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About SPIRE

- Design by users
- Design for users
- Design with users

PARTICIPATORY INNOVATION

- Sønderborg Participatory Innovation Research Centre
- Supported by the strategic research fund
- Cross-disciplinary research
What is Welfare Technology?

- technological support and reinforcement of security, safety, daily living and mobility
- public or private social welfare services and products
- targeted at older people, people with chronic illnesses and people with disabilities
- focused on ensuring a better use of resources in relation to welfare benefits and/or to provide a better quality of those services for their users.
- user-centered technologies
OVERVIEW

Some examples

Telemedicine

Automated care

Training motoric skills
Objective: enhance the quality of life of older people and strengthen the industrial base in Europe through the use of ICT

Motivation: the demographic change and ageing in Europe.

http://www.aal-europe.eu/.
Why is it urgent?

OVERVIEW

WELFARE TECHNOLOGY

Better utilization of resources

- saving labor
- better work environment
- better recruitment

Better quality

- from cold to warm hands
- more care and attention for the patients by existing resources

- director of own life
- self reliance and greater life quality
- improvement of quality

Modified from ÆldreForum (Oct 2011): Velfærdesteknologi nye hjælpmidler i ældreplejen.
DENMARK

• Cognitive support
• Information systems - provide the citizen and the caretaker with a feeling of security and with important information
• Robots – cleaning or taking care without being a nuisance
• Culture and behavior - the user’s viewpoint towards technology
Social sector

Demystifying technology needed for staff and citizens – and focus on ethics – and then improve use of technology significantly.

Health sector

Less polarization and more commitment needed among the different role profiles within the sector.

http://velfaerdsteknologi.nu/media/153536/Kompetenceunders%C3%B8gelser%20for%20velf%C3%A6rdsteknologier%20og%20Region%20Syddanmark.pdf (Accenture)
Danmarks vækstråd recommendations

• National knowledge bank
• Innovation driven by public demand
• Matchmaking between public and private actors
• Service design for optimizing procedures
• Better possibilities for innovation in the public sector
Region Nordjylland
- Lægemiddeludvikling og medicoteknik
- Intelligente hjælpemidler
- Automatisering af støttefunktioner vha. IT

Region Midtjylland
- IT i sundheds- og plejesektoren
- (Pervasive health care)

Region Syddanmark
- Intelligente hjælpemidler
- Telemedicinsk behandling
- Automatisering
- IT-systemer

Region Hovedstaden
- Lægemiddeludvikling
- Medicoteknik
- Diagnostik
- Klinisk forskning

Region Sjælland

Source: http://www.velfaerdsteknologi.nu/nyheder/analyser
The region - strategy

Den syddanske satsning på Velfærdsteknologi og -service, Dorthe Kusk, Afdelingschef Region Syddanmark
Regional initiatives

- Telemedicinsk behandling af KOL-patienter
- Virtuel videns- og projektplatform
- Robotteknologisk genoptræning
- Telemedicinsk sårbehandling
- Human Care Lifter
- MedicRobotics
- Innovationsnetværket Robocluster
- Telehjertesvigt
- Servicedesign på OUH
- Welfare Tech Region
- UNIK
Den syddanske satsning på Velfærdssteknologi og -service, Dorthe Kusk, Afdelingschef Region Syddanmark
The Players

Public sector

Universities

Private companies

Den syddanske satsning på Velfærdsteknologi og -service, Dorthe Kusk, Afdelingschef Region Syddanmark
Initiatives

Welfare Tech Region
UNIK
Patients@home

OPI – public-private innovation
EU public procurement of innovation policy development

Pre-2000: Efficiency, competition, reduce public spending, common market
2000: Lisbon European Council vision → the most advanced knowledge based economy.
2002: → R&D 3% of EU GDP, “impulse needed”
2003: public sector as “launching customer”
2005: public authorities “big market players”
2006: “public procurement to drive demand for innovative goods” to create lead markets; pre-commercial procurement a missing link
2007: European Council published a guide on dealing with innovative solutions in public procurement
2009: The EU Parliament noted “that strengthening pre-commercial procurement remains one way among many for Member States to raise their game in innovation and research…”

Current projects: PreCo, P3ITS, ProcSouth…

"Public procurement" occurs fourteen times in the EC communication Europe 2020 Flagship Initiative Innovation Union (2010)
(Old?) Perceptions of the procurement rules

- “tension between the EU procurement rules and the need to accommodate informal co-operation in the form of user/producer interaction related to technical change” (Edquist et al, 2000, p. 308)

- Other have warned that “[t]he consequence of rigid procurement rules may be that procurement processes give rise to solutions that are price competitive, but do not spur innovation and the dynamic development for firms and society as a whole” (Nyholm et al., 2001, p. 264).

- “Hopeless”; Evolution of an informal practice; Lawsuits; Incomplete contracts, small communities; Discriminating new/ small firms?; Quality decrease when negotiation is not allowed? Too low bids (DSB First).

Conclusion: Don’t even think about trying to procure innovation! 😞
Success factors for public procurement of innovation

- Expertise on public procurement procedures and relevant law
- Technical competence for specification
- Coordinating competence for co-operative procurement
- General project management skills
- Allocation of resources for public procurers
- Political support
- Risk management
- Public support
- Supplier side understanding of public procurement procedures
- Institutional coordination
- Understanding of when there is (not) a system failure
- Method development, for instance pre-commercial procurement

(Rolfstam, M. A tentative model of a demand system for public procurement of innovation, International Conference for Procurement, August 2010 Seoul)
OPI (Public/private innovation)
An example

- To develop the hospital bed of the future
- To enter into long term innovative collaboration
- The PPI form is a learning target – the participating enterprises attain motivation and knowledge to carry through more PPI projects
- The Regional Hospital of Randers wants to purchase and use the developed products
Triplehelix of the region and
The place of the user?
PARTICIPATORY INNOVATION

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Living labs

Mayor Aase Nygaard:
We want to pull the discussion about robots and welfare technology down to earth. In the living lab product developers can meet citizens, employees, and users of welfare technology. We want to ensure that the products cover real needs as they are experienced by employees and citizen.
VIRTUELT AMBULATORIE PÅ HOSPITALER

27. maj 2011 kl. 13:52
INNOVATIONSPANELET
Brugerstatus: Bruger

Invia har været i direkte kontakt med idéindehaveren. Idéen omkring et virtuelt ambulatorium er yderst spændende, og noget der allerede arbejdes med i regionen. Sygehus Sønderjylland er ved at indgå et lignende projekt, hvor systemet Dreaming anvendes til hjemmemonitørering. Idéindehaveren har læst projektbeskrivelsen og vurderet, at denne i høj grad stemmer overens med tilænkte idé. Enkelte elementer omkring f.eks. E-læring indgår ikke i Dreaming projektbeskrivelsen, hvorför de tilsendes styregruppen til inspiration.

Invia arbejder ikke videre med idéen.
PARTICIPATORY INNOVATION

The strong hand

Is there a need?
Will patients be using it?

“Usability test” for a designed product vs anthropological methods/ involving user knowledge in a richer way
The need for user involvement

The Strong Hand Video Workshop
Field Studies

Home Care setting by Trine Heinemann


Hearing in transition

Interviews & shadowing

Video Analysis

Co-designing


CONCLUSIONS

Future Challenges

Welfare technology challenges

general ideas about innovation

f. ex how to collaborate

How can we enable the public sector to take a strong leading role?

How to take user involvement seriously?