Getting Started with Tableau

Lab 1

Installation:

Download and install Tableau Public: https://public.tableau.com/en-us/s/download

Introduction

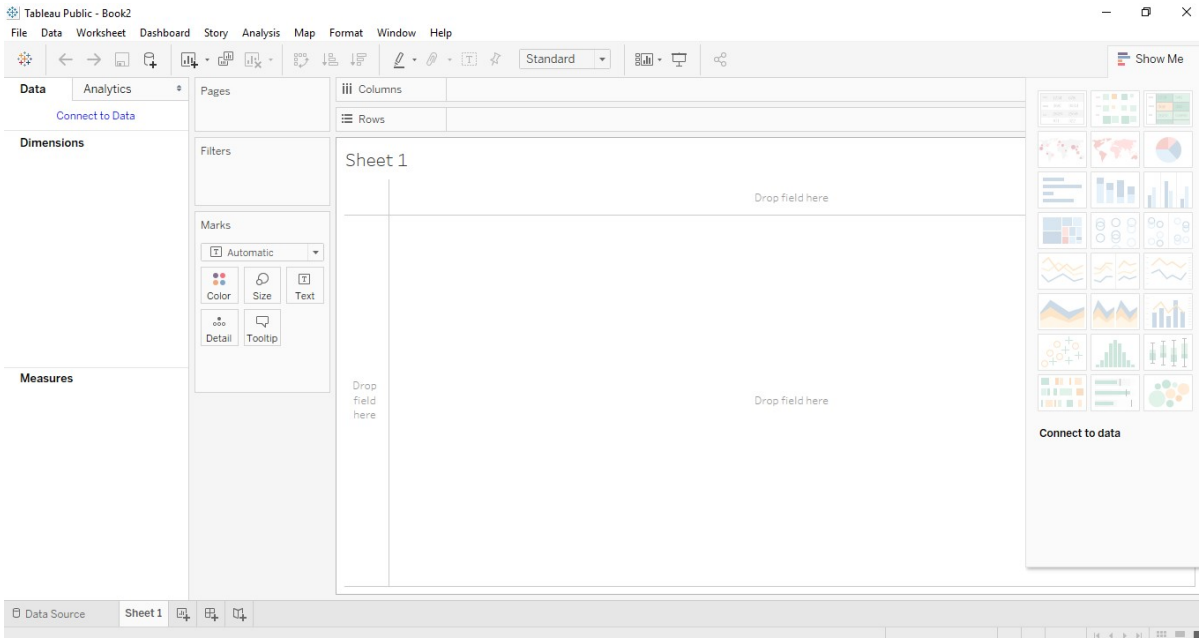
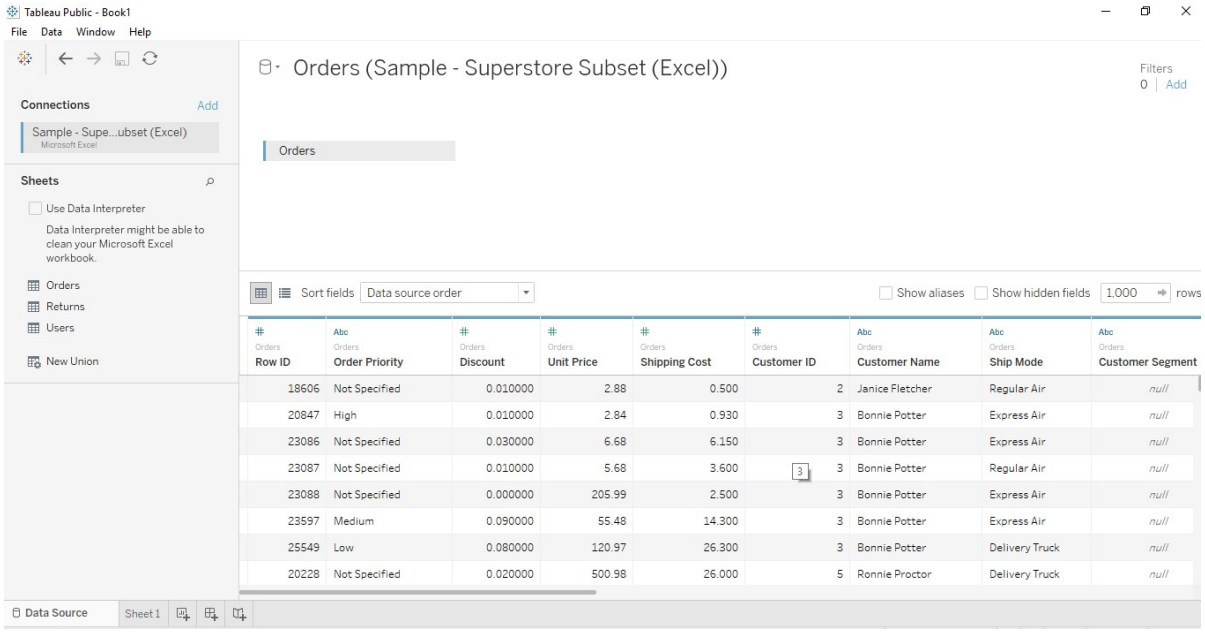


Figure 1 - Main Screen Tableau Public

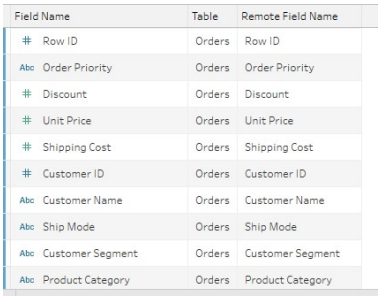
Connecting to Data and getting started

Open the sample superstore Excel file. Tableau is a very user-friendly software that works mainly on drag and drop. Select the variable or action you want to perform and drop it in the chart area. In the superstore file we can find 3 main tables: Orders, Returns and Users.

The Datasource Tab contains the information about the data available and allows for raw data manipulation. Drag the Orders table to the data sheet area.



You can look at the Metadata for field names and data structure. You can edit datatypes, names etc..



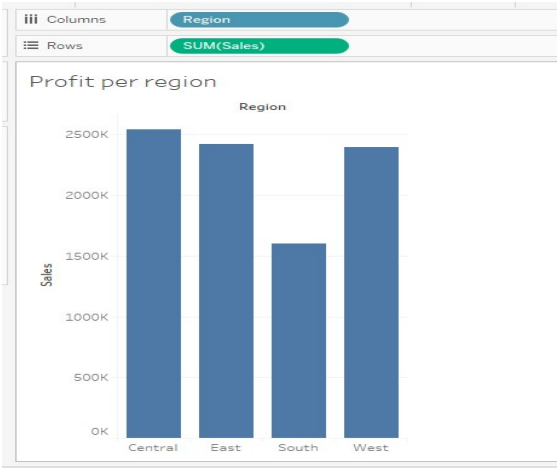
Field Name	Table	Remote Field Name
Row ID	Orders	Row ID
Order Priority	Orders	Order Priority
Discount	Orders	Discount
Unit Price	Orders	Unit Price
Shipping Cost	Orders	Shipping Cost
Customer ID	Orders	Customer ID
Customer Name	Orders	Customer Name
Ship Mode	Orders	Ship Mode
Customer Segment	Orders	Customer Segment
Product Category	Orders	Product Category

To go to the development canvas in Tableau, click on Sheet1 at the bottom of the page.

Exercises

1. Creating a column chart displaying sales per region

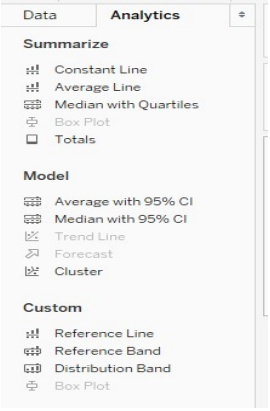
To include a variable in a chart, drag it into the appropriate area (Columns/ Rows).



Discrete variables will be displayed in blue and will create labels in the chart, whereas continuous variables will be displayed in green and will create axis in the chart.

Try different chart types from the Show Me tab.

2. Adding reference values to the chart



From the Analytics tab, we can add different summarization, modelling or custom reference values to our chart.

Add the average value and the median with quartiles as reference lines.

3. Clustering your data

From the Analytics tab, we can use the clustering tool to find similar groups of data and represent them with different colours in our chart.

Use the clustering tool to find 3 groups using median values. Repeat for average values.

Is there any difference between the two clustering models? Can you explain it?

4. Let's answer some questions

- What is the Profit over time? What type of chart is Tableau creating by default for this relationship?
- How does Quantity compare to Profit?
- How do Profit and Quantity perform in each region?
- How do Profit and Quantity perform per region and product type?
- Show the sales per year and quarter and add trend lines.

5. Save your work

Save your Tableau file to Tableau Public.

References

Sinha, C. (2017) Tableau 10 for beginners. Ohio Computer Academy.