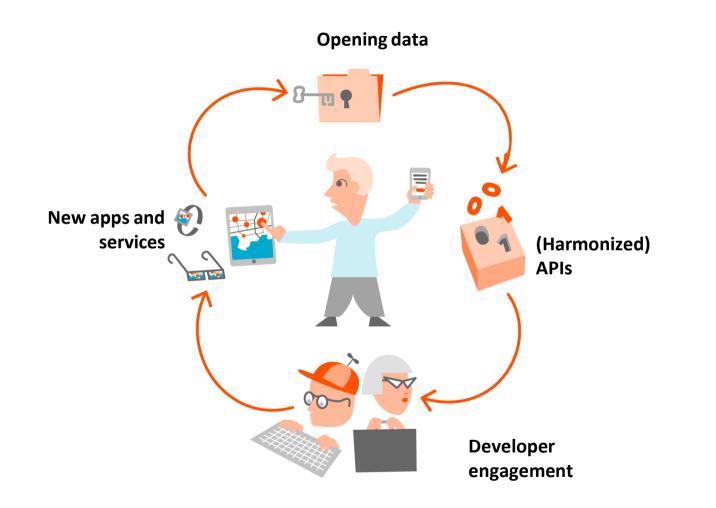
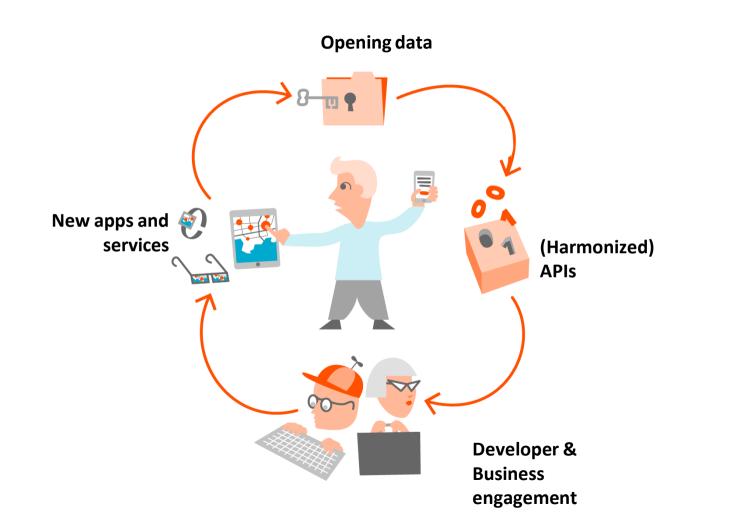
# Fair and open smart cities: Helsinki advancing with Mydata

Hanna Niemi-Hugaerts Director, IoT @CitySDK\_Hanna

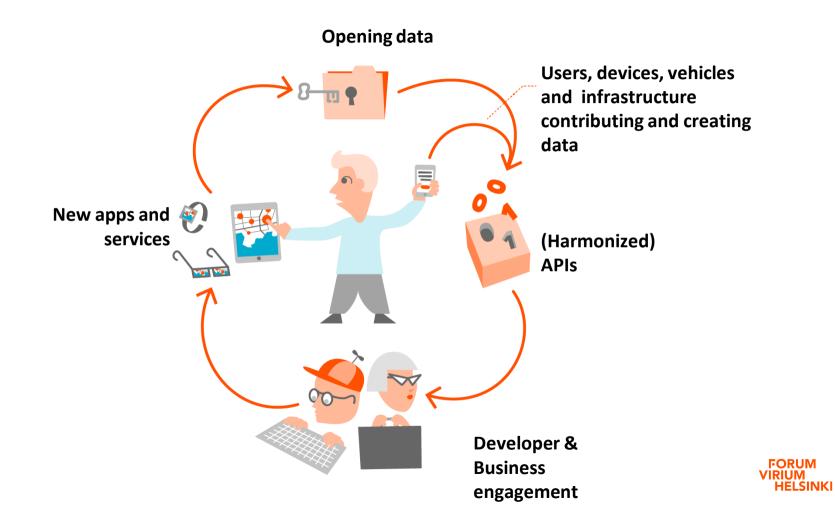
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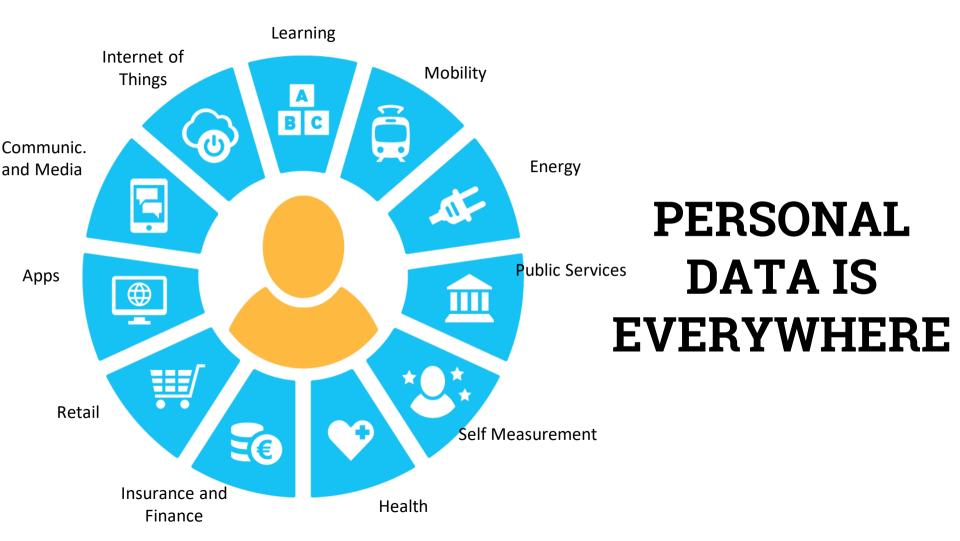


### **Personal Data**

'personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;

(Source: GDPR Article 4, Definitions)





### Rethinking Personal Data: A New Lens for Strengthening Trust

Prepared in collaboration with A.T. Kearney

Personal data is becoming a new economic "**asset class**", a valuable resource for the 21st century that will touch all aspects of society.

World Economic Forum

# Improving lives and connecting people vs. Data breaches, leaks and misuse

# **TRUST IS BROKEN**

# ...and even more...

# Personal data we could use in our everyday lives is NOT available.

# We are not empowered.

# We need to put the human in control of the data about them





The core idea is that individuals should be in control of their own data.

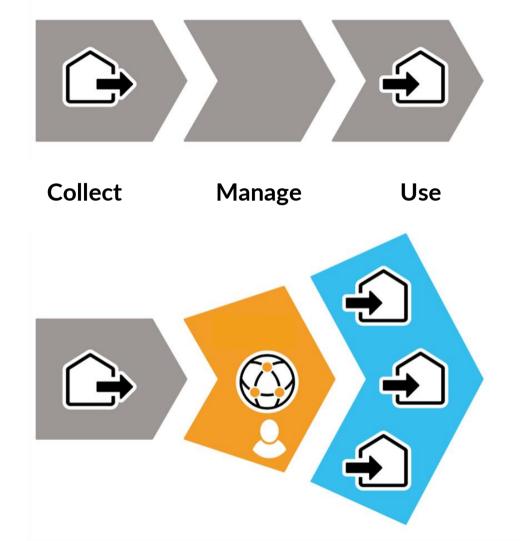
The MyData approach strengthens digital human rights while opening new opportunities for innovative services based on personal data and built on mutual trust.

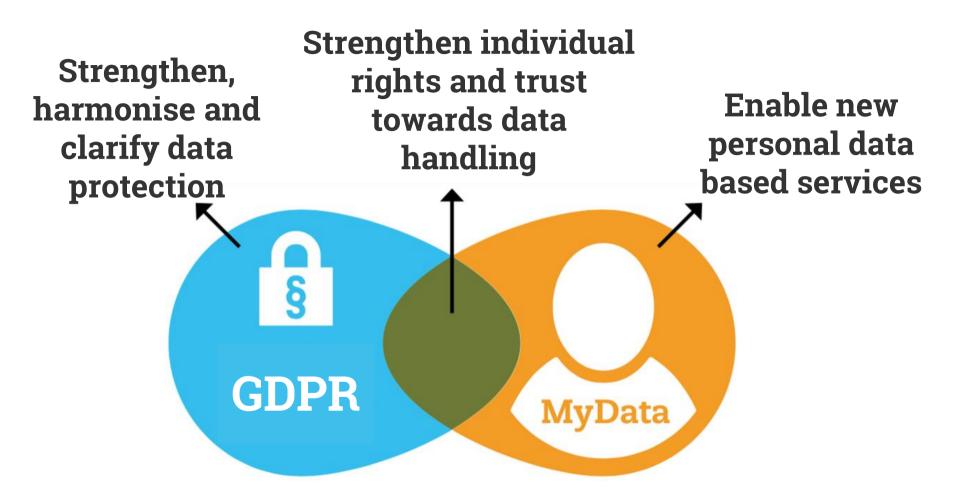
### Currently:

- Organizations manage the whole value chain
- Integrating data from multiple sources is hard

### Future:

- Specialized services for different parts of the value chain
- Need mechanisms for permissions (consent etc.)





Partly overlapping aims of the GDPR and MyData -approach

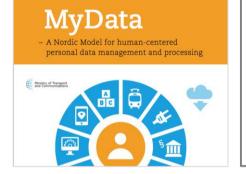
# mydata.org/declaration For a just, sustainable, and prosperous digital society

# Formal → actionable rights Data protection → data empowerment

3 Closed  $\rightarrow$  open ecosystems

# https://mydata.org/declaration

**BUSINESS** LEGAL TECH SOCIETY



White papers

2014 (FI), 2015 (EN) and

2018 (FI)

"People's right to decide about and monitor their personal information will be enhanced"

> "start MyData based pilot projects"



International conferences 2016, 2017 & 2018

mydata2018.org

**MyData Alliance** 40+ organizations Facilitate pilots Create interoperability



About

MyObta is a human centered approach in personal data management that combines industry need to data with digital human rights. The core idea is to be individuals be in control of therm of data. This simplifies data flow and opens new sopartimities for businesses to develop innovative personal data based services while preserving privacy.



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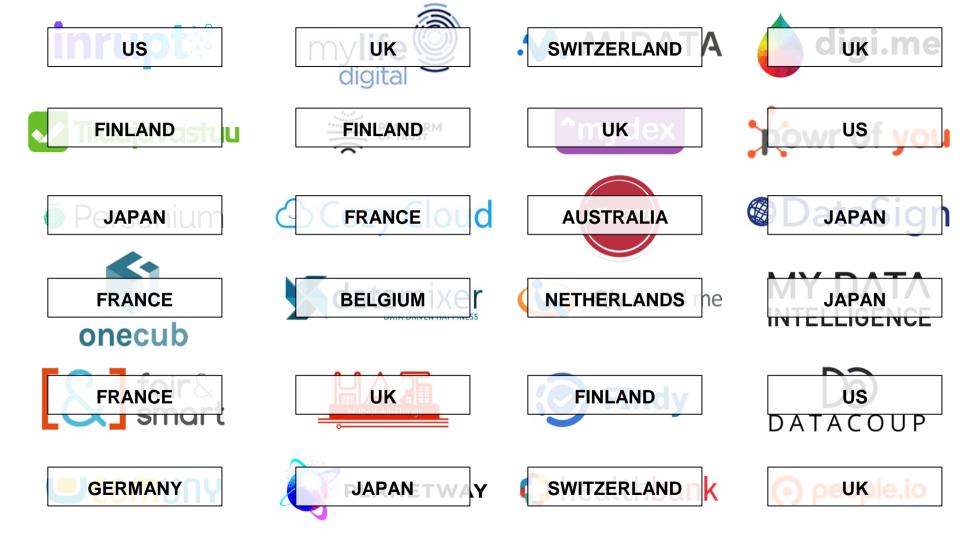
**Specification + Code** Architecture documentation & Reference implementation

MyData

Aug 29-31 **2018** 

From vision to action – future is now





# **Case Helsinki**



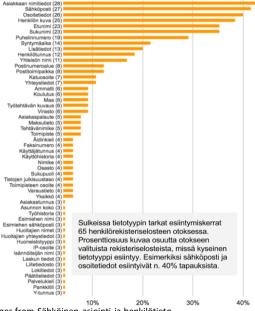
# Helsinki committed to furthering mydata principles

 Helsinki has already taken first steps to this model by mapping the sources of the city's personal data reserves and drafting concepts for trying out MyData solutions in the future.

https://www.hel.fi/uutiset/en/kaupunginka nslia/helsinki-commits-to-furtheringmydata-principles

- Report states that at least 209 out of almost 800 Helsinki's IT systems contain personal data
- Types of personal data vary -> but email or address were included in 40% of the cases

### Yleisimmät tietotyypit kaupungin henkilörekisteriselosteissa



Images from Sähköinen asiointi ja henkilötieto

### Selvitys- ja kokeiluprojekti MyDatan hyödyntämisestä kaupungin palvelujen kehittämisessä

Antti Poikola, Emilia Hjelm, Daniel Schildt ja

Open Knowledge Finland ry.

Funded by Helsingin innovaatiorahasto.

https://docs.google.com/document/d/1nmg5kSZuZgOk9E6WOkWCvHX

0Xyfkh\_AYEAwt6gWAZCQ/edit



Mydata supporting our carbon neutrality targets



### **Smart homes – more data**

Apartment 1 Sun 14:50 Mon Tue Wed Thu Fri Sat Sun - 6 000 Electric power use -4 000 -2000 Washing machine 54 W -4 W Dishwasher -1 000 320 W Kitchen stove **N**949 109 W 500 Fridge/Freezer Sockets: Bd1, Bd2 45 W 250 Sockets: Living room 71 W 14 W Sockets: Kitchen 21 W Lights: Living r., Bd1 0 W 639 W Total -15 Water use -10 Cold water 3 Litres Litres 3 Litres Total Recycling and waste Organic Mixed Cardboard Paper

Dataa Kalasataman asukkaiden sähkön- ja vedenkäytöstä sekä jätteiden kierrätyksestä (lähde: <u>http://bit.ly/2buPUnP</u> – CC BY 2.0)





# Climate Friendly Housing Companies

URBAN LAB 16.5.2019

7/23/201 9

Timo Ruohomäki, FVH





Uudenmaan liitto Nylands förbund

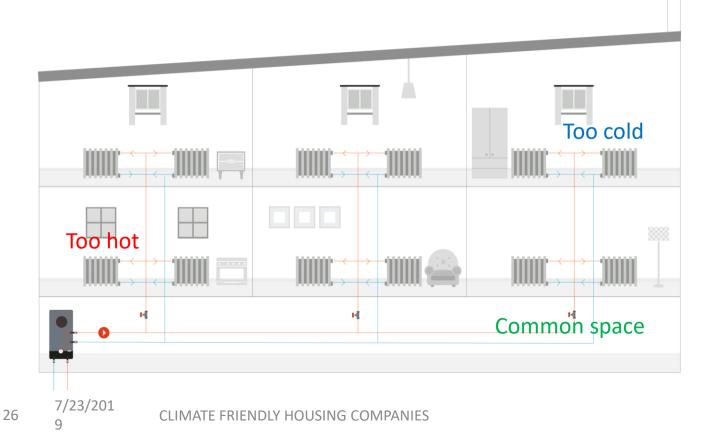


# Increasing energy efficiency in private housing companies with data-driven services

- Project partners:
  - City of Helsinki (4 houses)
  - City of Vantaa (2 houses)
  - Green Building Council Finland
  - HSY (online training)
  - Forum Virium Helsinki (data collection and platform)
- Project outputs: Data Portal, Digital Services Guide, Online Training Platform

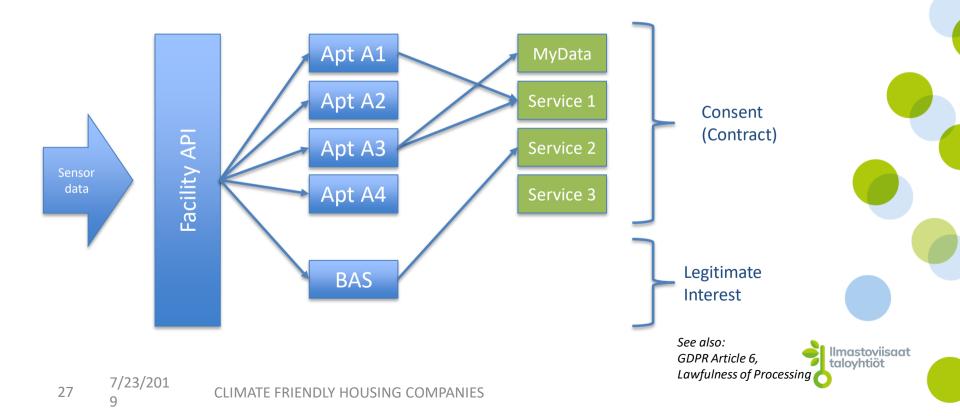


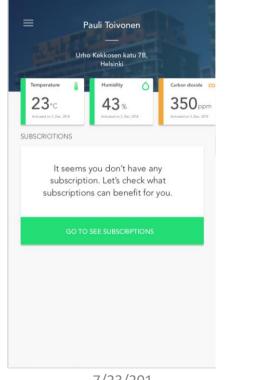
### Sensor data (T,RH,CO<sub>2</sub>)



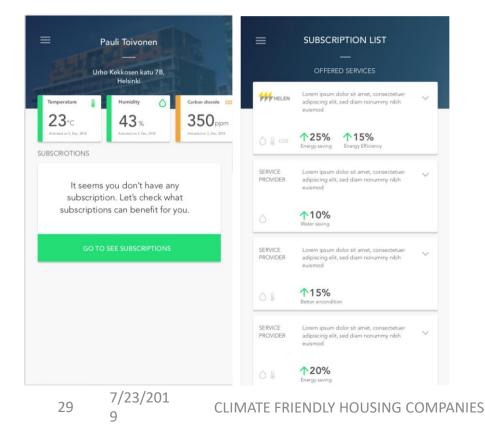


### Data Platform and GDPR

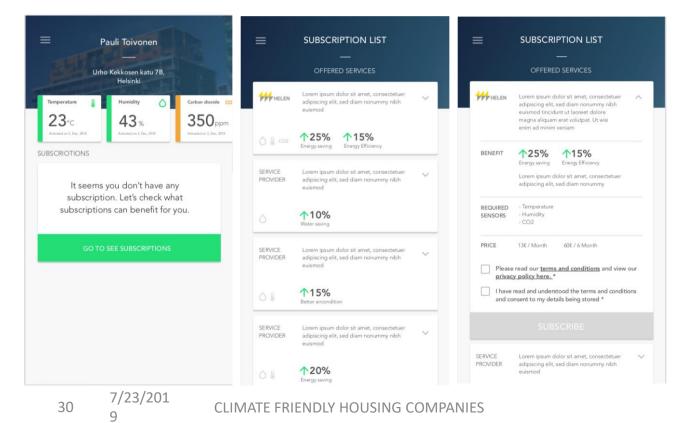




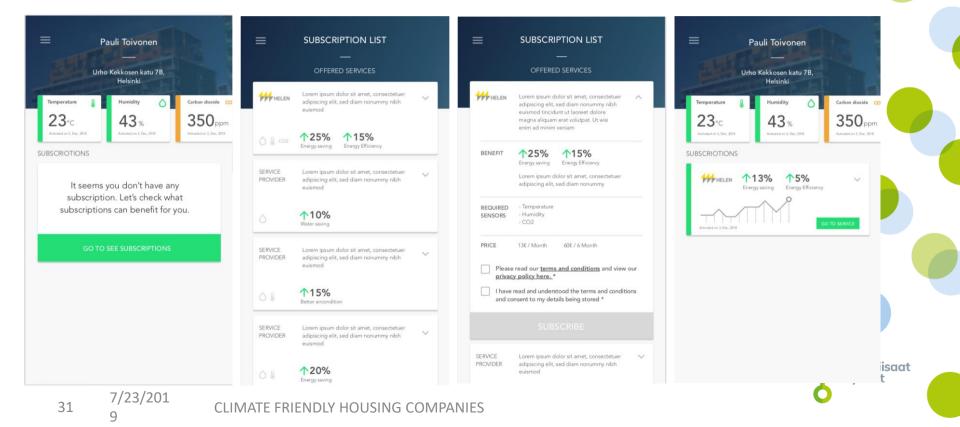
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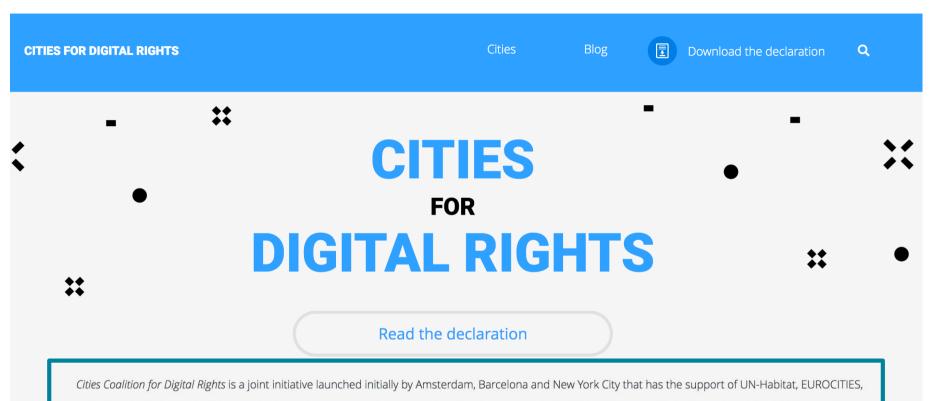












CGLU and other participating cities to protect, promote and monitor residents' and visitors' digital rights. City governments have already been taking actions.

### **Collaboration on Al Ethics**

Medium Cities

Become a member Sign in

Get started

## The Ethics of Using Artificial Intelligence in city services



Smart London Follow

There is great potential for the use of Artificial intelligence (AI) by cities. With the help of AI, we can provide more responsive services to citizens. However, AI poses ethical issues that need special attention, as Chief Digital Officers of London and *Helsinki here we explain why and suggest an approach for city government.* 







### How can we help you to create future city services in Helsinki? How can we shape the future of cities together?

Hanna.niemi-hugaerts@forumvirium.fi @CitySDK\_Hanna





vimeo



Linked in

forumvirium.fi