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

6th World Ageing & Generations Congress

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*Smart*Senior

Independent, safe, healthy and mobile in old age.

GEFÖRDERT VOM

Bundesministerium
für Bildung
und Forschung

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+.	Needs not met.

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)

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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

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

Singularity of solutions

- Lack of modularity
- Lack of standards
- Insufficient usability

Integrated service architecture & user-centred design

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

Separated business

- Separated markets
- Regulatory barriers
- Lack of cost sharing

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

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.

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Mission.
Scenarios.

A

Be safe on the go.

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

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Mission.
Scenarios.

Applications.
- Preventing falls.
- Stroke rehabilitation.
- Pain management.
- Peritoneal dialysis.
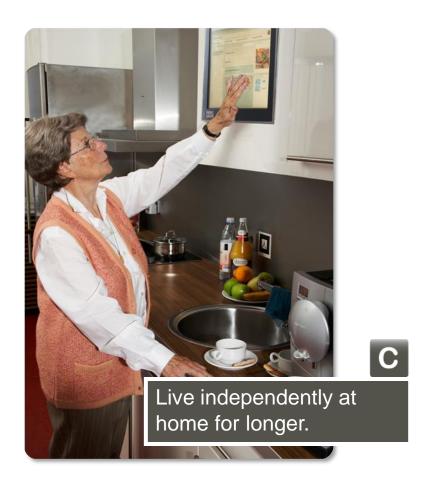
Get well and stay healthy.
- Telemedical aftercare and support in the home
- Standardized transmission of vital parameters and detection of anomalies
- Integration of care and support services

B

Get well and stay healthy.

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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

Live independently at home for longer.

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SmartSenior - an alliance addressing the "50+ generation".
Scenario overview and main objectives.

A Be safe on the go.

B Get well and stay healthy.

C Live independently at home for longer.

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

Consortium.
Partners.

Research	Health service providers	Manufacturers of sensor systems and medical equipment	Information technology	Infrastructure and network providers

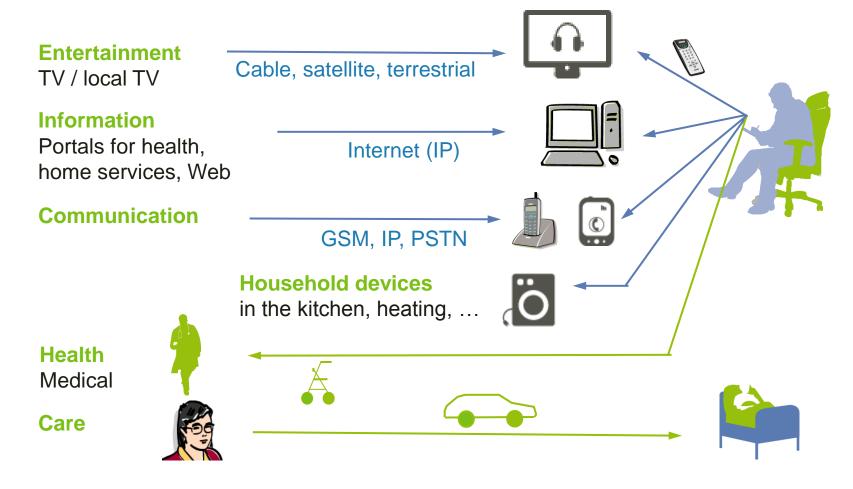| Mobility service providers	Health & care insurance companies *	Care and support providers	Manufacturers of household appliances *	Housing industry
	In negotiations with others.		In negotiations with others.	

* As associated partners

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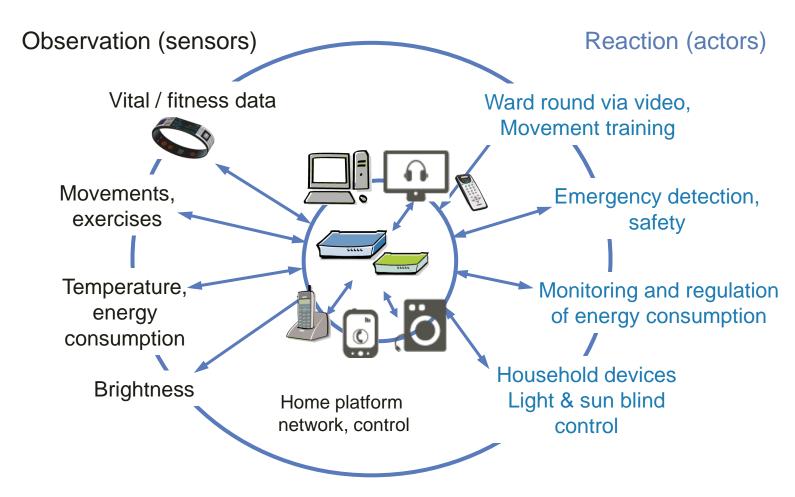 - Integration of business models
- Outlook

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Innovative business processes require fundamental changes to the service architecture and infrastructure.

Situation today.

Entertainment
TV / local TV

Cable, satellite, terrestrial

Information
Portals for health,
home services, Web

Internet (IP)

Communication

GSM, IP, PSTN

Household devices
in the kitchen, heating, …

Health
Medical

Care

SmartSenior will develop a modular and integrative infrastructure.

Observation (sensors)

Reaction (actors)

Vital / fitness data

Ward round via video, Movement training

Movements, exercises

Emergency detection, safety

Temperature, energy consumption

Monitoring and regulation of energy consumption

Brightness

Household devices Light & sun blind control

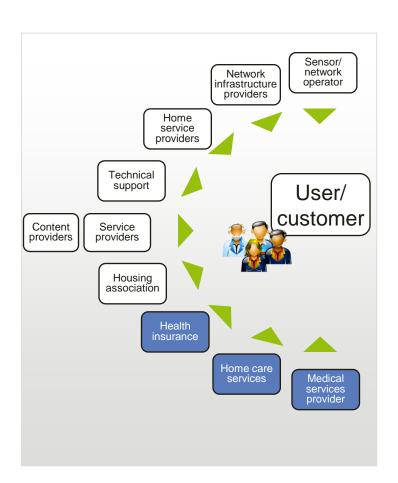Home platform network, control

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

Diagram showing providers connected to the User/customer: Sensor/network operator, Network infrastructure providers, Home service providers, Technical support, Content providers, Service providers, Housing association, Health insurance, Home care services, Medical services provider.
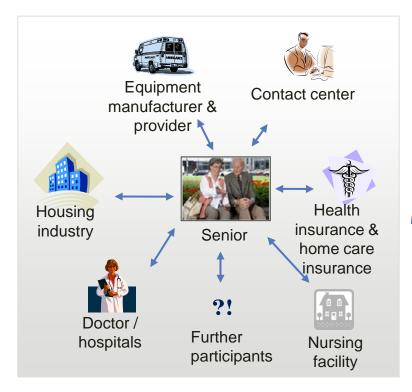
Pros

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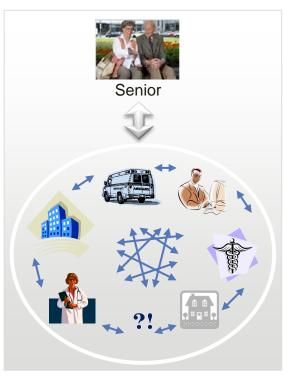- Transparency of costs (invoices).

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.
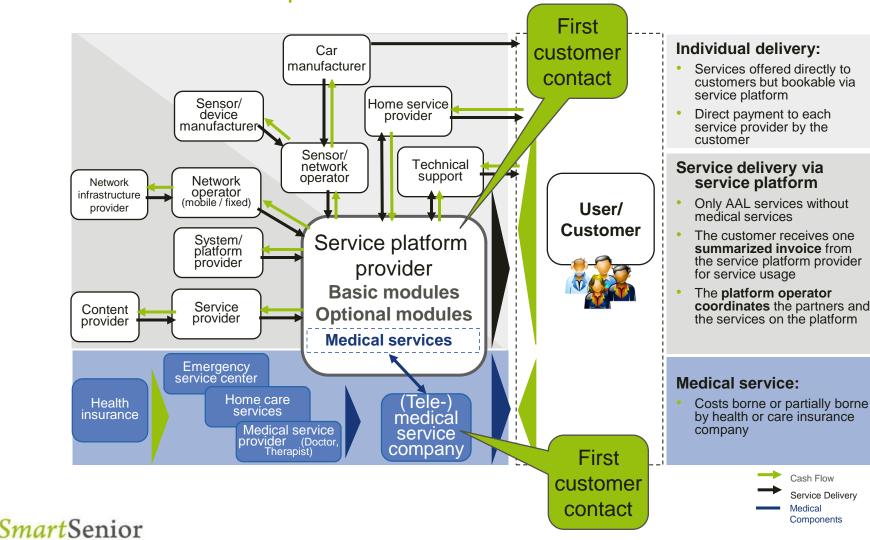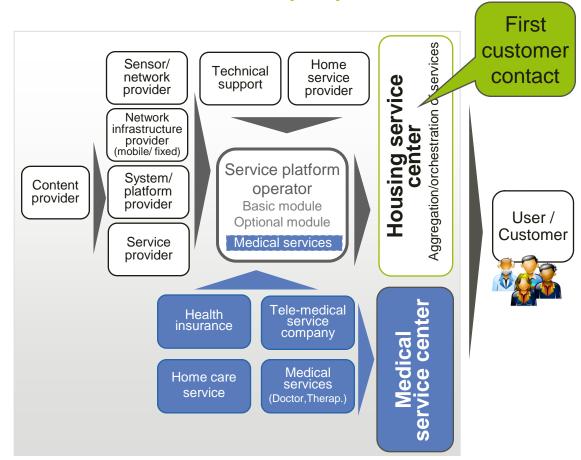

Coordinator

Serviced customer

Where does he buy?

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

Legend:
- Cash Flow
- Service Delivery
- Medical Components

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

First customer contact

Sensor/ network provider

Technical support

Home service provider

Network infrastructure provider (mobile/ fixed)

Content provider

System/ platform provider

Service platform operator
Basic module
Optional module
Medical services

Service provider

Housing service center — Aggregation/orchestration of services

User / Customer

Health insurance

Tele-medical service company

Home care service

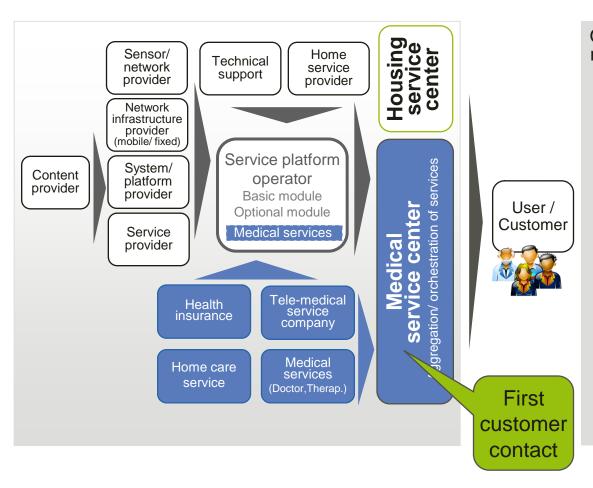Medical services (Doctor,Therap.)

Medical service center

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, mainten-ance, instruction, billing etc.)
- **Partnering / subcon-tracting** recommen-ded for service platform operation, technical support and for medical service provisioning

Medical Component

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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 / subcon-tracting** suggested

Medical Component

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Summary.
Service Orchestrator depending on sales approach as a promising business role.

Promising business opportunities for

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.

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Questions & Discussion.

Further information: www.smart-senior.de

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