

Menu & Quick Options

Data Fields

Rows & Columns Shelves

Filters Shelf - Interactive Filter

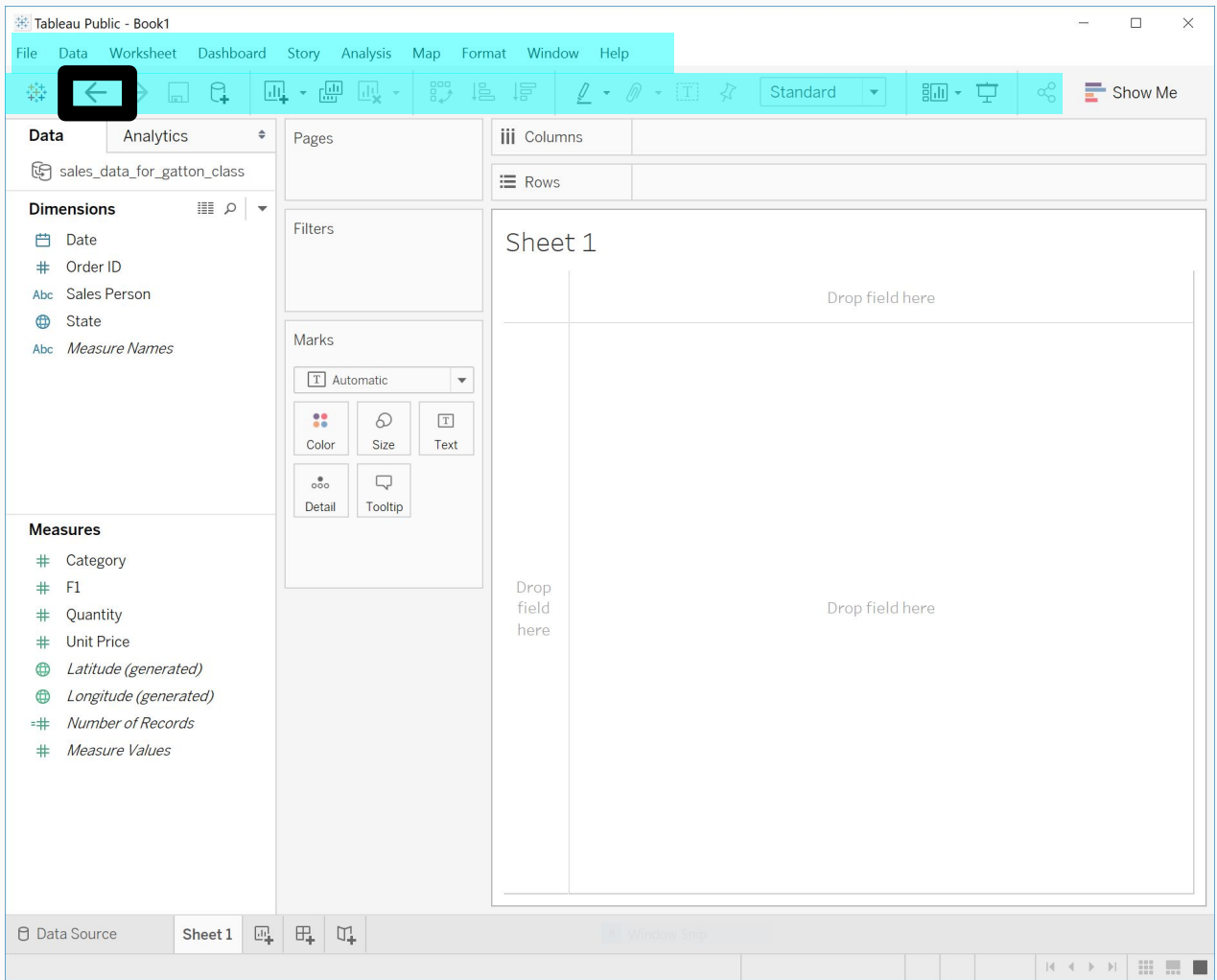
Marks Card - Legend

Pills

Viz Type Selector

Viz

Tabs / Worksheets



# Menus

Lots of options to manipulate data, customize formatting, print, save, etc.

# Quick-Options

Quickly select common options.

**UNDO** is the most important!!!!

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Window Help

Standard

Show Me

Data Analytics

Pages

Columns Sales Person Category

Rows SUM(Quantity)

Filters State: TN

Marks Automatic

Color Size Label

Detail Tooltip

Sales Person

AVG(Unit Price)

SUM(Number of Records)

SUM(Quantity)

SUM(Quantity)

Dimensions

- Category
- Color
- Date
- Order ID
- Sales Person
- State
- Measure Names

Measures

- F1
- Quantity
- Unit Price
- Latitude (generated)
- Longitude (generated)
- Number of Records
- Measure Values

Colored Bars

Sales Person

Quantity

Craig Fish MK

23% 101 38% 168 40% 179

State

- (All)
- IN
- KY
- MO
- OH
- TN
- WV

Sales Person

- Craig
- Fish
- MK

AVG(Unit Price)

- 11.220
- 12.000
- 13.000
- 14.000
- 14.545

Data Source Pivot Table 1 Pivot Table 2 Colored Bars Sheet 2 Sheet 4

3 marks 1 row by 3 columns SUM(Quantity): 448

Create visualizations by moving pills to different shelves, using the **Drag and Drop Interface**.

## Dimensions

# Category

Abc Color

📅 Date

# Order ID

Abc Sales Person

🌐 State

Abc *Measure Names*

## Measures

# F1

# Quantity

=# Total Price

# Unit Price

🌐 *Latitude (generated)*

🌐 *Longitude (generated)*

=# *Number of Records*

# *Measure Values*

# Data Fields

All the fields available in the data.

Split into two categories:

- **Dimensions**
  - Factors to split the data by
  - Usually strings, etc.
- **Measures**
  - Values to aggregate
  - Usually numeric

## Data Types

- Data types are indicated by symbols to the left
  - # : Numeric
  - Abc : String
  - Calendar : Date
  - Globe : Geographic
  - = : Calculated Field
- Defaults can be easily changed
  - R-Click for options

## Automatically Generated Fields

These are created by Tableau

*Number of Records* is used to count rows (very useful!)

*Measure Names* & *Measure Values* are used in complex viz's with multiple measures.

*Latitude* and *Longitude* are used for maps.

# Spreadsheet-Style Reports

- Move lots of dimensions onto the Rows Shelf.
  - Measures should be converted to Dimension, Discrete (R-Click on Pill)
- **By default, Tableau only allows 6 Dimensions.**
  - [Menu > Analysis > Table Layout > Advanced](#)

The screenshot shows the Tableau interface with a spreadsheet-style report. The Rows shelf contains the following dimensions: Order ID, Sales Person (group), Sales Person, Color, Category, Sub Category, Quantity, Unit Price, and Total Price. The data is displayed in a table with 9 columns and 8 rows.

Order ID	Sales Person (group)	Sales Person	Color	Category	Sub Category	Quantity	Unit Price	Total Price	
102934	Instructors	Craig	Red	1	A	2	\$13.68	\$27.36	1
103916	Instructors	Craig	Violet	2	F	3	\$15.55	\$46.65	1
111942	Fish	Fish	Green	3	D	11	\$10.21	\$112.31	1
113141	Fish	Fish	Indigo	2	D	8	\$11.73	\$93.84	1
115116	Fish	Fish	Blue	1	A	7	\$12.88	\$90.16	1
116557	Instructors	MK	Green	2	D	6	\$15.93	\$95.58	1
120955	Instructors	MK	Green	3	F	5	\$16.23	\$81.15	1
121631	Instructors	Craig	Orange	3	D	1	\$16.78	\$16.78	1

# Pivot Tables in Tableau

## Split by Dimensions

- Rearrange dimension pills to change the groupings

Tableau interface showing a pivot table. The Columns shelf contains 'Sales Person'. The Marks shelf contains 'SUM(Quantity)'. The mark type is 'Text'. The pivot table displays data for Sales Persons: Craig (497), Fish (704), and MK (1,403).

Pivot Table 1

Sales Person		
Craig	Fish	MK
497	704	1,403

Tableau interface showing a pivot table. The Columns shelf contains 'Color'. The Rows shelf contains 'Sales Person' and 'Category'. The mark type is 'Automatic'. The pivot table displays data for Sales Persons: Craig, Fish, and MK, grouped by Category (1-4). The mark type is 'AVG(Unit Price)'.

Tableau interface showing a pivot table. The Columns shelf contains 'Color'. The Rows shelf contains 'Sales Person' and 'Category'. The mark type is 'Automatic'. The pivot table displays data for Sales Persons: Craig, Fish, and MK, grouped by Category (1-4). The mark type is 'AVG(Unit Price)'.

Pivot Table 2

Sales Person	Category	Color						
		Blue	Green	Indigo	Orange	Red	Violet	Yellow
Craig	1	9.543	10.230	12.974	13.947	12.175	12.303	8.605
	2	11.506	10.477	9.210		9.630	11.287	14.740
	3	10.280	12.020	11.108	11.285	11.913	13.600	11.098
	4	10.075	11.765	12.842	11.125	12.573	13.310	11.353
Fish	1	14.918	14.556	12.360	12.740	15.177	16.205	12.177
	2	18.330	13.797	14.550	13.165	14.335	12.738	15.630
	3	13.508	13.258	12.923	14.192	14.145	12.778	13.314
	4	13.578	13.760	14.230	15.040	14.390	13.930	13.958
MK	1	14.404	14.985	12.817	14.626	15.183	14.256	15.259
	2	15.499	14.286	14.754	13.901	15.623	15.648	16.353
	3	16.881	14.539	14.557	14.745	14.455	15.401	12.684
	4	15.206	14.220	15.568	15.468	13.613	15.748	16.027

## Aggregate Measures

- Put pill on the Text shelf
  - Pill has "T" icon to left
- Can change aggregation type with R-Click / Triangle-Click
  - E.g., Sum, Average

Filters

Sales Person

Sheet 1

Sales Person

Color	Fish	MK
Blue	88	218
Green	109	220
Indigo	101	198
Orange	113	205
Red	84	148
Violet	80	234
Yellow	129	180

Marks

Automatic

Color Size Text

Detail Tooltip

SUM(Quantity)

Sales Person

- (All)
- Craig
- Fish
- MK

## Filter

- Drag Pills to Filters Shelf
- Filters all data on the worksheet
- Field does NOT need to be used elsewhere in the viz

R-Click > Edit Filter  
Select values to keep.

Filter [Sales Person]

General Wildcard Condition Top

Select from list  Custom value list  Use all

Enter search text

- Craig
- Fish
- MK

Sales Person

- Edit Filter...
- Remove Filter
- Apply to Worksheets
- Format Filters...
- Customize
- Show Title
- Edit Title...
- Single Value (list)
- Single Value (dropdown)
- Single Value (slider)
- Multiple Values (list)
- Multiple Values (dropdown)
- Multiple Values (custom list)
- Wildcard Match
- Only Relevant Values
- All Values in Database
- Include Values
- Exclude Values
- Hide Card

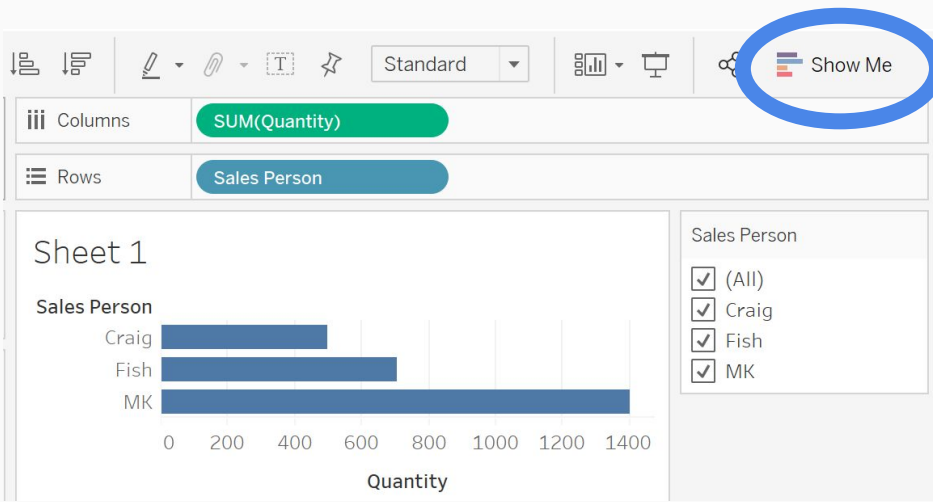
## Interactive Filter

R-Click > Show Filter

Triangle-Click the Filter for lots of options.

Particularly useful options:

- Filter Type
  - Single vs Multiple Value
  - (list) vs (dropdown)
- Apply filter to multiple worksheets
  - Particularly "All using this data source"

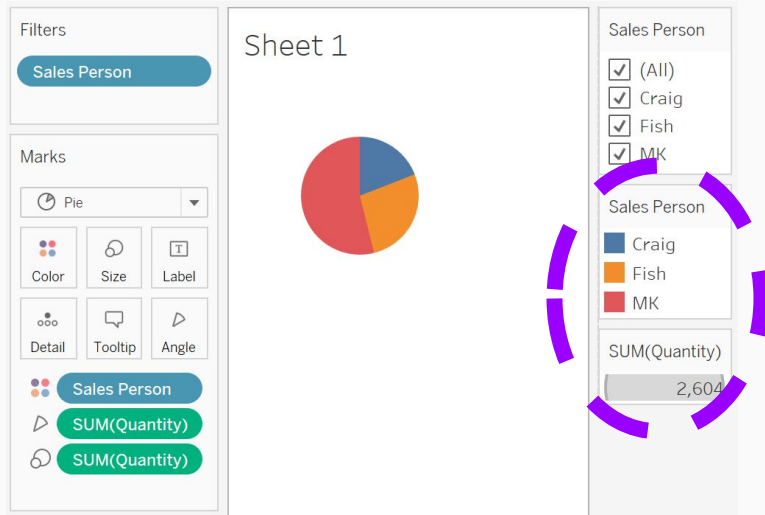


Use **Show Me** to easily change between visualization types.

Will Automatically move Pills to different Shelves

- Rearrange the Pills to change the Viz layout.

Adds color, size, etc. **Legends** to viz.



Look for Dimensions and Measures requirements at bottom of Show Me menu

For pie charts try

1 or more **Dimensions**

1 or 2 **Measures**



Pages

Columns

Sales Person

Rows

SUM(Quantity)

Filters

State: TN

Marks

Automatic



Color



Size



Label



Detail



Tooltip



Sales Person



AVG(Unit Price)



SUM(Number of Records)

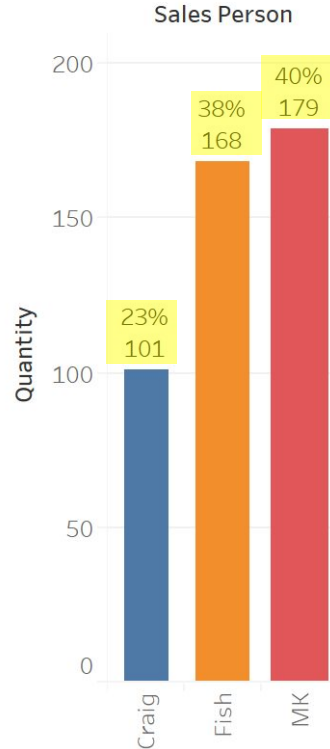


SUM(Quantity)



SUM(Quantity)

Colored Bars



State

- (All)
- IN
- KY
- MO
- OH
- TN
- WV

Sales Person

- Craig
- Fish
- MK

AVG(Unit Price)

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Use the **Marks Card** to add details to the Viz.

**Color**

**Size**

**Tooltip**

- Rollover text

**Title**

- Defaults to Tab name
- R-Click > Edit Title to edit

**Label**

- Percent of total
  - Triangle icon
  - R-Click > Quick Table Calculation > Percent of Total
- Format Numbers
  - R-click > Format -- Pane > Default > Numbers > Percentage

# Publish to Tableau Public web server

Menu > File > Save to Tableau Public

Creates a unique URL to workbook.

- Options to make it downloadable, viewable by others, etc.
- Uncheck the box Allow workbook and its data to be downloaded by others
- Check 'Show Workbook Sheets as Tabs'