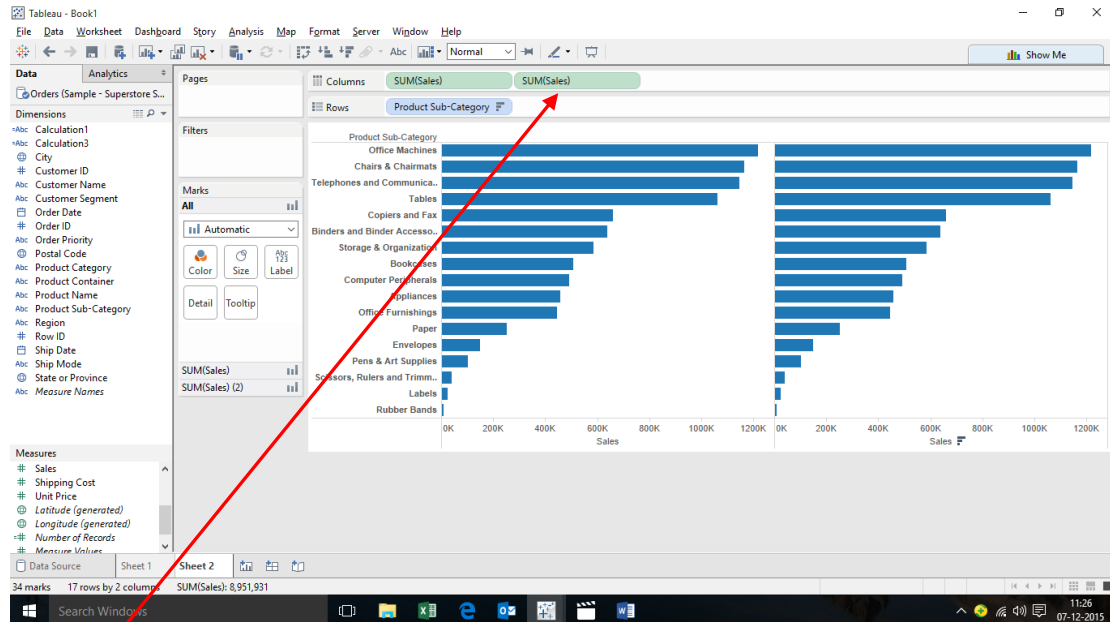


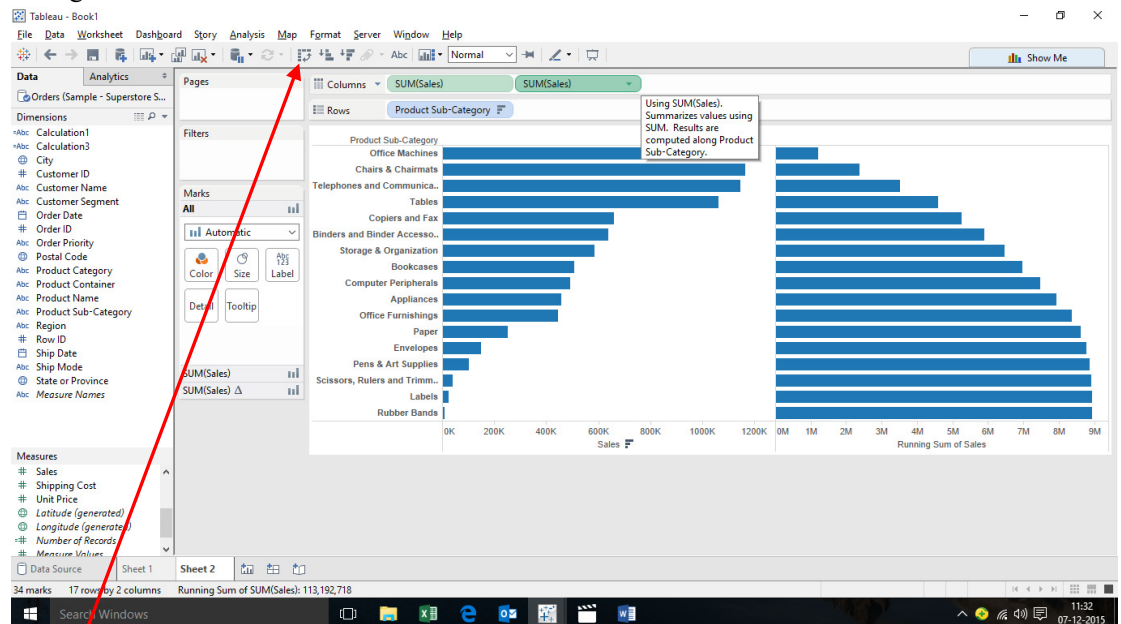
## Pareto:

1. Product Sub-Category to Rows
2. Sales to Columns
3. Descending Sort
4. Drag another copy of Sales to Columns



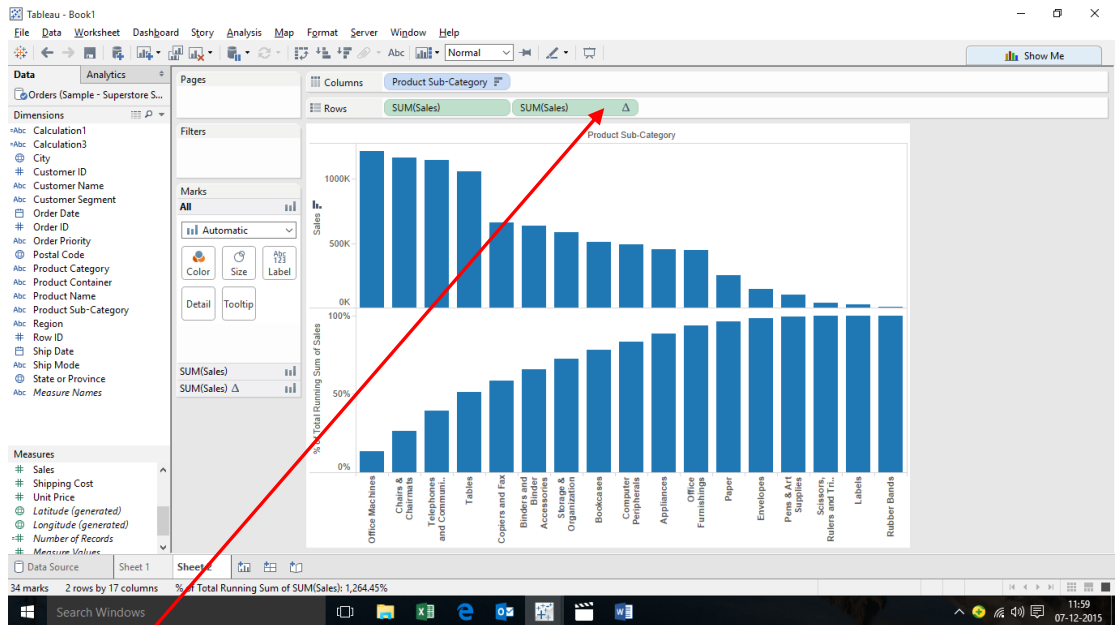
5. Click on Sum(Sales) to perform the following Quick Table calculation

### a. Running total

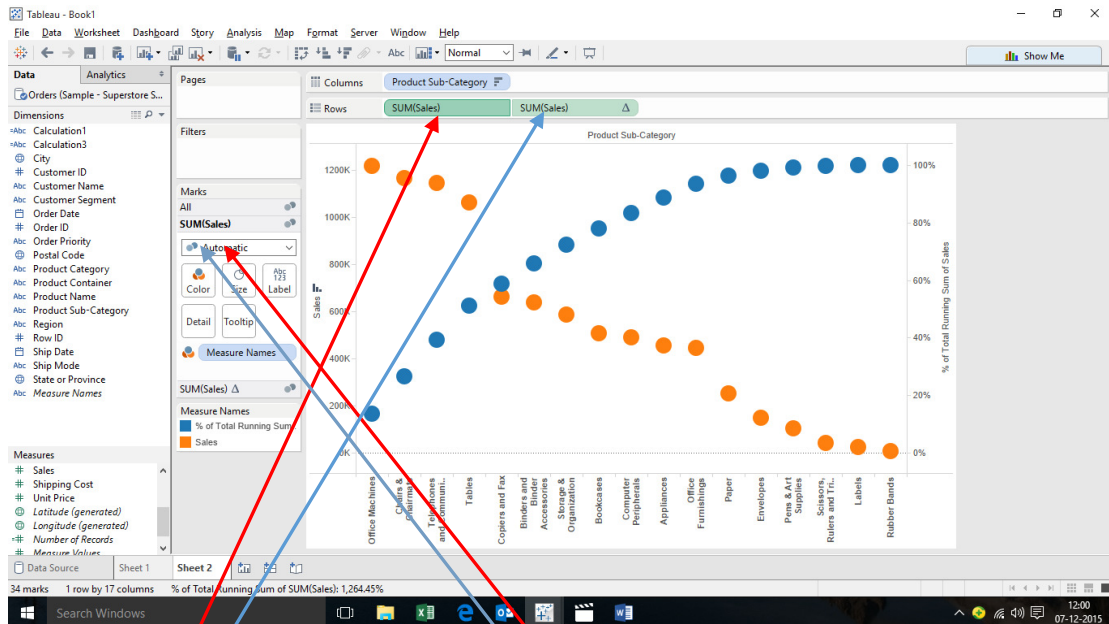


- b. Edit Table Calculation → Perform Secondary calculation on result → Secondary Type to change to % of Total

6. Swap Axis



## 7. Dual Axis

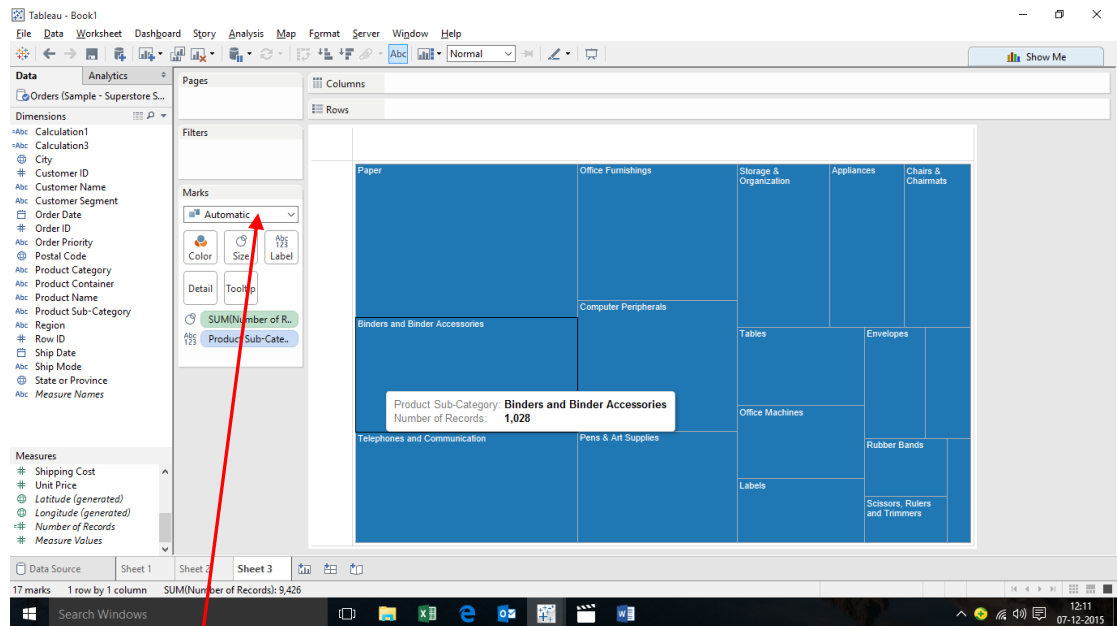


8. Click here and change Automatic to Bar

9. Click here and change Automatic to Line

**Word cloud:**

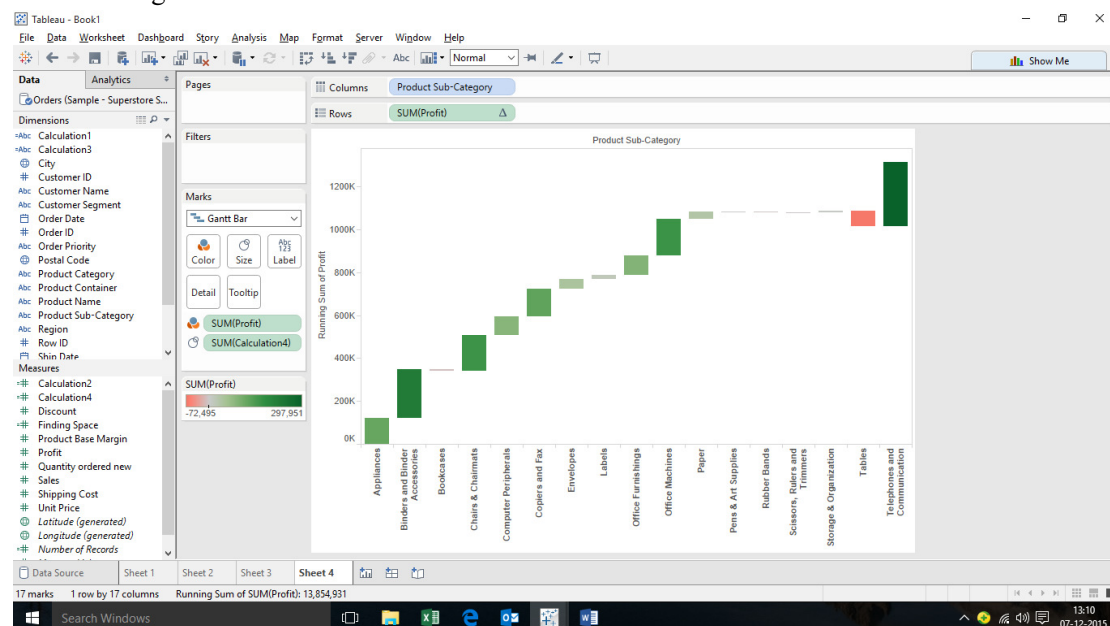
1. Product Sub-Category to Text
2. Number of Records to Size



3. Change Automatic to Abc
4. Profit to Colors

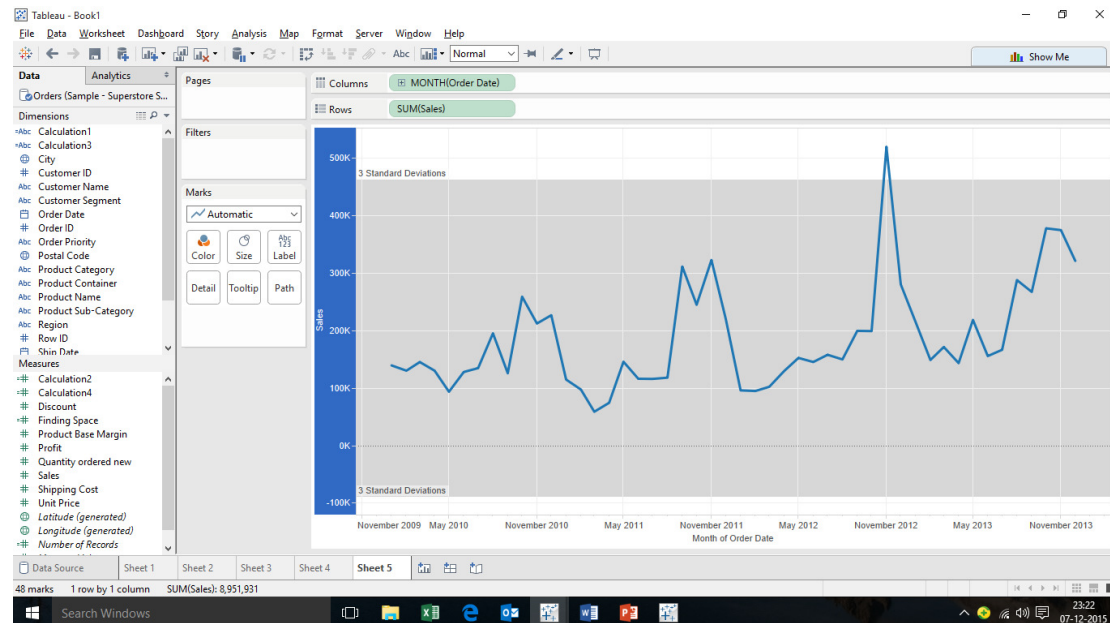
## Waterfall Chart

1. Product Sub-Category to Columns
2. Profit to Rows
3. Calculate Running total of Profit (Using Quick Table Calculations)
4. Change Marks from Bar to Gantt Bar
5. Profits to Colors
6. Create a calculated field (-[Profit])
7. Drag the calculation to Size



## Control Chart: (Static)

1. Sales to Rows
2. Order date – Month continuous to Columns.  
(Purpose is to see if sales falls 3 Standard deviations away from the mean)
3. First Right click on Sales Axis (Y Axis). Add reference line ~ Line ~ Entire Table ~ Average ~ Change to dotted line and maybe a different color
4. Create another reference line ~Right click create Reference line (On y Axis) ~ Distribution ~ Value ~ Standard deviation ~ -3,3



## Control Chart: (Dynamic using Parameters)

1. Sales to Rows
2. Order date – Month continuous to Columns.
3. Create calculated field Call it “Window Average”  

$$\text{WINDOW\_AVG}(\text{sum}([Sales]))$$
 → Add this calculation to details → Add reference line by right clicking Y axis → Line → Entire Table → Under Value, select the “Windows average” (Calculated field added to details) → Average
4. Create Upper control limit & lower control limit Using calc fields
  - $\text{UCL} = [\text{Window Average}] + \text{window\_STDEV}(\text{sum}([Sales]))$
  - $\text{LCL} = [\text{Window Average}] - \text{window\_STDEV}(\text{sum}([Sales]))$
  - Add these two calculations to details and create reference lines as did for the Windows Average.
5. Add another Sum (Sales) in the rows shelf. Convert the second Sum(Sales) to Circle marks (Instead of a line), → Dual Axis → Synchronise axis.
6. To set ‘KPI’ for data points falling beyond the control limits by using a different color:.
7. Create Calculated field call it “KPI” : if  $\text{sum}([Sales]) > [\text{UCL}]$  or  $\text{sum}([Sales]) < [\text{LCL}]$  then "Out of Control" else "In Control" End
8. Drag and drop this calc field to colors

9. To control the standard deviations dynamically using parameter control
- Create a Parameter ("Standard Deviation") ~ Float~ Range~0.1 to 4, Step size as 0.1. Click Ok
  - Show Parameter control
  - Already have 2 calculated fields UCL & LCL. Need to link it these calculations
  - For UCL :  $[\text{Window Average}] + \text{window\_STDEV}(\text{sum}([\text{Sales}])) * [\text{Standard Deviation}]$
  - LCL :  $[\text{Window Average}] - \text{window\_STDEV}(\text{sum}([\text{Sales}])) * [\text{Standard Deviation}]$