

## Project Design Phase Solution Architecture

Date	15 February 2025
Team ID	LTVIP2026TMIDS79606
Project Name	cosmetic insights : navigating cosmetics trends and consumer insights with tableau
Maximum Marks	4 Marks

### Solution Architecture:

This diagram explains how data moves from the customer to the final dashboard. In your report, you should describe this as a **layered architecture**.

- **Data Source Layer:** External data including Customer Feedback (Social Media APIs) and Internal Sales Logs (CSV/Excel).
- **Ingestion Layer:** Raw data is uploaded to **IBM Cloud Object Storage**.
- **Processing Layer:** Data is processed using **IBM Watson Natural Language Understanding (NLU)** to extract sentiment scores and keywords.
- **Storage Layer:** Cleaned and processed data is stored in **IBM Db2** or a consolidated Data Warehouse.
- **Visualization Layer:** **Tableau** connects to the database to create interactive dashboards.
- **User Layer:** The **Brand Manager** accesses the insights via a web browser.

### Example - Solution Architecture Diagram:

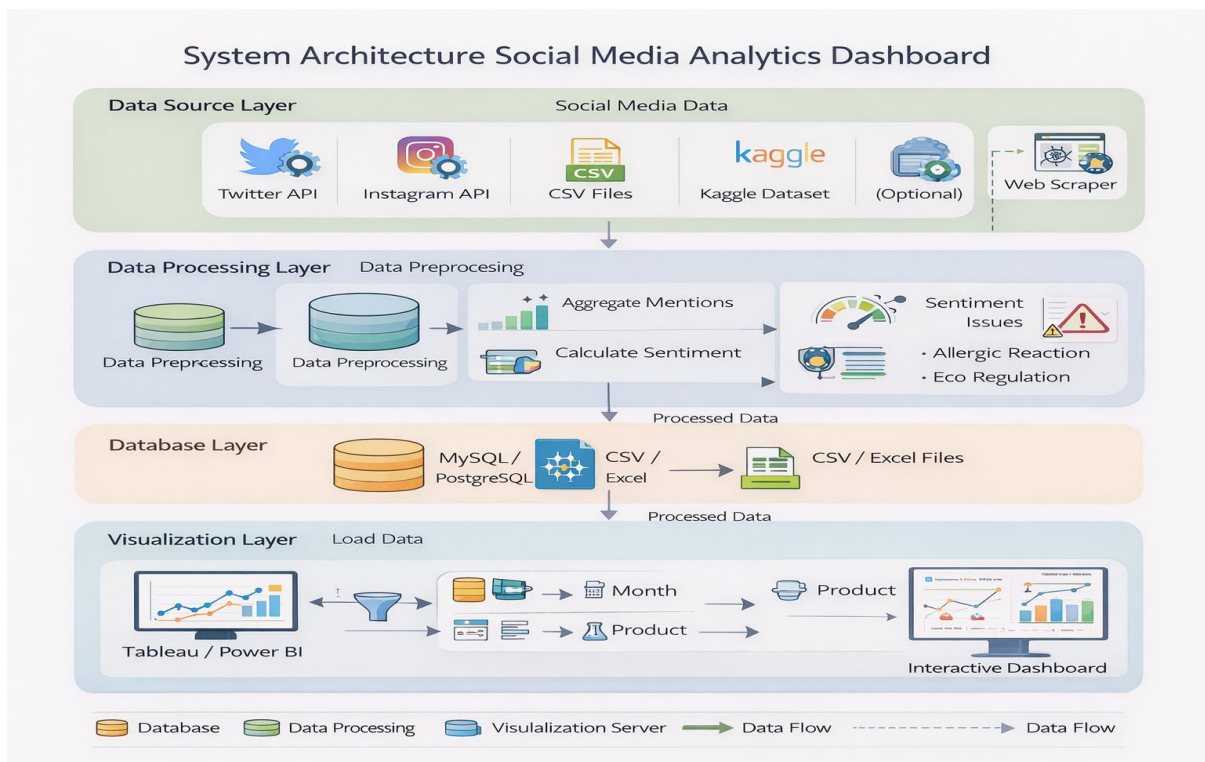


Figure 1: Architecture and data flow of the cosmetic insights

Reference: <https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>