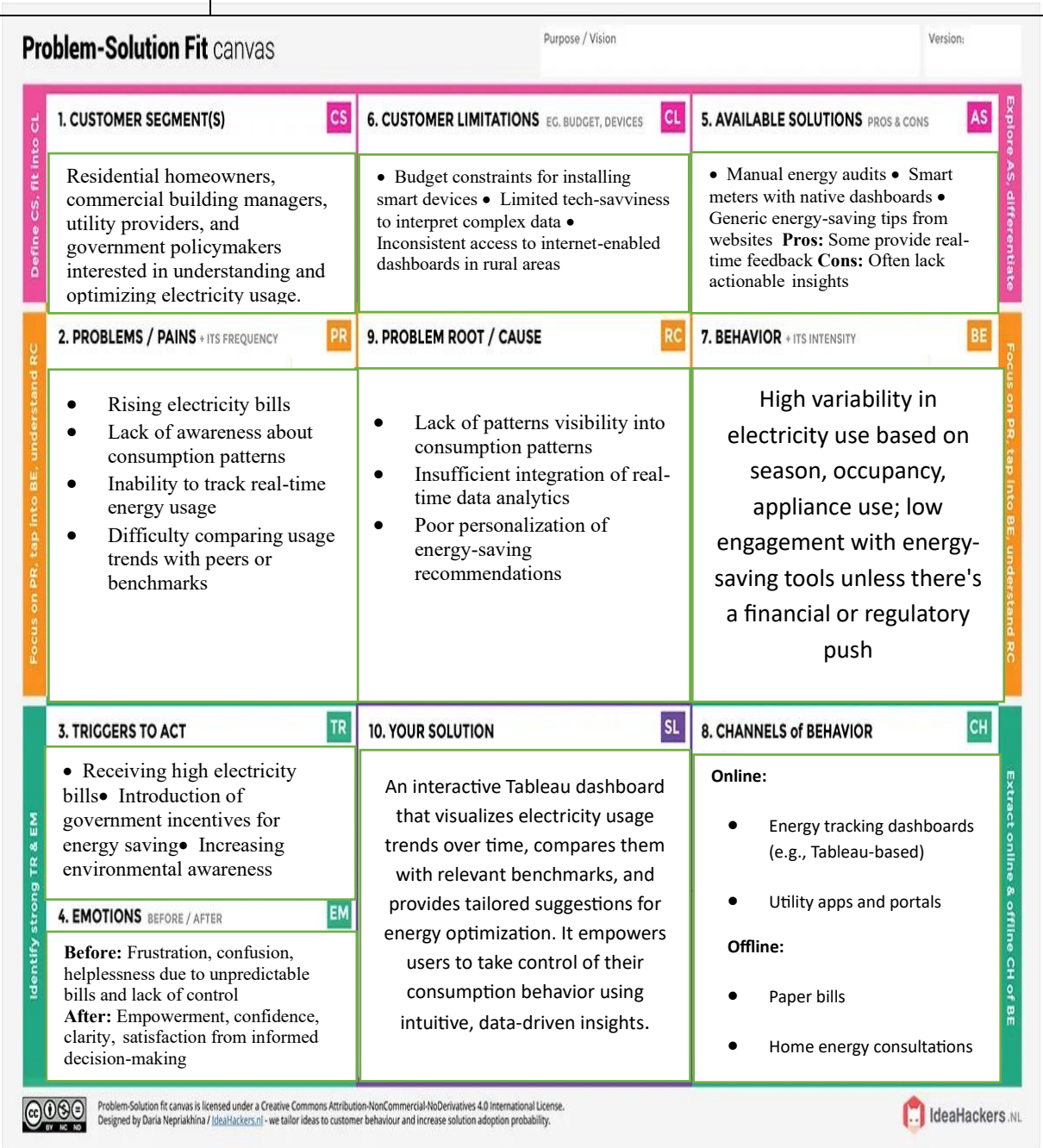
Project Design Phase

Problem – Solution Fit Template

Date	20 June 2025
Team ID	LTVIP2025TMID51709
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau.
Maximum Marks	2 Marks



Problem-Solution Fit canvas

Purpose / Vision

Version:

Define CS, fit into CL

1. CUSTOMER SEGMENT(S) CS

Residential homeowners, commercial building managers, utility providers, and government policymakers interested in understanding and optimizing electricity usage.

6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES CL

- Budget constraints for installing smart devices
- Limited tech-savviness to interpret complex data
- Inconsistent access to internet-enabled dashboards in rural areas

5. AVAILABLE SOLUTIONS PROS & CONS AS

- Manual energy audits
- Smart meters with native dashboards
- Generic energy-saving tips from websites **Pros:** Some provide real-time feedback **Cons:** Often lack actionable insights

Explore AS, differentiate

Focus on PR, tap into BE, understand RC

2. PROBLEMS / PAINS + ITS FREQUENCY PR

- Rising electricity bills
- Lack of awareness about consumption patterns
- Inability to track real-time energy usage
- Difficulty comparing usage trends with peers or benchmarks

9. PROBLEM ROOT / CAUSE RC

- Lack of patterns visibility into consumption patterns
- Insufficient integration of real-time data analytics
- Poor personalization of energy-saving recommendations

7. BEHAVIOR + ITS INTENSITY BE

High variability in electricity use based on season, occupancy, appliance use; low engagement with energy-saving tools unless there's a financial or regulatory push

Focus on PR, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TO ACT TR

- Receiving high electricity bills
- Introduction of government incentives for energy saving
- Increasing environmental awareness

4. EMOTIONS BEFORE / AFTER EM

Before: Frustration, confusion, helplessness due to unpredictable bills and lack of control
After: Empowerment, confidence, clarity, satisfaction from informed decision-making

10. YOUR SOLUTION SL

An interactive Tableau dashboard that visualizes electricity usage trends over time, compares them with relevant benchmarks, and provides tailored suggestions for energy optimization. It empowers users to take control of their consumption behavior using intuitive, data-driven insights.

8. CHANNELS of BEHAVIOR CH

Online:

- Energy tracking dashboards (e.g., Tableau-based)
- Utility apps and portals

Offline:

- Paper bills
- Home energy consultations

Extract online & offline CH of BE

IdeaHackers.NL