



Active Life Home

– Technology Supported Living at Home

Olli Nuuttila 13.12.2011

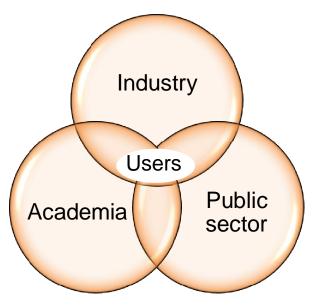
Matti Hämäläinen, Timo Itälä, Marko Nieminen, Aalto University Olli Nuuttila, Pia Kiviharju, Raimo Miettinen, Active Life Village Ltd

## Active Life Village Ltd

MISSION: Create new wellbeing service innovations and

business opportunities

### Triple helix



Aalto University
Laurea University of Applied Sciences



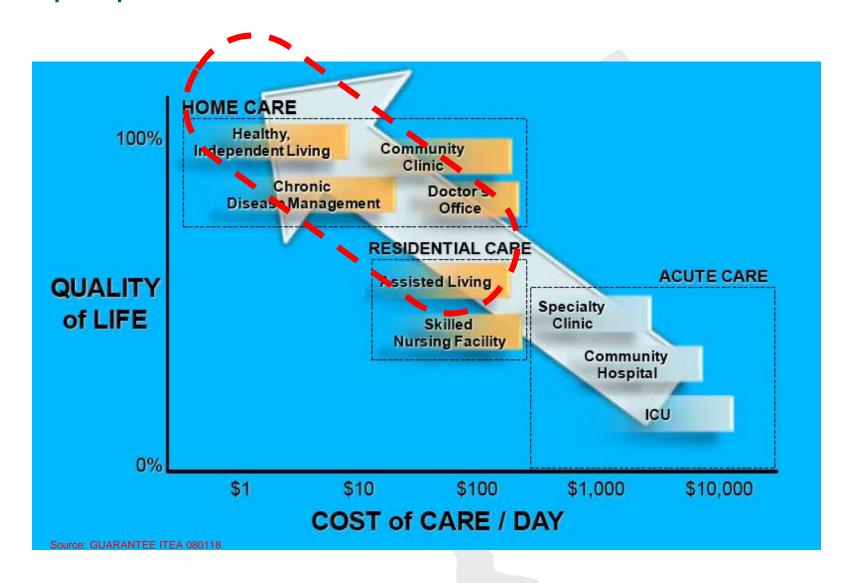
Active Life Village Espoo

## Future challenges of healthcare and wellbeing

# **Increasing costs** How can we better **Aging population** utilize ICT? Promotion of health by citizens' active role

Adapted from: Future of Health Care in the Year 2015 (Parliament of Finland, Committee for the Future)

## Moving focus from hospitals to local care and to people and communities —> Active Life at Home



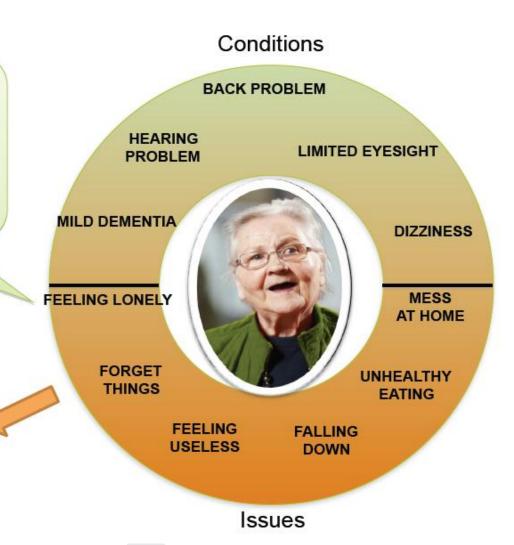
Case:
Active Life Home
Service Concept

## Active Life Home: addressing a variety needs

#### Situation:

- •84 year old woman
- ·Husband died 3 years ago
- ·Lives alone in suburban area
- Children live hours away

UNSECURITY
NEED FOR SUPPORT



## active life HOME



#### WAHTI SECURITY

IP-cameras and sensors. automatic alarms, remote control of home appliances



#### PLAYGROUND

AHR data management, mobile data collection



#### ARCTICARE SYSTEM

Indoor position tracking, easy- access VoIP video communications etc.



#### MEALTRACKER.FI

Visual food journal online, nutrition guidance



#### **EPOOQ.NET**

EPOOQ.NET

Recollecting and sharing life stories online



#### INNOHOME SENSORS

Detects and prevents fires, water leakages etc.



#### ELSI SAFETY FLOOR

Indoor position tracking, automatic alarms (enter/exit, falling, WC-time etc)



#### MED-O-WHEEL SMART

Automatic dosering, reminders, online tracking of medication intake

BEDDIT BED SENSOR

Analysis of sleep and

wellbeing



#### VIVAGO CARE

Activity level monitoring, automatic alarms, call button



#### **EVERON VEGA**

Location tracking (GPS, GPRS) automatic alarms, two way speech, call button



#### KIRA-MATIC LIGHTING Programmable lighting

modes



#### **TANDBERG E20**

Personal VoIP video connection





























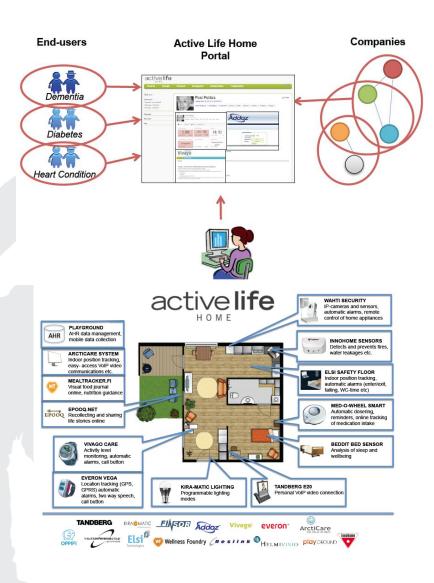




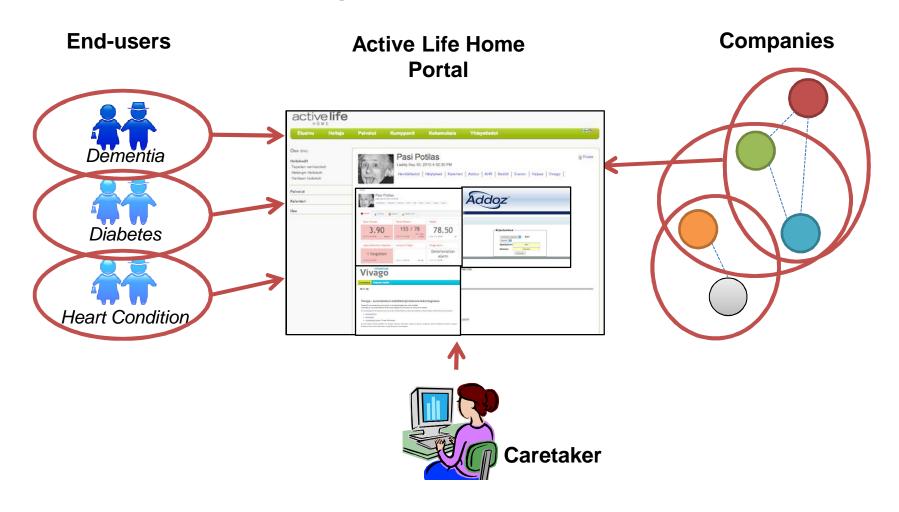


## Goals of Active Life Home

- Enhancing interoperability designing and implementing an integration platform
  - Data Integration to a shared Activity and Health Record database
  - Service operation and configuration through one user interface
  - Interaction of services inside the home
- Joint demonstration and marketing activities under the Active Life Home offering
  - Demo apartment etc.

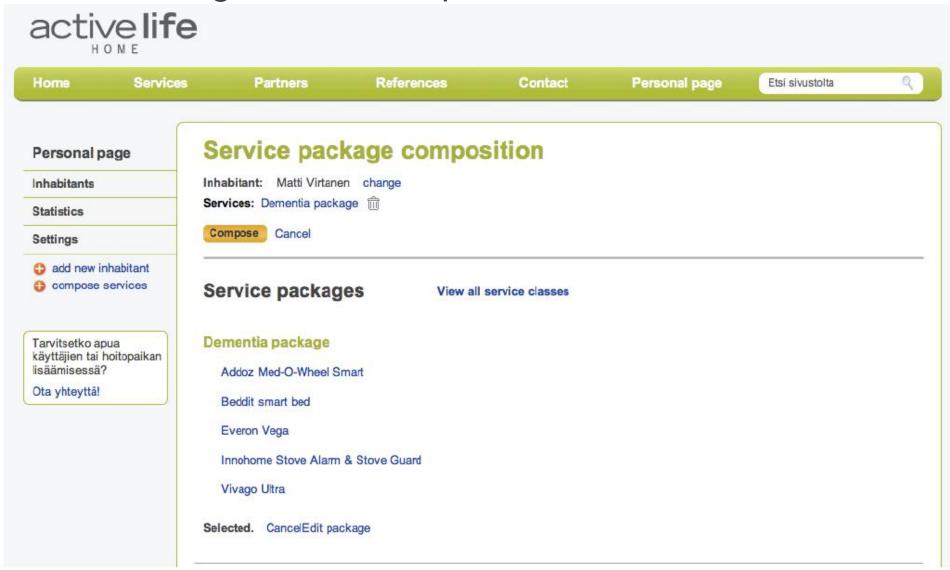


# Active Life Home Portal – matching needs and providers



## **Active Life Home Portal**

enabling service composition



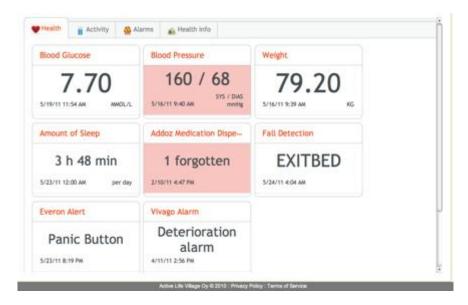
## Active Life Home:

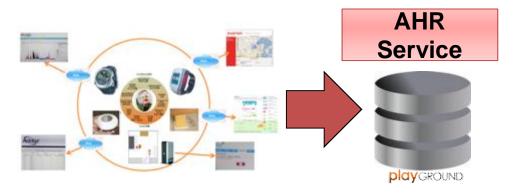
addresing the current problem of different products / services

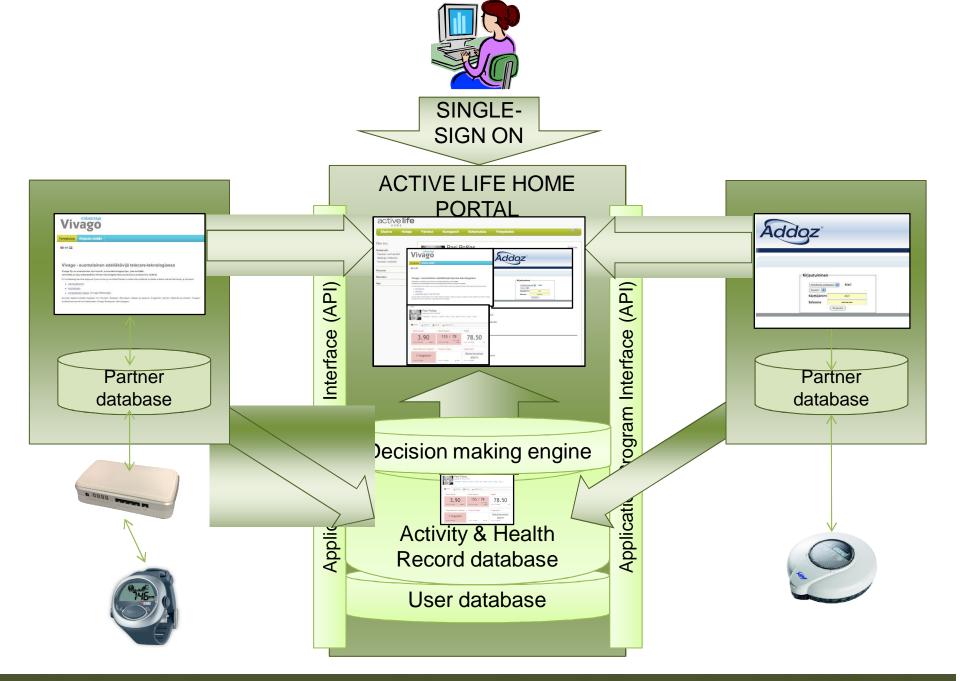


Active Life Home: making it easy to

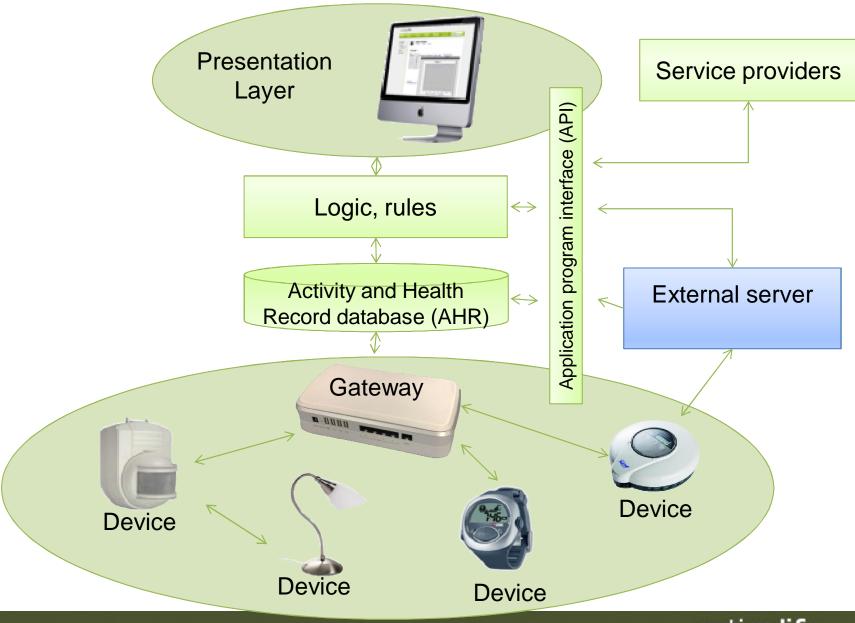
- a) use the variety of products together
- b) combine information from different sources to add value
- c) provide new opportunities



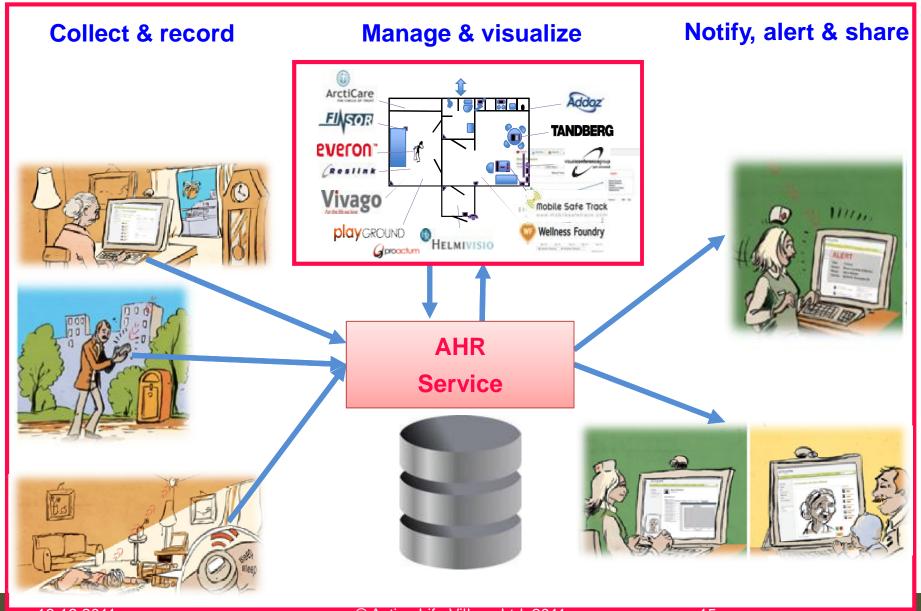




## Layer model of ALH



## Personal Data - Activity and Health Record (AHR)



# Active Life Home is a basis for Service System to support independent living

Service providers User Service Clean-Home Home Drug P.E. Security **Janitor** Medical Food communiti logistics houses Ing support care es Service center Customer data 24h Internet Service Service

## Active Life Home concept fulfills the elements required by senior citizens to live at home safely



## Physical home security

- Fire prevention, detection and alarm
- Guarding, Access Control



## Physiological monitoring, alarm and help

- Health monitoring
- Medication monitoring
- Eating, sleeping and other daily routine monitoring



### Social needs

- Contacts with relatives and friends
- Hobbies
- Recreation
- Studying, research, etc.

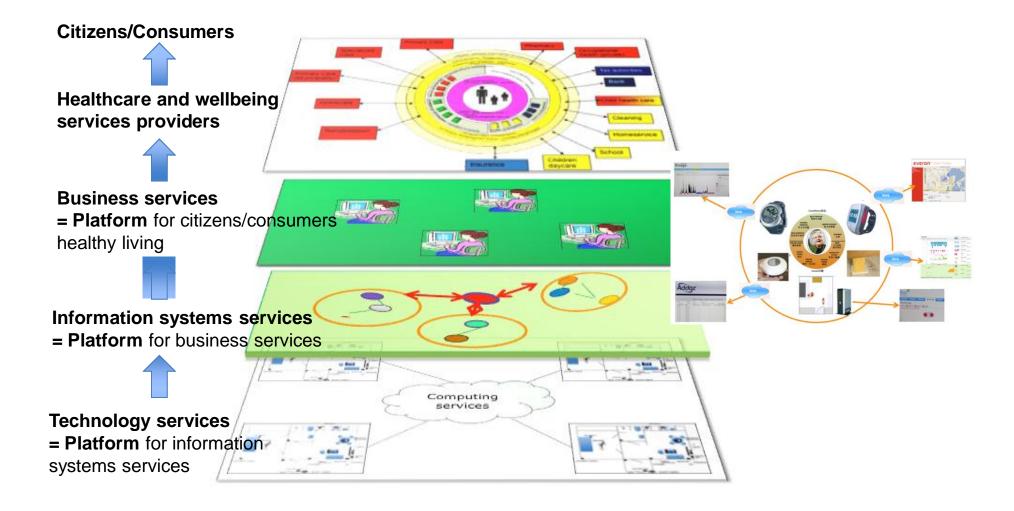


### Services

- Medical services
- Food supply

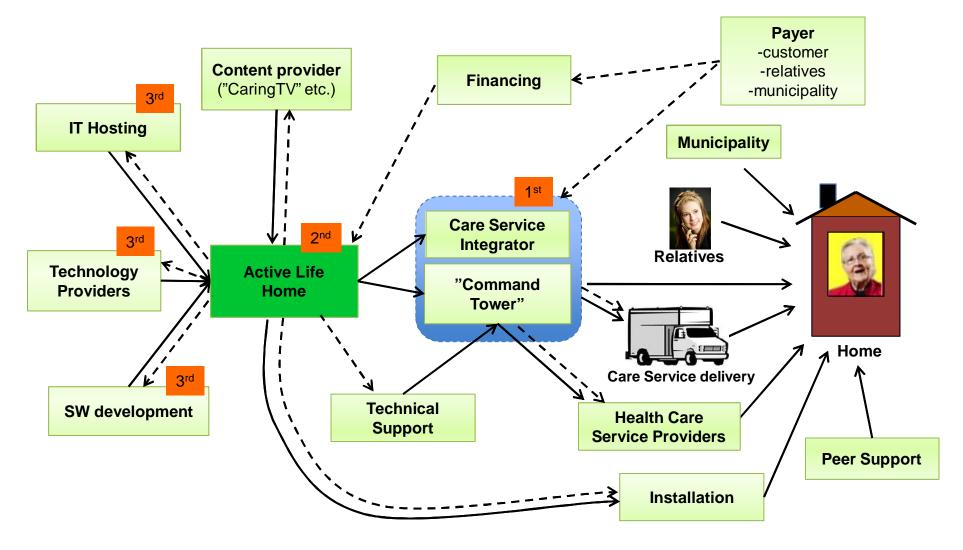
- Cleaning, snow work, jne.
- Personal hygienie

## We have a layered approach to define the services based on Active Life Home solution



## Example of value network









## Active Life Home BENEFITS

### For the relatives

- Awareness of safety
- Peace of mind
- Frequent contacting with the person



### For the society

•Cost savings

Better resource utilisation

Better service

### For the person

- Safe living at home
- •Support available if needed
- Connected to the society and social networks
- •Improved healthiness







## Better Life, at Home

olli.nuuttila@activelife.fi