

# Theme : Smart City

## Case Maker : PwC

### How do you manage lifecycle of any citizen in Utilities sector for a smart city

**Utilities** are the basic and necessary facilities required for the welfare of the public. This includes important set of services like electricity, natural gas, water, transportation and similarly many more. The fundamental reason for creating a smart city is to incorporate and integrate all these aspects in the best possible way.

As municipalities seek to grow and invest in infrastructure, there is pressure to modernize and incorporate new technologies, integrate sustainable resources and methods in order to increase the city's attractiveness and productivity, and improve citizen satisfaction.

The advent of smart cities has given an opportunity for the utilities sector to reinvent itself. A large number of new and creative ideas can be explored. These include but are not limited to the following :-

1. **Traffic & Transportation** is the lifeline of city metabolism. With increasing population and increasing number of cars on road, a smart city should efficiently manage the traffic generated for the smooth functioning of a city. It includes but is not limited to overall planning and strategies of traffic and transport in the city, including operation and maintenance of public transport, traffic police & parking facilities.

2. **Drainage Systems** - Drainage department is entrusted with the responsibilities of setting up and maintaining new sewerage treatment plants, sewage pumping stations, stormwater pumping stations, laying drainage / storm water drainage networks in existing as well as newly merged area. Although mostly neglected, this domain has a lot of scope and need for improvement. This could include leakage detection, simpler rain water harvesting systems, better disposal systems etc.

3. **Electricity** - The responsibilities of the electrical department include providing electricity to all homes, maintaining street lights among others. A smart city should incorporate SMART solutions to reduce consumption and ensure maximum energy efficiency. Additionally, it is necessary to have a transparent and effective energy management system that includes, smart metering system, providing real time monitoring of electrical loads of buildings and functionalities to control, command and configure the power sources.

4. **Water** - The waterworks responsible for the supply and distribution of water throughout the city. It also includes operation and maintenance of water treatment plant, supply pipelines, reservoirs etc. Some of the innovative ideas that can help make a water department smart includes, water leakage detection, identifying illegal water connections and preventing water contamination.

## **Expectations from the participants**

1. To come up with any feasible idea that can help make any one or all of the utilities sector smarter.
2. To build a prototype based on their idea during the hackathon.
3. Should take into account the implementational difficulties that may arise with his/her idea.