**Ideation Phase**

**Brainstorm & Idea Prioritization Template**

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| Date | 31 January 2025 |
| Team ID | LTVIP2025TMID48259 |
| Project Name | Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau |
| Maximum Marks | 4 Marks |

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

To explore and analyze the patterns of resource consumption (e.g., electricity or general utilities) across Indian states using data visualization techniques in Tableau, covering regional variations, seasonal demand fluctuations, and socio-economic influences on usage patterns.

**Team Collaboration Approach:**

* We discussed trends in energy and utility consumption across Indian regions.
* Identified the need to monitor consumption spikes, seasonal demand, and potential disparities between states.
* Agreed on using Tableau to communicate insights to policymakers, utility providers, and analysts for better planning and forecasting.

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

| **#** | **Idea** | **Description** | **Group/Theme** |
| --- | --- | --- | --- |
| 1 | Visualize consumption growth over time | Track how resource consumption has changed monthly or annually across states. | Consumption Trends |
| 2 | Map regional consumption intensity | Use geographic visualizations to identify high and low consumption areas. | Regional Analysis |
| 3 | Compare consumption between rural and urban regions | Benchmark differences in consumption patterns between urbanized and rural zones. | Socioeconomic Insights |
| 4 | Analyze consumption patterns by season | Identify periods of peak usage (summer, winter, festivals, etc.) | Seasonal Trends |
| 5 | Study correlation with socio-economic factors | Analyze how factors like income or population affect consumption patterns. | Socioeconomic Insights |
| 6 | |  |  | | --- | --- | |  | Create heatmaps showing demand surges during major events | | Highlight peaks during events like elections, festivals, or sporting events. | Event Impact |
| 7 | Assess environmental impact of consumption trends | Examine potential carbon footprint and sustainability issues arising from consumption patterns. | Environmental Impact |
| 8 | |  |  | | --- | --- | |  | Forecast future consumption demands | | Use past data to project future demand to help utility planners and policymakers. | Forecasting |

**Step-3: Idea Prioritization**

| **Idea Description** | **Impact** | **Feasibility** | **Priority** |
| --- | --- | --- | --- |
| Consumption trends and growth | High | High | High |
| Regional heatmaps for consumption patterns | High | High | High |
| Rural vs urban consumption comparison | Medium | Medium | Medium |
| Seasonal demand patterns | High | High | High |
| Socio-economic factor correlation | High | Medium | High |
| Heatmaps of event-based demand surges | High | Medium | High |
| Environmental impact assessment | Medium | Medium | Medium |
| Future demand forecasting | Medium | Medium | Medium |
| Consumption trends and growth | High | Medium | High |