
Practice Homework : Analyze the Superstore (Part 1)

This homework deals with the following topics:

- Tableau
- Principles of effective visualizations
- One-dimensional visualizations

General Idea of the Assignment

In this assignment, you will analyze data from the **Superstore** dataset. The objective is to gain insights and draw conclusions from the data. You'll use methods from our lectures for loading, visualizing and analyzing one of Tableau's sample datasets.

In this assignment, you will create visualizations based on the following prompts:

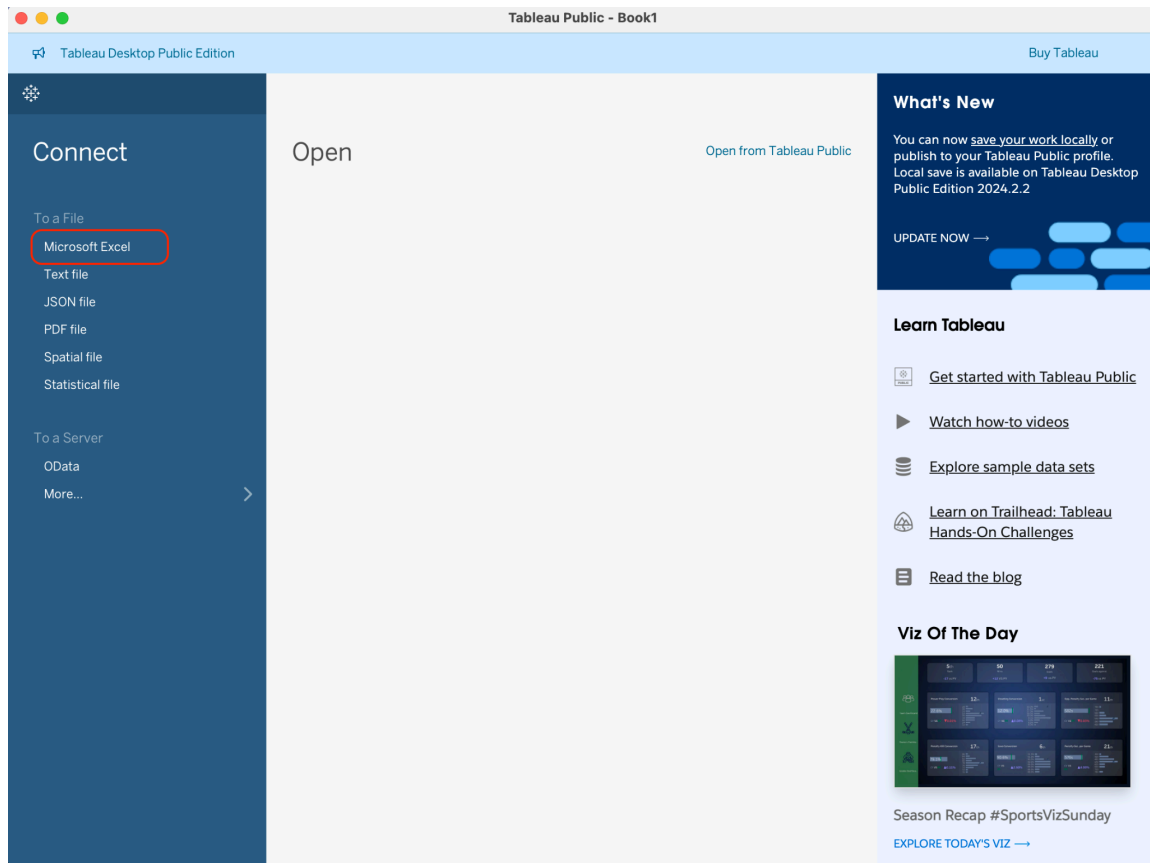
1. Create a simple bar chart to visualize profits for each category:
 - a. Drag the tab "Category" to the Rows shelf.
 - b. Drag the tab "Profit" to the Columns shelf.
 - c. Tableau will automatically create a bar chart for you.
2. Create a histogram to display the distribution of quantity:
 - a. To create a histogram showing the distribution of quantity, drag "Quantity" to the Columns shelf.
 - b. Access chart types from "Show Me" in the upper-right corner of the interface, and select the correct type of chart.
 - c. Add "Segment" to the Color mark to differentiate each bar by consumer, corporate, and home office segments.
 - d. To add values to the histogram, add the same metric in your Rows shelf to the Labels mark.
3. Create a time-series visualization to show sales over time and create a forecast:
 - a. Drag the dimension "Order Date" to the Columns shelf.
 - b. Drag "Sales" and "Segment" to the Rows shelf.
 - c. Tableau should automatically recognize this as a time-series chart.
 - d. Drag **Analysis > Forecast** to the visualization.
 - e. Add "Segment" to the color mark and rows shelf to create a stacked time series.

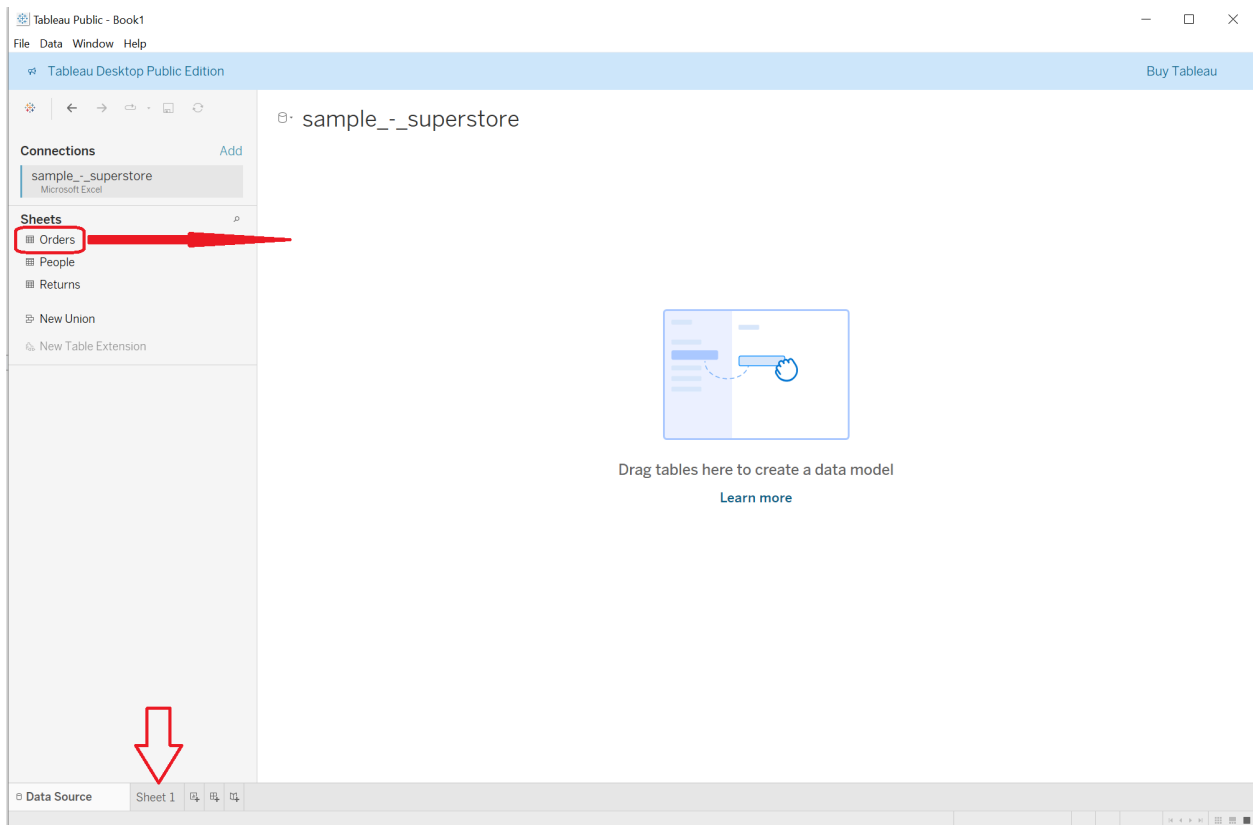
About the Data

Tableau provides a sample dataset called "Superstore", a comprehensive sample dataset for analysis and visualization. It simulates sales and performance data for a fictional retail company, providing a wide range of variables including customer details, product categories, regions, order dates, and sales metrics. The dataset enables analysts to explore sales trends, evaluate top-performing products, assess customer segments based on demographics or behavior, and uncover geographical patterns. With its realistic structure, the Superstore dataset serves as a valuable resource for practicing analytical skills and driving business strategies in the retail domain.

How to load the Data

- Download "Superstore Sales" dataset from Coursera
- Launch Tableau on your computer
- Click **To a File > Microsoft Excel**
- Load "sample_-_superstore.xls" you just downloaded
- Drag "Orders" to the right side of the window
- Click "Sheet 1"
- Start working on your visualizations





Submission

Before submitting, thoroughly review your work for any errors, inconsistencies, or missing components. Please ensure a well-prepared and comprehensive submission for your Tableau homework.

Evaluation

1. Simple Bar Chart (30 points):
 - a. Know the differences between each color of dimension. (5 points)
 - b. Created a clear and informative bar chart to visualize an indicator(10 points)
 - c. Figure out discrete value and contiguous value (5 points)
 - d. Extract useful information from the visualization (10 points)
2. One-Dimensional Visualization (35 points):
 - a. Created a one-dimensional visualization (e.g., histogram or box plot) to show the distribution of a specific indicator (15 points)

- b. Selected the correct measure for analysis (5 points)
 - c. Choose an appropriate visualization type for the task (10 points)
 - d. Included clear labels and title for the visualization (5 points)
- 3. Time-Series Visualization and make a forecast (35 points):
 - a. Clearly showed the trend line and forecast part (20 points)
 - b. Selected the correct measure for analysis (10 points)
 - c. Presented the trend clearly (5 points)