🧾 Functional Requirement Document (FRD)

PROJECT TITLE: SUPERSTORE CUSTOMER & SALES INSIGHT
PREPARED BY: JIBIN AHAMMED
DATE: 24/10/2025
VERSION: 1.0

---

1. PROJECT TITLE

Superstore Customer & Sales Insight

A Power BI dashboard to analyse Superstore sales performance, customer segmentation, and shipping efficiency using interactive visuals and DAX-based measures.

---

2. DASHBOARD SECTIONS

Section Name	Description
Sales & Profit Overview	Displays overall sales and profit performance across categories and regions with trend analysis.
Customer & Segment Insights	Highlights customer-level performance, sales by segment, and profit by category.
Shipping & Delivery Analysis	Shows profit based on delivery days, sales by ship mode and region, and discount distribution.

---

3. DATA REQUIREMENTS

Dashboard Section	Required Columns / Fields
Sales & Profit Overview	Order ID, Order Date, Category, Sub-Category, Region, Sales, Profit
Customer & Segment Insights	Customer Name, Segment, Category, Sales, Profit

Dashboard Section	Required Columns / Fields
Shipping & Delivery Analysis	Ship Mode, Ship Date, Order Date, Delivery Days, Discount, Profit, Region, Sales

4. FILTERS / SLICERS

Filter Name	Purpose
Category	Filter visuals based on product category
Region	Filter sales and profit visuals by region
Segment	Filter customer and sales by segment
Ship Mode	Analyse data by shipment type
Order Date Range	View performance over specific time periods

5. VISUALS / CHARTS

Dashboard Section	Visual Type	Purpose / Metric
Sales & Profit Overview	KPI Cards	Show Total Sales and Total Profit
	Stacked Bar Chart	Sales by Sub-Category
	Column Chart	Sales by Region
	Line Chart	Sales vs Profit trend
	Gauge	Profit Margin
Customer & Segment Insights	Table	Customer Name, Sales, Profit
	Pie Chart	Sales by Segment
	Column Chart	Profit and Sales by Category
Shipping & Delivery Analysis	Scatter Plot	Profit vs Delivery Days
	Stacked Bar Chart	Sales by Ship Mode and Region
	Column Chart	Discount by Ship Mode
	Cards	Total Discount, Avg Delivery Days

6. INTERACTIVITY

- **Cross-filtering:** Selecting a region or segment updates all visuals dynamically.
- **Drill-down:** Users can drill from category → sub-category → product level.
- **Hover Tooltips:** Show detailed metrics (sales, profit, discount).
- **Page Navigation:** Buttons for navigating between 3 report pages.

7. CALCULATIONS / MEASURES

Measure Name	DAX Formula	Description
Total Sales	SUM(Orders[Sales])	Total revenue generated
Total Profit	SUM(Orders[Profit])	Total profit earned
Profit Margin	DIVIDE(SUM(Orders[Profit]), SUM(Orders[Sales]))	Profit percentage
Average Discount	AVERAGE(Orders[Discount])	Mean discount per order
Delivery Days	DATEDIFF(Orders[Order Date], Orders[Ship Date], DAY)	Days between order and shipping
Sales by Segment	CALCULATE(SUM(Orders[Sales]), VALUES(Orders[Segment]))	Sales per customer segment

8. EXPORT / REPORTING NEEDS

Export Type	Purpose
PDF Export	For management presentation and reports
Excel Export	For raw data or detailed analysis
Power BI Service Share	Dashboard shared with Sales & Operations team
Auto Refresh	Dataset refresh scheduled daily or weekly

9. NOTES / SPECIAL INSTRUCTIONS

- Use **consistent color themes** across all dashboards (blue/orange palette).
- Ensure visuals load within **5 seconds**.
- Handle missing or inconsistent data during cleaning (based on Data Assessment Template).
- Maintain relationships between key columns: Order ID, Customer Name, Category, Region, and Ship Mode.
- Dashboard background image applied for professional presentation.