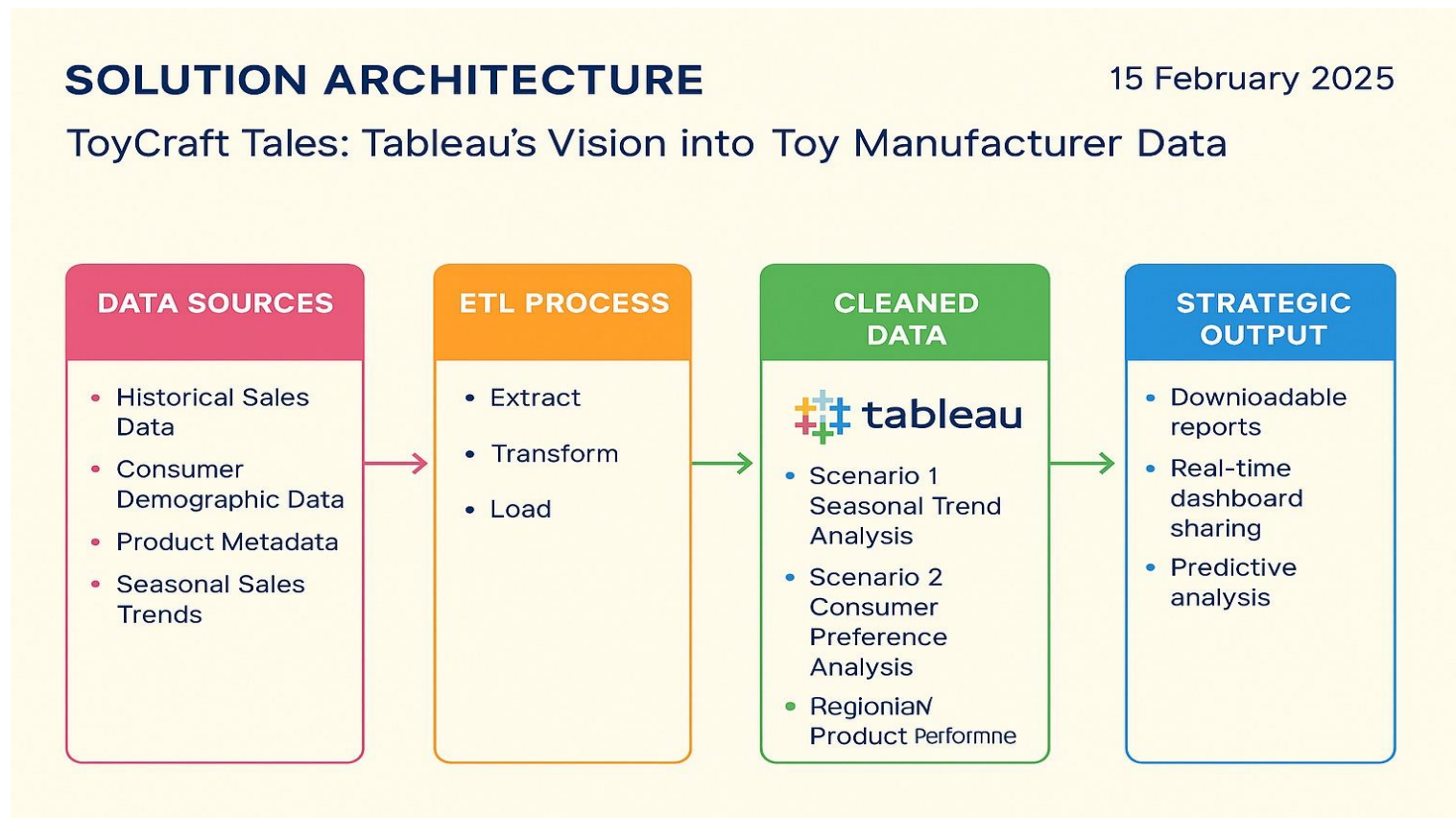


Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	20 June 2025
Team ID	LTVIP2025TMID47573
Project Name	ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data
Maximum Marks	4 Marks

Technical Architecture:



S.NO	Component	Description	Technology
1.	User Interface	How users interact with the analytics solution.	Tableau Dashboards (Web Interface)
2.	Data Sources	Where the raw toy manufacturer data originates.	Excel Files, CSVs, Local Operational Databases
3.	Data Storage (Analytics)	Central repository for structured data ready for analysis.	Cloud Data Warehouse (e.g., Google BigQuery)
4.	Data Processing & ETL	Processes for cleaning, transforming, and loading data.	Tableau Prep Builder, SQL Queries
5.	Application Logic	Logic within Tableau for data analysis and interactivity.	Tableau (Calculations, Filters, Dashboard Actions)
6.	Visualization Engine	Software used to create and design interactive reports.	Tableau Desktop
7.	Deployment Platform	Where dashboards are published and accessed by users.	Tableau Server / Tableau Cloud
8.	Security	Mechanisms to control access and protect sensitive data	Tableau Server/Cloud Permissions, User Authentication Export to Sheets

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Listing any open-source technologies used within the solution.	SQL (for database interaction)
2.	Security Implementations	Measures put in place to protect data and control user access.	Tableau Server/Cloud Permissions, User Authentication
3.	Scalable Architecture	How the system is designed to handle increasing data volumes and users.	Cloud Data Warehouse, Tableau Server/Cloud (Scalability features)
4.	Availability	Ensuring the analytics platform and dashboards are consistently accessible.	Tableau Server/Cloud Uptime, Data Backups
5.	Performance	Design considerations for the speed and responsiveness of the application.	Tableau Data Extracts (Hyper), Optimized SQL Queries