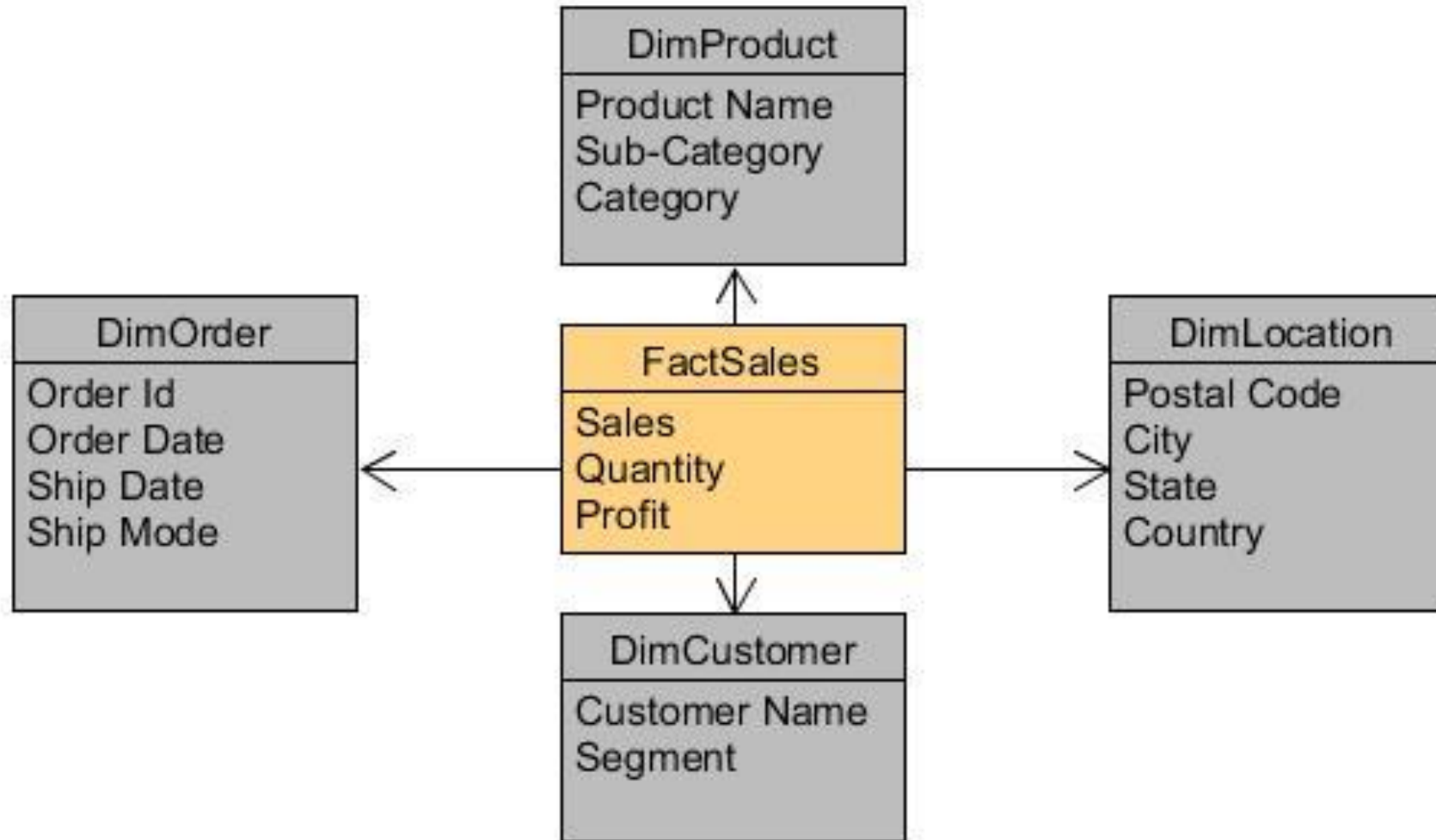


Tableau - Exercises

Prof. Dr. Ingo Claßen

Multidimensional Data Model (Data Cube)



Saved Data Sources: *Sample - Superstore*

The screenshot shows the Tableau Desktop interface. On the left, the 'File' menu is open, and the 'Saved Data Sources' option is highlighted with a blue arrow. Under 'Saved Data Sources', the 'Sample - Superstore' option is circled in red. The main workspace displays a grid of 'Open' workbooks, including 'Completed Twitt...', 'In-class...', 'ccrime-star', 'ccrime-star-basis', 'ccrime-pbi', 'final_Tableau C...', 'chicago-crime', 'Create Spider M...', 'chicago-crime', 'foodm', 'chicago-crime', 'Cell Coloring', 'chicago-crime', 'RegionalSalesA...', and 'Superstore'. The right sidebar contains a 'Discover' section with links for 'Training', 'Viz of the Week', 'Resources', and 'Forums'. An orange banner at the bottom right says 'Update to 2019.1.3 Now'.

Tableau - Book3

File Data Server Help

Microsoft Excel
Text file
JSON file
Microsoft Access
PDF file
Spatial file
Statistical file
More...

To a Server
Tableau Server
Microsoft SQL Server
MySQL
Amazon Redshift
Oracle
More...

Saved Data Sources
Sample - EU Superstore
Sample - Superstore
World Indicators

Open

Completed Twitt... In-class... ccrime-star ccrime-star-basis ccrime-pbi

final_Tableau C... chicago-crime Create Spider M... chicago-crime foodm

chicago-crime Cell Coloring chicago-crime RegionalSalesA... Superstore

More Samples

Discover

Training
View all 87 training videos

Viz of the Week
Explore viz of the week

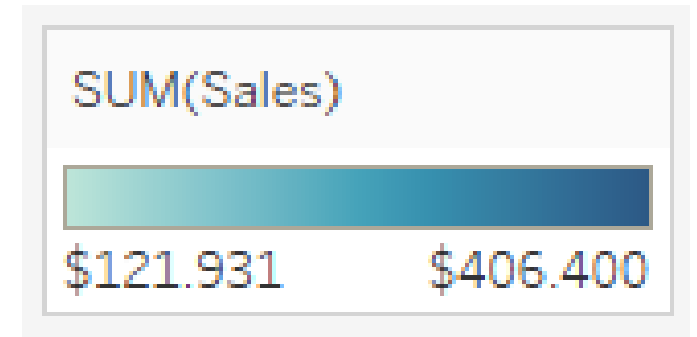
Resources
Get Tableau Prep
Blog - Parameter actions (now in beta) extend Tableau interactivity: Here's how and wh...

Forums

Update to 2019.1.3 Now

Highlight Table

| Category | Segment | | |
|-----------------|-----------|-----------|-------------|
| | Consumer | Corporate | Home Office |
| Furniture | \$391.049 | \$229.020 | \$121.931 |
| Office Supplies | \$363.952 | \$230.676 | \$124.418 |
| Technology | \$406.400 | \$246.450 | \$183.304 |



Table

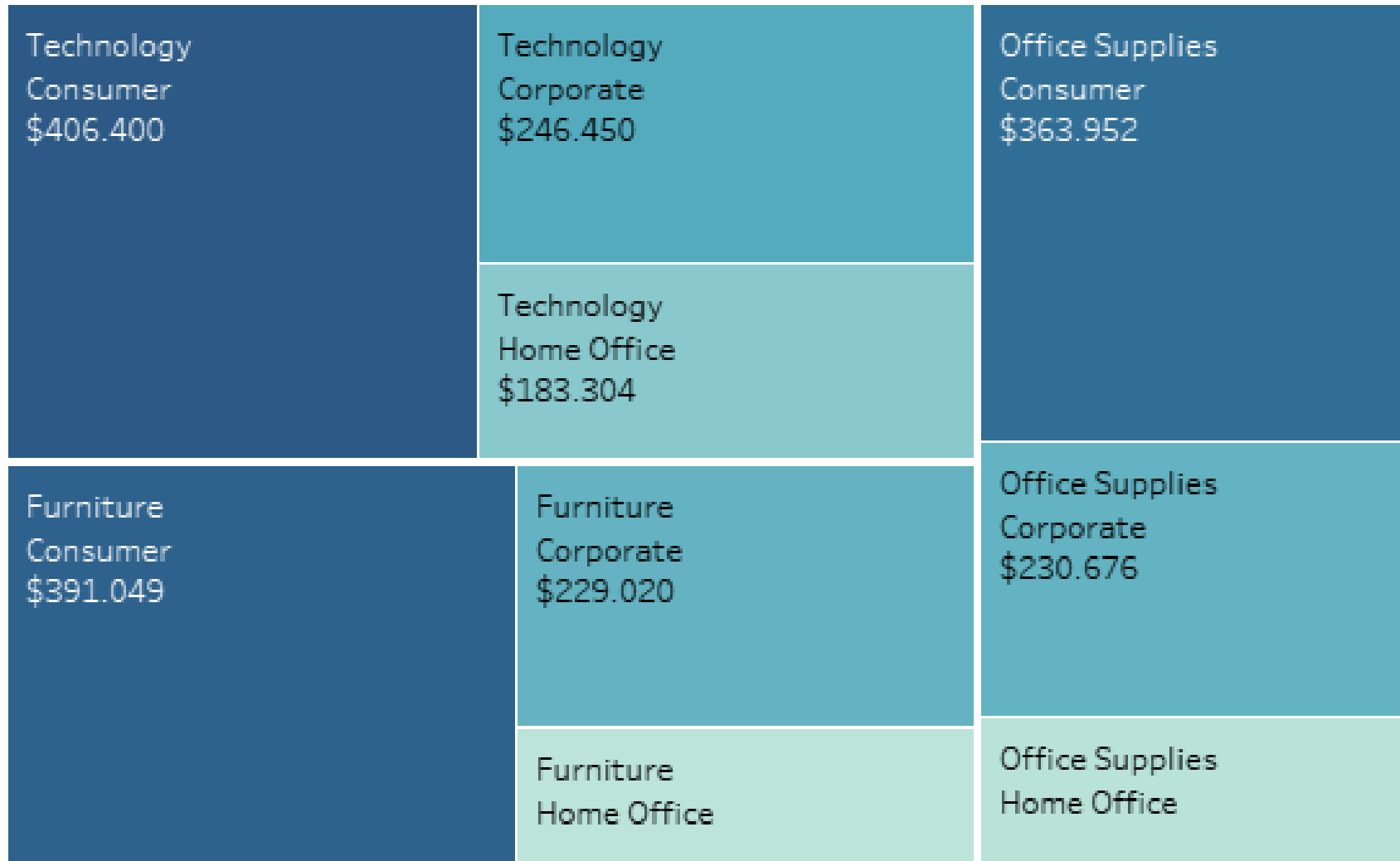
- Measure Names and Measure Values

| Category | Discount | Number of Records | Profit | Profit Ratio | Quantity | Sales |
|-----------------|----------|----------------------|-----------|--------------|----------|-----------|
| Furniture | 17% | 2,121 | \$18,451 | 2% | 8,028 | \$742,000 |
| Office Supplies | 16% | 6,026 | \$122,491 | 17% | 22,906 | \$719,047 |
| Technology | 13% | 1,847 | \$145,455 | 17% | 6,939 | \$836,154 |

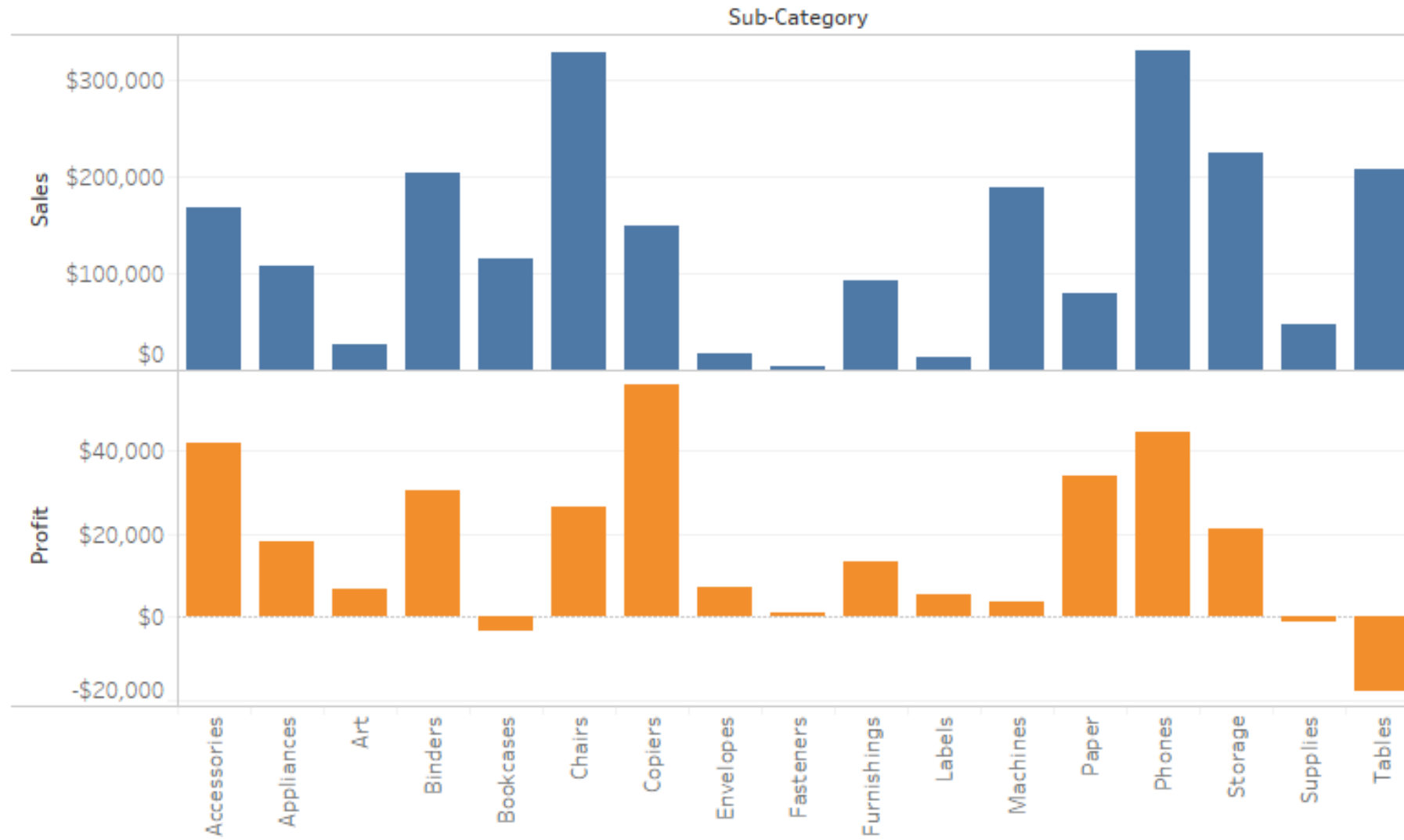
Bubble Chart



Tree Map

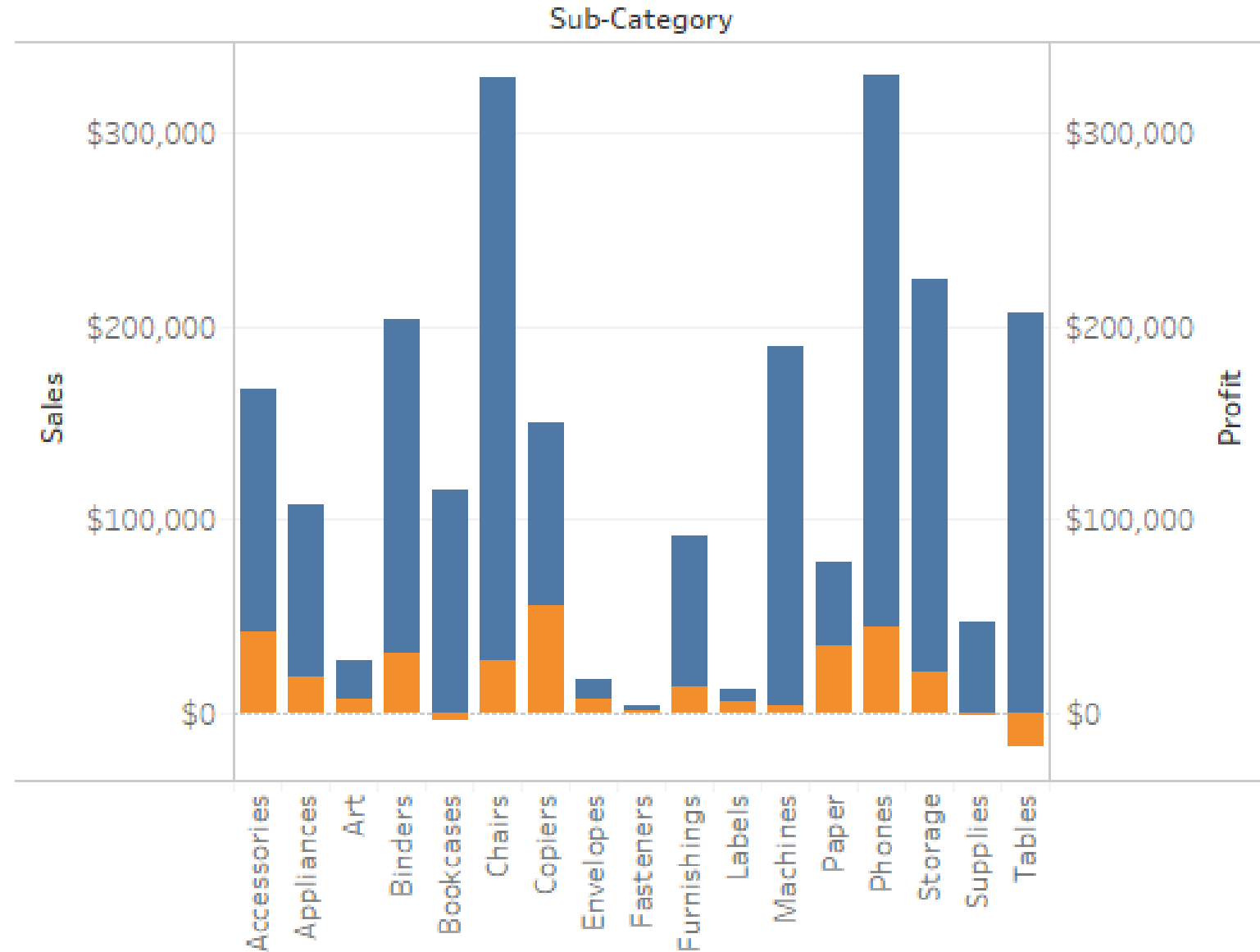


Two Barcharts in one report

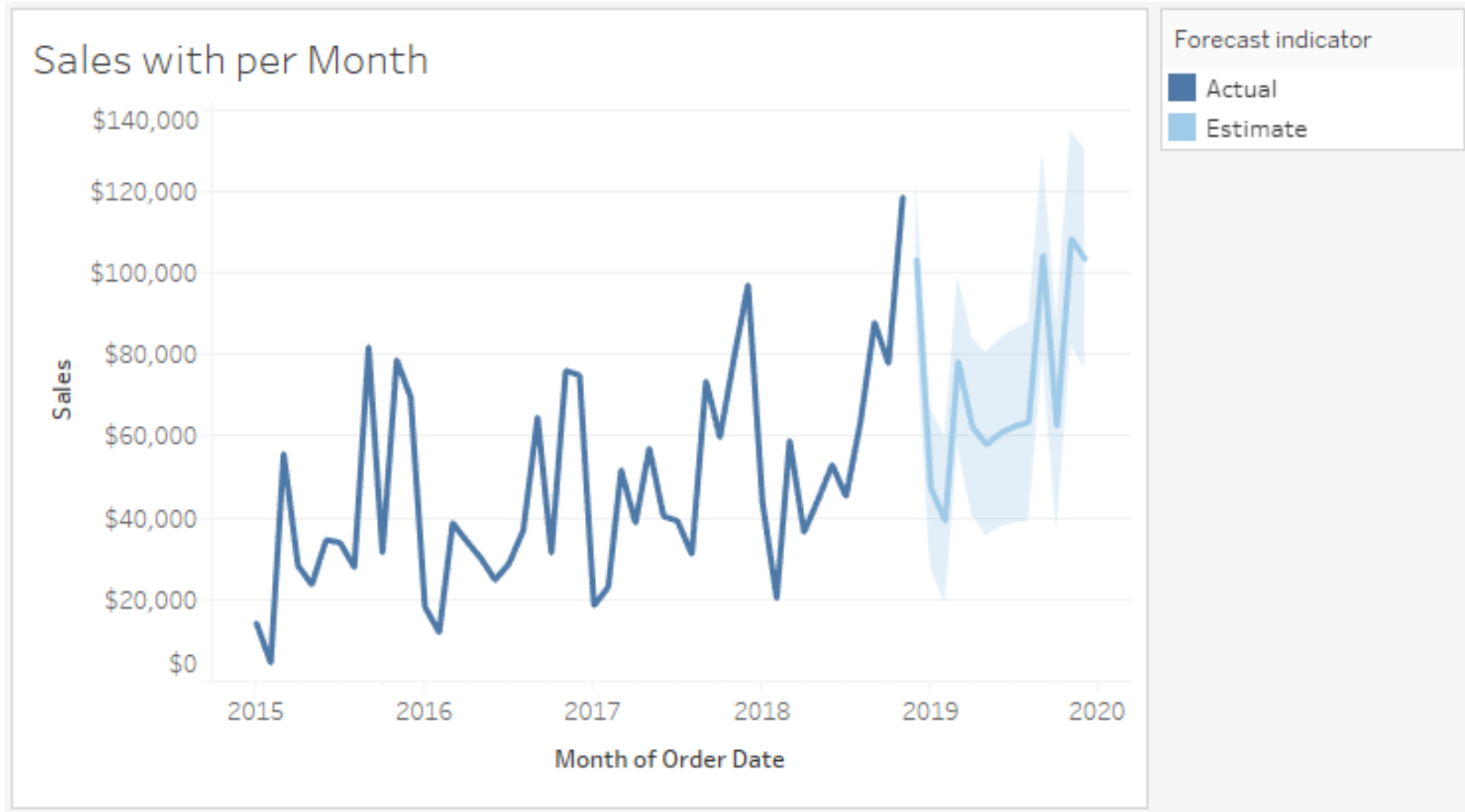


Two Barcharts in one report

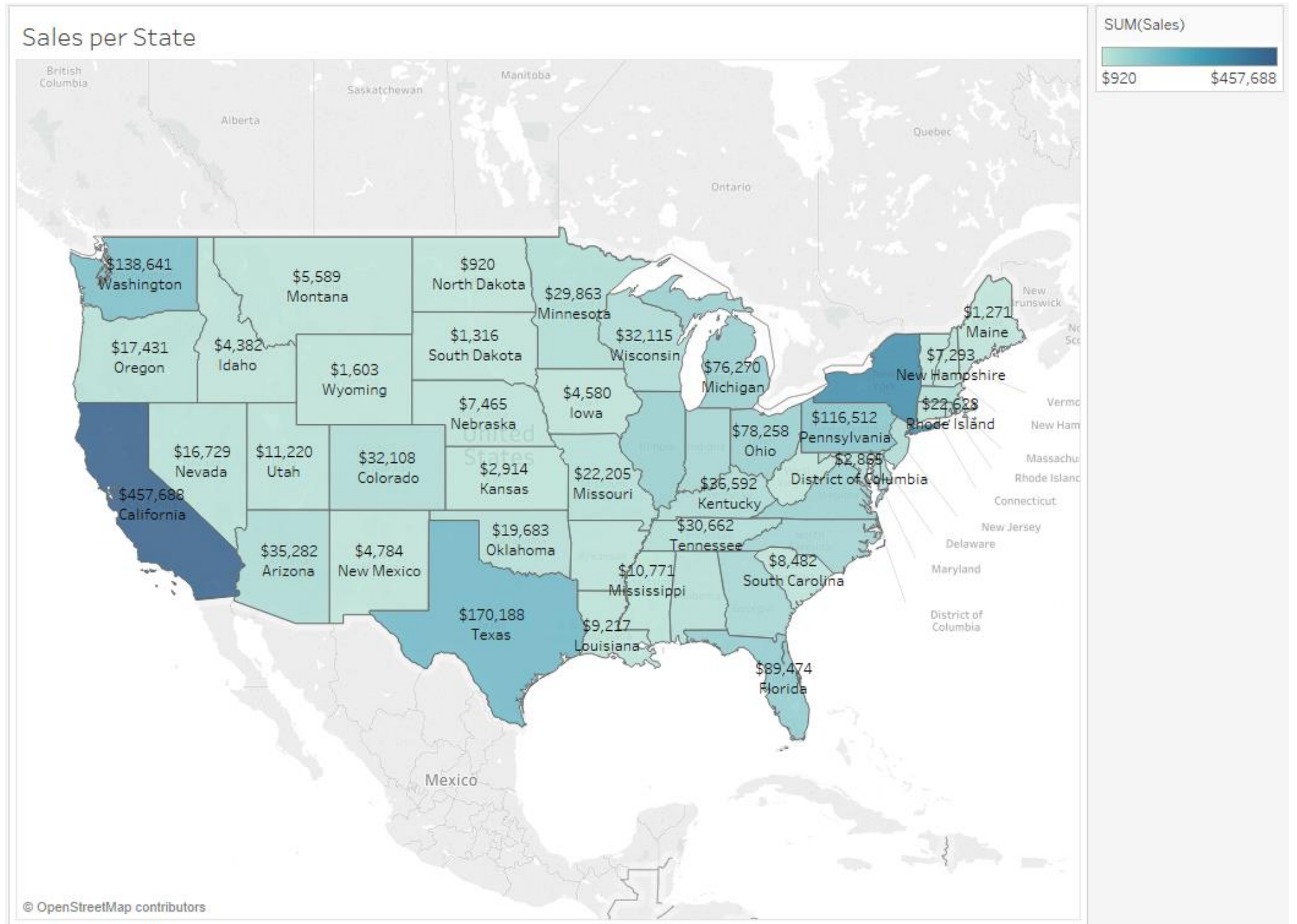
- Dual axes
- Synchronize Axis



Line Diagram – with Forecast

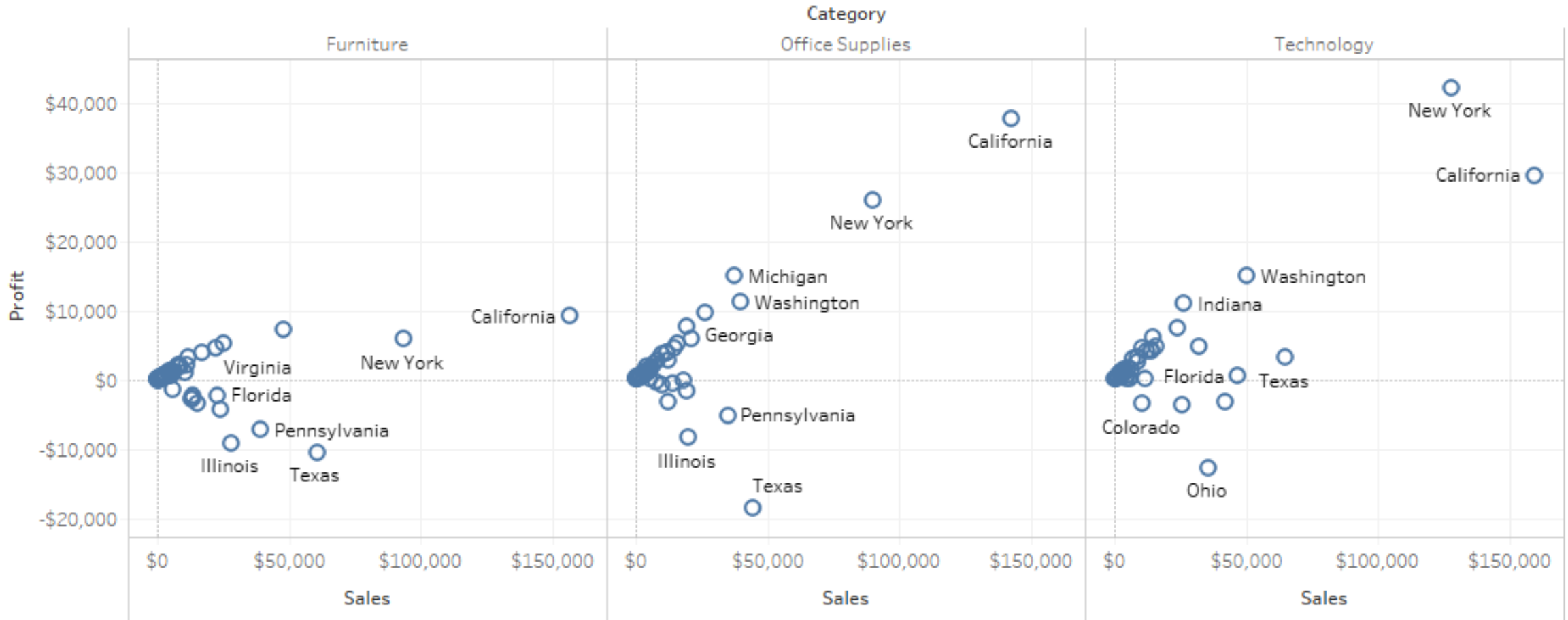


Maps



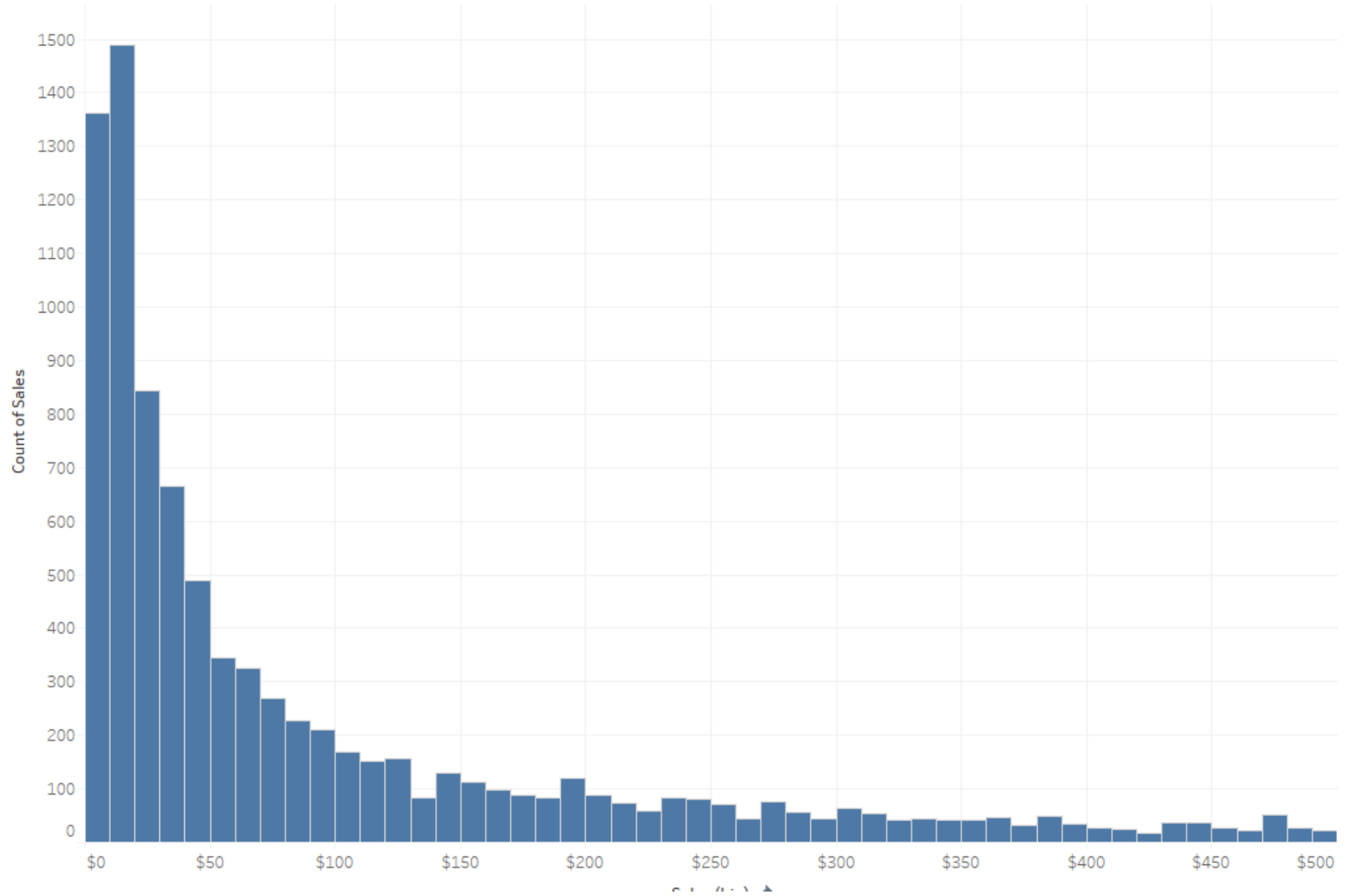
Scatter Plots

- Per Category on state level



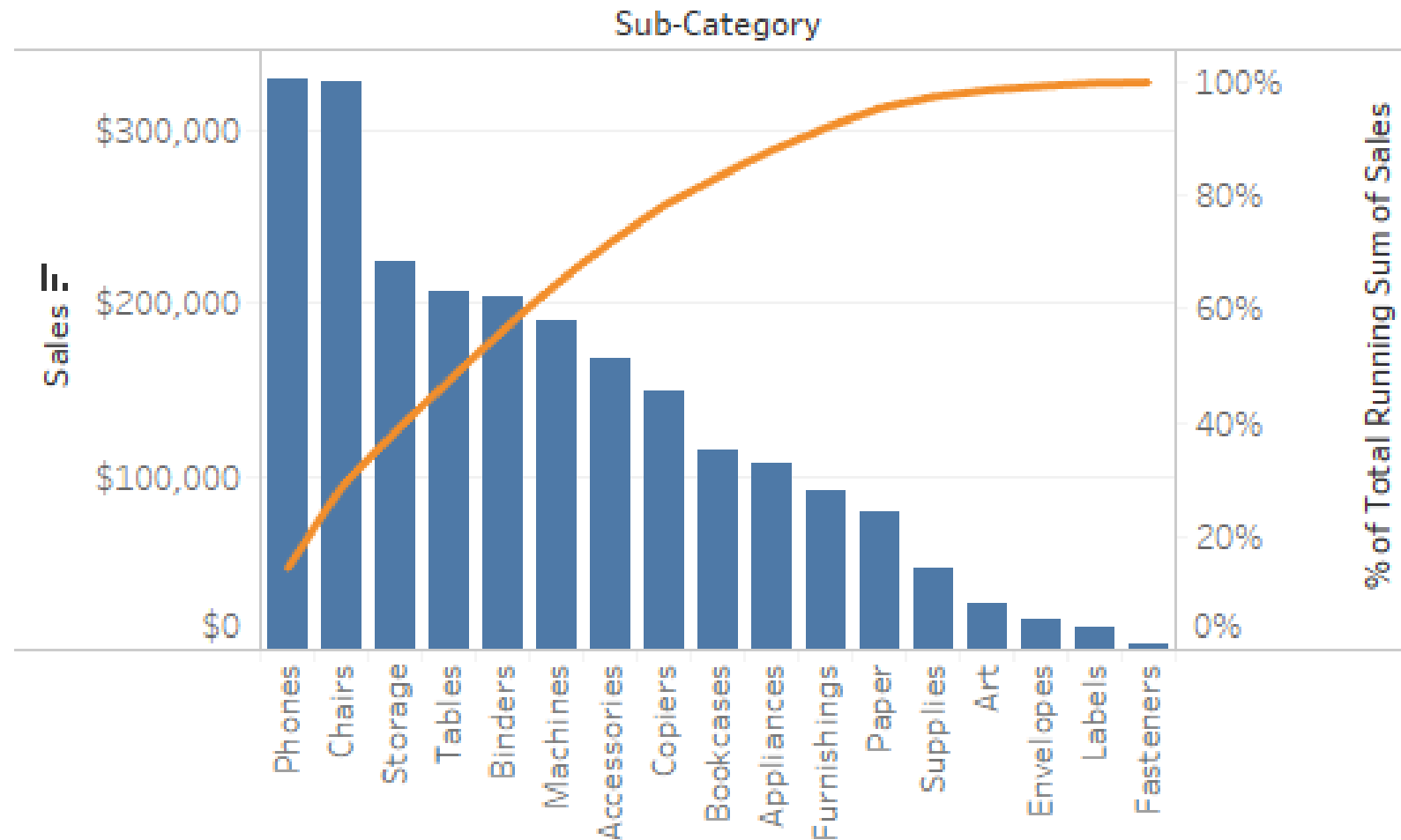
Histogram

- Bin size 10
- Edit axis fixed end 500

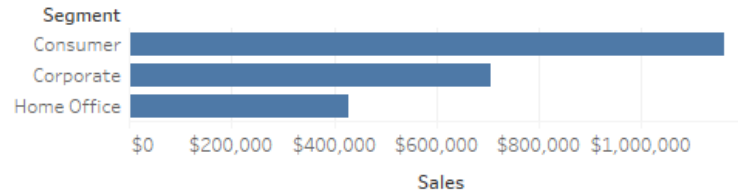


Combined Bar/Line Chart

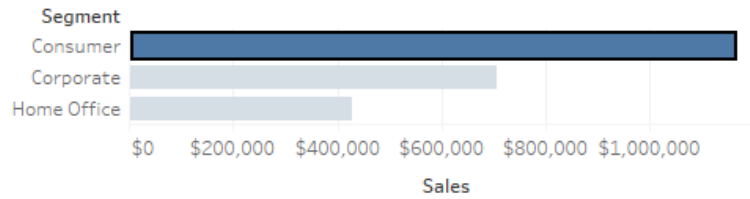
- Secondary table calculation
- Dual axes



Highlight Action

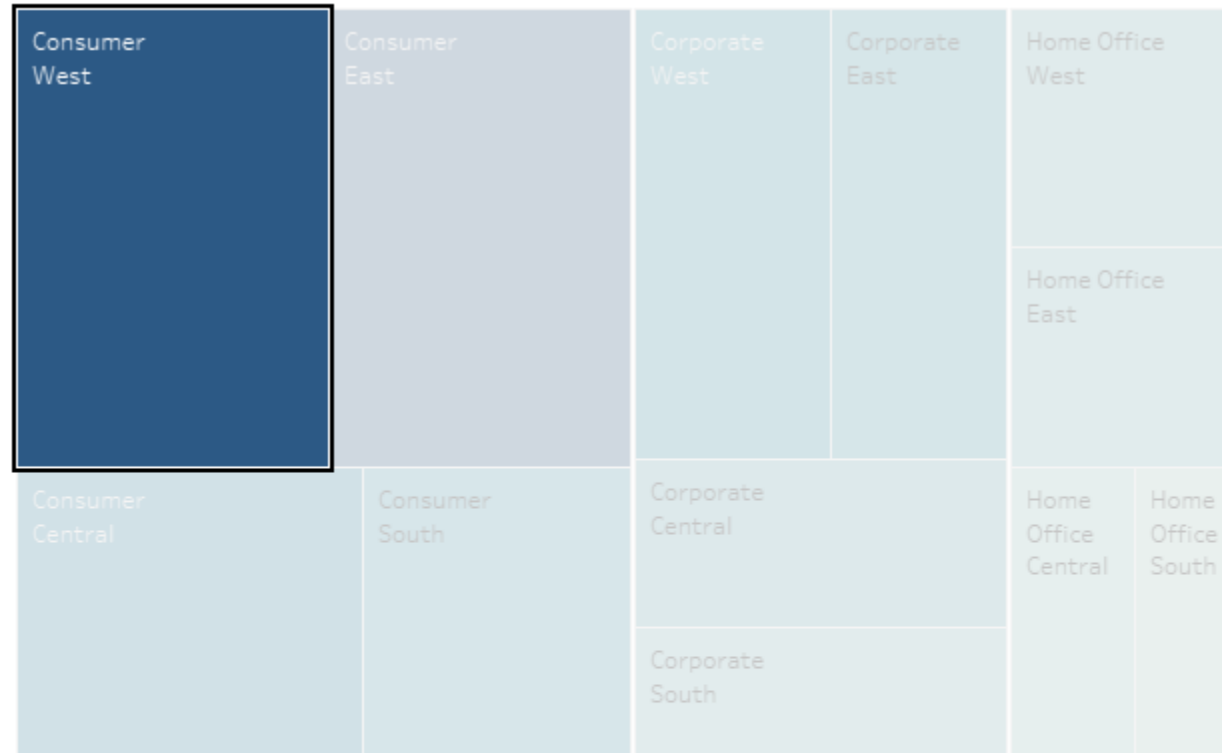


| | | |
|----------------------------------|-------------------------------------|--|
| Technology Consumer \$406,400 | Technology Corporate \$246,450 | Office Supplies Consumer \$363,952 |
| | Technology Home Office \$183,304 | |
| Furniture Consumer \$391,049 | Furniture Corporate \$229,020 | Office Supplies Corporate \$230,676 |
| | Furniture Home Office | Office Supplies Home Office |



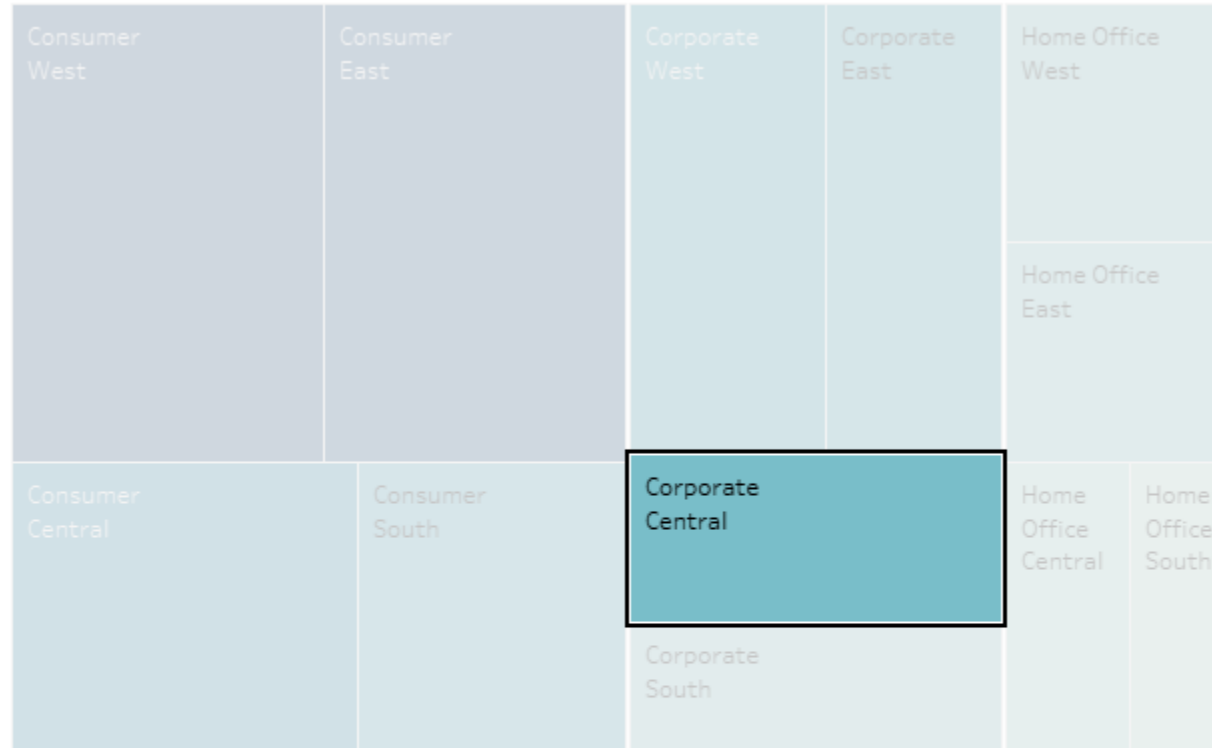
| | | |
|----------------------------------|-------------------------------------|--|
| Technology Consumer \$406,400 | Technology Corporate \$246,450 | Office Supplies Consumer \$363,952 |
| | Technology Home Office \$183,304 | |
| Furniture Consumer \$391,049 | Furniture Corporate \$229,020 | Office Supplies Corporate \$230,676 |
| | Furniture Home Office | Office Supplies Home Office |

Filter Action 1



| Customer Name | Segment | Region | Year of Ord.. | Profit | Sales |
|--------------------|----------|--------|---------------|--------|-------|
| Aaron Bergman | Consumer | West | 2015 | \$15 | \$310 |
| Adam Shillingsburg | Consumer | West | 2015 | \$4 | \$14 |
| Adrian Barton | Consumer | West | 2017 | -\$204 | \$393 |
| | | | 2018 | \$56 | \$937 |
| Alan Barnes | Consumer | West | 2016 | \$80 | \$660 |
| | | | 2018 | \$53 | \$134 |
| Alan Hwang | Consumer | West | 2015 | \$87 | \$606 |
| | | | 2016 | \$35 | \$80 |

Filter Action 2



| Customer Name | Segment | Region | Year of Ord.. | Profit | Sales |
|------------------|-----------|---------|---------------|--------|---------|
| Aaron Smayling | Corporate | Central | 2018 | -\$251 | \$1,476 |
| Adam Hart | Corporate | Central | 2017 | \$12 | \$217 |
| Alan Haines | Corporate | Central | 2018 | -\$26 | \$16 |
| Alejandro Savely | Corporate | Central | 2017 | \$269 | \$2,764 |
| | | | 2018 | \$23 | \$116 |
| Alex Russell | Corporate | Central | 2016 | -\$3 | \$180 |
| | | | 2018 | \$20 | \$85 |
| Alice McCarthy | Corporate | Central | 2015 | \$8 | \$15 |

Create Calculated Field

SalesTrafficLight

```
IF SUM([Sales]) < 200000 THEN
```

```
    'bad'
```

```
ELSEIF sum([Sales]) < 300000 THEN
```

```
    'avg'
```

```
ELSE
```

```
    'good'
```

```
END
```

Use Calculated Field for Coloring

- Adapt colors
- Sort Legend

| Year of Ord.. | Segment | | |
|---------------|-----------|-----------|-------------|
| | Consumer | Corporate | Home Office |
| 2015 | \$266,097 | \$128,435 | \$89,716 |
| 2016 | \$266,536 | \$128,757 | \$75,239 |
| 2017 | \$296,864 | \$207,106 | \$105,235 |
| 2018 | \$331,905 | \$241,848 | \$159,463 |

AGG(SalesTrafficLight)

- bad
- avg
- good

Calculated Fields – LOD - SalesPerCust

- { INCLUDE [Customer Name] : SUM([Sales]) }

