INDIA'S FIRST LIVE SMART CITY SERVICES: GANDHINAGAR

Project Requirements

With an advanatge as modern planned city, Gandhinagar is consideredd as India's green capital, besides being the capital of Western state of Gujarat, India. It has planned urban infrastructure and development regulations in place. Building on this Gandhinagar intended to emerge as the most citizen friendly city of India with the smarter networks and digtal transformation. The vision of Gandhinagar was to make Gandhinagar future ready city.

Objective

The project scope of Smart City services was an **Integrated Command and Control Centre (ICCC) at the police headquaters which integrates traffic management solution (Speed detection cameras, Automatic Number Plate Recognition), and City Surveillance System. It included enabling of Public wi-fi services, Smart digital display with environmental sensors, Mobile application for online municipal services, and Public Address System** for emergencies and public events management.

Innovative Smart Services Solution

Offering : Sterlite Tech designed, built and is managing the Gandhinagar Smart Services city project with its Smart Citiu Solution that helps urban settlements to exploit ICT in order to offer more structured, inclusive and hospitable living conditions for its residents. Sterlite Tech has delivered all the requirements placed by Gandhinagar Municipal Corporation (GMC) in their project scope.

Complexity and Challenges

- Absence of Industry benchmarks as guidelines
- Tender Smartness for new Technology advancement & enhancement
- Involvement and accomodation of state departments' aspirations and user requirements
- Sustainability option including new monetization framework (ROI for OPEX)
- Government's Existing Process & Approvals (required coherence)
- Power Sourcing Process & GERC regulations (crucial reform required)
- Short Execution Time-Frame
- Bidder and PMC – Skill & Capabilities

Public Wi-Fi

The public Wi-Fi deployed enables seamless and secured open to sky Wi-Fi connectivity for local citizens to freely communicate and access information on smart devices anywhere-

anytime. Complimentary access for fixed duration each day and option of paid Wi-Fi access hotspots at different locations is provided across 30 sectors (57 sq mtrs) of the city. More than 750 Wi-Fi access points and infrastructure deployed catering to more than 190k smart devices.

IP Surveillance

The IP based surveillance systems deployed at 35 vantage points of the city helps in monitoring and safeguarding different areas of the city. With the help of the CCTV surveillance, Civil Police and Traffic Police are able to easily track malicious activities from centralized location. It also enables in automatic number plate recognition, vehicle speed detection and face detection.

Smart Street Lights

Smart motion sensor based street lights have been deployed which automatically activates and deactivates when it senses any motion. 1000 smart street lights have been deployed in Gandhinagar across 5 key roads in the city. More than 30% of the electricity is saved and CO_2 emission has been will reduce drastically.

Environmental Sensors with Display on Digital Signages

Digital signage boards with environmental sensors for citizen and tourist displays different information like weather information, government / private advertisement, important announcement (Video only) etc. are deployed at 5 strategic locations (20 screens) of the city. The digital signage also helps during calamities, emergency situations, etc. and helps monetizing by running ad campaigns of private entities.

Public Address (PA) System

13 PA systems have been deployed at various locations in the city by which government has an additional mass communication platform to communicate with the citizens in the city. Installed public address (PA) systems can be dynamically managed from the centralized command centre.

Citizen Services & Convenience Mobile Applications

In order to provide one tap information to citizens of the city, Sterlite Tech offered device agnostic mobile iOS and Android application. With the help of user friendly mobile app, citizens will be able to access government services and information regarding billing, transactions, regulatory services, etc. This has enabled the government in better e-

governance.

Integrated Central Control Room

The centralized command centre has been deployed and lives to track various activities across the city. The completed video wall has been installed to track any kind of malicious activities in the city via CCTV cameras. Police officials can also use the face detection feature to track the person or vehicle. Integrated with the PA system, the CCR enables security officials to address using the amplifiers across the city.

Help Desk / Call Center

The 24/7 call centre is active and catering to the queries of the citizens of Gandhinagar. Centralized help desk enables to connect and get varied information through multi-level IVR without the need of Human Intervention for emergency services, register complain for water, electricity, drainage, road etc.

Major Project Impacts

The Gandhinagar Smart City Project led to become the first Wi-Fi capital city of India. With the smart city solution deployment it brought measurable improvements in the overall governance systems including,

Smart Communication

- City wide seamless data connectivity across 57 sq kilometres of the city limit
- Catering to **more than 1.9 lakhs** users
- Covering 75% geographical area of the city

Smart Traffic

- Vehicle speed detection cameras led to decreased **road accidents by 20%**
- **10,000+ traffic tickets/month** generated to traffic rule violators with the help of Automatic Number Plate Recognition (ANPR) cameras.

Smart Street Lights

- Smart LEDs with motion sensors result **in 40% reduction in power consumption**, and in equivalent carbon footprint.

Smart Surveillance

- With the introduction of E-beat app, crime rate **reduced by 39%.**

Smart Public Address System & Digital Signage

- Public address system led to information communication regarding government initiatives any **calamity, ground policing and administrative control for VVIP** etc.

- Government bodies are able to utilize the **digital signage** in showcasing **public awareness messages** as well as product advertisements to **generate additional revenue**

Smart Citizens Mobile Application

- **Utility bills and online information** is seamlessly available through the citizens' mobile app.

- Government bodies are able to **generate additional revenue** through the mobile app using advertisement and banner ads.

Testimonial

On launch of the Smart City Services, Vijay Rupani, **Hon'ble Chief Minister** of Gujarat, said, "The launch of Smart City Services in Gandhinagar is a step closer to realise the Digital India vision of our Hon'ble Prime Minister Narendra Modi. With this, Gandhinagar becomes the first Smart City Model."

Media Links:

http://www.business-standard.com/article/current-affairs/gandhinagar-becomes-india-s-first-model-smart-city-117010600927_1.html

http://www.business-standard.com/article/economy-policy/sterlite-technologies-bags-gandhinagar-smart-city-project-116032700155_1.html