

Project Title	Financial Performance Dashboard
Tools	Tableau Desktop
Technologies	Business Analyst
Project Difficulties level	intermediate

Dataset: Dataset is available in the given link. You can download it at your convenience.

Click here to download data set

Finance Analytics Tableau Project

Objective:

The goal of this Tableau project is to analyze financial performance across different countries, products, and time periods, using key financial metrics such as sales, profit, cost of goods sold (COGS), and discounts.

Columns Provided:

- Segment
- Country
- Product
- Discount Band

- Units Sold
- Manufacturing Price
- Sale Price
- Gross Sales
- Discounts
- Sales
- COGS (Cost of Goods Sold)
- Profit
- Date
- Month Number
- Month Name
- Year

Steps and Tasks

Task 1: Data Import and Preparation

- 1. Connect to Data:
 - o Open Tableau, click Connect, and import the dataset (CSV, Excel, or database).
 - Ensure that the Date, Month Number, Month Name, and Year fields are correctly formatted as dates.
- 2. Create Calculated Fields: We'll create some calculated fields for deeper analysis.

Profit Margin: To analyze profitability.

tableau

```
Profit Margin = SUM([Profit]) / SUM([Sales])
```

0

Total Discounts: To calculate the total discount given.

tableau

```
Total Discounts = SUM([Discounts])
```

0

Total Revenue (Gross Sales):

tableau

```
Total Revenue = SUM([Gross Sales])
```

0

Cost-to-Sales Ratio (COGS to Sales):

tableau

```
COGS to Sales = SUM([COGS]) / SUM([Sales])
```

0

Task 2: Visualizations

- a. Sales and Profit by Country (Bar Chart):
 - 1. Drag Country to Columns.
 - 2. Drag Sales to Rows.
 - 3. Color by Profit: Drag Profit to the Color mark.
 - 4. Use a **Bar Chart** to compare sales and profits across countries.
 - 5. Add filters for Segment and Product to refine the analysis by these categories.
- b. Sales and Profit Trend Over Time (Line Graph):
 - 1. Drag Year to Columns.
 - 2. Drag Sales and Profit to Rows.
 - 3. Change the chart type to a **Line Graph**.

- 4. Add **Month Name** to the Columns for a more granular analysis.
- 5. Color by Segment to visualize trends for different business segments.

c. Gross Sales vs Discounts (Scatter Plot):

- 1. Drag Gross Sales to Columns.
- 2. Drag Discounts to Rows.
- 3. Change the chart to a **Scatter Plot**.
- 4. Use **Size** or **Color** to differentiate between Product or Country.
- 5. This allows you to see the relationship between discounts and gross sales.

d. Sales by Product and Discount Band (Heat Map):

- 1. Drag Product to Rows.
- 2. Drag Discount Band to Columns.
- 3. Drag Sales to **Color** and change the visualization to **Heat Map**.
- 4. This shows how different discount bands affect product sales.

Task 3: Filters and Interactivity

1. Date Filter:

- Drag the Date field to the filter section.
- o Provide a range slider so users can explore data from different periods.

2. Segment Filter:

 Drag Segment to the filter section to allow users to toggle between business segments (e.g., Consumer, Corporate, etc.).

3. Country Filter:

 Drag Country to Filters, and show the filter on the dashboard so users can focus on specific countries.

4. Profitability vs Discounts:

 Create an interactive filter to allow users to filter data by discount bands and analyze how they affect profitability.

Task 4: Dashboard Creation

Create a New Dashboard:

 Click the Dashboard tab and drag the different sheets you created onto the canvas.

2. Arrange Visualizations:

- Arrange the visualizations in a clean, understandable layout.
- o For example:
 - Bar Chart (Sales and Profit by Country) on the top.
 - Line Graph (Sales Trend Over Time) below.
 - Scatter Plot (Gross Sales vs Discounts) on the side.

3. Interactive Filters:

 Add the **filters** (Date, Country, Segment, Discount Band) to the dashboard to allow dynamic exploration of data.

4. Title and Formatting:

- Give the dashboard a descriptive title like "Financial Performance
 Dashboard".
- o Customize fonts, labels, and tooltips to improve readability and professionalism.

Task 5: Export and Sharing

1. Save the Tableau Workbook:

Save your workbook as a .twb or .twbx file depending on your data source.

2. Publish to Tableau Public or Tableau Server:

- o If you're using Tableau Public, you can publish the dashboard for public access.
- o If using Tableau Server, publish it to your company's server for internal use.

Sample Tableau Calculations

Profit Margin Calculation:

tableau

```
IF SUM([Sales]) != 0 THEN SUM([Profit]) / SUM([Sales]) END
1.
```

Cost-to-Sales Ratio:

tableau

```
IF SUM([Sales]) != 0 THEN SUM([COGS]) / SUM([Sales]) END
2.
```

Revenue Calculation:

tableau

```
Total Revenue = SUM([Gross Sales])
3.
```

Discount Impact:

tableau

```
Discount Impact = SUM([Discounts]) / SUM([Gross Sales])
4.
```

Final Output:

By the end of this project, you'll have:

- Bar Charts showing the financial performance of different countries.
- Line Graphs visualizing the trend in sales and profit over time.
- **Heat Maps** to understand the impact of discount bands on sales.

Scatter Plots to see the relationship between gross sales and discounts.

These visualizations will provide comprehensive insights into financial performance and profitability across different segments, countries, and time periods.

This is a flexible project structure that can be adjusted according to the specific needs of the dataset and business requirements. You can modify the columns and add more complex calculated fields for deeper financial analysis.

Sample report

Finance Report Dashboard

Hello Everyone,

I made this Finance Dashboard in Power BI with the Finance Excel Workbook provided by Microsoft on their Website.

Problem Statement

- The goal of this Power BI Dashboard Project is to analyze the financial performance of a company using the provided Microsoft Sample Data.
- To create a visually appealing dashboard that provides an overview of the company's financial metrics enabling stakeholders to make informed business decisions.

Sections in the Report

Report has Multiple Section's from where you can manage the Data, Like :

- Report Data can be sliced by Segments, Country and Year to show Particular Data.
- It has cards showing Total Units Sold, Total Gross Sale and Total Profit.

- It has a Clustered Bar Chart with Year on X-Axis and Profit on Y-Axis showing Profit Quarterly.
- And Lastly, It has a Area Chart showing Months on X-Axis and Profit on Y-Axis showing profit Monthly.
- I have also included a Reset Button at the Top to clear all Slicer's.
- To use it hold CTRL and then click it to reset the Slicer's.

git clone https://github.com/TheMrityunjayPathak/FinanceReportDashboard.git

Getting Started

Clone the repository to your local machine using the following command:

