HOUSING EUROPE OBSERVATORY

Social Housing and Digitization – What are the Challenges in Europe?

EBZ Summer School 2019

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About us in brief

The **European federation of cooperative, public and social housing**

Network of national and regional housing provider federations, **45 members** in **24 countries**

About **43 thousand housing organisations** on the ground

Almost **25 million homes**

Roughly **200 hundred thousand** homes newly provided per year

'We have a vision of a Europe which provides access to decent and affordable housing for all in communities which are socially, economically and environmentally sustainable and where all are enabled to reach their full potential.'

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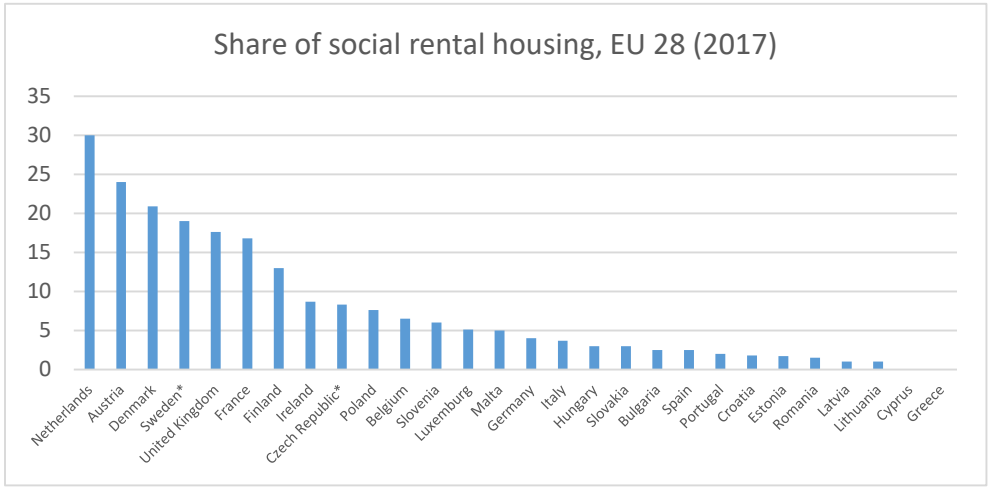
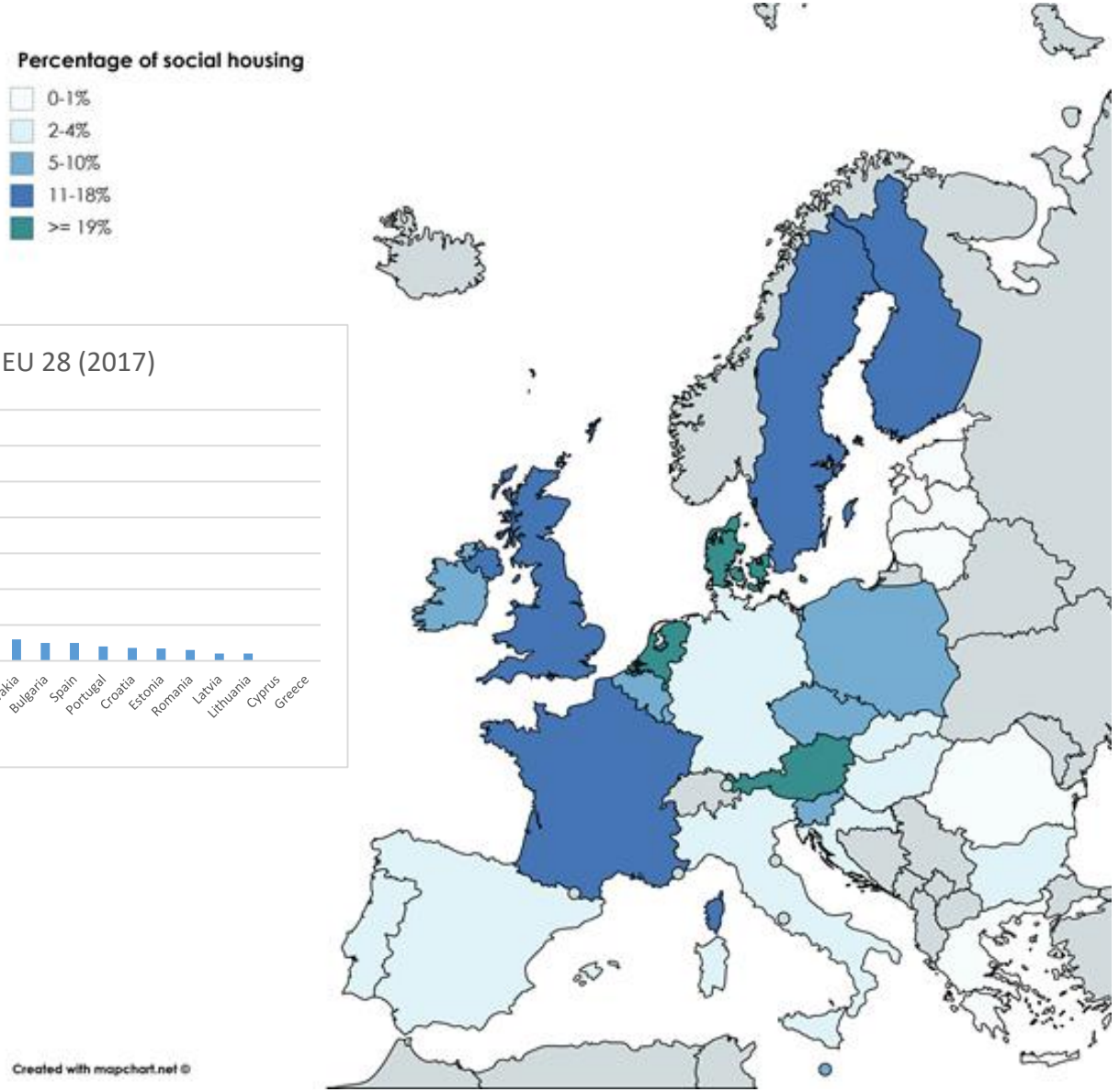
Social housing in Europe: size of the sector





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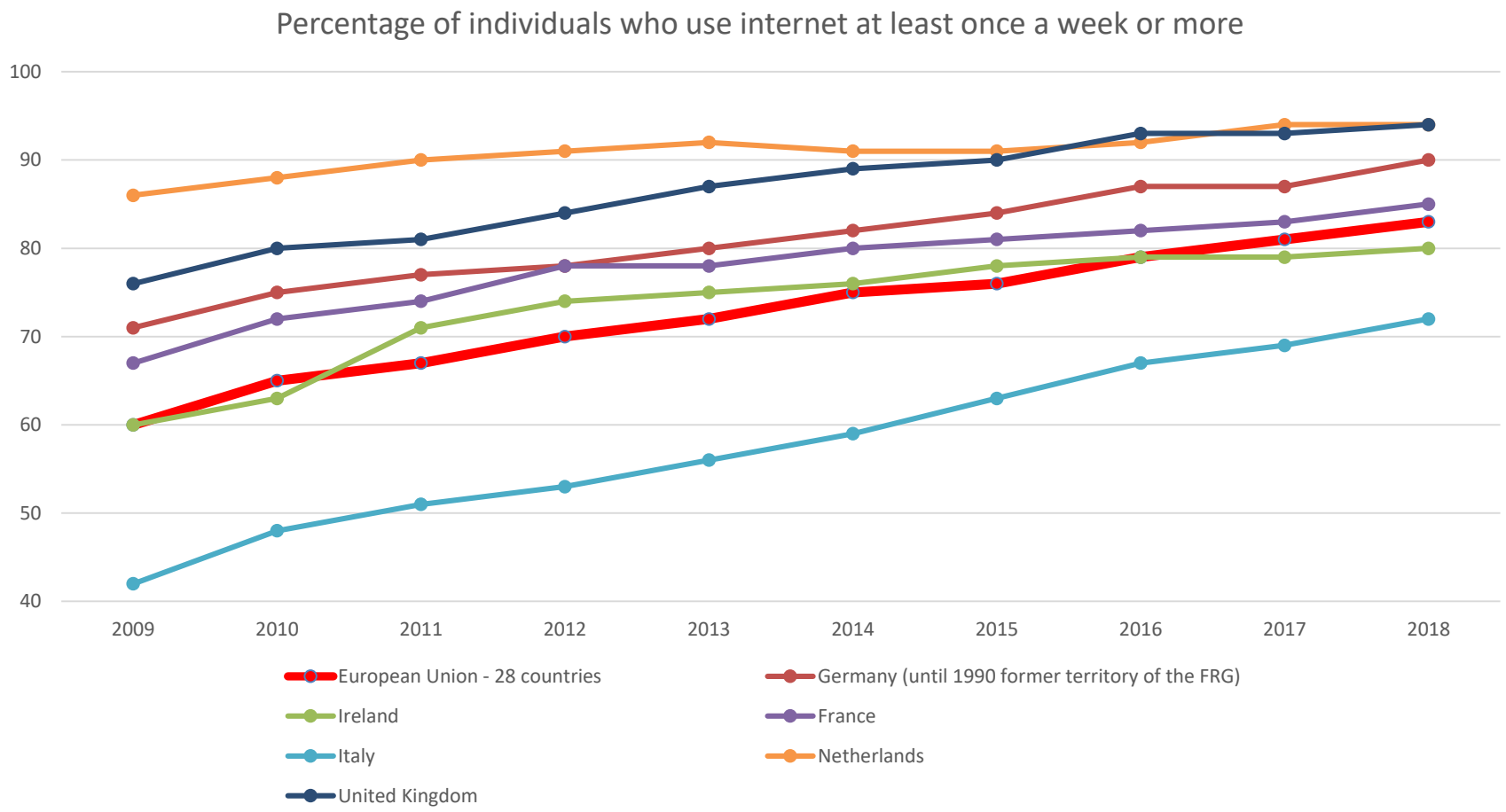
More than 80% of Europeans are connected



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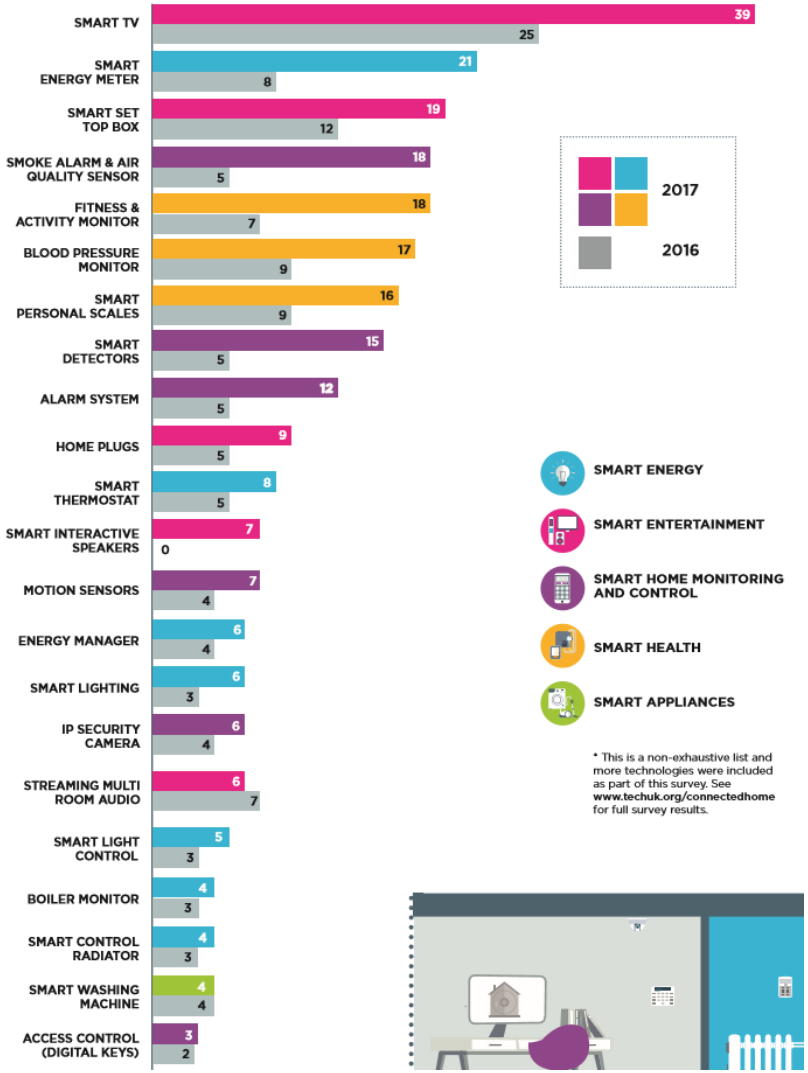
Smart home technologies are spreading



www.techuk.org/connected-home

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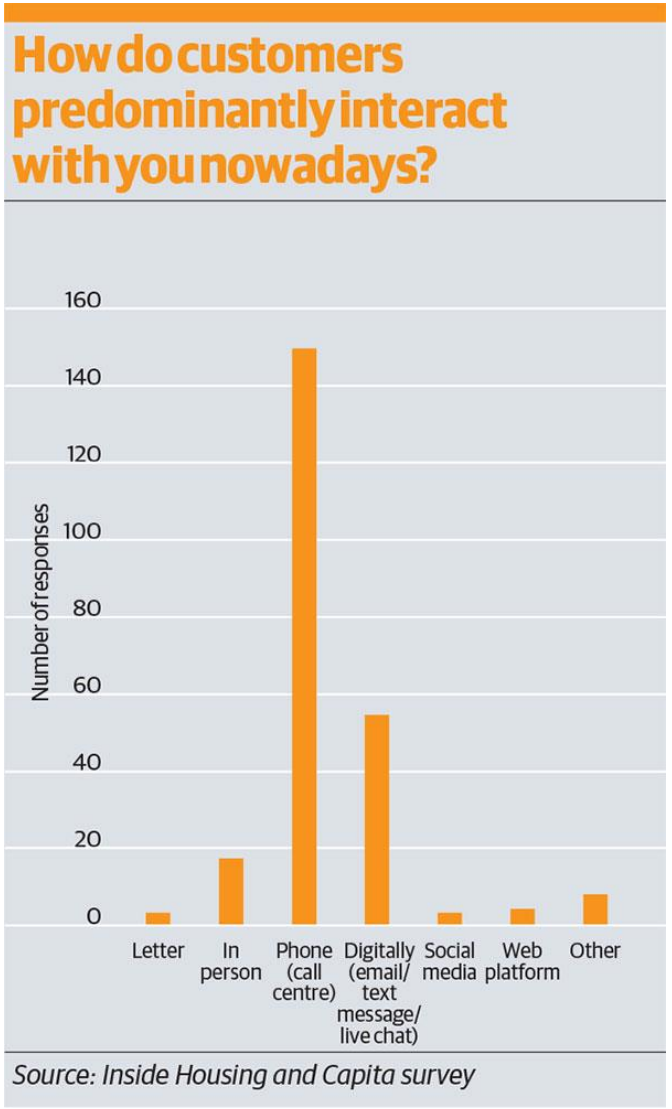
Is it also the case for social housing tenants?

- Little evidence
- Factors of (potential) digital divide: age, income, vulnerable groups…
- Increasing interest from HE members



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Perceptions of digitalization within the sector

- **43% believe their organisation is making efforts towards digital inclusion** and linking up with other supports and services (transport, healthcare...), 20% this is not happening, 37% happening to some extent

- **61% can picture their organisation incorporating digital platforms** such as smart phone apps in order to more effectively engage with your tenants, while 17% cannot – only 9% stated they're already doing this!

- Asked to identify the main benefit of smart homes, **47% highlighted comfort/ease of use for residents**, and 32% energy monitoring and reduction

- **51% believe BIM is the most interesting** potential tool that could be used to keep housing production affordable

- **75% think their city is not yet 'smart'** and 51% find that digitalisation of public facilities and services is only to some extent a priority for their government/local authorities

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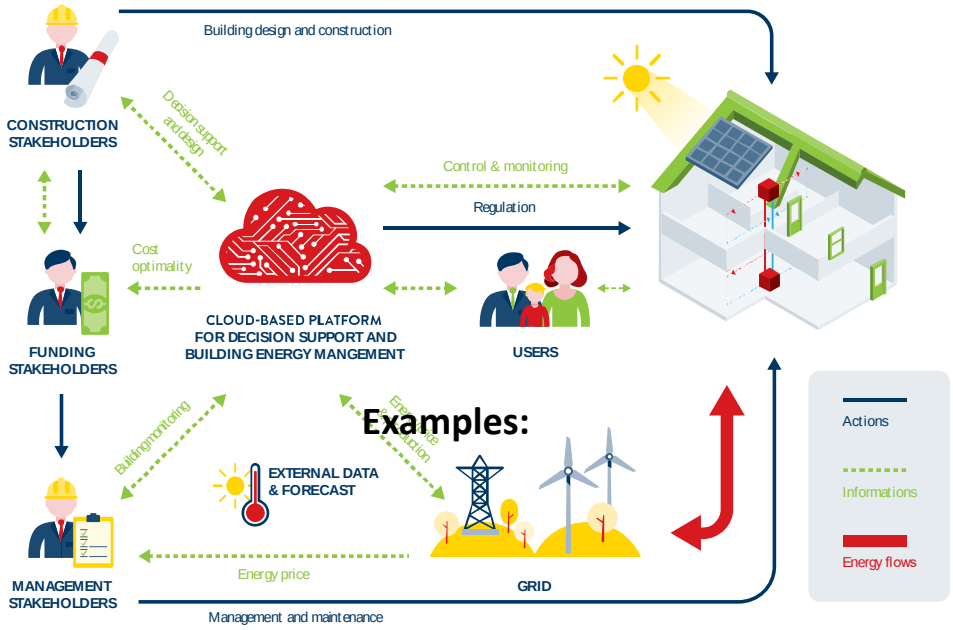
Disruptive technologies

- BIM (building information modelling)
- Buliding Energy Management Systems

+ and -? High upfront costs of investment in technology, high potential savings on long term. Must build trust and scale. Supply chain and industry often not (yet) ready. Digitalisation and data protection: big challenge across sectors



Summarising BIM pros and cons

=> Opportunities and limitations of digitalization in the planning and building process

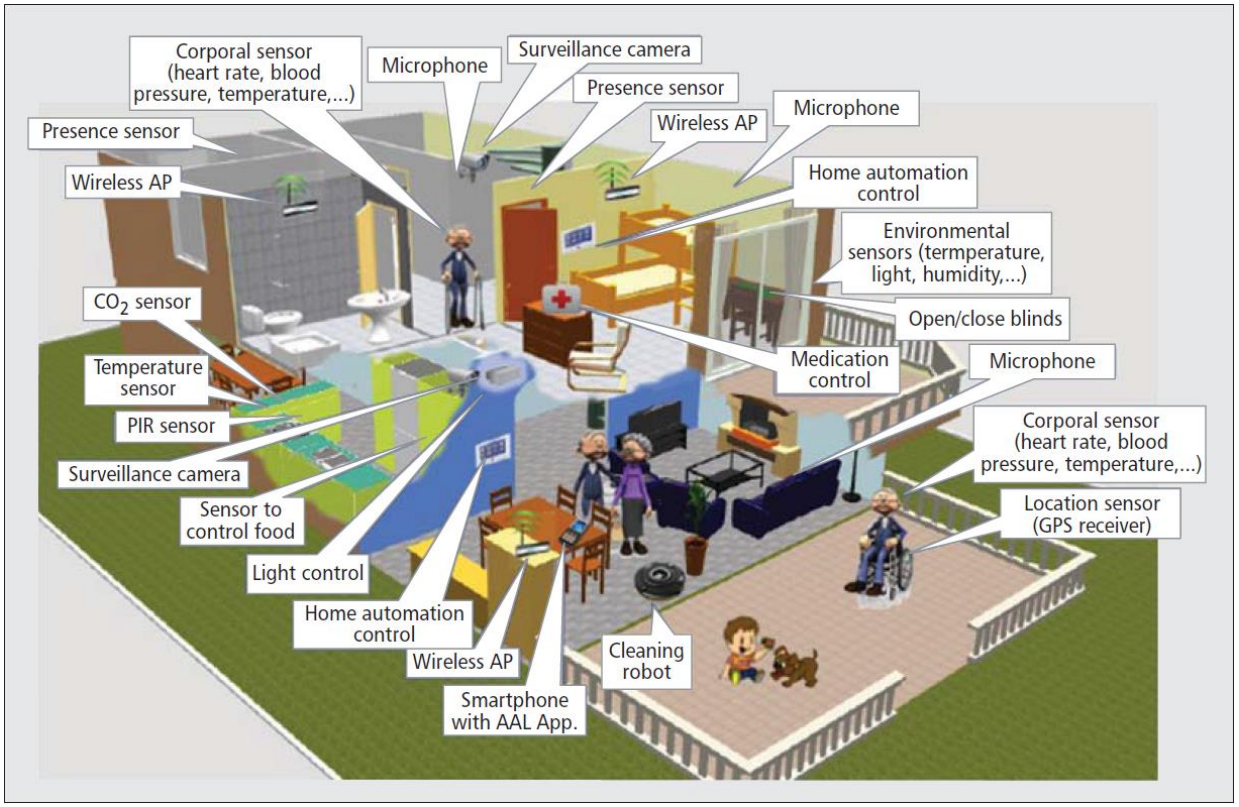
	Chances	Challenges
Planning	communication and co-operation (via integrated) building model	Setting of standardised rules
	documentation and data chain	extra planning costs (data collection, analysis, documentation)
	visualisation and simulation	early stakeholder involvement (e.g. integration of facility management in planning phase)
	virtual and augmented reality technologies	interoperability of software
		complex contractual relations and liabilities
Building	improved site controlling	data management
	communication via model	missing standardisation and interfaces
	automated settlement	=> effects: better implementation in large business with negative side effects
	smart site (automated control of construction phase)	
	efficient site logistics	
Operation	Data chain and model	costs of building information modelling
	integration in planning/building phase	new definition of business model (relation investor - provider - operator - facility managent)
	predictive maintenance	
	re-use of building data	

- There are chances but the effects on costs are uncertain

Studie: Potenziale der Digitalisierung im Bauwesen; BMVIT 2018
https://nachhaltigwirtschaften.at/resources/nw_pdf/schriftenreihe/201802_Studie-Potenziale-der-Digitalisierung.pdf

From ‘smart’ to ‘affective homes’? The potential of ICTs

- So far experience with energy management and ambient-assisted living tech
- + and -? HUGE interest from tech industry, and push from EU. ICTs can help but must put people at the centre! Having homes and neighbourhoods with adequate conditions must be the starting point



Concerns

- Digitalisation should be a people-driven and not technology driven agenda
- Some people will always be left behind (but is it true?)
- Sensitivity of use/storage of personal data
- Perceived first of all as a cost - not considered feasible in a financially tight context

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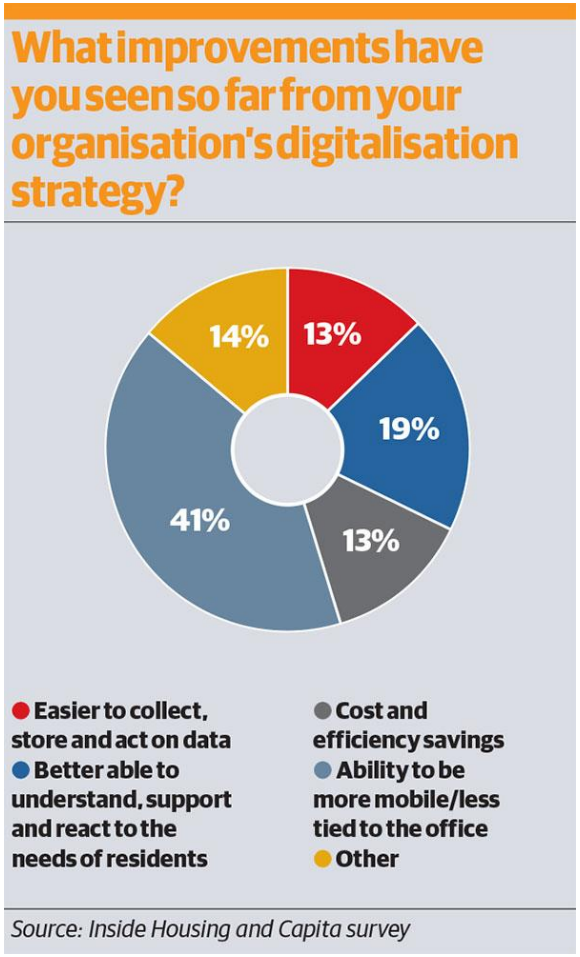
Benefits

Huge potential benefits, both in terms of the relation with end-users and in terms of internal organisation and efficiency:

- better interaction with residents
- better management of data can lead to savings
- better and more customized services (e-health, management energy consumption, …)
- better follow up and coordination with contractors
- opportunities for online processes and remote workforce



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Suggestions?

- start from users and their needs rather than focusing on technology
- involve staff, tenants and stakeholders to design better and more useful services
- adopt a flexible and step by step strategy
- digitalization as a tool to add value to the business
- think in terms of system/interconnection

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Smart cities: interesting lesson from Helsinki

SMART KALASATAMA

Helsinki Smart City Innovation District

Brownfield district

Construction
2011-2035

Target: 25 000 people,
10 000 jobs

Now ~3500 people

FORUM VIRIUM HELSINKI

…Thanks for your attention!

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