

Ideation Phase

Define the Problem Statements

Date	15 Feb 2026
Team ID	LTVIP2026TMIDS55781
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	2 Marks

Customer Problem Statement :

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

Energy regulators and utility companies face significant challenges in identifying regional and state-wise electricity consumption trends from raw, unformatted dataset rows. Without proper visual tools, understanding the nuances of power distribution, geographic disparities across Indian regions, and seasonal fluctuations becomes a highly inefficient and error-prone process. This lack of immediate, clear insight prevents grid analysts and policymakers from making swift, data-driven decisions regarding energy allocation, resource management, and infrastructure planning.

There is a critical need to specifically compare electricity usage patterns between the years 2019 and 2020 to understand how external events and seasonal shifts impacted overall power consumption. By developing an interactive visual analytics solution using Tableau, stakeholders can seamlessly track temporal shifts, pinpoint exact quarter-wise or month-wise peak usage times, and observe geographical distribution on interactive maps. This visual data story directly addresses the limitations of static data, transforming complex utility records into an accessible format that instantly reveals the true impact of the 2020 fluctuations compared to the previous year.

Customer Problem Statement					
I am	I'm trying to	Identify	But	Because	Which makes me
Energy Policy Maker	design effective power policies	regional consumption patterns	data is scattered across sources	electricity demand varies by region & season	overwhelmed
Utility Company Manager	forecast electricity demand	peak usage periods	consumption trends fluctuate	weather, population & industrial usage impact demand	challenged
Power Grid Operator	ensure uninterrupted power supply	load distribution trends	real-time demand is unpredictable	sudden spikes & outages occur	stressed
Market Research Analyst	understand energy usage trends	consumer & industrial consumption behavior	historical data is hard to interpret	usage patterns differ by sector & time	uncertain
Sustainability Planner	promote energy efficiency	high consumption zones	lack of actionable insights	energy wastage & inefficient usage persist	concerned

PS ID	I am	I'm trying to	But	Because	Which makes me feel
PS-1	a power utility strategist	identify which regions drive peak electricity demand and revenue	data is scattered and not visually integrated	there is no centralized analytics dashboard	unsure about capacity planning and infrastructure investments
PS-2	an energy planning officer	compare electricity consumption trends across states, regions, and time periods	I can't filter or analyze usage by region and quarter accurately	reports are generic and not tailored to energy analysis	frustrated and unsure how to optimize distribution
PS-3	a senior energy executive	present power consumption growth and performance insights to stakeholders	reports lack compelling visuals and clear narratives	there is no story-driven, interactive dashboard	disengaged and ineffective during decision meetings
PS-4	a market & policy analyst	understand how factors like seasonality, population, and industrial activity affect electricity usage	I can't explore patterns or correlations easily	existing tools are static and not interactive	stuck and unable to derive actionable insights