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

Date	28 June 2025
Team ID	LTVIP2025TMID48549
Project Name	Cosmetic Insights : Navigating Cosmetics Trends and Consumer Insights with Tableau
Maximum Marks	4 Marks

Technical Architecture:

The technical architecture integrates data sources (sales, reviews, social media) through ETL processes into a centralized database. Tableau connects to this database to create interactive dashboards for real-time visualization and decision-making.

Table-1 : Components & Technologies:

Component	Technology	Purpose
Data Sources	CSV, Excel, APIs (e.g., social media)	Collect sales, reviews, demographics, and trend data
Data Cleaning & ETL	Python, SQL, Excel	Clean, transform, and prepare data for analysis
Data Storage	Tableau Extracts / Google Sheets / SQL DB	Store structured and cleaned data
Visualization Tool	Tableau	Build interactive dashboards and visual analytics
User Access Interface	Tableau Public / Tableau Server	Allow users to view and interact with dashboards

Table-2: Application Characteristics:

S.no	Characteristics	Description
1	User-Friendly	Intuitive interface with easy navigation and interactive visuals.
2	Responsive	Accessible across devices (desktop, tablet); optimized Tableau layout.
3	Real-Time Insights	Enables dynamic filtering and up-to-date visual analytics for quick decisions.
4	Customizable	Dashboards can be filtered by region, product, demographic, and time.
5	Data-Driven	All insights are backed by actual sales, review, and consumer behavior data.

References:

https://fastercapital.com/content/Cosmetic-industry-analysis--Consumer-Behavior-Trends--Insights-from-Cosmetic-Sales-Data.html

https://www.circana.com/industry-expertise/beauty/