Independent, safe, healthy and mobile in old age.

Business Approaches in the German AAL Project
SmartSenior – Intelligent services for senior citizens.

6th World Ageing & Generations Congress

Michael C. Balasch
Deutsche Telekom AG, Laboratories
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SmartSenior
Independent, safe, healthy and mobile in old age.
Agenda.

- Current challenges of AAL Business Approaches
- SmartSenior: Key success parameters and integrated approaches
  - Integrated service offerings
  - Integration of business processes and technology
  - Integration of business models
- Summary
Motivation.
The market for services that enable an independent and self-determined lifestyle is growing at a rapid pace. However, there is still a lack of integrated, market-oriented AAL solutions focusing on user needs.

Growing target group 50+.
- 32 million people aged 50 or above in Germany in 2008*.
- Financially well-off (≈ € 740 billion estimated net income).
- Growth by 50% within ten years (no. of 50+ households).
- This demographic trend leads to an increasing demand for
  - professional health care services (1st health care market).
  - fitness / wellness / ambient assisted living (AAL) (2nd health care market, currently approx. 20% of consumers’ spending).

Needs not met.
- Today’s solutions and services for the “silver generation” are characterized by
  - limited availability,
  - poor integration,
  - high costs,
  - not accommodating the different individual needs, and by
  - lacking consistency and intuitiveness in user interfaces.
- Regulatory barriers hinder public-private co-funding.

* Source for all statistic data: Statistisches Bundesamt (http://www.destatis.de)
Current challenges of AAL business approaches. Singularity of offerings, insufficient technical and business process integration, and regulatory funding barriers are the main challenges in today’s AAL business.

**Singularity of offerings**
- Home control
- Medical care
- Mobility and fitness

**Singularity of solutions**
- Lack of modularity
- Lack of standards
- Insufficient usability

**Separated business**
- Separated markets
- Regulatory barriers
- Lack of cost sharing

**Integrated and modular offerings of SmartSenior**
- Service modules for independent living@home
- Medical modules to get well and stay healthy
- Mobile solutions to be safe at home and on the go

**Integrated service architecture & user-centred design**
- Integrated service architecture
- Standardized business and operational processes
- User-centred design and device-independent UIs

**Co-operative and integrated business models**
- Service orchestration to simplify service operation
- Creative co-operation and co-funding solutions
- Pro-active and long-term health cost management
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SmartSenior - an alliance addressing the “50+ generation”. The SmartSenior scenarios are derived from basic needs: Mobility, health care, and home services enabling elderly people to live at home for longer.

A
Be safe on the go.

B
Get well and stay healthy.

C
Live independently at home for longer.
Be safe on the go.

- Increased objective and subjective safety
- Extended tracking systems
- Extended emergency assistance with vital data transmission
- Safe emergency stop function in the car
Mission.
Scenarios.

Applications.
• Preventing falls.
• Stroke rehabilitation.
• Pain management.
• Peritoneal dialysis.

Get well and stay healthy.
• Telemedical aftercare and support in the home
• Standardized transmission of vital parameters and detection of anomalies
• Integration of care and support services
Mission.
Scenarios.

Live independently at home for longer.

- Assistance with everyday domestic life, integration of social and other services in the neighborhood
- Safety in the home, prevention and detection of emergency situations
- Integrated, easy-to-use communication facilities with social network and service providers
SmartSenior - an alliance addressing the “50+ generation”. Scenario overview and main objectives.

A
Be safe on the go.

B
Get well and stay healthy.

Maintaining older people's standard of living from an economic, health and social perspective.

C
Live independently at home for longer.
## Partners

### Research
- Fraunhofer
- Deutsches Forschungszentrum für Künstliche Intelligenz GmbH
- Deutsche Stiftung für chronisch Kranken

### Health service providers
- Charité
- Vivantes
- SMH 19221
- Öko Bock
- Siemens

### Manufacturers of sensor systems and medical equipment
- Getemed
- Humotion
- Nobiscum
- ClinPath
- Prisma
- Alcatel-Lucent

### Information technology
- Jambit

### Infrastructure and network providers
- T

### Mobility service providers
- Qiro
- BMW Group Forschung und Technik
- AOK
- DebeKa
- Die Johanniter
- Miele

### Health & care insurance companies
- *In negotiations with others.*

### Care and support providers
- *In negotiations with others.*

### Manufacturers of household appliances
- *In negotiations with others.*

### Housing industry
- Gewoba

*As associated partners*
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• Outlook
Innovative business processes require fundamental changes to the service architecture and infrastructure.

Situation today.

**Entertainment**
TV / local TV

**Information**
Portals for health, home services, Web

**Communication**
GSM, IP, PSTN

**Household devices**
in the kitchen, heating, …

Cable, satellite, terrestrial

Internet (IP)
SmartSenior will develop a modular and integrative infrastructure.

Observation (sensors)
- Vital / fitness data
- Movements, exercises
- Temperature, energy consumption
- Brightness

Reaction (actors)
- Ward round via video, Movement training
- Emergency detection, safety
- Monitoring and regulation of energy consumption
- Household devices
- Light & sun blind control

Home platform network, control

SmartSenior
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Today’s service offerings are fragmented and require individual interaction with the customer.

**Pros**
- Customer has a direct influence on the selection of services and providers.
- Transparency of costs (invoices).

**Cons**
- No integrated service offering!
- Time-consuming and consultation-intensive
  - Each module is negotiated individually with the associated services by the customer
  - Each module is managed separately
- Many devices and software:
  - Compatibility is not ensured
  - Different operating and usability concepts
  - Maintenance and repair of a variety of services
- Complex management of separate accounts
Business processes must change radically to fulfill basic customer needs such as simplicity and efficiency.
Business process and role model 1: Service orchestration managed by **platform provider** to enable a one-stop modular service.

**Individual delivery:**
- Services offered directly to customers but bookable via service platform
- Direct payment to each service provider by the customer

**Service delivery via service platform**
- Only AAL services without medical services
- The customer receives one **summarized invoice** from the service platform provider for service usage
- The **platform operator** coordinates the partners and the services on the platform

**Medical service:**
- Costs borne or partially borne by health or care insurance company

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### Medical Components

- **Cash Flow**
- **Service Delivery**
- **Medical Components**

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**First customer contact**
Business process and role model 2: Business opportunity for **housing service centers** to enhance customer loyalty and embrace new customers.

Opportunities and tasks for housing service centers:
- Benefit from direct customer contact
- **Attractive service offering** for renters
- Evaluation and **selection of local service companies**
- Overall **responsibility** (service orchestration, installation, maintenance, instruction, billing etc.)
- **Partnering / subcontracting** recommended for service platform operation, technical support and for medical service provisioning

**Medical Component**
Business process and role model 3: Medical service centers can use their patient contacts to extend their business models.

Opportunities and tasks for medical service centers:
- Benefit from direct customer contact
- Home care service provisioning as entry point for AAL services
- Monitoring and support of daily demands of / care for older persons
- Focus on enhancing independence and safety through technology support (i.e. sensor and vital data monitoring)
- Overall responsibility
- Partnering / sub contracting suggested
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Summary.
Service Orchestrator depending on sales approach as a promising business role.

- Platform provider:
  - Standardized and modular service concept for wide-area offerings – including local or regional customization.
  - Challenge: Regional presence with direct and personal contact to customers is indispensable for business success.

- Housing service center:
  - Mediator between customer needs and service providers with good local presence.
  - Basic infrastructure for future senior AAL services enable service offerings for comfort, security and safety at home.

- Medical service center:
  - Ensures daily care and monitoring of seniors.
  - Technical services in the seniors’ environments make home care more efficient → potential for cost sharing.
  - Enabling the link between medical and housing services.
Questions & Discussion.

Further information: www.smart-senior.de

Michael C. Balasch, Project Coordinator
Deutsche Telekom AG, Laboratories
michael.balasch@telekom.de

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