imAgezine

November 2014

i Age

e-inclusion
in ageing
Europe

Contents

iAge: e-inclusion in ageing Europe

An ageing population is one of the current and most pressing challenges facing Europe, and indeed the world, right now. The number of people of 65+ will rise by more than 50% by 2030, affecting the sustainability of our communities, especially in areas in decline. At the same time, the elderly are healthier, more mobile and better qualified than any previous generation, whilst Information and Communication Technologies (ICT) for enabling and supporting good health and mobility are more readily available than ever before.
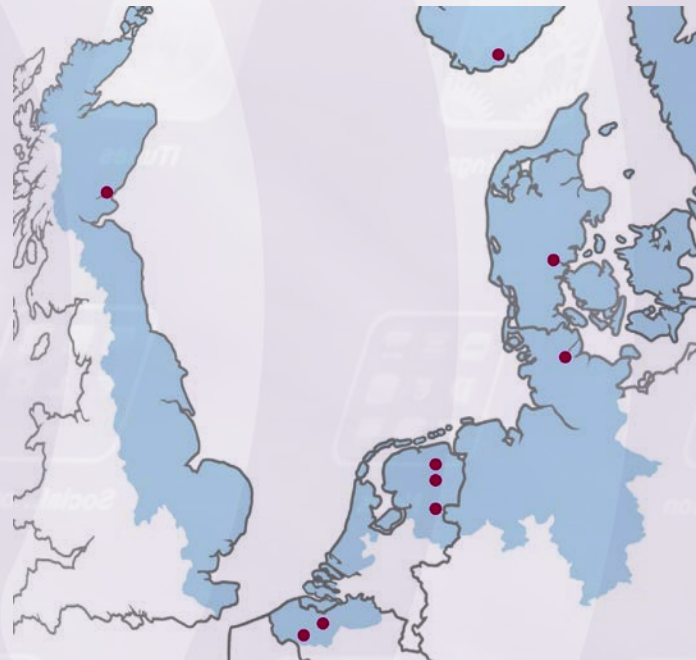
Implementing strategies to increase the use of ICT among older adults is increasingly important in an endeavour to keep the growing number of elderly actively involved in society. Subsequently these efforts allow for a greater contribution to economic development in regions facing population and economic decline. iAge acknowledges the importance of new technologies for economic activity and new ways of delivering services to an ageing society. This European cooperation project is therefore strongly focused on increasing ICT gains for older people and on the implementation of existing ICT best-practices or new technologies.

iAge has 12 partners from 10 regions in 6 countries around the North Sea. All partners have one or more projects (pilots) within iAge. The consortium works together on new approaches to service delivery and stimulating economic development through ICT innovation. iAge promotes the use of ICT to combat social exclusion, improve employment opportunities, quality of life and community participation. Transnational activities and joint analyses lead to positive achievements and contribute to the EU 2020 objectives for innovation and employment. The iAge project is co-funded by the Interreg IVB Programme for the North Sea Region and runs from 2012 - 2014. The Province of Drenthe (NL) is Lead Beneficiary.

"Transnational

activities and

joint analyses

lead to positive

achievements and

contribute to the

EU 2020 objectives

for innovation and

employment."

iAge Objectives

- Increase active participation and productivity of the elderly in relation to the labour market;
- Increase and promote the use and accessibility of ICT in relation to lifelong living;
- Implement transnational strategies, demonstration pilots and concrete actions;
- Communicate the iAge project and its outcomes to other ageing communities in and beyond the North Sea region.

iAge Partners

There are 18 partners and sub-partners from 6 countries in the North Sea Region.
The Province of Drenthe is Lead Beneficiary and responsible for project management.

The Netherlands
- Provincie Drenthe (LB)
    - STAMM-CMO
    - Hanze Institute of Technology
    - Municipality of Aa en Hunze
- Zorg Innovatie Forum
    - CMO Groningen
    - Stichting Oosterlengte
- Hanzehogeschool Groningen
- Municipality of Hardenberg

Scotland
- University of Abertay Dundee

Norway
- Knutepunkt Sorlandet
    - University of Agder

Germany
- Wirtschaftsakademie Schleswig-Holstein

Belgium
- Provincie Oost-Vlaanderen
    - ERSV Oost-Vlaanderen
- Intercommunale Leiedal
    - Mentor VZW

Denmark
- University College of Lillebaelt

Joint Annual Conference 2015

On 16th – 17th June 2015 the Joint Annual Conference of the Interreg VB Programme and the Eurpoean Commission will also be hosted by the Northern Netherlands (the three northern provinces of Drenthe, Groningen and Fryslan). The event will be held in 'De Nieuwe Kolk' in Assen. We look forward to meeting you in this beautiful part of the Netherlands! For updates on this event please vist the NSR website http://www.northsearegion.eu

What is Interreg?

The Interreg North Sea Programme has been initiated by the European Commission to stimulate cooperation between the regions. Lead Partners can apply through the programme 'calls' for project funding. If they comply with the programme requirements, half of their investments will be covered by the European Regional Development Fund (ERDF).

Interreg IVB 2007 - 2013

The current Interreg North Sea Programme consists of three strands; A, B, and C. The iAge project falls under Interreg IVB. Projects focus on transnational cooperation and exchange of experience within the North Sea Region and the programme is in its fourth phase, hence the name Interreg IVB.

The North Sea Region includes regions in Sweden, Denmark, Germany, the Netherlands, Belgium, Norway England and Scotland. The Interreg programme sets strategies, priorities and socio-economic analyses for the North Sea Region (NSR) for a number of years. The IVB Programme ran from 2007 – 2013 (projects can be finalized in 2014). Aim of the Programme is to make the North Sea Region a better place to live, work and invest in. Future development, however, will be determined by the ability to achieve economic progress through shared objectives and shared resources, building on regional strengths and territorial potentials.

Interreg VB 2014 – 2020

While the 2007 - 2013 Programme is at its final stage, the new 2014 -2020 Programme is taking shape. Since the start of the first North Sea Region programme, cooperation in the region has matured and intensified. This has meant that with each programme period it has been possible to raise ambitions for the impact and durability of the projects funded, and the new North Sea Region programme will continue this progression. Thematically, the programme builds on positions of strength, developing on proven successes and complementing these with new themes based on the current analysis. Four new priorities for have been set down.

Priority 1 Thinking Growth: Supporting growth in North Sea Region economies
Strengthening research, technological research and innovation.

Priority 2 Eco Innovation: stimulating the green economy
Preserving and protecting the environment and promoting resource efficiency.

Priority 3 Sustainable North Sea Region: Protecting against climate change and preserving the environment
Promoting climate change adaptation, risk prevention and management.

Priority 4 Promoting green transport and mobility
Promoting sustainable transport and removing bottlenecks in key network infrastructures.

For further information and updates please visit the programme website http://www.northsearegion.eu

Combining work and informal care in SMEs

The iAge pilot in Drenthe aimed at fostering sustainable employment in Drenthe by introducing innovative technology and especially targeted at working caregivers in small and medium enterprises (SMEs). In our regional partnership we studied the needs and wants of informal caregivers, their older family members and friends and the role of SMEs in facilitating the combination of work and care. Parallel to this we have tested and developed the Doeboek and an app, both innovative IT-tools, to bridge the distance between the informal caregiver at the workplace and the (older) care recipient.

Problems and solutions

We looked at the solutions currently available for easing the burden of those who combine paid employment with informal caregiving responsibilities (see report by Jojanneke van der Veen). These solutions are designed to increase the care recipient's independence or support the informal caregiver physically and mentally. Despite the many solutions that boost the independence of care recipients, they are not particularly diverse nor tailor made for the older end user. In our search for an innovative tool the conclusion was: it is more efficient to use and adapt an existent tool together with the end user rather than reinvent the wheel! This was confirmed by experiences of our international partners in iAge. Furthermore, there is no standard situation in the relation paid work and care - many different work situations (e.g. flexible working options) and lots of different medical problems call for tailor-made (IT) solutions.

Doeboek

So, sub-partner STAMM (consultancy firm for the social sector) introduced and guided the testing and prototype development of Doeboek - an IT tool on tablet and smartphone (app) with video-calling, agenda and memo functions. Doeboek was tested on 14 couples of caregivers and their family/friends (care recipient) in the municipality of Aa en Hunze and was developed with usability tips from our Scottish partners at the University of Abertay in Dundee. Knowledge and experience was exchanged with the municipality of Vrees (Germany) within the project "Vitaldorf der Zukunft". The instruction and learning methodology was also adapted with the help of international iAge partners.

Lessons learned

KEEP IT SIMPLE SIMPLE SIMPLE!! And pay attention to usability, accessibility and readability. Main conclusion: "the next version of the Doeboek app can be a helpful instrument for working caregivers to fulfill tasks at a distance although the elderly care recipients, aged 70+, have very little basic IT skills, generally speaking, and this is a barrier for successful use." The prototype of Doeboek will be available through the iAge toolbox,.

Another interesting point of evaluation: we thought people at work would like to feel available and more easily accessible for the ones they take care of (the main idea behind the tool). But this is not the case for everyone. Some informal care-givers also appreciate the relative peace and distraction at work!

provincie Drenthe

The province of Drenthe is a rural area containing 12 municipalities with altogether almost 500.000 inhabitants. In the next 20 years, the amount of elderly (65+) will increase with almost 50% and the number of youngsters will decrease by almost 25%. This demographic transition has a great influence on many aspects of the Drenthe society. The structure of the population in urban and rural areas changes, care services and social cohesion change, and the environment and living conditions change. These days 1 out of 8 employees is double-tasking – in a sense that they take care on a structural basis besides having a paid job – in the next decade this figure will rise to 1 out of 4! We know that this group is (partly) heavily burdened, both physically and mentally – and might have problems in keeping the job going and staying healthy. We assume this poses a possible threat to the labour market participation which has to stay at a certain level (especially amongst the elderly) to keep the SMEs in Drenthe on the move.

"All solutions, be they IT or more practical arrangements, start with raising awareness for the situation of informal caregivers."

Informal care in Drenthe - the role of IT for the elderly

During the minor 'Healthy Ageing at Hanze University Groningen students carried out several studies on the target group of working caregivers and the role of SMEs in Drenthe. Of the approximately 100,000 (working) caregiversin Drenthe, 45% feel seriously burdened while some 17% feel trapped by their sense of duty when combining care-tasks, work and family.

Theoretically, IT can play a role in relieving some of this burden by increasing the care-recipient's independence (GPS systems, sensor techniques) or by supporting the informal caregiver by way of informative sites and the use of contact devices (e.g. Doeboek).

Research carried out by the Hanze University shows that enthusiasm for IT-tools within the target group (aged 70+) is minimal, mainly due to the lack of basic skills and limited learning abilities of the elderly client. Another approach is called for – one which gives the client a sense of security rather than a feeling of being cared for. Working caregivers are not looking for new technologies but want support or helpful solutions for their problems.

Potential solutions for facilitating the combination of paid work and care-giving:
- Change the corporate culture of SMEs with regards to informal care-giving.
- Build solid networks around the care-recipient.
- Improve information structures regarding rules and regulations for the working caregiver and the care-recipient.

During interviews with representatives from SMEs it became very clear that it is, as yet, premature to talk about care-giving employees using IT solutions in the work environment as an aid to coping with the domestic situation. Many of the problems encountered by those combining work with care are simply not visible for most owners and directors of SMEs (i.e. employability problems). "This may change in the future, but right now this is not an issue we are aware of."

Raising awareness

All solutions, be they IT or more practical arrangements, start with raising awareness for the situation of informal caregivers. This must be done amongst the informal caregivers themselves, SMEs and other stakeholders, such as municipalities and welfare-organisations. As iAge partners in Drenthe, we started a campaign for this purpose - DrentheMantelzorgVriendelijk. nl. A website, poster and toolbox for SMEs, supplemented by illustrative personal stories of informal caregivers, were created

to raise awareness amongst all stakeholders. Numerous campaign-supporting events, including the roll out of the project 'Informal Care in SMEs' at the Business Park Emmen (a cooperation of 300 businesses in Emmen), aimed at turning businesses into care-friendly organisations. This is a very important target group as more than 95% of all businesses in Drenthe are SMEs. The Province of Drenthe, both as regional authority and employer, set the right example by taking steps towards earning the predicate "Care-friendly Organization"!

International cooperation and further steps

Within the iAge partnership we have discussed a wide range of interesting topics with regards to the elderly and the use of IT - learning new approaches and gaining insight into usability features. This international cooperation and exchange of ideas and experiences has been of great value during the development of important parts of our project. Raising further awareness, building supportive structures (e.g. creating information and contact points for informal caregivers) and

searching for usable IT-tools will certainly continue in Drenthe, with the help of municipalities and other stakeholders. While further developing both hard- and software solutions we will keep a continuous eye on the needs of the (elderly) end-user!

Grandma on the web

The aim of the pilot 'Grandma on the web' was to map ICT use among elderly people and to identify and evaluate educational strategies.

'Grandma on the web' is the Norwegian subproject of the EU project 'iAge', and it integrates an inter-municipal cooperation between the municipalities Lillesand and Vennesla in the Southern region of Norway and the Centre of eHealth and Healthcare Technology at the University of Agder, Norway. 'Grandma on the web' is part of the iAge Work Package 4 where the main goal is to improve regional development through promoting use and accessibility of ICT in relation to lifelong living and to identify and evaluate educational strategies. One of the aims of our pilot project was to map computer usage and attitudes toward technology among elderly people. A survey was made of computer and internet usage among people of 65-years and older in the municipality of Lillesand. From the 500 questionnaires distributed 178 replies were received. In addition, three focus group interviews were conducted with a total of

10 people aged 65 and over All participants had "some" or a "great experience" with ICT use.

Another aim was to design and evaluate ICT courses for elderly people. In the period 2012 to 2014, nine ICT courses were conducted for the 'Grandma on the web' project, three in Vennesla and six in Lillesand municipalities. In Vennesla, the teaching model combined ICT training for elderly people with an educational programme at a school. The teachers were schoolchildren (14 years old) who organized ICT-courses for their grandparents and others new to the community. In the municipality of Lillesand, different course-models were tested. The lecturers were students of Young Entrepreneurship in the lower secondary school (1 course), volunteers from the Centre for the Elderly (1 course), and from the Centre for Adult Education (4 courses). The courses were advertised in the local newspaper

and around 100 participants joined the training activities.

Computer use and attitudes among the elderly
Results from the survey showed that 9 out of 10 had access to, and frequently used, a computer at home. Half of the respondents reported to have learned to use Internet by attending specific courses and others learned with the guidance of relatives or acquaintances. Most of them used computers for online banking, sending mail, reading the news, finding information and other simple tasks. Relatively few actively used social media. Most elderly, even non-users felt that it was important to learn to use ICT to keep up with the community. Active users of ICT expressed that computer use led to an increased quality of life. In the survey respondents' answers indicated that monitoring technologies are acceptable for the purpose of

Knutepunkt Sørlandet (Kristiansand Region) is an inter-municipal cooperation between the city of Kristiansand and six surrounding municipalities. The area, located in the southernmost part of Norway, covers 2150 square km and has about 125.000 inhabitants. Kristiansand, with more than 80.000 inhabitants, is the main city in the area with very good connections to the continent, both by ferries and by airplane.

The cooperation Knutepunkt Sørlandet was established to coordinate the inter-municipal teamwork and take an active part in activities, which will create effective and good solutions both for the inhabitants and for the commercial trade.

Knutepunkt Sørlandet was also a partner in the Interreg IV B project Demographic change, which terminated 31 December 2011.

Two of the municipalities, Vennesla and Lillesand, are taking part in iAge. Vennesla is situated 25 km to the north of Kristiansand and Lillesand 30 km to the east.

security and privacy, as long as these are not misused.

Motivation

The majority of the course attendees did not have any or very little experience with computers, even though most of them had a computer at home. There were different motivations for participation in the courses. For instance, participants in Lillesand signed up for classes because they had a genuine desire to learn, some out of curiosity and others because they believed that it was necessary to keep up with society and the times. As one of the course members puts it: "Everyone is talking about ICT and everybody has a computer." However, several of the participants in the intergenerational courses in Vennesla were not initially motivated and did not have any previous intention to learn how to use computers. They joined the course because they were invited, and sometimes persuaded, by their grandchildren or by the contact person from the municipality: "I have to say that this all happened quite by coincidence. I never imagined myself using a computer and would never have done this if I hadn't been persuaded",
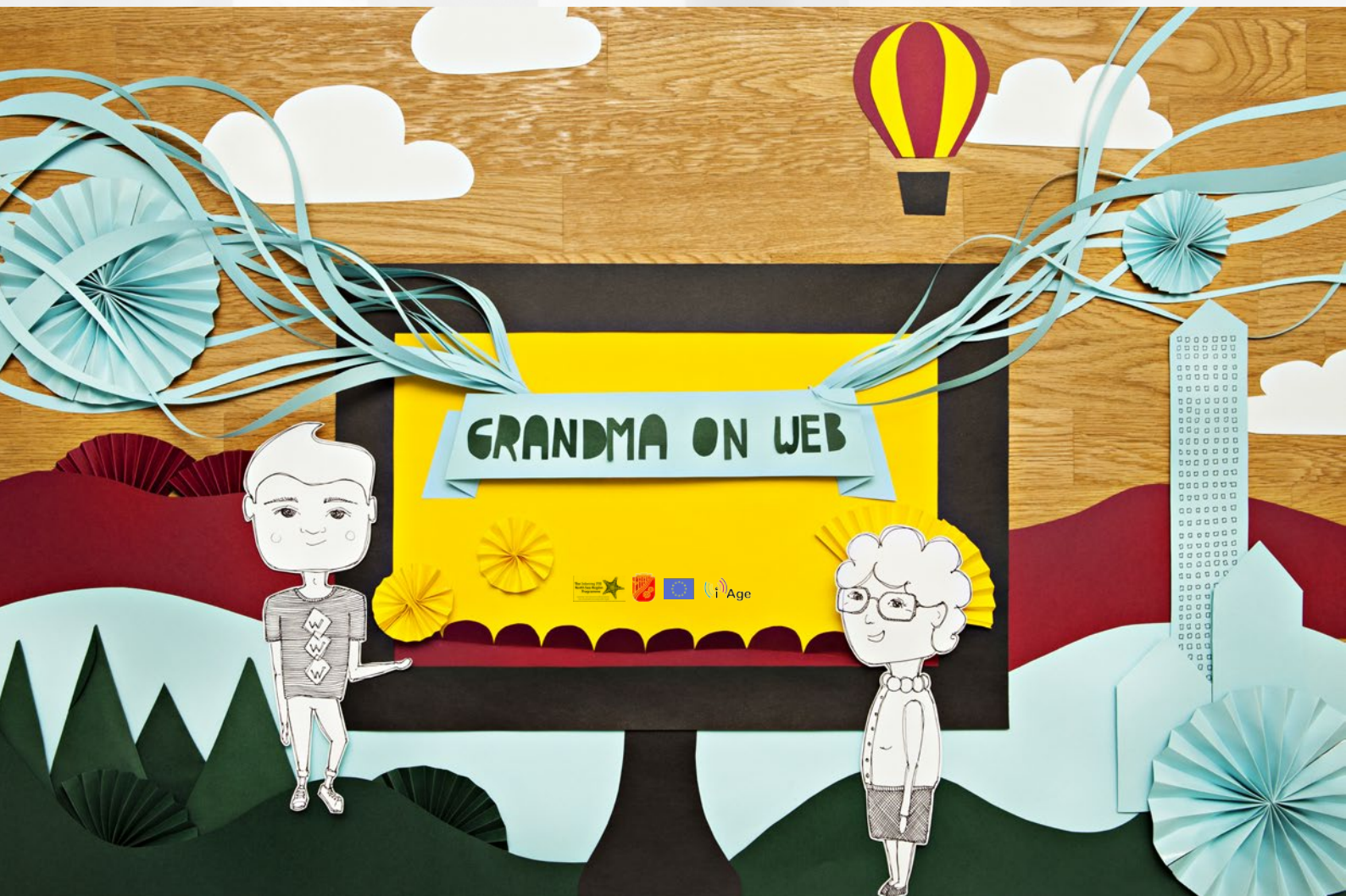
admits one 'grandma on the web' laughingly

.

Evaluation

The course-attendees reported that they had a positive learning experience as a result of the courses. For many of them, it was an "eye opener" and they are keen to explore the possibilities of Internet further. Many of them were particularly thrilled to discover the possibilities for contact with friends and family through social media. In their role as teachers the youths had the opportunity to develop qualitative social values such as goal achievement and social responsibility. They also found it an enjoyable learning experience. Based on the evaluation, a course creation guide was developed.

Usability

Another issue the Norwegian pilot wanted to address within the iAge project was increasing competence in evaluating the user-friendliness (usability) of applications/web-portals. Within the partnership the University of Agder has cooperated trans-nationally with the University of Abertay Dundee and Hanze University Groningen in completing a PhD course in Usability Design. In addition, a former Research Scholar from University of Abertay Dundee has been employed by the University of Agder in a postdoctoral position. This forms the basis for further cooperation between the two universities beyond the iAge period.

The Centre of eHealth and Healthcare Technology, an interdisciplinary faculty collaboration at the University of Agder Campus Grimstad, is a Norwegian sub-partner in iAge, responsible for the Norwegian pilot and the coordination of WP4. There is an important focus on eHealth in Norway, not just nationally. Counties, municipalities and public organisations are all committed to this theme and, in this respect, iAge has contributed significantly to other projects in the same field.

"I never imagined myself using a computer and would never have done this if I hadn't been persuaded."

Mobile Technology and e-inclusion

Abertay University has 1 pilot project- Mobile Technology and e-inclusion. The pilot is designed to encourage dynamic and successful communications through increasing the accessibility of ICT and the mobility of the aging population. It supports the promotion of sustainable communities by keeping the older population economically active, using services and keeping healthy; thereby contributing to regional economic development. The pilot fits in WP4 life-long Living.

The development of appropriate mobile technology requires a design process that includes extensive user testing, with different groups to optimise the screen layout and interactivity based on interactive experimental trials informed by the relevant literature on cognitive and aging processes. During the project display techniques for end users have continued to be investigated. The display techniques are those adequate to the problems of visualization and understanding end-users may face in the use of technology.

Mobile applications for usability and accessibility have been developed during the iAge project. These are assistive technologies, which can be described as any device or system that allows an individual to perform a task that they would otherwise be unable to do. They tend to address the limitations caused by a particular functional impairment: for example, mobility problems (wheelchairs), loss of hearing (hearing aids) or loss of sight (screen-reading software).

A number of assistive applications are being developed at Abertay to address issues that have come directly from the target users themselves. 6 best apps have been prepared for publishing in Google Play Store for wider stakeholder testing in November 2014. The apps selected are as follows:

1. Behaviour Based Security - to reduce the use of passwords by relying on touch pressure and keystrokes to identify user
2. Medicine Identification - which can scan identify barcodes and provide information on the product for the user
3. Memory Loss guidance – supports user with directions to a desired location and provides reminders of task
4. Fall Assist application - smartphones as a fall detection system due to the benefit of working as an alert to a fall regardless of location
5. Universal Text Entry - to allow text entry for users with varying ability to interact with mobile devices.
6. Tapology - introduce a platform for gaming, internet and visual rehabilitation to older users who have not had prior experience with information communication Technology

A framework of best practice for application development was also developed by Abertay. This focussed on accessible usability in desktop, web, and mobile software. This is presented as set of Non-technical Guidelines- Assuring accessible usability in desktop, web, and mobile software.

Why accessible usability is important? To be a universal and inclusive provision, software applications require to be accessible and usable without barriers. The responsibility for achieving this lies with all stakeholders within an organisation; procurement officers, commissioning/operating staff,

The City of Dundee is located in an ideal setting on the banks of the River Tay. It is easily accessed from almost all of Scotland's major towns and cities – 90% of the population lives within a 90 minute drive from Dundee. It has a knowledge based economy and the city accounts for 10% of the United Kingdom's digital-entertainment industry, with the University of Abertay Dundee as a national leader in digital games.
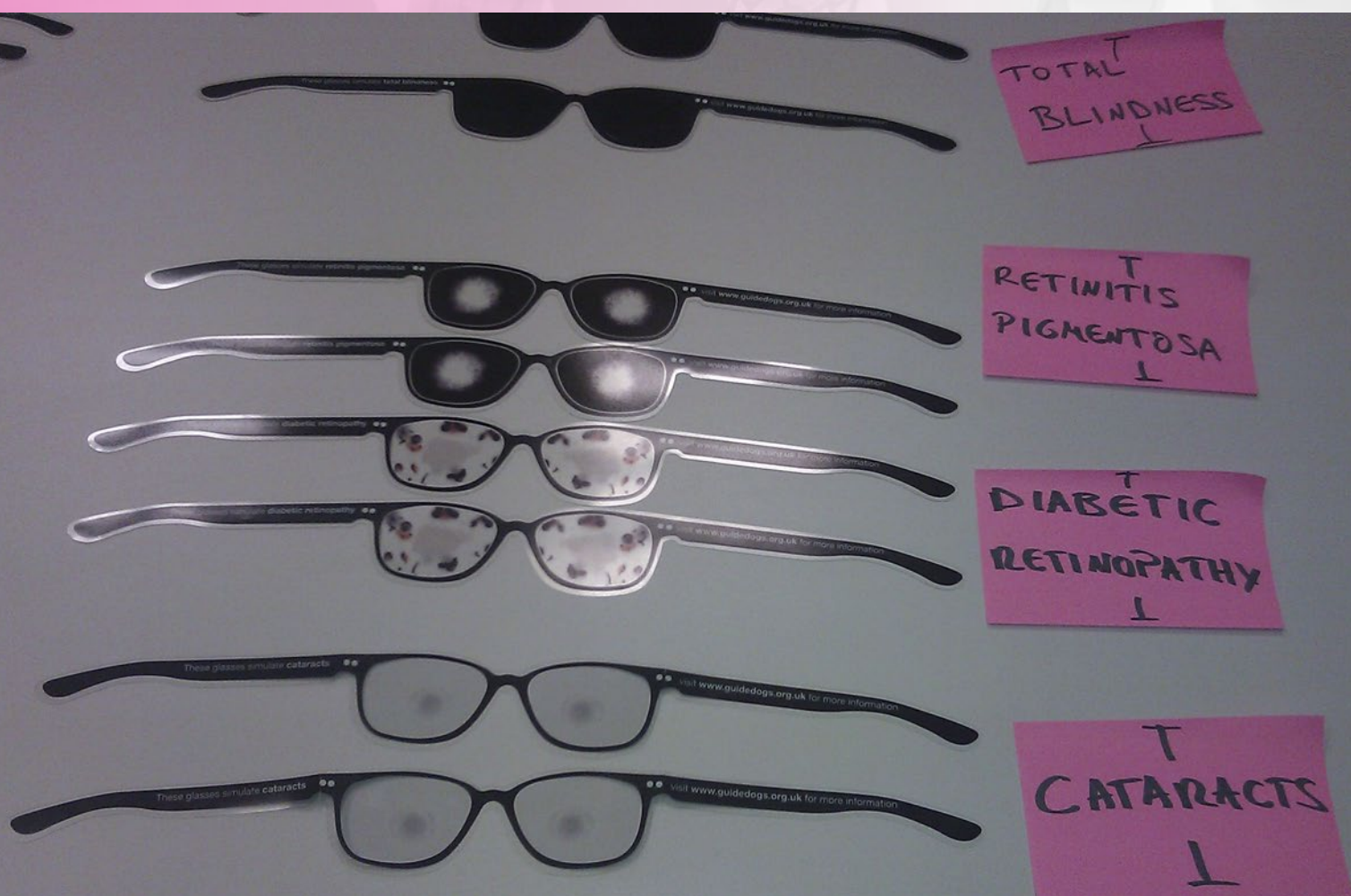
"Software applications must be accessible and usable, without barriers."
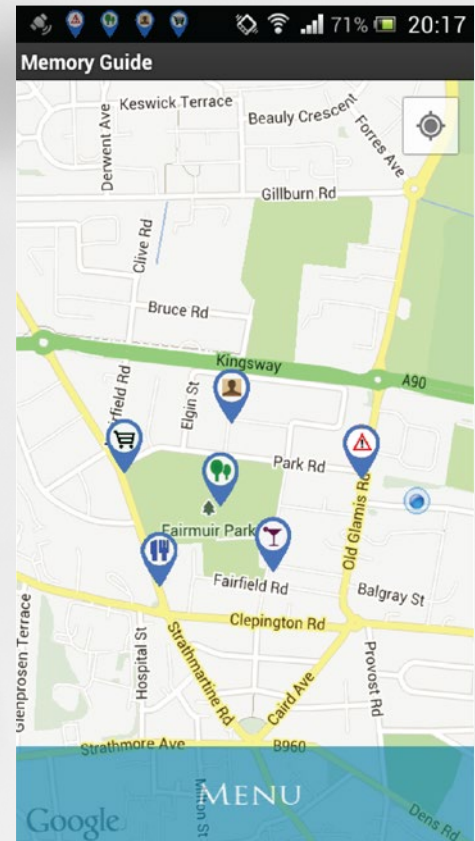
Lots of technology in one small box
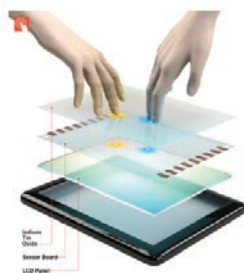
Touch Screen   GPS   Motion   Communication

clients/customers and support volunteers, as well as the technical developers of the system. All stakeholders should understand the role of accessible usability and their individual responsibility for achieving it.

If a product or service is provided to users through software, be it a desktop application, web site or mobile app, then there are moral, legal and business reasons why this must be presented in an accessible and usable manner.

Technical guidelines are well-established with regard to development practices for accessibility as they apply to IT staff but this may lead to

non-engagement by non-technical staff who commission and operate such systems; indeed sometimes technical guidelines can create barriers to any such engagement. The guidelines and acceptance testing presented here reflect the importance of non-technical staff in providing effective, accessible and usable systems through highlighting specific areas for engagement. The document suggests mechanisms for such stakeholders to actually take the lead role in supporting accessible usability through the powers implicit in their procurement, commissioning and operational responsibilities.
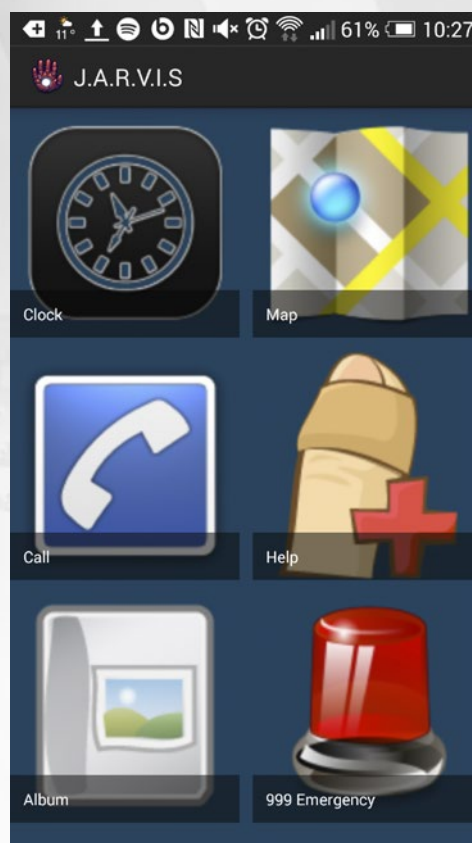
iAge Hardenberg: Lifelong Living Online

Results have been positive for the pilot "Lifelong Living Online", where the Municipality of Hardenberg works together with 4 care and welfare organizations in Dedemsvaart . The 41 elderly participants have been divided amongst the 3 subprojects 'Safety', 'Social contacts' and 'Services' and are learning very successfully to work with modern tools. They are enthusiastic and see the opportunities these tools can offer.

Gemeente
Hardenberg

Region

The municipality of Hardenberg is a rural community with an area of more than 300 km2. Hardenberg is located in the north east of the province of Overijssel and has nearly 60,000 inhabitants divided over more than 30 villages and hamlets. The pilot was executed in Dedemsvaart, a community with about 13,500 inhabitants.

In the near future this region will be confronted with population decline. This is also true for the municipality of Hardenberg, especially in smaller communities. In the larger communities of Hardenberg and Dedemsvaart the population is expected to remain in balance. The number of older people in the municipality of Hardenberg will increase significantly, while the number of youngsters will decrease. This will make it harder to provide care and other facilities at the current level.

For future policy we must realize that the next generation of older people will be more familiar with modern means. This must be taken into account in the further development of infrastructure, working arrangements and service offerings.

Since March 2014 over forty elderly people (between 67 and 90 years of age) in Dedemsvaart have been learning more about modern technology. This group of senior citizens are participating in the "Lifelong Living Online" pilot which is part of the European iAge project. The Municipality of Hardenberg works together with home care organization "Carinova", welfare organization "De Stuw", the Baalderborg Group (care for the handicapped) and the General Practitioners Group Avereest. Results are positive. The elderly are excited about using the

offered facilities and enjoy working on the iPad.

The project in Dedemsvaart focuses on the use of modern means to enable elderly people to live independently for a longer period of time. Our target group, divided amongst three subprojects, are using modern technology to experience which means can contribute to more independent and comfortable living. The outcomes of preliminary interviews indicated that older people do not usually think of modern technology as a means for extending or

improving independent living. However, as it turned out, once these means are made available, older people are very willing to get started.

In early 2014 a baseline study was carried out, followed by an interim measurement in June of the same year.
To start off, all participants received an iPad on loan. From the very beginning this group of elderly people actively practiced using their iPads and figures show an increase in use from around 20% to more than 80%

over a trial period of six months (January - June 2014). That probably also explains the increase in the use of e-mail (from 52% to 73%), video calls with friends and acquaintances (from 20% to 54%), and games or activities on the computer (from 34% to 57%). The use of smartphones has increased slightly from 21% to 26%.

Meanwhile, more than half of the 41 participants use Facetime or Skype to make video calls. Map information (e.g. Google Maps) and Facebook is also widely used. More than 75% of the test group are very keen to learn more about the possibilities of the iPad for playing games, using Skype, listening to music, using search engines and video calling with their GP.

Safety
In the subproject 'Safety' participants received some additional in-house devices that contribute to increasing safety and the sense of security. Some participants had a motion detector and light sensors installed. The detectors, placed in the bedroom, help people to find their way to the bathroom at night.
Other participants have been provided with a camera at the front door, enabling them to see callers on a screen. Although it did take some extra effort to find the most suitable camera, this facility contributes enormously to the elderly's sense of security.
Two participants from this subproject have suffered a fall during the past year. Fear of falling appears to be high, as can be seen

from the figures – initially rated at 5.8 in the first measurement this has risen to a 6.3.

Social contacts
The subproject concerning social contacts is organized by welfare organization "De Stuw". In this subproject participants experience how an iPad or laptop can help to create and maintain social contacts. The interim report shows that participants have made contacts and expanded their network by participating in the project. In addition, video calls are mentioned more often as a form of contact (e.g. Skype).

Services
The Baalderborg Group and the General Practitioners Group Avereest supervise the subproject

'Services', which has 12 participating elderly. The project revolves around ZWIP - a digital consultation table for older people with multiple care providers. This group first needed to learn the basic skills required for using the iPad. Participants are positive and enthusiastic about the potential of ZWIP. On the other hand it has become apparent that the professionals still have to get used to working with ZWIP. In the third phase of the iAge project the potential of ZWIP will be explored further.

Participants mention two benefits:
- An improved alignment between the involved care givers;
- No longer necessary to inform involved care givers every time again.

Overall results

The results of the Hardenberg pilot are positive. The elderly have learnt how to use the iPad quite quickly and they really enjoy it! Moreover, people who were initially very sceptical, questioning the need for such modern tools, are now active iPad users.

The following findings are noteworthy:
- The elderly are quite capable of learning to use modern means of communication;
- The elderly are excellent motivators within their own target group.

As yet, it is not entirely clear what next steps will be taken on the basis of these results.

"The elderly are quite capable of learning to use modern means of communication and are excellent motivators within their own target group."

ICT WORKS!

The province of East-Flanders and its sub-partner `RESOC Gent en Rondom Gent' have engaged in two activities. The first targets the stimulation of the use of social media, for job search by unemployed 50+ and job promotion of care professions by care ambassadors. The second aims to encourage health care teachers to integrate the theme 'home automation' in health care education curricula.

Provincie Oost-Vlaanderen
Voor ieder van ons

The Provincie Oost-Vlaanderen is the second biggest Belgian province, with 1.5 million inhabitants (surface area: 3,000 km². Its number of 65+ inhabitants is expected to rise with 20% towards 2020 (baseline year 2008), to about 300 000 people.

The department of Economics, European and International cooperation of the Provincie Oost-Vlaanderen is partner in the iAge project. The Provincie Oost-Vlaanderen (Province of East-Flanders) is an intermediate government authority. In Belgium there are four levels of government: federal, regional, provincial and municipal.

Sub-partner of the Provincie Oost-Vlaanderen is RESOC Gent en rondom Gent (with ERSV Oost-Vlaanderen as legal entity). RESOC Gent en rondom Gent is an organisation (financed for the largest part by the Flemish government) with as its most important task facilitating the socio-economic development of the region Gent en rondom Gent. This region with about 400,000 inhabitants comprises ten municipalities: the city of Gent of course, and nine neighbouring municipalities: Destelbergen, Evergem, Lochristi, Melle, Merelbeke, Moerbeke, Oosterzele, Wachtebeke and Zelzate.

The matching process between employer and employee occurs increasingly through the use of social media. By lack of knowledge of these social media older job seekers are missing job opportunities. Within the classical job application training for unemployed 50+, offered by the regional public employment services, the attention for the use of social media has proven insufficient. To fill in this void, 12 coaches in such training programs were offered 1 ½ day training program (by an external specialised trainer), covering the fundamentals of social media and their applications in job seeking, as well as specific use cases. The program also addressed the opportunities and threats of job seeking via social media and general guidelines for dealing with resistance towards new ICT instruments. All coaches involved in this training have since experimented with social media. Some are directly transferring their acquired knowledge to their job application trainees, while others are using them indirectly to facilitate the communication and exchange of information with their trainees. As a result, roughly 12 50+jobseekers are familiarized with the use of social media for job applications every six weeks.

As a result of the ageing population, we have a great need for new labour forces within the healthcare sector. For this reason Flanders initiated the campaign 'ikgaervoor.be' to promote the healthcare professions. The Province of East-Flanders supports this initiative through ± 70 care ambassadors. Their promotion and communication is crucial. The ambassadors involved can use the

"As a result
of the ageing
population there
is a great need
for new labour
forces within
the healthcare
sector."

social media as a communication channel in their task, as well as motivate their employers to use these new media. However, the older ambassadors indicated that they were not familiar with the social media that could help them in this task. These professionals, in various branches of the healthcare, sector have been offered the opportunity to follow a basic and/ or advanced crash course (½ day each) in the use of social media as an extra promotion channel supporting their ambassadorship. On the beginners course we welcomed 28 participants. The advanced course counted 42 participants. Awaiting the final evaluation of this project, we have noticed that some of the participants of these courses have already launched their online ambassador's profile.

Care providers for the elderly are ideally placed to offer advice about the supporting capabilities of home automation technologies. However, as this topic is currently not addressed in their educational programs, they are ill prepared for the task. By sensitizing and supporting the teachers, we hope to change this situation. We will create customized course material about home automation, covering an overview of existing products, their use in supporting the home user and/or care provider and the cost and requirements for their installation. In addition, we will offer training workshops to familiarise healthcare teachers with these technologies and to coach them in the use of the developed course material in their classes. To support us in this activity, we have attracted partners who are specialised in domotics and domotics education.

Hanze UAS Groningen

Hanze University of Applied Sciences in Groningen is strongly involved in the iAge project. It participates with its Centres of Applied Research and Innovation, Entrepreneurship, Labour Market, Area Development and the Quantified Self Institute. Professors, lecturers and students of the Hanze University have an active role in multidisciplinary research and development, to achieve the iAge goals.

iAge develops new approaches to service delivery and economic development through joint development of ICT innovation. iAge promotes the use of ICT to prevent people from exclusion, improve employment opportunities, quality of life and social participation. Transnational activities and joint analyses create positive achievements towards the EU 2020 objectives of innovation and employment.

How can elderly people be motivated to make choices about their living environment that will help them to stay healthy and independent for longer? Research shows that many people choose to ignore possible housing problems and health risks that can come with age. At the same time, they want to create a nice living environment for themselves and are willing to spend time and money to achieve this. We aim to use individual preferences when adapting housing solutions to stimulate elderly people on their specific path in 'lifelong living'. The basic assumption is that there is no 'one size fits all' solution. The goal is to match possible solutions to different target groups. From Hanze UAS point of view, the use of ICT in and around the house should focus on health and sustainability. The pilot aims to link these benefits.

Living the future
ICT solutions can play a role in independent living. In a pilot study, students asked 42 people over 65 which auxiliaries and house modifications helped them live independently before they moved to a nursing home. Some 75% of the respondents had had their houses modified. Strikingly, none of them regarded ICT as a means to living independently for longer.

Home automation for Livelong living
In 2030, the number of people over 65 will be 50% greater than today. To enable older people to live independently longer, six students of Hanze's schools of ICT and Physical Therapy developed the prototype of a platform controlling ICT applications in a house. They named it Home Automation Living Platform (HALP).

One of the shortcomings of current home automation is the absence of a central platform to connect with. Devices cannot interact with and relay data to clients and medical practitioners. Bringing an open hardware platform and open source software into the clients house results in a powerful piece of hardware, capable of providing access to and from different sensors.

Domotics and caregivers
The demographic composition of regions in decline is changing. The number of elderly people is growing. The simple fact that they need more care than younger people is putting increased pressure in local governments' budgets. Municipalities need to make cutbacks. Assisting seniors to live independently in their own homes for as long as possible could be a solution. Home automation applications could be of great help. To find out about the adjustments needed, twenty caregivers from

Hanze University of Applied Sciences
Groningen

Hanze University Groningen (Hanze UAS)

Hanze UAS is a University with more than 2,700 employees and over 25,000 Dutch and foreign students who have enrolled in one of the seventy degree programmes in the fields of economics, technology, health care, education and teacher training, social work, labour relations, fine arts, and music. Hanze UAS is one of the largest and most all-round universities of Applied Sciences in the Netherlands. Research takes place in our six research centres. Healthy Ageing, Entrepreneurship and Sustainable Energy are strategic aims of Hanze UAS.

"iAge develops
new approaches
to service
delivery and
economic
development
through joint
development of
ICT innovation."

different home care institutions in the southwest of Friesland were interviewed. Self-sustainability, self-control, safety and privacy of the client are named as the main advantages of technological applications. Unfamiliarity with the possibilities, possible resistance, inability of the user and finances are mentioned as drawbacks.

A Careless future
This pilot examined the attitude of a few dozen people over 50 towards practical, architectural and technological modifications in their houses aimed at living independently longer. The objective for the research was the development of a checklist, a list by means of which houses can be assessed as whether or not appropriate for different types of people over 50, depending on their way of life.
The main research question was with which conditions a checklist should comply to be useable for those who classify houses. Considering the developments in health care, the use of ICT is necessary.

Social Housing
Students of the School of Architecture, Civil Engineering and Construction, conducted a graduation research into the life-cycle durability of Dutch social housing. Commissioned by a housing cooperative, they examined the architectural

characteristics of a soon to be renovated district in Nieuw-Buinen, a small town in the municipality of Borger-Odoorn in Drenthe.

Gradual Retirement
Economic (e-)inclusion of older workers is problematic in western societies in general, and in the Netherlands in particular. Approximately 2% of hired workers is over 50 in the Netherlands, whereas that number hovers around 10% in other countries. Given the current low regarding the job market for older workers in the Netherlands, this pilot explored the opportunities for two alternative strategies to increase the e-inclusion of older citizens. Improving opportunities for gradual retirement can help lengthen careers by allowing for a gradual reduction of productive work rather than a full stop. Quantitative and qualitative results show that workers between 50 and 67 prefer to retire gradually by applied flexible working schemes, reducing the workload and the weekly hours. Gradual retirement stands for more than a phased reduction of working time. It also includes adaptive modification of job content. ICT tools are considered helpful tools in supporting sustainable employability. They can make older workers less vulnerable at work places, make them stay employable and can also be used as a means to stay in contact with peers, friends and local institutions after retirement.

Gellert concluded that scenarios considering reduced working hours, knowledge transfer, flexible time schedules and ICT training need to be developed to improve transition to retirement and to ensure societal inclusion after retirement.

Self-tracking devices
This part of the project focused on increasing e-inclusion of older citizens by stimulating self-employment and awareness using self-tracking devices – so called mHealth applications. Older workers got the opportunity to use and test self-tracking devices that measure and give feedback on the workers' lifestyle. In the project, the Professorships New Business & ICT, Labour Market Participation, the Quantified Self Institute and SME Estafette, cooperated intensively.

A pilot study examined if and how older workers can be stimulated to change their lifestyle in order to stay vital and work longer. Twelve employees of the company were equipped with sensors giving feedback on one aspect of their physical functioning. The pilot study was a first step towards testing the effectiveness of self-tracking devices. It uncovered practical and methodological issues that you have to take into account, before starting a large-scale research. Self-tracking devices can stimulate people to effectively change their behavior, if personalized and related to personal choices and goals, feedback.

Transnational exchange
The partners in iAge worked together by learning, exchanging experiences and developing expertise within each work package. They implemented the iAge check, added knowledge to wikiAge, participated in meetings and conferences organized by each partner and all contributed to the transnational exchange and dissemination of results.

During the iAge partner meeting in Groningen (November 2013), the International Health Battle took place at Hanze University of Applied Sciences Groningen (NL). Students from the iAge project Universities of Scotland, Norway, Denmark, The Netherlands, Belgium and Germany attended the competition. Delegates from the iAge partnership also witnessed the three-minute pitches. Thirteen student teams, consisting of students from all over Europe, worked in multidisciplinary teams on issues related to Healthy Ageing. They competed for a place in the finals. In just one day they solved cases on issues related to health and lifelong living.

Another specific result of Hanze University is the exchange of students and lecturers. Students, who were involved in research of home automation in the iAge project, could participate in a programme about usability and accessibility at the University of

Abertay Dundee, Scotland and the University of Adger, Norway. Lecturers (experts in usability and accessibility) from Hanze University accompanied them. The students learnt a lot about how people see things around them and what people focus on. They participated in a workshop on co design. Students of the University of Abertay, presented their game concepts to the public and developers of leading game studios. At the University of Agder, lectures were given on different subjects that relate to usability and user experience. The focus was on the human perception and how this deteriorates over time. The course involved testing systems in the usability lab. Results of the test cases were discussed with students from Iceland, Norway and Germany.

As a transnational result the University of Abertay and Hanze University developed a checklist and guidance for testing the usability and accessibility of developed IT products.

View to the future – Fit 4 Sustainable Employability
As a follow up of the Interreg IVB iAge project, several partners are interested in participating in the Fit 4 Sustainable Employability programme.
You can read more about this programme in the article 'So, what happens next?' further on in this magazine.

A Volunteer Database

The pilot in Belgium involved building a software tool that allows an optimised matching of volunteers and offered jobs. The value of this tool is the combination of historic profiling of the volunteer and geolocation of offered jobs. The Public Centre of Social Welfare (PCSW) Kortrijk has successfully implemented the volunteer database. A learning network, consisting of 13 municipalities in the region South-West Flanders transfers the know-how and the use of the software tool to the entire region.

Creating a software tool

The iAge project partners realised that a lot of voluntary work is done by and for the elderly. More specifically, we noticed in the Kortrijk region in Belgium that the practical organisation of volunteer work could be made more efficient. There was no consistent use of a software tool that built a historic profile of a volunteer, nor was there a uniform communication tool. The aim of the Volunteer Database was to build a software tool that allows a better matching of volunteers with offered jobs. The software tool creates a database of volunteers with historic profiling of their preferences and competences.

Intercommunale Leiedal – Mentor vzw

Leiedal is an inter-municipal organization that supports the broad socio-economic and spatial development of the 13 municipalities in the south of West-Flanders (in Belgium). The city of Kortrijk is its capital. Kortrijk is a 20-minute drive from the French city of Lille (Rijsel). The region has one of the most dense networks of organizations, governments and institutes, and civil society involved in regional development. One of the main axes of development is entrepreneurship. In the region about 10,000 companies, mainly SMEs, are active. In the past there was an important flax and textile industry. Nowadays many future oriented companies are active worldwide in various different product categories, although the textile industry is still important.

In partnership with the 13 local governments, Leiedal aims for a sustainable development of the region, into an optimal area to live and to work in. Leiedal's main activities are economy, e-government, urban development, living and housing, environment, mobility.

Mentor is a sub-partner of Leiedal. Mentor vzw is a centre for Life Long Learning and an advisory office for social economy. The mission of Mentor vzw is to promote durable employment of disadvantaged groups on the labour market. Mentor's main activities are education (for jobseekers, workers and employees), guidance, orientation and advice to companies. The organization is located in Kortrijk , Belgium.

"The software
tool creates
a database
of volunteers
with historic
profiling of their
preferences and
competences."

The first pilot was set up at the Public Centre of Social Welfare (PCSW) Kortrijk, Belgium. After a thorough assessment of the current intake of volunteers, the pilot constructed a software tool with a decentralised database system. The software tool has been made as generic as possible so it can be transferred to other organisations. However, the database of volunteers remains proprietary to the organisation. It has proven to be a challenge to implement the same software tool in different organisations, as the requirements differ. Nonetheless, a regional roll-out of a volunteer software tool seems feasible. After the development of the database, workshops were organized to help the staff of the PCSW (the future 'administrators') to learn to work with the new database and a competence aimed system.

Smart database
The pilot in Belgium learned to build a 'smarter' database by comparing the taxonomy of the database with the platform of the German project partner Sentiso. de. While the German platform matches elderly with a paid job, the Belgian software tool matches (elderly) volunteers with volunteer jobs.

Now that the volunteer database is up and running in Kortrijk, we can say that the pilot has been successful. The database consists of 700+ profiles that allow a better matching with a geo-located volunteer job. The regional roll-out of the software tool to other municipalities and organisations has been made possible by building a learning network. The network consists of multiple organisations spread over 13 municipalities who are active in volunteer work. The network exchanges know-how and tutorials on how to use the software and how to build a coherent and efficient database.

In terms of lessons-learned, we can share with you that the administrators of the tool need to have some digital skills and a mind-set for a better service, change and growth. Ultimately the software tool needs to be customised to the requirements of each organisation. A regional roll-out of the (customised) tool is only possible through acceptance of change and the will to improve by the administrators. The exchange of experiences in the learning network is key to the longevity and sustainability of the volunteer database software tool.

The Elderly creating active communities

Groups of elderly volunteers are creating active communities by gathering leisure activities on a website called "Gang I de gra" and elderly "ICT-mentors" are teaching elderly people with mobility issues computer skills in the privacy of their own homes.

During the course of the iAge project the Danish partner, the University College Lillebaelt, focused on testing the possibilities for creating active communities in less developed areas where the active elderly themselves play a crucial role. The aim was to develop a training model that can be used by resourceful elderly people to create, promote and implement a wide range of activities, supported by an ICT-Platform and using social media.

Challenges
- Starting up informal health promotion & prevention activities, supported by an ICT-Platform. (Elderly volunteers working with "Gang i de Graa").
- Enhancing the social inclusion of elderly people through the use of social media. (Elderly ICT–Mentors teaching immobile elderly at home).

Achievements
As part of iAge's WP 3, a platform showcasing leisure activities for the elderly in the Municipality of

Hedensted has been set up and is now online - www.gangidegraa. dk. . Leisure activities such as badminton, cycling tours and hiking are continuously being presented. A municipal consultant collects information and arranges this for presentation on the website while a group of elderly volunteers develop and maintain the site. After receiving training, instruction videos have also been produced by these same volunteers to show physical activities for the elderly. A suitable walking track is also being developed for the target group and Nature Guides from our partners at the Municipality of Hedensted explain on video about the landmarks en route. Information about this walking track can be found on the website; we hope this will inspire other groups of elderly people in the area to design similar routes in their neighbourhood.

The former pilot activity "ICT-mentors" (WP 4) is now part of a regular service offered by our municipal partner. Four courses with 15-18 elderly ICT mentors and

about 60 elderly end-users have already taken place. The idea has always been that one ICT mentor teaches one elderly person with mobility problems in the privacy of their own homes. The Municipality of Hedensted now promotes this service with, for example, a flyer. A new objective is to teach the end-users how to use an iPad. The aim is to discuss didactics for training the end users and to train the ICT-mentors themselves in the use of iPads.

Lessons learned
During the Danish pilot a group of resourceful elderly volunteered as ICT-mentors to teach other elderly people with mobility problems one-on-one in their own homes. This individual approach in comfortable and private settings was very successful, not only because the participants improved their ICT-skills, but also because this resulted in an increased self-confidence, sense of security and a desire to learn more after completing the ten session course.

UNIVERSITY COLLEGE

Lillebaelt

University College Lillebaelt in Denmark offers the entire welfare package. We educate nurses, occupational therapists, physiotherapists, radiographers, biomedical laboratory technicians, social educators, teachers, social workers and public administrators with a strong theoretical foundation and firm roots in practice.

University College Lillebaelt is one of seven university colleges in Denmark established 1 January 2008. A large number of smaller institutions – of which most offered only one specialized bachelor programme – have merged and most medium-cycle higher professional education programmes in Denmark are now offered by university colleges. University College Lillebaelt covers part of the Southern Region of Denmark and has approximately 7,000 students and 700 employees.

"Teaching
the elderly
one-on-one in
their own homes
has been a
very successful
approach."

The Danish partners have produced a report, based on scientific research, on the most important factors involved in teaching the elderly ICT skills. Using Hiim & Hippe's model on didactic relations, the report focuses on the individual elder, their learning resources, the framework, outcomes and future perspectives of teaching the older generation ICT- skills.

Cooperation
iAge UCL has been a co-operation between employees and students from UCL, elderly volunteers, staff and consultants from the Municipality of Hedensted and representatives from the DaneAge Association (Ældresagen)
The Norwegian Municipality of Vennesla, with their "Granma on the Web" pilot, has visited our pilot in Hedensted and UCL to share experiences, with a focus on working with elderly volunteers. In turn, we have been visiting the Dutch partners in Hardenberg to exchange ideas and explore future co-operation.
UCL has also visited the University of Abertay, Scotland, in order to test the design of the www.gangidegraa.dk website.

Future steps
- The pilot in Hedensted will continue the work and focus on elderly volunteers. iAge has played a motivating part in this process.
- Hardenberg (NL) is planning to re-visit Hedensted in 2015.
- UCL has created a strong focus on "Training methodologies of the elderly" and the experiences will be useful in the work of UCL.
- UCL intends to be part of future bilateral agreements with participants of iAge.

Telecare in Northeast Groningen

After one and a half years, over 50 home-care clients use a videophone or tablet as a support for their home care and as part of daily life in Northeast Groningen. It's time for an update on what has been achieved in this iAge pilot.

"The elderly are becoming more informed and skilled in the use of ICT and are also willing to use this in contact with professional organizations"

In Northeast Groningen the first experiences have been made with the use of the telecare video phone in (health) care. This new means of communication was installed in the homes of 50 clients of care provider Oosterlengte. Over a dozen more will be installed before the end of 2014, and a number of information sessions have been planned for user support. Clients using telecare, in addition to home care, received a videophone or tablet computer. "The people are very enthusiastic up to now", says coordinating nurse Harry Koning from Oosterlengte. "Our oldest telecare client is a lady of 98 years old! We have consciously chosen for a tried and tested system, - recognizable, affordable and reliable. The first experiences are promising. We can now have screen contact with the client to check if medication has been taken, for example, whereas previously we had to visit six times a day. "

The local support office for welfare and social work 'Het Oude Ambt' also joined the home-care organization on the digital platform. Clients or their relatives can contact the support office for questions on daily living, welfare, voluntary help at home and for information on suitable activities in the neighbourhood. "We see this videophone as a useful aid and think it helps us provide the elderly and their informal carers with a more personal assistance in a pleasant way" according to Marcel van Leeuwen, Manager at 'Het Oude Ambt'.

ZORG INNOVATIE FORUM

Oosterlengte

Oosterlengte is an integrated care organization in the East of the province Groningen and works in the municipalities Oldambt, Bellingwedde and Pekela. Offering a wide range of care, Oosterlengte operates eight nursing homes and a home care organization with over 1900 clients and more than 1000 employees, a meal service used by 1400 clients and a Member Service (for gardening, job services, pedicure, etc).

CMO Groningen

CMO Groningen is the knowledge centre for care, welfare and education in and for the province of Groningen. CMO Groningen regulates the provincial coordination regarding family and informal care for the province of Groningen. Within the province there are 20 points of support for informal care and CMO's assignment is to support these.

ZIF

The Healthcare Innovation Forum (Zorg Innovatie Forum, ZIF) is an independent network organization in the Northern Netherlands consisting of 25 healthcare institutions, healthcare insurers, NGO's, municipalities housing corporations and institutes for education and research. ZIF was founded in 2007 and stimulates cooperation and participation in structural healthcare innovation, prevents fragmentation and creates economic sustainability.

The Region

The eastern part of the province Groningen is an economically weak region with a relatively low social standard, low level of education and high unemployment. The region is extensive, meaning that home care involves a lot of time and travel costs, which has financial consequences in these unprofitable areas. The shrinking population and rapidly changing demographics is a problem for healthcare delivery. The financial maintenance of a home care infrastructure in rural areas of economic decline will become increasingly difficult if no change occurs.

"The Elderly use video phone for homecare and informal care support to live longer in their own homes."

Together
Before this videophone system could actually be implemented, the project partners first needed to fine-tune matters with all stakeholders in the region, such as housing corporations, general practitioners, hospitals and rehabilitation centres. "In this area the number of people over 65 is increasing by 60% till 2040, while the number of people who can give care is decreasing. We are also experiencing de-population here, so a declining number of inhabitants. These challenges can be resolved with smart solutions. Telecare, for example, will become more and more available for the elderly and care professionals in the coming years. At first the introduction of this telecare system was a sole initiative from healthcare organizations, but now the elderly and their relatives are more enthusiastic and are keen to use the application.
They are becoming more informed and skilled in the use of ICT and are also willing to use this in contact with professional organizations (e.g. home care) and with their general practitioner", says Sander Holterman, Project Advisor at ZIF, partner in this iAge pilot.

Holterman is enthusiastic about the contacts, several times a year, with the other European iAge partners.. "We exchange experiences and keep each other informed of new developments. The videophone we use, for example, was also tested in the eHealth Lab of our Norwegian partner. In Scotland we learned useful lessons on the cognitive aspects of an ageing brain and took this into account when producing our brochures and instruction guide for elderly clients. One example; avoid the use of English IT terminology. "

Expansion possibilities
Now that the use videophone has taken off at the home care and welfare organization, further involvement of other regional stakeholders is on the agenda. Several general practitioners and the regional hospital are positive about the possibilities of eHealth applications like the videophone but also admit that they need support due to scarce time and lack of eHealth experience. Current changes in government policy concerning the regional organization of healthcare offer new opportunities but also raise new questions on the costs of care and (the limitations of) own responsibilities and self-management of the elderly.

The Labour Market and Best Agers

Wirtschaftsakademie Schleswig Holstein (WAK) in Germany supports labour participation of the elderly in Schleswig Holstein, Germany. Our aim is to raise exchange of knowledge and experiences between the labour market and best agers.

It was a central goal of the pilot to identify instruments with which labour market participation (including volunteering) of retired persons can be increased. This also includes improving the image of the elderly as skilled e-professionals and encouraging businesses to provide incentives for people of 65+ working after retirement by using IT.

The regional demographic report of Schleswig-Holstein shows that the working population in rural areas is shrinking in numbers as a result of demographic change. As a consequence rural regions will be more affected by a shortage of skills in comparison to bigger cities like Kiel or Lübeck. Strategies of companies to tackle this demographic trend, (e.g. renewing their know-how exclusively by replacing the older employees with younger ones) are doomed to fail. It is important to keep the knowledge and experience of the elderly in the regional economy in the future.

In this context it is of the essence to keep elderly people within the company after retirement and/or to encourage them as entrepreneurs. Our main aim is to increase active participation and productivity of the elderly in relation to the labour market in the EU, especially in the North Sea Region.

We have succeeded in the development and implementation of mentor and coaching programs in cooperation with the job centers and the Federal Employment Office in Kiel. There we were able to empower and coach unemployed 50+ with ICT-courses and consultancy.

We improved the development and integration of the online recruiting portal 'Sentiso' to enhance the connection between elderly people and companies looking for skilled and experienced project workers. This offers an alternative solution - the shortage of skilled labour and demographic change is seen as an opportunity rather than a problem.

Furthermore, a first set of online tools for the elderly was developed in cooperation with the senior network in Kiel and the Berufsakademie of the Wirtschaftsakademie Schleswig-Holstein. This is a BA - College of Cooperative Education; a career-oriented alternative to technical colleges and universities. This tool provides information and tutorials and training for the use of tablet PCs.

Another important topic in our project was the implementation and design of ICT courses for older employees.

The speed of change in the area of Information and Communication Technologies (ICT) requires employees that easily re-qualify themselves and improve their skills, through training. Employees can effectively use modern technologies, such as e-learning, for training. The normative literature indicates that the ICT training process becomes more

IHK Wirtschaftsakademie Schleswig-Holstein

Schleswig-Holstein lies in the north of Germany. It borders on Denmark (Region Syddanmark) to the north, the North Sea to the west, the Baltic Sea to the east, and the German states of Lower Saxony, Hamburg and Mecklenburg-Vorpommern to the south. The GDP/ nominal is € 75.63 billion.

With 2,837,641 inhabitants it reaches a population density of 180 per km2. 22% of the population is 65+.

Wirtschaftsakademie Schleswig-Holstein was founded in 1967 and then re-established itself as the new Wirtschaftsakademie Schleswig-Holstein GmbH at the beginning of 2004. As a private service company with the status of a public welfare institution, it provides advanced training courses for the Flensburg, Kiel and Lübeck Industrie- und Handelskammer (IHK - Chambers of Industry and Commerce).

The Wirtschaftsakademie Schleswig-Holstein contributes new perspectives to working life and to the economic success of the companies in the area between the North and Baltic Seas.

The college offers diverse study courses at 17 locations, covering rural areas state-wide and with own guesthouse accommodation close by e.g. in Kiel, Elmshorn, Lübeck or Husum.

"It is important to keep the knowledge and experience of the elderly in the regional economy in the future."

learning environments for older persons:

- Self-concept and Motivation to learn - adults need to be involved in the planning and evaluation of their instruction
- Experience (including mistakes) provides the basis for learning activities
- Readiness to learn - adults are most interested in learning subjects that have immediate relevance to their job or personal life
- Orientation to learning - adult learning is problem rather than content-oriented

For effective motivation, the learner should be put in the centre of learning: the starting point must be a question from the learner. The learner must be allowed to decide about important elements of the training structure, as well as the learning process itself (communication, collaboration, even co-instruction). To keep the learner motivated, modularization of the learning is an essential element, as well as customization of the material.

complicated when we focus on older employees. Also, older employees (over 40 years of age) have different training needs, skills and capabilities compared to younger employees.

In our project we summed up all efforts in terms of ICT training and, basically speaking, the following principles should be put forward to guide designers while creating

¡Age has come of age!

When iAge started in 2012 the partners defined a number of goals and, as we now approach the final phase, it is time to reflect on what has been achieved during the 3-year life span of the project.

What has been achieved?
Concrete results include the development of a transnational ICT toolbox consisting of training material and software applications, with contributions (tested in different environments) from all iAge partners. The Trimbos Institute made an inventory of relevant ICT tools (in development or already running) which provided input for the iAge toolbox and gave an interesting overview of ICT tools that consider the needs of the end-users. With Trimbos coordinating, the partners addressed the objective of designing local solutions that can be applied globally and also found that new technologies are not always the answer; smart use of existing technologies can work just as well and cost less. The Institute also produced a report, with the collaboration of all partners – 'Barriers and needs in ICT use of elderly people'.

Sharing knowledge about the innovative solutions for e-inclusion in ageing Europe and spreading the results of the project amongst the iAge partnership and relevant stakeholders has remained important throughout the project. A website - www.iAgeproject. eu - and the use of social media (Facebook, Twitter and Blog) are essential means of communication and these were used extensively to post updates on project progress. The website is also linked to 'wikiAge', a Wikipedia-style application which is used to post information and upload articles and tools on e-inclusion in ageing Europe. Every opportunity was seized to inform and promote the project during meetings and conferences in all partner countries, thus ensuring international exchange and contributing to an ever-expanding network.

The University of Abertay Dundee investigated appropriate display techniques for end users in terms of visualization and helping older adults to understand the use of current technology. They also designed the online 'toolbox' so that all the training material and applications developed by other partners during the course of the iAge project are now readily available at www.wikiage.eu/tools.

Partners Drenthe, Wirtschaftsakademie Schleswig-Holstein (WAK), Intercommunale Leiedal and Hanze University Groningen have stimulated self-employment using ICT in one way or another. For example: the WAK analysed existing online portals for elderly employees and entrepreneurs in the region of Northern Germany and implemented the online recruiting platform 'sentiso.de' for retired professionals. This platform was further developed within the iAge project , improving employment opportunities for older people. There has been a concrete exchange with our Belgian partners Leiedal and East-Flanders and activities focused on detailed matching tools, senior e-mentor networks and online coaching, online support for informal carers, intergenerational training ('train-the trainer') to name but a few.

iAge

The iAge partnership includes (regional) government authorities and Universities. We cooperate with knowledge institutes, educational institutions, professional care providers, social welfare organisations, housing associations, GPs, local interest groups, client representative councils, associations of the elderly and SMEs , including ICT companies.

Closing the gap, building new bridges

Raising awareness of authorities, service providers and SMEs regarding the lack of end-user oriented ICT technologies in labour-market services and services related to life long living was an important theme in iAge. Over the past years we have also discovered new opportunities regarding the enhancement of economic development in areas in decline - not just closing the gap between developers and end-users regarding ICT and e-solutions but also building new bridges for future collaborations and e-inclusive solutions.

The situation of informal caregivers combining work with care, and raising awareness by employers (in particular SMEs) and the public has been highlighted by the Drenthe partners in a very successful, wide-scale campaign. A group of working caregivers was also paired with care-receivers to test a tablet application (Doeboek) designed to support the caregivers in their multiple tasks and consequently contribute to the survival of these small businesses.

Whilst the Province of East-Flanders encourages the older unemployed people (50+) to job hunt by using social media in addition to the traditional channels, the University College of Lillebaelt in Denmark has created a course for elderly volunteers who, in turn, teach immobile elderly basic social media skills in their own homes. Leiedal offers many suitable volunteer jobs and with a modified database, using an improved tool, employers' requirements are more easily matched with the competences of volunteers. This improved matching of supply and demand should ensure an increase in the participation of older workers on the labour market and an improved regional economy.

The WAK, in cooperation with the regional job centres, had 9 unemployed participants between 55 and 64 taking part in a mentor session to build up their own business in the services sector. On passing an exam participants are allowed to build up their business in practice. This approach was compared with the Danish project and used as a transnational model concept. The Hanze University Groningen explored the development of a virtual incubator (ICT-tool) for people over 50. With the virtual incubator people are supported and facilitated when starting up their own business. This includes online skills training and exchange, educational services and guidance to expand on innovative ideas.

Life Long Living

In the field of Life Long Living, partners jointly tested the user-friendliness of ICT apps and the three universities (Abertay Dundee, Agder and Hanze University of Applied Sciences) held a joint PhD-course on usability. The UAD worked on software applications to enable the older generation (55+) to use mobile technology for support in their daily lives. The applications help users to use the technology efficiently and to their own benefit. Functionality allows for greater and easier communication between the user and their extended network, family, friends, healthcare professionals or other services. The University of Agder, Norway and the University of Abertay Dundee also exchanged views on the principles of co-design, usability testing, web accessibility and e-health systems. The Oosterlengte Foundation, sub-partner of ZIF (Health Innovation Forum), implemented tele-care applications and tested user friendliness.

The Municipality of Hardenberg studied the national and regional use of ICT, Domotics and social media by the elderly, researched what is available in the region and analyzed the ICT needs of the elderly. Various ICT options were tested on the basis of the results. In Norway, the 'Grandma on the Web' pilot was a great success in many ways. Here young students (around 14 years of age) taught their grandparents (65+) the ins- and-outs of basic computer skills and social media. The University of Agder evaluated this ICT-training and published a report on their findings. A course manual has been made and shared with the iAge partners and other regions in Europe. With this approach – the young teaching the old - a target group has been reached that would never have signed up for a traditional course.

iAge has had many successes and the partnership has more than achieved the set goals. Along the way we have discovered new approaches, gained more insight, adapted some activities as a result of lessons learned and exchanged experiences, technologies and much, much more. Some of the partners may continue working together in future projects, others will broaden their scope and focus on other aspects of healthy ageing, technological innovation, lifelong living and demographic change. While we all face the challenges posed by an ageing population in Europe, one thing is for sure: based on the experience of our iAge cooperation, each partner is more than willing to contribute to future solutions.

You can follow us on Facebook, Twitter @iageproject or visit www.iageproject.eu.

So, what happens next?

As iAge ends, final reports are being written and results are being disseminated. The project focused on combating social exclusion and improving employment opportunities, the quality of life and community participation of the elderly in Europe. iAge offers new approaches for service delivery and stimulates economic development through ICT innovations. However, this is also the time for looking forward and considering next steps. So, what happens next?

There are a number of project proposals and ideas currently being developed for the new Interreg Programmes. By using existing networks and forging new alliances many of the iAge partners have become involved, as interested parties or co-creators, in these projects. New partners are still welcome! Some of the proposals are more developed than others but the following pages offer an insight into future goals and ambitions.

Contact details for each project idea can be found under each description. For further information and support during the development of potential Interreg projects please visit the programme website www.northsearegion.eu.

Informal care and voluntary assistance

As a consequence of an ageing population, the rising costs for health and care services and recent budget cuts, many (national) governments in the countries around the North Sea have moved from a care system whereby the state regulates, cares and pays to one that facilitates a civil society that is based on solidarity and community. Looking for new strategies, decision makers in several countries have directed attention to informal care and voluntary assistance.

This Interreg VB project idea deals with **Informal care and voluntary assistance: innovation in (public) service delivery**. The project aims to improve processes related to voluntary work and informal care in health and public services.

The project will probably submit in Priority 1.1: Develop new or improved knowledge partnerships between businesses, knowledge institutions, public administrations and end users with a view to long-term cooperation (post project) on developing products and services.

Several partners from the iAge project on e-inclusion in ageing Europe are preparing this new project.

Interested partners from iAge so far are:
- Knutepunkt Sørlandet, NO
- University of Abertay Dundee, UK
- University of Agder, NO
- Province of Drenthe, NL
- Leiedal/Mentor, BE
- CMO Groningen, NL

New partners from Denmark, Sweden, Germany and the UK are still welcome!

For further information please contact:
Svein Øderud, svein.oderud@ knutepunktsorlandet.no

Fit 4 Sustainable Employability

As a follow up of the Interreg IVB iAge project, several partners are interested in participating in the Fit 4 Sustainable Employability programme.

FIT4SE aims for increased labour productivity and employability. It stimulates (vulnerable) workers through lifestyle awareness via mHealth devices and personalized coaching. The support system combines sensor technology for biofeedback with advice about behavioral change and counseling in self-management. The partners of FIT4SE recognize that innovation is needed on four dimensions: Behavioral Change, Organizational Change, Business Innovation and Technological Innovation.

The FIT4SE proposal is an improvement on current practice as it engages employees to self-manage their personal fitness to an adequate standard for their jobs. Self-management implies self-motivation and is expected to be more effective than typical externally motivated interventions. Moreover, the use of sensor devices and an IT system enables 24/7 feedback and support, making the FIT4SE proposal a much more immediate and responsive approach than regular fitness programmes. The use of sensor

devices has been shown to have an effect on behaviour of individuals, most notably within the Quantified Self movement. However, these cases involve typically very motivated users with specific goals and ambitions to understand and possibly change their behaviour. Furthermore, these devices have become available only fairly recently and have already seen a number of new product releases. This makes it hard to scientifically establish that effects are sustained over a longer period of time. Could it be the device, or any particular feature of the device that caused the change in behaviour?

The basic approach and system allow for a large variation of interventions. Users may indicate interest in working towards very diverse goals. Interventions that deal with physical as well as mental fitness are conceivable, creating biofeedback loops involving physical activity, food and drink intake, mental training, stress, sleep and relaxation, for example. The same basic infrastructure may be effective in all these areas. Moreover,

different jobs may require different fitness levels. The thresholds of minimal performance in any given job can be defined and set as targets for an individual holding that job. The basic system would be the same for, e.g., both blue collar and white-collar employees. The chosen approach is practice-based, developing the solution in situ. By taking an applied research approach, all factors (personal, organizational, commercial, financial and technical) can be taken into consideration, thereby developing a solution that would be realistic and usable in the real world.

iAge partners from the University of Abertay (Scotland), Intercommunale Leiedal, Mentor (Belgium) and Sentiso (Germany) are involved in the FIT4SE project proposal .

More information can be provided by:
- Louis Polstra – Professor Labour Participation – l.polstra@pl.hanze.nl
- Hugo Velthuijsen – Professor New Business & ICT – h.velthuijsen@pl.hanze.nl

Healthy Rural Areas

The Healthy Rural Areas project is predominantly about maintaining and improving health and healthy ageing. The prevention of early care is the best way to achieve a higher quality of life and lowering the costs of care. In the near future self-management, self-reliance and self-monitoring will become dominant aspects in the healthcare sector. The community, regional stakeholders and public administrations will have a mediating and supporting role.

It is expected that almost a quarter of the European population will be older than 65 years old by 2030. In the transition towards an ageing society, creative and innovative solutions are called for in order to increase opportunities for self-reliant living over a longer time, improve the situation of larger groups of working older people in good physical and mental health and ensure accessible care, at a lower cost, for everyone.

E-health can play an important role. Anticipation and prevention are key perspectives: 'smart medicines', health self-monitoring, domotics and robotics are all currently being tested on a broad scale. However, it should be stated that E-health applications may only help to reach the required output when:

- Supported by an underlying cost-benefit analysis based on the long term; the use of applications is very dependant on situation, target group and financial opportunities
- Consultancy of stakeholders takes place at an early stage (potential clients, care insurance companies, General Practitioners)
- Offer and demand of innovative health applications is in tune; E-health applications do not always match the needs of the end-user.

Rural areas in decline – often poorer and lacking facilities and amenities – are particularly vulnerable, hence the urgency for innovative solutions is high for these depopulating areas. E-health applications may lead to lowering budgets for cure and care, but must only be seen as a contributing factor. Improvements in 'life style' and food quality and quantity can have a crucial influence on sustained health, both physical and mental. While most E-health applications focus on supporting physical health, the impact and costs resulting from mental disease is often much greater. Therefore, we will have a specific interest in issues related to mental health in the Healthy Rural Areas project.

Social innovation will also be of major importance in future health and care tasks – think of 'personalised care' and 'empowerment', and the innovative use of social resources (e.g. volunteers). Efficiency measures on the community level can be achieved with an improved organisation and information supply and by building new alliances.

Showcasing region-specific situations will result in innovative best practices to improve both life quality and budget savings. Based on the analyses of urgent health-related problems to be tackled in the associated partner regions, showcases and tools will be developed and executed using the concept of 'living labs'. The key-indicator for assessing success on the longer term will be a 'health-budget-index', a tool for measuring and monitoring 'life quality' and 'economic output'. This will be developed by the associated knowledge-institutes on the basis of pilot projects executed. This

index will provide us with more insight into the key-factors for health improvements and budgets used.

More specifically we aim to:
- Showcase health innovation on the community level by implementing and monitoring (a combination of) measures in the field of health innovations
- Jointly develop 'living labs' with the perspective of bringing stakeholders together (co-creation to tune offer and demand of health innovations in real life situations and to monitor results of measures taken
- Experiment with innovative solutions for specific health and care problems, using 'smart applications'

For further information please contact Peter Laan, peter.laan@faro-advies.nl

Contact

With many thanks to all iAge partners for their contributions to this magazine

www.iageproject.eu

Twitter: @iageproject and Facebook

PO14110404
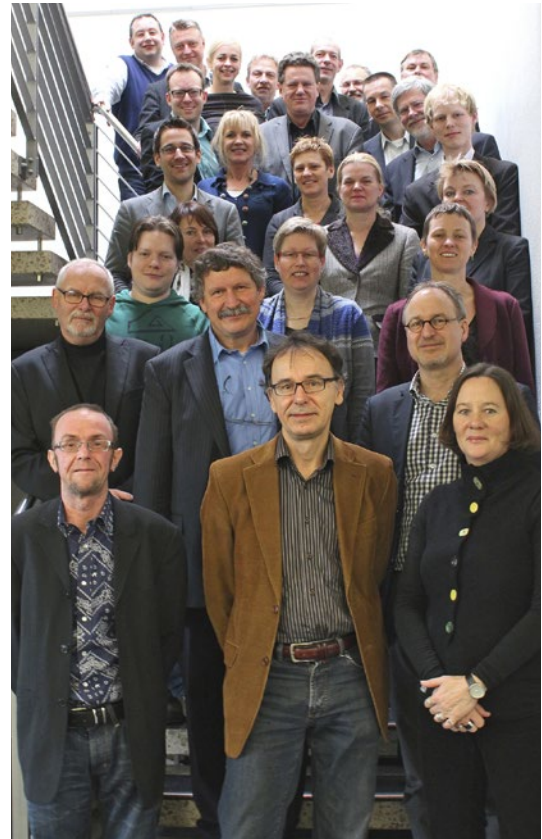
www.iageproject.eu

iAge

The **Interreg IVB**
North Sea Region
Programme

Investing in the future by working together
for a sustainable and competitive region

provincie Drenthe