

Ideation Phase

Define the Problem Statements

Date	20 February 2026
Team ID	LTVIP2026TMIDS66673
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	2 Marks

Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau – Problem Statement

Electricity consumption data is generated in large volumes across different regions and sectors, but traditional reports and raw datasets make it difficult to analyze usage patterns, peak demand periods, and seasonal variations. The absence of interactive and visual analytical tools limits effective interpretation of this data, creating challenges for utility providers and policymakers in making informed decisions. Therefore, there is a need for a visualization-driven solution that converts complex electricity consumption data into clear, interactive dashboards to support efficient energy analysis and planning.

I am:	Electricity utility analysts and energy policymakers responsible for monitoring electricity usage and planning efficient energy distribution.
I'm trying to:	Analyze electricity consumption patterns across regions, time periods, and sectors to identify peak demand and trends.
But:	The electricity consumption data is large, complex, and difficult to understand using traditional reports and spreadsheets.
Because:	There is a lack of interactive dashboards and effective data visualization tools to simplify the analysis.
Which makes me feel:	Overwhelmed and uncertain while making timely and informed energy planning decisions.

Reference: <https://miro.com/templates/customer-problem-statement/>

Example:

Electricity utility analyst	Energy policymaker	Analyze electricity consumption patterns	Identify peak and off-peak demand hours	Electricity data is large and complex	Difficult to compare trends across regions	Data is scattered across multiple sources	No interactive dashboards available	Overwhelmed by data volume	Uncertain about decision accuracy
Grid planning professional	Data-driven decision maker	Understand seasonal and regional usage trends	Support efficient energy planning and distribution	Static reports make analysis slow	Patterns are hard to identify quickly	Lack of visual analytics tools	Traditional reports lack real-time insights	Frustrated with manual analysis	Less confident in energy planning decisions

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	an electricity utility analyst	identify peak electricity demand patterns	data is scattered and complex	there's no unified visual dashboard	unsure about demand planning
PS-2	an energy policymaker	track regional electricity consumption trends	I can't compare trends easily	dashboards aren't interactive	frustrated and uncertain