Project Design Phase Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau

1. System Design Overview

- Plan how the system will function before development begins.
- Components include Data Sources, Data Processing Layer, Visualization Layer, and User Interaction Layer.

2. Architecture Design

- Architecture Flow: Data Collection → Data Preparation → Tableau Processing → Dashboard Visualization → Insights & Reports.

3. Dashboard Layout & Wireframes

- Header with project title and filters.
- KPI Summary including Sales, Profit, Quantity, and Growth %.
- Charts section with Trend, Bar, Donut/Pie, Bubble, and Area charts.
- Insights panel for key findings and recommendations.

4. Database & Data Model Design

- Tables include Orders, Products, Customers, and Regions.
- Relationships established using Product ID, Customer ID, and Region ID.

5. User Interface (UI) Design

- Clean layout with consistent color themes and easy navigation.
- Interactive controls such as Region filter, Category filter, Date range selector, and Drill-down options.

6. Visualization Design Selection

- Word Cloud – Product popularity.
- Donut Chart – Category distribution.
- Trend Line – Time analysis.
- Bar Chart – Comparison.
- Bubble Chart – Multi-variable analysis.
- Area Chart – Growth visualization.
- Text Table – Detailed data.
- Pie Chart – Market share.

7. Functional Design

- Import dataset, clean data, create metrics, display dashboards, enable interactivity, and export insights.

8. Non-Functional Design

- Performance optimization, accuracy, scalability, security, and user-friendly experience.

9. Design Deliverables

- System architecture diagram.
- Dashboard wireframes.
- Data model design.
- UI layout plan.
- Visualization strategy document.