



GN PHOTOS

# Building smart cities with a soul

Technology solutions for urban areas must be people-centric and responsive to the demands of a diverse population

GN Bureau

**B**y 2020, one out of every six Indian will be living in cities. Today there are at least 15 cities in India with a population of 10 million and above, and by 2020 it is expected to touch 40. A city is a mix of spaces: some public, others private, and a few that are both. Each is structured differently and caters to specific requirements. Their security frameworks are also different. Today

security architecture has moved beyond the narrow law and order framework, a reactive system, to a more proactive and dynamic system of checks and balances. The critical component of this emerging framework of security in cities is information, communication and digital technologies.

Governance Now and Directorate of Information Technology, government of Maharashtra, organised its second event of the NextGen Cities series on March 10 at Vashi, Navi Mumbai. The theme was 'Technologies for Safer and Better Urban infrastructure'. The conclave focussed on solutions for the

challenges of upgrading the existing infrastructure of cities. It also deliberated on the need of town planners and city administrators to focus on building people-friendly cities.

Speaking on People First Approach for NextGen Cities, Vikas Aggarwal, director, industry solutions and market development, government vertical, Microsoft, said, "Cities can be divided into eight functional areas: government administration, public safety and justice, health and social services, education, energy and water, building and infrastructure planning, tourism and recreation and transportation. Along



**“We plan to make energy audit in big buildings mandatory.”**

*Sanjay Bhatia, vice-chairman and managing director, CIDCO*



**“Cyber security is the most prevalent and pervasive societal issues we face.”**

*Arthur Thomas Ball, managing director, public safety and national security (Asia), Microsoft*



**“We should have standardisation of software at the national and state level.”**

*Dr SV Pattiwar, additional commissioner, Navi Mumbai Municipal Corporation*



**“For making cities smart people, processes, data, and things need to be connected.”**

*Rajesh Aggarwal, principal secretary – information technology, government of Maharashtra*

with the city these areas too grow in verticals. But if these verticals had to grow in standalone isolated silos that don't talk to each other, it will result in wasteful expenditure in terms of data capture and processes. All these verticals have to be connected on a real-time basis.”

**Connect everything**

Rajesh Aggarwal, principal secretary, information technology, Maharashtra, shared his insight on smart cities from the three perspectives of connectedness. He said that smart cities in the first instance are about connecting people. “People are getting connected through mobile and social media. Many city governments, traffic departments and municipal corporations are making use of social media tools for potholes monitoring, traffic monitoring or garbage collection,” he said. “People and government connectedness through this media is the way to make cities smarter.”

Second, he said, people connectedness has to be backed up by process connectedness. “Processes are getting connected through payment gateways, etc where each system talks to the other.” Finally, he said, that connectedness of data should become the foundation

of all other connectedness. “More information, data and analytics are making things smarter and bringing better connectedness,” he said. “This will lead to a connectedness of things, where not only my laptop is connected but my shirt, toothbrush, washing machine, etc are smartly connected.”

Speaking on the challenges posed by technology, Arthur Thomas Ball, managing director, public safety and national security (Asia) Microsoft, said: “With 60% population moving into urban centres in India and estimated to be 75% globally by 2025 the challenges posed by connected people, data, agencies and technology is real. Though technology can help overcome shortage of resources it is not enough. Technological solutions and applications are also presenting challenges in securing information, products, personal identity information. With almost a billion people on Facebook our solutions have to include those billion people.”

**Make people central**

RL Mopalwar, divisional commissioner, Konkan range technology, said that technology is an integral part of our lives and governance systems. “It changes the entire spectrum of governance. NMMC (Navi Mumbai

Municipal Corporation) was the first to have CCTV system with 225 cameras,” he said. “The issue here is not infrastructure but consistency in operation and the will to make it work in a people centric manner. Maharashtra has 50% urbanisation. The greater Mumbai agglomeration has 23 million people and 10 million each live in Nashik, Nagpur and Pune. There are huge technology requirements for these four cities.”

In his presentation on NextGen Cities, Cusrow Poonawala, consultant, I-Omniscient, said that the world's fastest train, which runs at 400 km per hour, uses I-Omniscient software to get an alert on any object on the track. The software provides 20 applications. Sanjay Bhatia, vice-chairman and managing director, CIDCO, emphasised on the need to digitise data in his address on smart cities. “CIDCO has started digitising data and will also set up a customer friendly portal,” he said. “On the lines of Mumbai police we too are going in for CCTVs. Sensors on waterways, sewer treatment plans and power distribution centres, GIS for the city and Wi-Fi zone areas are the other digital technologies to be deployed.”

**Plan better**

In a panel discussion on making cities



**“Are we becoming smarter? Are we able to go back to the manual system with confidence that it will work as effectively without IT as it is now or are we are making people too dependent on technology?”**

*Virendra Singh, director – IT, Govt of Maharashtra*



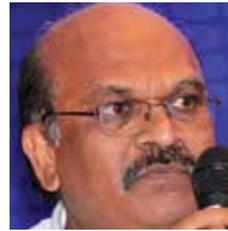
**“A smart city is a continuous process of an ecosystem of different partnerships of administration, government, educators and the common man.”**

*Vikas Aggarwal, director, industry solutions and market development, government vertical, Microsoft*



**“Police control rooms in the UK and Germany have put in place dedicated teams to monitor and analyse the systems. We still have to get to that level.”**

*Ravinder Singhal, additional commissioner of police, Thane*



**“A software being developed based on auto PCR will help improve quality and provide immediate service of building plan approvals.”**

*Kamlakar Akode, director, town planning, Govt of Maharashtra*



**“The challenge of deployment of IT in government is huge whereas its application in sectors without government interference is wonderful.”**

*RL Mopalwar, divisional commissioner, Konkan Range*

safer and better, Kamlakar Akode, director, town planning, government of Maharashtra, said technology is the future of planning. “We first need an advanced GIS plan for land mapping and development. Advanced technology can help build better plans and we are developing standardised by-laws that will help give better service to the people,” he said.

Venugopal, OSD, Navi Mumbai airport influence notified area, (NAINA), CIDCO, said: “CIDCO has been declared a special planning authority for developing NAINA city. It will be a 600 sq km with a population of 80 million. We plan to make it a smart city, which is not just IT-friendly but also environment-friendly. We will use digital data surveys where millions of data points will be captured and analysed on a real-time basis. All plans will be put up on Google maps so that people can see land zones coming up. This makes everything transparent.”

Virendra Singh, director

– information technology, Maharashtra, said, “The challenge is to use IT not just as a solution, but in a holistic manner. Each technology solution must answer this question: Are we establishing a simple interface between the users and the technology?”

Dr SV Pattiwar, additional commissioner, Navi Mumbai municipal corporation (NMMC), while answering a question on how NMMC’s adoption of HMIS a few years ago has not been successful, said, state governments must support smaller corporations and other urban local bodies in terms of manpower, technical capacity and standardisation. “These small local bodies have the money, but they don’t have the solutions,” he said. “Navi Mumbai is a modern planned city and ready for new technologies to be implemented.”

**Policing and security**

Ravinder Singhal, additional commissioner of police, Thane, speaking on

if it was actually possible to analyse cameras recordings said that while visiting police controls rooms in the UK and Germany he saw dedicated teams analysing monitoring systems. “We still have to get to that level. We yet have to see a system like that. But having something like that in our country will be very good,” he said. “The existing system can possibly help after incident has taken place as it is being recorded. For monitoring the city or main junctions, dedicated teams on an hourly basis have to be put in place to analyse and submit reports.” Answering the question if safe city is only a police responsibility, Singhal said, “Security is a very complex issue for which police has become central and focal point these days. Departments like RTO and civic bodies too are involved and should be held equally responsible for ensuring security.” ■

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