



SMART CITY VNPT's APPROACH & EXPERIENCE

VNPT Group

Thanh Hoa, 5th July 2018



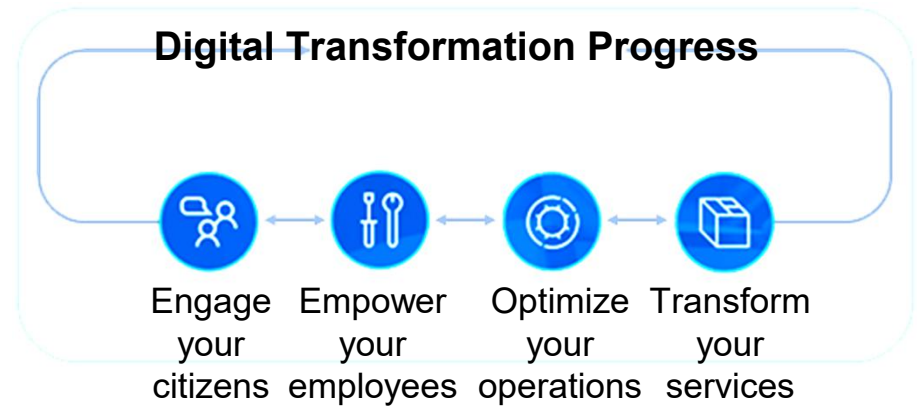
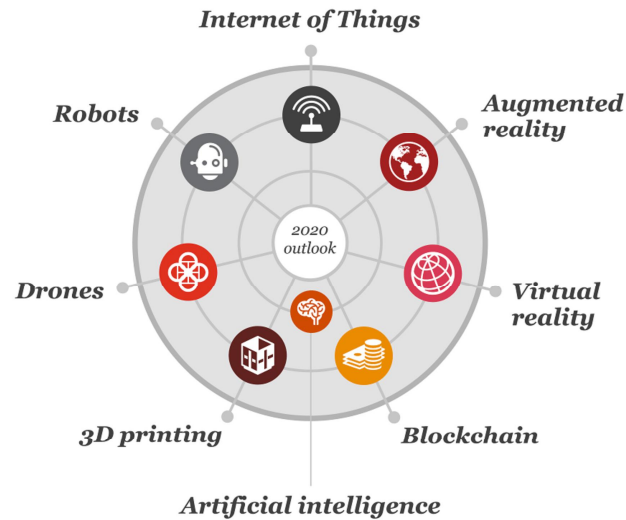
- 1** **Technology context for Smart City**
- 2** **VNPT's Approach for Smart City**
- 3** **VNPT's Experience in Smart City Development**



1. TECHNOLOGY CONTEXT FOR SMART CITY



THE WORLD TECHNOLOGY CONTEXT



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#TechMegatrend

Industrial Revolution 4.0

- Building the platforms for digital revolution.
- Physical management in virtual workspace.
- Technology Disruption Cloud Computing, IoT, AI, blockchain, ...

Digital Transformation

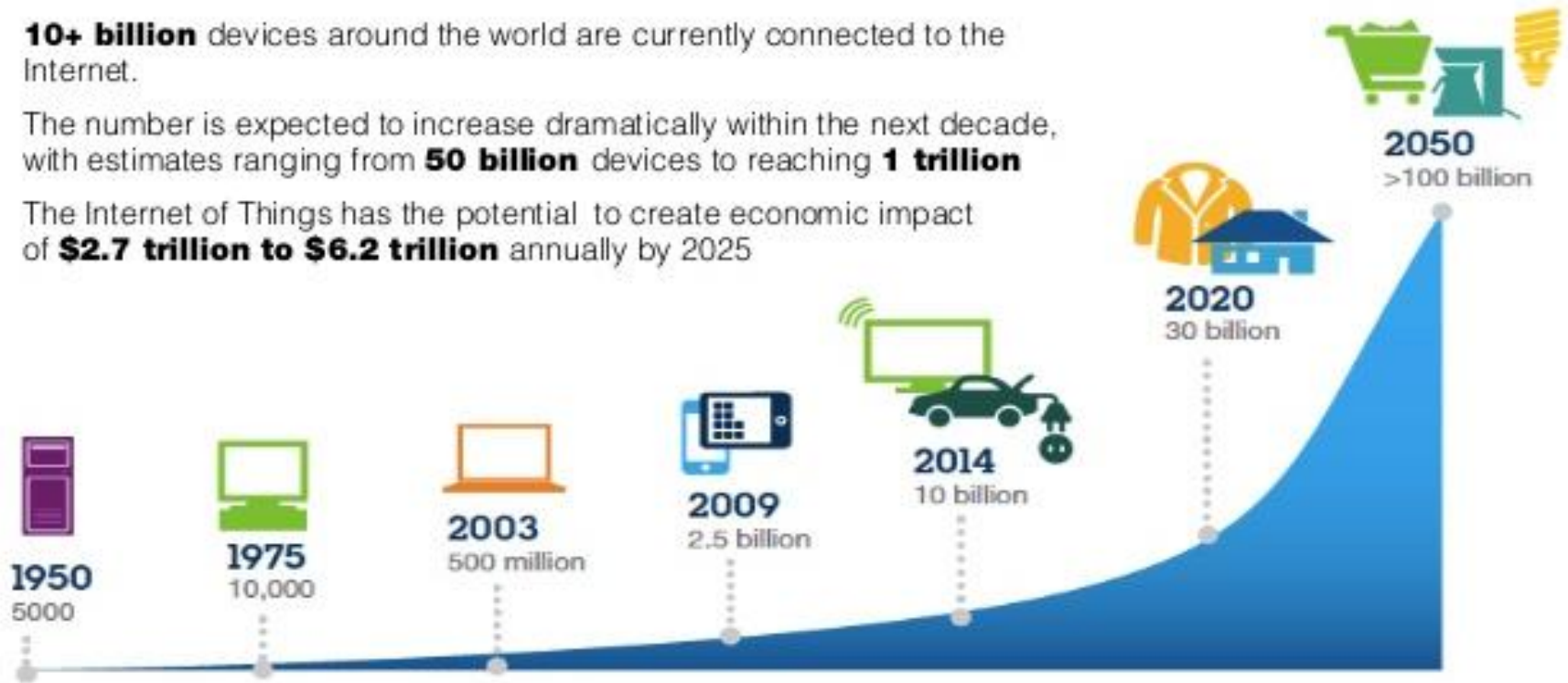
- 4 pillars in the value chain of service delivery.
- Connected, shared and analyzed data to engage the new values and smarter services.

Eg: Internet of Thing Explosion

10+ billion devices around the world are currently connected to the Internet.

The number is expected to increase dramatically within the next decade, with estimates ranging from **50 billion** devices to reaching **1 trillion**

The Internet of Things has the potential to create economic impact of **\$2.7 trillion to \$6.2 trillion** annually by 2025





Generations Of Smart Cities

Smart City 1.0

Technology Driven IBM (2007), CISCO and several other multinational technology companies were praising the potential for technology to transform cities into highly efficient, highly technologically driven havens for innovators

Smart City 2.0

City-Led smart city, Technology-Enabled the municipality—led by forward-thinking mayors and city administrators—takes the lead in helping determine what the future of their city is and technology is enabler

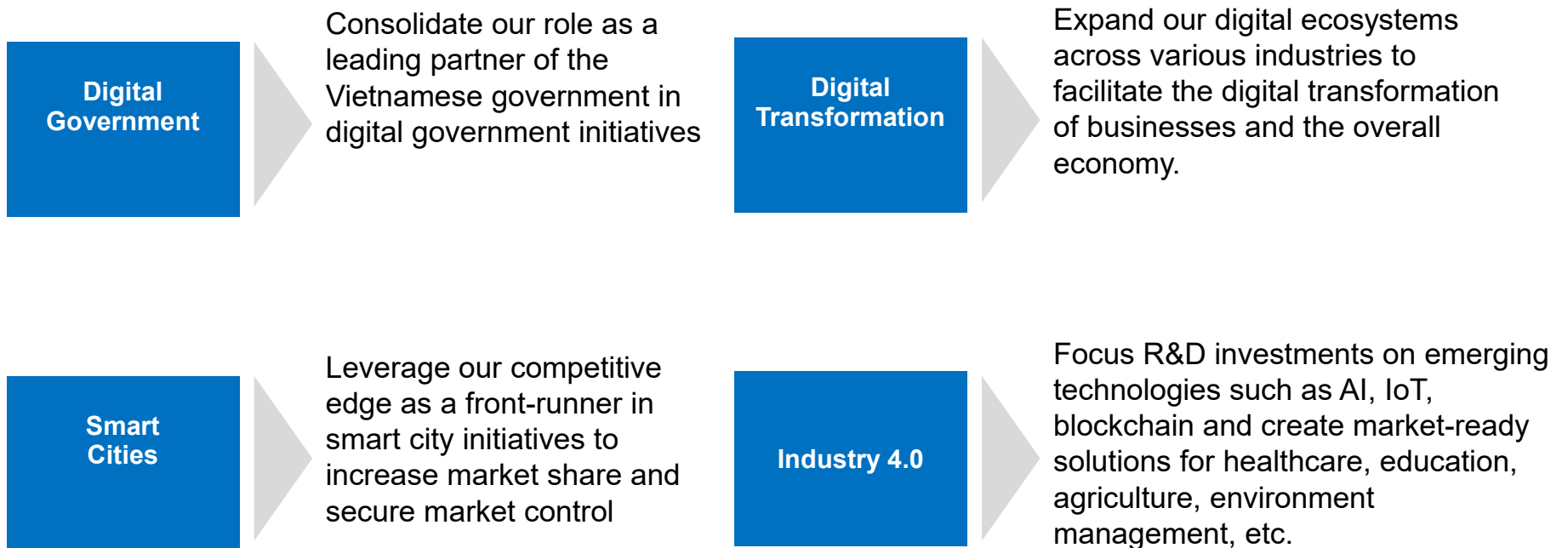
Smart City 3.0

Citizen-centric smart city, Citizen centric, place the citizens (as end users) at the central of innovative services with personalization





Our focused areas in the 4.0 Era



2. VNPT'S APPROACH FOR SMART CITY



Smart City Governance

Optimize the resources

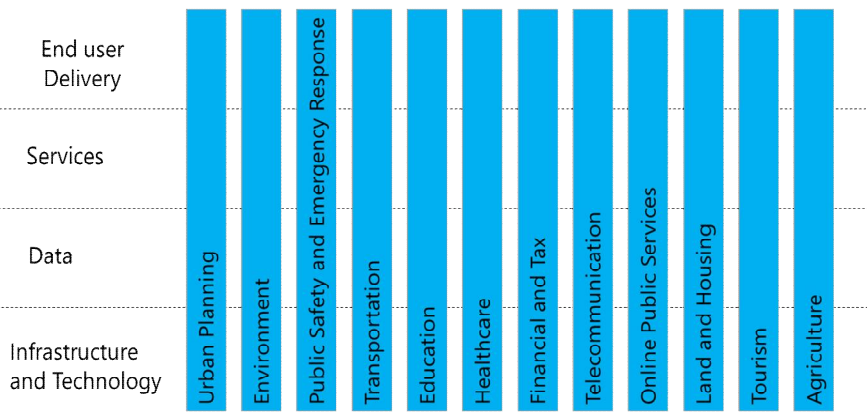
Better Public Service

New value and services

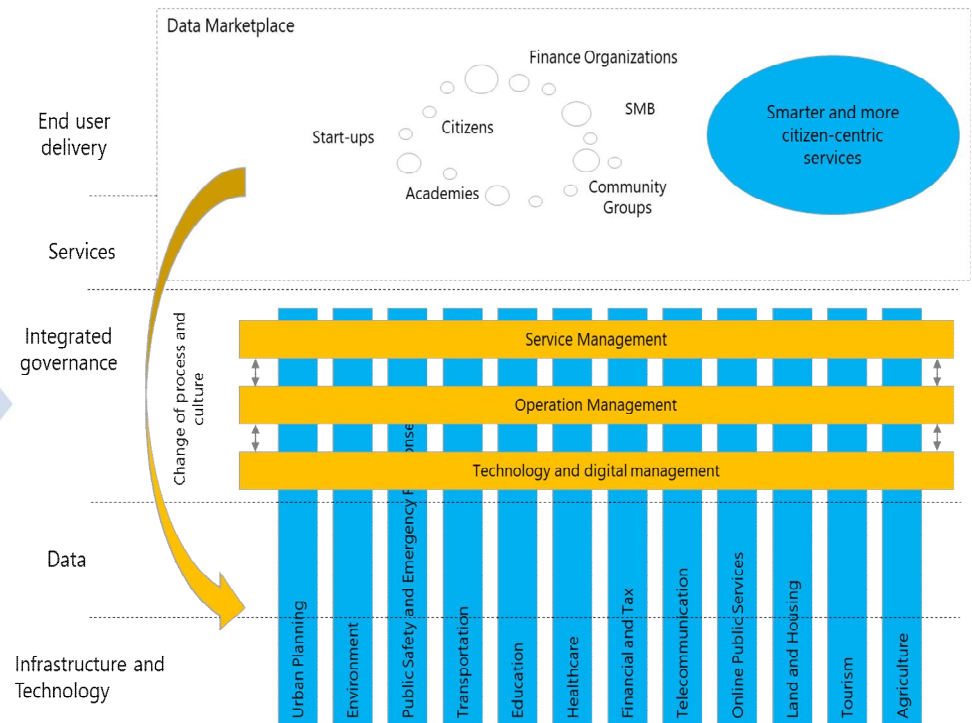


Collaboration issues

End user troublesome



Traditional city operating model



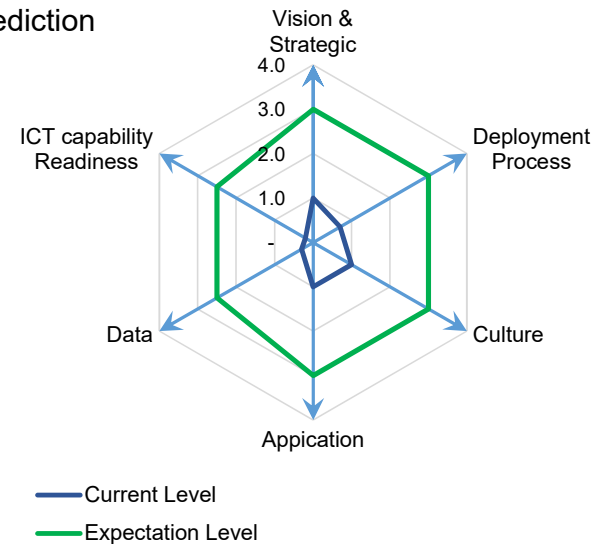
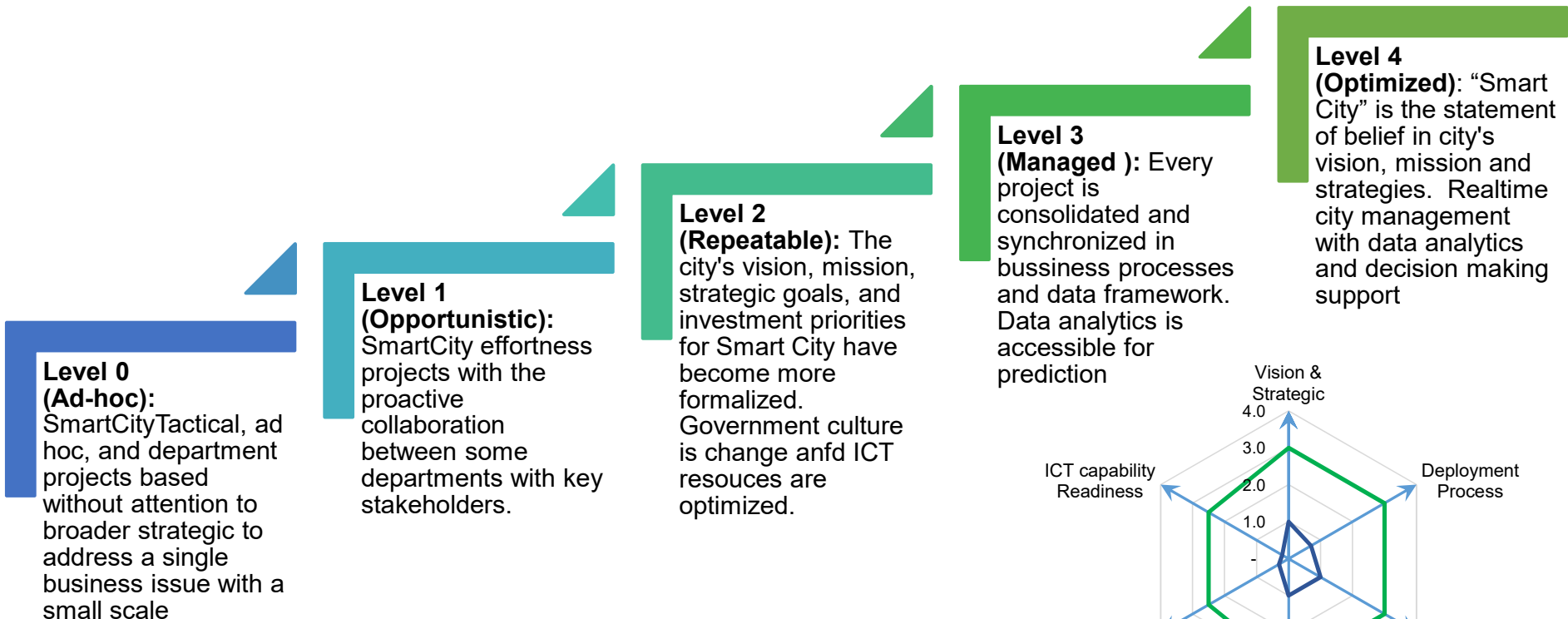
Smart city operating model



VNPT's principles of smart city development

- 1 Citizen-centric: place the citizens at the central of innovative services
- 2 Update, ensure the neutral of technologies and integrate to the legacy systems, cost effecience
- 3 Guarantee for the information securities and privacy
- 4 Follow to the development orientation of the Government, adapt to the specific conditions of the cities/provinces
- 5 Identify the quick wins projects and long-term projects in smart city development
- 6 Ensure the synchronization between tech and non-tech solutions, such as the policies, financial mechanisms, communications, training, etc.
- 7 Open data, open platform, and open community

Assessment of the Smart City maturity



Suggested Deployment Methodology

Step 1

Refer:

- Current ICT plan of the city
- The vision, goal, expectation, challenges of each areas

- **Current infrastructure assessment**
- **Validate the vision, goal, expectation, challenges of city in smart city journey**

Step 2

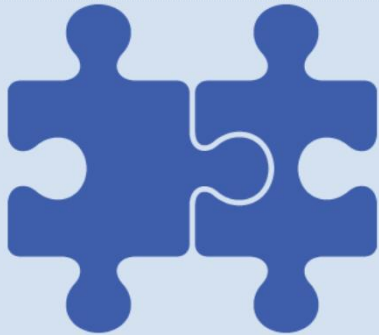
Define the Smart City master plan

- ICT infrastructure for smart city services
- Integrated database and interoperated platforms, open data platform, integrated operation center for the city
- Decide the priority services to implement (Digital government, agriculture, health, education, etc.)

Step 3

- **Implement other projects in the smart city roadmap**
- **Continuously improve and expand the scope basing on the effectiveness of the on-going smart city implementation**

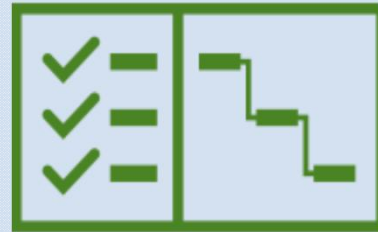
Proposal & Roadmap for a smart city development



1

Reference Architecture

- Technology architecture
- Business architecture
- Solution architectures



2

Proposed ICT solutions

- Core solutions for a smart city
- Solutions for specific areas
- Roadmap & Implementation plan
- Financial plan



3

Non-Tech Solutions

- Strategic plan
- Organization plan
- Communication plan
- Processes & Policies
- Training and resources development






3. VNPT'S EXPERIENCE IN SMART CITY DEVELOPMENT

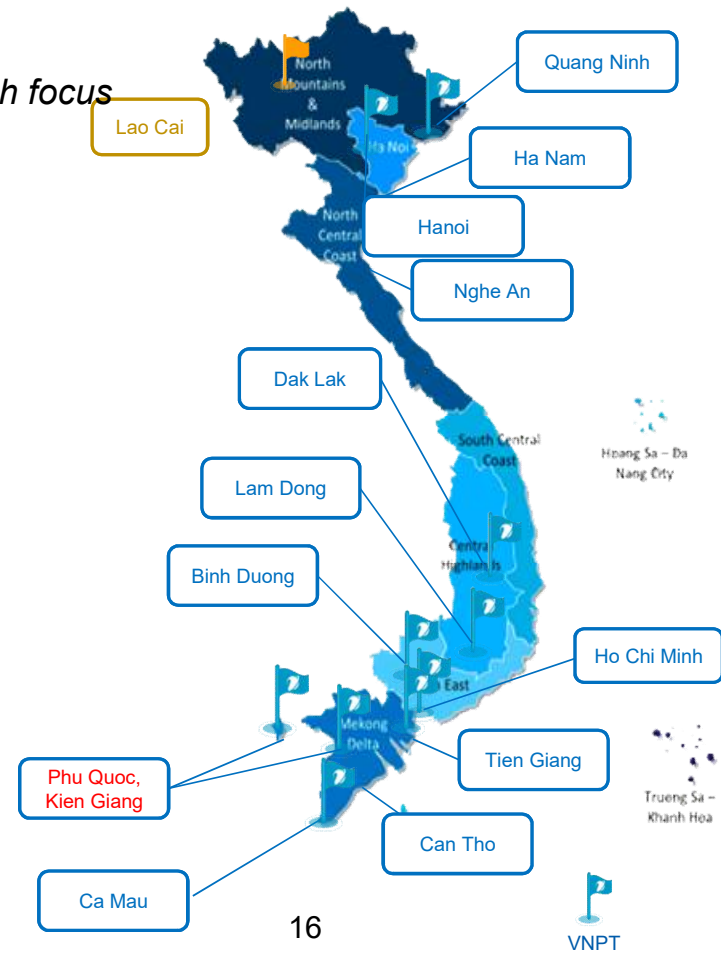




VNPT – a pioneer in Smart City Initiatives

We are working with over 20 cities to engage in smart city initiatives which focus on enhancing livability and sustainability.

 Digital Government	 Smart Tourism	 Safe City
 Smart Agriculture	 Smart Education	 Smart Healthcare
 Smart Environment	 Smart Urban Planning	 Smart Transportation
 Smart Infrastructure		



Design a smart city ICT Framework



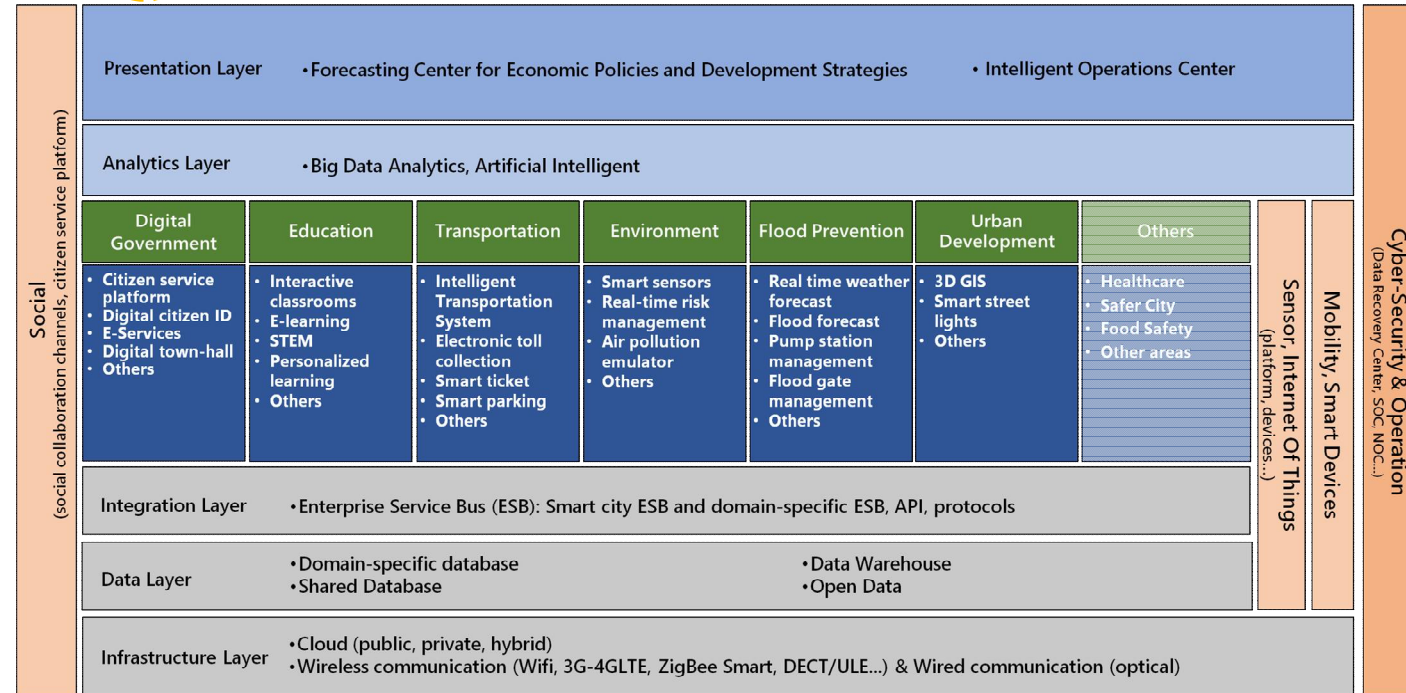
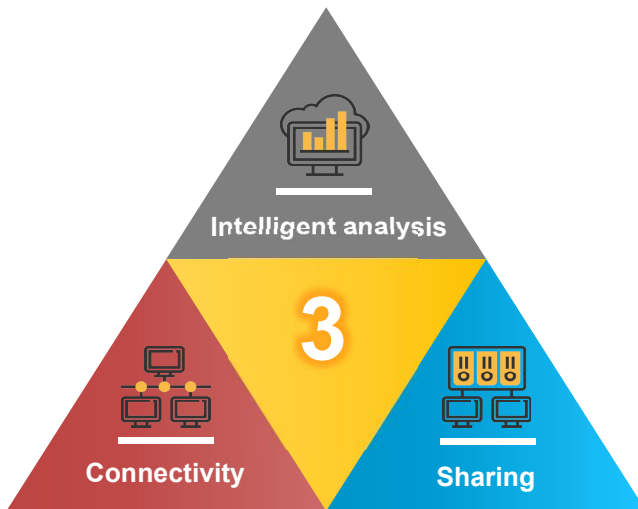
Government



Citizen



Business



- An architecture framework that ensures the co-operation of all infrastructure systems and field solutions
- Demonstrates proven technology solutions and industry-standard solutions in a unified framework
- A reference model for building specific architectural models for each sector
- Comply with the guidance about SmartCity deployment of MIC, Vietnam
- Comply with open standards and refer to the standards of SCC, NASSCOM, ISO / IEC 18384: 2016, Microsoft ... as well as experience in the world.

Objectives

Citizen Engagement

Create the most favorable conditions for citizen to access and use public services. Citizen can track their transaction progress. Citizen can contribute their ideas to the government anytime, anywhere.

Understanding Citizen

Thank to intelligent analytics tools, shared data sources will provide information that empowers the government to understand the needs of citizens when interacting with government through public services to find the suitable solutions.

Optimize operations

Interoperable, standardized and digitized processes provide integrated services that allow citizen to interact only with one single point of contact, helping to increase efficiency and reduce costs for government and citizen themselves.

Enhance transparency

Open data is provided to the public will help improve the transparency of government operations and enhance the monitoring ability of citizen and create the new value.

Eg: Digital Government



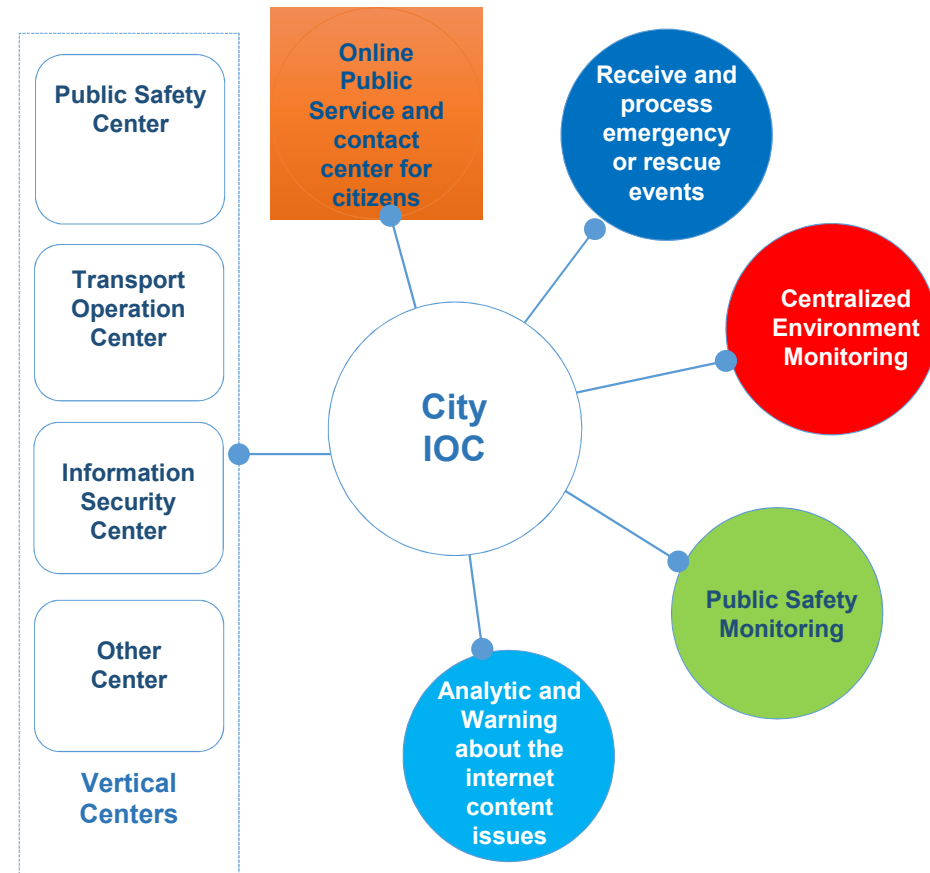
Nortable Solutions

- Administrative procedure digitalization, digital offices
- Online public services, one-stop portals
- Data warehouse
- Electronic Citizen Platform
- Citizen Engagement Applications
- Reports, Analytics
- Open Data Platform

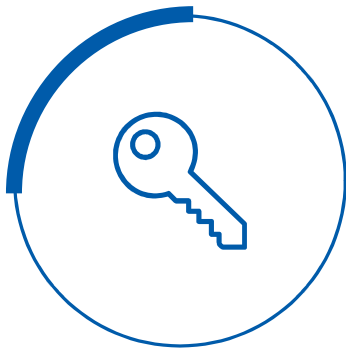
Intelligent Operation Center (IOC)



- Provides integrated data visualization, real-time collaboration, and deep analytics that can help leaders prepare for problems before they arise and to coordinate and manage problems as they occur, to improve the efficiency of city operations.
- Major functions:
 - Report and Visualization workspace
 - Events and incident management,
 - Collaboration, instant notification, and messaging
 - Status monitoring
 - Analytic and Prediction Model



Smart City Cooperation model



Turnkey model



Rental model



PPP model

- Integrate all stakeholders: government, citizens, businesses, academy/organization, ...
- Citizens are essential stakeholders
- Understand the value to the citizens of accessing the Smart City Data and Services
- The validation is required for any deployment and enhance the citizen experience and satisfaction
- Data is being restructured and shared
- End user data is endless → How to use effectively? → Integrate as much as data you have
- The information security and privacy are considered at the beginning
- KPI measurement and enhance the trust of citizens
- Deploy the appropriate scope (not too large or too small)

Thank you!

