Data Governance for Smart Cities

W3C Staff Contact for Web of Things and Media&Entertainment
W3C Project Specialist, Smart Cities Champion
Project Professor, Graduate School of Media and Governance, Keio University

Kazuyuki Ashimura

25 June 2021

Pros and Cons of Smart Cities…

- "Smart City" by Wikipedia: https://en.wikipedia.org/wiki/Smart_city
  - An urban area that uses **different types of electronic methods and sensors to collect data**.
  - Insights gained from that data are used to **manage assets, resources and services efficiently**; in return, that data is used to improve the operations across the city.
  - The smart city concept integrates **information and communication technology (ICT),** and various physical **devices connected to the IoT (Internet of things)** network to optimize the efficiency of city operations and services and connect to citizens.
  - Smart city technology allows **city officials** to interact directly with both **community and city infrastructure** and to **monitor what is happening** in the city and how the city is evolving.

Various Adoptions All Over the Wolrd

- Amsterdam
- Barcelona
- Columbus, Ohio
- Copenhagen
- Dubai
- Dublin
- Gdynia
- Isfahan
- Kyiv
- London
- Madrid
- Malta
- Manchester
- Milan
- Milton Keynes
- Moscow
- New Songdo City
- New York
- San Leandro
- Santa Cruz
- Santander
- Shanghai
- Singapore
- Stockholm
- Taipei

Criticism

- A **bias in strategic interest** may lead to ignoring alternative avenues of promising urban development.
- A smart city, as a scientifically planned city, would defy the fact that real development in cities is often **haphazard**. In that line of criticism, the smart city is seen as unattractive for citizens as they "can **deaden and stupefy** the people who live in its all-efficient embrace". Instead, people would **prefer cities they can participate to shape**.
- The focus of the concept of smart city may lead to an **underestimation of the possible negative effects** of the development of the new technological and networked infrastructures needed for a city to be smart.

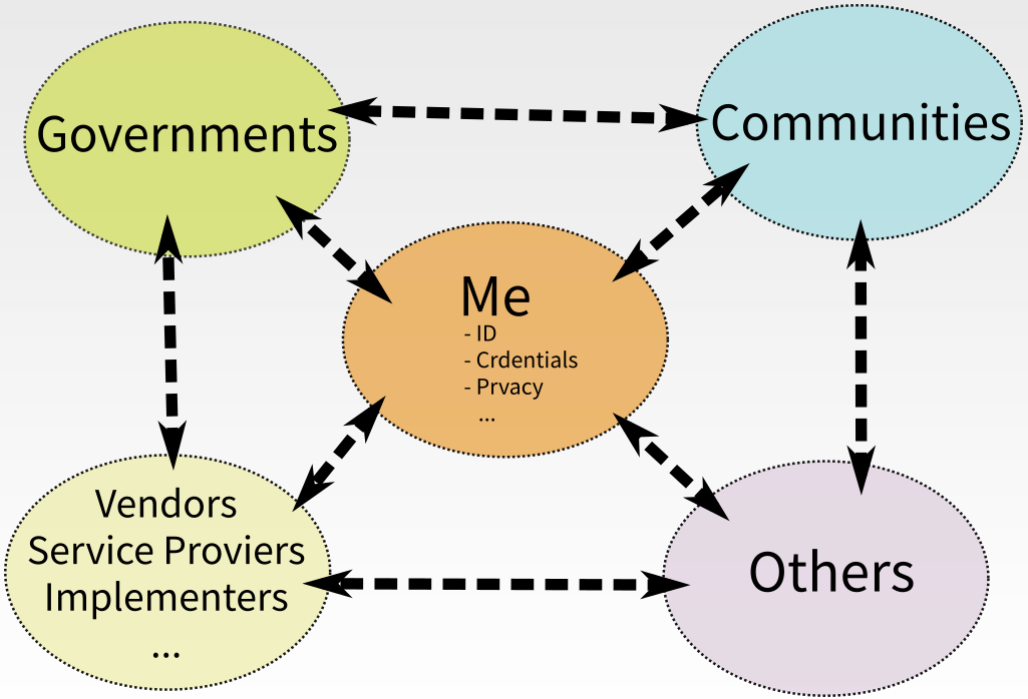
Criticism (contd.)

- As a globalized business model is based on capital mobility, following a business-oriented model may result in a **losing long-term strategy**: "The 'spatial fix' inevitably means that mobile capital can often 'write its own deals' to come to town, only to move on when it receives a better deal elsewhere. This is no less true for the smart city than it was for the industrial, [or] manufacturing city."
- The **high level of big data collection and analytics** has raised questions regarding surveillance in smart cities, particularly as it relates to predictive policing.
- As of August 2018, the discussion on smart cities centres around the **usage and implementation of technology** rather than on the inhabitants of the cities and how they can be involved in the process.

Criticism (contd.)

- Especially in **low-income countries**, smart cities are irrelevant to the majority of the urban population, which lives in poverty with limited access to basic services. A focus on smart cities may worsen inequality and marginalization.
- If a smart city strategy is not planned taking into account people with **accessibility problems**, such as persons with disabilities affecting mobility, vision, hearing, and cognitive function, the implementation of new technologies could create new barriers.

Data Governance for Smart Cities



Data Transfer among various stakeholders

- Who
- What
- When
- How
  - ➢ Need clarification based on concrete Use Cases by a dedicated IG ☺

Thanks!