

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	19 February 2026
Team ID	LTVIP2026TMIDS24154
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Gathering	Collect sales, price, promotion, and product placement data from retail databases.
FR-2	Data Cleaning & Preparation	Remove duplicates, handle missing values, and normalize data for consistency.
FR-3	Visualizations	Create meaningful Tableau visualizations such as: <ul style="list-style-type: none">• Sales Volume vs Product Category• Sales Volume vs Product Position• Promotion vs Sales Volume• Consumer Demographics vs Sales Volume• Product Category vs Product Position
FR-4	Dashboard & Story Development	Develop interactive Tableau dashboards and story scenes with filters for product category, promotion, and product position.
FR-5	Web Integration	Embed the Tableau dashboard and story into a Flask-based web user interface for interactive access.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The dashboard must be user-friendly with intuitive navigation, filters, and clear visualizations.
NFR-2	Security	Ensure role-based access, data encryption, and secure connections (SSL/HTTPS).
NFR-3	Reliability	The solution should consistently deliver accurate and updated insights without failure.
NFR-4	Performance	Dashboards must load within 5 seconds and support quick interactions with filters.
NFR-5	Availability	The dashboard should be available 24/7 with minimal downtime (<1% monthly).
NFR-6	Scalability	The system must handle growing data volumes and users without degrading performance.