

Define CS, fit into	<div>1. CUSTOMER SEGMENT(S)<div>CS</div><ul style="list-style-type: none">Real estate analystsReal estate firms and pricing strategistsProperty consultants andBusiness intelligence teams in</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>	Explore AS, AS
Focus on J&P, tap into BE, understand	<div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&P</div><ul style="list-style-type: none">Identify factors influencing housing sale pricesAnalyze renovation trends and house age patternsUnderstand market dynamics based on house features (e.g., bathrooms, floors)Forecast future price trends using historical patternsMake data-driven decisions for pricing and inventory strategy</div>	<div>9. PROBLEM ROOT CAUSE<div>RC</div><ul style="list-style-type: none">Stakeholders lack tools to identify impactful featuresinDatasets 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>	Focus on J&P, tap into BE, understand
Identify strong TR & EM	<div>3. TRIGGERS<div>TR</div><ul style="list-style-type: none">Pressure to optimize pricing strategies in a competitive housing marketNeed to differentiate between renovated and non-renovated properties</div>	<div>10. YOUR SOLUTION<div>SL</div><p>A web-based dashboard using Tableau embedded into a Flask app. Pre-processed data stored in MySQL, integrated with real-time filtering.</p><p>Visualizations include: Time-wise, region-wise, lockdown comparison, and top/bottom usage states.</p><p>Interactive filters for users to select year, region, and time period.</p><p>Optional ML-powered demand forecasting.</p><p>Published on Tableau Public for easy access and sharing.</p></div>	<div>8. CHANNELS of BEHAVIOUR<div>CH</div><p>8.1 ONLINE</p><p>Download datasets from energy portals (POSOCO, Ministry of Power)</p><p>Read insights or trends from news portals or LinkedIn</p><p>Watch dashboard demos (YouTube, Tableau)</p><p>After: Informed, empowered, confident, able to make smart decisions</p></div>	Extract online & offline CH of BE
	<div>4. EMOTIONS: BEFORE / AFTER<div>EM</div><p>Before: Overwhelmed, frustrated, unsure, data-blind</p></div>			

8.2 OFFLINE

Attend government briefings

Internal review meetings and

printed reports Collaborate

on planning documents

manually