Problem Statements- Sustainable Smart City Assistant

Team ID: LTVIP2025TMID38464

Project Name: Sustainable Smart City Assistant Using IBM Granite LLM

Customer Problem Statement – Sustainable Smart City Assistant

To design meaningful experiences for city residents and administrators, it's essential to understand their challenges from their perspective. The Customer delivering solutions that promote smarter governance, better sustainability, and more inclusive urban participation. Problem Statement helps us stay focused on

A well-crafted problem statement enables the team to align on goals, identify opportunities for innovation, and build empathy with those who interact with city systems daily — from citizens needing real-time information to officials managing urban infrastructure.

Example 1 – Citizen Perspective

I am a city resident.
I'm trying to understand what new policies mean for me and how I can contribute to a more sustainable city.
But I find government documents too long and complex.
Because they are written in technical language and not easily accessible to the public.
Which makes me feel confused, uninformed, and disconnected from city decisions.

Example 2 – City Official Perspective

I am a city data officer.
I'm trying to track the performance of key services like water usage, energy consumption, and traffic flow.
But I have to manually analyze large amounts of data from different systems.
Because there's no centralized assistant to summarize or forecast KPIs intelligently.
Which makes me feel overwhelmed, slow in decision-making, and unable to respond proactively.

Main Goal :

This assistant will empower urban planners, administrators, and citizens to make informed, sustainable choices while contributing to the vision of smarter, greener, and more resilient cities.

urban areas face growing challenges in managing resources efficiently, ensuring environmental sustainability, and improving the quality of life for citizens. Key issues include inefficient energy and water consumption, limited public awareness of ecofriendly practices,inadequate anomaly detection in utilities, and lack of personalized summary.

PS ID	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A city resident	understand policies and take sustainable actions	policy documents are too complex and inaccessible	they are written in technical terms and not summarized for common citizens	confused, excluded from decisions, and disengaged
PS-2	A city official or urban planner	monitor KPIs and detect issues in city operations	current systems require manual effort and offer no real-time insights	there's no intelligent assistant to summarize data or detect anomalies	overwhelmed, slow in decision-making
PS-3	A concerned citizen	give feedback or report a civic issue	existing platforms are slow or ineffective at processing public input	citizen feedback is often ignored or lost in unstructured formats	unheard, frustrated, and disconnected
PS-4	A sustainability officer	engage citizens with daily eco-friendly suggestions	current outreach is limited and not personalized	there is no automated system that adapts to behavior or local environmental trends	ineffective, and missing opportunities for impact
PS-5	A city administrator	get quick summaries of lengthy policies or regulations	I need to read full documents or rely on manual reviews	there is no AI-based summarizer to extract relevant insights	time-constrained, inefficient, and frustrated