Smart cities in Asia and implications for governance

Yu-Min Joo
Associate professor
KDI School of Public Policy and Management

Ministry of Urban Development, Government of India

LAUNCH OF PROJECTS
SMART CITIES MISSION
BY
SHRI NARENDRA MODI
PRIME MINISTER OF INDIA

VENUE : PUNE, MAHARASHTRA

Smart City

SONGDO
smart city

臺北智慧城市物聯網創新實驗室
Taipei Smart City IoT Innovating Lab

View on Hong Kong Smart City Blueprint
香港智慧城市藍圖諮詢

Smart Nation
Better living, more opportunities, stronger communities.
#SmartNation #buildSG

YOKOHAMA DAY
in
Smart City Week 2014

Nanjing Builds a Smart
City with Huawei eLTE

Smart city boom in Asia

What is a smart city?

Smart cities: applying off-the-shelf technologies to urban systems and infrastructures to solve urban challenges (Glasmeier and Christopherson, 2015).

Smart cities: a corporate vision and market creation strategy in the new urban world (Hollands, 2015; Kitchin, 2014; Soderstrom et al., 2014).
Also referred to as **corporate smart cities.**

Smart cities: Innovation platform with a civic, community, and participatory orientation (Anttiroiko, 2016; Allwinkle and Cruickshank, 2011; Komninos et al. 2013).

- "At its core a smart city is a welcoming, inclusive city, an open city. By being forthright with citizens, with clear accountability, integrity, and fair and honest measures of progress, cities get smarter. A smart city listens—and tries to give voice to everyone" (Hoornweg, 2011).

- Smart citizens are empowered with technology to access data, communicate, and engage in urban governance, becoming part of the collective brain of a smart city (Joss et al. 2017).

Smart cities and development motivations

Some examples of smart cities in Asia as part of their government's new development strategy:

- **Singapore**: to serve as the next big idea after the city-state's global-city development goals, amid an impending waves of technological change and disruption.

- **South Korea**: to find a new source of exportable model for economic development. Also, a cornerstone project of the national government's latest announcement of Fourth Industrial Revolution as the new national development strategy.

- **India**: to focus on cities as the development engine, departing from its decades of rural bias. Seeks to embark on leapfrog development; smart city projects are expected to deliver 'world-class' urban services and trigger further developments in other parts of the city.

- **Japan**: to tackle the country's persistent concerns over efficient and sustainable energy supply and uses. Smart cities serve as showcase projects constructed by Japanese Government and the private sector, localizing and testing out new energy-related technologies and to build business models.

- **United Arab Emirates (UAE):** to prepare for a post-petroleum economy by promoting clean-tech industries as the next key source of economic development.

- *Implications for governance?*

Smart city Seoul example

Oasis of Ten Million Imagination (2006-)

About

A 'citizen proposal system' that collects citizens' creative ideas and hands over the best ideas selected by citizens' vote, to the city officials who then reflect the proposal in actual administration or give suggestions

Major Performance

▸ High citizen participation rate – Number of members 70,379
▸ Monthly average of 669 proposal cases (average daily number of visitors 227)
▸ High number of adoptions – Of a total 152,000 proposal cases received, 565 cases were adopted

Revamped to **Democracy Seoul** (2017)—an open platform where citizens can now monitor whether and how their suggestions undergo decision-making and implementation processes.

Smart city Seoul example
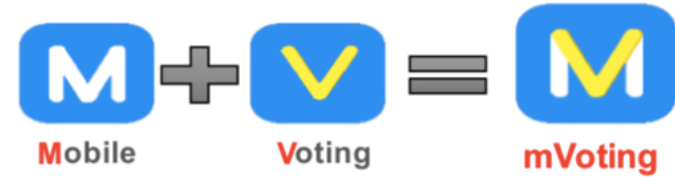
Seoul Smart Complaint Center (2012-)

Smart city Seoul example

Mobile + Voting = mVoting

Citizens as prosumers of information
M-voting (2014) – Seoul citizens as policy prosumers.
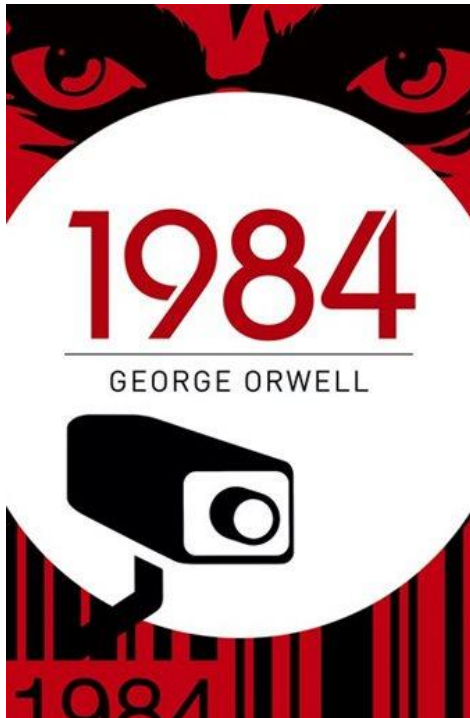Towards a goal of achieving cooperative governance.

Total 4,404 agendas have been put up for citizen vote, out of which 3,889 were from citizens.

App downloads 280,000 and 1,100,000 participants (based on 2016 data).

Example of citizen participatory budgeting: Since 2015, Seoul citizens decided where $50 million city budget is to be spent annually via M-voting.

Potential pitfalls of smart cities

- **Digital divide:** "smart citizens" vs. others.
- **Privatization**: privatization of city spaces and data.
- **Surveillance, privacy, and control issues:** A dystopian vision of constantly monitored and controlled society. Who has the power?
- **Cybersecurity issues**

Source: book cover of 1984, ARC classics (1949)