

"Cities of the Future: How smart communities should be focused on being connected, sustainable and citizen centric"

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What we will cover

- Our current trajectory in enabling smart communities is still too focused on the technology and not on the outcomes.
- So how do we initiate a step change in our approach?
- We will explore some different strategies that have worked in other places.
- From these experiences outline a plan that will help smart communities become connected, sustainable and citizen centric.

How Smart Are We Really?



Source: Scientific American

Today



Standards

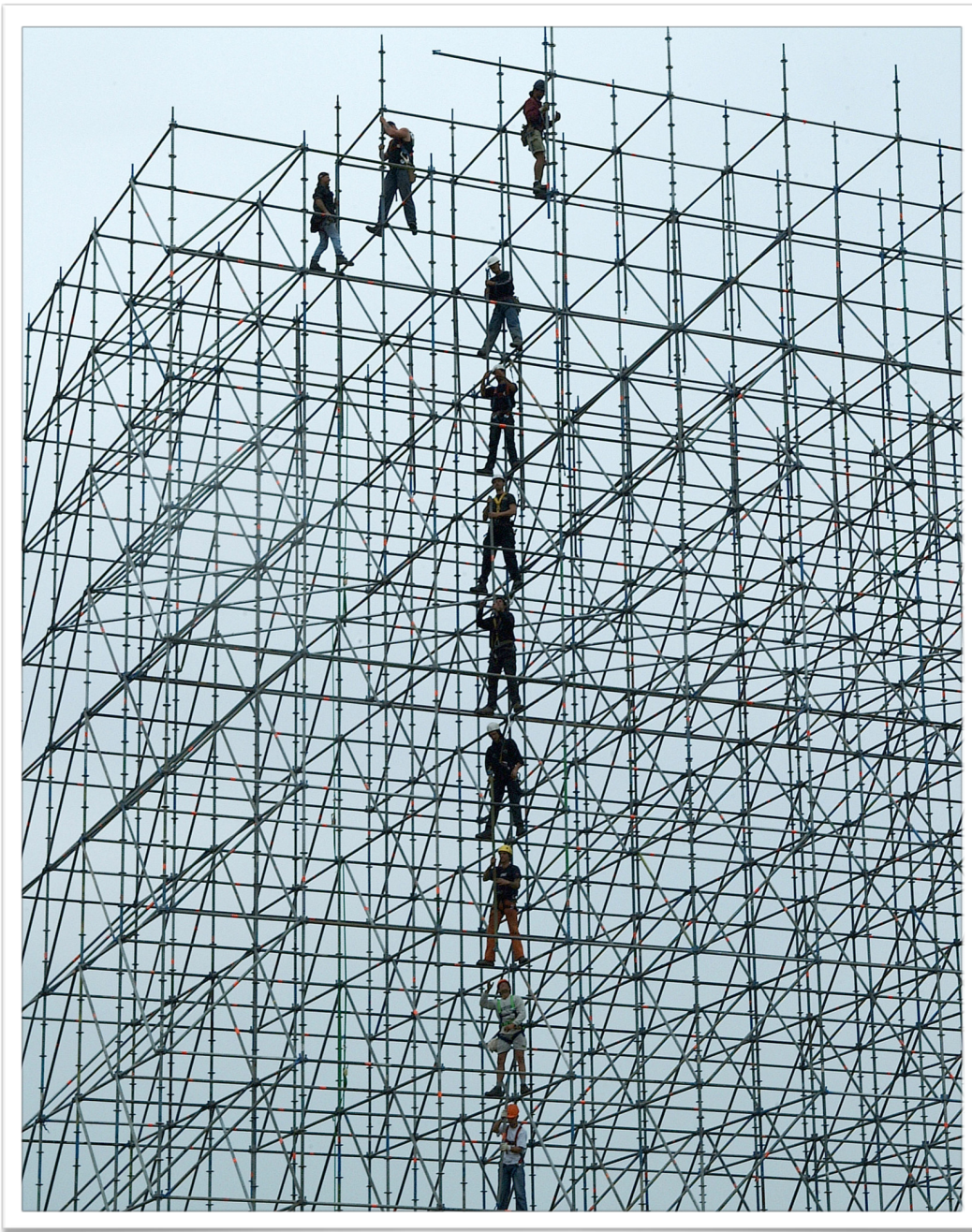
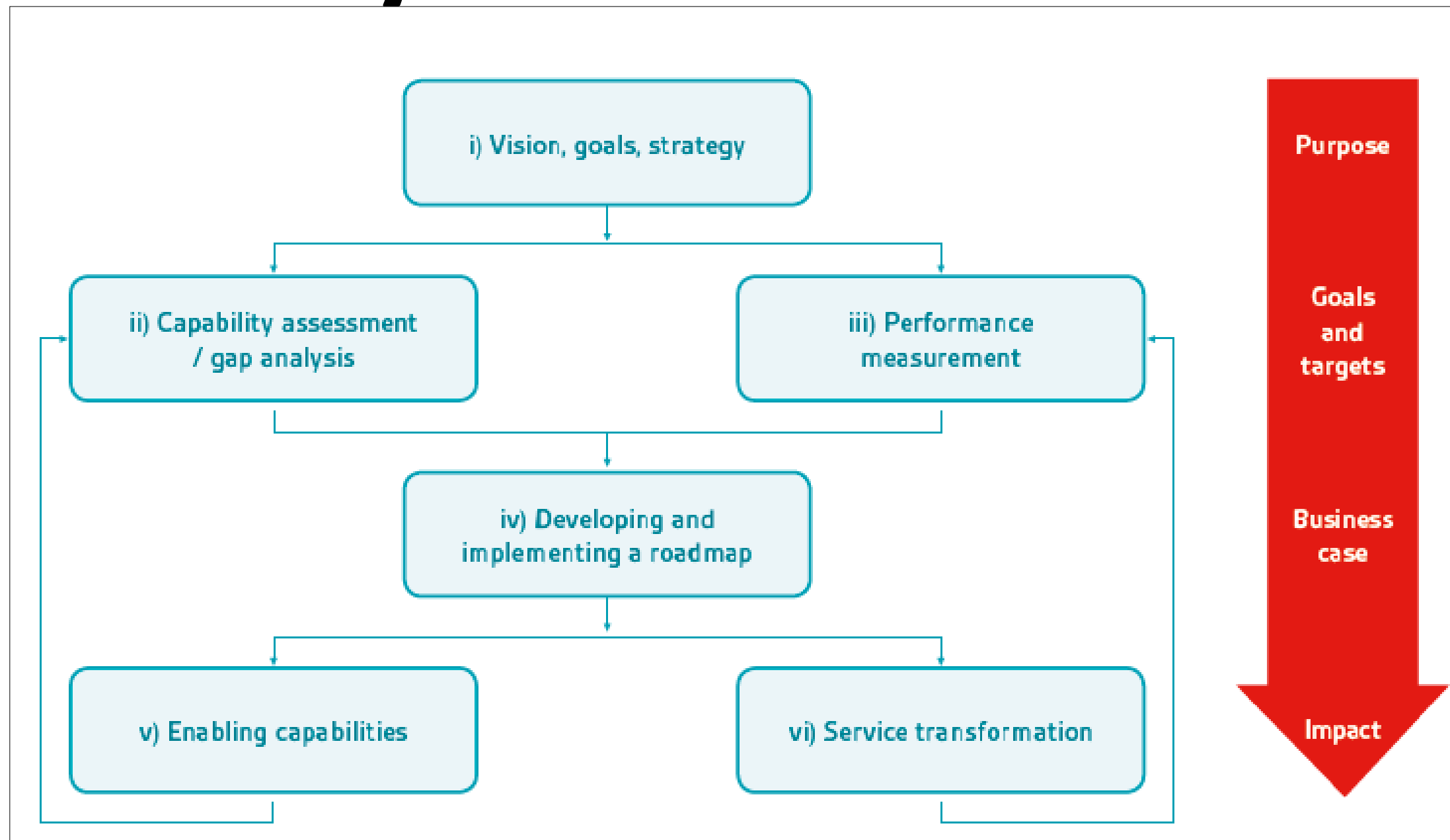


Photo by Bo de Visser - <https://freeimages.com/>

Standards provide a framework to create a joined up, focused and successful programme

Journey to Smart



A Smart City requires that all the key stakeholders in the city agree to a joint vision, a set of goals and an overall approach with which to achieve them (see illustration). Part of this approach could be to set up a Smart City team, directly accountable to city leadership and with a mission to drive forward smart initiatives

Principles

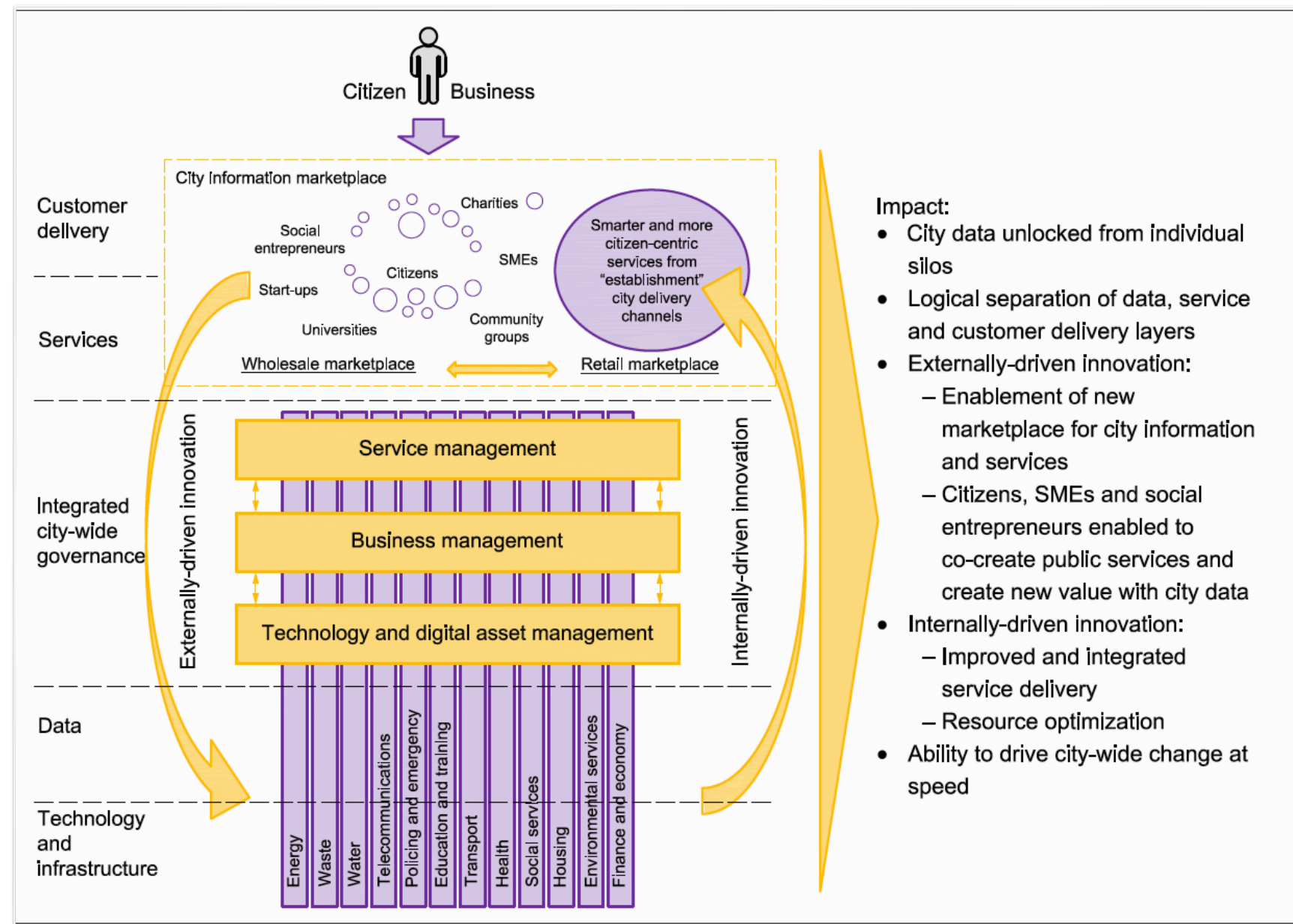
“A genuinely “smart” city puts the needs of its citizens first. Data must be collected with a purpose, and that purpose should improve some aspect of the interaction of people with the cities they inhabit”

“A well-facilitated interaction between citizens and city administrators creates a virtuous circle: when a service improves thanks to feedback and interaction, citizens are motivated to continue to participate and connect.”

<http://smartcityinnovation.eu/wp-content/uploads/2019/06/7389-Final-Smarter-Cities-web-B.pdf>

What does Good Look Like?

- Visionary
- Collaborative
- Digital
- Interoperable
- Transparent
- Privacy-by-Design
- Citizen Centric
- Open Data
- Outcomes Centric
- Governance



Impact:

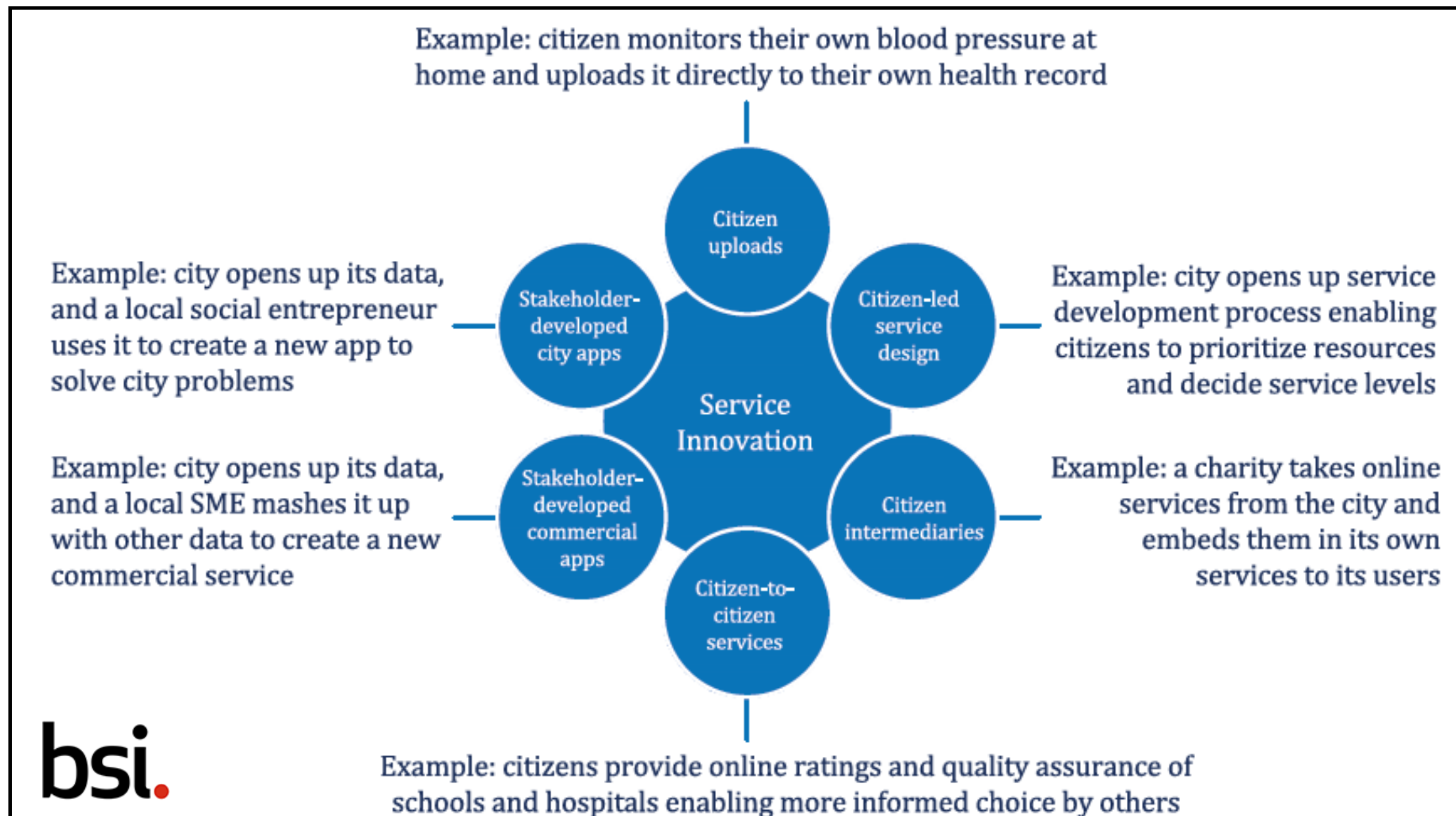
- City data unlocked from individual silos
- Logical separation of data, service and customer delivery layers
- Externally-driven innovation:
 - Enablement of new marketplace for city information and services
 - Citizens, SMEs and social entrepreneurs enabled to co-create public services and create new value with city data
- Internally-driven innovation:
 - Improved and integrated service delivery
 - Resource optimization
- Ability to drive city-wide change at speed

Outcomes

Introducing the Sustainable Development Goals



Service Transformation



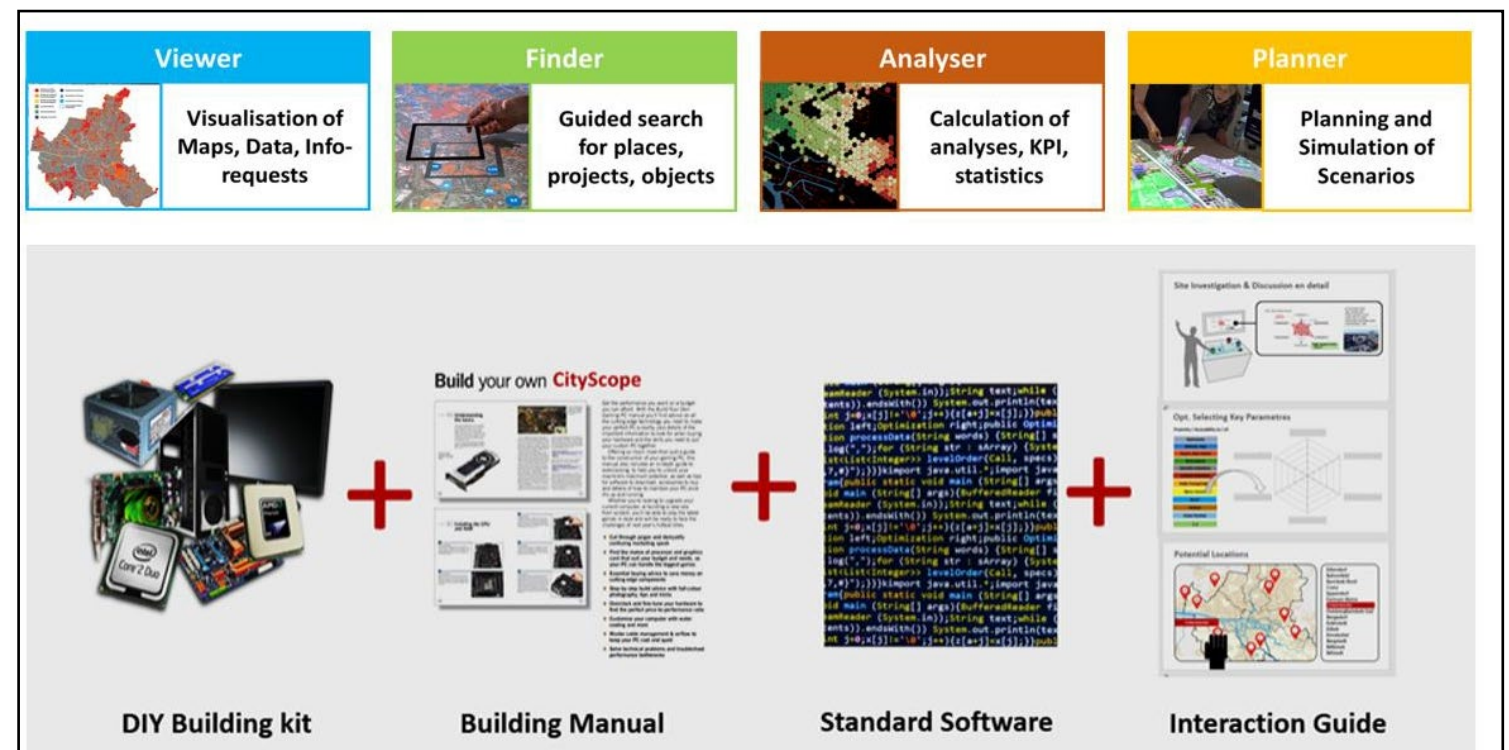
Taken from ISO37106

What information is being collected? By whom and for what purpose?

BRISTOL
ONE CITY

<https://www.bristolonecity.com>

Open City Toolkit



<https://github.com/citysciencelab/open-city-toolkit>

New Forms of Collaboration
Open Source
Need a Lab!

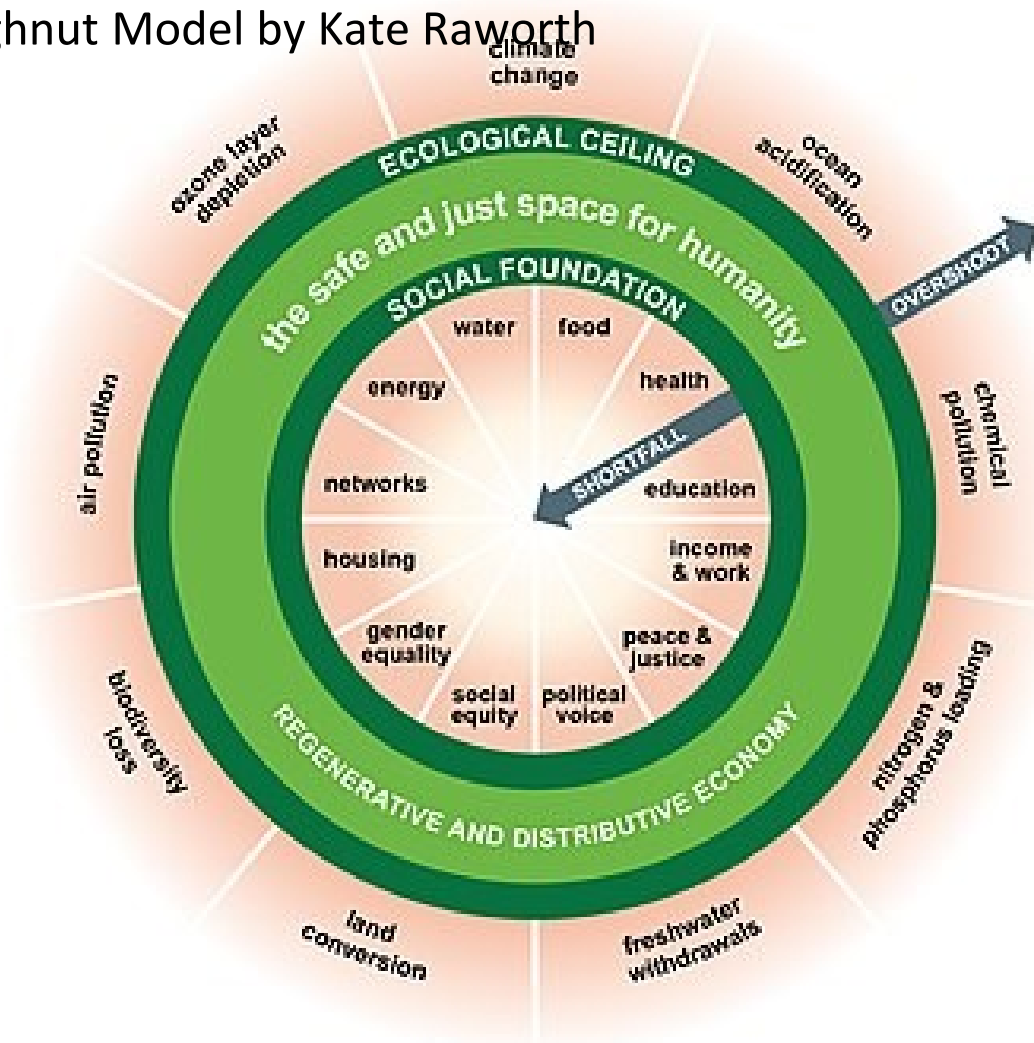
In use in cities across the world: Bhubaneswar, India & Latacunga, Ecuador

The Bristol Approach

Bristol Approach -Knowle West Media Centre
<https://www.bristolapproach.org>

For Consideration

Doughnut Model by Kate Raworth



Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist by Kate Raworth

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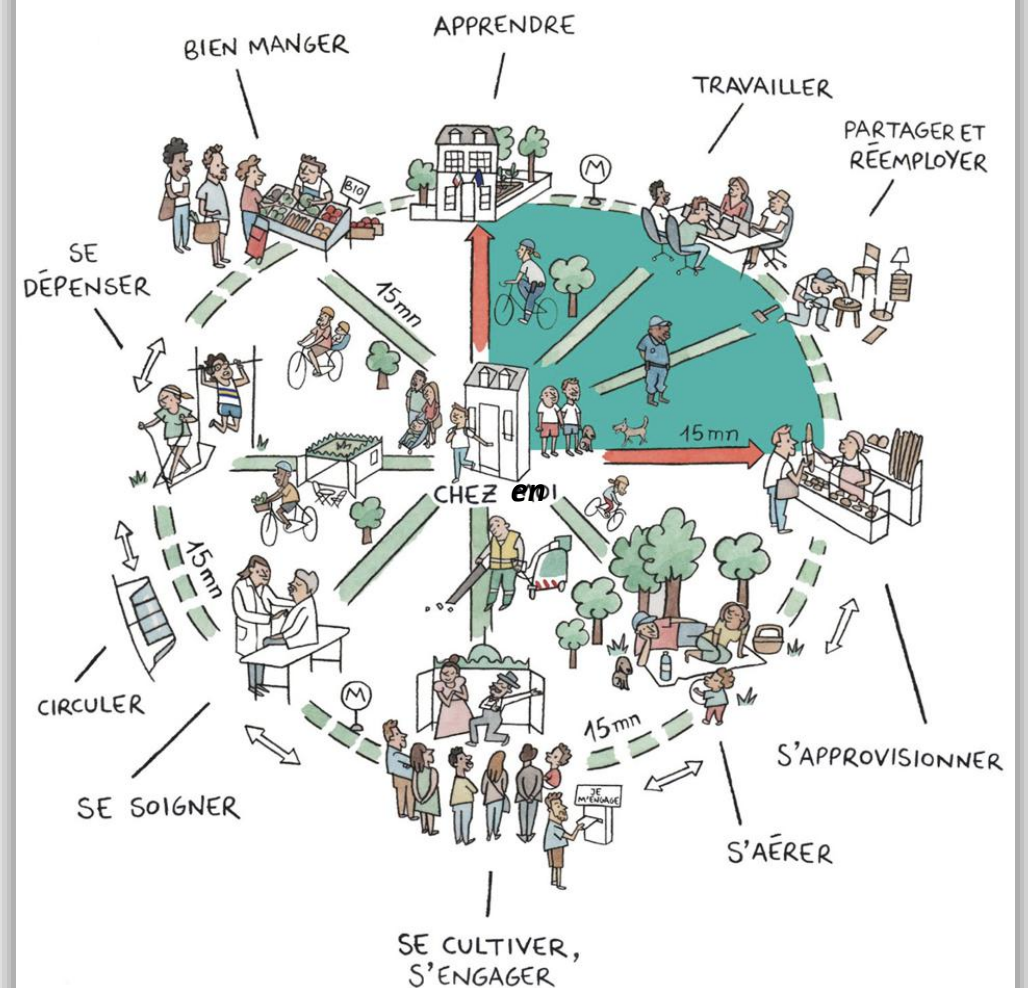


Image Credit: Micaël Dessin - Paris en Commun
Prof. Carlos Moreno / Mayor Anne Hidalgo

MICAËL

UoS Thought Leadership

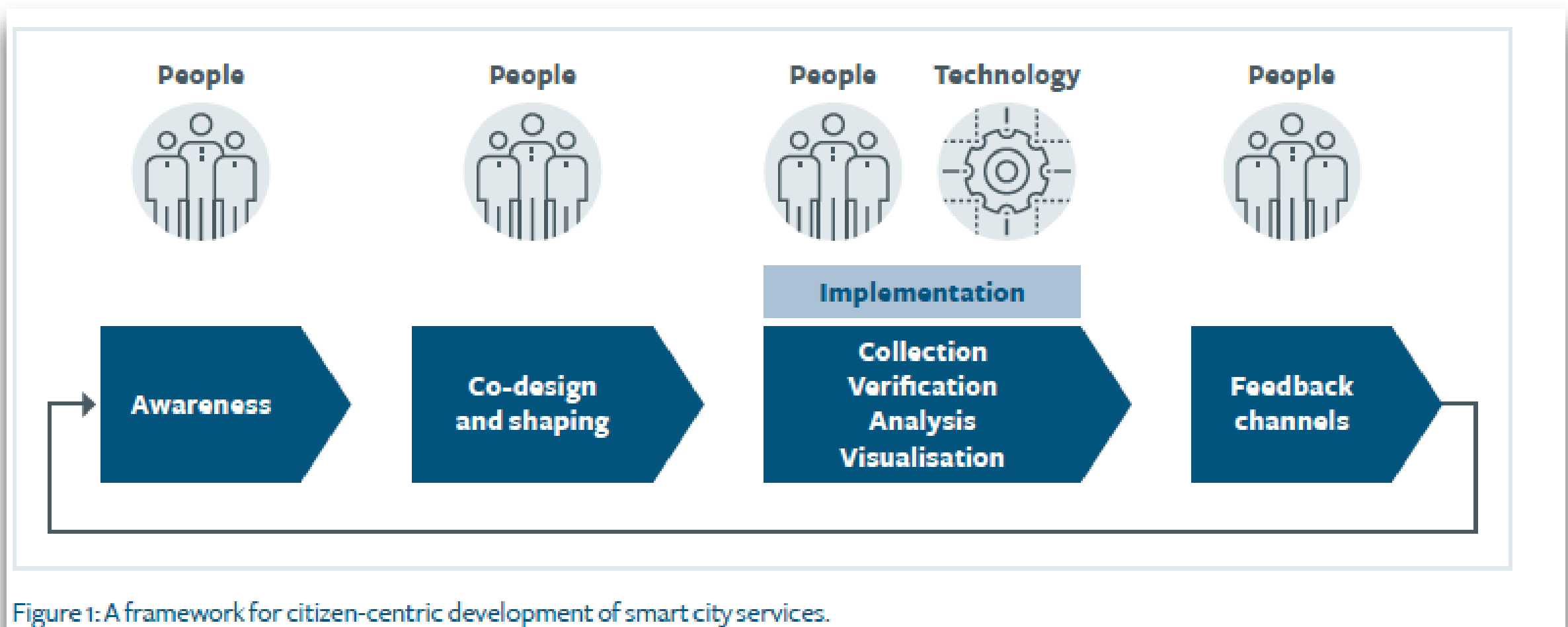
International Conference on Evolving Cities - ICEC 2021



<https://evolvingcities.org>

SCIFI

<http://smartcityinnovation.eu/about/>



<http://smartcityinnovation.eu/wp-content/uploads/2019/06/7389-Final-Smarter-Cities-web-B.pdf>

Citizen Centricity

Key Recommendations for Engaging Citizens in Smart Cities:

To enable citizens to engage effectively with the development of smart city services, they should be:

- Informed about the opportunities provided by civic technology and how this can empower them to use and provide data to transform their city;
- Presented with a range of opportunities for co-creation across the framework;
- Engaged via low tech, bottom-up approaches which reduce barriers and value diverse insights;
- Offered opportunities to interact with technically skilled citizens, and to develop technical awareness themselves;
- Engaged with apps and sensors that build on existing tools and existing practices, rather than requiring them to learn and implement entirely new activities;
- Supported to engage with city authorities (and vice versa) - feedback channels should enable citizens to improve, as well as benefit from improved, services.

<http://smartcityinnovation.eu/wp-content/uploads/2019/06/7389-Final-Smarter-Cities-web-B.pdf>

Appendix

Links to BSI Standards

Standard		Link
PD 8100	PD8100 - Overview Guide	https://shop.bsigroup.com/forms/PASs/PD-81002015/
PAS 180	PAS180 - Smart Cities Terminology	https://shop.bsigroup.com/forms/PASs/PAS-1802014/
ISO37106 / PAS181	PAS 181/ISO37106 - Sustainable cities and communities. Guidance on establishing smart city operating models for sustainable communities.	https://shop.bsigroup.com/forms/PASs/PAS-18120142/
PAS182	PAS 182 - Smart City data concept model (SCCM)	https://shop.bsigroup.com/forms/PASs/PAS-1822014/
PAS 183	PAS183 - Guide to establishing a decision-making framework for sharing data and information services	https://shop.bsigroup.com/forms/PASs/PAS-1832017-download/
PAS 184	PAS184 - Developing project proposals for delivering smart city solutions.	https://shop.bsigroup.com/forms/PASs/PAS-1842017/
PAS 185	PAS185 - Smart cities – Specification for establishing and implementing a security-minded approach	https://shop.bsigroup.com/forms/PASs/PAS-185/
PAS 186	PAS 186 - Smart cities – Supplying data products and services for smart communities – Code of practice	https://shop.bsigroup.com/PAS186
BIM - ISO 19650-5		https://www.bsigroup.com/en-GB/iso-19650-BIM/