A Tree Map and Sparklines

Sleeper Ch. 23, 24

Traditionally, **treemaps** are visualizations for hierarchical data. They are made of a series of nested rectangles of **sizes proportional to the corresponding data value**.

The analysis shows not only the sales amount by sub-category, but the sales contribution of each US state per sub-category and whether or not those states were profitable within each sub-category.

https://finviz.com/map.ashx

https://www.nngroup.com/articles/treemaps/

https://help.tableau.com/current/pro/desktop/en-us/buildexamples_treemap.htm

Treemap: Sales and Profitability by State and Sub-Category

- Mark type: Square
- Size Marks Card: Sum(Sales)   - primary measure
- Color Marks Card: AGG(Profit Ratio)   - secondary measure
- Detail Marks Card: State   - to see the square for each State
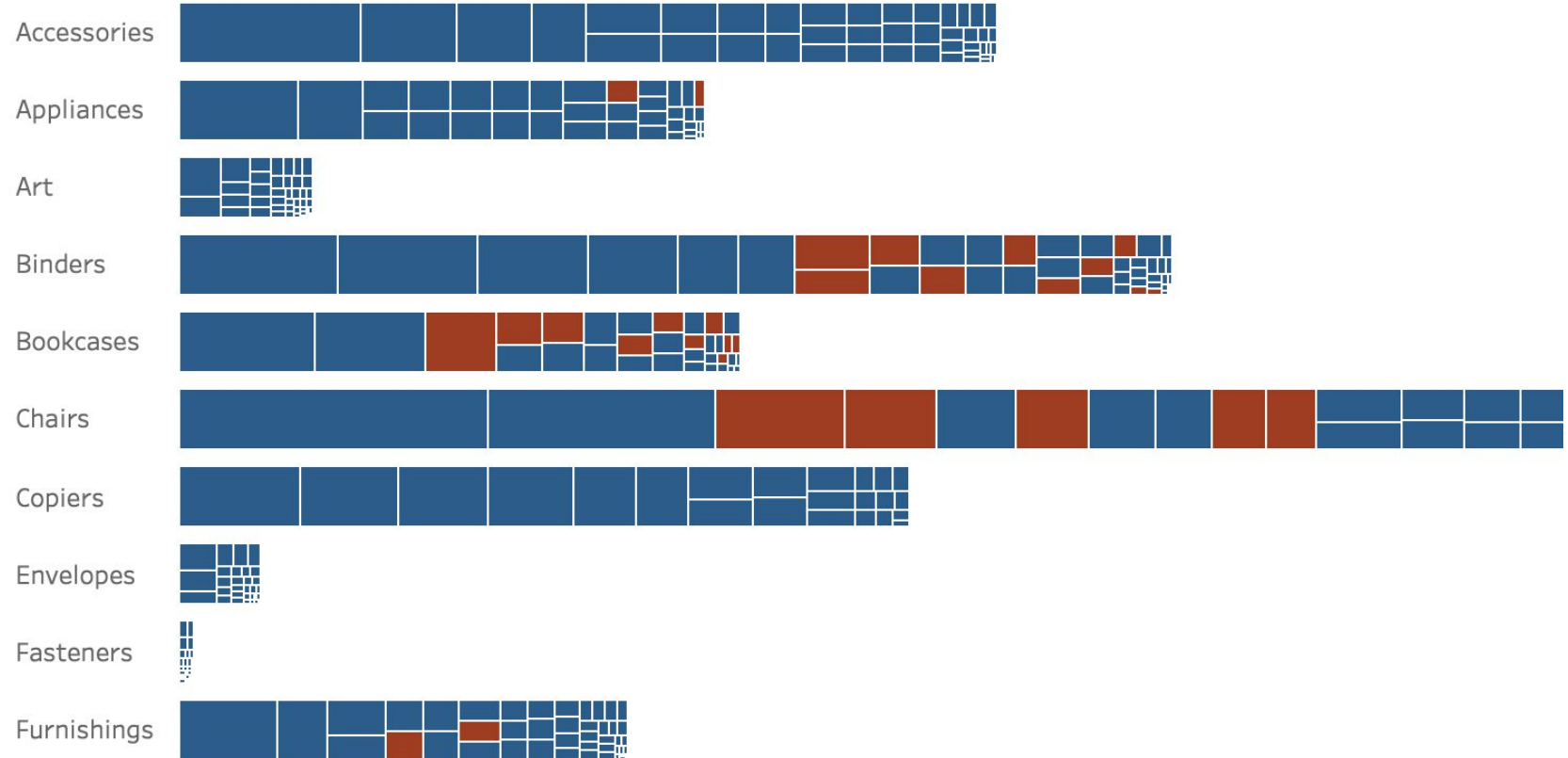
To see all this analysis at the Sub-Category level:

- Rows: Sub-Category

Fit Width ▾

Click on **Color Marks Card** > **Edit Color** > **Stepped Color** = **2 Steps**

Treemap

Sub-Catego..
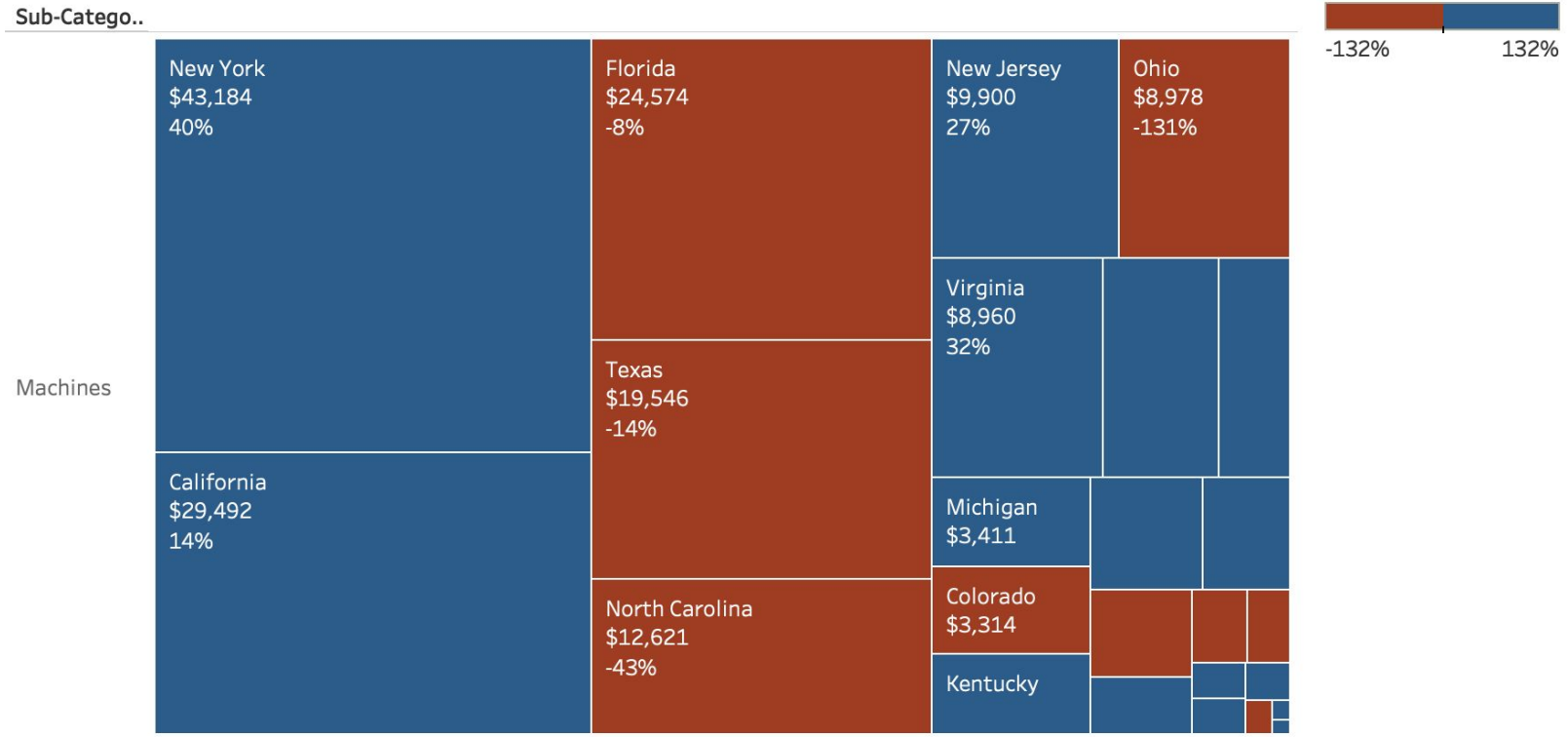
Sub-Category Treemap

Create a filter for Sub-Category Machines:
- Right-click the **Sub-Category** Dimension > **Show Filter** > check **Machines**

Create a more meaningful label for each square:

- Label Marks Card: State
- Label Marks Card: Sum(Sales)
- Label Marks Card: AGG(Profit Ratio)

Sub-Category Treemap

State, sum of Sales and Profit Ratio broken down by Sub-Category. Color shows Profit Ratio. Size shows sum of Sales. The marks are labeled by State, sum of Sales and Profit Ratio. Details are shown for Country and State. The view is filtered on Sub-Category, which keeps Machines.

https://learning.oreilly.com/library/view/practical-tableau/9781491977309/ch23.html

Sparklines are small, intense, word-sized graphics with typographic resolution. Sparklines can be placed anywhere that words or numbers or graphics can be placed: in sentences, maps, graphics, tables. Sparklines have a data-ink or data-pixel ratio = 1.0, consisting entirely of data, with no non-data at all. Thus sparklines have no frames, tic marks, and non-data paraphernalia. Sparklines often get their quantitative scaling context from nearby words, numbers and graphics; sparklines are directly quantified by numbers on or near the sparkline itself.

https://www.edwardtufte.com/bboard/q-and-a-fetch-msg?msg_id=oooAIr

- Rows: **Measure Names** , **Measure Values**

  Fit Height ▼   – to avoid scrolling

- Columns: **Month(Order Date)**   – an element of time to trend measures

Reduce the width of the view to make the trends 'spark' by moving the right border.

Remove irrelevant **Number of Records** pill from the **Measure Values** shelf.

Exclude zero on the axes for the **Discount** measure:

- Right-click on axis > **Edit Axis...** > Uncheck **Include Zero** checkbox.

Hide x and y axis by right-clicking then uncheck **Show Header**

Remove the gridlines:

- Right-click the viz > **Format...** > **Rows** > Lines icon ≡ > **Grid Lines: None**

Sparklines cont.

Remove Column Divider:

- Right-click the viz > **Format...** > **Columns** tab > Borders icon ⊞ > **Column Divider Pane: None**

Soften Row Separators by choosing a dotted line instead of a solid line:

- Right-click the viz > **Format...** > **Rows** tab > Borders icon ⊞ > **Row Divider Pane:** Dotted line - - - - -

Sparklines

The trends of Discount, Profit, Profit Ratio, Quantity and Sales for Order Date Month.