

Project Design Phase-II

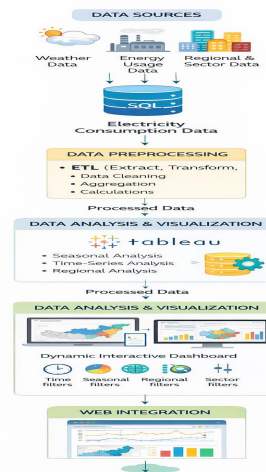
Data Flow Diagram & User Stories

Date	31 January 2026
Team ID	LTVIP2026TMIDS24158
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example:



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Data Analyst	Data Collection	USN-1	As a data analyst, I can collect electricity consumption data from public datasets.	Dataset is successfully collected and stored.	High	Sprint-1
Data Analyst	Data Storage	USN-2	As a data analyst, I can store electricity consumption data in an SQL database.	Data is stored and accessible via SQL queries.	High	Sprint-1
Data Analyst	Data Preprocessing	USN-3	As a data analyst, I can clean and preprocess electricity data.	Missing values and incorrect formats are handled.	High	Sprint-1
Data Analyst	Data Integration	USN-4	As a data analyst, I can connect the SQL database to Tableau.	Tableau connects successfully and loads data.	High	Sprint-1
Data Analyst	Time-Series Analysis	USN-5	As a data analyst, I can analyze electricity usage trends over time.	Time-based trends are visible in Tableau.	High	Sprint-2
Data Analyst	Seasonal Analysis	USN-6	As a data analyst, I can identify seasonal variations and peak demand periods.	Seasonal peaks are clearly visualized.	High	Sprint-2
Data Analyst	Regional Analysis	USN-7	As a data analyst, I can compare electricity consumption across regions.	Regional comparison charts are displayed.	Medium	Sprint-2
Data Analyst	Dashboard Design	USN-8	As a user, I can view an interactive	Filters work for time, season, and region.	High	Sprint-3

			dashboard with filters.			
Data Analyst	Story Creation	USN-9	As a user, I can view a Tableau story explaining key insights.	Story presents insights step-by-step.	Medium	Sprint-3
Stakeholder	Web Integration	USN-10	As a stakeholder, I can access the dashboard via a web page.	Dashboard loads successfully on the web.	Medium	Sprint-3