Socio-Technical Assisted Neighborhoods

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Background in Germany

• typically, elderly people wish to stay in their self-chosen-environment as long as possible…

• …even if they experience a growing loss in quality of life and health problems

• family based support system is no longer sufficient
Approaches for independent living in the familiar domicile

• technical solutions
• alterations to the home
• low-threshold assistance
• social communities in neighborhoods
• …

→ new concepts, including social and technical solutions, have to be developed
Technisch-soziales Assistenzsystem für Komfort, Sicherheit, Gesundheit und Kommunikation im innerstädtischen Quartier (TSA)
(Ambient Assisted Living – for older adults in urban areas)

The project...

... aims to develop a support system for independent living in old age

... was launched in August 2010

... is a joint project of engineers and sociologist, private enterprises and NGO’s

... is funded by the German Federal Ministry of Education and Research
Ambient Assisted Living for older adults in urban areas (TSA)

Aim of the project:

• to help older adults to live independently in their accustomed homes and apartments

• to develop a concept of technical and social components, suitable for the elderly with little or no technological competence

• to promote social integration (active neighborhood community and involvement into the residential district)

• to involve the target group into the development process

• to analyze if and to which extent modern technology along with social assistance help to maintain the quality of life of older adults or even improve it.
Technical Concept

SAFETY

COMFORT

INFORMATION / COMMUNICATION

HEALTH

all functions via
Technical Concept

**Personal Assistant Unit for Living**

- Human Machine Interface, (usability tests with elderly)
- Comfort & Safety features
- Central Data Collection and Storage
- Data processing and interpretation
- Alarm generation
Social Concept

• establishing and maintaining social contacts in the neighborhood
• local neighborhood club: important connecting role
• Aspired: integration of general and special services from facilities nearby:
  – dwelling maintenance (landlord)
  – promotion of neighbourly help (neighborhood club)
  – “meals on wheels” (nearby nursing home)
  – laundry service (nearby nursing home)
  – skilled nursing (German Red Cross)
  – social services (German Red Cross)
  – housekeeping / domestic assistance (German Red Cross)
  – doctors, hairdressers, …
Sociological Research

- Gather feedback about elderly people’s experiences and acceptance of the technical devices
- Regular meetings in the facilities of the local neighborhood club
- Find out how technology supports everyday life
- Iterative development process
- Written survey of tenants aged 60 and older (n = 171) (general acceptance of AAL technology, willingness to pay, needs of services)
On-Road Trail

- equipment of 10 out of 20 targeted apartments
- different buildings, older housing stock
- iterative process: not all functions installed right from the start.
Experiences so far… I

- potential users: relatively high level of acceptance to use AAL-technology at home, especially in the fields of safety and health
- acquisition of new participating households very difficult
- current prospects: acquaintances / neighbors
- local neighborhood club important for acquisition of participants
- possibility to order services via PAUL valued positively by most interviewees
- professional help only in urgent need
Experiences so far… II

- different levels of acquisition: daily vs. occasional usage
- Important: local contact person & prompt help at technical difficulties
- PAUL has a connecting effect:
  - participants enjoy regular project meetings
  - additional meetings to exchange experiences
  - Skype contacts instead of normal phone
  - mutual assistance, e.g. accompany to the supermarket, chauffeur to various places, and check if everything is in order
  - more active in the neighborhood club.
Summary and Perspective

- integration of organizations, services and companies in the urban neighborhood form a central aspect of care in old age.
- enjoyment of using PAUL
- PAUL enhances comfort
- use of information and communication features increasing
- Safety, security and health aspects yet to evaluate
- AAL concepts including services have to be considered critically in regard to the acceptance in practice.
- project design may help to foster neighborly friendships and thus avoid loneliness of senior citizens
Thank you very much for your attention!