**🧾 Functional Requirement Document (FRD)**

**PROJECT TITLE:** SUPERSTORE CUSTOMER & SALES INSIGHT  
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**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 |
| **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.