

FAQ's

1. Define a smart city.

A **smart city** is an urban development vision to integrate multiple information and communication technology (ICT) solutions in a secure fashion to manage a city's assets – the city's assets include, but not limited to, local departments information systems, schools, libraries, transportation systems, hospitals, power plants, water supply networks, waste management, law enforcement, and other community services. The goal of building a smart city is to improve quality of life by using technology to improve the efficiency of services and meet residents' needs. ICT allows city officials to interact directly with the community and the city infrastructure and to monitor what is happening in the city, how the city is evolving, and how to enable a better quality of life.

2. What are the characteristics that constitute a smart city?

- It has been suggested that a smart city (also community, business cluster, urban agglomeration or region) use information technologies to:
- Make more efficient use of physical infrastructure (roads, built environment and other physical assets) through artificial intelligence and data analytics to support a strong and healthy economic, social, cultural development.
- Engage effectively with local people in local governance and decision by use of open innovation processes and e-participation, improving the collective intelligence of the city's institutions through e-governance, with emphasis placed on citizen participation and co-design.
- Learn, adapt and innovate and thereby respond more effectively and promptly to changing circumstances by improving the intelligence of the city.

3. How do forms of intelligence get demonstrated in smart cities?

Orchestration intelligence: Where cities establish institutions and community-based problem solving and collaborations, such as in Bletchley Park, where the Nazi Enigma cypher was decoded by a team led by Alan Turing. This has been referred to as the first example of a smart city or an intelligent community.

Empowerment intelligence: Cities provide open platforms, experimental facilities and smart city infrastructure in order to cluster innovation in certain districts. These are seen in the Kista Science City in Stockholm and the Cyberport Zone in Hong Kong. Similar facilities have also been established in Melbourne.

Instrumentation intelligence: Where city infrastructure is made smart through real-time data collection, with analysis and predictive modelling across city districts. There is much controversy surrounding this, particularly with regards to surveillance issues in smart cities.

4. What are the components of a smart city road map?

Define exactly what is the community: maybe that definition can condition what you are doing in the subsequent steps; it relates to geography, links between cities and countryside and flows of people between them; maybe - even - that in some Countries the definition of City/community that is stated does not correspond effectively to what - in fact - happens in the real life

Study the Community: Before deciding to build a smart city, first we need to know why. This can be done by

determining the benefits of such an initiative. Study the community to know the citizens, the business's needs - know the citizens and the community's unique attributes, such as the age of the citizens, their education, hobbies, and attractions of the city.

Develop a Smart City Policy: Develop a policy to drive the initiatives, where roles, responsibilities, objective, and goals, can be defined. Create plans and strategies on how the goals will be achieved.

Engage The Citizens: This can be done by engaging the citizens through the use of e-government initiatives, open data, sport events, etc. In short, People, Processes, and Technology (PPT) are the three principles of the success of a smart city initiative. Cities must study their citizens and communities, know the processes, business drivers, create policies, and objectives to meet the citizens' needs. Then, technology can be implemented to meet the citizens' need, in order to improve the quality of life and create real economic opportunities. This requires a holistic customized approach that accounts for city cultures, long-term city planning, and local regulations.

5. What are the main 5 challenges preventing the growth of smart cities?

- Vision Vs Real Needs
- Design
- Funding
- Skepticism
- Implementation

6. What are the ten steps to building a smart city?

- Work out what problems need fixing
- Find a leader
- Develop a vision everyone can get behind
- Make a business case
- Share data and incentivise innovation
- Design from the bottom up
- Tread carefully
- Get politicians on board
- Educate citizens
- Spread the word