Project Design Phase
Problem – Solution Fit Template

Date	27 June 2025
Team ID	LTVIP2025TMID21127
Project Name	Sustainable Smart City Assistant
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem–Solution Fit in the context of the Smart City Sustainability Assistant means identifying real, recurring problems faced by citizens, urban planners, and policy implementers in accessing and acting on sustainability data and resources—and ensuring that the AI-powered assistant you're developing directly addresses those challenges in a meaningful, accessible way.

Purpose:

- Solve complex urban and sustainability-related problems by making policy insights, city metrics, and citizen engagement tools easily accessible, even for non-expert users.

- Accelerate adoption of eco-conscious behavior and civic engagement by integrating your assistant into common digital channels and daily user behavior (e.g., mobile browsing, voice interaction).

- Sharpen communication through relevant eco-tips, personalized insights, and multilingual support to suit users from diverse backgrounds.

- Increase citizen and stakeholder trust by providing reliable summaries, responsive interfaces, and actionable insights that solve frequent pain points like complex documents, inaccessible data, or language barriers.

- Understand the real-life context—such as regulatory confusion, environmental concern, or data overload—and improve sustainability decision-making for your target users: citizens, city officials, and planners.

Template:

Problem-Solution fit canvas 2.0 — Purpose / Vision

1. CUSTOMER SEGMENT(S) — CS	6. CUSTOMER CONSTRAINTS — CC	5. AVAILABLE SOLUTIONS — AS
1) Urban citizens 2) Environmentally conscious users 3) Data analysts and researches	1) Lack of time or technical skills 2) No awareness of existing tools 3) Limited digital literacy	1) City complaints portals 2) Reading full PDFs manually 3) Posting on social media for awareness 4) Google searches
2. JOBS-TO-BE-DONE / PROBLEMS — J&P 1) Need to understand lengthy policy documents quickly 2) Need help reporting civic/environmental issues 3) Language or accessibility barriers to official information	**9. PROBLEM ROOT CAUSE — RC** 1) Overload and fragmented civic data and policies 2) Lack of user-friendly, accessible tools for sustainability	**7. BEHAVIOUR — BE** 1) Use mobile/web tools for quick info 2) Ask questions on forums 3) Read translated summaries
3. TRIGGERS — TR 1) News about pollution alerts 2) City campaigns for smart initiatives **4. EMOTIONS: BEFORE / AFTER — EM** Before: overwhelmed by data After : Informed, empowered to act	**10. YOUR SOLUTION — SL** 1) Extracts and summarizes PDF policies 2) Translates responses into local languages 3) Generates actionable eco-tips for citizens 4) Enables voice-based interaction	**8. CHANNELS of BEHAVIOUR — CH** 8.1 Online: 1) Streamlit app 2) City websites 8.2 Offline: 1) Community centers 2) Eco workshops

Side labels: Define CS, fit into CC · Focus on J&P, tap into BE, understand RC · Identify strong TR & EM · Explore AS, differentiate · Focus on J&P, tap into BE, understand RC · Extract online & offline CH of BE

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References:

1. https://www.ideahackers.network/problem-solution-fit-canvas/
2. https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe