Smart Technology Infrastructure

Smart Buildings

Smart Cities

Integrated Everything

What is this Smart Environment that planners, builders, manufacturers and governmental agencies are striving for?

Let us have a look at the Smart City and Smart Building concept.

Why work with Associate Planet in this technologically complex area?

The Smart Environment

Smart Cities, Smart Buildings, Smart Everything! Is now high on the agenda of governments and development agencies.

As technology evolves, it is better understood and you want and expect more from it.

It makes the more everyday tasks easier to accomplish. You can control your work space, home, life more efficiently.

A 'Smart Environment' needs to be joined up, integrated, secure. This is not easy to achieve because of:

- the nightmare of integration
- cyber - physical are different worlds and cultures
- the variety of products in the market and often their incompatibility
- functions are all de-centralised
- the cloud is still a bit of an unknown
- security still has to be implemented in an improved and robust manner

The Smart City Concept

The smart city uses different types of electronic data collection sensors to supply information which is used to manage assets and resources efficiently.

Data is collected from citizens, devices, and assets that is processed and analysed to monitor and manage the infrastructure.

This will bring efficiencies to the way the smart environment is managed and operated. Which in turn benefits the:

- citizens
- shops and retail
- transport hubs and systems: bus; tram; rail; car; aeroplanes
- the movement of goods, ordering, delivery
- interaction of local government with the local community and citizens
- environment

The Smart Building Concept

The smart building is integral to the smart city concept.

A smart building is any structure that uses automated processes to automatically control the building's operations. It includes your home, office environment, manufacturing and industrial buildings.

Building Management and Control Systems form an integral part of the Smart Environment to manage the running of the infrastructure for the efficiency, security, comfort and sustainability of the people who use it.

solutions are our universe

The Technology Strategy

The Information and Communication Technology (ICT) or Technology Strategy is the tool to implement the 'Smart' infrastructure requirement and is developed from the various Urban and Business Plans for the proposed development.

The technology strategy:

- defines the project objectives, scope and the relationship to the overall development and business strategy
- defines the existing technology infrastructure
- defines the new technology and IT infrastructure with its scope of operation
- outlines the current technology available
- outlines a road map of how to achieve the smart infrastructure required
- outlines the approach and methodology of the engagement
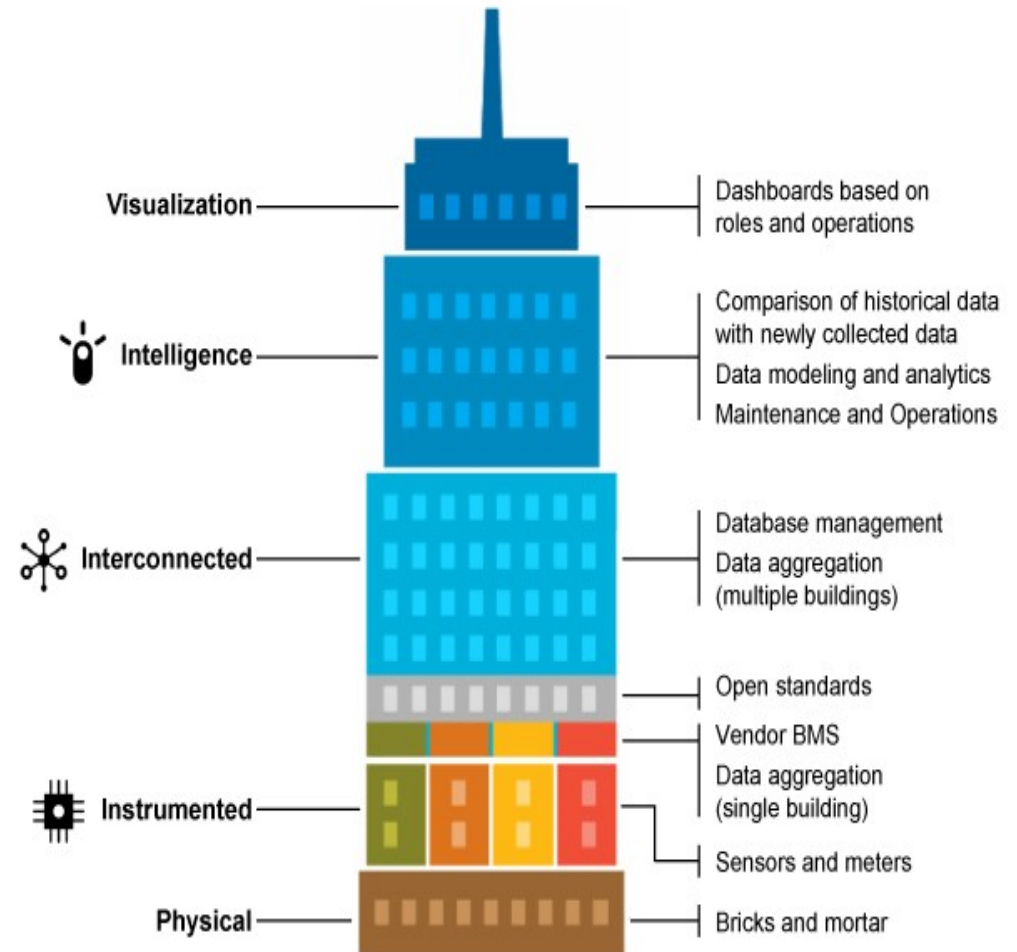- summarises resources and team structure required

Our Expertise

Principals and Associates of Associate Planet have been involved in major integrated building management systems and smart infrastructure projects over the last 23 years.

Key projects have been in the Pharmaceutical Sector, Airport Sector and Industrial/Manufacturing sites.

Our expertise has been borne out of practical knowledge and experience of:

- integrating disparate technologies
- a wide variety of products
- all major systems and applications
- the centralisation of functions.
  e.g. control rooms.

Visualization — Dashboards based on roles and operations

Intelligence — Comparison of historical data with newly collected data / Data modeling and analytics / Maintenance and Operations

Interconnected — Database management / Data aggregation (multiple buildings)

Open standards

Vendor BMS / Data aggregation (single building)

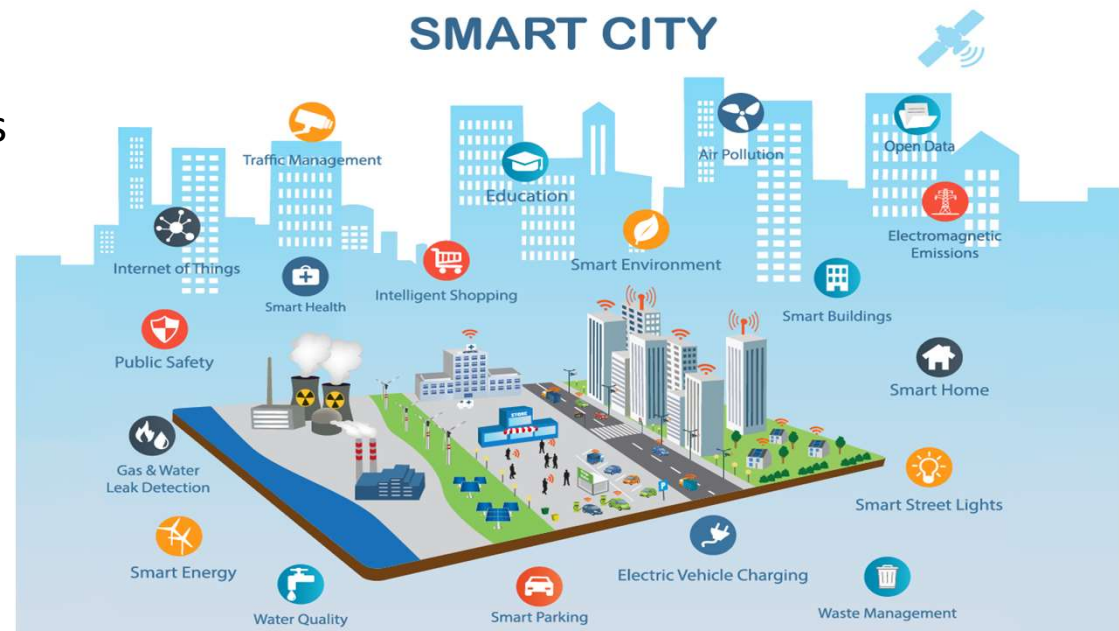**Instrumented** — Sensors and meters

Physical — Bricks and mortar

solutions are our universe

As part of these Smart Building projects our Principals and Associates have been involved in furthering Information Communication Technology across:

- the city scape
- new town developments
- housing developments
- manufacturing and industrial technology parks

We have excellent knowledge of:

- The distributed requirement of infrastructure and technology
- integrated communications
- Cloud and how to use it
- diverse data technologies.

SMART CITY

Some Benefits

The integration of Information and Communication Technology (ICT) gives the smart environment the capability of:

- operational optimisation
- efficient use of assets and resources
- managing costs
- enhanced quality, performance and interactivity of urban services
- an easier response to change

This can improve the way an environment is managed and operated bringing major advantage to:

- shops, retail environment
- transport hubs and systems: bus; tram; rail; car; aeroplanes
- utilities
- the movement of goods, ordering, delivery
- the interaction of citizens with their local environment, management of the required services.
- the environment

Benefits of the Smart Environment

Smart Towns and Cities

- integration of the urban transport network with the city
- management of utilities for cost, usage information for the public on their phones, tablets computers for ease of shopping, work
- ease of access to what's going on in the area shopping, work, places of interest, getting about
- security

The Environment

- keeping the city clean
- climate control of enclosed areas, as appropriate
- economic operation of the environment
- security

Integrated Infrastructure

- integrated communication technology
- economic operation of the environment
- data collection
- learning systems
- control systems
- security, access control

Contact us

Contact us to discuss how we can support you

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