SALES PROJECT USING TABLEAU

Requirements - A dashboard for analyzing year over year sales performance

Key requirements -

1.KPI overview - Display a summary of total sales, profits and quantity for the current year and the previous year.

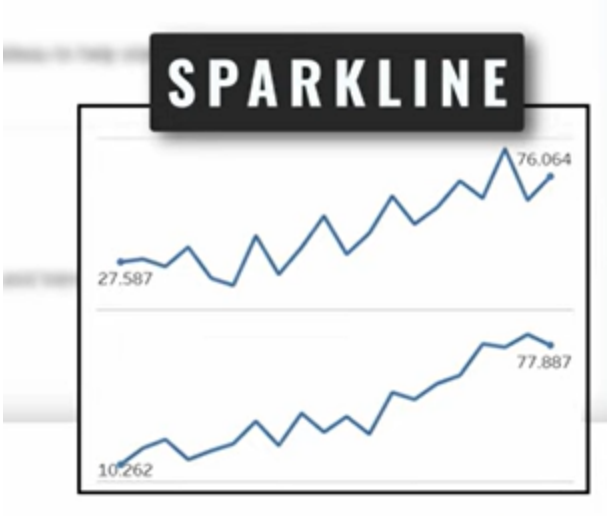
CHART FOR THIS - BANS CHART

Sales Trends

– Present the data for each KPI on a monthly basis for both the current year and the previous year.

– Identify months with highest and lowest sales and make them easy to recognize.

Chart for this -



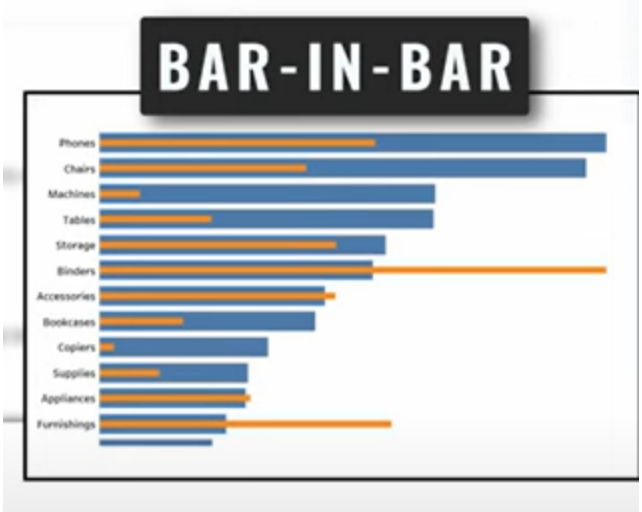
sparkline with circles - to show the max and min values

Product Subcategory Comparison

– Compare sales performance by different product subcategories for the current year and the previous year.

– Include a comparison of sales with profit.

BAR CHARTS - FOR SUBCATEGORY COMPARISION



Weekly Trends for Sales & Profit

– Present weekly sales and profit data for the current year.

– Display the average weekly values.

– Highlight weeks that are above and below the average to draw attention to sales & profit performance.

CHART - LINE CHART

OTHER CHARTS AND REPRESENTATIONS

- Histogram to show frequency distribution , example. how frequently a customer has ordered in a year.
- Table to show rankings - example . Ranks of top 10 customers and how much they have purchased.

INTERACTIVITY REQUIREMENTS

Dashboard Dynamic

– The Dashboard should allow users to check historical data by offering them the flexibility to select any desired year. —dynamic , user can choose years — parameters

– Provide users with the ability to navigate between the dashboards easily. — buttons

– Make the charts and graphs interactive, enabling users to filter data using the charts —dashboard filters

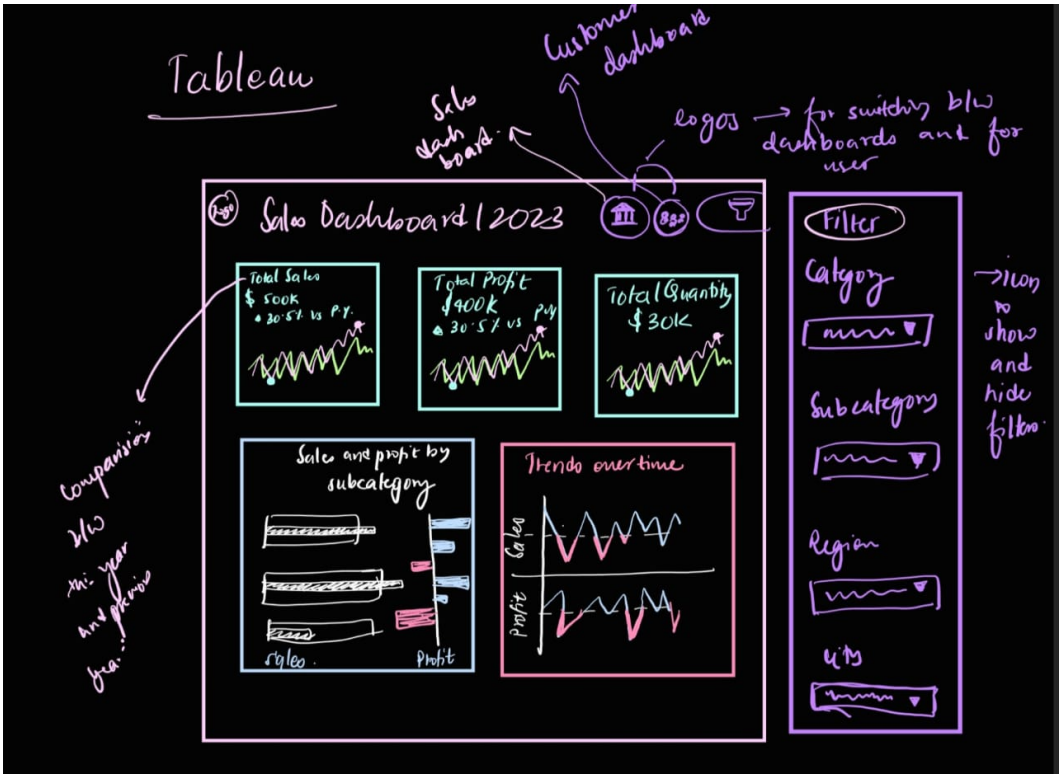
Data Filters

Allow users to filter data by product information like category and subcategory and by location information like region, state and city. - quick filters

STEPS TO BUILD THE DASHBOARD

First step → DRAWING MOCKUPS

A mock up is essentially a representation of all the elements to visualize how the final dashboard may look.



DASHBOARD COLOR SCHEME - decide beforehand to maintain consistency.

2X BASIC COLORS -

#303030 - dark grey

#b3b3b3 - light gray

2 X CUSTOM COLORS

#ff5500 - orange

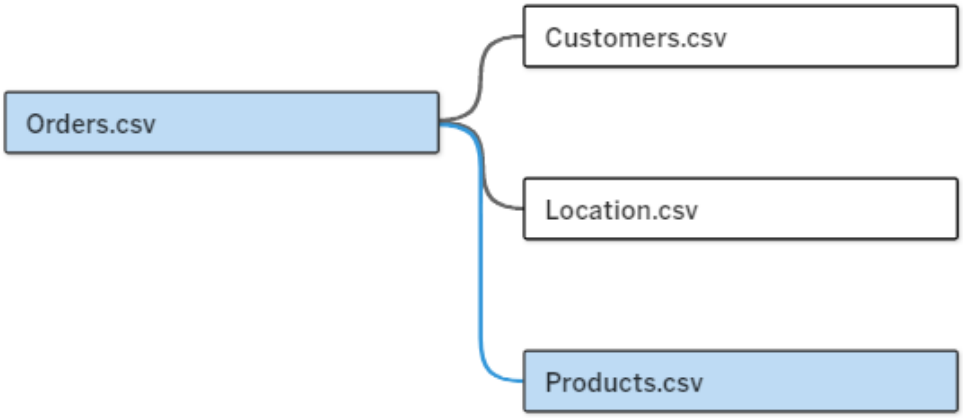
#303030 - blue

next step → Building data source

First find the data that has facts - i.e. the table contains events - an id and dates etc.

In this case orders table had the facts i.e. the sales and profit etc.

other data sets are called dimensions.

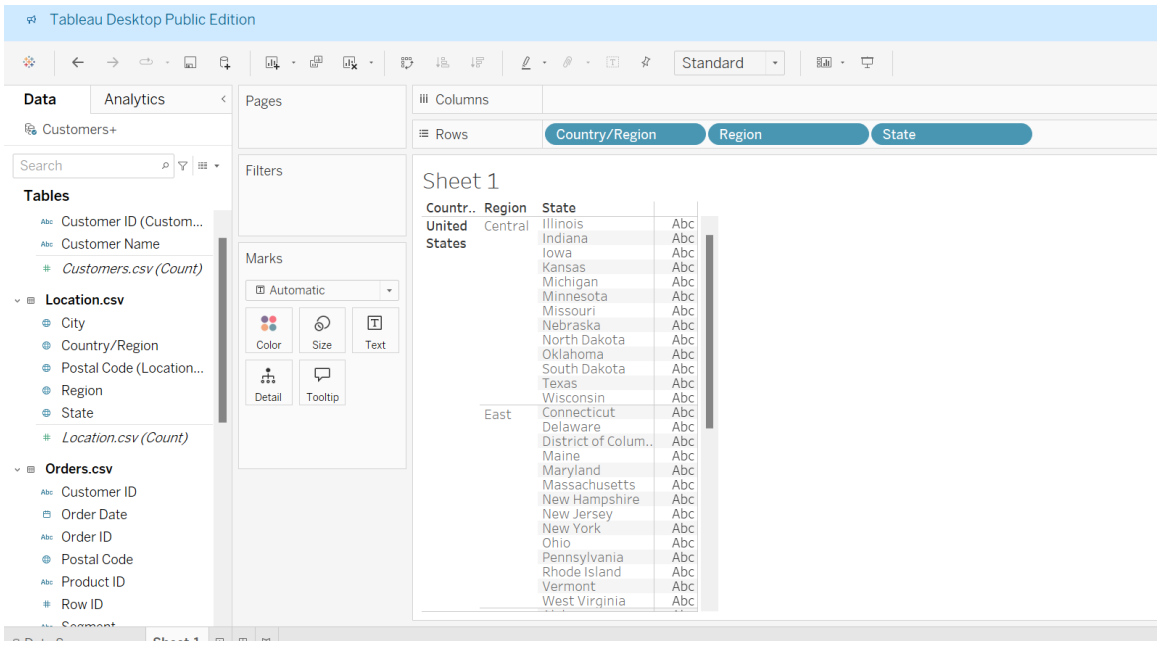


Data model with one fact and all other dimensions connected to the fact.

Checking the data type for any anomalies i.e. if all the data types are consistent with the requirements. Ex- profit may be of string type and need to be converted to number type.

next step → Understand the data

Input different categories into the worksheet rows to check and understand the data.



shows which state of which region of which country has users

next step → build charts

1. Check if you have all the required data or you need to add calculated fields.
2. Depending on the data and the requirements, decide the chart type.

CREATING A SHEET AND CALCULATED FIELDS BASED IN REQUIREMENTS.

1.KPI overview - Display a summary of total sales, profits and quantity for the current year and the previous year

Dynamic dashboard → the user can change the year

next - show the differences between the current and the previous year sales as a percentage.

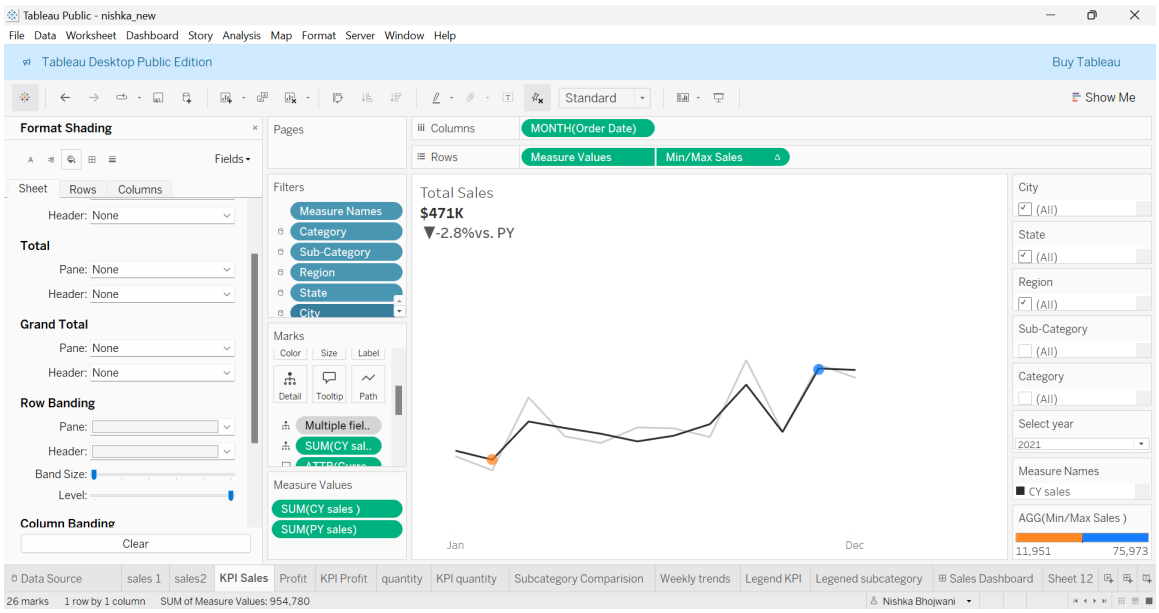
Checking the percentage difference between two years and also creating a field called min/max sales.

Sheet 1

CY sales	% Diff sal..	PY sales	Sales
609,206	29.5%	470,533	2,297,201

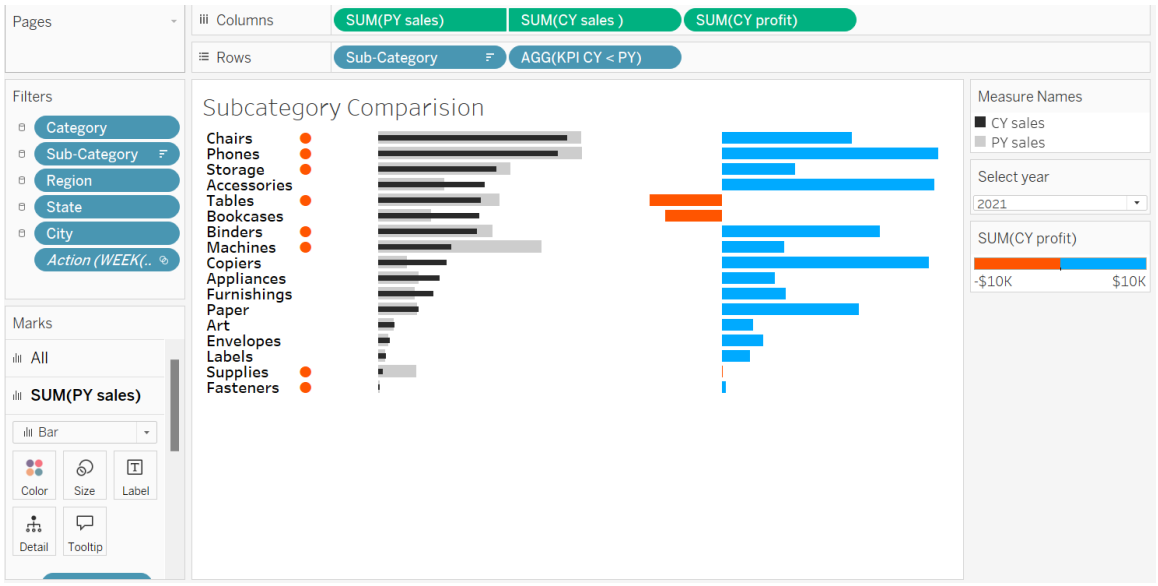
KPI has two parts - BAN and SPARKLINE

Sales trends using graphs - 3 graphs are made in a similar fashion i.e. sparklines for the years and circles for min and max values (year can be selected by user).

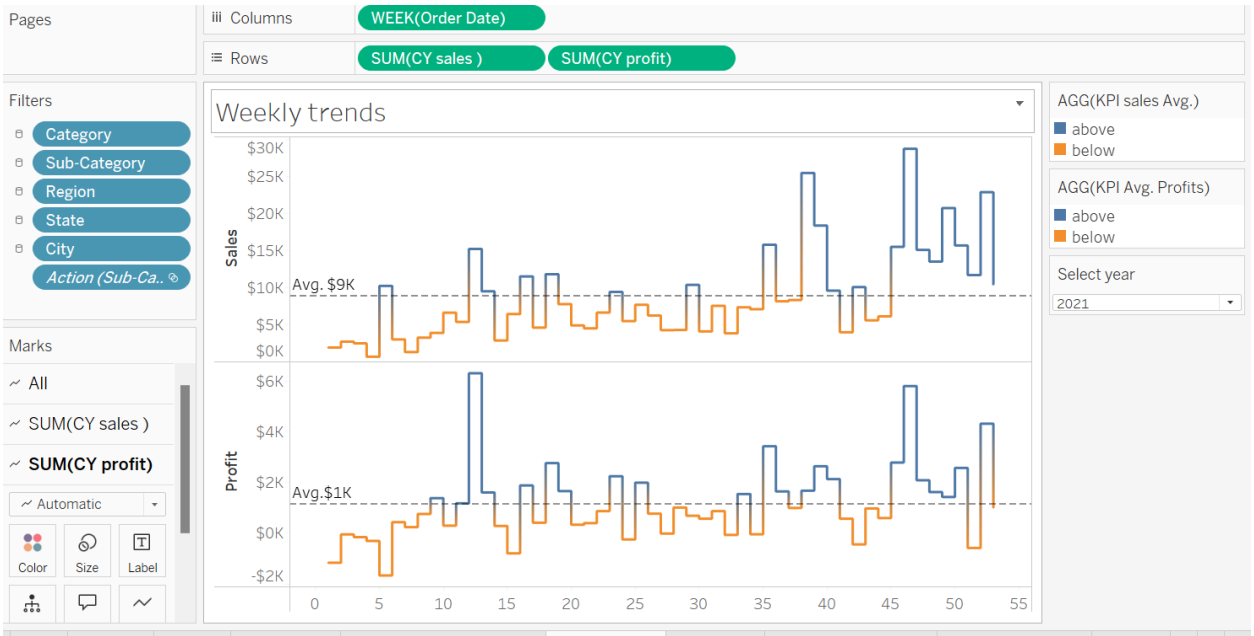


Tool tip can be modified to show the required details when you hover the mouse on a particular point.

PRODUCT SUBCATEGORY COMPARISION - USING BAR IN BAR CHART AND PROFIT TRENDS ANALYSIS USING BAR CHART

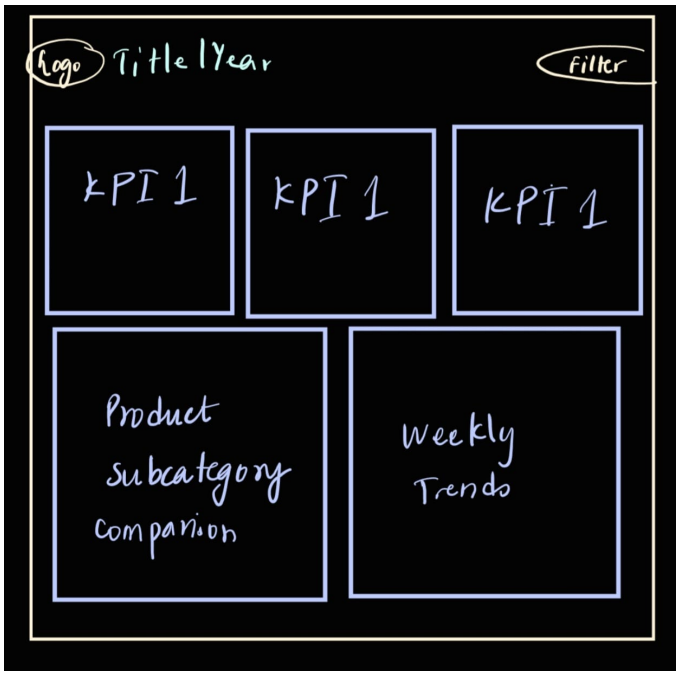


Finally making a weekly trends graph using a line chart and defining a calculated field called average to show the sales and profit values above and below the average



Next step → to create a dashboard with all of these charts for easy visualization.

Create a mockup of all the placeholders and the filter + its components - making a blueprint of the final dashboard to understand how everything is placed for ease of creating the final containers.



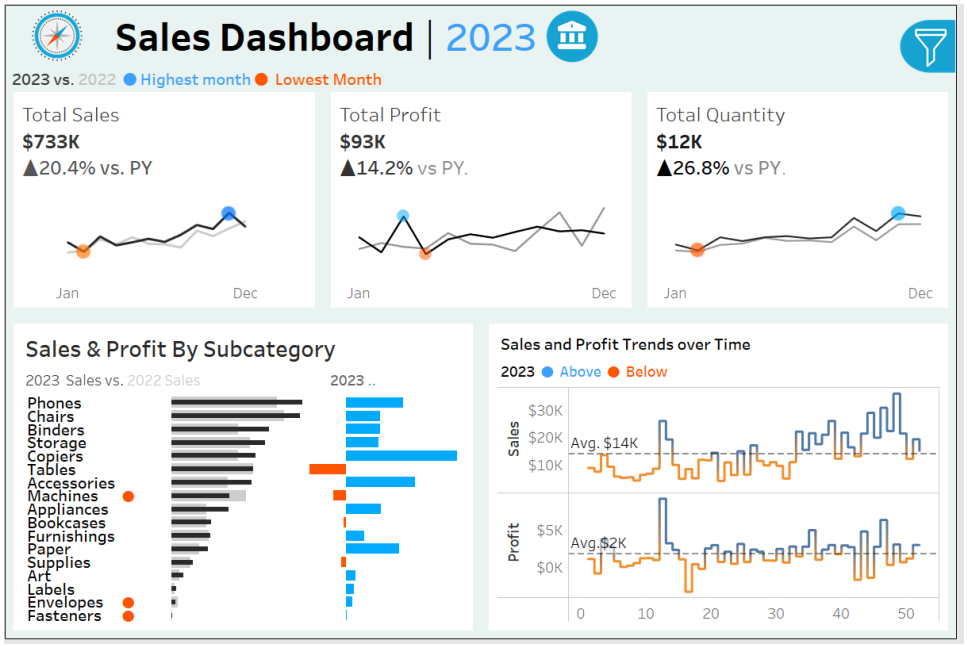
Final step → Create the dashboard -

1. Create containers for all the components and blanks for all the elements and charts.
2. Create a floating container for filter which can be edited later. It contains all the parameters the user wants to alter as drop down lists.
3. Add the dashboard title and the year (dynamic).
4. Add the previously created charts in the blanks and give them proper spacing.
5. Create legends and add the chart titles and legends.
6. Fit all the charts with the settings (fit view) , add paddings externally and internally to distinguish the charts.
7. Add all the final touches to the dashboard i.e. icons for buttons if any and mouse hovers and align the filter according to the borders of the main border.

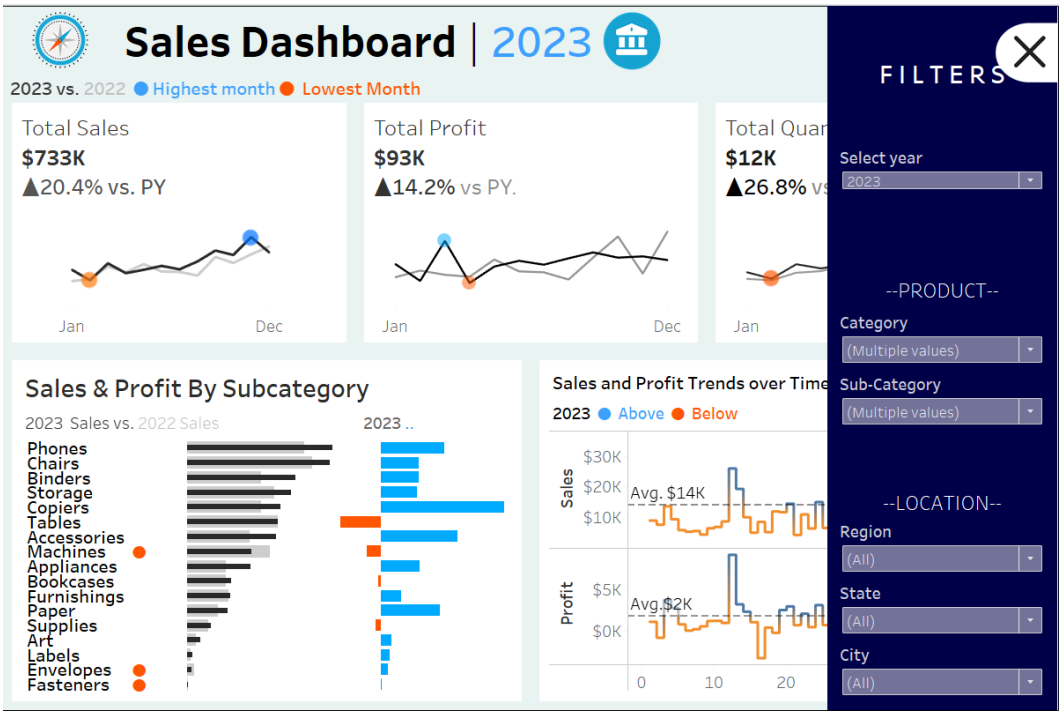
Images showing final dashboard and the filter and how it changes with the parameters.

Note ：The subcategory graph and the trends graph can both act as filters as well. (as shown in figure c.)

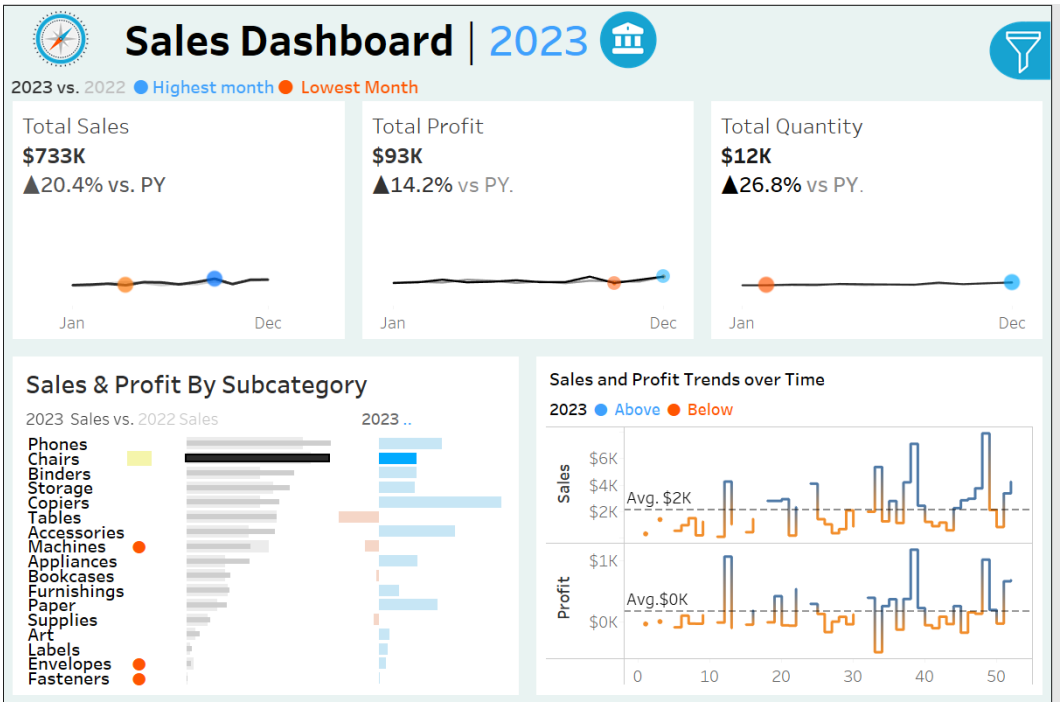
a. Dashboard final - Filter hidden



b. Final dashboard - Filter shown



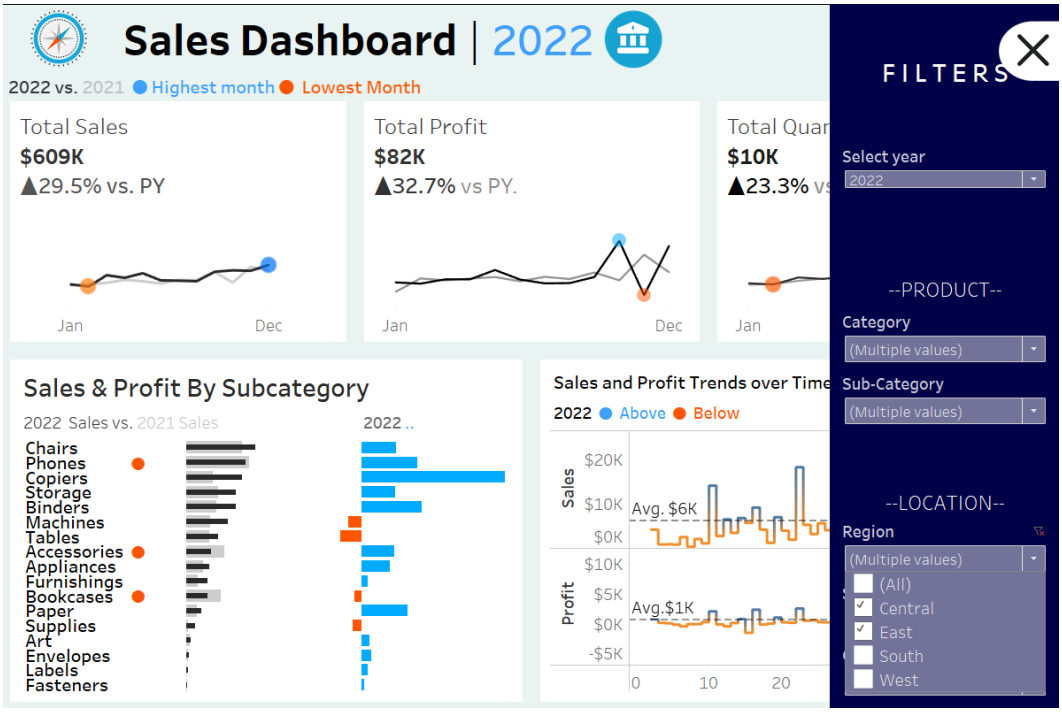
c. Filtering with the charts.



- filtered by subcategory (chair) from the chart

d. Filtering with the filters

- Filtered based on region - central and east.



Learnings - How to build a professional dashboard using tableau.

Link to the project on tableau public - https://public.tableau.com/authoring/nishka_new/SalesDashboard#1