USER REQUIREMENT DOCUMENT

Project Title: Sales Performance Analysis System

Dataset: *Sample Superstore Dataset (Kaggle)*

Tools: Excel | SQL | Power BI

Purpose:

The purpose of this project is to develop a **Sales Performance Analysis Dashboard** that evaluates historical sales data to identify revenue trends, best-selling products, regional performance, and profitability insights. The system will provide interactive visual insights using Power BI to support data-driven business decisions.

Scope:

The system will:

- Analyze total sales performance over time (monthly and yearly)
- Identify best-selling products based on revenue
- Analyze revenue distribution by region
- Calculate total profit and profit margin
- Identify most profitable products
- Provide interactive filtering and dynamic visualization

The system will not:

- Predict future sales using machine learning
- Modify or update the source dataset
- Process real-time transactional data
- Store new sales records

Stakeholders:

Stakeholder	Role
Business Management	Monitor overall sales performance
Sales Managers	Identify top-performing products
Regional Managers	Analyze region-based revenue
Data Analysts	Extract actionable business insights

Data Processing:

The system shall:

- Import the Superstore dataset from CSV
- Clean and transform data in Excel
- Load dataset into SQL for structured querying
- Perform aggregations using SQL (GROUP BY)
- Import cleaned dataset into Power BI
- Create DAX measures for KPIs

The system shall calculate:

- Total Sales (₦)
- Total Profit (₦)
- Total Orders
- Average Order Value (₦)
- Profit Margin (%)
- Year-over-Year Growth (%)

Dashboard Requirements:

The dashboard shall display:

KPI Metrics (Top Section)

- Total Sales (₦)

- Total Profit (₦)
- Total Orders
- Average Order Value (₦)
- Year-over-Year Growth (%)

Sales Trend Analysis

- Line chart showing Total Sales by Month and Year
- Yearly comparison of revenue growth
- Seasonal sales pattern identification

Product Performance Analysis

- Top 10 Best-Selling Products (based on Total Sales)
- Most Profitable Products
- Product Profit Margin (%)
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Regional Analysis

- Revenue by Region (Column Chart)
- Profit comparison across regions

Detailed Sales Table

Columns:

- Product Name
- Category
- Sales (₦)
- Profit (₦)
- Profit Margin (%)

Filtering Capabilities

The system shall allow filtering by:

- Year
- Region
- Product Category
- Product Name

System Architecture Overview:

Data Flow:

CSV Dataset → Excel Data Cleaning → SQL Aggregation & Querying → Power BI Dashboard → Business Insights

Expected Outputs:

The system should generate:

- Interactive sales dashboard
- Revenue trend visualization
- Product ranking analysis
- Regional performance comparison
- Profitability insights
- Business recommendation summary

Success Criteria:

The project will be considered successful if:

- All KPIs calculate correctly
- Dashboard is fully interactive
- Filters dynamically update visuals
- Visualizations are clear and readable
- Business insights can be derived easily