

# Summary

The **Sales & Profit Performance Dashboard** is an interactive data visualization project built using **Power BI**. It provides business stakeholders with meaningful insights into company performance through KPI cards, trend charts, regional comparisons, and customer segmentation.

The dashboard allows users to filter data by quarters, analyze monthly trends, and identify top-performing product lines and customers. It is visually clear, interactive, and focused on driving data-driven business decisions.

Key highlights:

- Total Revenue: ₹2.89K
- Total Profit: ₹866.97
- Quarterly and monthly profit trends
- Top customer: Tyrrell Corp
- Most profitable region: North America

## What I Learned From This Task

### Key Elements of a Dashboard

- KPI cards, charts, slicers, filters, and a clean layout are essential.
- A good dashboard summarizes data in a way that's immediately actionable.

### What is a KPI?

- A **Key Performance Indicator (KPI)** is a measurable value that shows how effectively a business is achieving its objectives.
- Examples: Total Profit, Revenue, and Profit Margin.

### What are Slicers in Power BI?

- **Slicers** are visual filters that allow users to select values (like quarter or month) and dynamically update the entire dashboard view.

### Power BI vs. Tableau (in brief)

- **Power BI** is more Microsoft ecosystem-friendly and cost-effective.
- **Tableau** is more powerful for advanced visual customization and performance with large datasets.
- Both support data blending, dashboards, and interactivity.

### How to Make a Dashboard Interactive

- Use slicers, filters, drill-downs, and dynamic visuals.
- Ensure that every visual responds to user input to tell a cohesive data story.

### Dealing with Large Datasets

- Use data modeling best practices (e.g., star schema)
- Load only required data columns
- Apply filters in Power Query
- Aggregate data when possible

### Chart Types for Trend Analysis

- **Line charts** and **area charts** are best for trend analysis over time.
- **Column charts** work well for comparing values across categories or time intervals.