

Project Design Phase-II

Data Flow Diagram & User Stories

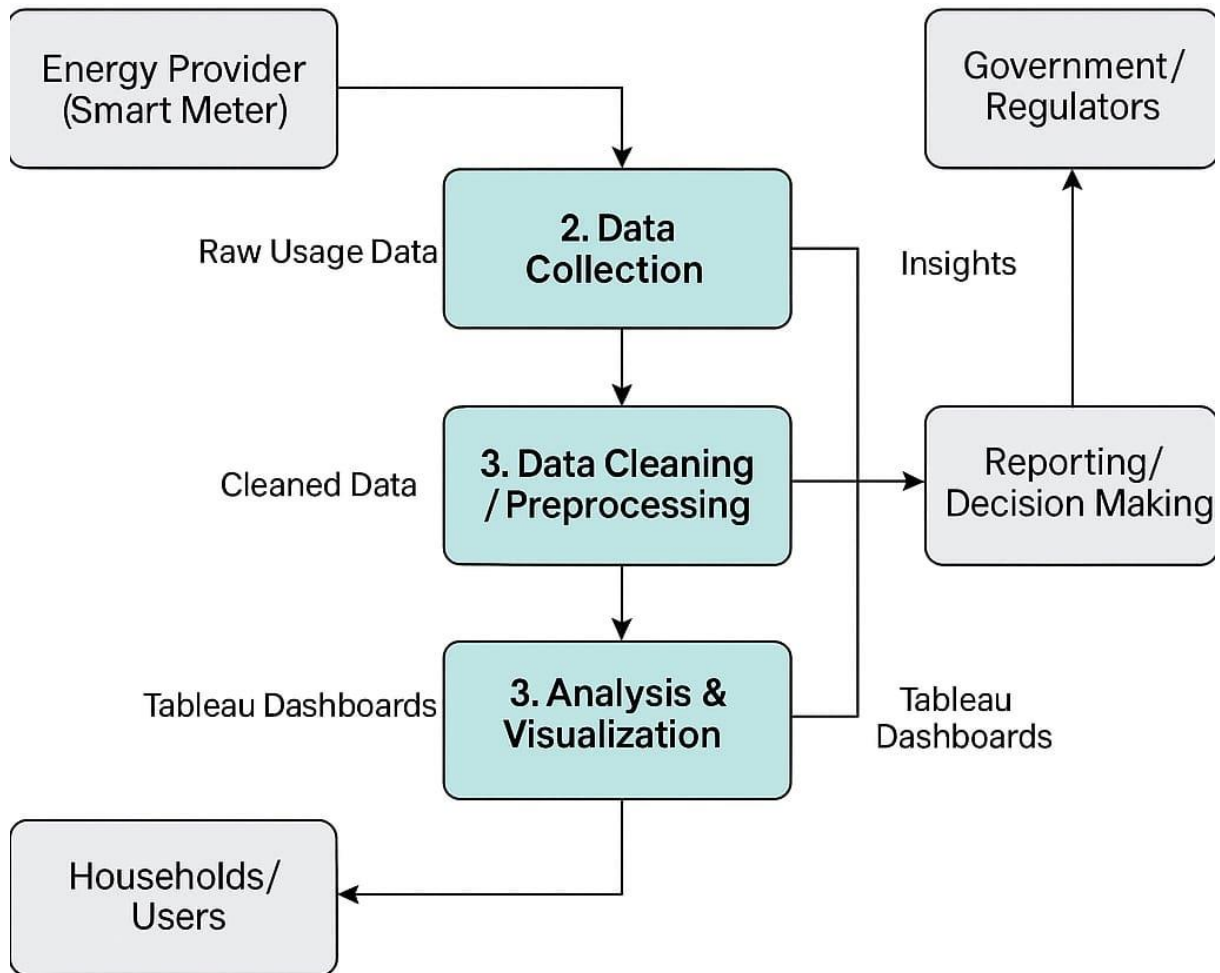
Date	26 June 2025
Team ID	LTVIP2025TMID47899
Project Name	Plugging Into the Future – An Exploration of Electricity Consumption Patterns using Tableau.”
Maximum Marks	4 Marks

Data Flow Diagrams:

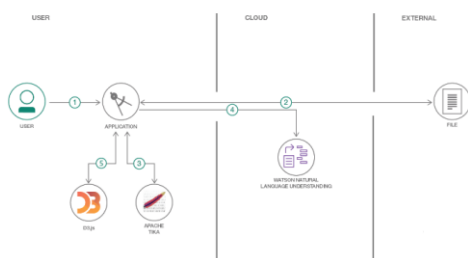
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example:

Plugging into the Future – An Exploration of Electricity Consumption



Flow



1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

1. External Entities:

- **Smart Meters (data source)**
- **Government/Policy makers**
- **Consumers/Households**

2. Processes:

- **Data collection (real-time usage data)**
- **Data cleaning (handling nulls, errors, standardizing)**
- **Analysis (peak usage, trends, prediction)**
- **Reporting (dashboards, alerts, reports)**

3. Data Stores (optional in DFDs):

- **Raw data storage**
- **Processed data warehouse**

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account/dashboard after successful registration	High	Sprint -1
		USN-2	As a user, I will receive a confirmation email and click confirm to	I can receive a confirmation email and click confirm to	High	Sprint -1

			n email once I have registered for the application.	activate my account		
		USN-3	As a user, I can register for the application through Facebook.	I can register and access the dashboard using Facebook login	Low	Sprint -2
		USN-4	As a user, I can register for the application through Gmail.	I can register and access the dashboard using Gmail login	Medium	Sprint -1
	Login	USN-5	As a user, I can log into the application by entering my email & password.	I can log in and access my dashboard after entering valid credentials	High	Sprint -1
	Dashboard	USN-6	As a user, I can view and manage my profile, recent activity, and settings.	I can see my dashboard with options like edit profile, activity log, settings	Medium	Sprint -2
Customer (Web user)	Registration/Login	USN-7	As a web user, I can register and log in using email/password or social login.	I can access the web dashboard after registration/login	High	Sprint -1

	Dashboard	USN-8	As a web user, I can access a responsive dashboard with personalized features.	I can view and interact with the dashboard on any screen size	Medium	Sprint -2
Customer Care Executive	User Management	USN-9	As a care executive, I can view and respond to customer queries/issues.	I can log in, view user messages, and mark tickets as resolved	High	Sprint -2
Administrator	User & System Management	USN-10	As an admin, I can view user analytics, manage content, and control access.	I can see user stats, update content, and grant/revoke permissions	High	Sprint -3