

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	13/06/25
Team ID	LTVIP2025TMID59112
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

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

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

Our team came together to address a real-world issue with national importance. After discussing themes like sustainability, digital transformation, and development, we chose to focus on **electricity consumption in India** — a crucial area impacting the economy, environment, and public utilities.

We identified challenges such as regional differences, seasonal demand changes, and the need for better energy planning. Recognizing the power of data visualization, especially using Tableau, we decided to analyze electricity usage patterns to gain actionable insights.

Problem Statement:

“How can electricity consumption patterns be visualized and analyzed to improve energy management, promote sustainable practices, and enable data-driven decision-making across different states and regions of India?”

Team Members:

- **Team Leader:** E Gayathri
- **Team Member:** Dasari Venkatesulu
- **Team Member:** Yarlanki Udaykumar
- **Team Member:** Thummalakunta Mallikarjuna

Step-2: Brainstorm, Idea Listing and Grouping

Idea	Idea Description	Group/Category
1	Analyze electricity usage by time of day	Time Patterns
2	Compare state-wise usage in 2019 and 2020	Yearly Comparison
3	Identify regions with highest and lowest consumption	Regional Insights
4	Study the effect of COVID-19 lockdown on power consumption	Event Impact (COVID)
5	Use heat maps to show high and low usage zones	Visualization Techniques
6	Embed interactive dashboard on a web app using Flask	Deployment / Web Integration
7	Create a data story using Tableau storytelling features	Narrative & Communication
8	Use filters for region, year, and quarter in dashboard	Dashboard Interactivity
9	Create visualizations for quarterly trends	Seasonal Analysis
10	Add calculated fields for monthly and annual usage	Data Processing / KPIs
11	Forecast future usage using historical data trends	Predictive Analysis
12	Display total and average usage across years	KPI Overview / Trends

Step-3: Idea Prioritization

Idea	Idea Description	Impact	Feasibility	Priority
1	Analyze electricity usage by time of day	High	Easy	High
2	Compare state-wise usage in 2019 and 2020	High	Easy	High
3	Identify regions with highest and lowest consumption	Medium	Medium	Medium
4	Study the effect of COVID-19 lockdown on power consumption	High	Medium	High
5	Use heat maps to show high and low usage zones	Medium	Easy	Medium
6	Embed interactive dashboard on a web app using Flask	High	Hard	Medium
7	Create a data story using Tableau storytelling features	High	Medium	High
8	Use filters for region, year, and quarter in dashboard	Medium	Easy	Medium
9	Create visualizations for quarterly trends	Medium	Easy	Medium
10	Add calculated fields for monthly and annual usage	High	Medium	High
11	Forecast future usage using historical data trends	High	Hard	Medium
12	Display total and average usage across years	High	Easy	High