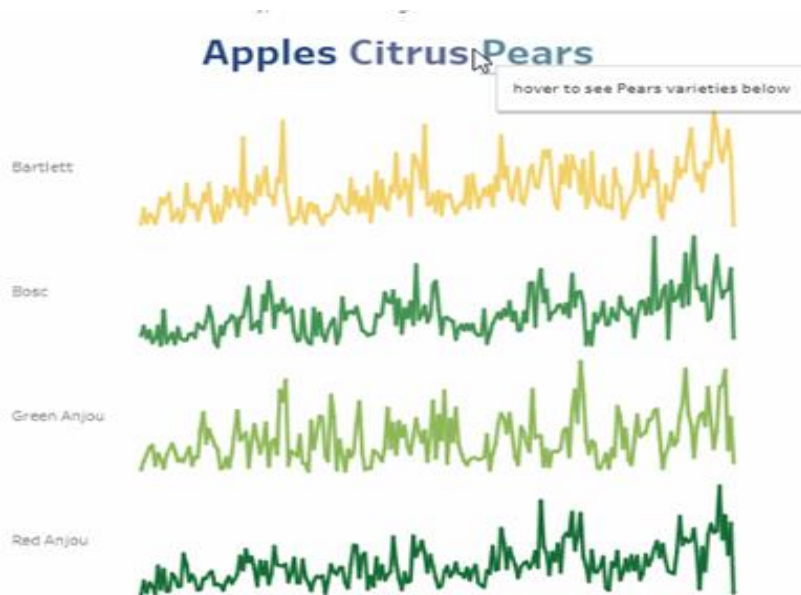
- Connect to global\_superstore\_2016.xls
- Add a web page object to the dashboard
- Add a URL action so that when you click on the state in US, the web page will be shown on the web page object

Time: 5 mins



# Parameter Actions

- Use parameter actions to let your audience change a parameter value through direct interaction with a viz, such as clicking or selecting a mark. You can use parameter actions with reference lines, calculations, filters, and SQL queries, and to customize how you display data in your visualizations.
- Parameter actions open up new possibilities for creating summary values and statistics without using calculations. You can configure parameter actions to let users select multiple marks that are automatically aggregated into a single parameter value.



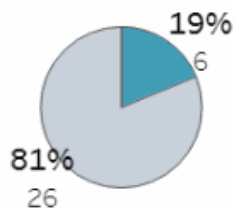
# Set Actions

Use set actions to let your audience interact directly with a viz or dashboard to control aspects of their analysis. When someone selects marks in the view, set actions can change the values in a set

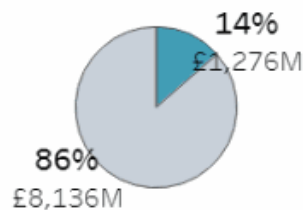
Market Value by Team in the 2018 World Cup



% of Teams

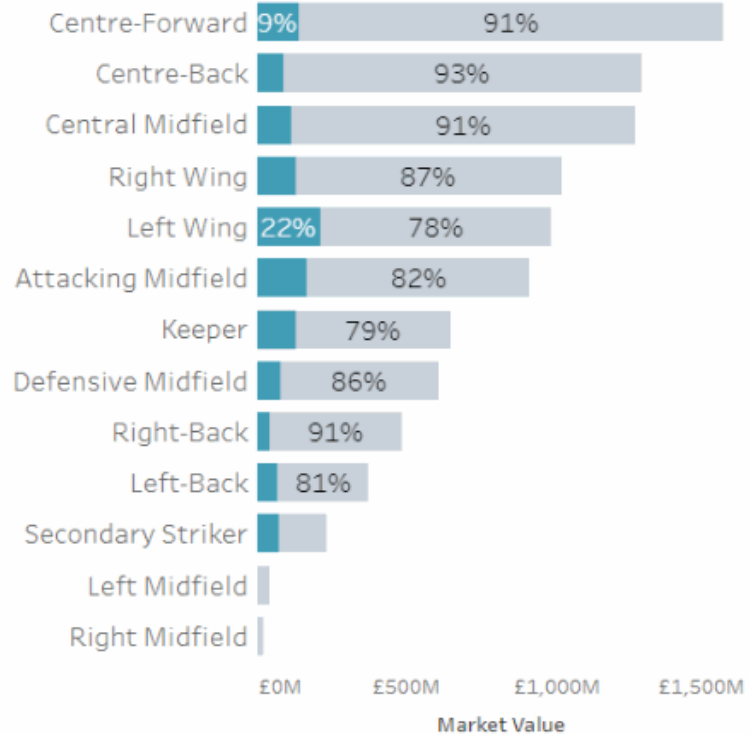


% of Market Value



Market Value by Position

Sort By

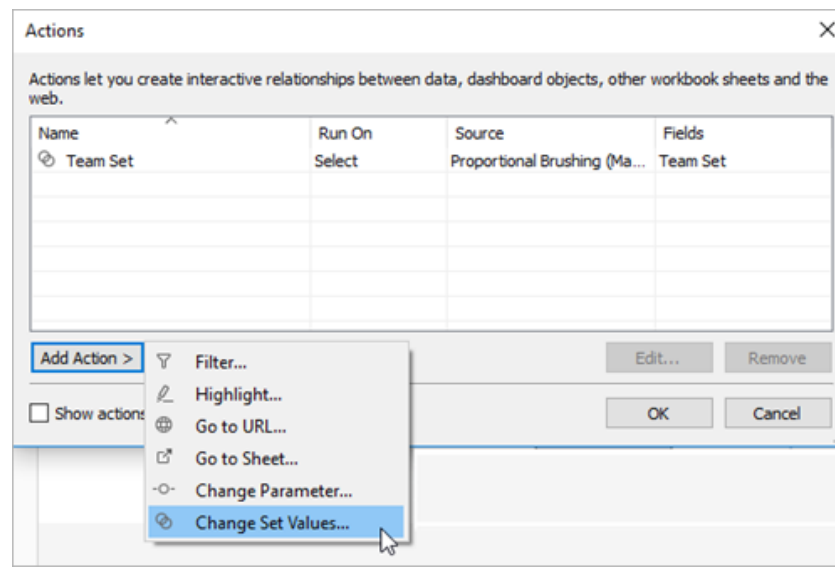


# General Steps for Set Actions

- Create one or more sets. The sets you create will be associated with the data source that is currently selected.
- Create a set action that uses one of the sets you created.
- Build a visualization that uses a set referenced by a set action.
- Test the set action and adjust its settings as needed to get the behavior you want your audience to experience.

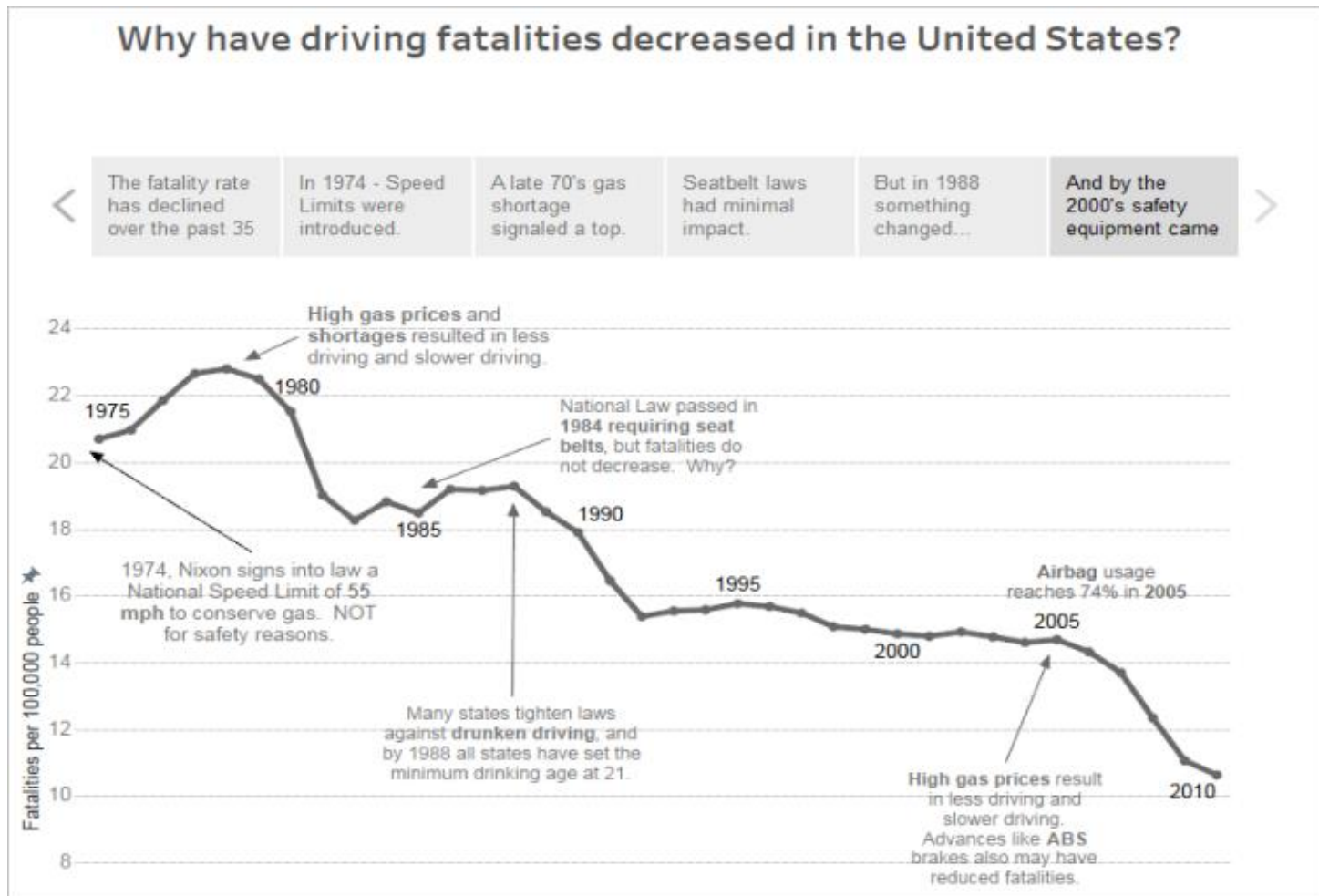
# Create a Set Action

- In a worksheet, select Worksheet >Actions.
- In the Actions dialog box, click Add Action and then select Change Set Values.
- In the Add/Edit Set Action dialog box, specify a meaningful name for the action.
- Select a source sheet or data source.
- Select how users will run the action.
- Specify the target set. First, select the data source, and then select the set.
- Specify what happens when the selection is cleared in the view
- Click OK to save your changes and return to the view.
- Test the set action by interacting with the visualization.




# Story

A story is a sheet that contains a sequence of worksheets or dashboards that work together to convey information



# Create a Story Point

- Click the New Story tab. 
- In the lower-left corner of the screen, choose a size for your story. Choose from one of the predefined sizes, or set a custom size, in pixels:
- By default, your story gets its title from the sheet name. To edit it, right-click the sheet tab, and choose Rename Sheet.
- To start building your story, double-click a sheet on the left to add it to a story point.
- Click Add a caption to summarize the story point.
- To further highlight the main idea of this story point, you can change a filter or sort on a field in the view.
- Add another story point

# Activity: Story

- Connect to global\_superstore\_2016.xlsx
- Present a story on how the company sales has expanded globally over the years

Time : 5 mins