

## Project Design Phase

### Solution Architecture

Date	23-06-2025
Team ID	LTVIP2025TMID47723
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	4 Marks

#### Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

#### About the architecture:

- ❖ User (Shailaja) uses a Web or Mobile App (React/Flutter) to search for products.
- ❖ The API Gateway handles and routes her request securely to backend services.
- ❖ An Amazon Lex Bot processes voice/text input using natural language understanding.
- ❖ Lambda Function executes backend logic — retrieves relevant product data.
- ❖ DynamoDB/MySQL serves as the product database (location, name, pricing, etc.).
- ❖ S3 Storage/CDN hosts images, logs, and static content (fast loading).
- ❖ CloudWatch Logs + Notification (Bell Icon) monitors activity and sends alerts.
- ❖ A “Success” state confirms quick and relevant product results.
- ❖ Ends with a Happy Customer outcome — fast, frustration-free experience.

## Solution Architecture diagram :

