

# ADVANTAGES & DISADVANTAGES

S.No	Advantages
1	<b>AI-Driven Efficiency:</b> Automates summarization, forecasting, and anomaly detection using Granite LLM and ML.
2	<b>Citizen Engagement:</b> Enables easy feedback reporting and eco-awareness tools for the general public.
3	<b>Smart Decision-Making:</b> Helps city administrators make data-driven decisions with visualized KPIs and AI insights.
4	<b>Scalable &amp; Modular Architecture:</b> Built using FastAPI and Streamlit, allowing easy feature upgrades or city-specific customizations.
5	<b>Real-Time Interaction:</b> Enables immediate responses to queries and actions through AI chat and live dashboards.
6	<b>Semantic Document Search:</b> Saves time for policy analysts and administrators by finding relevant sections in documents via Pinecone.
7	<b>Environmental Impact:</b> Promotes sustainability by encouraging eco-conscious behavior through AI-generated tips.
S.No	Disadvantages
1	<b>Dependency on APIs and Cloud Services:</b> Requires consistent access to IBM Watsonx Granite and Pinecone services.
2	<b>Limited Offline Functionality:</b> Most features need internet access and cloud APIs to function.
3	<b>Initial Training &amp; Setup:</b> Admins and citizens may need basic onboarding to use all features effectively.
4	<b>Privacy &amp; Data Handling Concerns:</b> Handling personal or feedback data may raise security and compliance challenges.
5	<b>Scope of NLP:</b> While Granite LLM is powerful, it may not perfectly summarize or answer niche local governance policies without fine-tuning.
6	<b>Hardware &amp; Hosting Costs:</b> Hosting APIs, ML models, and dashboards on cloud infrastructure may incur ongoing costs.

