Positive and ethical design of ICT for social inclusion of old adults

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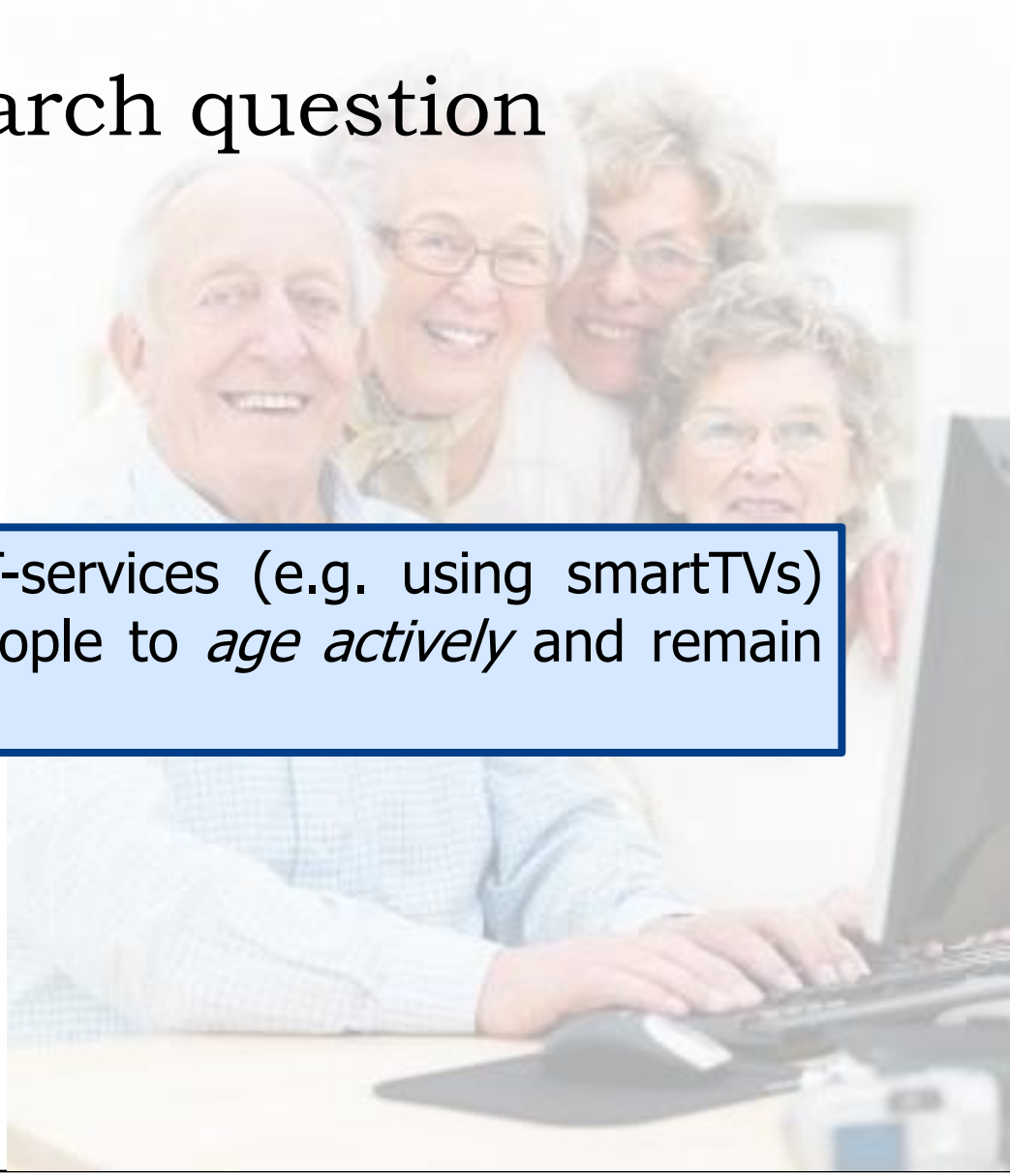
Key issue of ageing populations

- Older people in developed countries increasingly isolated and under-stimulated

→Amplification of common age-related cognitive and physical impairments

My central research question

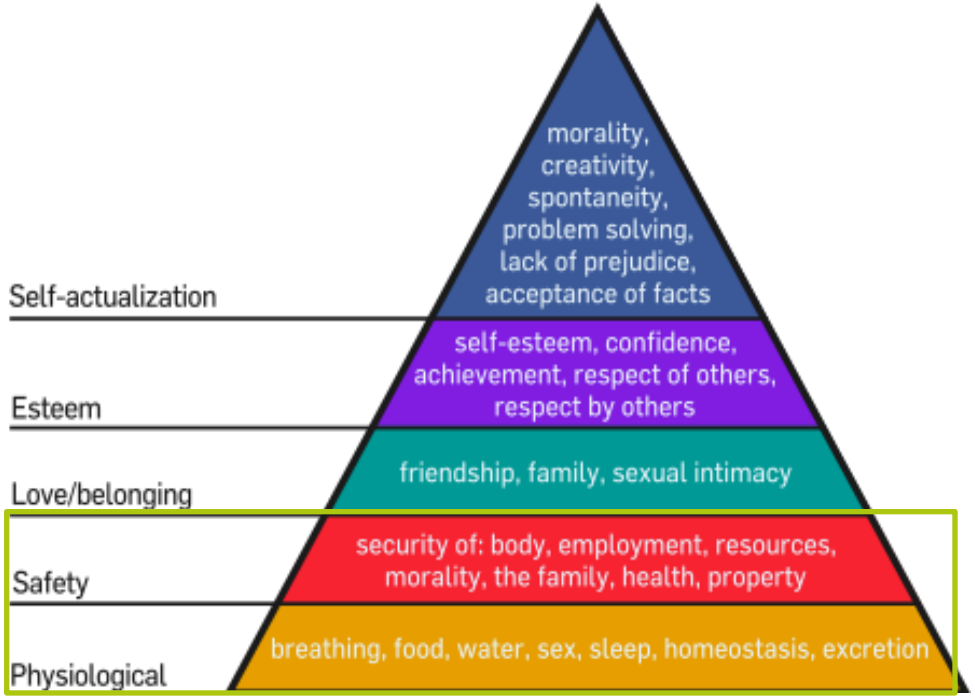


How can we design ICT-services (e.g. using smartTVs) that empower older people to *age actively* and remain *socially included?*

Background: Current AAL technologies

Current ICT for older people

- focus on lower level human needs (physiological/safety needs), e.g. health monitoring, emergency detection



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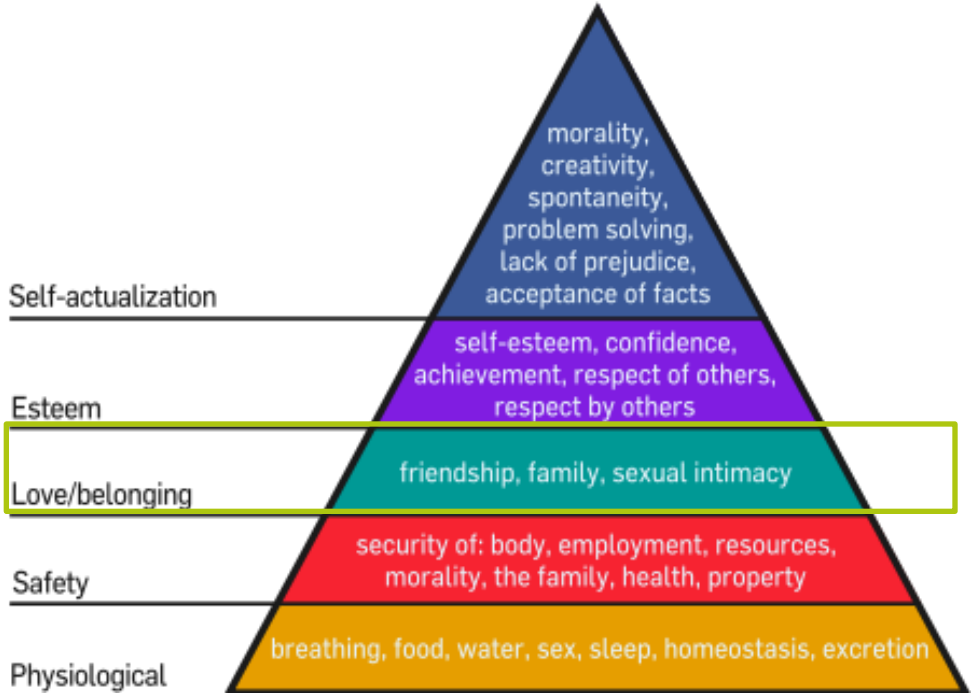

Current ICT for older people

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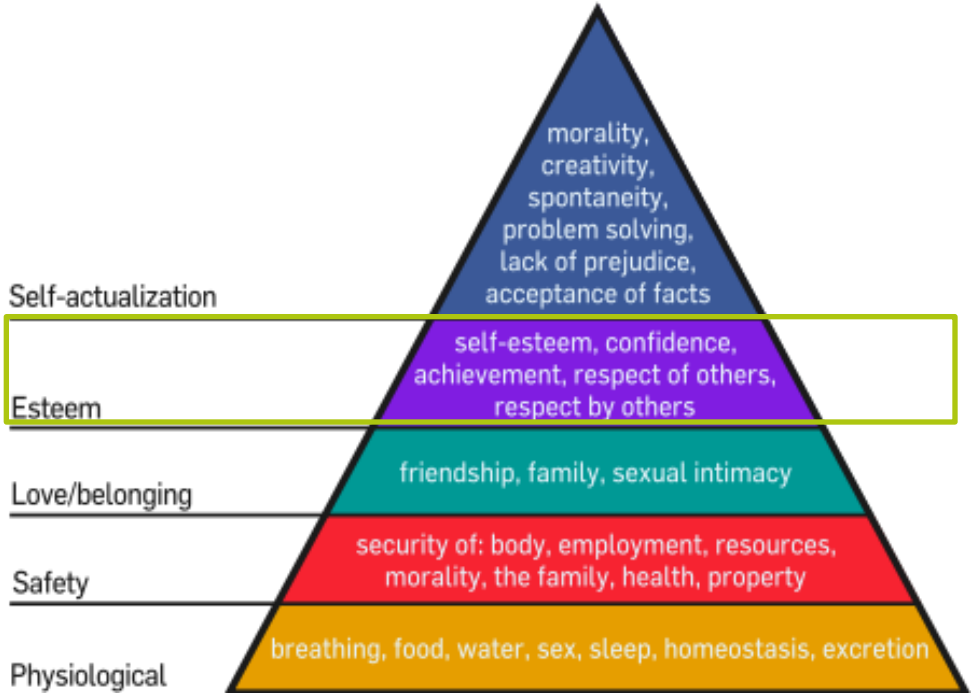
- focus needs to be expanded to include esteem needs



My design approach

My design perspective

- Shifting image of elderly
  - fragile and in need of care → confident, contributing to society
- Focus on *positive* and *ethical* design to promote social inclusion

What is positive design?

- construction of better technologies through discourse that encourages participative action
- instead of focus on detection of error, treatment of dysfunctions → focus on encouraging human strengths and accounting for human values
- taking positive characteristics of ageing as a starting point to create design opportunities
  - Skills, knowledge, experience, time, …

Avital, M. and Boland, R.J (2008). Managing as Designing with a Positive Lens.

What is ethical design?

- Ethical design considers

  (1) all stakeholders equally, accounting for strengths, weaknesses and needs

  (2) stakeholders' values (e.g. independence), their definitions and tensions with other values

  (3) how systems adapt to users' changing needs and values over time

Value Sensitive Design

A theoretically grounded approach to design of technology that accounts for human values in a principled and comprehensive manner.

- Iterative and integrated conceptual, empirical and technical investigations

Friedman, B., Kahn, P. H., Jr., and Borning, A. (2006). Value Sensitive Design and information systems.

A first conceptual investigation

Independence – a central value in AAL

Independence – a central value in AAL

- Functioning unaided and not being dependent on others
- *Flexible interpretations* of independence that change over time
- *Redefining independence*
  - functional ability, reciprocity, autonomy, meaningful activity, valued role and continuity of identity
  - Strategies for independence, e.g., adapting self-care practices
- Home as a prerequisite for maintained independence

→ we should rethink independence (and other values) in AAL projects

Dependency on assistive devices and caregivers will remain,
but older people can still feel independent as they use ICT-services to engage with and return value to their community.

→ DESIGN FOR RECIPROCITY

Thank you for your attention!
Any questions?