# Lesson 08: Tableau Chronicles Crafting Compelling Dashboards and Stories

## Overview

In this exercise, you will work with a dataset that contains information about customer orders from an online retail store. Throughout the exercise, you will learn how to aggregate data, create interactive dashboards, and craft compelling data stories to communicate insights effectively.

## Instructions

- Work through all tasks individually or within your group
- Divide your time evenly among the tasks to ensure a comprehensive understanding
- Utilize the provided **Online_Retail_Sales** dataset to enhance your problem-solving abilities

## Tasks

As a data analyst you are tasked with analyzing online retail sales, starting by loading the dataset into Tableau and performing an initial data exploration. Your tasks will involve aggregating sales data to gain insights, creating interactive dashboards, and crafting a data story to present your findings effectively.

1. **Load the dataset and perform data aggregation**

    - Import the **Online_Retail_Sales** dataset into Tableau
    - Use Tableau's data pane to inspect the structure of the dataset and gain an initial understanding of the data
    - Drag **Product category** to the **Columns** and **Quantity** to the **Rows**
    - Create a calculated field by clicking on **Analysis**, select **Create Calculated Field**, and name it **Total Sales**
    - Utilize Tableau's aggregation functions to calculate key metrics like Total Sales and Average Order Value

2. **Create interactive dashboard**

    - Click on the **Dashboard** at the top of the screen and select **New Dashboard**

- Drag **Sheet 1** onto the dashboard canvas. Go to **Layout**, select **Floating**, and adjust the size.
- Go to **Sheet 1** and drag **Average order value** to the **Columns**. Click on the dropdown under **AGG(Average order value)** and select **Line**. Go to the **Dashboard** to see the final output.

3. **Craft a data story**

- Click on the **Story** at the top of the screen and select **New Story**
- Drag the dashboard onto the story canvas and drag the **Drag to add text** onto the canvas. Add **Mark Labels** to display specific data points on visualizations.

**Discussion Questions (Optional)**

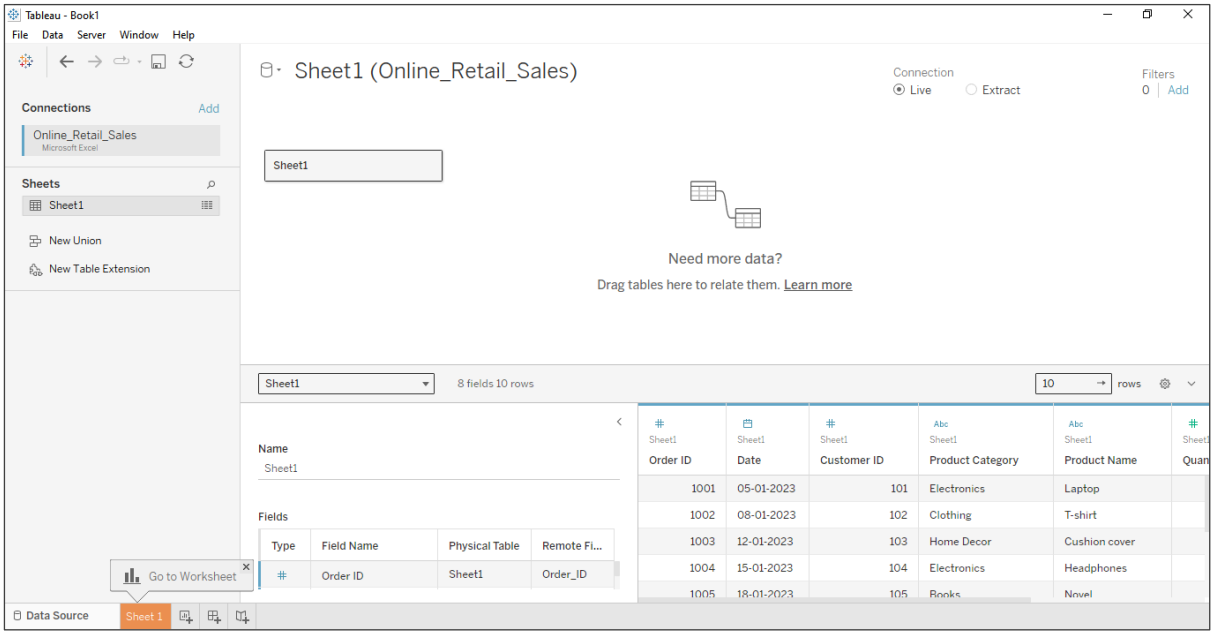
If time permits, discuss the following questions:

- What insights did you uncover through the data visualization process, and how could these insights inform business decisions?
- How did you choose which categories to group sales data by, and what influenced your decision?

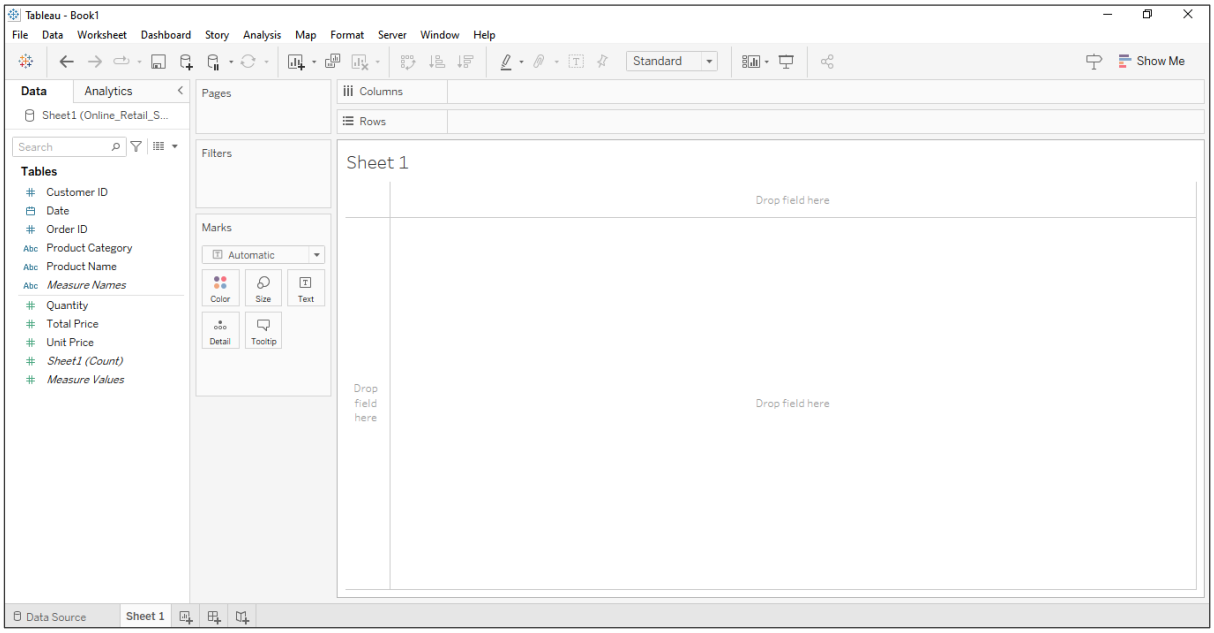
# Answer Key

## 1. Load the dataset and perform data aggregation

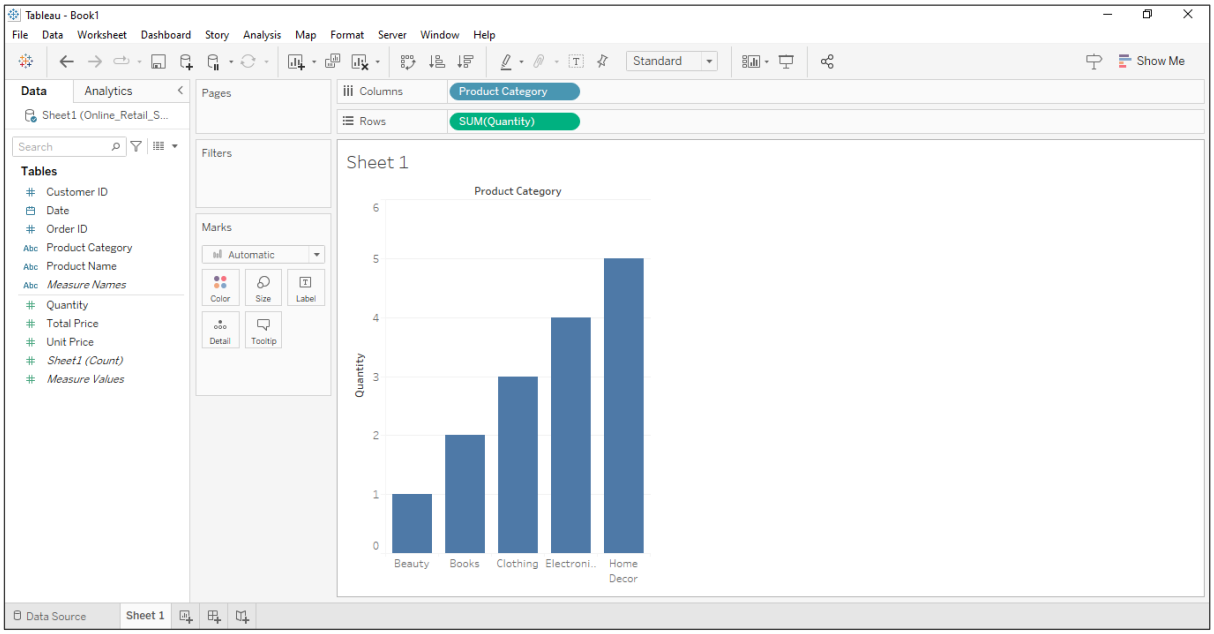
- Import the **Online_Retail_Sales** dataset into Tableau



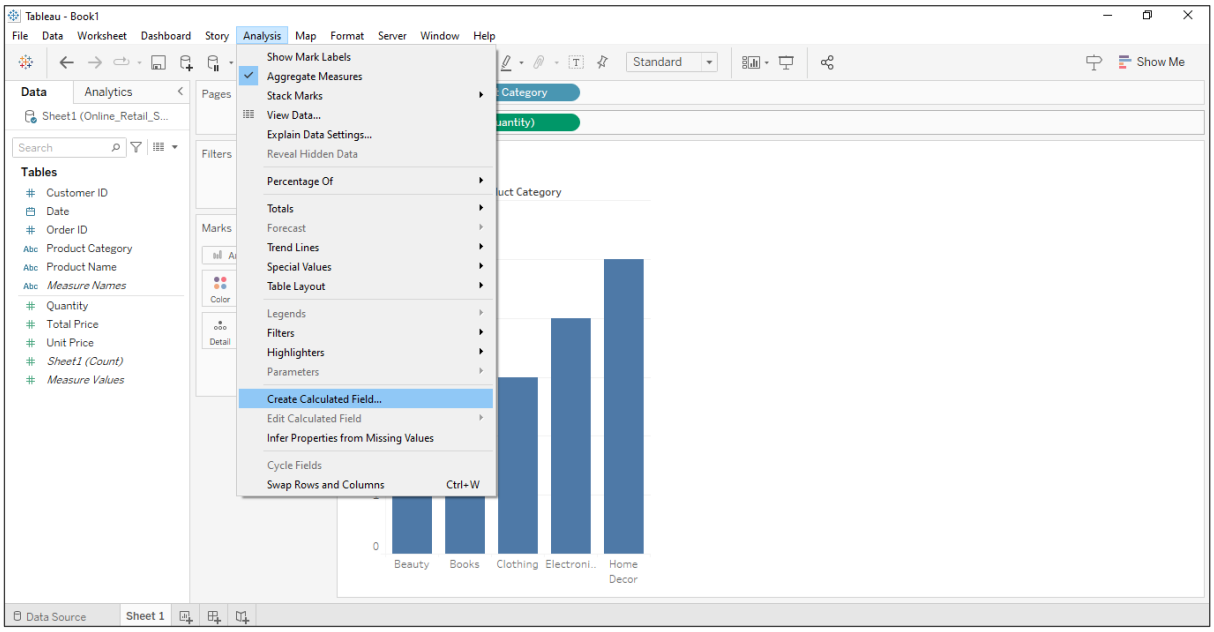

- Use Tableau's data pane to inspect the structure of the dataset and gain an initial understanding of the data

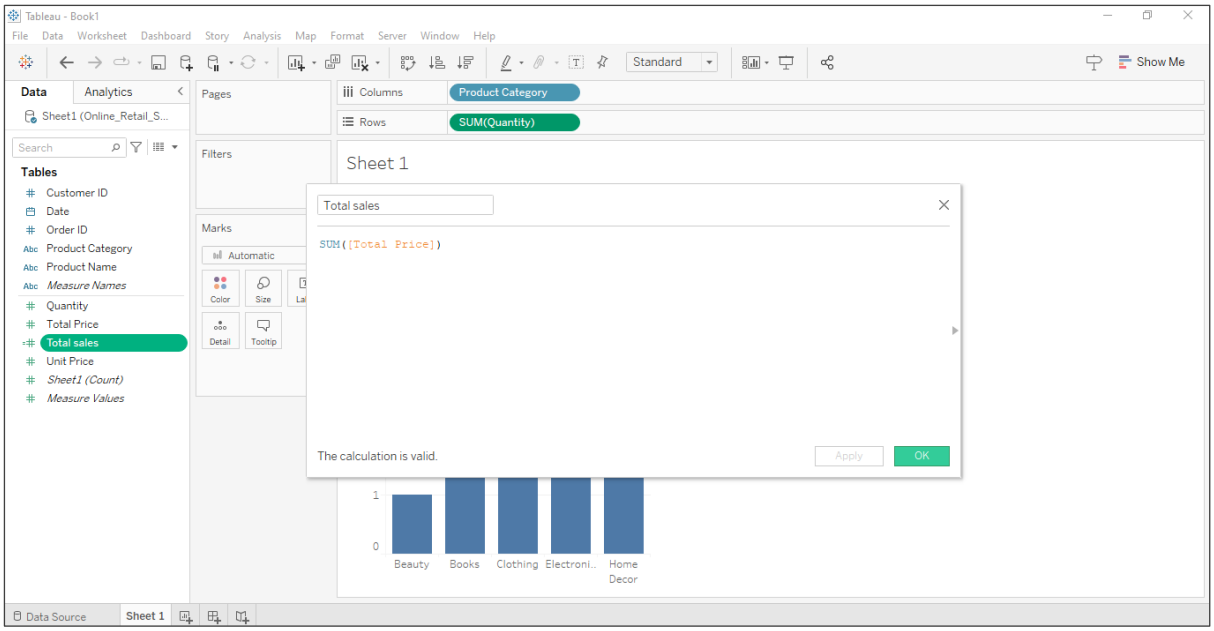


- Drag **Product** category to the **Columns** and **Quantity** to the **Rows**

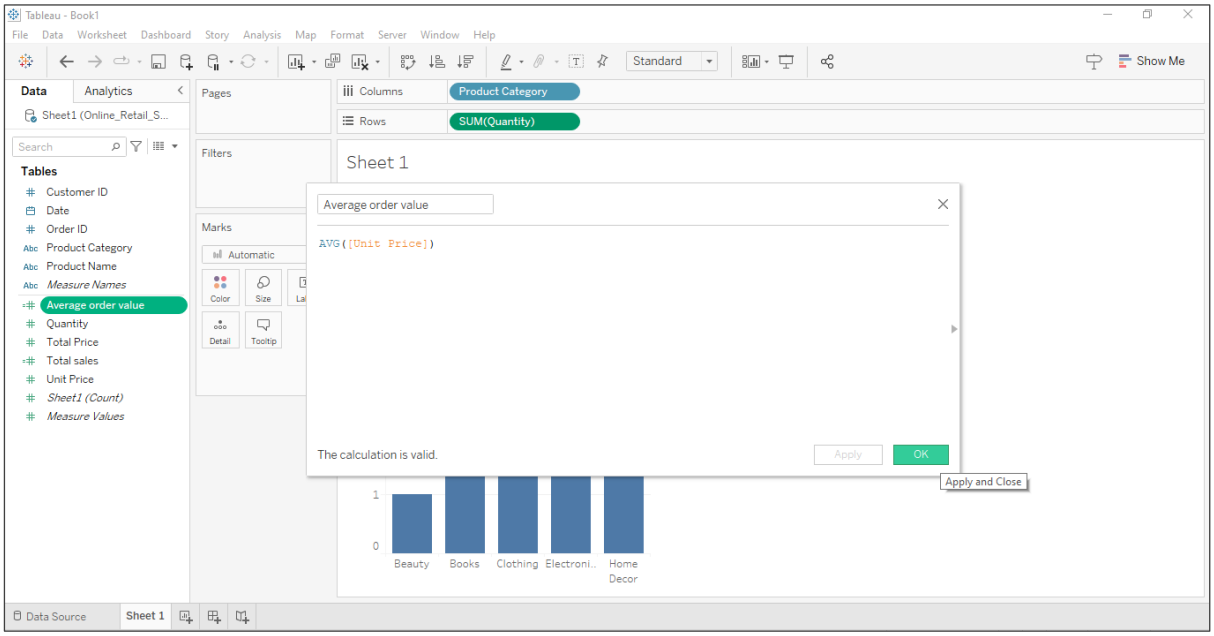



- Create a calculated field by clicking on Analysis, select **Create Calculated Field**, and name it **Total Sales**



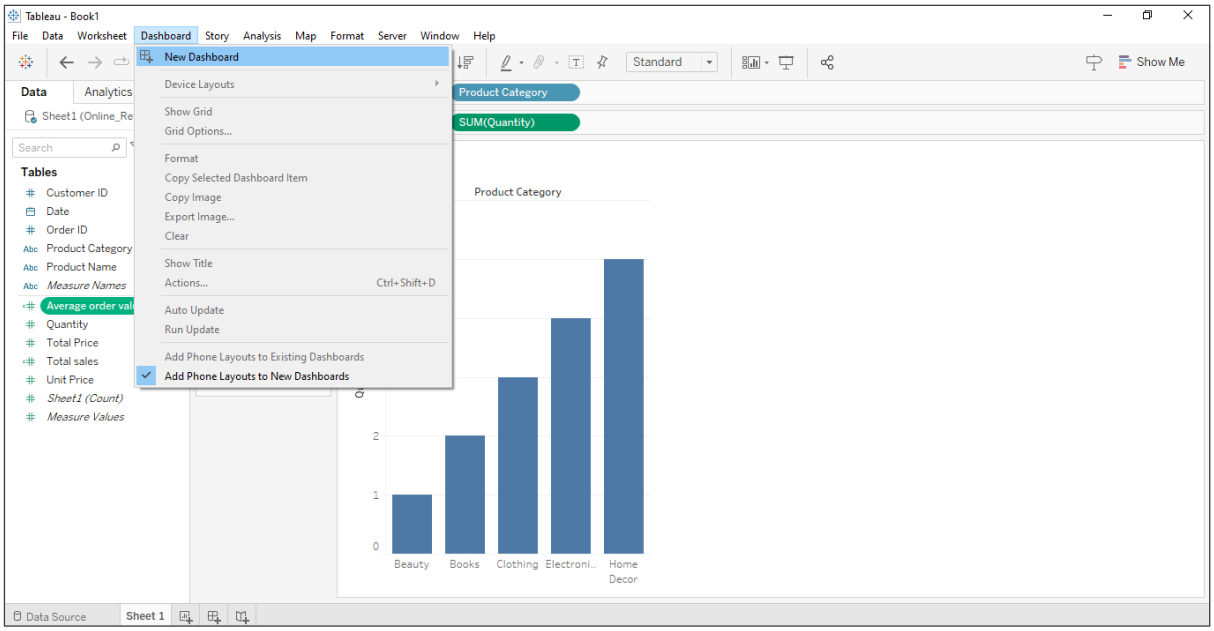


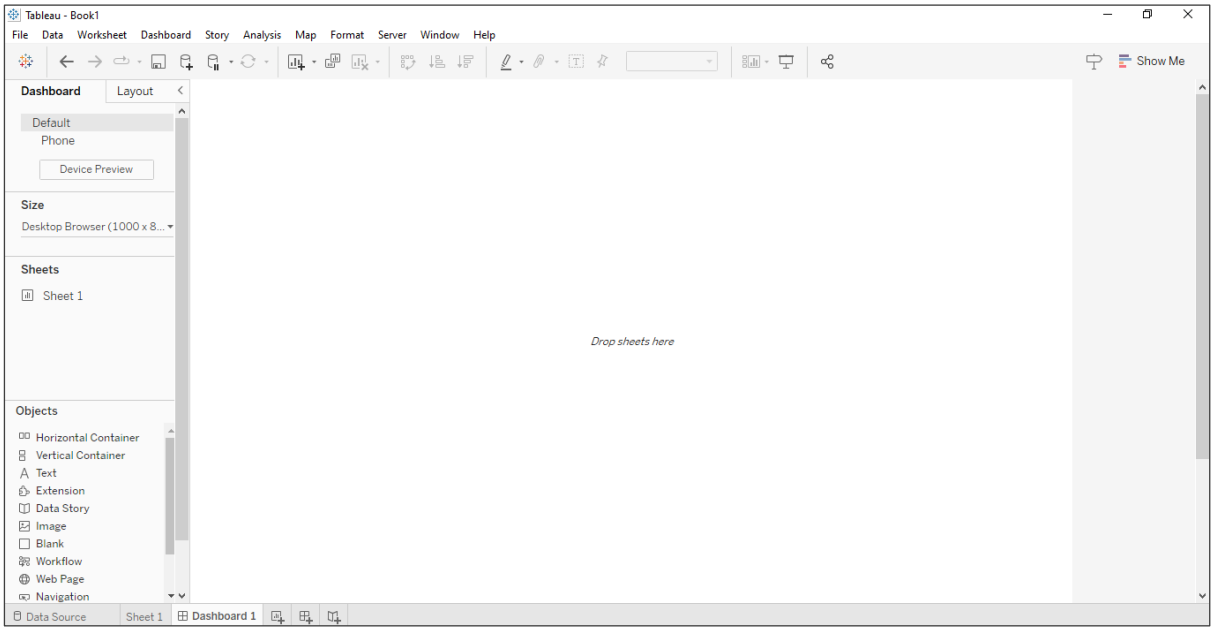

- Utilize Tableau's aggregation functions to calculate key metrics like **Total Sales** and **Average Order Value**



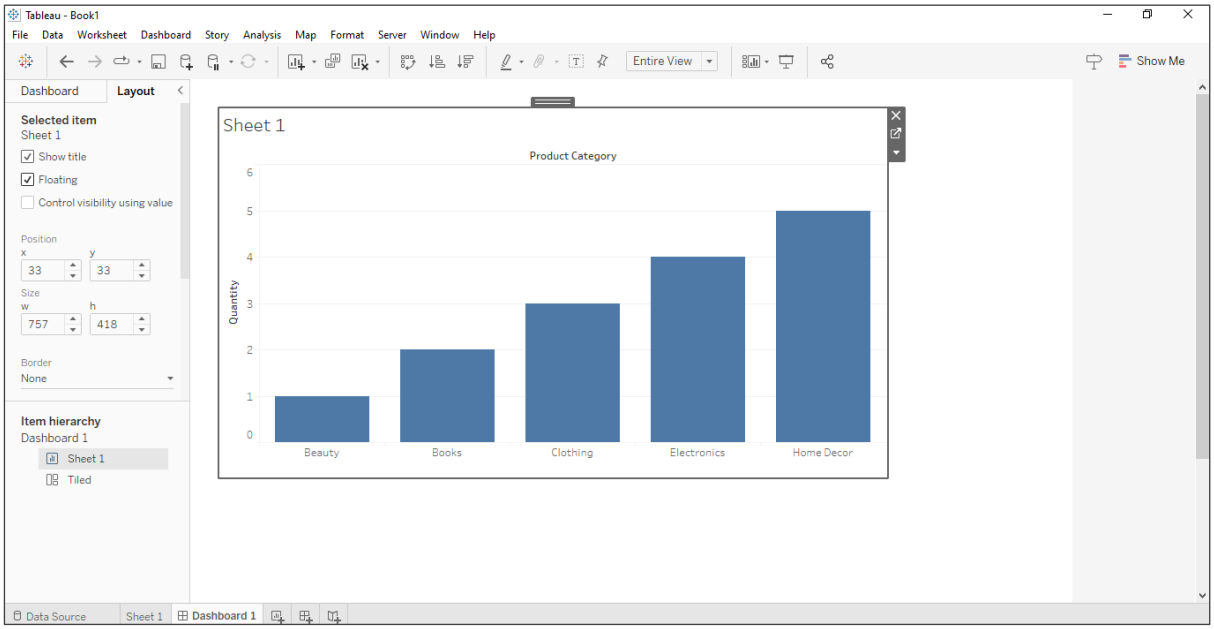
## 2. Create interactive dashboard

- Click on the **Dashboard** at the top of the screen and select **New Dashboard**

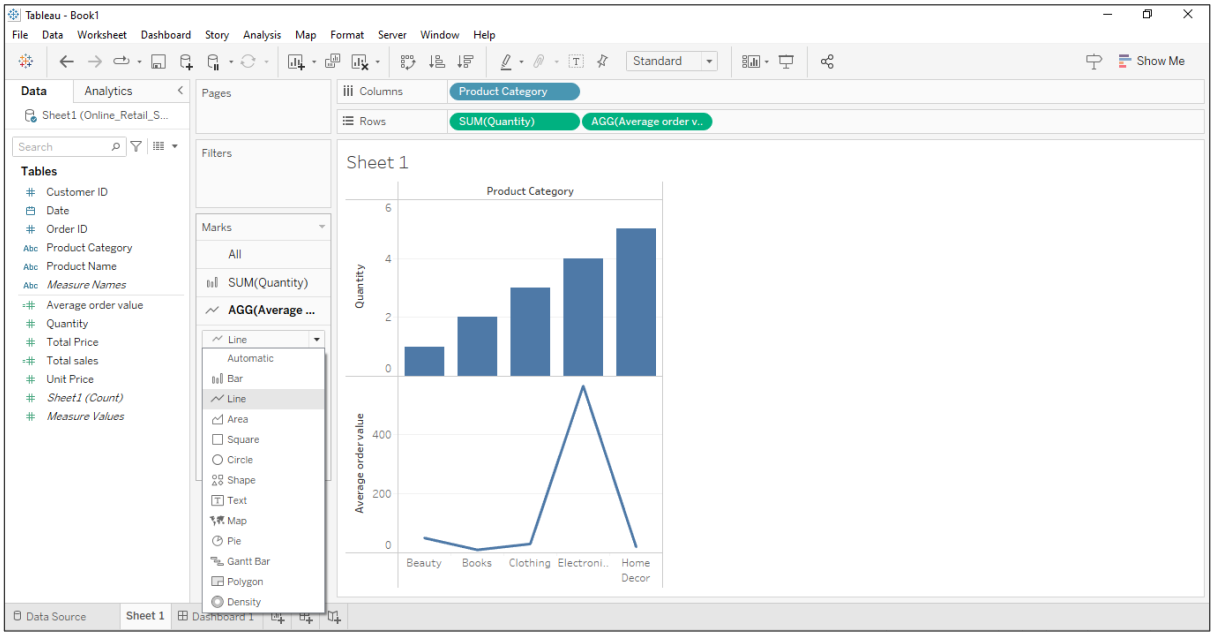


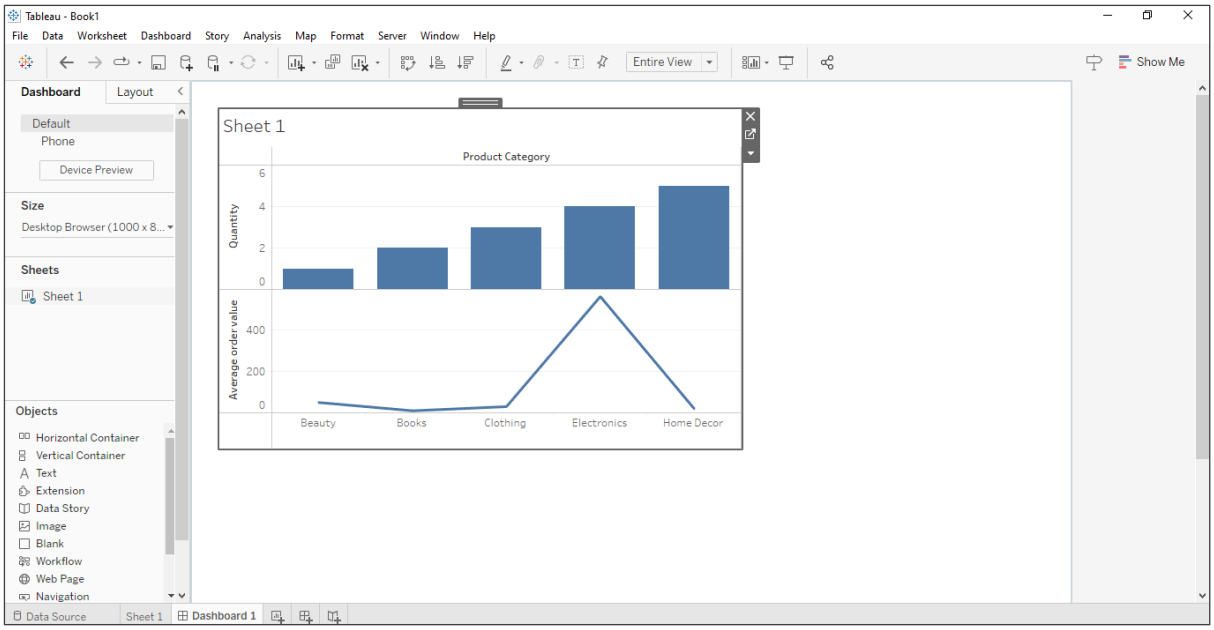



- Drag **Sheet 1** onto the dashboard canvas. Go to Layout, select **Floating**, and adjust the size.



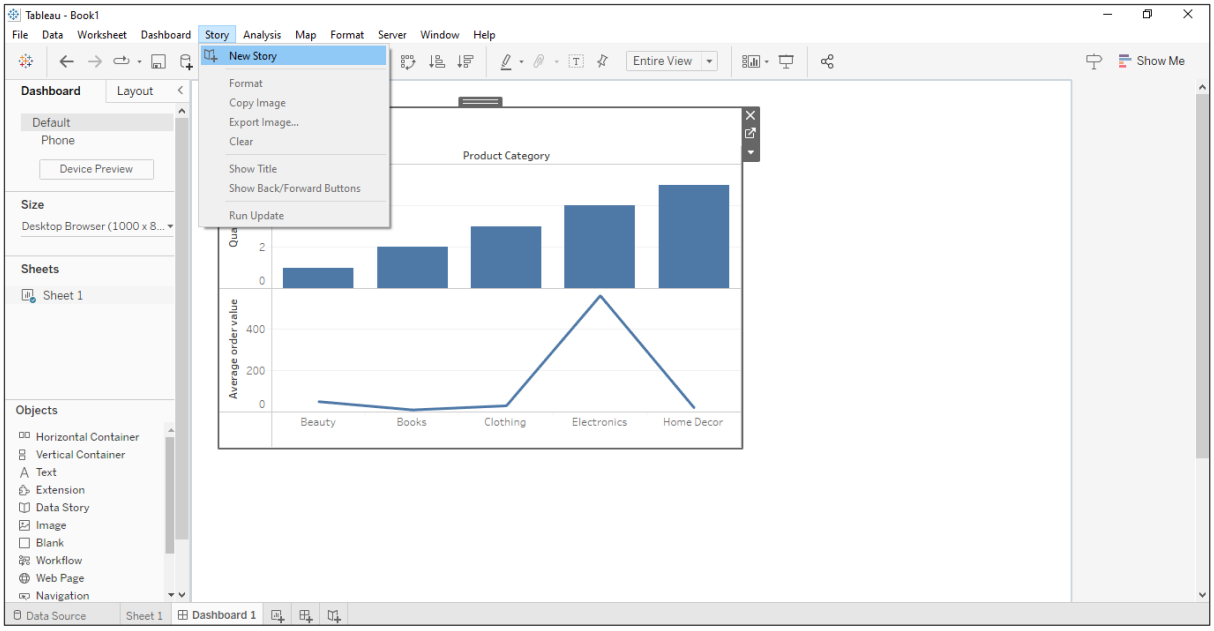

- Go to **Sheet 1** and drag **Average order value** to the **Columns.** Click on the dropdown under **AGG (Average order value)** and select **Line**. Go to the **Dashboard** to see the final output.

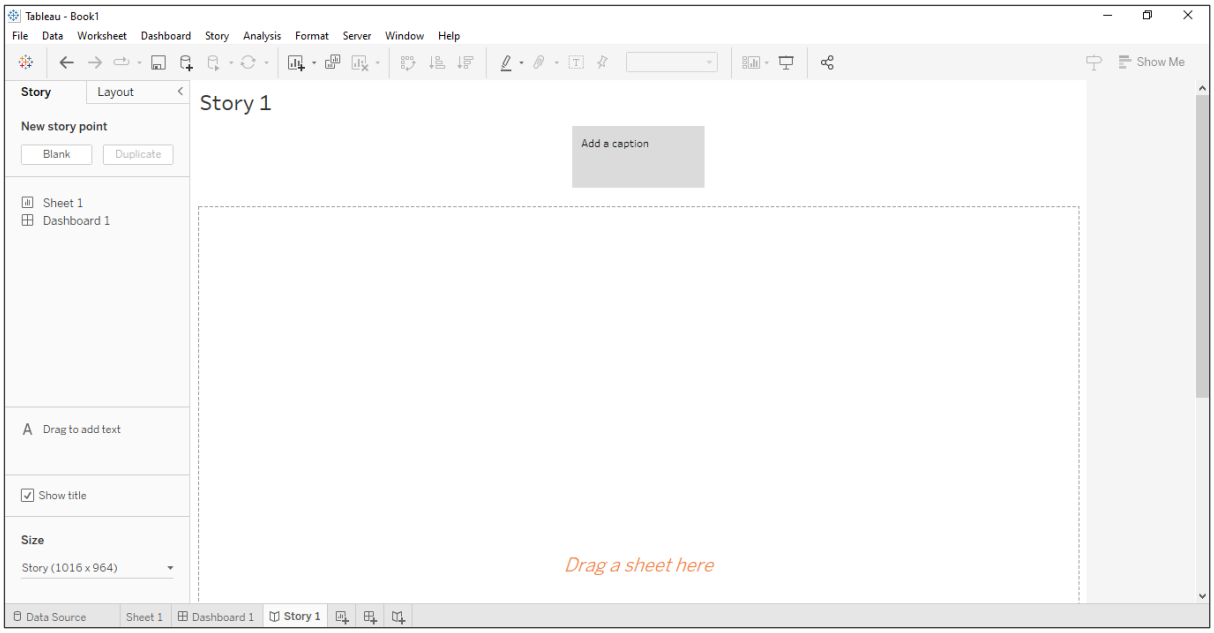




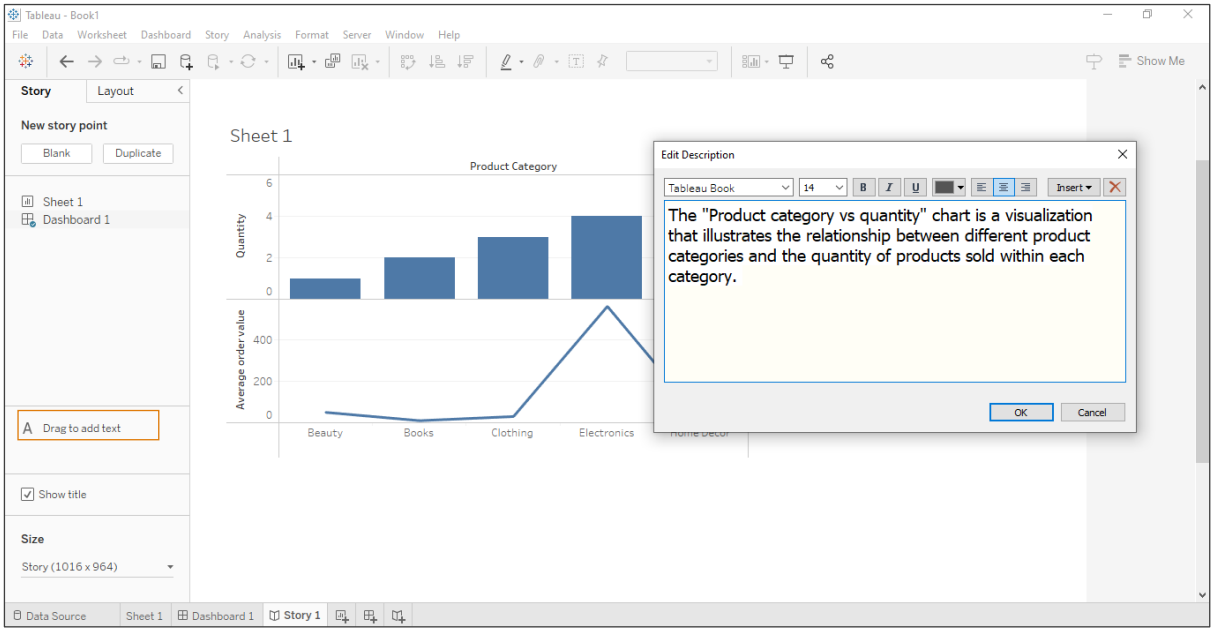

## 3. Craft a data story

- Click on the **Story** at the top of the screen and select **New Story**






- Drag the dashboard onto the story canvas and drag the **Drag to add text** onto the canvas. Add **Mark Labels** to display specific data points on visualizations.



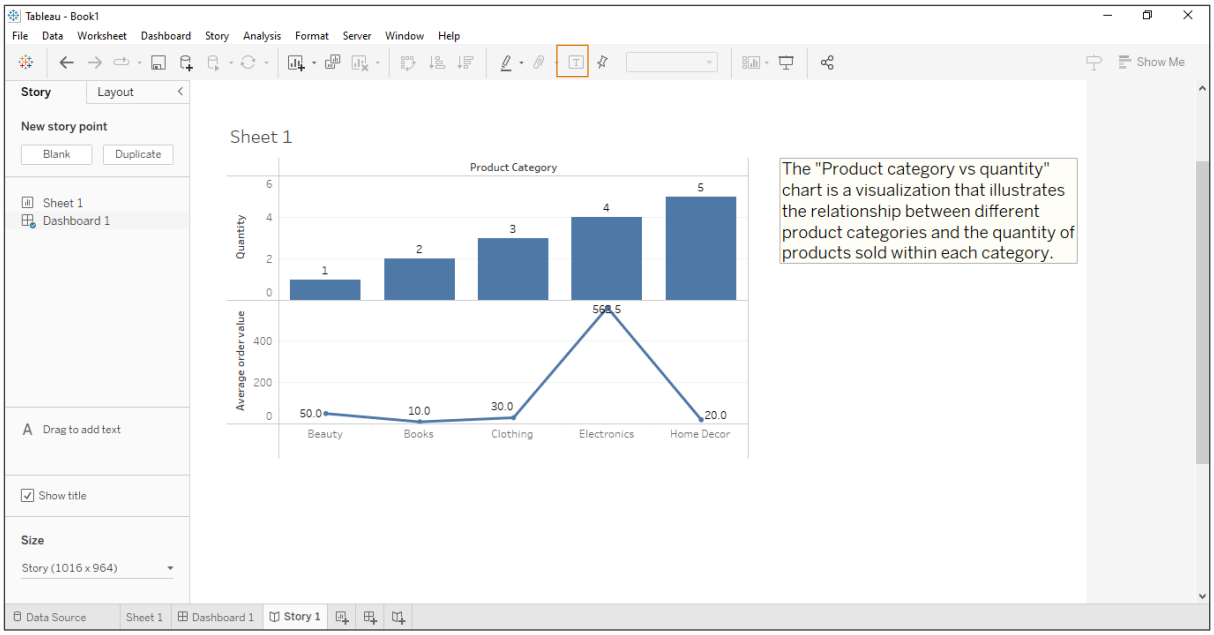


Tableau - Book1
File Data Worksheet Dashboard Story Analysis Format Server Window Help
Show Me
Story
Layout
New story point
Blank
Duplicate
Sheet 1
Dashboard 1
Drag to add text
Show title
Size
Story (1016 x 964)
Sheet 1
Product Category
Quantity
Average order value
1
2
3
4
5
50.0
10.0
30.0
563.5
20.0
Beauty
Books
Clothing
Electronics
Home Decor
The "Product category vs quantity" chart is a visualization that illustrates the relationship between different product categories and the quantity of products sold within each category.
Data Source
Sheet 1
Dashboard 1
Story 1