

Formatting Data

Tableau also allows us to format the data in various ways. We can change Font, Alignment, Sheet Colors & Borders

The screenshot shows the Tableau Public interface with the 'Format' menu open. The menu options include: Dashboard..., Story..., Workbook..., Font... (highlighted), Alignment..., Shading..., Borders..., Lines..., Reference Lines..., Drop Lines..., Annotations..., Title and Caption..., Field Labels..., Legends..., Filters..., Highlighters..., Parameters..., Cell Size, Copy Formatting, Paste Formatting, and Clear Worksheet Formatting.

The 'Format Font' pane on the left shows settings for the 'Tableau Boo...' worksheet. The 'Default' section includes Worksheet, Pane, Header, and Tooltip settings. The 'Total' section includes Pane and Header settings. The 'Grand Total' section includes Pane and Header settings.

The data table displayed in the main view is as follows:

	Region			
	East	South	West	Grand Tot..
	45,038	27,281	61,120	167,401
	34,191	19,525	30,240	107,538
	7,498	4,662	9,214	27,137
	53,501	37,033	55,967	203,428
	43,819	10,900	36,007	114,879
	96,263	45,177	101,786	328,454
	53,220	9,300	49,750	149,530
	4,375	3,344	4,120	16,477
	821	504	923	3,024
	29,067	17,310	30,072	91,705
	2,608	2,358	5,087	12,507
	66,108	53,890	42,445	189,243
	20,174	14,146	26,664	78,475
	100,628	58,311	98,698	330,047
	71,618	35,770	70,540	223,862
	10,763	8,320	18,126	46,679
Tables	39,152	39,142	43,919	206,968
Grand Total	501,256	678,834	391,750	2,297,354



Calculations

Table Calculations (Percentage of Total): These are the calculations we do on the output received.

The screenshot shows the Tableau Public interface with the 'Quick Table Calculation' menu open. The menu is nested, starting from 'Quick Table Calculation' in the 'Marks' card, leading to 'Edit in Shelf', then 'Continuous', and finally 'Percent of Total'.

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Window Help

Standard

Columns: Sub-Category

Rows: Sub-Category

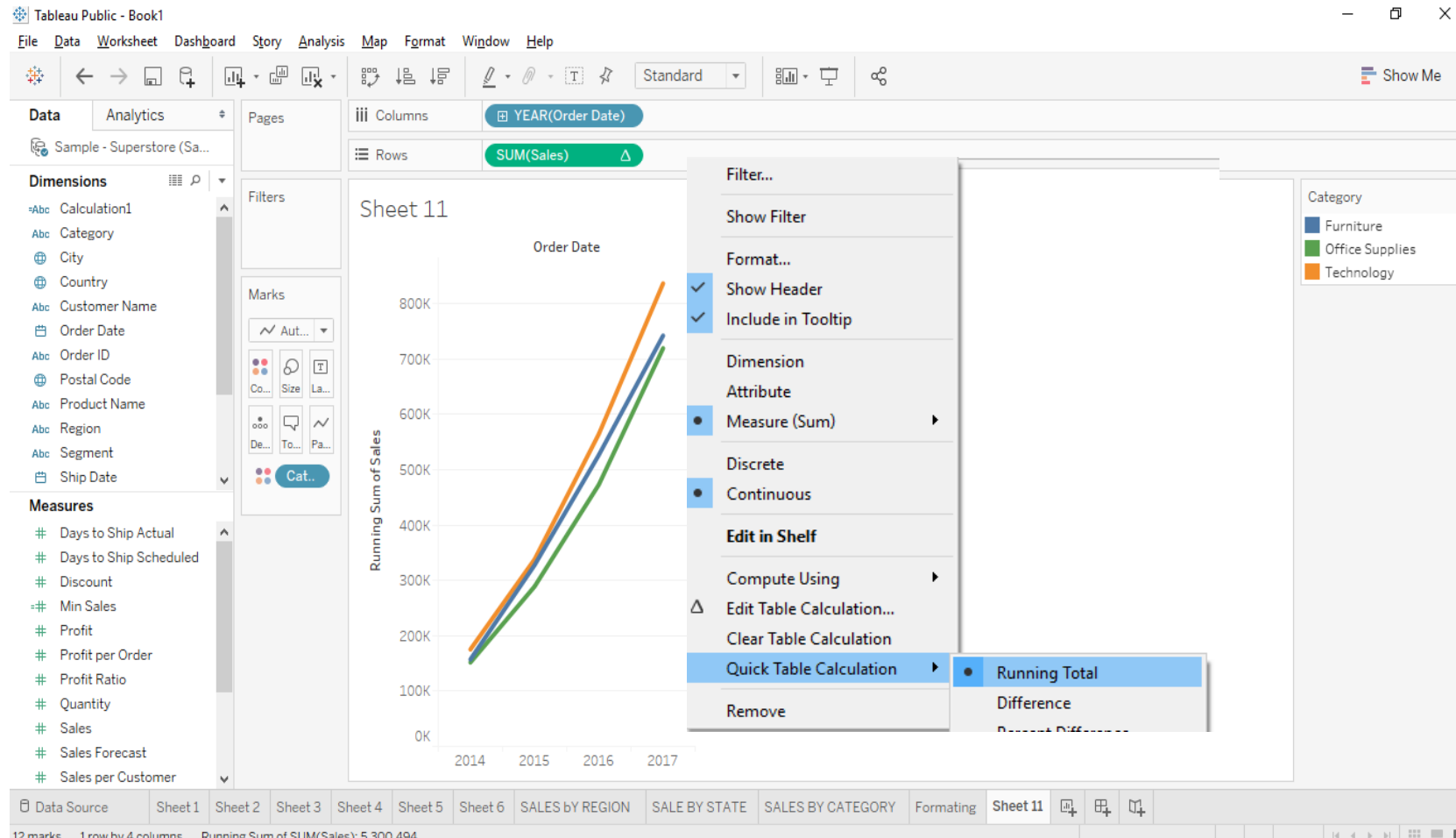
Sheet 11

Sub-Catego..	
Accessories	7.29%
Appliances	4.68%
Art	1.18%
Binders	8.85%
Bookcases	5.00%
Chairs	14.30%
Copiers	6.51%
Envelopes	0.72%
Fasteners	0.13%
Furnishings	3.99%
Labels	0.54%
Machines	8.24%
Paper	3.42%
Phones	14.37%
Storage	9.74%
Running Total	2.03%
Difference	9.01%
Percent Difference	100.00%

BY STATE SALES BY CATEGORY Formatting Sheet 11

Calculations

Table Calculations (Running Total): These are the calculations we do on the output received.



Calculations

Table Calculations (Percentage Difference) : Gives the percentage difference between previous & current value

The screenshot displays the Tableau Desktop interface. The main view is a table titled "PER DIFF" showing the percentage difference in sales by month for the year 2014. The table has three columns: "Year of Order Date", "Month of Order Date", and "% Difference in Sales from...". The data is filtered for the year 2014. The percentage difference is calculated as the difference between the current month's sales and the previous month's sales, divided by the previous month's sales.

Table Data:

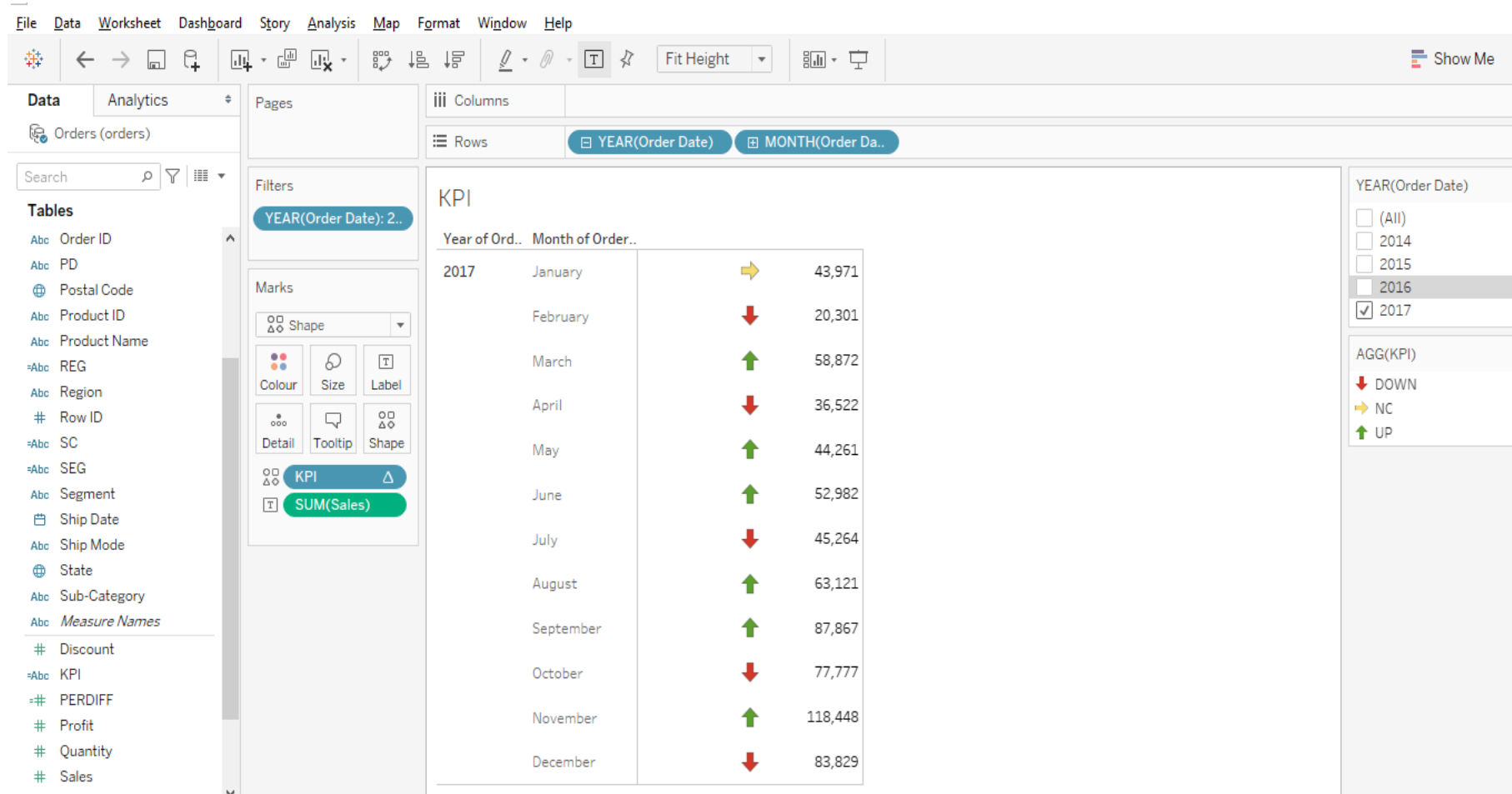
Year of Order Date	Month of Order Date	Sales	% Difference in Sales from...
2014	January	14,237	
	February	4,520	-68.25%
	March	55,691	1,132.13%
	April	28,295	-49.19%
	May	23,648	-16.42%
	June	34,595	46.29%
	July	33,946	-1.88%
	August	27,909	-17.78%
	September	81,777	193.01%
	October	31,453	-61.54%
	November	78,629	149.98%
	December	69,546	-11.55%

The interface also shows the "Columns" shelf with "Measure Names" and the "Rows" shelf with "YEAR(Order Date)" and "MONTH(Order Date)". The "Marks" shelf is set to "Automatic". The "Filters" shelf contains "YEAR(Order Date): 2014" and "Measure Names". The "Measure Values" shelf contains "SUM(Sales)". The "Parameters" shelf contains "P1".



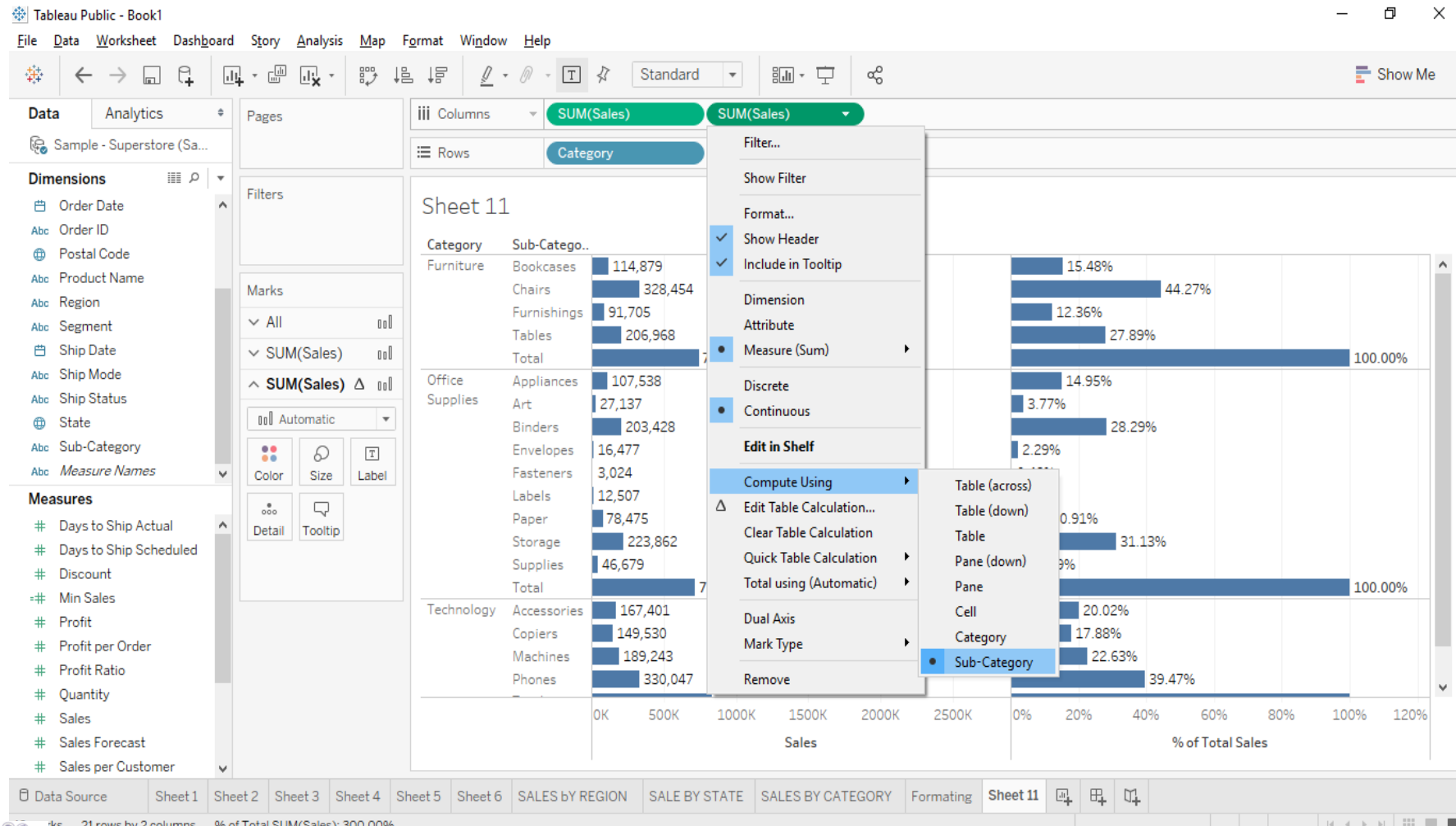
Calculations

KPI (Key Performance Indicators) : highlight the trend of the value.



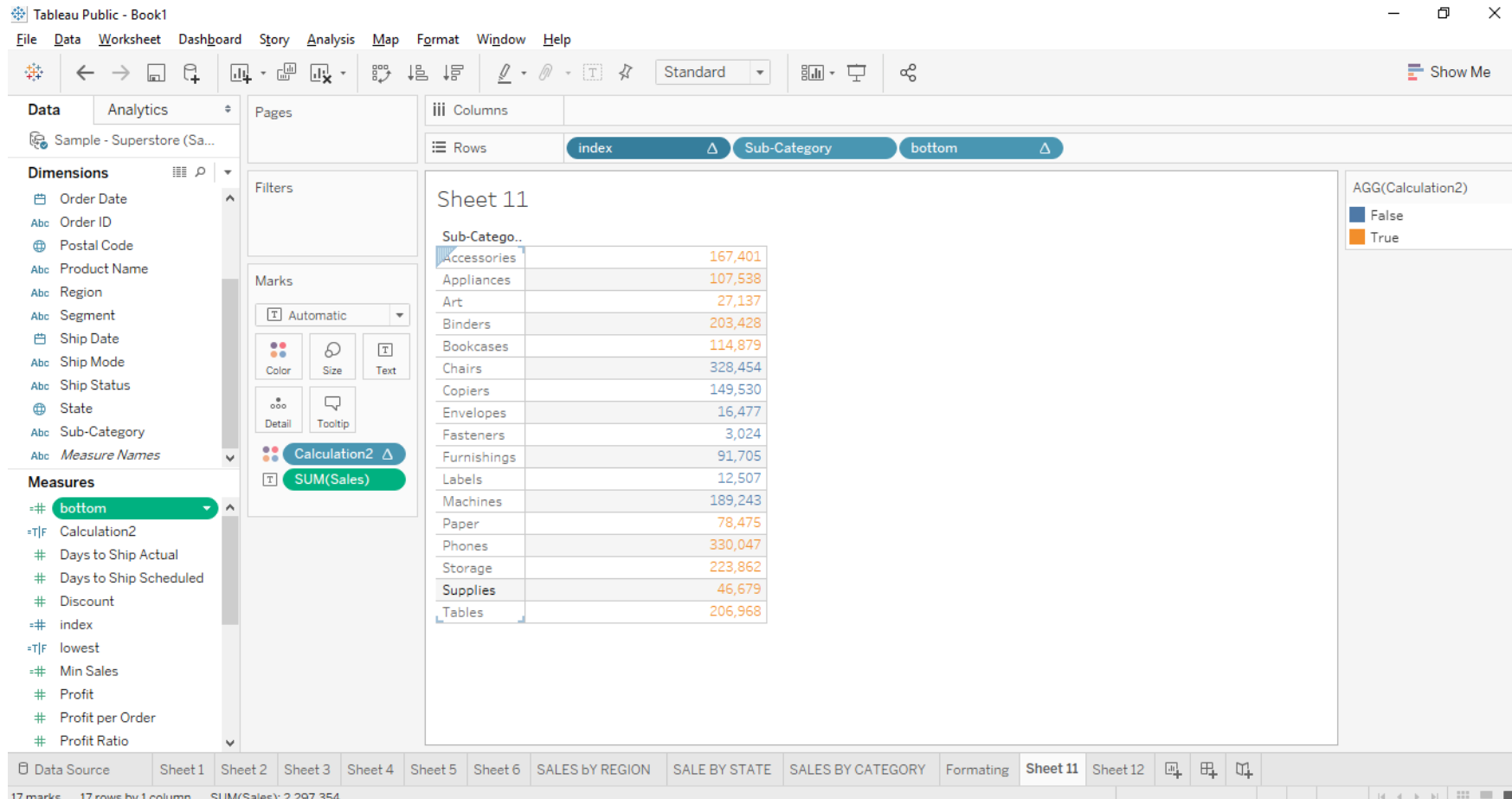
Calculations

Compute Using: It is the advance feature of quick table calculations.



Calculations

Conditional Formatting : Formatting the data as per some condition.
For Eg: Highlighting the top 5 or bottom 5 sales.



NOTE: We need index & last function to implement conditional formatting.



Data

Analytics

Clipboard_20180210T07...

Sample - Superstore (Sa...

Dimensions

Order Date

Order ID

Postal Code

Product Name

Region

Segment

Ship Date

Ship Mode

Ship Status

State

Sub-Category

Measure Names

Measures

Days to Ship Actual

Days to Ship Scheduled

Discount

index

Last

Profit

Profit per Order

Profit Ratio

ProfitCategory

Quantity

Pages

Filters

Marks

Automatic

Color

Size

Text

Detail

Tooltip

AGG(ProfitCat..

SUM(Profit)

Columns

Rows

Sub-Category

AGG(ProfitCategory)

IF-ELSE 2

Sub-Catego..	ProfitCateg..	
Copiers	OK	55,618
Phones	OK	44,492
Accessories	OK	41,932
Paper	OK	34,053
Binders	OK	30,200
Chairs	OK	26,586
Storage	OK	21,280
Appliances	OK	18,132
Furnishings	OK	13,070
Envelopes	LowProfit	6,956
Art	LowProfit	6,530
Labels	LowProfit	5,558
Machines	LowProfit	3,387
Fasteners	LowProfit	952
Supplies	LowProfit	-1,187
Bookcases	LowProfit	-3,479
Tables	LowProfit	-17,733



Source

Sheet 1

Sheet 2

COMPUTE USING

ComputeUsing2

conditionalFormatting

Rank

IF-ELSE

IF-ELSE 2

+

+

+

ASSIGNMENT



1. Display sub category & Region wise profit in the tabular format. Format the worksheet with black background. Font in bright color, no banding in rows/columns. Heading should be highlighted in different color.
2. Display in a form of horizontal bar chart category & subcategory wise total sales & Sales percentage. Percentage should be with respect to Category.
3. Represent year wise profit (running total)
4. Represent subcategory wise profit. Use conditional formatting to highlight top & bottom profit generating subcategory. The number should be dynamic.
5. Display monthly profit in a tabular format. Order date should be interactive. Increase & decrease should be highlighted using arrow.



CHARTS

Using Tableau we can create 24 different type of charts. Tableau gives us the best suited chart as per the dimensions and measures selected by us using Visualization Query Language.

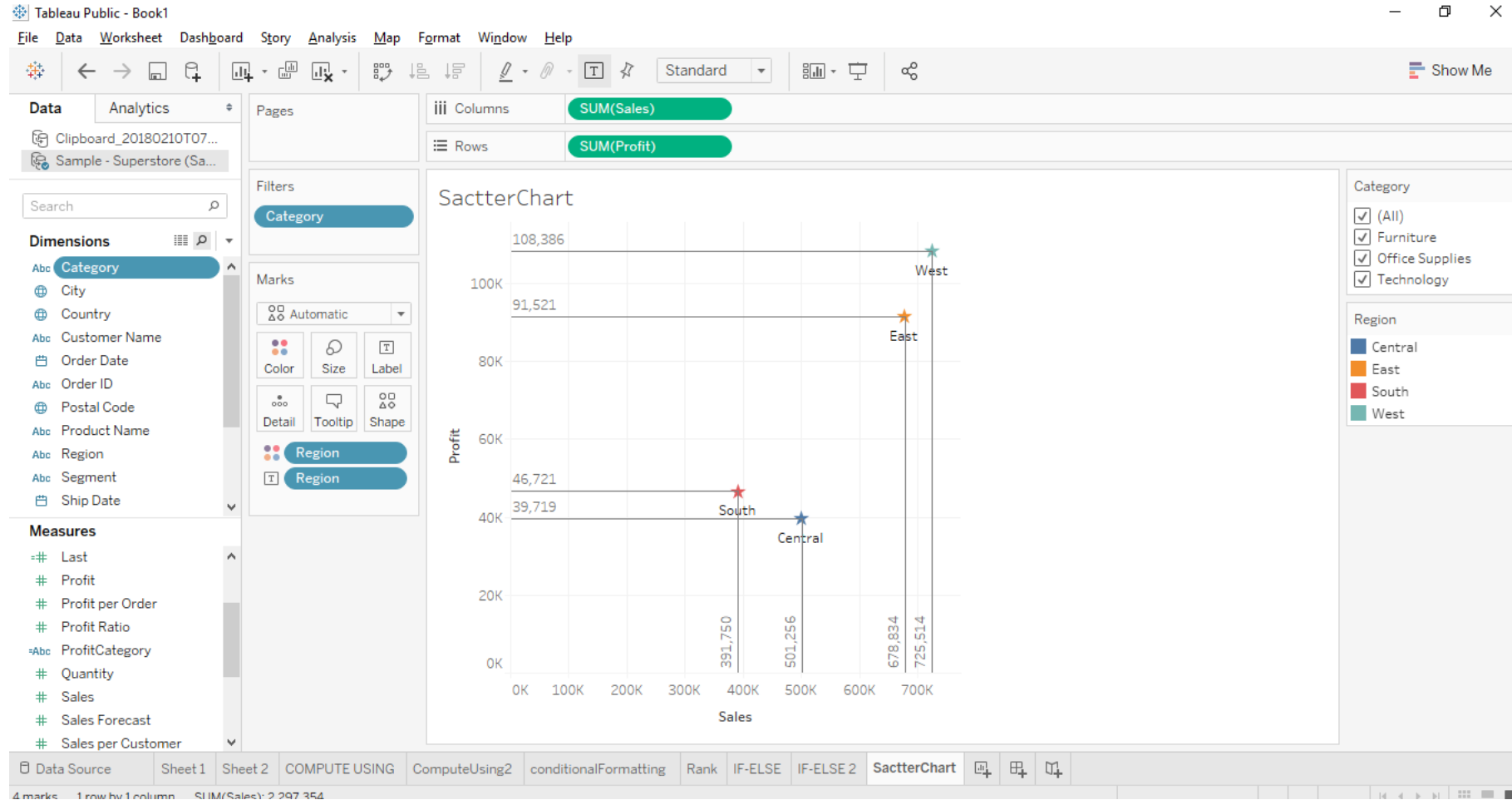
If we select Dimension First and Measure second we will get a text.

If we select Measure first and Dimension second we will get a graph.



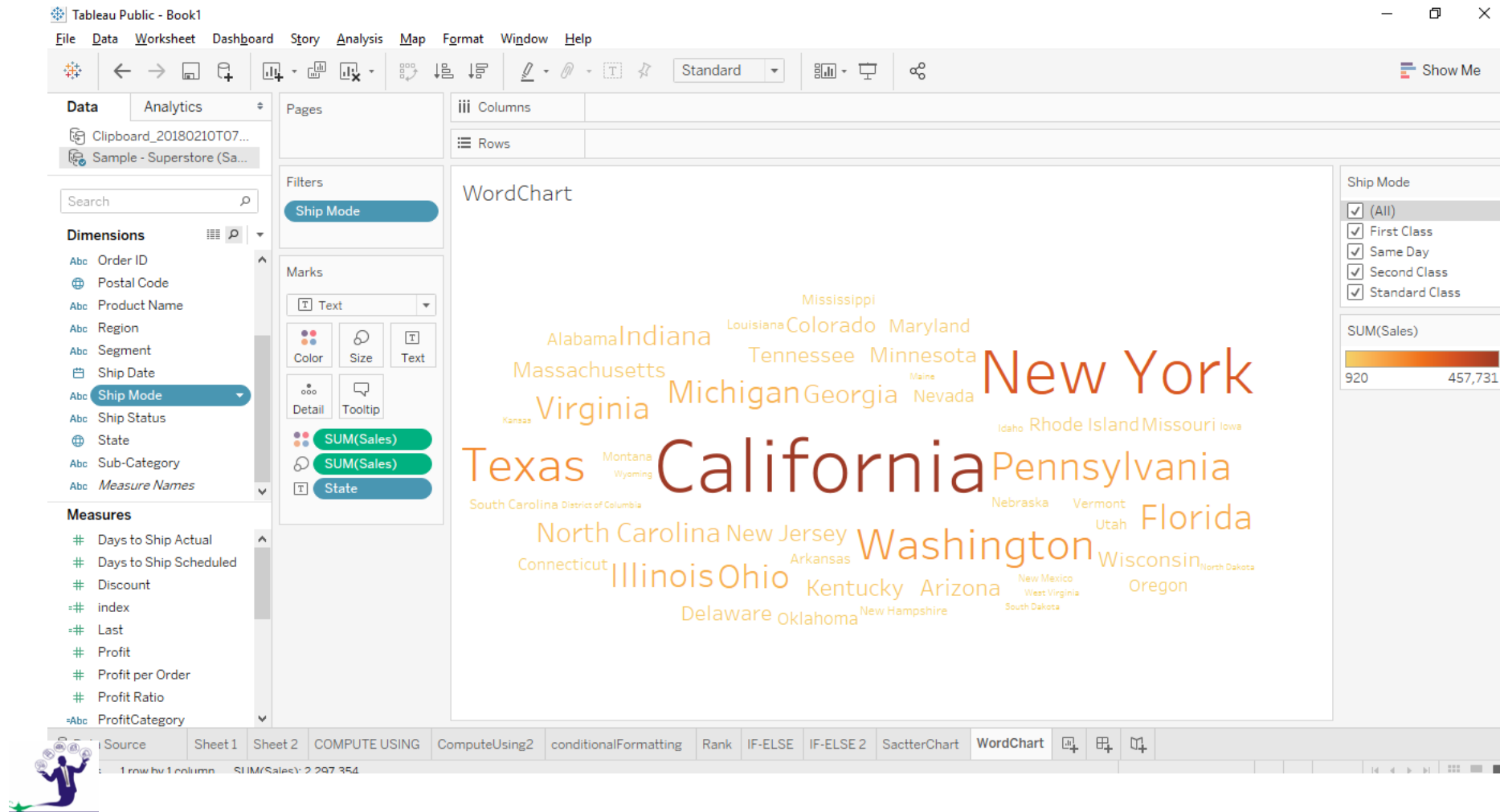
CHARTS

Scatter Charts: In scatter chart we get few points scattered on the plot area.



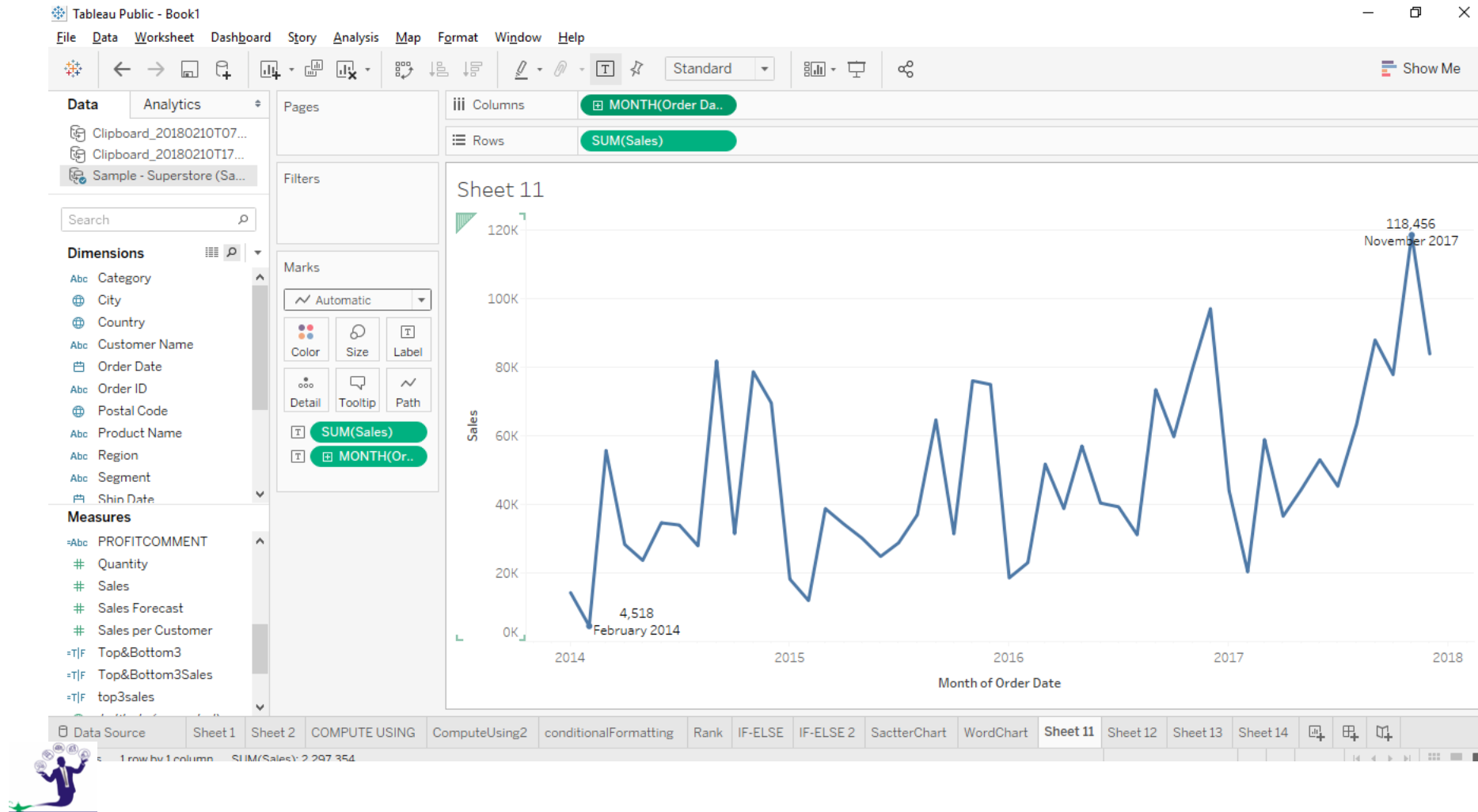
CHARTS

Word Maps: Dimension is displayed in different colors & size as per the measure value.



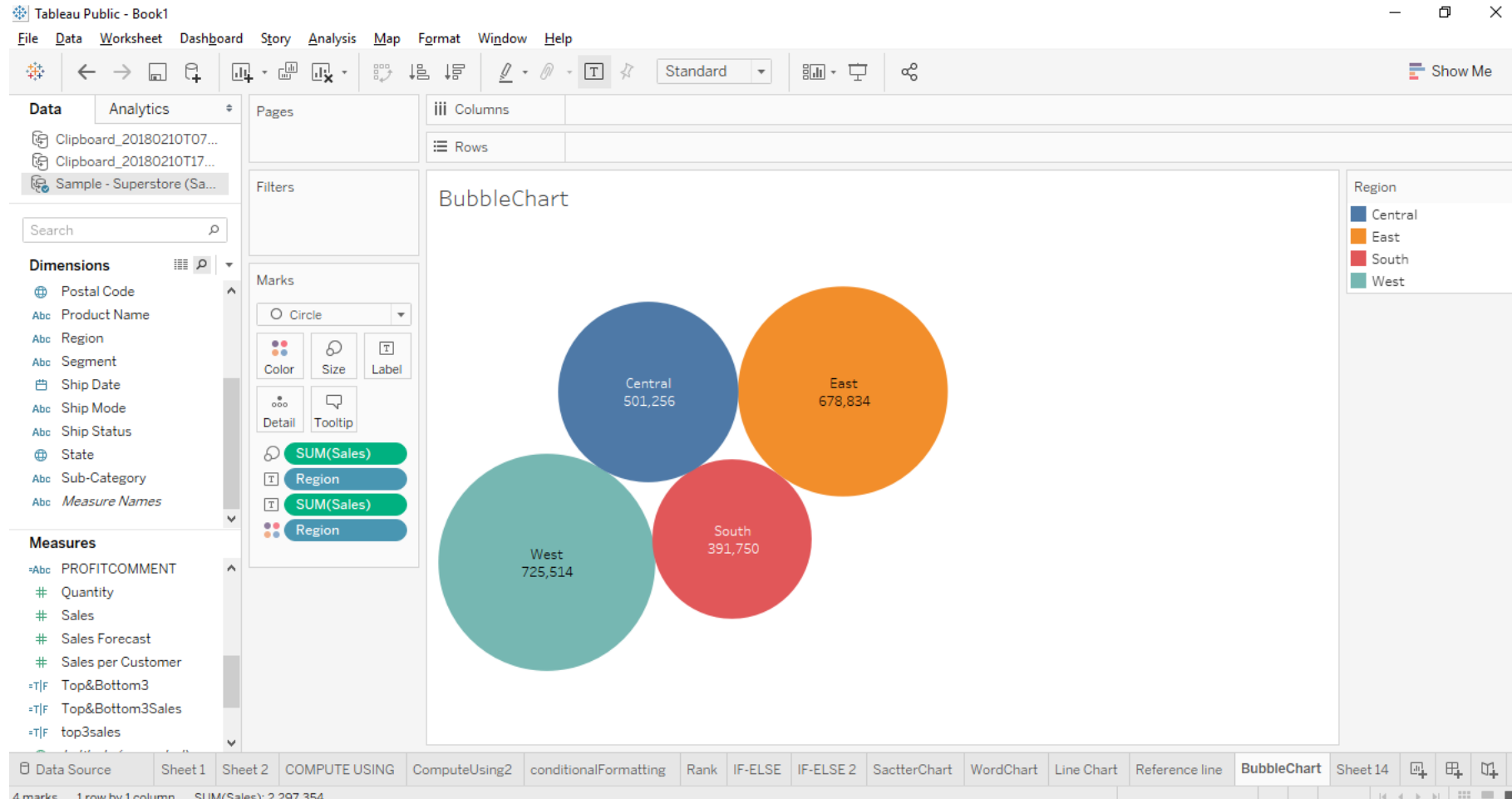
CHARTS

Line Chart: Tableau automatically gives a line chart when we are working with date field. A line chart can be continuous (Green) or discrete (Blue).



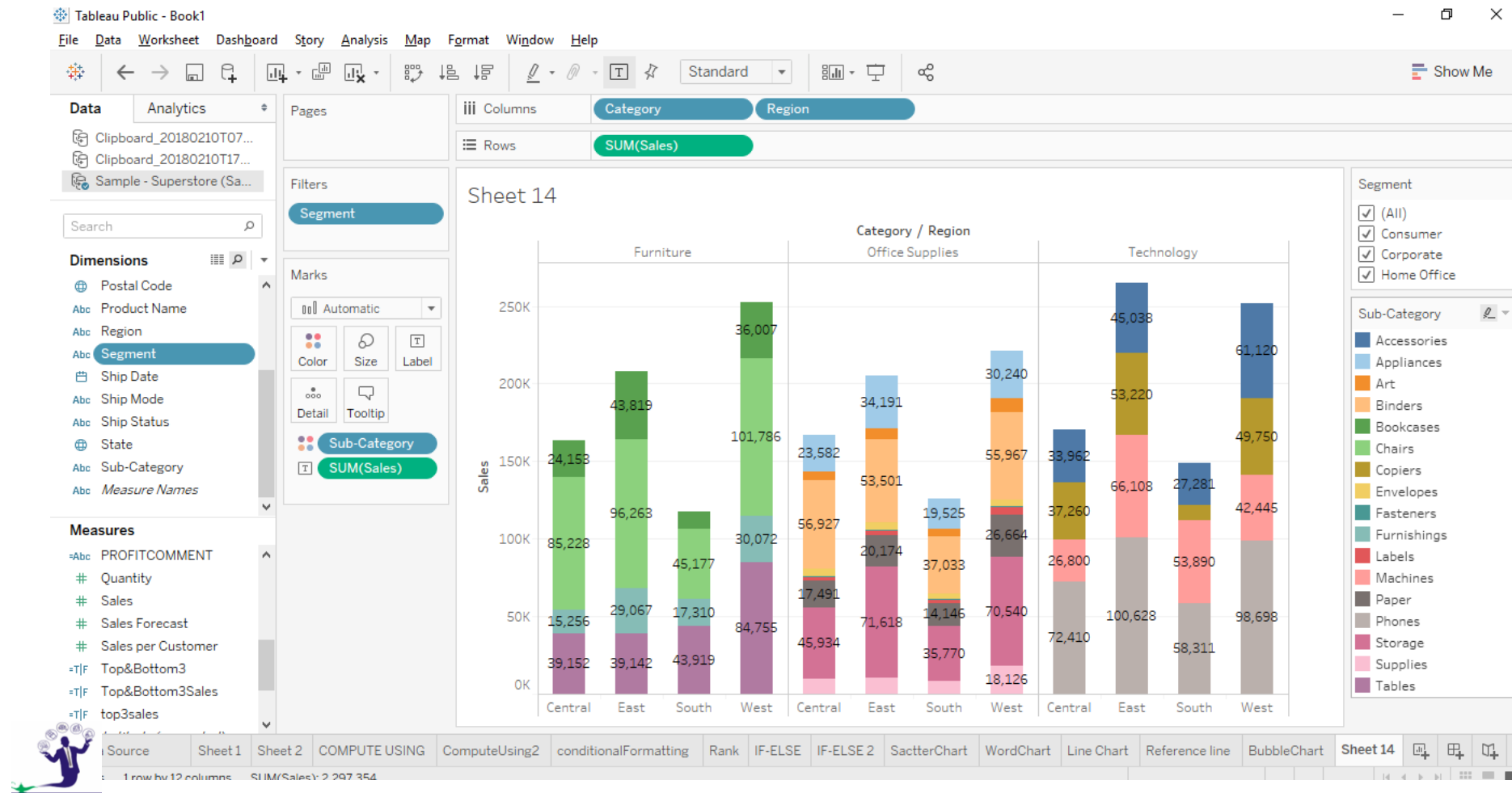
CHARTS

Bubble Chart: Circle represent dimensions & Size represents measures.



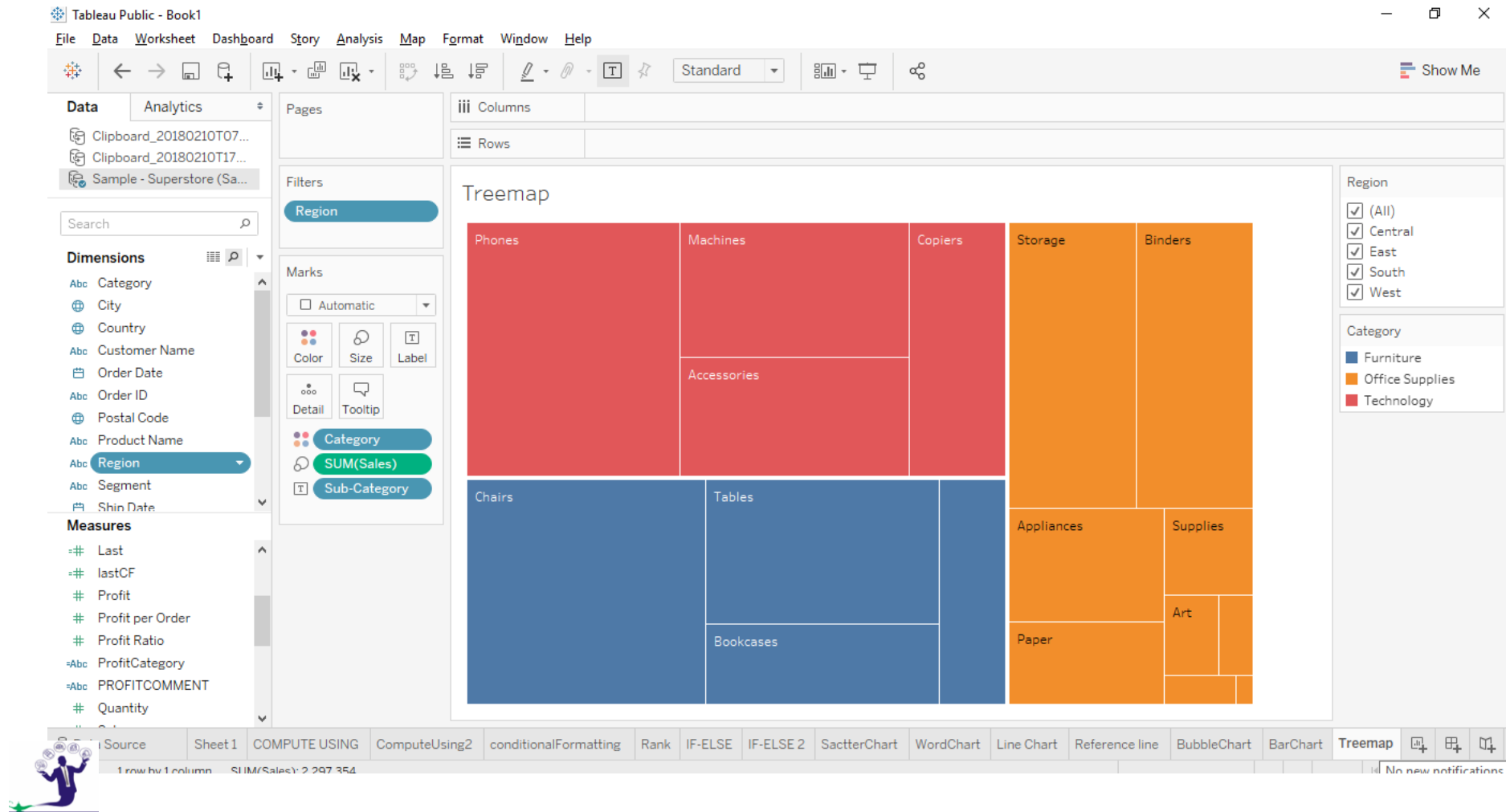
CHARTS

Bar Chart: Bar chart could be Stacked Bar Chart, Colored Bar Chart, Level Bar Chart & Interactive Bar Chart. If we put Dimensions in colors we will get stacked bar chart. If we put Measures in the colors we will get Colored Bar Chart.



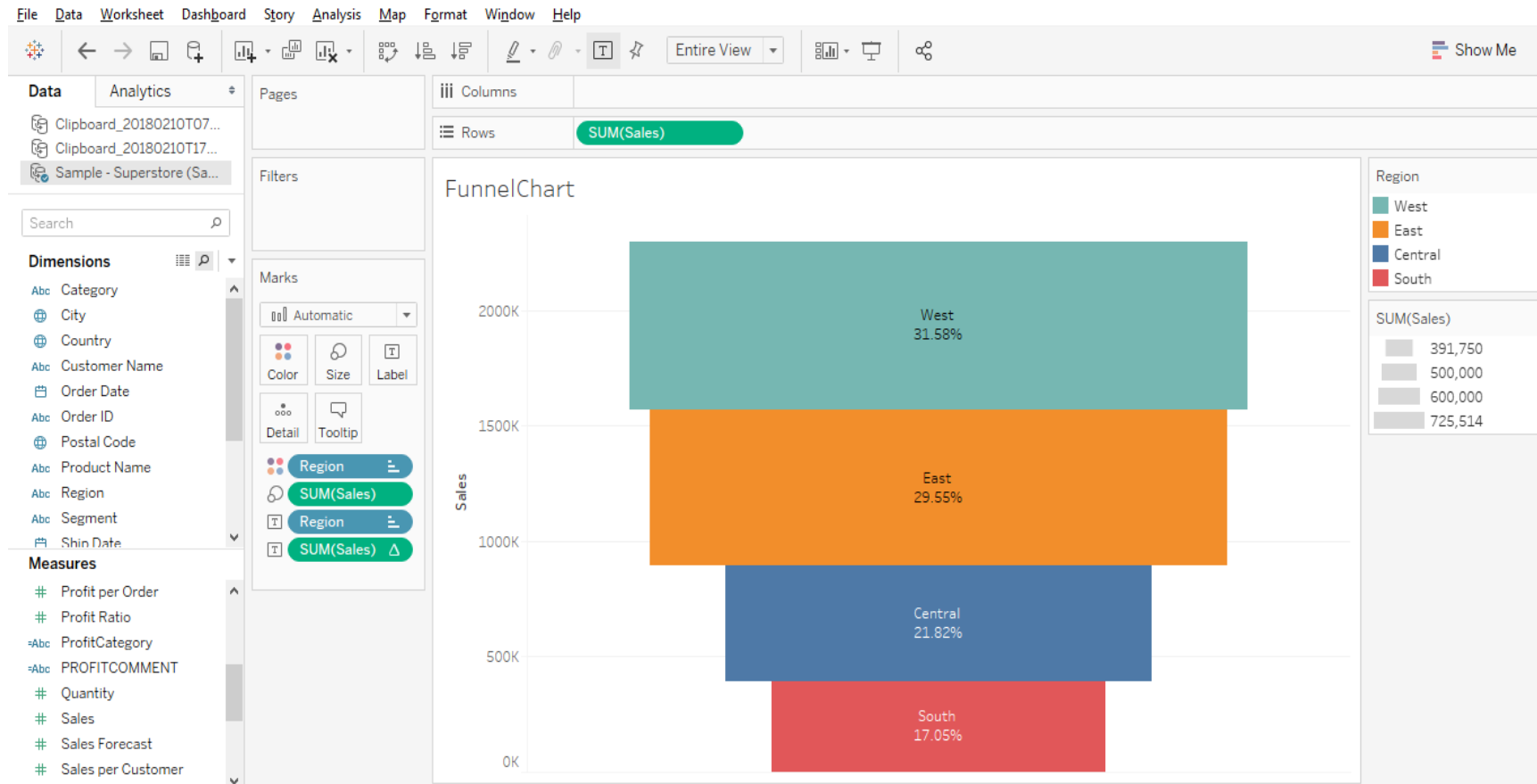
CHARTS

Tree Maps: This chart displays the data in a form of boxes / rectangles of various size.



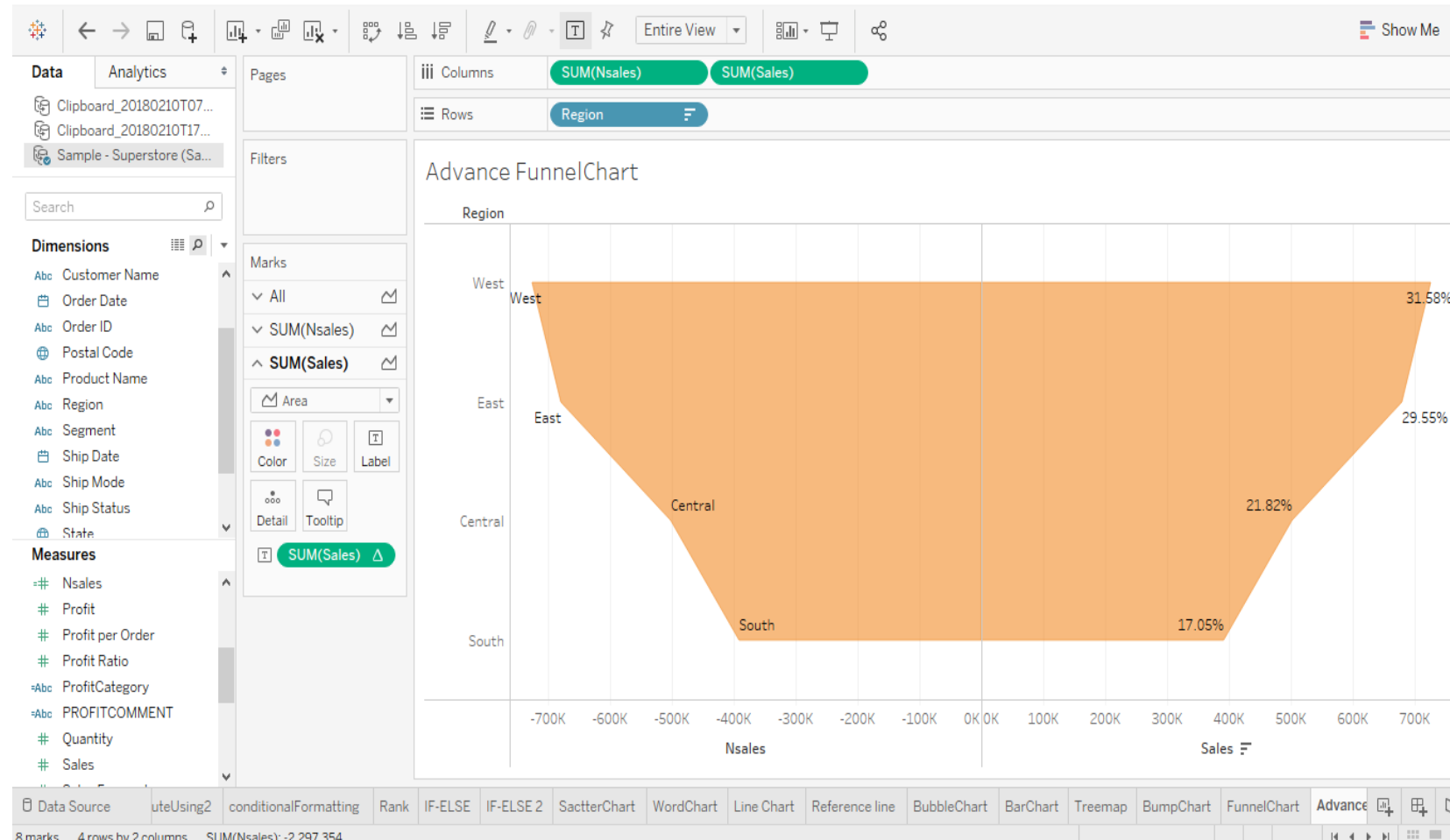
CHARTS

Funnel Chart: It is used to display a measure at different levels / sectors.



CHARTS

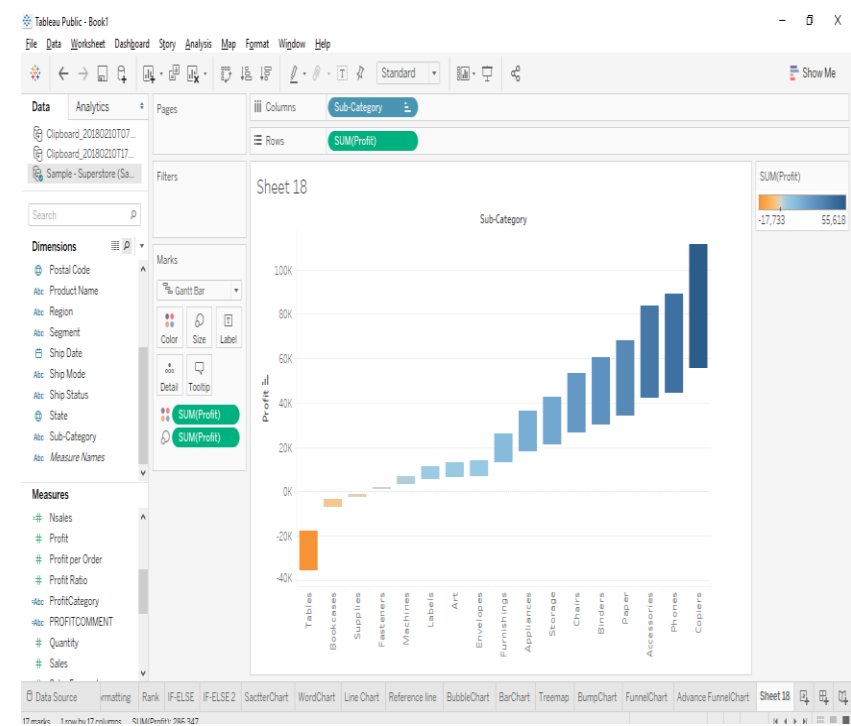
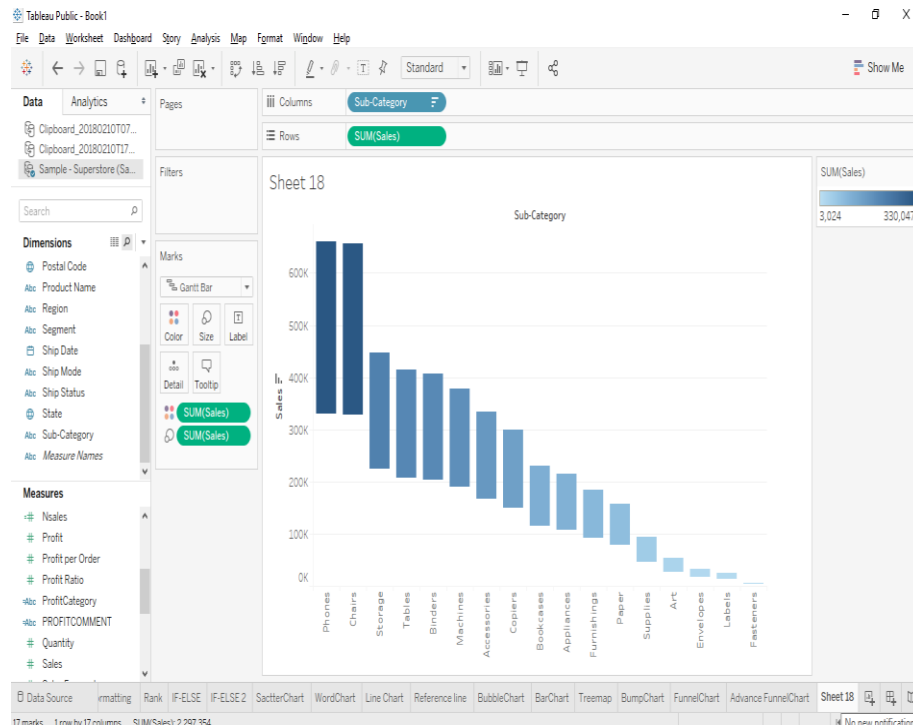
Advanced Funnel Chart: It is used to display a measure at different levels / sectors.



CHARTS - WATERFALL

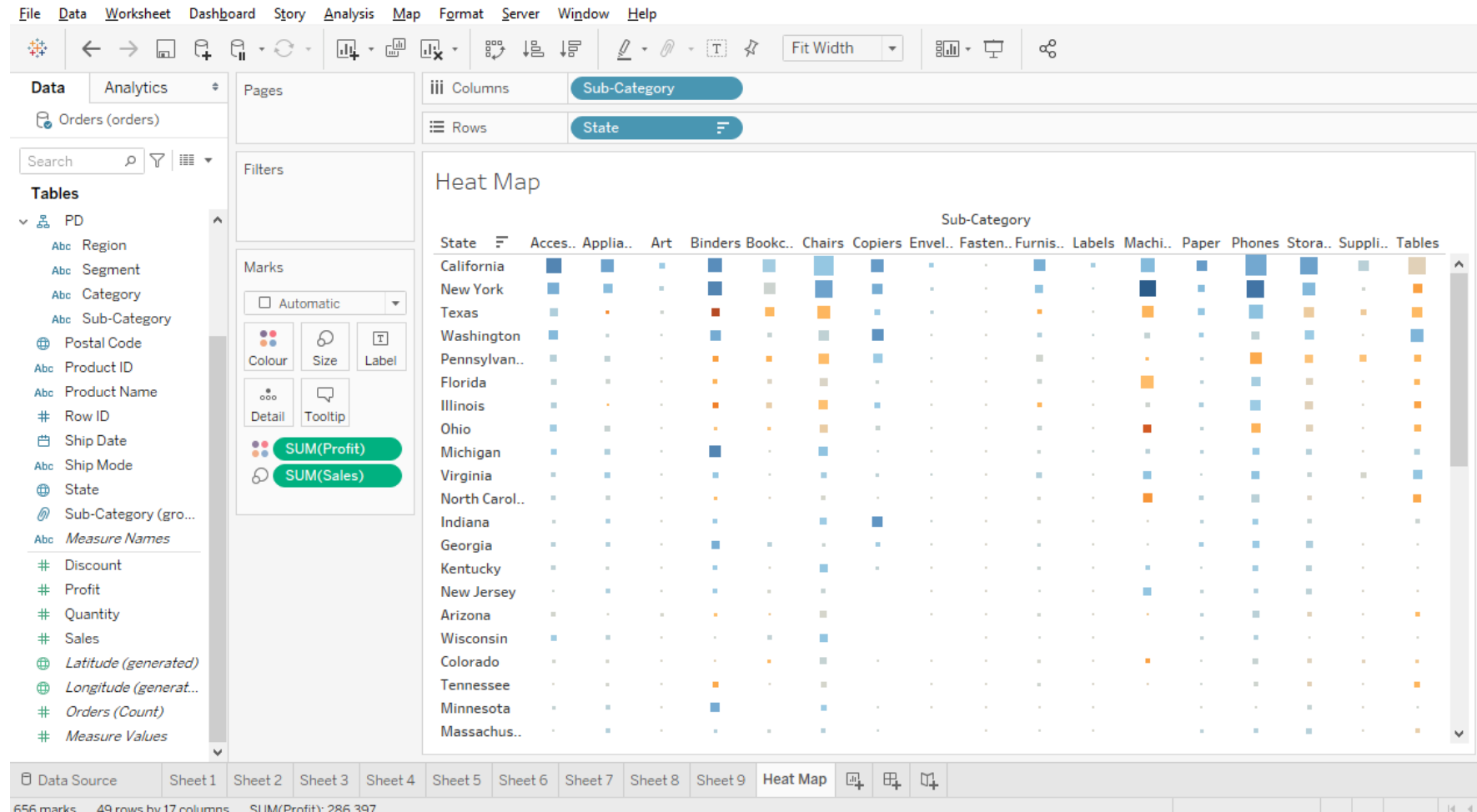
Waterfall Chart: These effectively display the cumulative effect of sequential positive and negative values, thus giving a view of water fall.

To create this chart we use Gantt Bar chart.



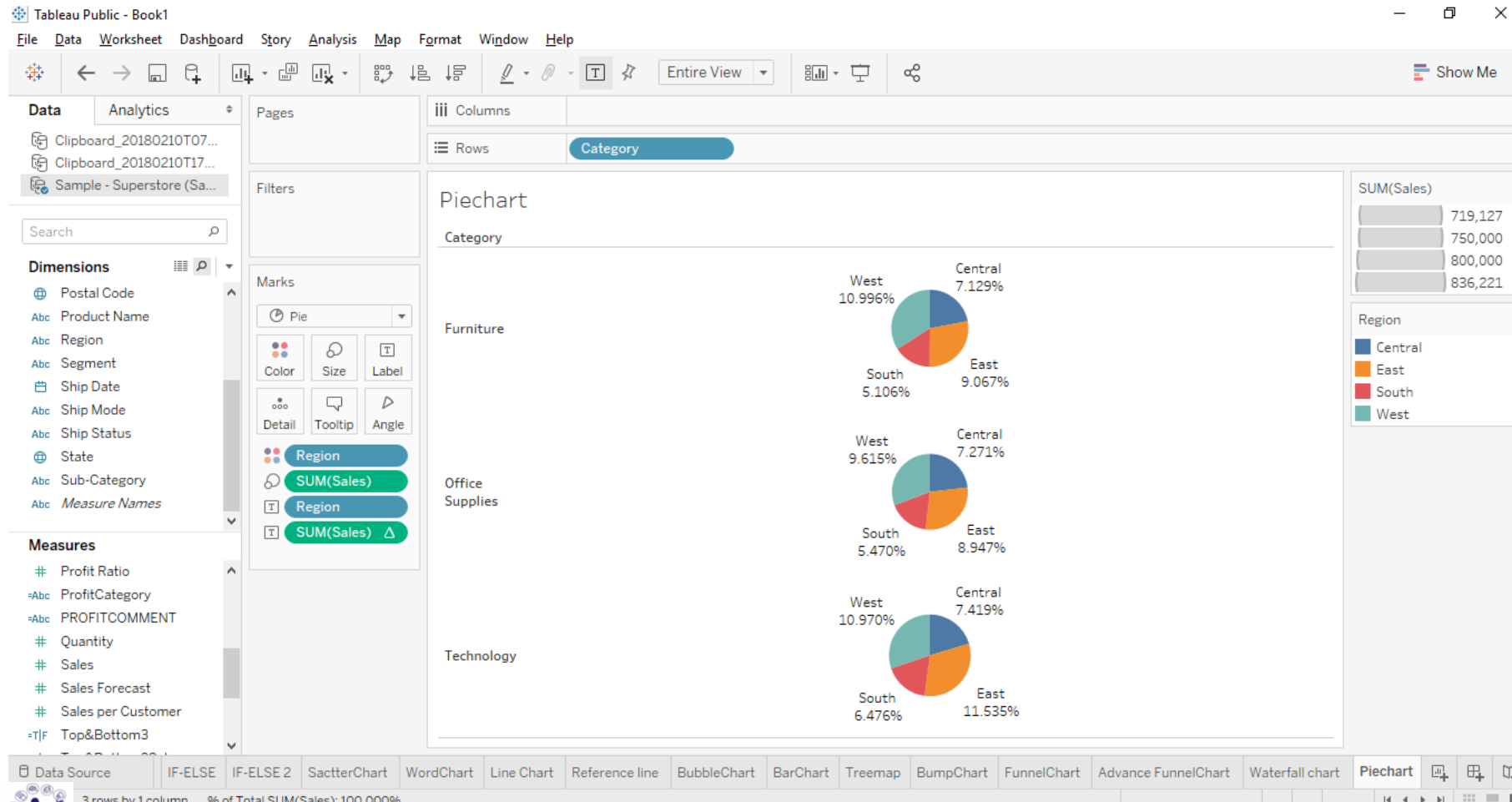
CHARTS - Heat Map

Heat Map is Used to display the data along with color. It will help to compare the data by their color.



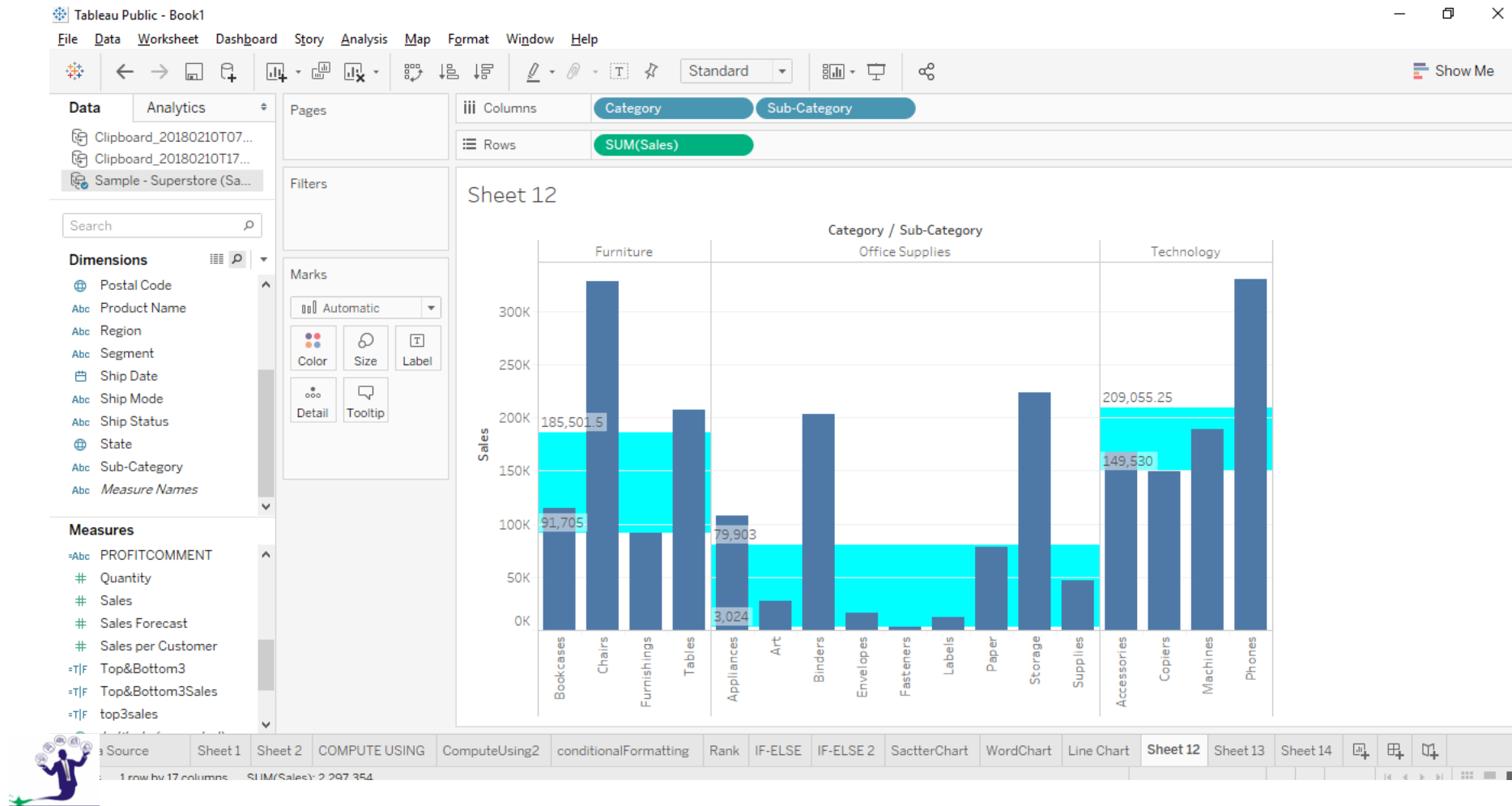
CHARTS - PIE CHART

Pie Chart: Comparatively displays the measure value.



CHARTS

Reference Lines: These are used to identify / highlight the values with respect to a certain level. Eg: If we need to identify the below average and above average sales. To add a reference line right click on X axis and click on add reference line.



CHARTS

Bump Chart: It is the line chart where the rank changes with time.

