

Project Design Phase

Solution Architecture

Date	18 June 2025
Team ID	LTVIP2025TMID47570
Project Name	Toycraft tales: tableau's vision into toy manufacturer data
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.

Goals of the Architecture

1. Find the best tech solution to visualize how product position, price, promotions, and customer demographics affect sales volume.
2. Define the system's structure and behavior using Tableau Public for dashboards and Python/Tableau for preprocessing.
3. Outline features, components, and development phases clearly for visualization and interaction.
4. Provide technical specifications for implementation and scaling.

Architecture Components

Layer	Component Description
Data Layer	Source: Product Positioning.csv file with fields like Sales Volume, Foot Traffic, Demographics, Promotion, etc.
Processing Layer	Data cleaning, formatting, and calculated fields in Tableau or via Python (optional).
Application Layer	Tableau logic engine for filters, calculations, and chart rendering.
Presentation Layer	Final dashboard built in Tableau with interactive visuals: bar, funnel, donut, waterfall, etc.
Users	Retail managers, marketing executives, analysts – accessing via Tableau Public or PDF reports.

Solution Architecture Diagram:

