

FUNCTIONAL REQUIREMENTS DOCUMENT (FRD)

1. Project Title

Supply Chain & Sales Performance Dashboard

2. Dashboard Sections

- **Overview Section**

A high-level performance summary showing total sales, total profit, shipping efficiency, delivery performance, and key trends over time.

This page helps executives quickly understand business health.

- **Section 1 — Sales & Product Insights**

Detailed analytics for product performance, customer behaviour, category-level sales, and revenue contribution.

Helps sales teams identify best-selling products and improvement areas.

- **Section 2 — Supply Chain & Delivery Performance**

Focus on logistics: shipping delays, late delivery risk, delivery status, and shipping-mode performance.

Ensures supply chain managers can identify bottlenecks and operational issues.

- **Section 3 — Geographic Insights (Optional)**

Map-based visualization of customer distribution, regional sales, and delivery behaviour.

3. Data Requirements

Dashboard Section	Data Fields Needed	Source
Overview	Sales per customer, Benefit per order, Late delivery risk, Delivery Status, Real vs Scheduled shipping days	DataCo CSV
Page 1 — Sales & Product Insights	Product Price, Product Name, Category Name, Department Name, Sales per customer, Customer segment	DataCo CSV
Page 2 — Supply Chain Performance	Shipping Mode, Delivery Status, Days for shipping (real), Days for shipment (scheduled), Late delivery risk	DataCo CSV
Page 3 — Geographic Insights	Customer City, Customer Country, Customer Zip code, Delivery Status, Sales per customer	DataCo CSV

4. Filters / Slicers

Users should be able to filter by:

- Date Range (Order Date / Shipping Date)
 - Product Category
 - Product Department
 - Customer Segment
 - Shipping Mode
 - Country / City
 - Delivery Status
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5. Visuals / Charts

Dashboard Section	Visual Type(s)
Overview	KPI cards, Sales trend line, Category bar chart, Delivery Status donut chart, Late delivery risk bar
Page 1 — Sales & Product Insights	Bar charts, Pareto chart, Tree map, Scatter plot, Top 10 product chart
Page 2 — Supply Chain Performance	Dual-axis chart (scheduled vs real), Heatmap, Bullet chart, Shipping mode performance bar
Page 3 — Geographic Insights	Filled map, Symbol map, regional delivery performance map

6. Interactivity

The dashboard must support the following interactions:

- **Cross-filtering:** Selecting any chart updates all other charts.
 - **Drill-downs:** Category → Product → Customer level navigation.
 - **Highlight actions:** Hovering highlights related products or regions.
 - **Navigation buttons:** Move between Overview → Sales → Supply Chain pages.
 - **Tooltips:** Show detailed values on hover.
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7. Calculations / Measures

Calculation Name	Formula	Purpose
Shipping Delay	DATEDIFF ('day', [Scheduled Shipping Date], [Actual Shipping Date])	Measure delay per shipment
On-Time Delivery Flag	IF [Shipping Delay] <= 0 THEN 'On Time' ELSE 'Late' END	Categorize delivery performance
Total Sales	SUM ([Sales per customer])	Total revenue
Total Profit	SUM ([Benefit per order])	Overall profit analysis
Sales Contribution %	[Sales per customer] / TOTAL (SUM ([Sales per customer]))	Identify top-selling items
Late Delivery %	SUM([Late_delivery_risk]) / COUNT ([Order Id])	