

INFO 290T

Human-Centered Data Management

Discussion: Polaris



Announcements

- Moving project proposal to September 19th!
- Please come talk to us!!

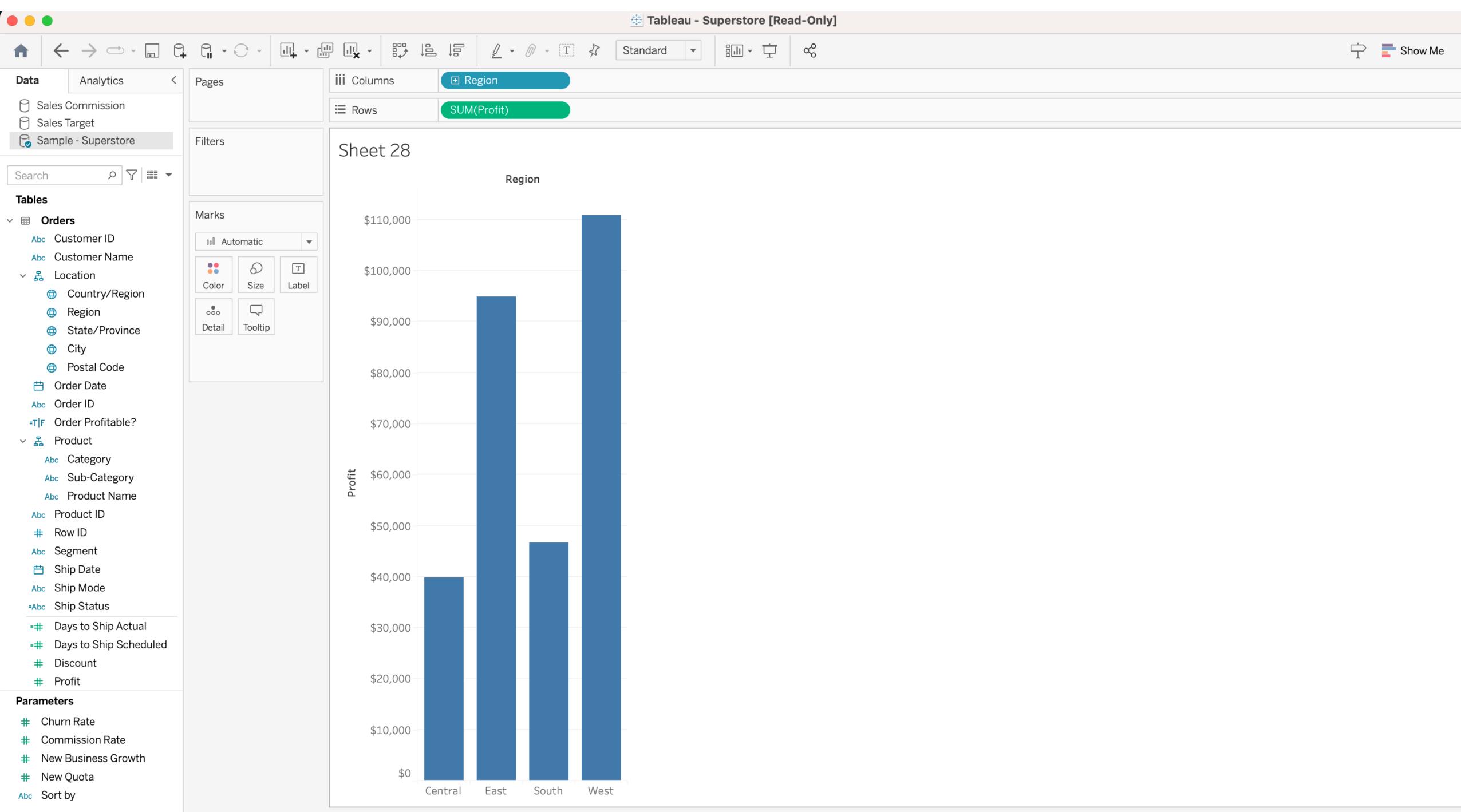


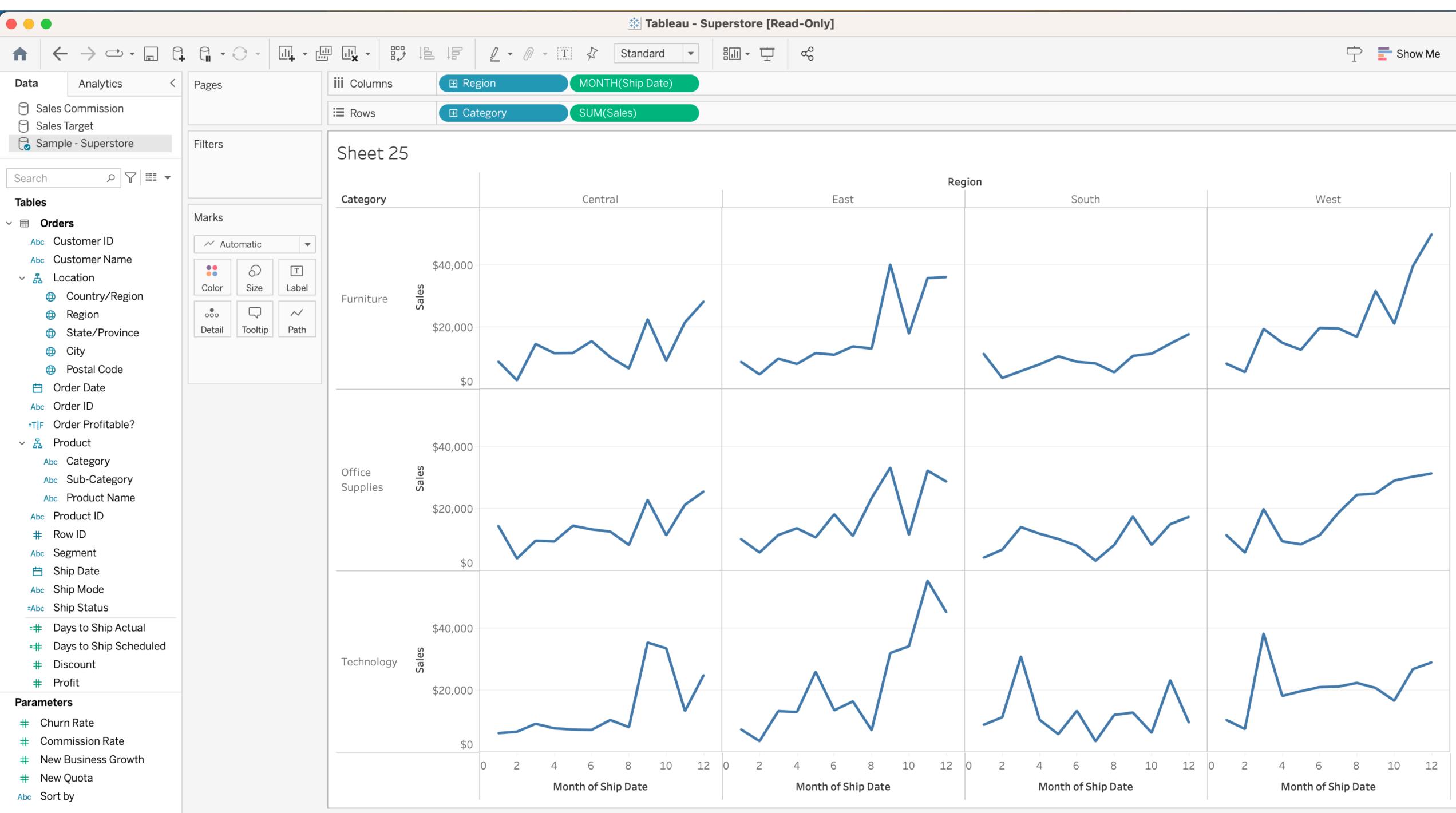
A Bit of History: Polaris → Tableau!

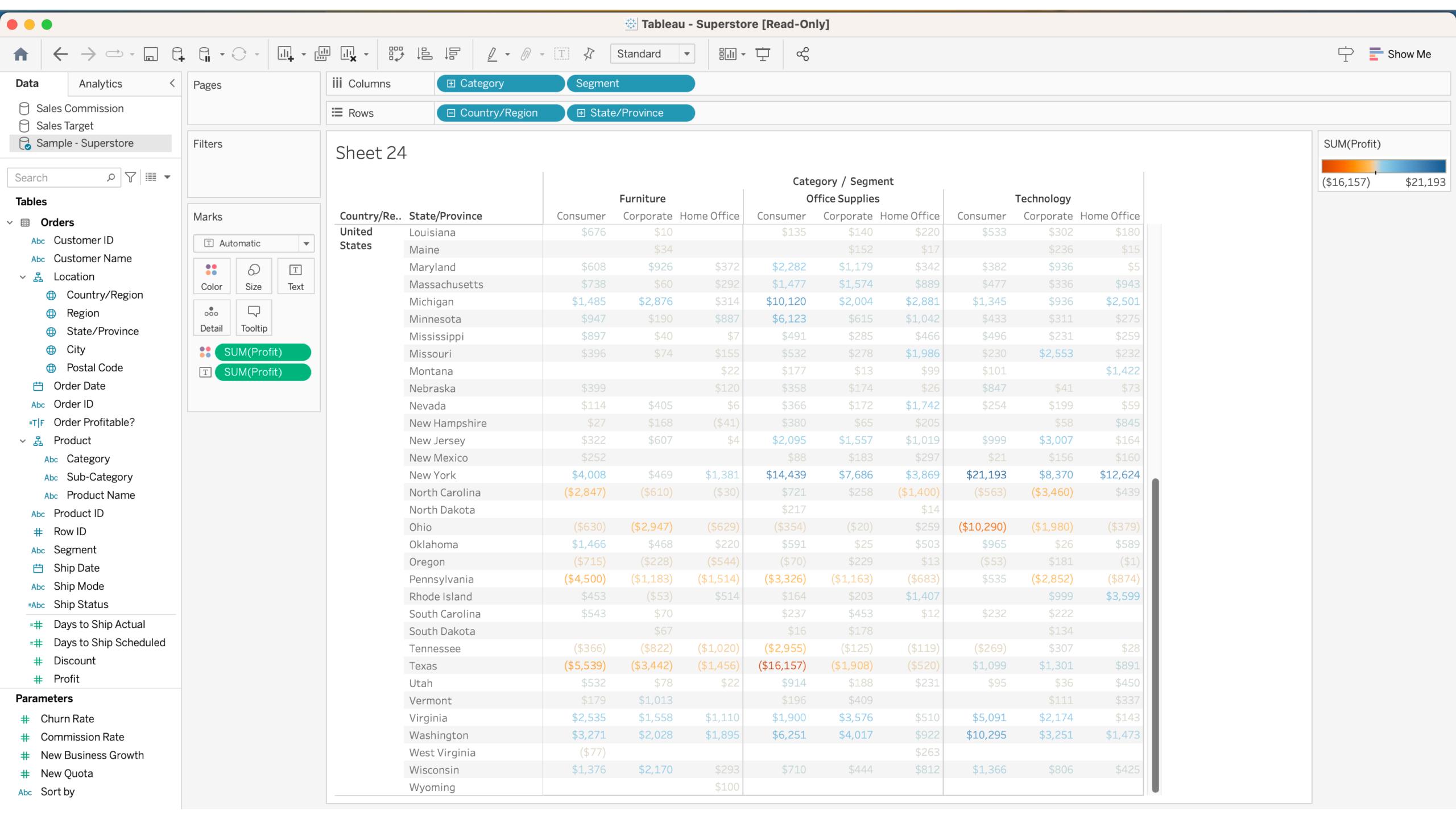
- 2003: Founded
- 2013: IPO
- 2019: Bought by Salesforce in a deal worth \$15B
- 2023: Still going!

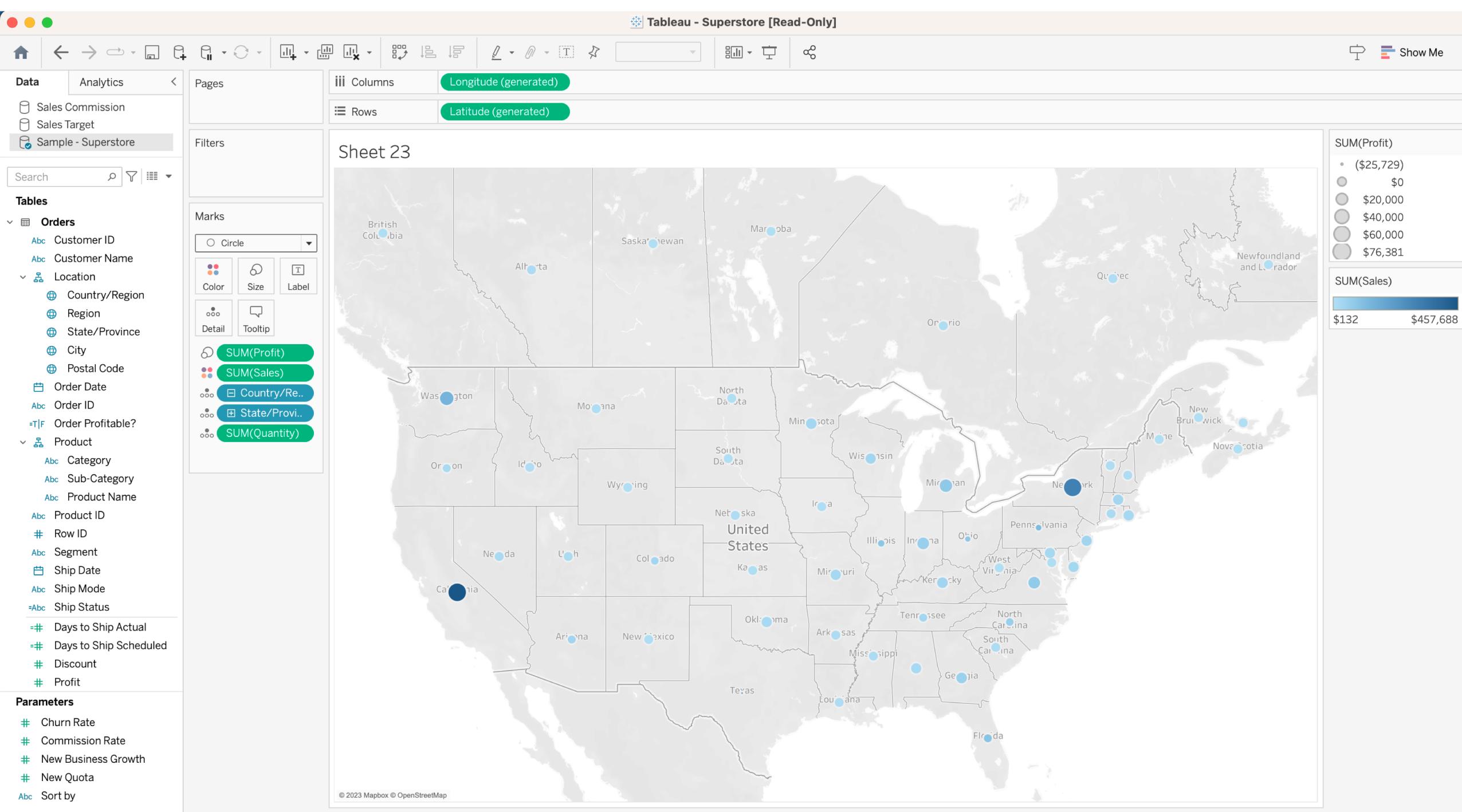
One of the most successful visual analytics software
(Other being PowerBI)

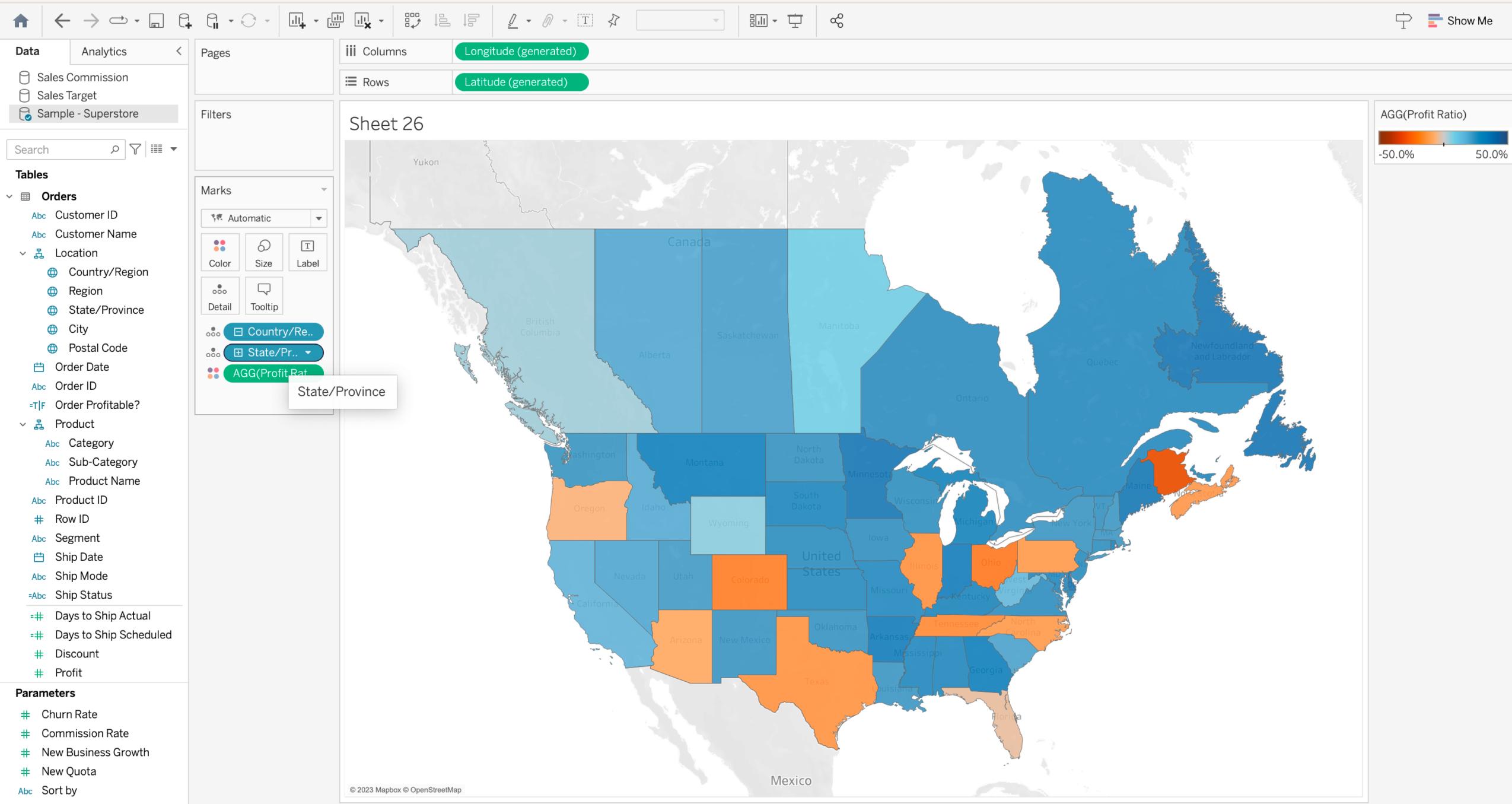


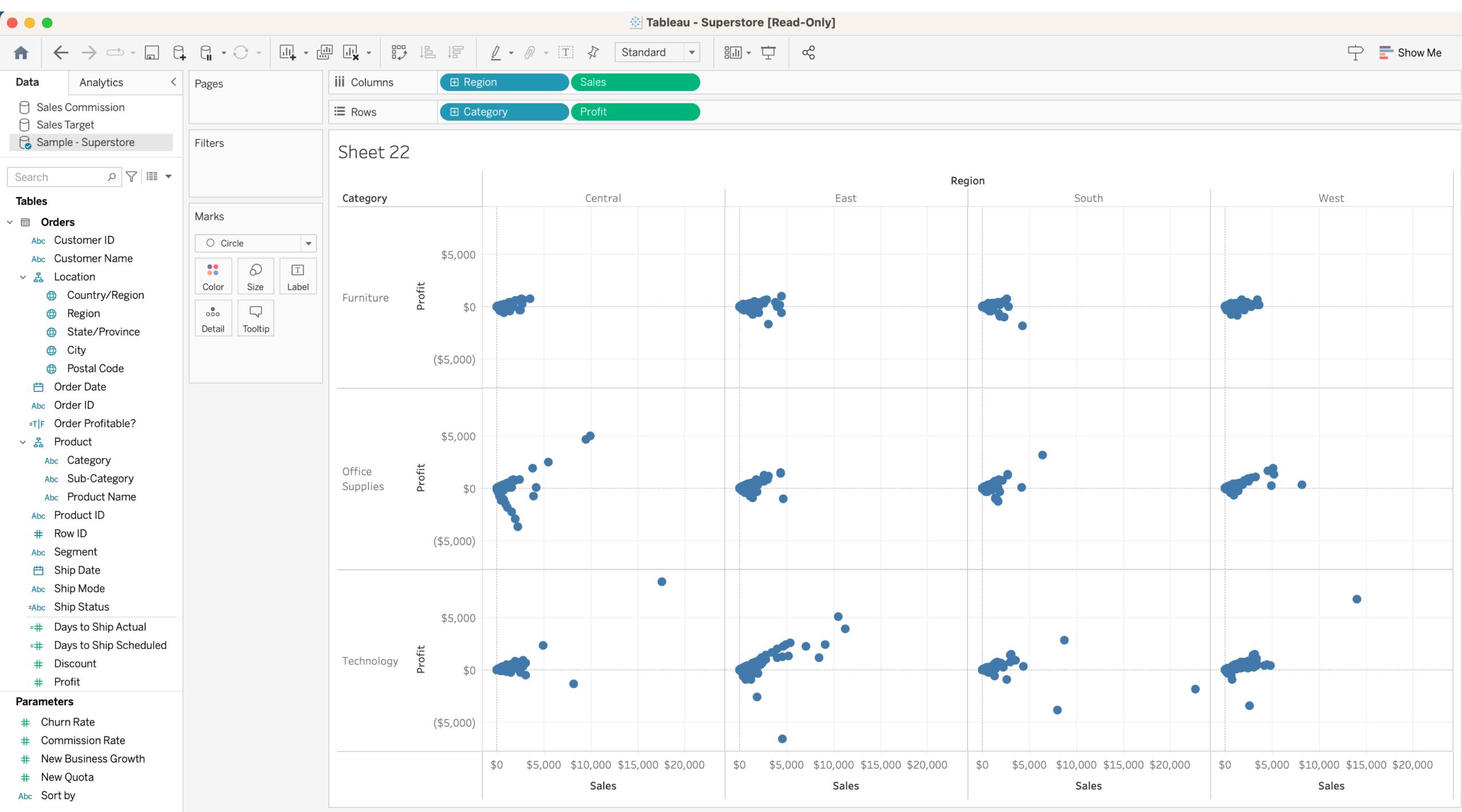


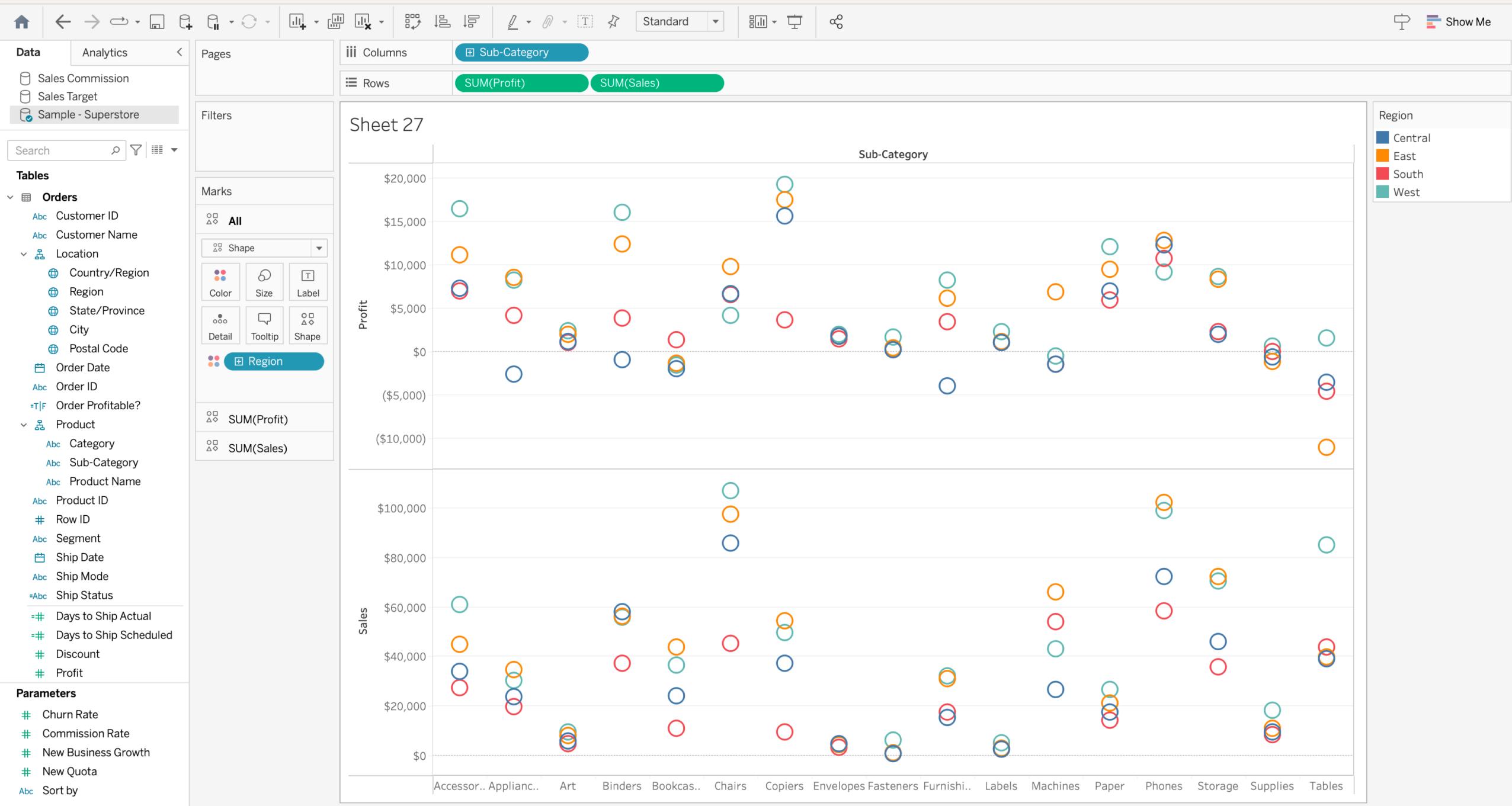












Discussion

- My key takeaways from the paper
 - Tabular interface to depict charts (information-dense)
 - Elegant algebra and mapping to relational queries



Discussion: Informal Archaeology!

- Paper that influenced this paper:
 - Wilkinson's grammar of graphics
 - Many successful packages: ggplot2, vega/vega-lite
 - Alternative way of thinking composing graphics (less relational, less declarative)
 - Arguably as successful
- Paper that this paper influenced:
 - “Show me: automatic presentation for visual analysis”
 - Figuring out which mark to use, how to add a field to a shelf, and how to automatically build visualizations for multiple field is hard!
 - Show me helps



Discussion: Is this enough automation?

If you were to inject automation further into this, how would you do it?

- Often I don't even know which attributes – or pairs thereof to look at.
- How should I start?
- How do I go about finding the answer to a specific question: “why is my sales low”?
- If there are many panes, which pane should I focus on?
- How do I make sense of outliers?

What is the danger of additional automation?



Discussion: Scalability

- Scalability largely brushed under the covers.
- How many SQL queries do we issue (at least)?
- Do we need that many SQL queries?
 - In which cases do we not need that many SQL queries?
- What would you do for scalability?
 - If you were using Polaris/Tableau and wanted to get interactive latencies?



Discussion: Improving the paper

- If you were the authors how would you improve the paper itself?
- Experiments! User study!
- Lots of “take our word for it”
- Still... lots of impact!

