

Case Study: Smart City Information System

You are the Mayor of a mid-size European city, located at a major crossroads in a dynamic business environment. The city has a significant young population, including many students, and is seeking to modernize its infrastructure by adopting smart-city solutions. Your vision is to drive technological advancements that enhance the quality of life, support sustainable development, and boost the city's competitiveness in attracting businesses, residents, and visitors.

The city has typical infrastructure for its size, e.g., roads, traffic lights, bus networks, utilities (electricity, water, waste), and public services (education, healthcare, administration). It does not have a subway system but faces increasing demands for better mobility, digital public services, and sustainable urban development.

The city's strategic objective is to implement smart-city initiatives that make everyday life easier, safer, and more sustainable. Some of the focus areas include Smart Mobility, Smart Infrastructure, Smart Services, Sustainability & Safety, among others.

All of these initiatives require a centralized information system that integrates diverse technologies, ensures data flows across departments, and provides a unified view for decision-making.

You are hired as a consultant to support the project and its **objectives**:

Information System Development – Design a system that connects smart solutions into a central smart-city platform.

Integration with Existing Systems – Ensure compatibility with the city's existing IT systems and third-party solutions.

Citizen Engagement – Provide digital channels for residents, students and visitors to interact with city services, report issues, and access real-time updates.

Data-Driven Decisions – Enable data collection to support analytics, predictive modeling, and better urban planning.

Regulatory & Security Compliance Ensure compliance with data laws, standards, and ethical data use principles.

As consultants, your task is to **design and propose** a smart-city information system for the city.