

Project Design Phase Problem – Solution Fit

Date	19/06/25
Team ID	LTVIP2025TMID50896
Project Name	Visualizing housing market trends: an analysis of sale prices and features
Maximum Marks	2 Marks

Problem – Solution :

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ **Understand the existing situation in order to improve it for your target group.**

Template:

Problem-Solution fit canvas 2.0		Purpose / Vision: To visualize electricity consumption patterns and empower smarter, data-driven energy decisions for a sustainable future.	
Define CS, fit into	<div>1. CUSTOMER SEGMENT(S)<div>CS</div><ul style="list-style-type: none">Utility company decision-makersGovernment policymakers (energy departments)Energy analysts and researchersPublic sector monitoring authorities</div>	<div>6. CUSTOMER<div>CC</div><ul style="list-style-type: none">Limited technical/data visualization skillsBudget constraints for tool adoptionReliance on manual Excel-based workflowsLimited access to cleaned, centralized dataLow IT infrastructure in smaller utility companies</div>	<div>5. AVAILABLE SOLUTIONS<div>AS</div><ul style="list-style-type: none">Static government reports in PDF/ExcelManual data analysis using spreadsheetsInternal dashboards with limited scope<div>Pros: Familiar tools, simple setup</div><div>Cons: No interactivity, slow, difficult to analyze, lacks filtering</div></div>
	<div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&P</div><ul style="list-style-type: none">Understand state-wise and sector-wise electricity usage patternsForecast demand for better grid managementIdentify peak hours and plan energy-saving programsAnalyze seasonal usage trends and post-lockdown impactsMake data-driven decisions from raw usage data</div>	<div>9. PROBLEM ROOT CAUSE<div>RC</div><ul style="list-style-type: none">No centralized platform for data-driven electricity consumption insightsDatasets are raw, unfiltered, and not visualizedDecision-makers lack tools and training to interpret the data easilyGrowing complexity in managing supply-demand post-COVID and climate events</div>	<div>7. BEHAVIOUR<div>BE</div><ul style="list-style-type: none">Use Excel to sort and manually analyze usageRequest reports from IT/data teamRefer to government portals for downloadsDiscuss patterns informally within departmentsUse experience-based intuition over data evidence</div>
Identify strong TR & EM	<div>3. TRIGGERS<div>TR</div><ol style="list-style-type: none">External pressure from government mandates, public reports, or new datasets requiring improved energy planning and transparency.Operational challenges like blackouts, peak season budgeting, or rising interest in sustainability prompt action from utility stakeholders.</div>	<div>10. YOUR SOLUTION<div>SL</div><div>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.</div></div>	<div>8. CHANNELS of BEHAVIOUR<div>CH</div><div>8.1 ONLINE</div><div>Download datasets from energy portals (POSOCO, Ministry of Power)</div><div>Read insights or trends from news portals or LinkedIn</div><div>Watch dashboard demos (YouTube, Tableau Public)</div><div>8.2 OFFLINE</div><div>Attend government briefings</div><div>Internal review meetings and printed reports</div><div>Collaborate on planning documents manually</div></div>
	<div>4. EMOTIONS: BEFORE / AFTER<div>EM</div><div>Before: Overwhelmed, frustrated, unsure, data-blind</div><div>After: Informed, empowered, confident, able to make smart decisions</div></div>		