

INTERNSHIP REPORT ON

Digital e sales dashboard

By Sayan Sahu

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Under the guidance of Mr.Rahul Kumar

About the Project

Introduction

The project aims to develop a comprehensive digital sales dashboard using Tableau to visualize and analyze sales data, enabling stakeholders to make data-driven decisions.

SCOPE

The scope of the project includes data collection, data preprocessing, dashboard design, and implementation using Tableau. The dashboard provides insights into key sales metrics, trends, and performance indicators.

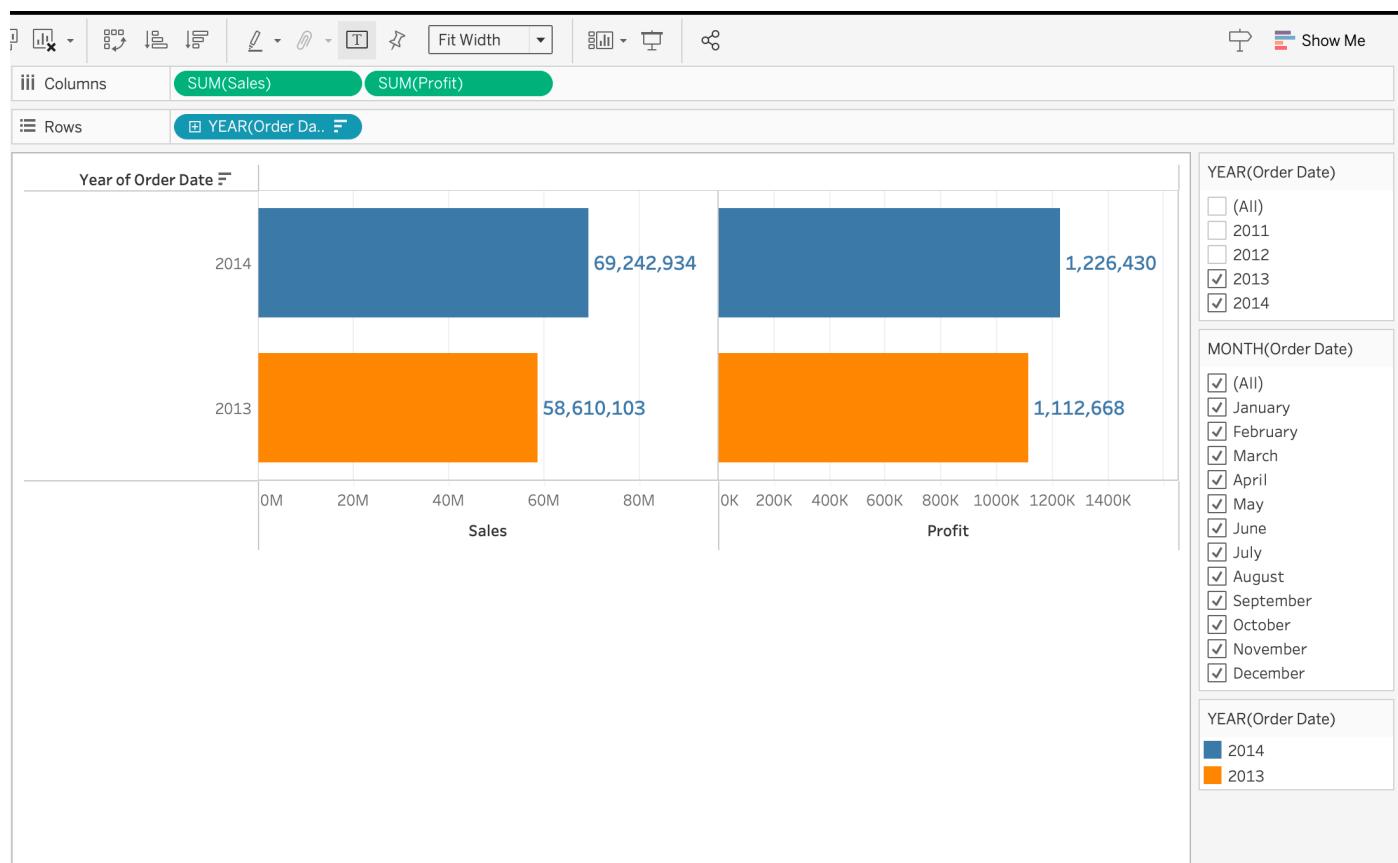
Tools and Technologies:

- Tableau Desktop:For data visualization and dashboard creation
- MS Excel:For data collection and preprocessing.
- Data sheet:Sales data from the company's database.

PROBLEM STATEMENT

Problem Statement 1.

The CFO of an electronics chain is interested in gaining a better understanding of sales and profits. She has a very specific question of the data "What do monthly sales and profits look like over the past two years?"



This is what monthly sales and profit looks like past 2 years we also have a filter on the right hand side of the screen for getting more specific data distribution we can select months and years according to our need.

Problem Statement 2.

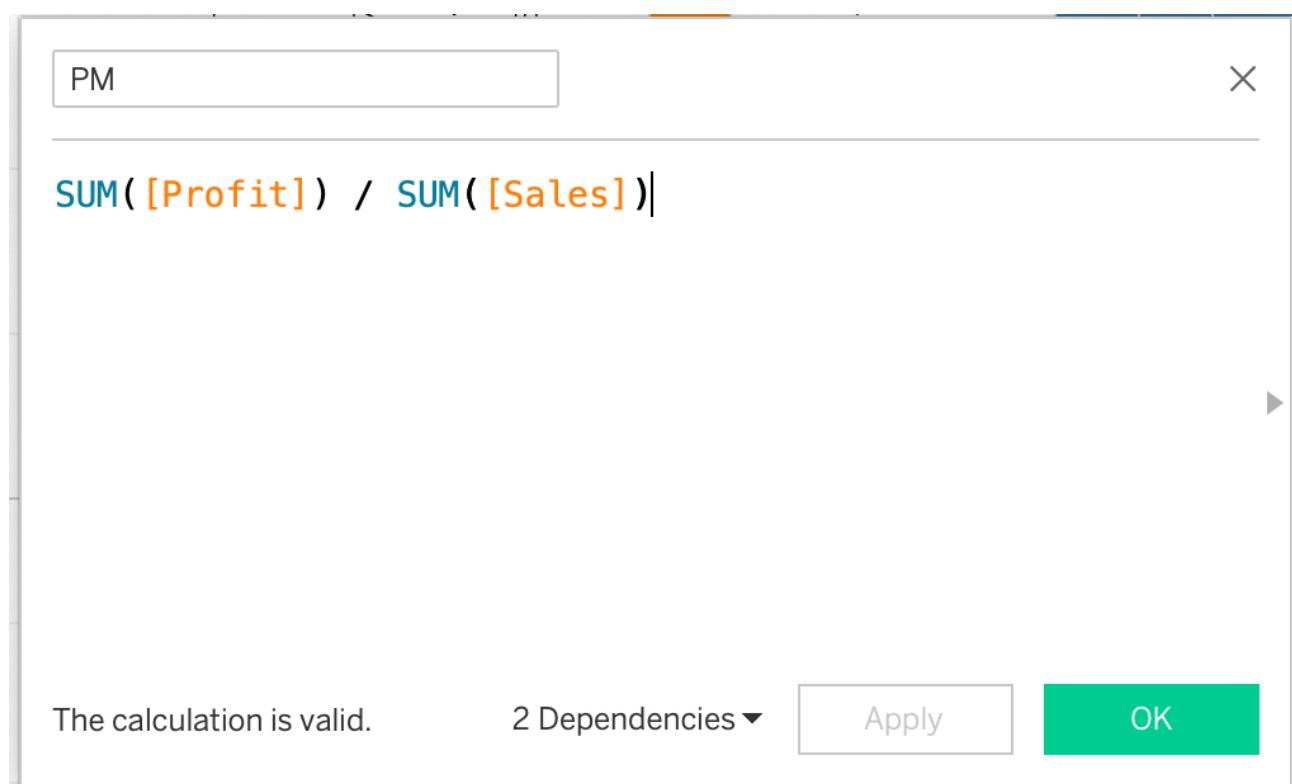
The CFO liked this but now feels that the picture is a bit misleading since we are looking at absolute numbers for profit.

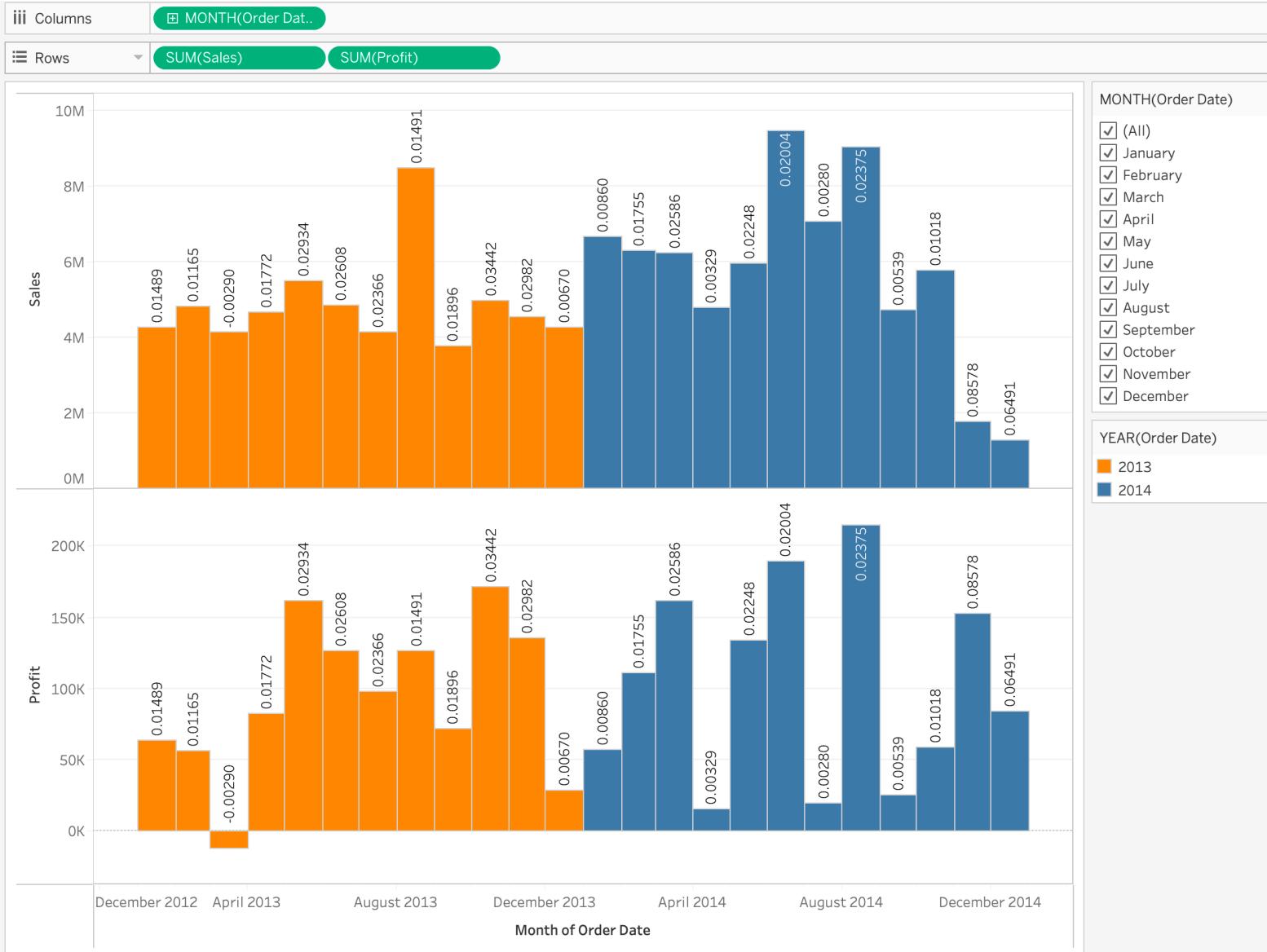
"Can you fix the previous viz to show profit margin instead of the absolute profit numbers?"

Solution:

To calculate Profit margin the formula we have used is
 $\text{SUM}([\text{Profit}]) / \text{SUM}([\text{Sales}])$

We have created a new calculated parameter and defined this formula in it.





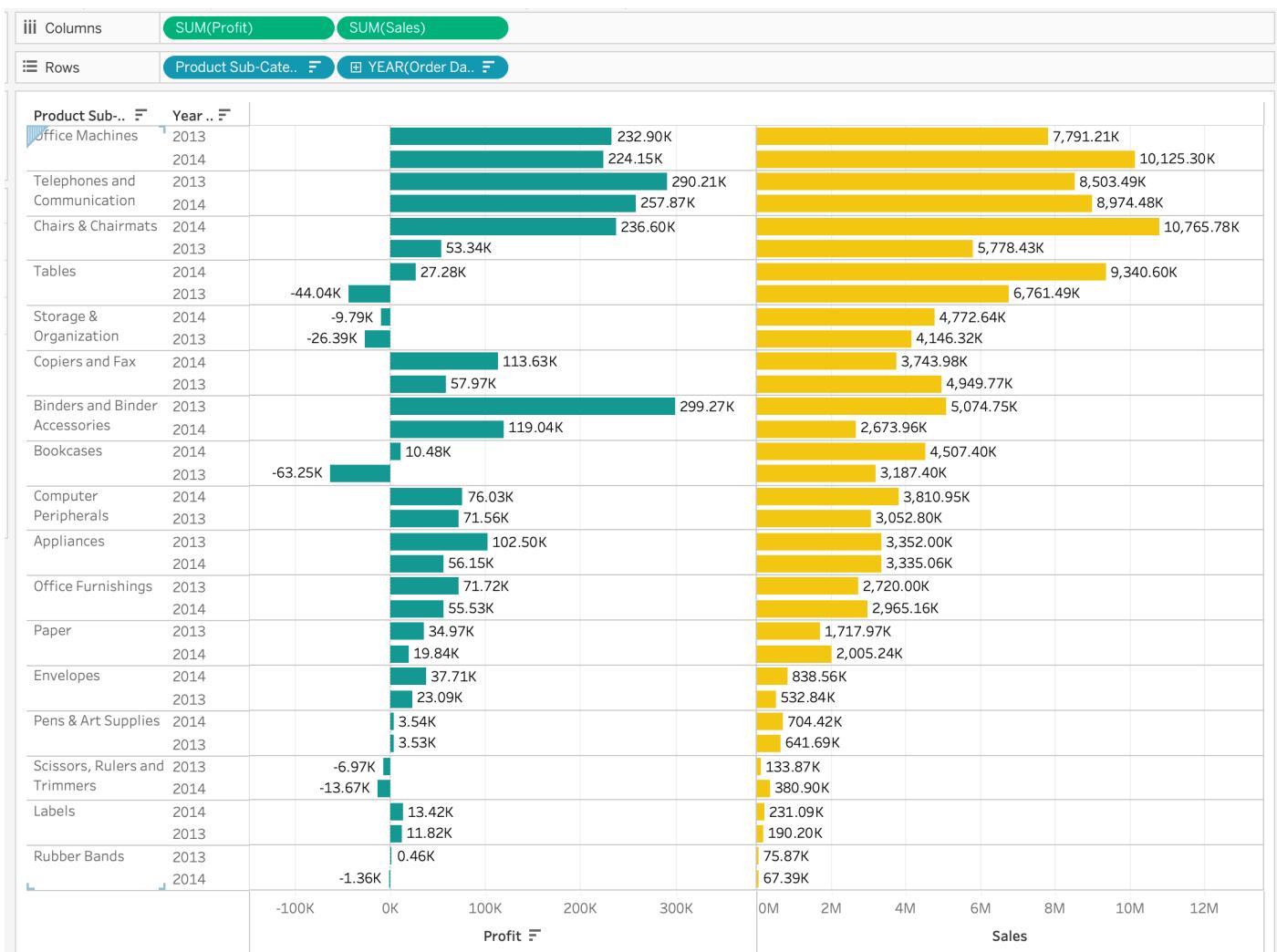
This is our Profit Margin being shown at each bar for sales and profit values. Here too we have a Month and Year filter on our right side panel for viewing according to our need.

Problem Statement 3.

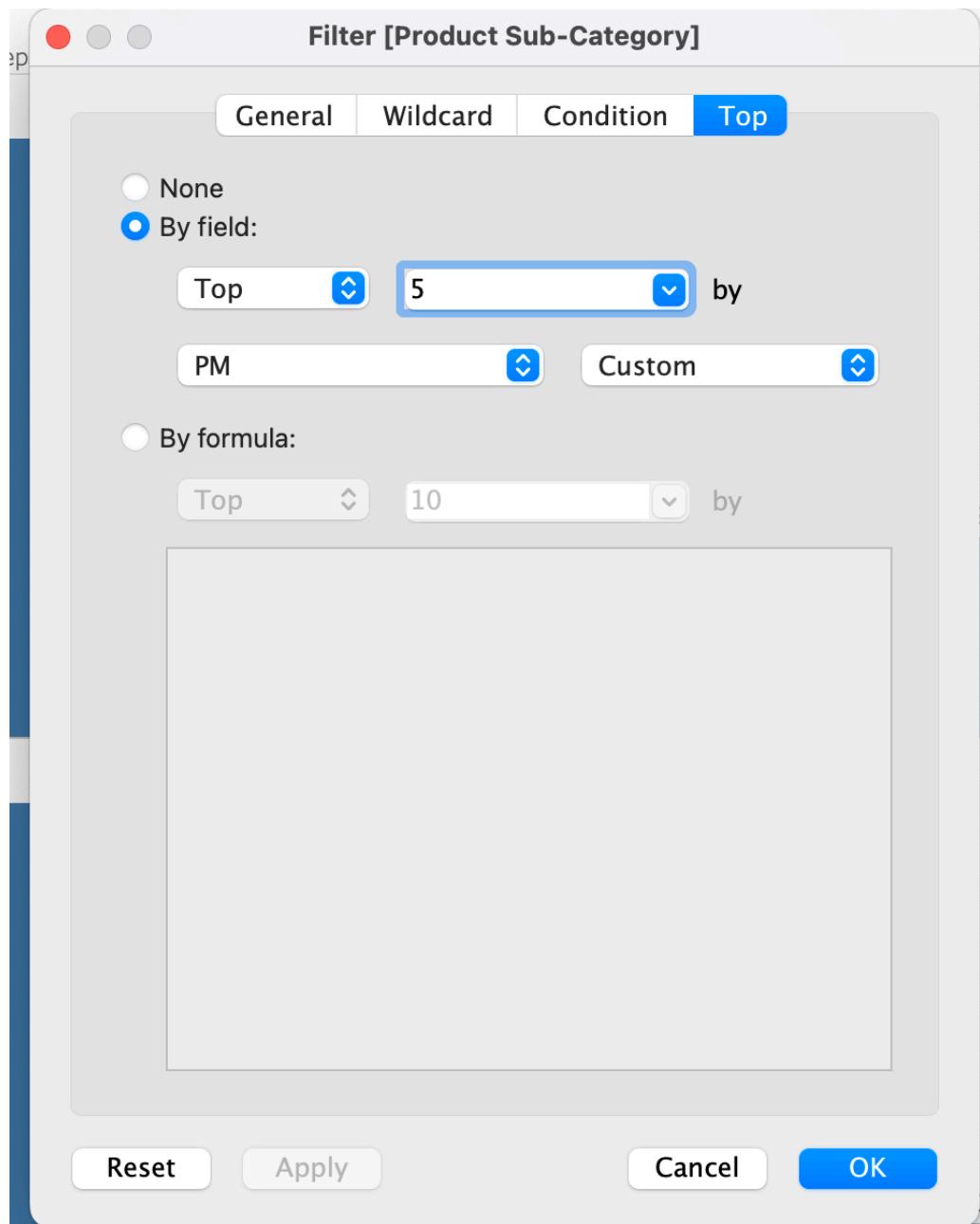
Management has a new request: "**Can you show us, on the same chart, both profits and sales by product sub-category in descending order of sales?**"

Bonus: Can you think of a way to focus management on the key product categories and not all of the many small items that the company sells?

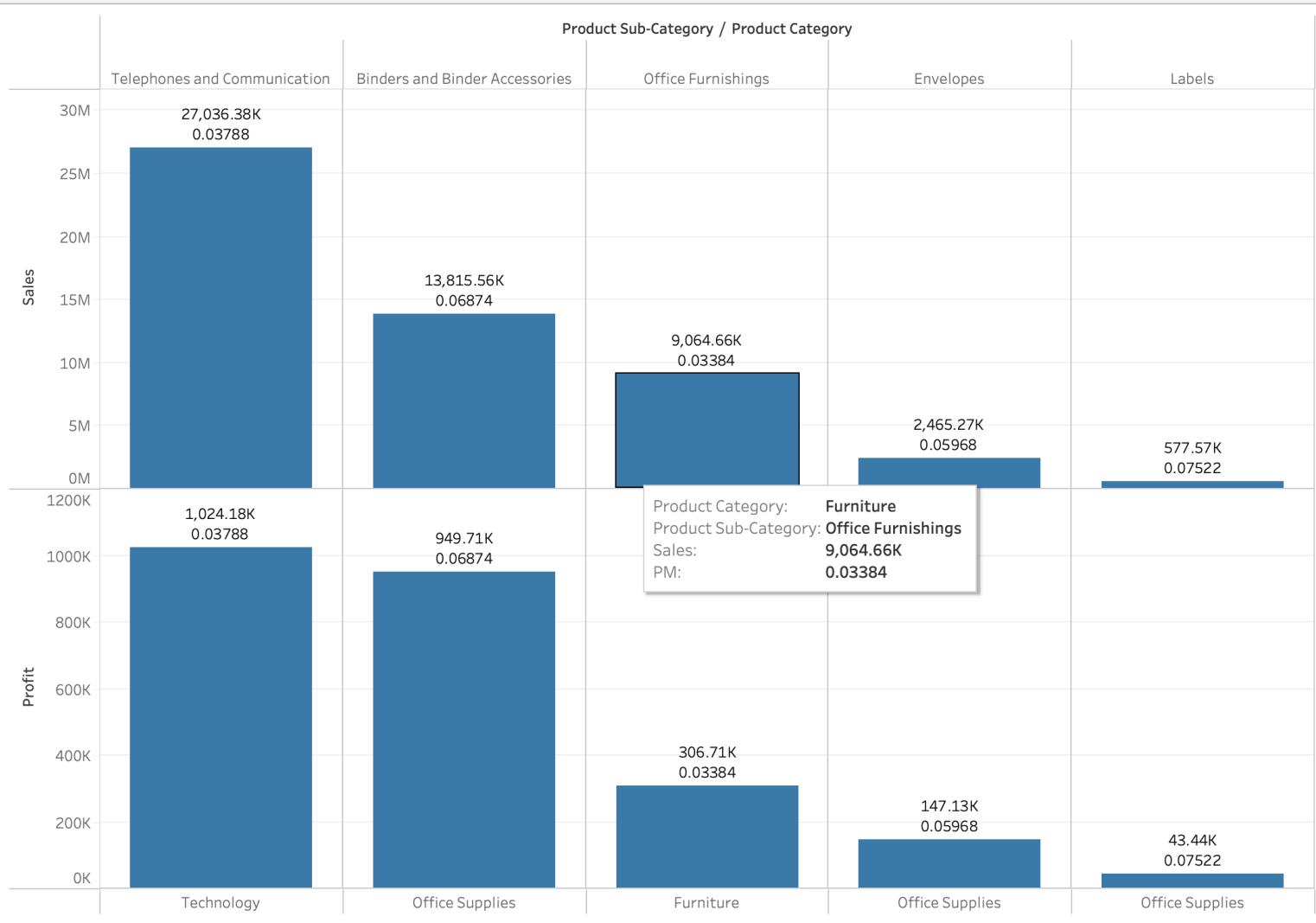
On focussing on the first part of our problem we need to have Product sub category and Year in our rows and profit and sales value in our column our sheet will look like this .



For the second part of our problem we need to add a top N filter where N will be 5 so that it can show only top 5 key selling products on the basis of profit margin.



This is what our filter looks like and given below is our sheet



This is what our sheet looks like showing the top 5 company products depending upon the profit margin alongside profit and sales.

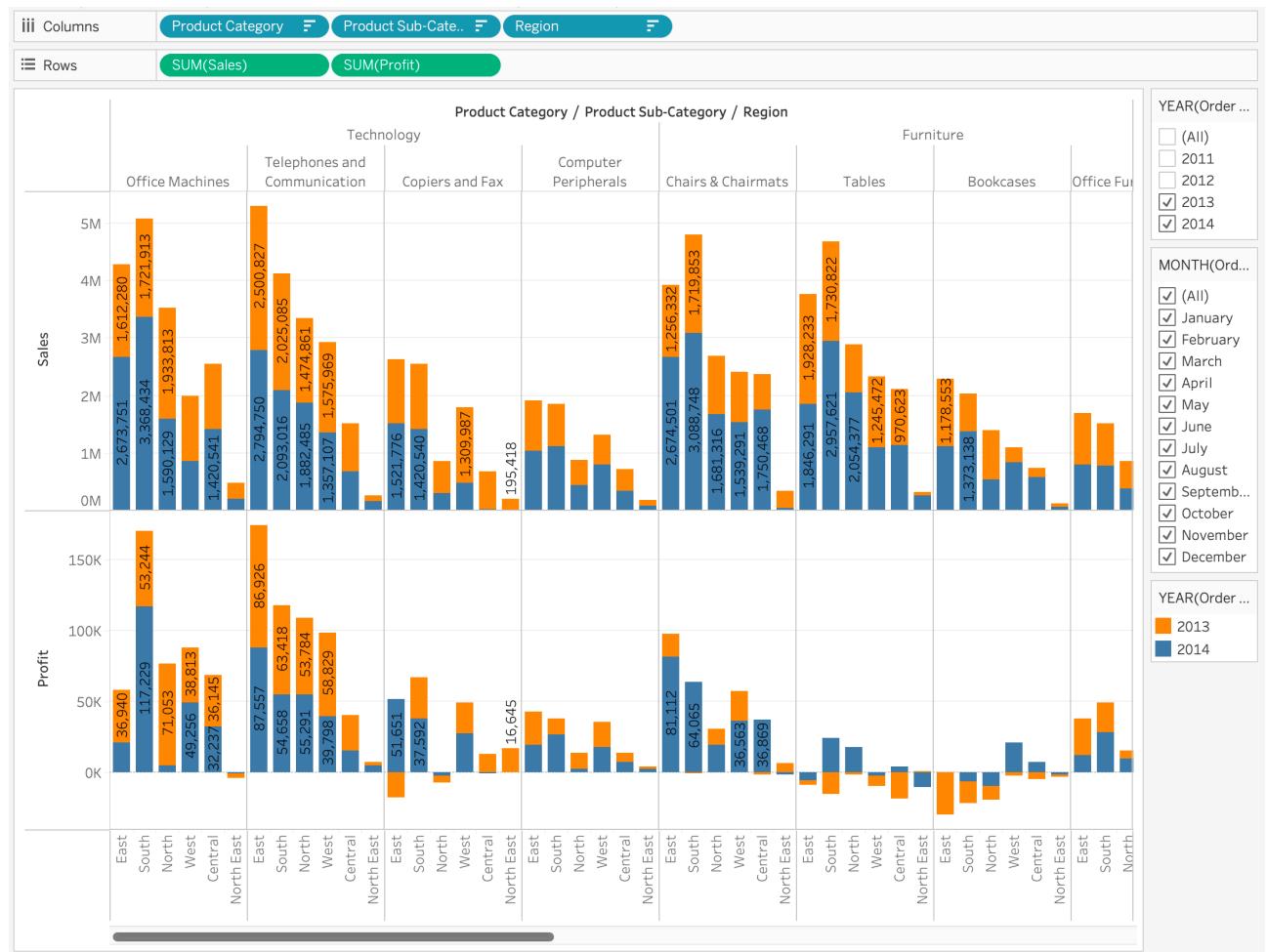
Problem Statement 4.

The regional sales managers of Superstore are interested in an analysis of sales and profit by product category, sub-category and region. They will use this information to discuss growth opportunities for new products and possible pricing changes or product cancellation ideas.

They want to know: **"What do our sales and profits look like by product category, sub-category and region? Also, can you give us the ability to drill from category to sub-category that was purchased?"**

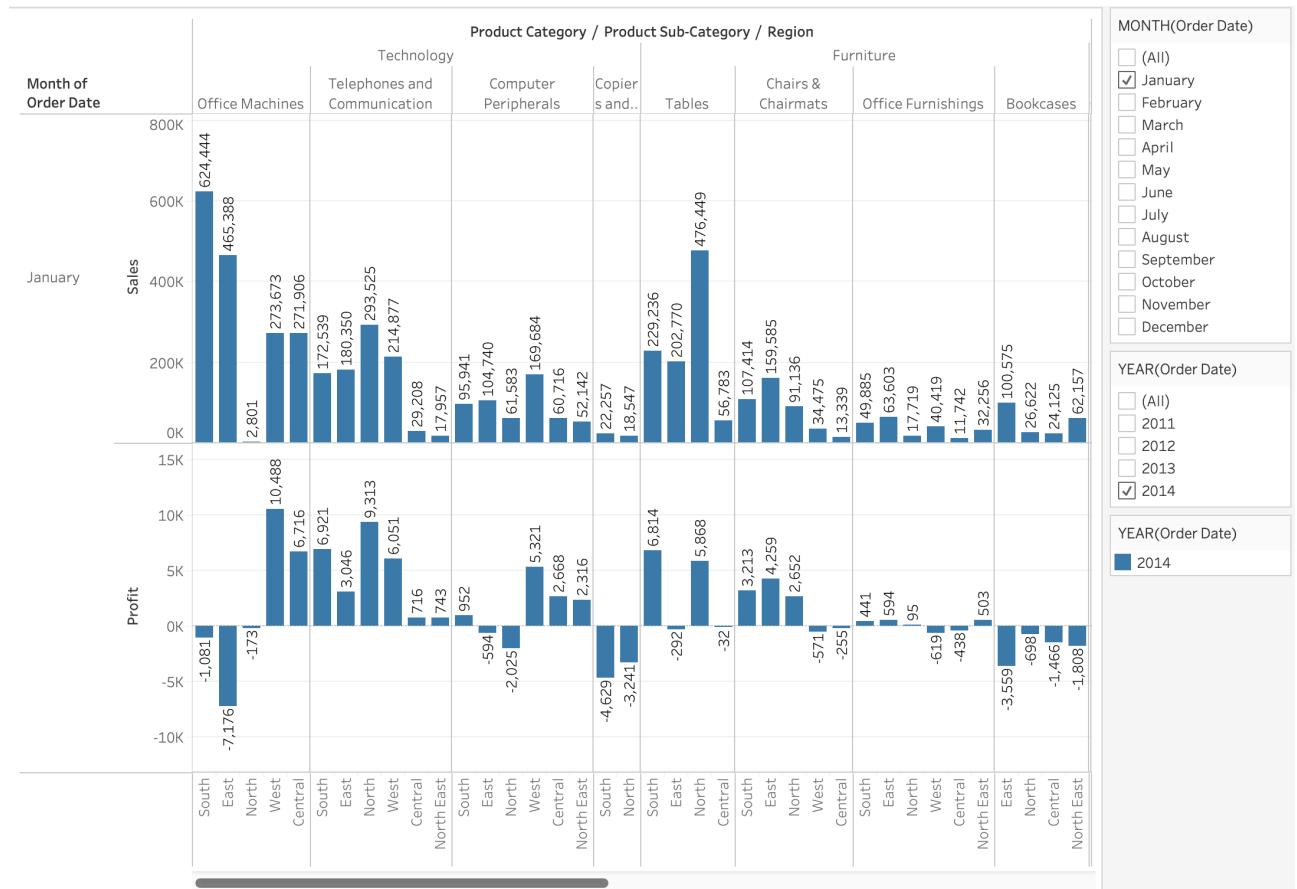
Bonus: Can i look at the trend for each segment within the same view

Lets first focus on the first part of our problem where the product category ,sub category and region is in column and sales and profit in rows.



This is how it looks like having months and year filter on the right hand side.

For second part of our problem we need to have a look at trend of each segment within the same view for this we can add month to the rows of the existing sheet.



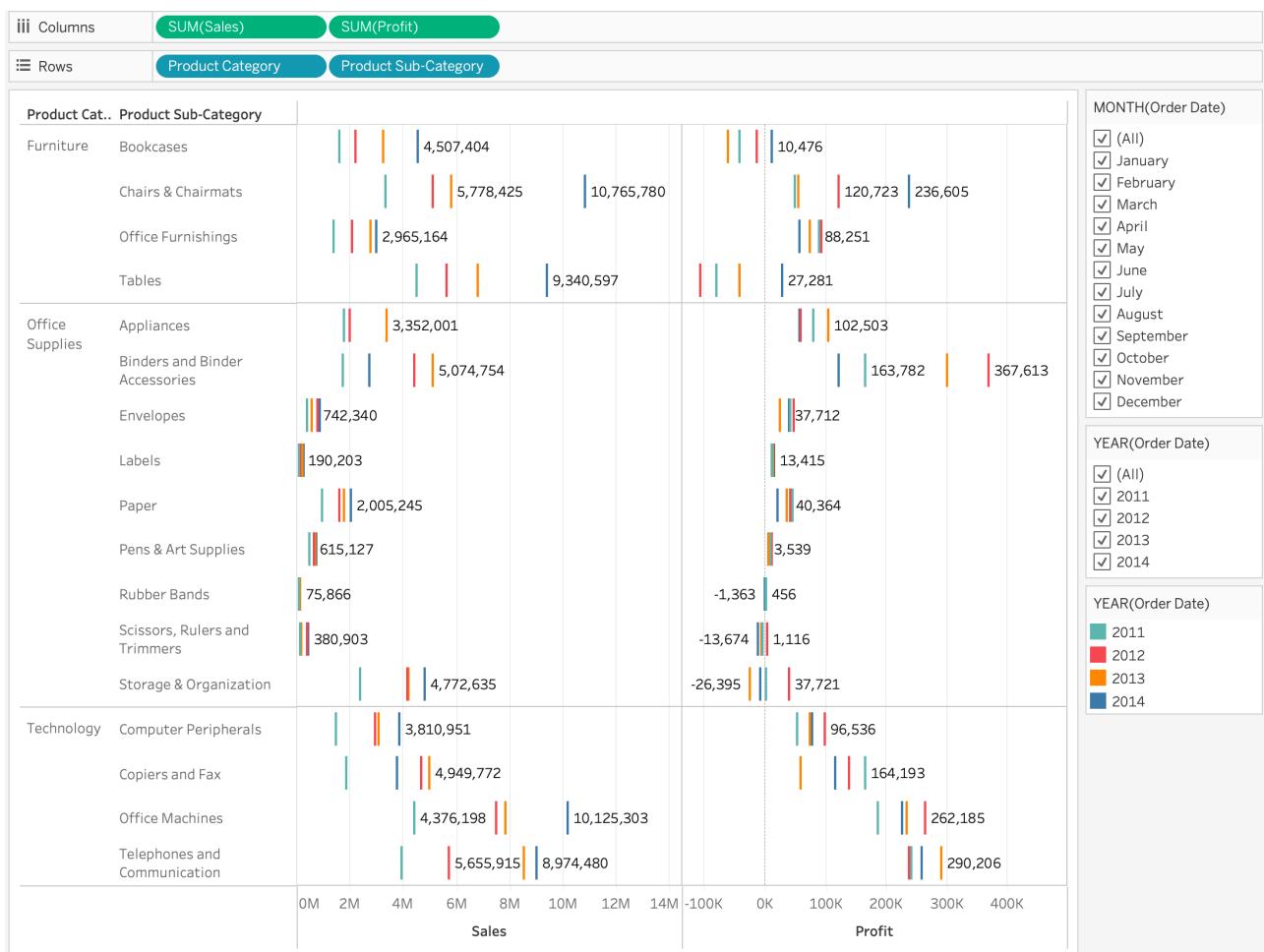
Here we again have a filter on the right hand side for filtering on basis of month and year

Problem Statement 5.

The Sales Manager for South East Asia doesn't want to see a viz of profit and sales by product category and sub-category.

"The bar chart is awesome, but can you show me a cross-tab of the data? I need to see actual values!"

For this we need to have Product category and sub category on rows and sales and profit in columns and we'll select the graph type to gantt bar

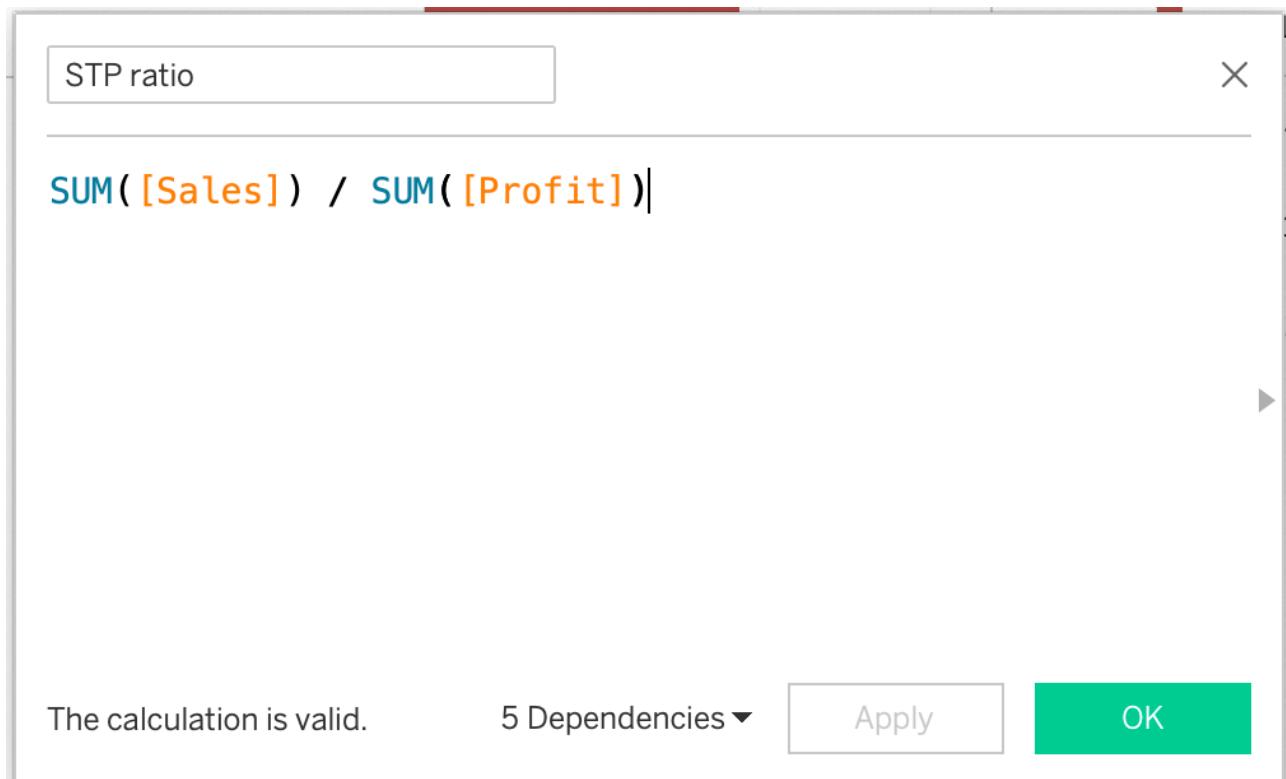


Problem Statement 6.

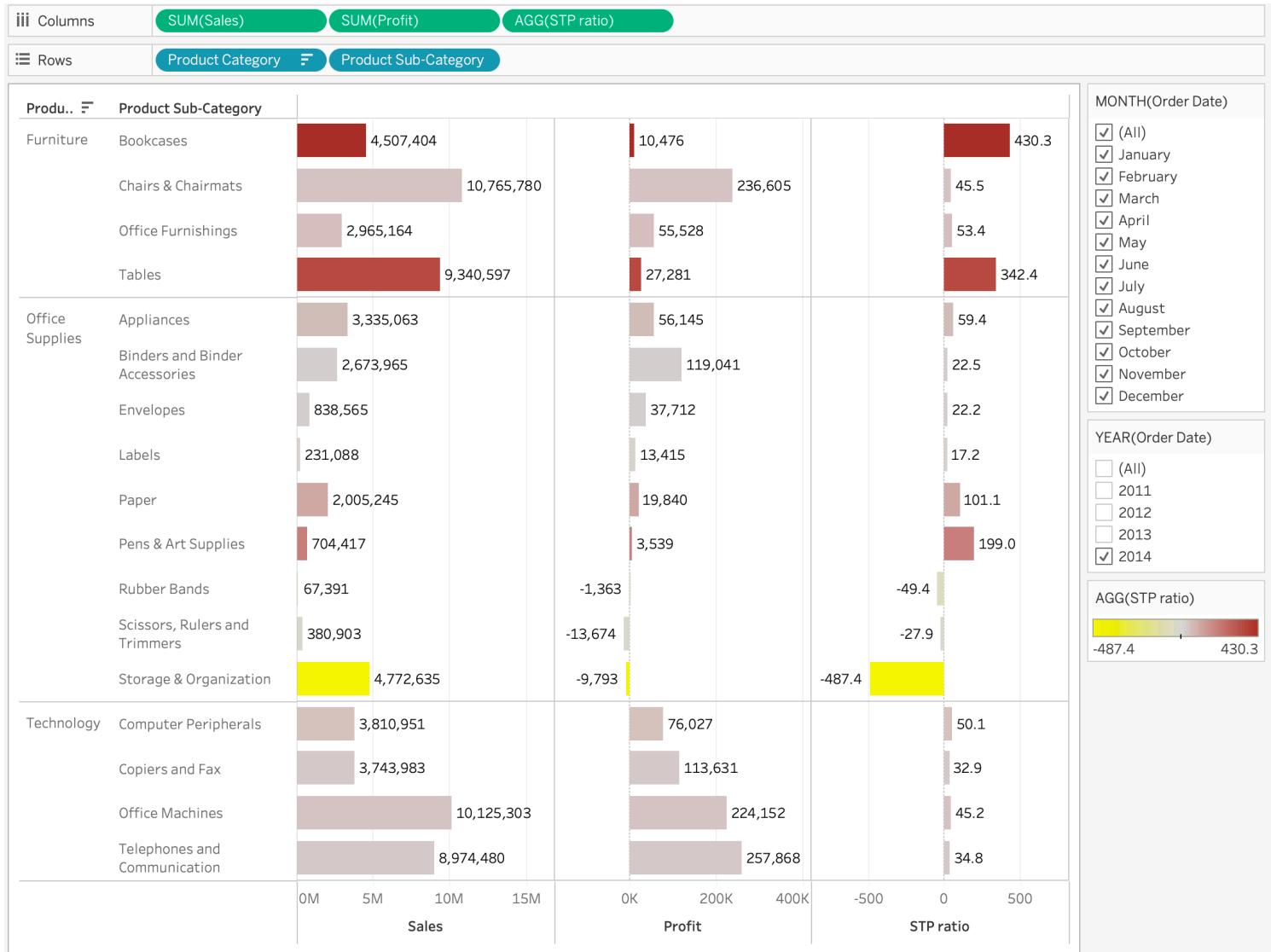
After the Regional Sales Managers reviewed your analysis the RM for North Asia called and asked for more details.

His question: "**I like the crosstab, but I also need to quickly see where my best and worst performers are. Can you build me a view highlighting sales by profits?"**

For viewing best and worst performers we need to have a new calculated field as sales to profit ratio where the formula we have used is this



This is included in the column and give it to color property and the sheet we obtain is given below



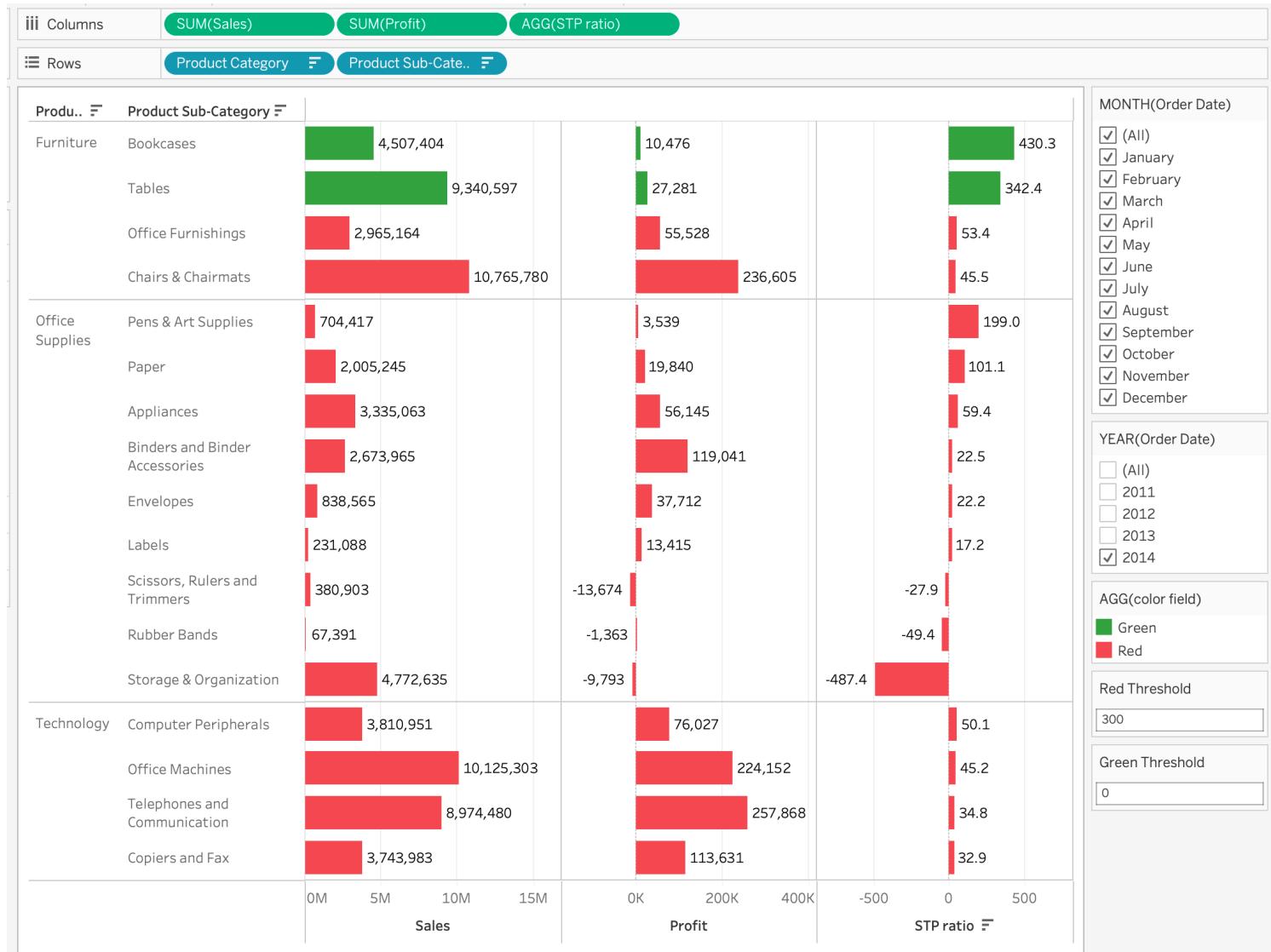
Here our sheet is very interactive with higher STP ratio in red colours showing the best performers .We also have a filter on the right side panel for filtering on basis of year and months.

Problem Statement 7.

“I like the highlight table, but I need to define my own values for what is Red and Green. Can you help me some traffic lighting?”

To enable the HR to give his/her own colour values we have to create a new parameters Green threshold and Red Threshold and then create a new calculated field named as color field implementing Red & Green Threshold which one can input.



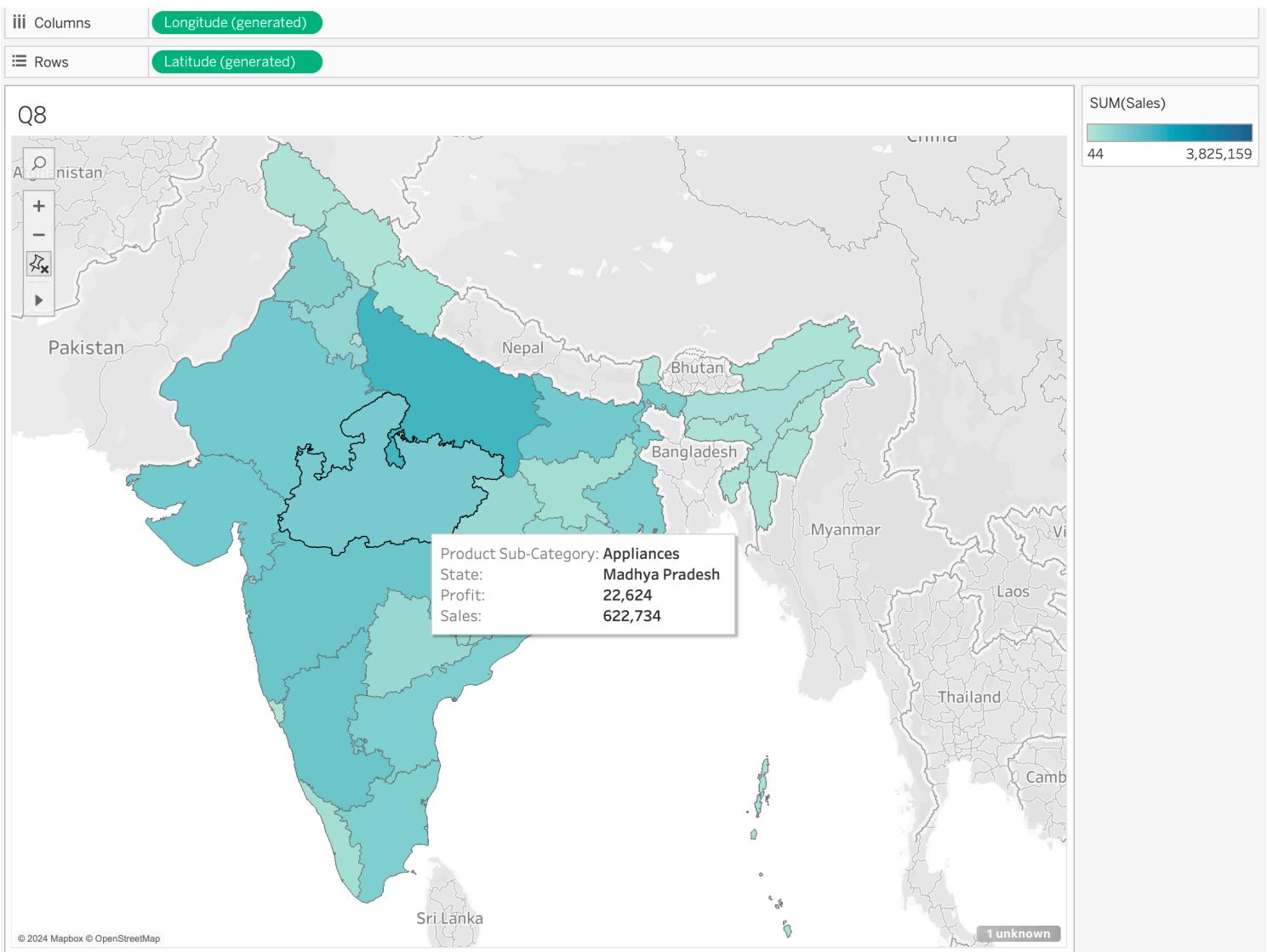


This is what our sheet would look like here in Red Threshold one can input the values and in Green also determining at what values the red and green color appears.

Problem Statement 8.

Now things were getting exciting, the managers scheduled a follow-up meeting with you and asked for additional analysis.

"Can you create a geographic map to distribute to the state managers that shows profits and sales down to the city level? We also need the ability to choose the Product Category that is displayed."

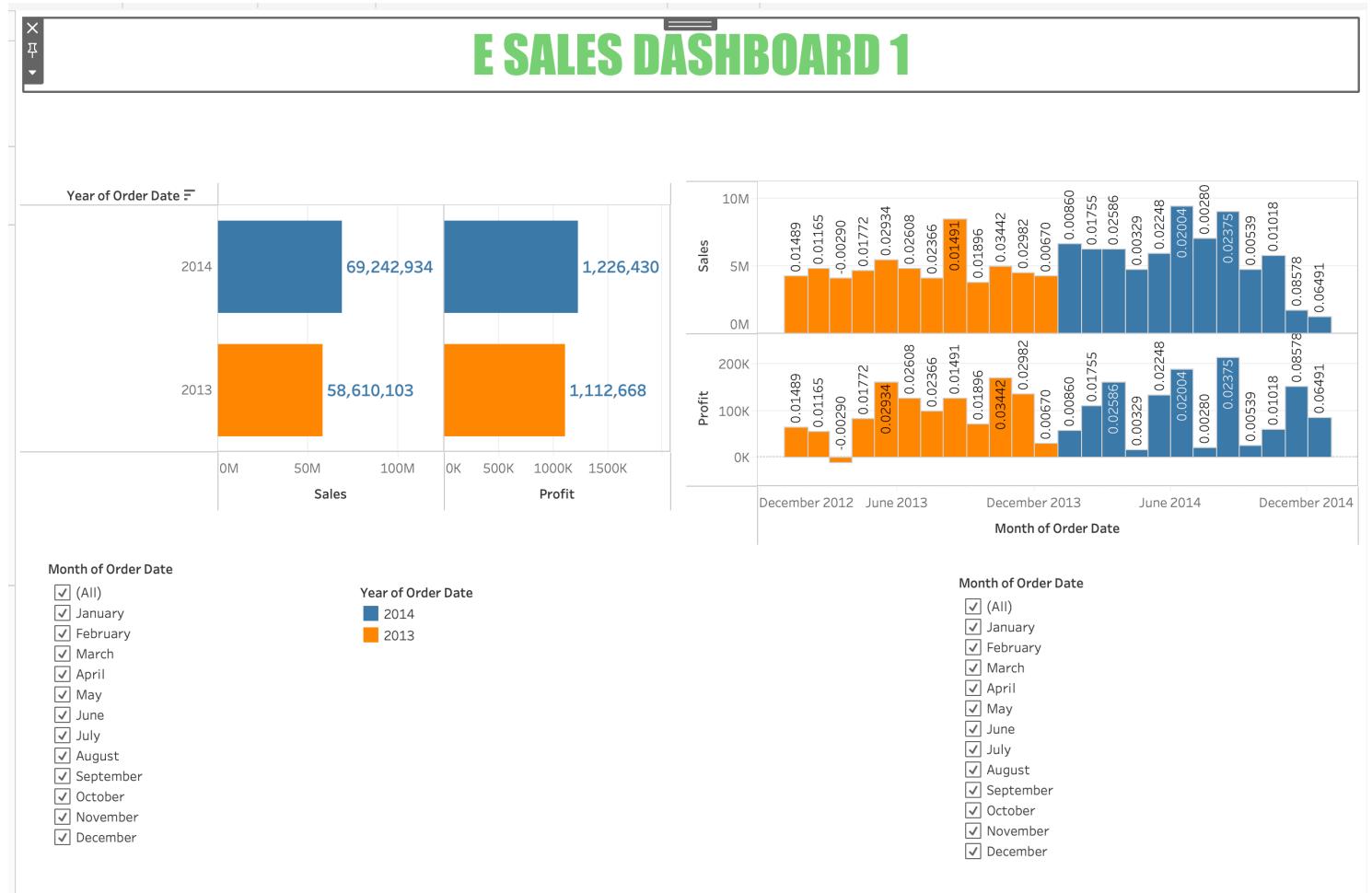


This is what our map looks like showing the state with more sales with deeper color and on hovering over each state you can easily see the profit value the sales value and the product subcategory too.

Problem Statement 9.

Create a Sales Dashboard using all the questionnaire shared above.

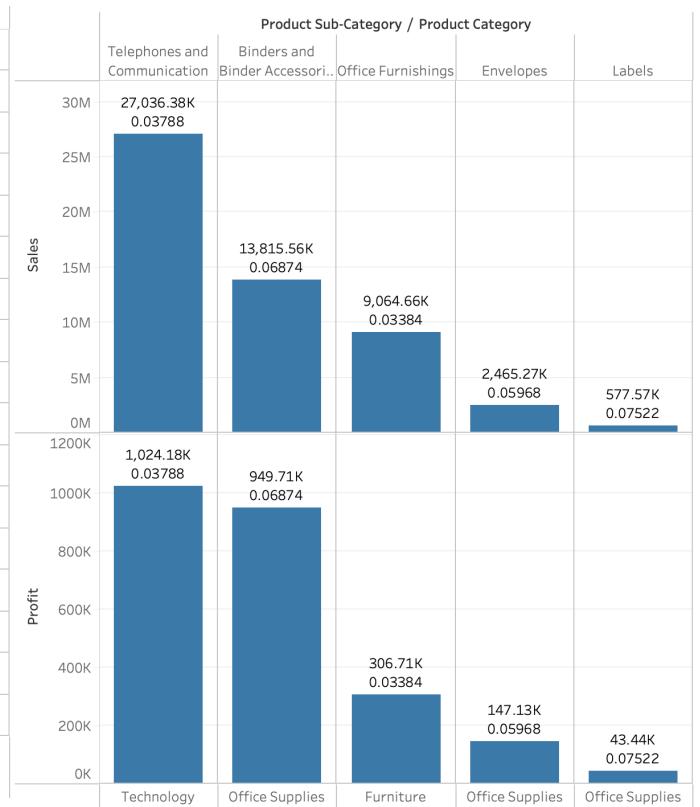
Problem statement 1 &2 dashboard.



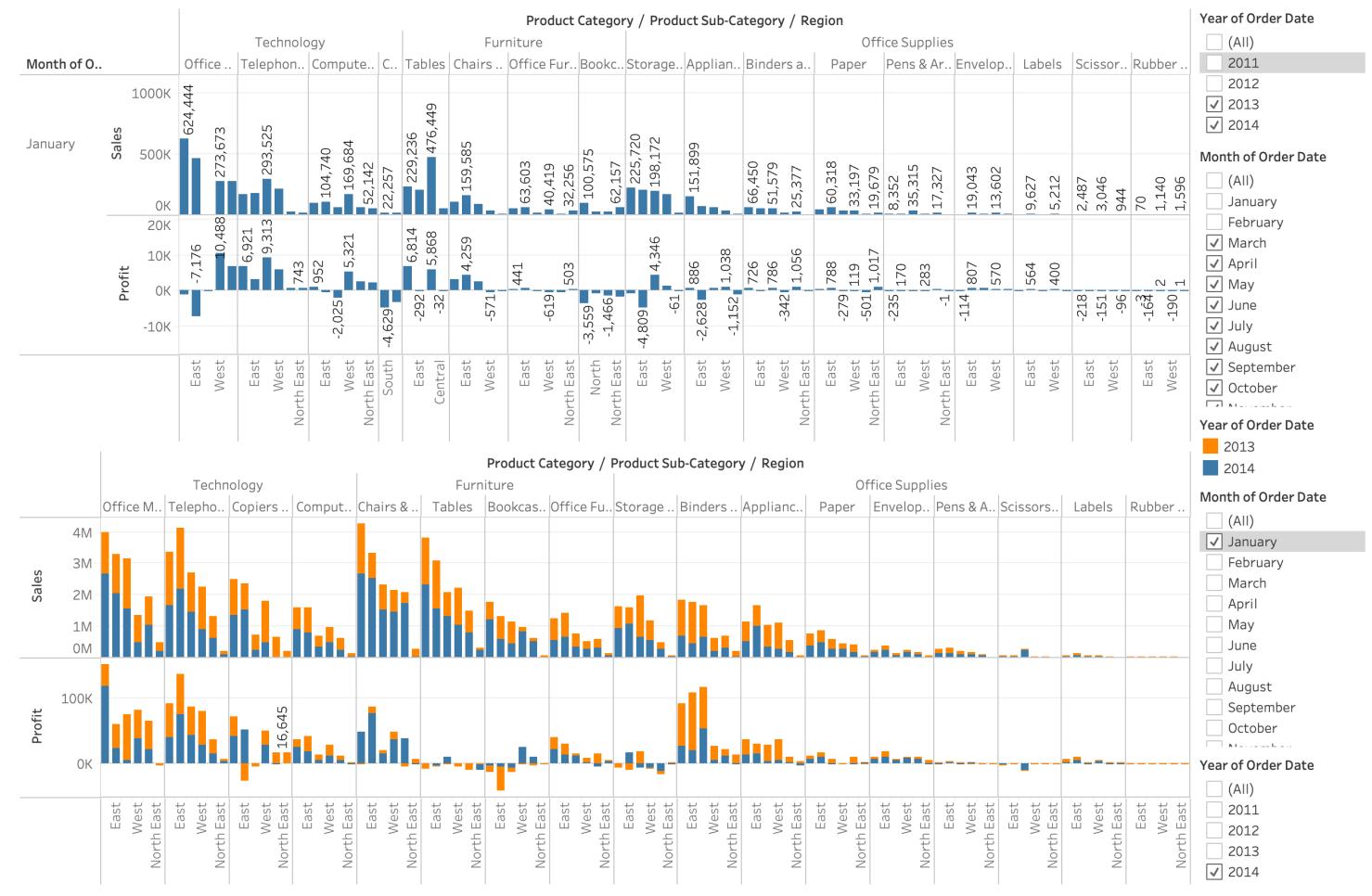
Problem statement 3 dashboard.

SALES DASHBOARD 2

Product Sub-Category	Year	Profit	Sales
Office Machines	2013	232.90K	10,125.30K
	2014		
Telephones and Communication	2013	290.21K	8,503.49K
	2014	257.87K	8,974.48K
Chairs & Chairmats	2014	236.60K	10,765.78K
	2013	53.34K	5,778.43K
Tables	2014	27.28K	9,340.60K
	2013	-44.04K	6,761.49K
Storage & Organization	2014	-9.79K	4,772.64K
	2013	-26.39K	4,146.32K
Copiers and Fax	2014	113.63K	3,743.98K
	2013		
Binders and Binder Accessories	2013	299.27K	5,074.75K
	2014	119.04K	2,673.96K
Bookcases	2014	10.48K	4,507.40K
	2013	-63.25K	
Computer Peripherals	2014	76.03K	3,810.95K
	2013	71.56K	3,052.80K
Appliances	2013	102.50K	3,352.00K
	2014		
Office Furnishings	2013	71.72K	2,720.00K
	2014	55.53K	2,965.16K
Paper	2013	34.97K	1,717.97K
	2014		
Envelopes	2014	37.71K	838.56K
	2013	23.09K	532.84K
Pens & Art Supplies	2014	3.54K	704.42K
	2013		
Scissors, Rulers and Trimmers	2013	-6.97K	133.87K
	2014	-13.67K	380.90K
Labels	2014	13.42K	231.09K
	2013		
Rubber Bands	2013	0.46K	75.87K
	2014	-1.36K	67.39K



Problem statement 4 dashboard.



Problem statement 5 & 6 dashboard.



You can select months and years according to your need it is very interactive.

Problem statement 7 & 8 dashboard.

