

# Business Pulse Dashboard

## Power BI Project Report

### Project Overview

This project showcases a comprehensive business performance dashboard built in Power BI. It analyzes sales, product trends, customer segments, and shipping efficiency using a single-table dataset. The goal was to demonstrate end-to-end data analytics skills, from data transformation to visualization.

### Tools & Technologies

- Power BI
- Power Query
- DAX (Data Analysis Expressions)
- Data Modeling
- Visualization Design

### Dataset Summary

The dataset includes fields such as:

- **Time-based:** Order Date, Ship Date
- **Geographic:** Region, State, City
- **Customer:** Customer ID, Segment
- **Product:** Product Name, Category, Sub-Category
- **Sales Metrics:** Sales, Row ID

### Data Preparation (Power Query)

- Removed duplicates
- Formatted data types (Date, Decimal, Text)
- Created calculated columns:
  - Profit Estimate = Sales \* 0.3
  - Profit Margin = Profit Estimate / Sales
  - Order Month, Year, Quarter
  - Shipping Delay = Ship Date - Order Date

### Data Model

- Single-table model
- Hidden unused columns for cleaner visuals

### DAX Measures

- Total Sales
- Estimated Profit

- Profit Margin %
- Total Orders
- YoY Sales & Growth %
- Avg Shipping Delay
- Best-Selling Product (dynamic KPI)

## Dashboard Pages

### Page 1: Business Pulse (Executive Overview)

- KPI Cards: Total Sales, Profit, Margin %, Orders
- Line Chart: Monthly Sales Trend
- Bar Chart: Sales by Region
- Donut Chart: Profit by Category
- Slicers: Year, Segment

### Page 2: Product Deep Dive

- Bar Chart: Top 10 Products by Sales
- Column Chart: Sales by Sub-Category
- KPI: Best-Selling Product
- Table: Product Details (Sales, Profit, Margin)
- Slicer: Category

### Page 3: Customer & Logistics Insights

- Bar Chart: Sales by Segment
- Table: Customer Summary
- Heatmap: Month vs Region Sales
- KPI: Avg Shipping Delay
- Slicers: Region, Segment