Purpose / Vision: To visualize electricity consumption patterns and empower smarter, data-driven energy decisions for a sustainable future.

1. **JOBS-TO-BE-DONE / PROBLEMS**

**Define CS, fit into**

**Focus on J&P, tap into BE, understand**

* + Understand state-wise and sector-wise electricity usage patterns
  + Forecast demand for better grid management
  + Identify peak hours and plan energy-saving

programs

* + Analyze seasonal usage trends and post- lockdown impacts
  + Make data-driven decisions from raw usage data

# J&P

## PROBLEM ROOT CAUSE

* + No centralized platform for data-driven electricity consumption insights
  + Datasets are raw, unfiltered, and not visualized
  + Decision-makers lack tools and training to interpret the data easily
  + Growing complexity in managing supply-demand post-COVID and climate events

# RC

## BEHAVIOUR

* Use Excel to sort and manually analyze usage
* Request reports from IT/data team
* Refer to government portals for downloads
* Discuss patterns informally within departments
* Use experience-based intuition over data evidence

# BE

1. **TRIGGERS TR**

**Identify strong TR & EM**

1. **External pressure from government mandates, public reports, or new datasets** requiring improved energy planning and transparency.
2. **Operational challenges like blackouts, peak season budgeting, or rising interest in sustainability** prompt action from utility stakeholders.
3. **YOUR SOLUTION SL**

A web-based dashboard using Tableau embedded into a Flask app. Pre-processed data stored in MySQL, integrated with real-time filtering.

Visualizations include: Time-wise, region-wise, lockdown comparison, and top/bottom usage states.

Interactive filters for users to select year, region, and time period.

Optional ML-powered demand forecasting.

Published on Tableau Public for easy access and sharing.

## CHANNELS of BEHAVIOUR CH

### ONLINE

Download datasets from energy portals (POSOCO, Ministry of Power)

Read insights or trends from news portals or LinkedIn

Watch dashboard demos (YouTube, Tableau Public)

## EMOTIONS: BEFORE / AFTER EM



**1. CUSTOMER SEGMENT(S)**

**CS**

1. **CUSTOMER**
   * Limited technical/data visualization skills

**CC**

1. **AVAILABLE SOLUTIONS**
   * Static government reports in PDF/Excel

* Utility company decision-makers  Budget constraints for tool adoption
* Manual data analysis using spreadsheets
* Government policymakers (energy departments)
* Reliance on manual Excel-based workflows
* Energy analysts and researchers
* Limited access to cleaned, centralized data
* Public sector monitoring authorities
* Low IT infrastructure in smaller utility companies
* Internal dashboards with limited scope

**Pros**: Familiar tools, simple setup

**Cons**: No interactivity, slow, difficult to analyze, lacks filtering

**Extract online & offline CH of BE**

**Explore AS,**

**Focus on J&P, tap into BE, understand**

**Before**: Overwhelmed, frustrated, unsure, data-blind

**After**: Informed, empowered, confident, able to make smart decisions

### OFFLINE

Attend government briefings

Internal review meetings and printed reports Collaborate on planning documents manually