

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	31 January 2025
Team ID	LTVIP2025TMID48331
Project Name	ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Ingestion & Integration	Ingest Sales Data (from ERP)
FR-2	Data Transformation & Modeling	Cleanse and Validate Raw Data
FR-3	Dashboard & Visualization	Develop Sales Performance Dashboard
FR-4	Reporting & Export	Generate Ad-hoc Reports based on User Queries
FR-5	User Access & Security	Authenticate Users (e.g., via company SSO)
FR-6	Data Refresh & Performance	Schedule Automated Data Refreshes
FR-7	Alerting & Notifications	Trigger Alerts for Low Stock Levels
FR-8	Historical Data Analysis	Store Historical Sales Data for trend analysis
FR-9	Predictive Analytics (Basic)	Generate Basic Sales Forecasts
FR-10	Feedback & Enhancement	Provide a mechanism for users to submit feedback on dashboards

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-functional Requirement	Description
NFR-1	Usability	The Tableau dashboards and reports should be intuitive and easy for various user types (e.g., Sales Analysts, Executives) to navigate and understand.
NFR-2	Security	User access to dashboards and underlying data must be authenticated and authorized based on roles (e.g., row-level security for sensitive data).
NFR-3	Reliability	The data ingestion and transformation processes should reliably complete daily refreshes without errors, ensuring consistent data availability.
NFR-4	Performance	Dashboards should load and render within 5-10 seconds for typical usage, even with large datasets.
NFR-5	Availability	The Tableau Server and underlying data sources should be available 99.5% of the time during business hours (9 AM - 6 PM IST, Monday - Friday).
NFR-6	Scalability	The system must be able to handle a 50% increase in data volume and a 30% increase in concurrent users over the next 2 years without significant performance degradation.
NFR-7	Data Integrity	All data loaded into the system must be accurate, consistent, and complete, matching the source systems after transformation.
NFR-8	Maintainability	The data pipelines, Tableau workbooks, and server configurations should be well-documented and easily maintainable by the IT team.
NFR-9	Extensibility	The system should be capable of integrating new data sources (e.g., social media data, IoT production data) with minimal development effort.
NFR-10	Response Time	Complex data queries and dashboard filter applications should return results within 15 seconds.