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Is this a smart city? Narratives of city smartness and their critical assessment

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Introduction: the rise of a new buzz word

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- Term gains prominence in the years shortly before 2010

- Initially strongly pushed by industries: IBM, Cisco, Siemens, Schneider Electrics, Accenture, Oracle, Microsoft, Ericsson…

- Taken up by politics:
  - EU Com launches The European Innovation Partnership on Smart Cities and Communities (2012);
  - "Strategic Implementation plan" (2013)
  - Since 2011 several FP7/Horizon2020 calls for Smart Cities
  - Cities announcing themselves as Smart Cities: Amsterdam, Stockholm, Copenhagen, Malmø, Berlin…

But what is it all about? Perception of fuzziness, inconsistent use

→ Study examined the conceptual elements of Smart Cities

Methodology

1st step: media and document analysis:

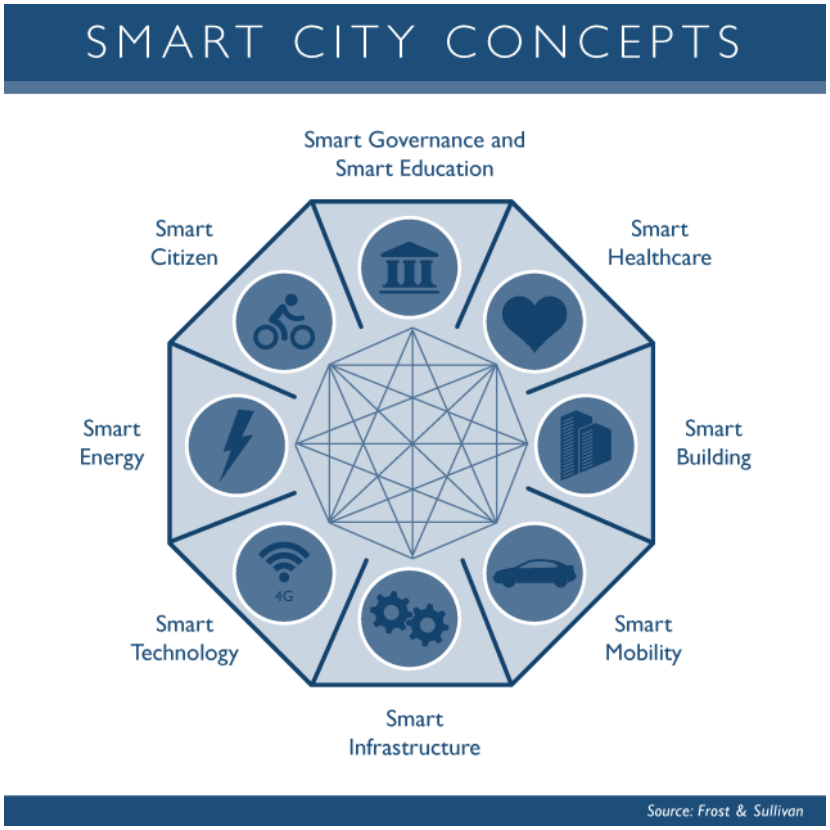
- Mainly sources in English and German language
- Aim: identify recurring issues, objectives, means, problems

2nd step: 7 semi-structured interviews

- Representatives from the German Association of Cities and Municipalities (No 1), the Climate Alliance (No 2), the cities of Mannheim (No 3), Amsterdam (No 4), and Stockholm (No 5), as well as two international consultancies (No 6, No 7).
- Clearly a thin sample → data to be interpreted with caution
- Findings from step 1 were confronted with stakeholder conceptualizations to consolidate findings

Coding and analysis with MaxQDA software

No clear normative orientation



"This is not a vision of "liveable city" or something like that. It is a tool that allows me to achieve different things. (…) With the Smart City approach I do not necessarily get to a sustainable city, or an eco-city. Therefore, for me it is ***neutral."*** *(No 2)*

"*An Intelligent City for us can take* ***many different forms****, and depending on what you are trying to achieve you can call it an Ecocity or a Knowledge City." (No 6)*

Smart City as a flexible “process strategy”?

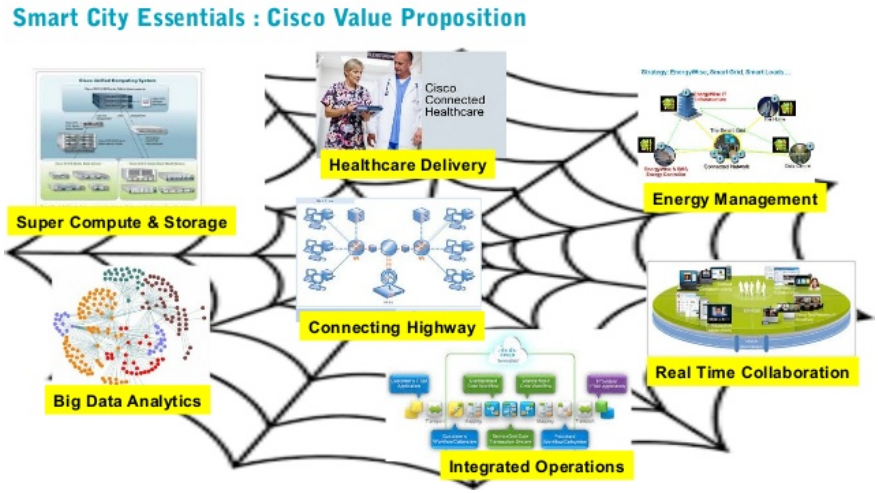
The novelty of the Smart Cities concept seems to lie rather in its *conceptualizations of change processes.*

Three process-related perspectives:

- *instrumental perspective:* ICT for improved efficiency and optimisation
- *administrative perspective*: transversal, issue-centred policy making
- *governance-perspective:* the learning, interactive and creative city

The instrumental perspective

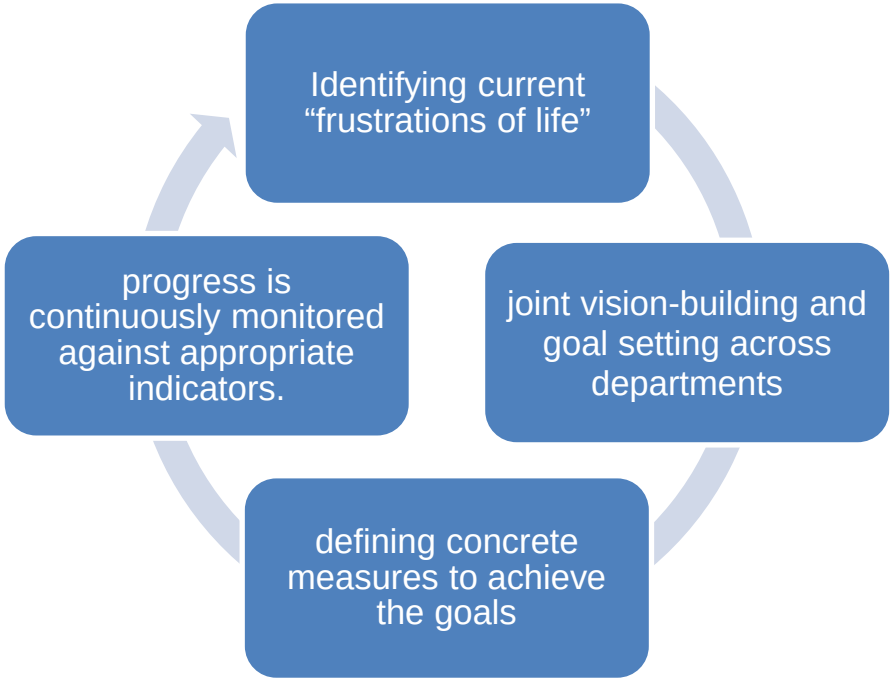
- ICT are expected to enable cities to better collect, process, analyse and visualize information on public goods and services
- large, connected datasets, “Big Data”
- aim: more efficient organization, “optimization”



“Instrumentation enables cities to gather more high-quality data in a more timely fashion than ever before. Interconnection creates ***links among data, systems and people in ways not previously possible****. Intelligence, in the form of new kinds of computing models and new algorithms, enables cities to generate* ***predictive insights for informed decision making actions*** *across the city’s core systems.” (IBM 2010: p.1)*

The administrative perspective

- Smart Cities overcome “silo structures“ (No 1)
- “issue-centred” policy making across departments



“I think what is actually much more helpful is to start with […] what is life like now? […] And to look at what aspects of life suck. And if you were to make it better, ***what would make it a more attractive place to live****? […]* ***The frustrations of life drive the outcomes.”*** *(No 6)*

“Let’s suppose I have made the decision to strive for a certain kind of […] city, for example one that puts emphasis on community cohesion […]: Then the question is how can I ***organize the different tasks*** *such as education, […] multigenerational houses […], how shall I* ***conceive the objectives to make them practicable*** *and to* ***monitor*** *their implementation on a given timeline.” (No 1)*

The governance perspective

- Smart Cities as “truly citizen-centric” approach (Nam & Pardo, 2011, p. 189)
- citizens no longer seen as passive “target groups” who need to „get convinced” of policy measures, but as creative change agents
- inclusive and multi-stakeholder governance forms
- SC as a place of social learning and experimentation (living labs)

https://rwconnect.esomar.org/wp-content/uploads/2012/01/HiRes.gif

Challenging perspective 1

- Risk of transparent citizens:
  - “no longer possible to be off the radar” (Steiner & Veel, 2014, p. 298): risk of surveillance and control,
  - risk of private data misuse

- Tendency to neglect offline, low-tech and non-commercial innovations: repair cafes, community gardens, …

- Are increasing efficiency and optimization at all cost desirable?
  - efficiency forces may have negative social impacts, e.g. in the health sector
  - Do we want to maintain some sort of unpredictability and “creative chaos”?

Challenging perspective 3

- Smart City paradox:

  Bottom-up innovation and participation postulated as core idea…

  …while Smart Cities are currently mainly promoted by economic and political elites…

  …and many community grassroots initiatives (Seyfang & Smith, 2007; Seyfang, Park & Smith, 2013) evolve without those elites.

- Harmonic, uncontroversial picture of urban adaptation processes:

  transformation processes are essentially political processes: veto powers, nested interests and power plays (Meadowcroft, 2009; Shove & Walker, 2007).

Conclusions

- No clear content orientation
- Novelty of Smart Cities may lay in the combination of different process-related perspectives
- More empirical data needed to put findings on more solid ground

Thanks!

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