

## Project Design Phase Solution Architecture

Date	26 June 2025
Team ID	LTVIP2025TMID49104
Project Name	Cosmetic Insights _ Navigating Cosmetics Trends and Consumer Insights with Tableau
Maximum Marks	4 Marks

### Solution Architecture Cosmetics Data Analytics Platform:

Solution architecture for the cosmetics analytics platform is a structured process that connects **beauty industry challenges**—such as shifting consumer preferences, product performance tracking, and market competition—with advanced **technology solutions**. The architecture ensures that business goals are effectively addressed through scalable and insightful systems.

Its objectives are to:

- 💡 **Identify the most effective technology stack** (e.g., data pipelines, BI tools, AI models) to analyze cosmetic product sales, customer trends, and inventory optimization.
- 📋 **Describe the structure and behavior** of the analytics platform, including how data flows from raw product databases and sales channels to visual dashboards and predictive models.
- 🔧 **Define key solution features**, such as a personalized recommendation engine, customer sentiment analysis, and dynamic pricing modules; outline each development phase from data collection to deployment.
- 📄 **Provide technical specifications and architectural standards** to ensure seamless integration, high performance, and maintainability of the entire cosmetics solution.

### Example - Solution Architecture Diagram:



