



Aalto University
School of Business

Open data in city service development and predictive analytics

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Bio excerpts

Professor of information systems at Aalto University School of Business

https://people.aalto.fi/index.html#matti_rossi

Winner of the Millennium Distinction Award 2013 for Open Source and Data Research

One year visits to Georgia State Univ., RSM Erasmus and Claremont Graduate College

Minority owner and former board member of MetaCase Consulting (www.metacase.com)



Openness and freedom by Anders Chydenius

Anders Chydenius, a Finnish enlightenment thinker and politician (1729-1803) was a defender of open economy and open governance in the 18th century.

He played a crucial role in creating the world's first Freedom of Information Act in the Diet of Sweden-Finland in 1766.

According to Chydenius, economics exists for the benefit of "the little people" - and not the other way round.



Source: http://www.chydenius.net/historia/lyhyesti_vuodet/e_lyhyesti.asp

Open Data

Some commonly applied definitions

- **Wikipd:** *“The idea that certain data should be freely available to everyone to use and republish as they wish, without restrictions from copyright, patents or other mechanisms of control”*
- **Open Knowledge Foundation:** *“A piece of content or data is open if anyone is free to use, reuse, and redistribute it — subject only, at most, to the requirement to attribute and/or share-alike.”*



Openness

1. Technical openness

- Interfaces and standards

2. Legal openness

- Contracts, copyright, privacy, data protection, national security etc

3. Commercial openness

- Price of access and service design

4. Societal openness

- Transparency of society

› (Lindman, Rossi, Tuunainen. 2013. Open data research agenda, HICSS,2013)



Open Data as a tool for transparency: Helsinki Region Infoshare

Helsinki and the surrounding area are pioneers in opening data for reuse

Helsinki has a public API for city council decision making process, called Open Ahjo (Forge)

A hackathon held here produced an open data application called BlindSquare that is location based and helps blind people find their way in the city

<http://blindsquare.com>



Citizen participation

Low barrier of entry two-way communication and information sharing platforms are needed to help

- Citizens to have their voice heard
- Representatives to listen to issues
- Ad-hoc groups to organize

Example: D-CENT project

- digital tools for social movements, civic innovators and civil society groups
- See more: <https://forumvirium.fi/en/project-areas/new-forms-of-media/d-cent>

Open Information Production brings Transparency and Interoperability to Software Systems and Healthcare

Prevents Vendor-lock-in

- Open standards and Application Interfaces
- Open collaboration between stakeholders and use cases

Improves Transparency

- To own healthcare service production
- To own information management and software systems

Supports Quality Control

- Own internal activity (patient services or medical device maintenance)
- Service providers (e.g. software or logistics)
- External Benchmarking (e.g. international productivity benchmarking)

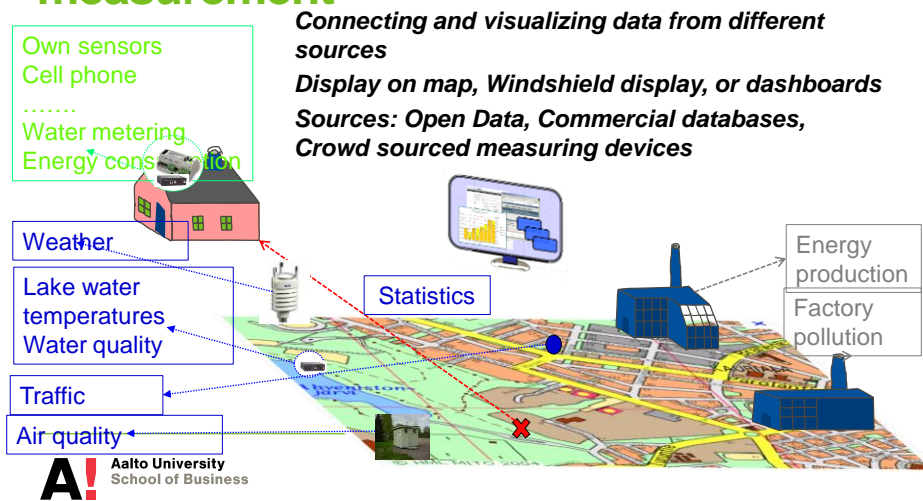
Openness of healthcare information systems

Radical solutions proposed

- Use of existing open source systems, creation on new systems (hackatons)
- User ownership of data (e.g. MyData)
- Self-healthcare
- Virtual healthcare
- “Mobile” healthcare
- Robots in healthcare



What kind of networks are emerging: crowdsourced environmental impact measurement

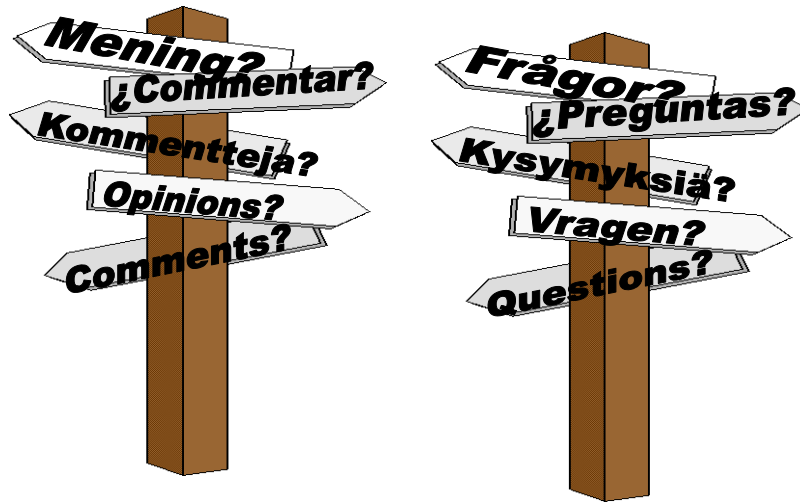


Source: Synchron Tech Oy white paper



Summary

Open data gaining momentum, but little commercial activity
Cities can have radical new services based on open data
Hybrids of open and closed data are probably where most of the action will be



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