

A Line Chart and Marks Cards, Encoding and LOD.

Sleeper Ch. 9, 10

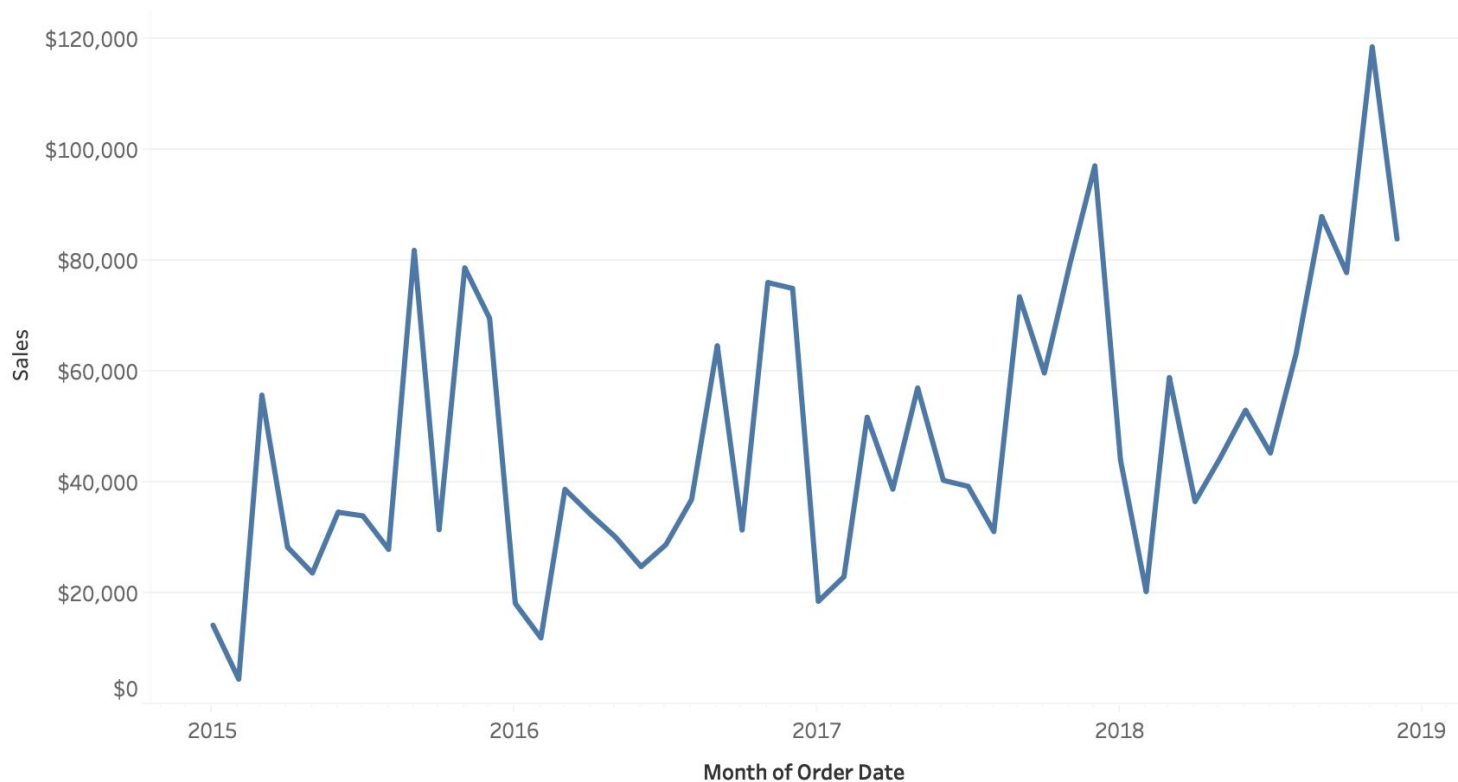
Monthly Sales Line Chart

Double-click on the **Sales** measure to add it to the **Rows** shelf.

Double-click on the **Order Date** to add it to the **Columns** shelf, drill down to **Month**:

- Columns: Month(Order Date)
- Rows: Sum(Sales)

Monthly Sales



The trend of sum of Sales for Order Date Month.

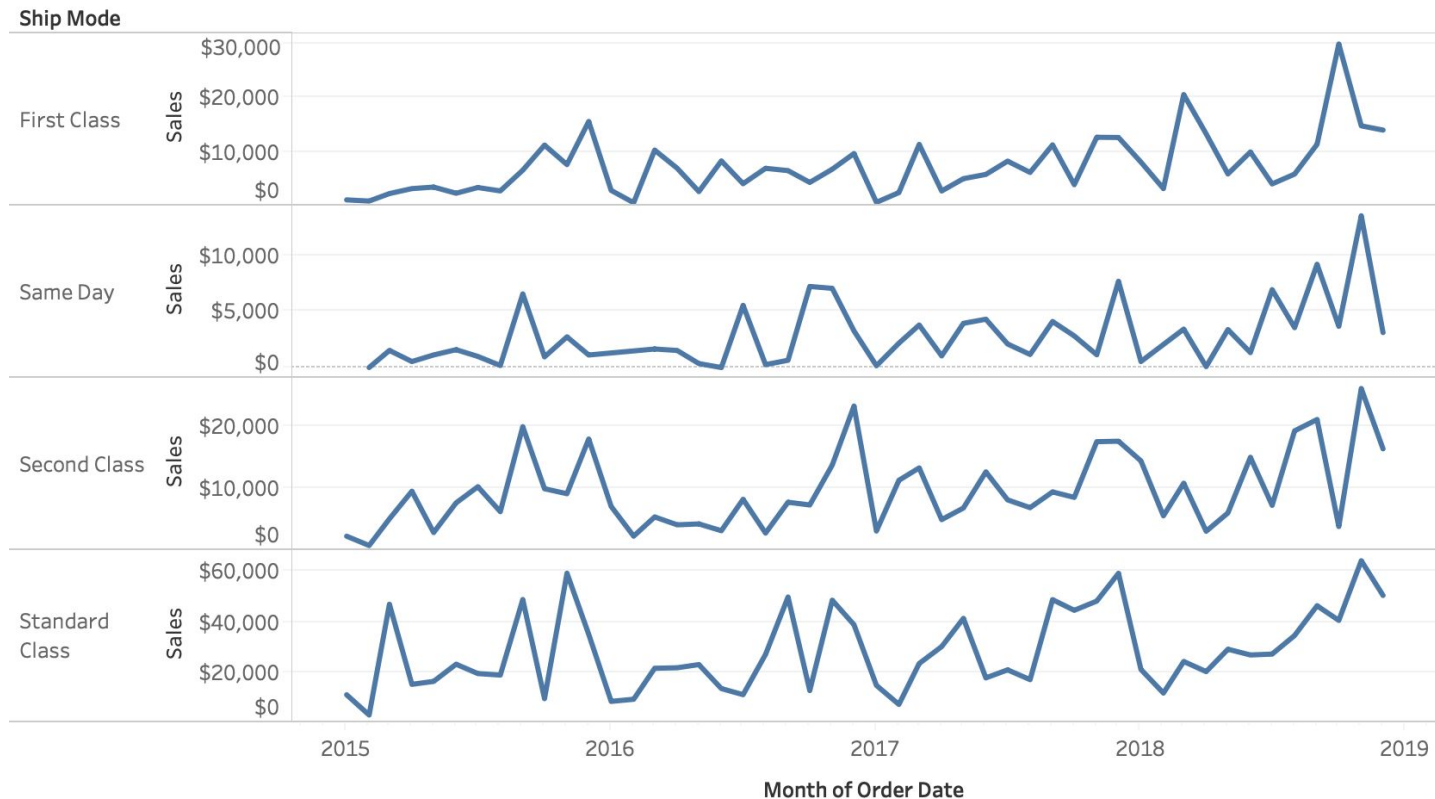
Monthly Sales by Ship Mode

Same Line Chart, this time broken down by **Ship Mode**:

- Columns: Month(Order Date)
- Rows: Ship Mode, Sum(Sales)

To configure for each of the four axes to have its own range of values, right-click on any of the axis objects > **Edit Axis...** > click **Independent axis ranges for each row or column**

Monthly Sales by Ship Mode



The trend of sum of Sales for Order Date Month broken down by Ship Mode.

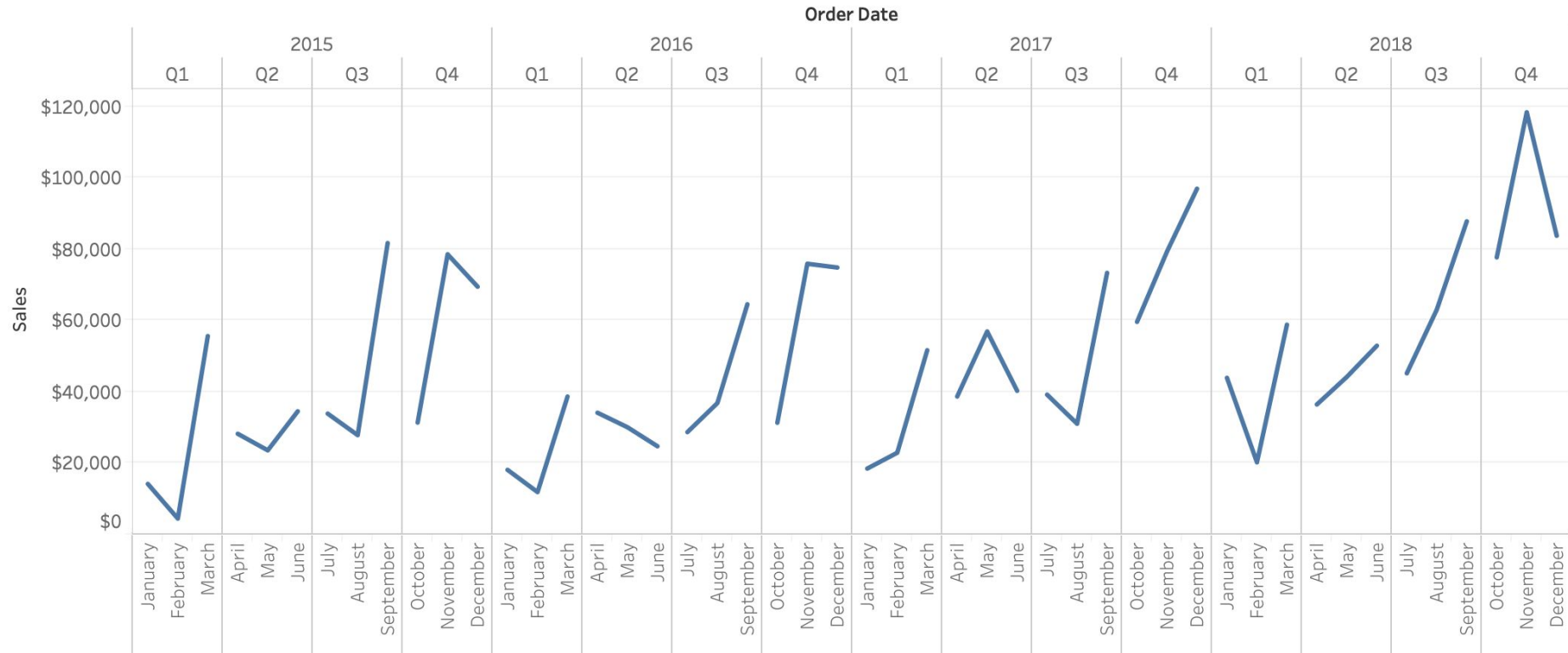
Monthly Sales (Discrete Order Date)

Discrete Date is a hierarchy: Year > Quarter > Month > Day

Drill down from **Year(Order Date)** to **Quarter** to **Month** by clicking on the plus sign '+' next to Year:

- Columns: **Year(Order Date)**, **Quarter(Order Date)**, **Month(Order Date)**
- Rows: **Sum(Sales)**

Monthly Sales (Discrete Date)

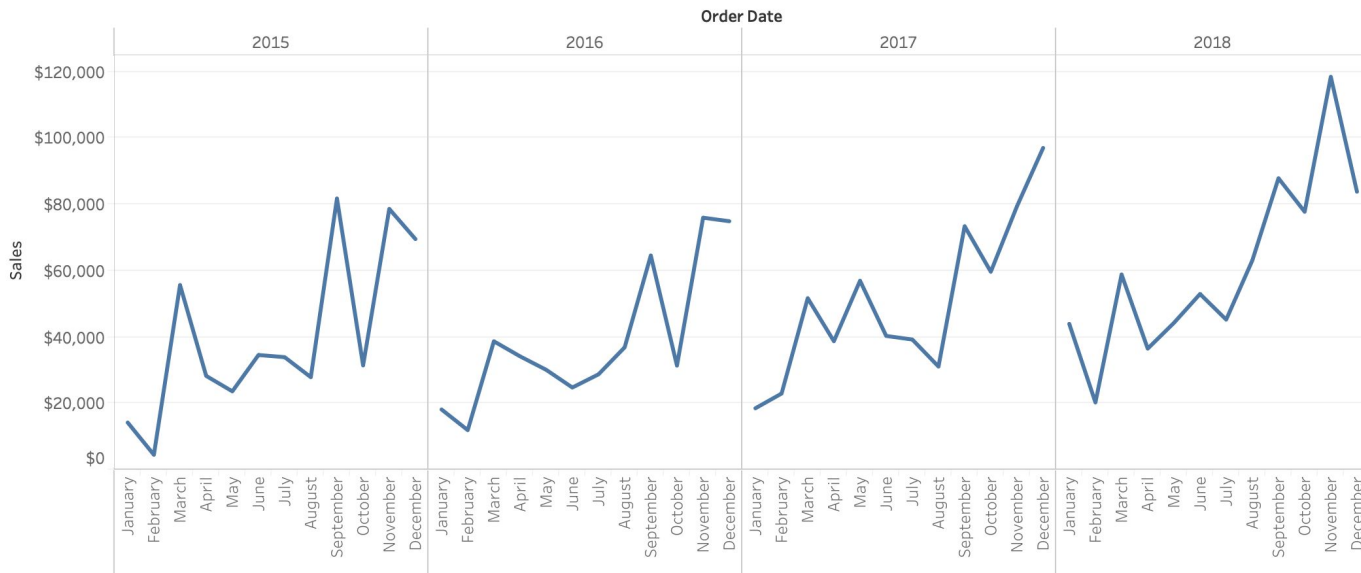


The trend of sum of Sales for Order Date Month broken down by Order Date Year and Order Date Quarter.

Monthly Sales - Quarter Removed

Same viz, this time without the Quarter – simply remove the **Quarter** pill from the **Columns** shelf:

Monthly Sales - Quarter Removed (Discrete Date)



The trend of sum of Sales for Order Date Month broken down by Order Date Year.

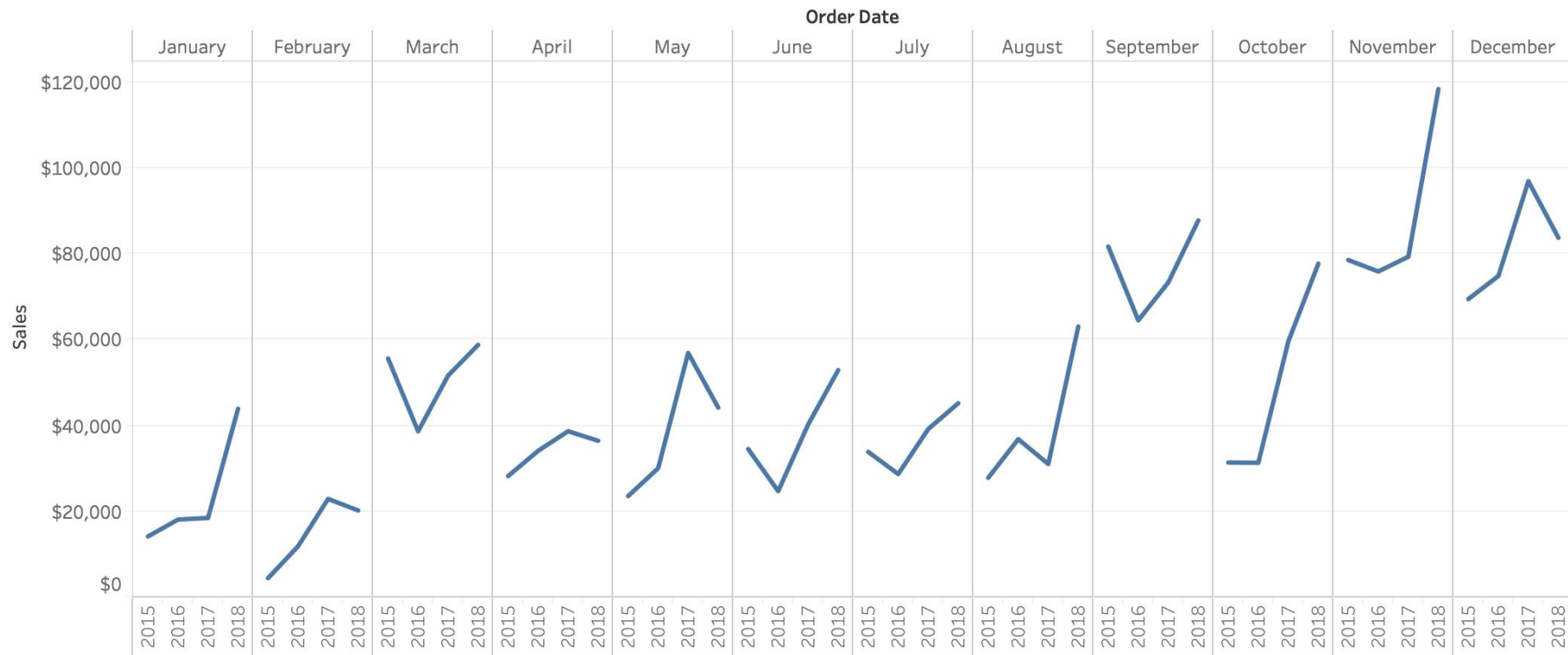
Four-Year Trend Per Month

Up until now, we have been looking at our data chronologically, from oldest to most recent.

Fields are processed in order, however, so switch the order of the pills on the **Columns** shelf:

- Columns: Month(Order Date), Year(Order Date)
- Rows: Sum(Sales)

Four-Year Trend Per Month



The trend of sum of Sales for Order Date Year broken down by Order Date Month.

The Marks Shelf and **Marks Cards** include the word “marks” because they change the marks, or data points, on a view.

LOD

Every visualization has a **level of detail** – the most granular level where the analysis takes place.

Create a scatterplot:

- Columns: `Sum(Sales)`
- Rows: `AGG(Profit Ratio)`

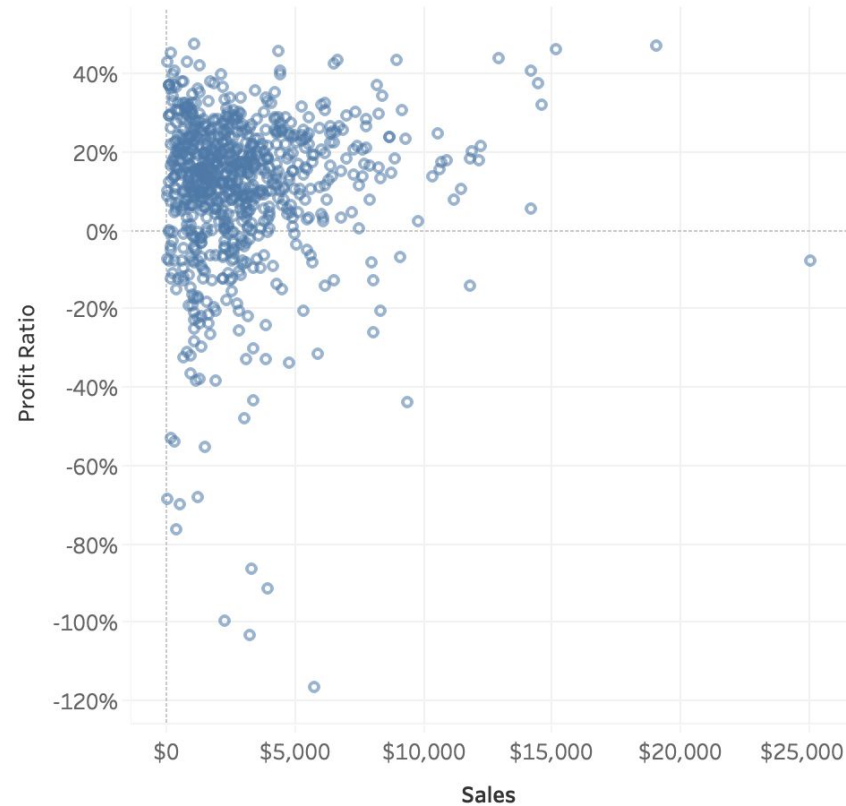
Customer Sales by Profit Ratio

Same scatterplot, we are going to change the level of granularity to Customer:

Drag *Customer Name* to the Detail Marks Card:



Customer Sales by Profit Ratio



Sum of Sales vs. Profit Ratio. Details are shown for Customer Name.

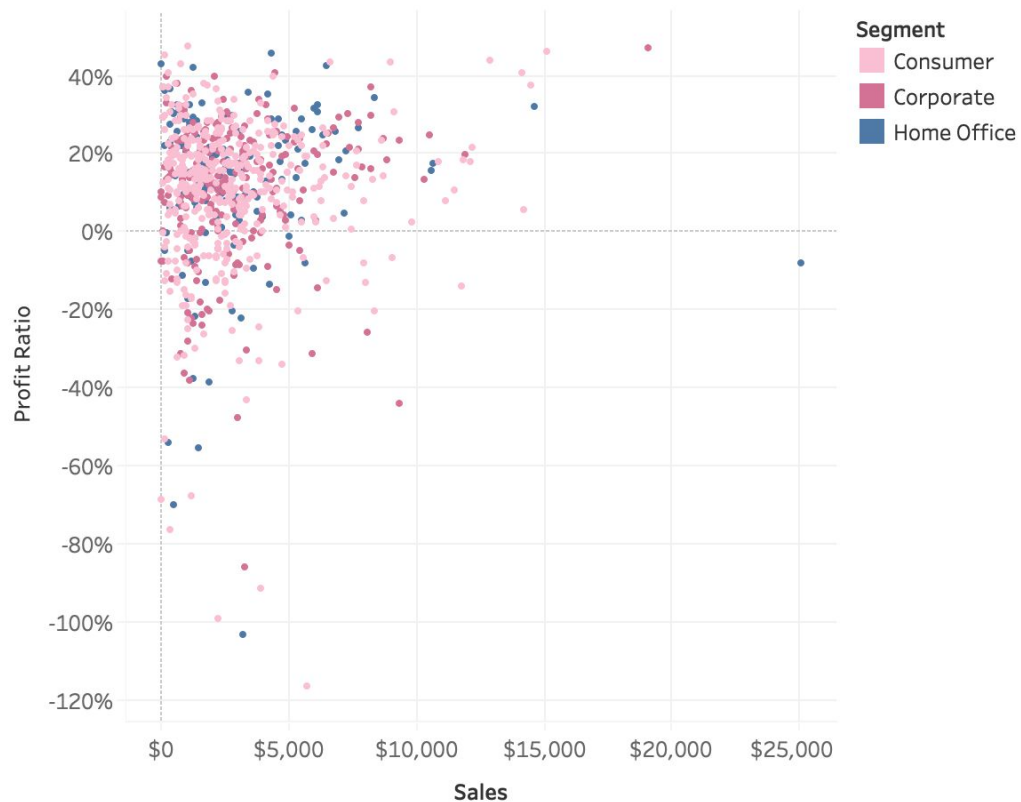
Marks Cards: Color, Size and Shape

Color, Size and Shape Marks Cards allow you to **encode** the marks on a view.

Same scatterplot, drag:

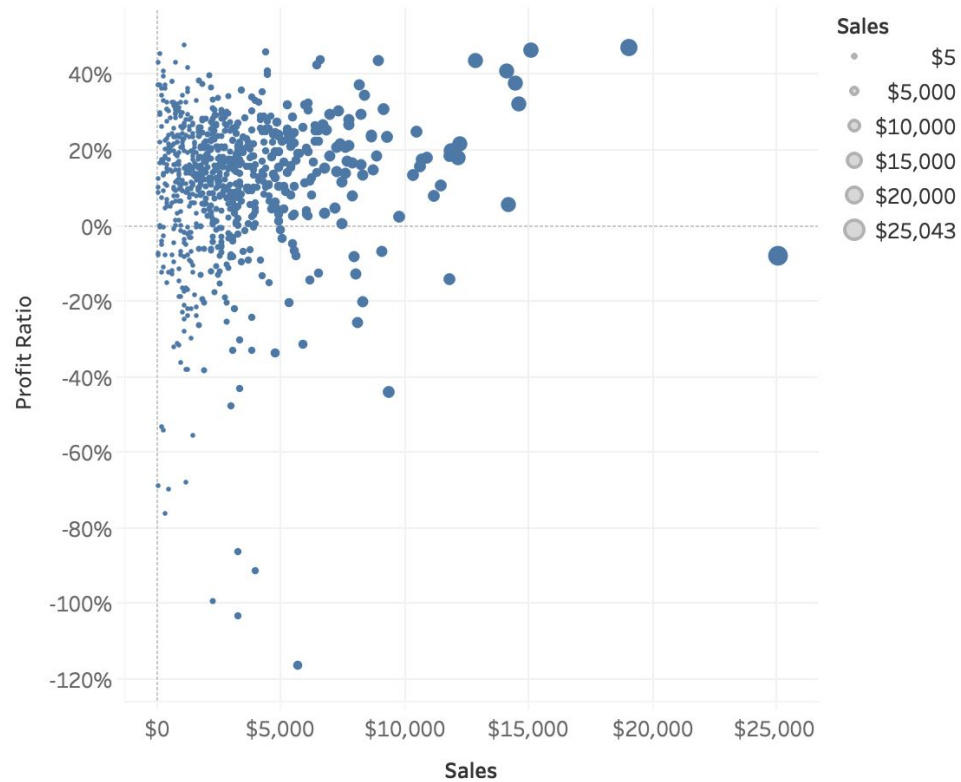
- **Segment** to the **Color** Marks Card
- **Sales** to the Size **Marks** Card
- **Category** to the **Shape** Marks Card

Color Marks Card - Segment



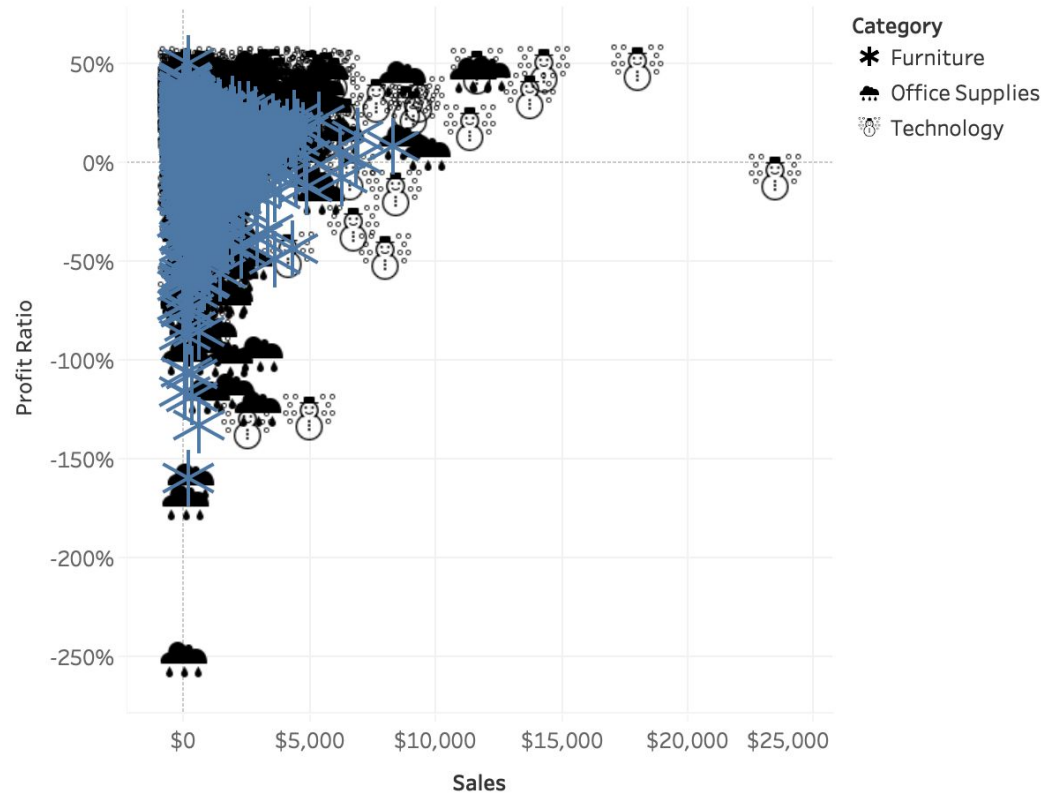
Sum of Sales vs. Profit Ratio. Color shows details about Segment. Details are shown for Customer Name.

Size Marks Card - Sales



Sum of Sales vs. Profit Ratio. Size shows sum of Sales. Details are shown for Customer Name.

Shape Marks Card - Category



Sum of Sales vs. Profit Ratio. Shape shows details about Category. Details are shown for Customer Name.

Label Marks Card vs Tooltip Marks Card

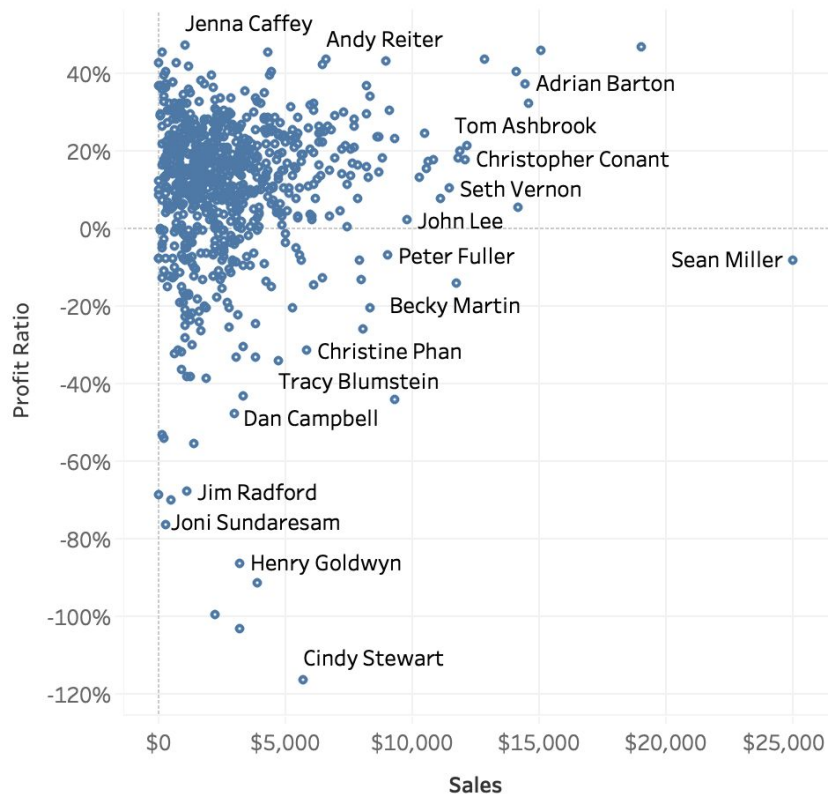
Both Marks Cards will display text on the view:

Label Marks Card – info is shown on the view;

Tooltip Marks Card – info is shown on the view **when a user hovers** over the mark;

Same scatterplot, drag **Customer Name** to the **Label** Marks Card.

Label Marks Card - Customer Name



Sum of Sales vs. Profit Ratio. The marks are labeled by Customer Name. Details are shown for Customer Name.