

# Fundamental Global Changes: Urbanisation, Globalisation

- 500M Urbanised Next 5 Years, 100 new cities.
   350M in China alone by 2025
- GDP of Emerging Countries

  = GDP of Developed
- Crime Rate Up 30% Worldwide 60% of urban dwellers have been victims
- Top 20 Megacities Use 75% of World's Energy 50%+ of new construction happening in Asia
- Only 3% of buildings in the developed world qualified for LEED

## Technology Trends: Everything Is Becoming Connected

50 Billion













300 Million Devices











2004 2008 2010 2012 2014 2016 2018 2020 2022 2024

Source: Forrester Research, Cisco

# Songdo, ROK: Cities are Already Run on Networked Information



Citizen Smart Services Menu



**Environmental efficiency** 

Connecting and Monetization of Services

**Economic development** 

Citizen quality of life

## Technology Will Be Consumed As Services















\$3

\$5

\$15



#### **Real Estate**

- Child Locator / Elder (
- Executive Suite\*
- Office Resource Mana
- Green aware\*
- On-premises Safety a Security\*
- Digital Library
- Smart Business Centr
- Info signage (I, II)\*
- ·Smart Card (I, II)\*
- Smart Kiosks
- Residential Service\*
- Energy dashboard
- Smart Connected Maintenance\*
- Integrated Building Management\*
- Triple Play
- Office in a Box
- Convention in a box
- Collaboration
- Telepresence
- Virtual Concierge (res
- Integrated Operation for in-building\*
- Private Virtual Office\*
- Asset Tracking\*
- Virtual Attendant
- Car Park Management
- Mobile Concierge
- Location based push advertising

### Citizen Services Menu

✓ Health Care Monitoring From Home \$10

✓ Alert That Your Child Is At School

\$5

Check mobile phone for Next Bus/ online on bus \$3

▼ TelePresence a Friend From Home \$8

✓ Access Government Services Online \$6

✓ "Green" Utility Awareness / Smart Grid

Automatic Guidance to Parking Spot / Elevator Held

✓ Access to Security Services

**My Total = \$52/mo** 

#### Utilities

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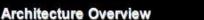
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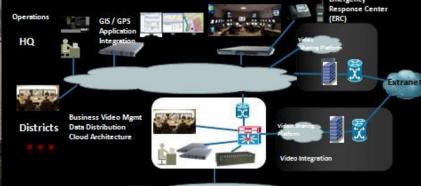
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gy nization Chongqing, China: 5 pillar Smart City strategy based on a city wide network









# Analyzing and modeling the impact of these city services in a real-time visualized environment

- Visualizes the city buildings and critical infrastructure (water, electricity, the ICT network)
- Visualizes and simulates the impact of services (energy consumption, traffic, emergencies)
- Breaks down functional and data silos
- Models impact of services on the city with real or even realtime data



Technical Assessment

Simulation Requirements and Status

Data Simulation

**Decisions** 

Modeling these Services will create decision maker and public buy in to realize the Benefits of a Smart + Connected Community:

## 20 Years... 5 Million People:

Community Revenues +\$15B



GDP Growth 9.5%



Energy Efficiency +30%



New Jobs 375,000



**Source:** Connecting Cities: Achieving Sustainability Through Innovation Nicola Villa and Wolfgang Wagener, Cisco IBSG