

## Ideation Phase

### Brainstorm & Idea Prioritization Template


Date	19 February 2026
Team ID	LTVIP2026TMIDS80013
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	4 Marks

#### An Exploration of Electricity Consumption Patterns Using Tableau & Idea Prioritization :

Plugging into the Future: An Exploration of Electricity Consumption Patterns using Tableau" is a project that leverages Tableau's data visualization capabilities to analyze and understand electricity consumption patterns across various regions and sectors. By examining data such as time-of-day usage, peak demand periods, seasonal variations, and consumption by sector (residential, commercial, industrial), the project aims to provide valuable insights for utility companies, policymakers, and consumers. These insights can help optimize electricity usage, improve grid management, and promote sustainable energy practices.

Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

#### Step-1: Team Gathering, Collaboration and Select the Problem Statement



### Brainstorm & idea prioritization

#### Electricity Consumption Analysis Using Tableau

This session focuses on identifying electricity consumption patterns across states, regions, and time periods to support data-driven energy planning and sustainable grid management.

🕒 10 minutes to prepare  
🕒 1 hour to collaborate  
👥 2-4 team members

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#### Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes

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**1 Team gathering**  
All team members review Tableau dashboards  
Understand year-wise, quarter-wise, and regional trends  
Share initial observations

**2 Set the goal**  
To identify key electricity consumption patterns and prioritize actionable insights for energy planning.

**Tools used**

- Tableau Public
- Electricity consumption dataset
- Interactive dashboards

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#### Define your problem statement


What problem are you trying to solve?  
Frame your problem as a How Mght statenent.  
This will be the focus of your brainstorm.

🕒 5 minutes

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PROBLEM

How might we analyze electricity consumption patterns across states and regions to improve energy planning and sustainbliity?



#### Key rules of brainstorming

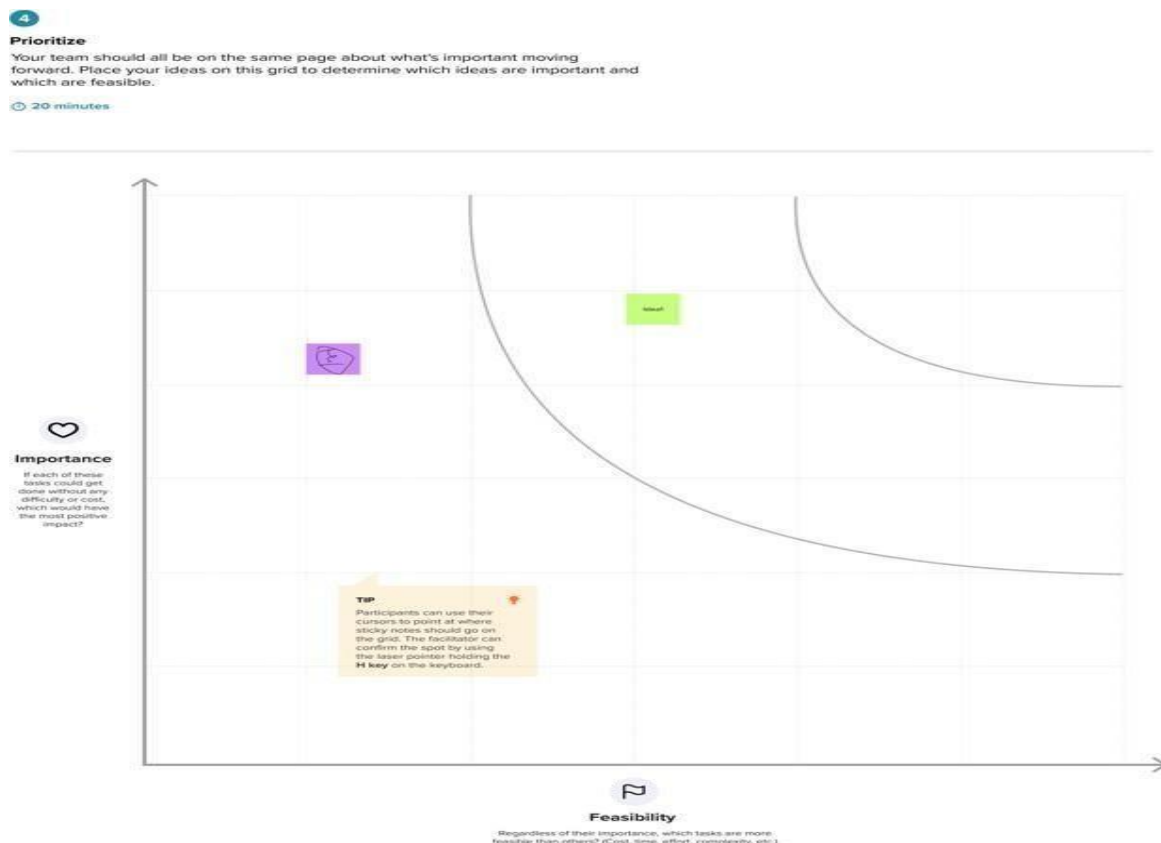
- ✓ Focus on electricity consumption insights
- 2 Encourage all team ideas.
- 👉 Do not judge ideas initially.
- 💡 Prioritize high-impact insights.
- 🔄 Convert data patterns into strategic actions.

## Step-2: Brainstorm, Idea Listing and Grouping

This project aims to design a comprehensive regional comparison dashboard to analyse electricity consumption patterns across different regions and sectors. The main focus is to understand how electricity usage varies geographically and over time. By integrating multiple datasets such as population density, weather conditions, and smart grid implementation details, the dashboard will provide deeper insights into energy demand patterns. The project emphasizes interactive visualizations and analytical techniques to support data-driven decision-making for energy planning and management.

- Develop a regional comparison dashboard to analyse electricity usage across different regions.
- Identify seasonal consumption peaks during summer, winter, and monsoon periods.
- Perform sector-wise analysis for residential, commercial, and industrial consumption.
- Create time-series graphs to study monthly and yearly electricity usage trends.
- Integrate population density data to correlate demographic concentration with energy demand.
- Use color-coded maps to visually represent electricity consumption intensity.
- Incorporate dynamic filters (region, year, sector, season) for interactive insights.
- Link weather and temperature data to analyse electricity demand spikes.
- Compare electricity usage before and after smart grid implementation.
- Apply correlation analysis to understand relationships between influencing factors.
- Predict future electricity consumption using historical data trends.
- Provide actionable insights to support policymakers and energy authorities.

## Step-3: Idea Prioritization



## Objective

The primary objective of this project is to analyse electricity consumption patterns using interactive Tableau dashboards and generate actionable insights for improved energy planning and sustainability.

1. To analyse electricity consumption trends across different states and regions of India.
2. To identify peak demand periods and seasonal variations through year-wise and quarter-wise analysis.
3. To examine regional disparities in electricity usage and highlight high- and low-consumption areas.
4. To study time-based consumption trends and understand how electricity demand changes over different periods.
5. To explore the relationship between industrialization, population concentration, and electricity usage.
6. To provide data-driven recommendations for energy optimization, infrastructure planning, and sustainable grid management.