Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	31 January 2026
Team ID	LTVIP2026TMIDS28498
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Data Source	Raw sales data collected from POS,ERP, or CRM systems	Microsoft SQL Server / Excel / CSV
2.	Data Preparation	Cleans, transforms, and loads data into Tableau	Tableau Prep / Python / SQL
3.	Data Storage	Centralized storage for processed data	Azure SQL Database / Amazon RDS/Local System
4.	Data Visualization Tool	Creates dashboards and interactive visual reports	Tableau Desktop / Tableau Online
5.	User Interface	Web or embedded view where users interact with dashboards	Tableau Public / Embedded Tableau
6.	Access Control	Manages user roles and access levels	Tableau Server / Active Directory
7.	Report Sharing	Mechanism to export and distribute dashboard insights	Tableau Share / PDF Export / Email
8.	Feedback Collection	Collects feedback from users about the dashboard experience	Google Forms / Microsoft Forms

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Usability	Easy-to-use dashboard with filters, tooltips, and clean layout	Tableau UX / UI design best practices
2.	Performance	Fast data loading and interaction with filters	Tableau Extracts (TDE/Hyper), Optimized SQL
3.	Security	Role-based access and secure data handling	Tableau Server Permissions / HTTPS
4.	Scalability	Ability to handle large datasets and user growth	Tableau Server / Cloud Storage
5.	Availability	Ensures the dashboard is accessible 24/7 with minimal downtime	Cloud Hosting (Azure/AWS), Tableau Server
6.	Integration	Seamless connection to different data sources	Tableau Connectors / APIs
7.	Real-time Data Refresh	Automatically updates dashboards with latest data	Tableau Scheduler / Live Data Connection