

Retail Sales Data Analysis using Tableau

– Stepwise Documentation

Step 1: Install Tableau

- Go to <https://www.tableau.com>.
- Choose Tableau Desktop (Free for Students) or Tableau Public (Free version).
- Download and install the application.
- Sign in or register with an email account.

Step 2: Connect to Dataset

- Open Tableau.
- Click “Microsoft Excel”.
- Browse and open your file: Online Retail.xlsx.
- Select the sheet (usually named Sheet1) to load the data into Tableau.

Step 3: Data Cleaning & Field Creation

- In Data Source tab, review columns.
- Create a calculated field for Total Sales:
- Right-click in Data Pane > Create Calculated Field.
- Name: Total Sales
- Formula: [Quantity] * [UnitPrice]
- Click OK.

Step 4: Create Visualizations

a) Top 10 Products by Total Sales

- New Worksheet → Rename to 'Top 10 Products'.
- Drag Description to Rows.
- Drag Total Sales to Columns.
- Sort descending by Total Sales.
- Add filter on Description → Top 10 by Sum of Total Sales.

b) Product Contribution to Total Sales (Pie Chart)

- New Worksheet → Rename to 'Product Contribution'.
- Drag Description to Color (Marks Card).
- Drag Total Sales to Angle.
- Set chart type to Pie in Marks dropdown.
- Filter to show Top 10 products.
- Add Total Sales to Label.

c) Month-wise Sales in 2010 (Descending)

- New Worksheet → Rename to '2010 Monthly Sales'.
- Drag Invoice Date to Columns → Drill down to Month.
- Drag Total Sales to Rows.
- Drag Invoice Date to Filter → Select only 2010.
- Sort bars by descending Total Sales.

d) Most Loyal Customers by Purchase Order

- New Worksheet → Rename to 'Loyal Customers'.
- Drag CustomerID or Customer Name to Rows.
- Drag InvoiceNo to Columns → change aggregation to Count.
- Sort descending to show most frequent buyers.

e) Yearly Sales Comparison

- New Worksheet → Rename to 'Yearly Sales'.
- Drag Invoice Date to Columns → set to Year.
- Drag Total Sales to Rows.

f) Country-wise Total Sales (Map)

- New Worksheet → Rename to 'Country Sales Map'.
- Drag Country to Detail → Tableau creates a map.
- Drag Total Sales to Size and Color.
- Format map as needed.

Step 5: Build the Dashboard

- Click New Dashboard tab.
- Set size: Automatic or 1280x1000.
- Drag each worksheet (a-f) into the dashboard.
- Resize and arrange them properly.
- Add Text objects to label sections.
- Optional: Use multiple dashboards if space is tight.

Step 6: Save Your Work

- Go to File > Save As.
- Save as .twbx (Tableau Packaged Workbook).
- Includes all sheets, dashboards, and data.