

THE IMPACT OF AAL IN THE NETHERLANDS

Co-creation and commercialisation of
ICT solutions for older adults



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CONTENTS

1

The need for ICT
solutions for older
adults 6

2

Driving, co-creating
and commercialising
solutions 12

3

AAL results in
the Netherlands 20

4

Stories behind the
technology 26

5

Added benefits and
further development
..... 52

6

Questions and
solutions
..... 58

7

Linking up with AAL
..... 62

Publisher's details
..... 66

PREFACE

We all want to maintain a good quality of life as we grow older, even if we experience physical or mental limitations. We want to live at home, remain socially active and stay part of our community for as long as possible, with the care and support of others if necessary. How can society find an appropriate response to the aspirations, wishes and needs of older adults? Whatever the answer, solutions involving smart technology are sure to be indispensable.

In the context of the [European Active & Assisted Living \(AAL\)](#) programme, many individuals, businesses and organisations are hard at work developing ICT-based solutions to enhance the independence of older adults. Since 2008, the programme has been a vibrant hatchery for innovations in this field. The Netherlands is currently involved in over seventy international [AAL projects](#), which are increasingly starting to bear fruit. A range of innovative products and services is finding its way to market, designed for older adults, informal carers, and the professionals and volunteers who assist them.

An important principle within the AAL programme is that this can only be achieved in good collaboration. This applies not only to companies, local authorities, care organisations, and enthusiastic individuals with a great idea, but also to entire countries. Sustainable innovation in the field of smart technology calls for broad-based cooperation across national borders. The only way to create new market opportunities for the ICT solutions our society demands is by connecting experience, expertise and development potential from local and European levels.

This publication shows what AAL has delivered for the Netherlands until now, often in the words of those directly involved: from older adults contributing their own ideas about new ICT solutions, to companies bringing tangible products and services to the market. Their stories provide an inspiring glimpse into the future. In the years ahead we can look forward to seeing how the input of everyone involved changes the way older adults live their lives.

An ageing population plus dejuvenation, and a growing demand for care at a time of increasing staff shortages: our society is facing major challenges. There are many possible solutions to the problems that await us, but one thing is certain: smart technology has an indispensable part to play.

1

THE NEED FOR ICT SOLUTIONS FOR OLDER ADULTS

Society is ageing rapidly. By 2040, an estimated 26 percent of the Dutch population will be over the age of 65, and a third will be over 80, according to Statistics Netherlands (CBS). This poses some major challenges for society as a whole. There will be more people with chronic conditions, for example. And a larger group will be affected by loneliness. The demand for care is rising – as is the cost of care – while staff shortages make it difficult to meet the requirements.

The seniors of the future belong to a new generation. They are more assertive and more active and highly value self-determination. They are also more familiar with ICT and other aspects of modern technology. Recent research shows that increasing numbers of older adults are already online. This offers a range of opportunities for the use of smart technology in enabling older adults to live independently for longer.

Experience gained within AAL confirms that the Netherlands is in an excellent position to operate at the forefront of these developments. The Dutch population is relatively well educated, and many seniors have sufficient spending power. The country enjoys an advanced technological infrastructure and the level of internet penetration is among the highest in the world. A promising environment to launch smart technology solutions for older adults.

Three major misunderstandings

- technology is of no use to older adults – especially those with incipient dementia
- technology leads to the impoverishment of care and welfare
- technological solutions only put jobs at risk

Three major barriers

- the market for ICT solutions for older adults is still weak; there is too little return on investment
- it is difficult to finance care innovations, due to the partitioning of funding
- interoperability issues, meaning that devices cannot ‘talk’ to one another properly

Three major opportunities

- technology offers new opportunities to boost older adults’ independence
- technology enables care organisations and local authorities to deliver better quality at lower costs
- new financing opportunities are created such as ‘health deals’ and ‘health impact bonds’



MARTIN VAN RIJN, State Secretary for Health, Welfare and Sport

Innovation calls for cooperation in practice

‘Living independently at home for as long as possible is something more and more people want. Fortunately, the opportunities for people to grow old in their own homes and communities are becoming more widespread. Good quality care and support in the home are essential to achieving this. Informal carers, district nurses, GPs and personal carers all contribute to the quality of life for our older adults. Innovation is a key factor in helping them to carry out their tasks in a changing society.

Encourage innovation

The Netherlands has been an enthusiastic participant in the European AAL programme from the very start. Since 2008, the government has been investing in ICT solutions that improve older adults’ quality of life and support their autonomy and self-reliance. And in solutions that make professional care more efficient and more effective. Some interesting public-private partnerships have developed within the programme. Collaboration is vital to innovation in this field, especially since many businesses initially failed to see older adult users as a commercially viable market.

Fruitful cooperation

In the Netherlands, AAL has helped to put the topic of ‘older adults and ICT’ on the map. A great deal of experience has been gained in co-creation in this field, leading to many fruitful collaborations between developers, scientists and end users. Their primary focus is not the technology itself, but its practical usefulness in the lives of older adults and their loved ones. As well as in the everyday work of the professionals who assist them.

Large-scale application

For the government, the crucial question is: ‘Can technological solutions help us meet the major societal challenges?’ The results achieved by AAL show that substantial steps have been taken towards this goal. Implementation of the initial results is starting to take off, but targeted incentives are still needed. A promising approach involves regional ‘ecosystems’ – networks of public and private parties capable of scaling up individual solutions. Innovation is not just about disseminating new technology, it also involves complex change processes. When the parties involved agree on what is needed, these processes often go a lot faster. This kind of cooperation is something we must continue to promote.’

JAN BRINKERS, consultant at Unie KBO, a seniors organisation

Technology keeps older adults independent and mobile

‘Loneliness among older adults is a major social problem. And then there’s the issue of how society can deal with the growing demand for care, now that people are living ever longer. Information technology is definitely part of the solution, but it’s not a silver bullet. ‘Techies’ often tend to forget that older adults were not brought up with modern technology. They can cope just fine with the TV remote, but more complicated interfaces are a step too far.

Tablet clubs

A lot has changed with the introduction of the tablet. It’s a device with genuine appeal among older adults and we are actively encouraging its use among our members. The tablet makes emailing, video calls and browsing simple, and it expands your world. Nevertheless, people do need support with these activities. Our members can put their questions to a local KBO tablet coach. These coaches are not techies but fellow KBO members. It’s an arrangement that enables older adults to help one another – and it works. Next to more traditional group activities, such as carpentry clubs, we see an increasing number of ‘tablet clubs’.

Aware of added value

Among our senior members, I see a real demand for technology that helps them remain independent and mobile. Especially older adults might benefit from supportive innovations, such as devices to remotely adjust the thermostat or the lights at home. Or products to keep track of a partner who has Alzheimer’s. AAL has made us – as a seniors organisation – much more aware of the added value of technology. In turn, we have been able to contribute the older adult’s perspective to innovation processes.

At local chain stores

Within AAL there is now a greater focus on making solutions commercially available. That’s a definite step in the right direction. I’ve seen many a promising innovation come to nothing because there were no market players willing to take the risk of going into production. These days, every project has to include a commercial party who is prepared to make a genuine commitment. Ultimately, our aim is that attractive new applications will be both affordable and easy to use, so that anybody can buy them at their local chain store.’



Developing smart technology is one thing, but ensuring that new solutions gain widespread acceptance is quite another matter.

AAL focuses on encouraging the leap from invention to market. How does this transition work? And what is the result?

2

DRIVING, CO-CREATING AND COMMERCIALISING SOLUTIONS

Challenge to all public and private parties to invest in
ICT solutions that promote the self-sufficiency of older adults

The cooperating countries

Societal goals

- Living independently for longer
- Improved quality of life
- Cutting the costs of long-term care
- Economic boost for companies in Europe

Duration

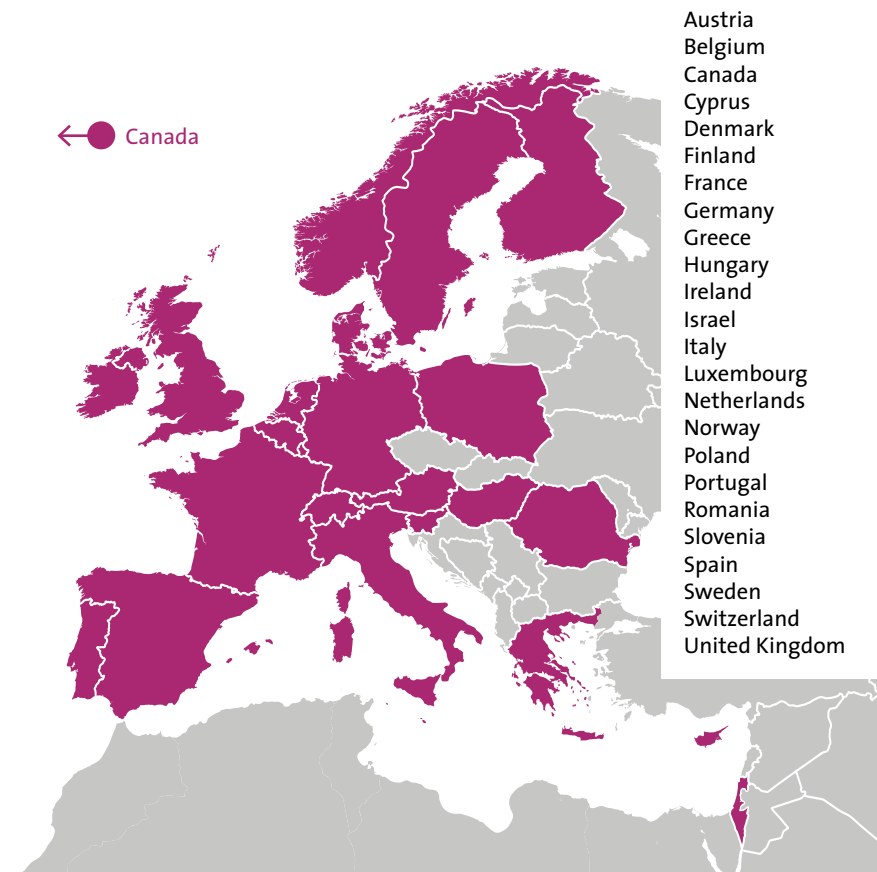
2008-2020

Lead time for projects: until 2024

Time to market: 2027 and beyond

Philosophy

International cooperation is key to making
effective ICT-based solutions available to
older adults, both now and in the future.



Typical AAL

- The **aspirations, wishes and needs of older adults** and their networks of family, friends and carers are the starting point
- **Public and private** investment in ICT projects
- Substantial involvement by **SMEs and large enterprises**
- ICT solution launched **onto the market** after two to three years
- **International cooperation** involving at least three countries

Number of calls for the submission of projects 9

EU

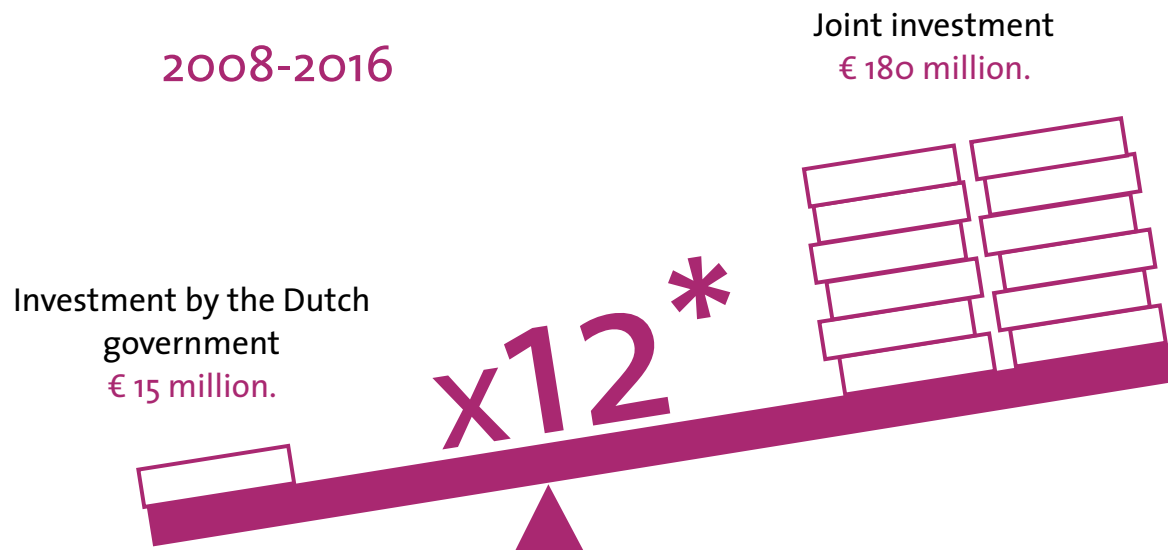


NL



The Netherlands' partners





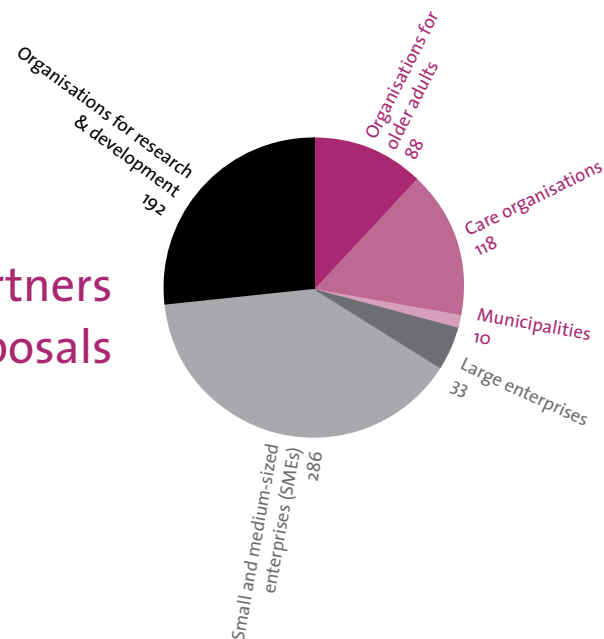
* The multiplier. This is the number that, when multiplied by the amount invested, indicates the ultimate effect of the investment.

The AAL leverage effect

- 1 Partners in different countries work together on an AAL project
- 2 In their own country, every project partner gets:
 - a government grant
 - an EU grant
- 3 Each project partner also invests in their own project

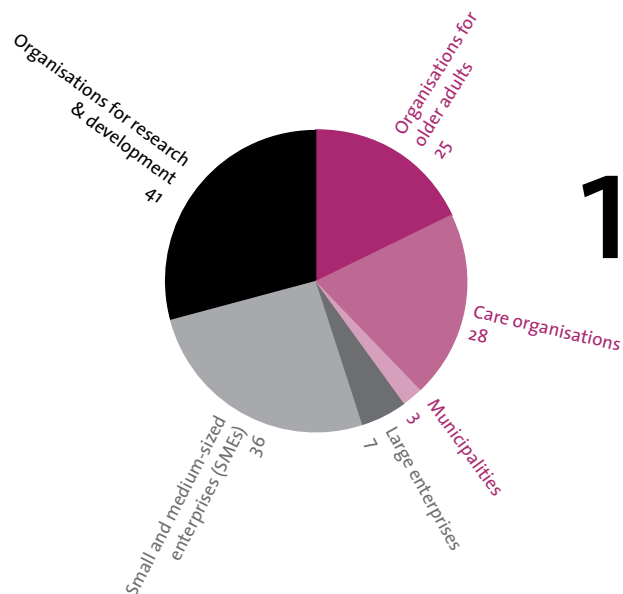
727 x

Dutch partners
involved in the submitted proposals

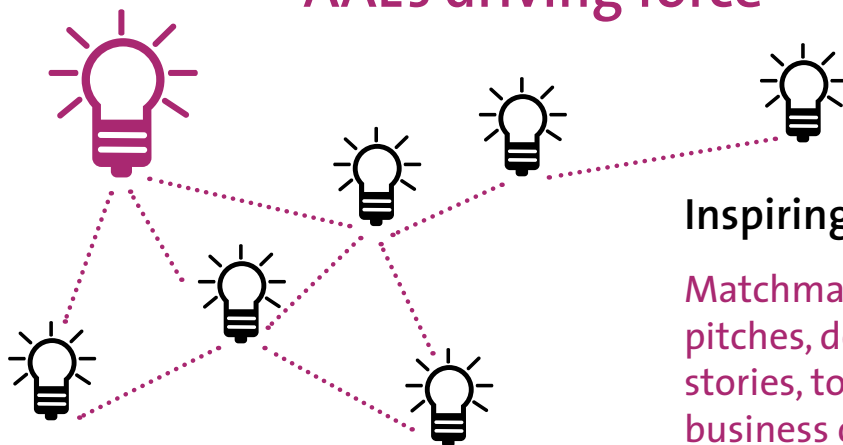


140 x

Dutch partners involved in
funded projects



AAL's driving force



Inspiring, connecting and equipping people

Matchmaking and partner meetings, workshops, pitches, demonstrations, forums, presentations, success stories, toolkits, training courses, co-creation sessions, business coaching, local support.

Funding innovations

Issuing calls, involving stakeholders, organising information days, staging challenge prizes and hackathons.



The role of ZonMw >

- Driving and monitoring progress
- Ensuring coordination and cross-fertilisation
- Linking between national and international levels
- Funding Dutch partners in international projects
- Encouraging follow-up of promising AAL results in the Netherlands

CHRIS FLIM, AAL Executive Board member

Innovation starts with exploring wishes and needs

‘Taking wishes or needs as a starting point is one of the biggest challenges faced by innovation developers. Within AAL, we now call this the ‘challenge driven’ method, which represents a significant shift from the thematic approach. But it’s more than a matter of terminology. It’s about asking older adults, informal carers and care providers serious questions about what they think is important and what they need. That is much more difficult than it sounds. On YouTube you can find street interviews from the 1990s asking people what they thought of mobile phones. Back then, nobody was remotely interested in owning one... In other words, it’s not enough to simply ask people what they want. You have to involve stakeholders in your development process from the very beginning. If innovations are co-created with end users, they steadily acquire more support.

From idea to everyday use

These joint processes cannot stop once a promising prototype has been produced. They run from the initial design right through to market introduction, including suitable business models. After all, if technological innovations fail to reach the market, nothing will change. Within AAL there is now a much stronger focus on the steps needed to get an idea to market, and

rightly so. Or perhaps I should say from idea to everyday use. After all, the care system is not a real market.

Important role

AAL has an important part to play in this process. It’s encouraging to see that in recent calls there is already a focus on market orientation from the proposal submission stage. The support provided within the [AAL-2Business](#) programme is also highly relevant. It helps developers bridge the gap to other parties, including investors and financiers. They are essential to scaling up innovations, once the first steps towards a successful market introduction have been taken within AAL.

Different mindset

AAL’s experience of cross-border public-private partnerships has proved to be particularly useful. In response to our more focussed strategy, I expect developers, including SMEs, to adopt a more international and market-oriented mindset. From the outset, this will give them a clearer view of the end result – a promising solution for older adults – and it will make them less inclined to become bogged down in the further development of prototypes. This will automatically enable us to introduce more innovations with genuine appeal to older adults.’



AAL has contributed to 71 ICT projects in which Dutch partners have a major part. This involved money, and many other forms of support. All ICT solutions are designed to boost older adults' independence and quality of life.

3

AAL RESULTS IN THE NETHERLANDS



AAL projects add quality to the lives of older adults and of those around them. They frequently provide solutions that cover various domains of people's lives. To achieve this, a wide range of technologies and services have to be combined. How many projects contribute to which domains of life?



Situation as of January 2017

To date, AAL has funded 71 projects in which Dutch partners are playing a crucial part. Some of the solutions are already available on the market. Others are still under development or have just started. Some results also appear suited to further development for other target groups. In addition, solutions from other AAL projects (without Dutch partners) will also find their way onto the Dutch market.

Total number
71

< [INDEX](#)

Social life and leisure 42

coordinating care
supporting decisions
jointly arranging informal care
arranging services/transactions
remote guidance
writing wikis
monitoring health problems
making video calls to grandchildren
sharing interests/hobbies
writing wikis
keeping in touch
taking courses
looking for information
making appointments
coordination with professional
comb
meeting old and new friends
preventing
surfing the internet
lifelong learning
door-to-door guidance
scoring volunteering points ("gamification")
staying socially connected
online shopping
peace of mind for informal carers
supporting decisions
doing voluntary work
living alone
reminders of appointments
shopping
matchi
preparing meals
lifting heavy th
detecting cogni
informing care professionals
fall detection
looking after yourself
getting enough exercise
monitoring medication use
structuring the day
living alone safely
supporting informal carers
obtaining current traffic information
navigating
arriving safely
finding people who have wandered off
looking for information
warning about obstacles
arning back wandering people
ntly arranging informal care

Taking good care of yourself 37

smart cooking support
managing illness(es)
healthy eating
timely medication intake
monitoring vital signs
keeping fit
preventing disease (exacerbation)
drinking plenty of fluids
drawing up shopping lists
eating together (virtually)
continuing to perform well
continuing to work
maintaining expertise of older adults
looking for services
housekeeping
opening/closing curtains
structuring the day
reassuring informal carers
emergency alarms
opening/closing doors
living alone safely
supporting informal carers
obtaining current traffic information
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Living independently 28

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22 ZONMW – THE IMPACT OF AAL IN THE NETHERLANDS

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finding your way
living alone safely
structuring the day
supporting informal carers
obtaining current traffic information
navigating
arriving safely
looking for information
warning about obstacles
planning a route
finding people who have wandered off
looking back wandering people
jointly arranging informal care

Social life and leisure 42

Taking good care of yourself 37

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22 ZONMW – THE IMPACT OF AAL IN THE NETHERLANDS

< [INDEX](#)

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22 ZONMW – THE IMPACT OF AAL IN THE NETHERLANDS

The word cloud visualizes the impact of AAL in the Netherlands across three domains:

- Social life and leisure (42)**: Words include "writing wikis", "keeping in touch", "taking courses", "looking for information", "making appointments", "coordination with professional", "meeting old and new friends", "surfing the internet", "lifelong learning", "door-to-door guidance", "scoring volunteering points ('gamification')", "staying socially connected", "online shopping", "eating together (virtually)", "continuing to perform well", "supporting decisions", "doing voluntary work", "living alone", "reminders of appointments", "shopping", "opening/closing curtains", "reassuring informal carers", "structuring the day", "emergency alarms", "opening/closing doors", "looking after yourself", "fall detection", "informing care professionals", "detecting cognitive decline", "monitoring medication use", "finding your way home", "supporting informal carers", "structuring the day", "getting enough exercise", "living alone safely", "obtaining current traffic information", "navigating", "arriving safely", "looking for information", "warning about obstacles", "planning a route", "finding people who have wandered off", "gaining back wandering people", "dialysis", "being guided home", "booking holiday travel", "finding your way back home", "orientating", "coaching young entrepreneurs", "remaining socially active", "maintaining expertise of older adults", "continuing to work", "peace of mind for informal carers", "supporting decisions", "doing voluntary work", "living alone", "reminders of appointments", "shopping", "opening/closing curtains", "reassuring informal carers", "structuring the day", "emergency alarms", "opening/closing doors", "looking after yourself", "fall detection", "informing care professionals", "detecting cognitive decline", "monitoring medication use", "finding your way home", "supporting informal carers", "structuring the day", "getting enough exercise", "living alone safely", "obtaining current traffic information", "navigating", "arriving safely", "looking for information", "warning about obstacles", "planning a route", "finding people who have wandered off", "gaining back wandering people".
- Taking good care of yourself (37)**: Words include "managing illness(es)", "healthy eating", "timely medication intake", "monitoring vital signs", "keeping fit", "drawing up shopping lists", "drinking plenty of fluids", "exchanging recipes", "preventing disease (exacerbation)", "enough exercise", "reducing stress", "outdoor guidance", "training in a virtual 3D environment", "diet planning", "arranging transportation", "travelling by public transport", "being guided home", "booking holiday travel", "finding your way back home", "orientating", "coaching young entrepreneurs", "remaining socially active", "maintaining expertise of older adults", "continuing to work", "peace of mind for informal carers", "supporting decisions", "doing voluntary work", "living alone", "reminders of appointments", "shopping", "opening/closing curtains", "reassuring informal carers", "structuring the day", "emergency alarms", "opening/closing doors", "looking after yourself", "fall detection", "informing care professionals", "detecting cognitive decline", "monitoring medication use", "finding your way home", "supporting informal carers", "structuring the day", "getting enough exercise", "living alone safely", "obtaining current traffic information", "navigating", "arriving safely", "looking for information", "warning about obstacles", "planning a route", "finding people who have wandered off", "gaining back wandering people".
- Living independently (28)**: Words include "remote guidance", "signalling emergencies", "raising alarm in emergencies", "lifelong learning", "door-to-door guidance", "scoring volunteering points ('gamification')", "staying socially connected", "online shopping", "eating together (virtually)", "continuing to perform well", "supporting decisions", "doing voluntary work", "living alone", "reminders of appointments", "shopping", "opening/closing curtains", "reassuring informal carers", "structuring the day", "emergency alarms", "opening/closing doors", "looking after yourself", "fall detection", "informing care professionals", "detecting cognitive decline", "monitoring medication use", "finding your way home", "supporting informal carers", "structuring the day", "getting enough exercise", "living alone safely", "obtaining current traffic information", "navigating", "arriving safely", "looking for information", "warning about obstacles", "planning a route", "finding people who have wandered off", "gaining back wandering people".

22 ZONMW – THE IMPACT OF AAL IN THE NETHERLANDS



A selection of the technology involved

CT • sensor networks • artificial intelligence • user profiles •
domotics • algorithms • integration • personalisation • avatars
ars • robots • Internet of Things • intuitive interfaces • telepresence
• teleconferencing • geofencing • exergames • context awareness
• behaviour pattern recognition • big data • augmented 3D reality
• virtual reality • notifications • image recognition • speech recognition
• speech production • emotion recognition • detecting stress • software • platforms
• telemonitoring • data management • bus systems

Where to find what?

AAL's ICT solutions will be described in various databases. It is important for professionals, decision makers and developers to be aware of what is already there. And of developments in the pipeline. Where can you find information about AAL projects and their results? And about solutions that are already commercially available?

www.zonmw.nl/aal

ZonMw provides information about all the AAL projects in which the Netherlands is involved. Which projects are under development and which have reached completion? And which partners are (or were) involved?

www.zorginnovatie.nl

The place to find ICT solutions that can be scaled up for other target groups and other settings, as well as various prototypes that have yet to be tested.

www.vilans.nl/thema-ehealth

Here you can find international AAL solutions that are being implemented and evaluated in everyday practice in the Netherlands.

www.hulpmiddelenwijzer.nl

The Vilans Guide for assistive devices provides independent information about assistive aids and technologies. It also helps you select the right devices. The guide is intended for users, professionals, consultants and local authorities.

www.beteroud.nl

This platform describes innovative projects for older adults. Information on relevant AAL results can also be found here.

www.aal-europe.eu

The international platform that summarises all ongoing and completed international AAL projects.

See and experience ICT solutions:
www.slimstehuisalkmaar.nl
www.smart-homes.nl

Since 2008, the Netherlands has been involved in 71 European AAL projects. These pages feature some appealing examples. Each story is completed by a quote from someone closely involved, concerning the added value of smart technology for older adults.

4

STORIES BEHIND THE TECHNOLOGY

12 AAL solutions

ANNE

CO-LIVING

IRONHAND

HALLOZORG

SENSARA

HOMEDOTOLD

ALFA

SOCIALCARE

VICTORYAHOME

COME

PALETTEV2

ACTIVEADVICE

ANNE

Makes older adults less dependent

What is it?

Anne is a digital assistant in the form of an avatar. Users can communicate with her through a smart TV, computer or tablet. Anne uses speech recognition software for this purpose. She reminds people of appointments, helps them check their medication, and enables older adults to make video calls to their friends and informal carers. She can even set up a karaoke session. If required, users can control domotics via Anne, and call for help in an emergency.

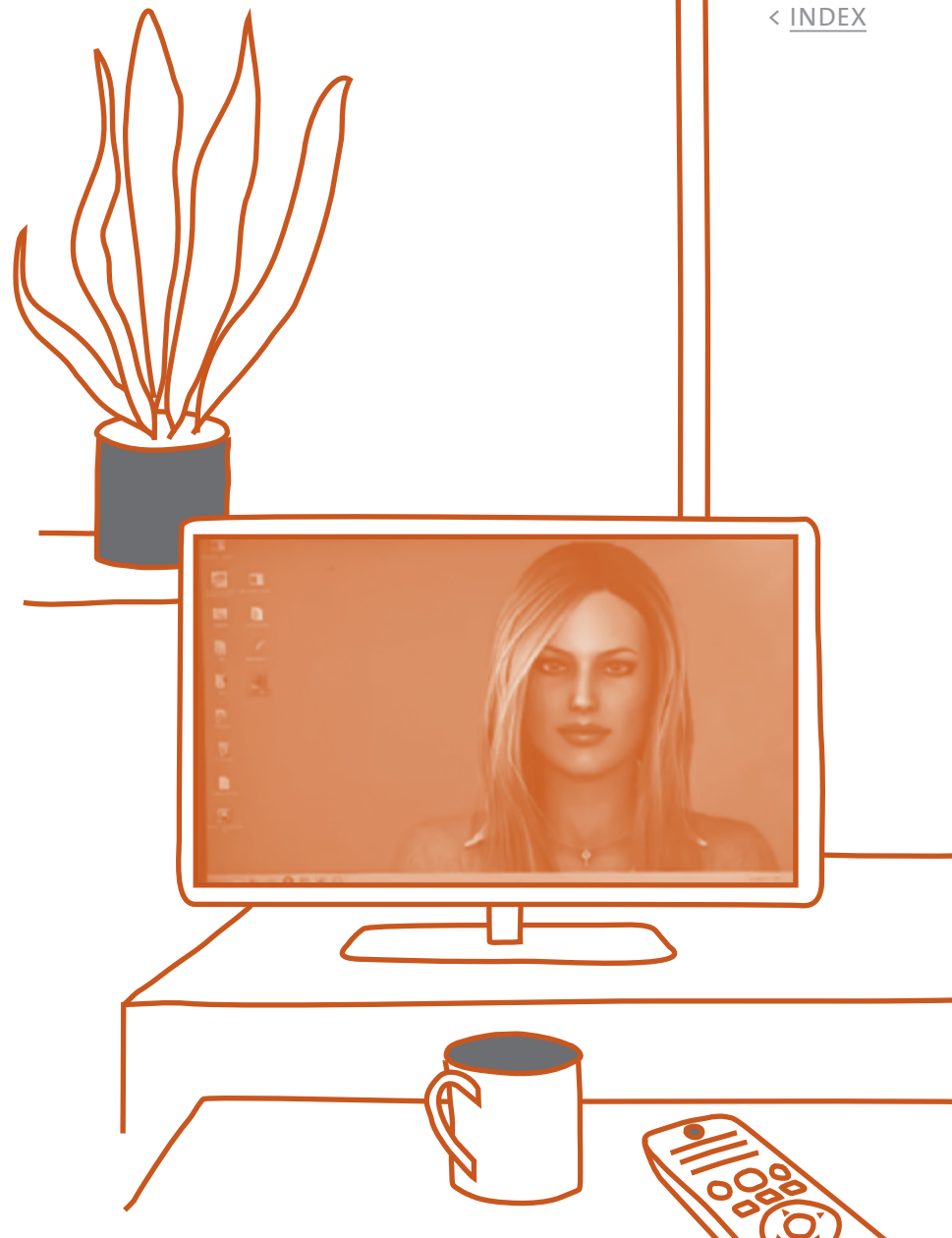
For whom?

For people who want to continue to live independently, albeit with a little support. You don't have to learn anything new in order to operate Anne. The ability to talk is enough.

What is the added value?

People can live at home for longer. With Anne's assistance, they can continue to carry out simple tasks, such as opening the curtains and taking their medication on time. This makes users feel less dependent on others. It also enables care organisations to save on their staff costs.

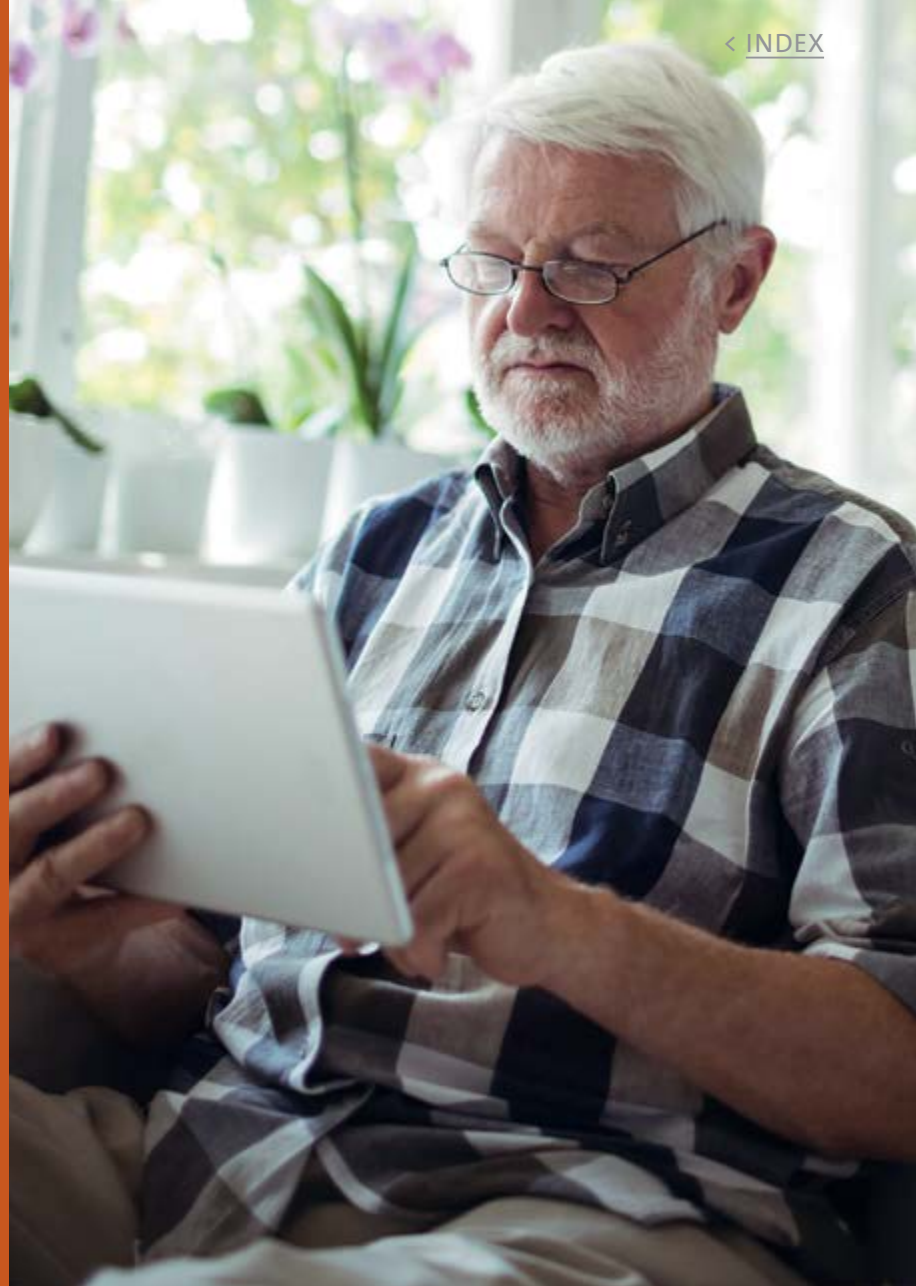
Anne is a product of AAL project DALIA. See www.zonmw.nl/dalia.



THE CREATOR:

‘When a stroke confined my father to a wheelchair, I became his informal carer. The rehabilitation process focused purely on his limitations. I asked him about his own priorities. He wanted to be independent again. To be able to read the newspaper so that he could have a good conversation about what’s going on in the world. I devised a voice-recognition based system for him. But since talking to an empty screen feels a bit weird, we came up with Anne. Now my father says he can do a lot for himself again but, above all, he has his dignity back.’

Annemarie Johannes, Managing Director of Virtask



CO-LIVING

Keeps people socially active for longer

What is it?

Making electronic appointments to meet one another in person, that's the essence of Co-Living, a virtual social community. Using a tablet, older adults are encouraged to take part in activities. The software provides additional tips ('Don't forget your spectacles!'), and lets them invite others to join in. Family members can monitor the user's personal pages, so they can remain involved in their loved one's activities.

For whom?

For (reasonably) healthy older adults who want to live independently and to lead an active life. Preventing psychosocial decline and social isolation gives a real boost to their well-being.

What is the added value?

Co-Living helps older adults to maintain a social life, and to meet friends. The application gives structure to their activities, is accessible and gives older adults the feeling that they are keeping 'up to date'. It also enables care providers to easily identify signs of inactivity.

See www.zonmw.nl/co-living.



Seeing:



THE CARE INSTITUTION:

‘Older adults often tell us they thought they would never be able to keep up with modern society. Now, a whole new world opens up to them. Grandchildren love to come and visit, because grandpa has a tablet! Our staff think it’s just great – they see people brighten up and become more active. For Zuyderland, working on innovations is important as it enables us to go on delivering quality. But nothing can be taken for granted. Older adults have to get used to technology, and so do our staff. As an organisation, we want to steer that process very carefully.’

Cindy Wings, Project Manager for Innovation and Science at Zuyderland

IRONHAND

Supports people with reduced grip strength

What is it?

IronHand is a glove equipped with sensors. These control a motor that reinforces the strength of the hand. The glove does not replace the muscle function of the hand, it merely provides extra support. The user initiates a movement – for example, grasping, twisting or wringing – which is then reinforced by the glove. The glove can also be used therapeutically, as part of hand function training during rehabilitation. This is supported by special exercise software, in which users play games on a computer screen.

For whom?

For people with impaired hand function following a stroke, for example, or due to arthritis or a loss of strength in old age.

What is the added value?

The IronHand restores the user's ability to perform everyday tasks such as personal care, housekeeping, leisure activities or work. By supplying only additional force, the glove ensures that the user's hand muscles will not deteriorate any further.

Zie www.zonmw.nl/ironhand.



THE USER:

‘Due to my arthritis, I now have less strength in my left hand. And I have to be careful not to strain my wrist. I use a brace that fixes my wrist in position, but that means my hand doesn’t get enough exercise. The glove enables me to do anything I want, without strain. IronHand’s computer games are a really good idea. I have to do a lot of exercises, like kneading clay for example. This helps me to maintain the strength in my hand. The computer makes exercising more fun. I can train the muscles in my hand and wrist by playing games.’

Hetty Dorrestijn, IronHand user



HALLOZORG

Improves communication associated with care

What is it?

HalloZorg (HelloCare) is a free app that enables people to set up their own care network with friends, family, neighbours and care professionals. It is a sort of 'Facebook for care', but one that is secure, private and focused on cooperation. It includes a number of additional modules, including motion detection sensors and a mobile alarm function, for example. A dashboard is provided for care institutions, as well as guidance on involving care networks. HalloZorg started within AAL in 2012, under the name ConnectedCare.

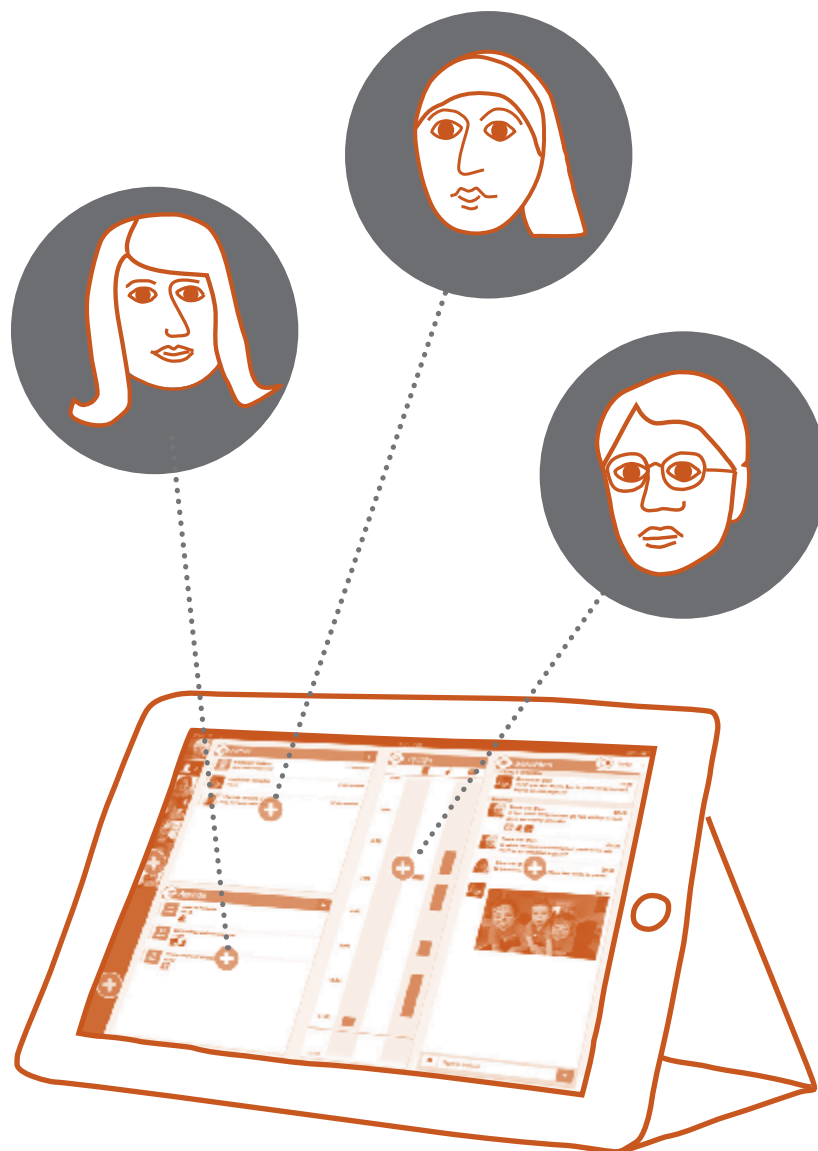
For whom?

For anyone who sees care as a social group process, and for whom cooperation is paramount. Everyone involved does their bit, and they all can keep track of developments.

What is the added value?

HalloZorg improves communication between those involved in providing care. Care-related stress decreases, as everyone knows what is happening and when. It also facilitates a more 'bottom-up' approach to support, which gives people greater autonomy.

HalloZorg is based on the AAL projects MyGuardian and Care4Balance. See www.zonmw.nl/myguardian and www.zonmw.nl/care4balance.





THE HEALTH INSURANCE COMPANY:

'The Sint Maarten care group contacted us, as they wanted to implement HalloZorg. An excellent plan, especially since this application dovetails nicely with our Leefkracht (Life Force) programme. HalloZorg connects people with one another. This increases involvement throughout the entire care network that surrounds a person. Together with Sint Maarten, we are assessing the tool to see whether it delivers added value, both for our client and for the care provider. I expect that it will widen the options open to district nurses in their interconnecting role. That, too, can now be assessed in everyday practice.'

Olivier van Noort, Senior Purchaser for District Nursing at Menzis



SENSARA

Provides safety while maintaining privacy

What is it?

Sensara HomeCare uses sensors to detect unusual or dangerous situations at home, then sends this information to family members, informal carers, or professional carers. The system can detect behaviour patterns that potentially lead to incidents. It also records changes in the resident's condition, making it possible to take timely action. Additionally Sensara HomeCare provides an alarm button with wandering detection and an optional bed sensor.

For whom?

For older people who have always taken care of themselves and who wish to continue living independently, while feeling safe. Together with their loved ones, they decide how and with whom the system will communicate.

What is the added value?

Safety is an important prerequisite for independence. Sensara provides safety while maintaining privacy. The system alleviates the concerns felt by family and friends, and enables older adults to continue living independently, happily and healthily.

Sensara is a product of AAL project ROSETTA.

See www.zonmw.nl/rosetta.

THE ENTREPRENEUR:

‘Sensara emerged from years of scientific research and practical experiments. It started life as an AAL project, and is now being commercialised through our company. We deliberately chose an iterative design process, developing the product step-by-step. This way you can test successive versions of an innovation with end users. Financing such a long-term process is certainly a challenge. In effect, it is a chain of pilot projects. We succeeded, thanks to the commitment of TNO, who saw the potential in this approach.’

Irek Karkowski, CTO of Sensara and former researcher at TNO



HOMEDOTOLD

Facilitates the use of modern ICT

What is it?

HOMEdotOLD has developed supplementary services for television sets, giving older adults access to the interactivity of social media. For instance they can use their familiar TV remote to make video calls to family and friends. The applications have an easy-to-use interface that has been extensively tested with older users. The video call application and the 'remote pointer' have been released as options for the Philips Smart TV.

For whom?

For older adults living at home who feel lonely but who struggle to communicate through social media, and for informal carers who want to keep in touch remotely.

What is the added value?

Personalised and intuitive applications on a standard TV set improve social participation and social contacts. This, in turn, improves people's quality of life and their zest for life. It also makes it easier to bridge the distances to loved ones and other trusted individuals.

See www.zonmw.nl/homedotold.





THE INTERNATIONAL COMPANY:

‘Healthy living, prevention, diagnosis, treatment and home care. Philips wants to help improve people’s lives in each of these areas. ICT is essential in this context. AAL is making good progress here, as are we – from within our own role. One example is the eCareCoördinator. Using this platform, care professionals and informal carers can remotely monitor and coach older adults with chronic conditions, such as heart failure. One of the benefits is that it prevents unnecessary hospital admissions. With the aid of technology, it is now possible to provide preventive care and support in people’s own homes. This gives a huge boost to older adults’ quality of life.’

Mark van Meggelen, Business Manager for Connected Care & Health Informatics at Philips Benelux

ALFA

Helps older adults to structure their day

What is it?

ALFA's combined technology supports people with incipient dementia. An electronic diary, with an automatic reminder, helps users to plan and check their daily activities themselves. The system warns a family member, caregiver or professional caregiver if the person with dementia is late in carrying out a particular activity. Other components (not yet widely available) encourage people to go for walks, and to chew their food better – activities that stimulate brain function.

For whom?

People with cognitive problems caused by incipient dementia who want to manage their own daily schedule more effectively. They benefit from this targeted stimulation of their cognitive function.

What is the added value?

The participants continue to make more active use of their brain, helping them remain autonomous for longer. The electronic diary keeps people active, and helps them avoid uncertainty about what to do next. Sensor technology reduces the risk that they will wander off or fall over.

See www.zonmw.nl/alfa.



THE CARE INSTITUTION:

'If you take over too many tasks of people with incipient dementia it tends to make them even more dependent on assistance. So we operate on the principle that it is best to let them do as much as possible by themselves. We prepare an individual schedule for each client, with tasks for everyone in the care network. Including the neighbour who taps on the window in the evening, as a reminder that it is dinner time. We are now switching from Excel spreadsheets to this electronic diary. For some employees it will take a bit of getting used to, but those who grasp the essentials more readily can coach the rest.'

Hellen Junggeburth, Care Manager at Zorgboerderij Giersbergen



SOCIALCARE

Links supply and demand in voluntary support

What is it?

SOCIALCARE connects people in their own environment. It might be a street, a neighbourhood, an apartment building or a village. This electronic platform offers a range of voluntary services related to care and support. Users communicate by means of video, sound and text. The portal is based on the ICT resources that project partners already have available. So it is not a separate piece of equipment, but a unique way of connecting what is already available.

For whom?

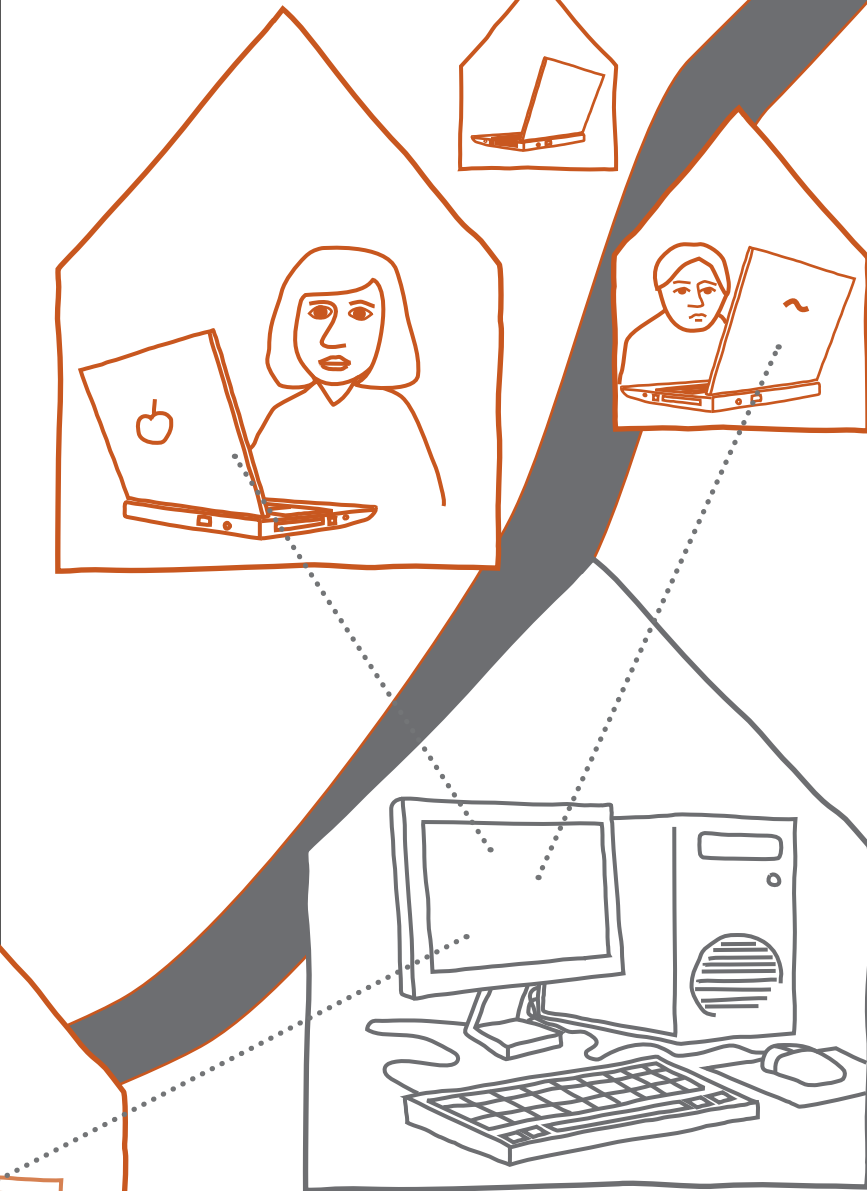
Older adults and other people who play an active role in their own community and neighbourhood and want to support each other with services for well-being and care.

What is the added value?

The platform is enabling social innovation by matching supply and demand. It also gives the participants peace of mind, as they know help will be quickly available in the event of an emergency. Meanwhile, the platform's strong focus on well-being helps to avoid premature medicalisation of problems.

See www.zonmw.nl/socialcare.





AN ENGAGED SENIOR:

'At the National Foundation for the Elderly, we are on the lookout for initiatives that have a genuine impact on social issues. These include problems such as loneliness or decreasing mobility. Our focus is not on the technology itself. If your innovation is of no practical use to the target group, then it is effectively worthless. The best applications are fully integrated into the social context in which older adults live. In other words, the community of family, neighbours, informal carers and care professionals. This means that they should all be involved in developing new technology solutions. Co-creation is crucial to useful innovations.'

Gerard van Loon, former Philips employee and now working for the National Foundation for the Elderly

VICTORYAHOME

Gives loved ones greater peace of mind

What is it?

VictoryaHome keeps track of people's health and safety, prompts them to engage in social interaction, and provides peace of mind for family and friends. The system includes sensors and an automatic pill box. The peace-of-mind app gives informal carers insight in the older adult's current status, for example by notifying them about missed medication doses, or issuing a warning in the event of a fall. Communication is mediated by Giraff, a mobile care robot with a built-in display screen, in the older adult's home.

For whom?

For older adults with mild cognitive impairments or multiple conditions, who are capable of living independently with some assistance. It is also meant for their loved ones, informal carers, and professional care providers.

What is the added value?

VictoryaHome supports independence, makes people more autonomous, and can be used to jointly identify appropriate solutions. The mobile care robot facilitates virtual 'visits'. Informal carers can use it to chat from a remote location, or to help solve problems.

See www.zonmw.nl/victoryahome.



THE INFORMAL CARER:

'Since her stroke, my mother has problems carrying out some daily activities. I can't be there all the time, so Giraff is a godsend. It means I can drop in to see her while sitting at my computer. And we can have breakfast together, for example. She sometimes forgets to use a knife to butter her bread, and just uses her finger instead. Then I ask her to get a knife from the drawer. She says it feels like a real visit. When we share meals like this, she sometimes even lays the table for two.'

Nicole Cordewener, informal carer



THE CREATOR:

'The family became very stressed when my grandmother developed dementia. Would we – together – be able to arrange and provide proper care for her? Installing a few monitoring sensors in someone's home is not enough. What you really need is communication, especially about what to do when something goes wrong. On its own, technology is not much use: in the end it's about bringing people together. The basic principle with everything we develop is that care provision is primarily a social matter.'

Martijn Vastenburg, founder of ConnectedCare



COME

Reduces the stress of informal care

What is it?

The focus on individual responsibility is putting informal carers under increasing pressure. This means that they also need support. For example, what is the best way to deal with a person who has become very forgetful? CoME is an ICT platform that detects changes in a person's well-being, enabling the family and friends to respond quickly. CoME also provides information and training using augmented reality to support informal carers. This technology superimposes virtual elements over real-world images.

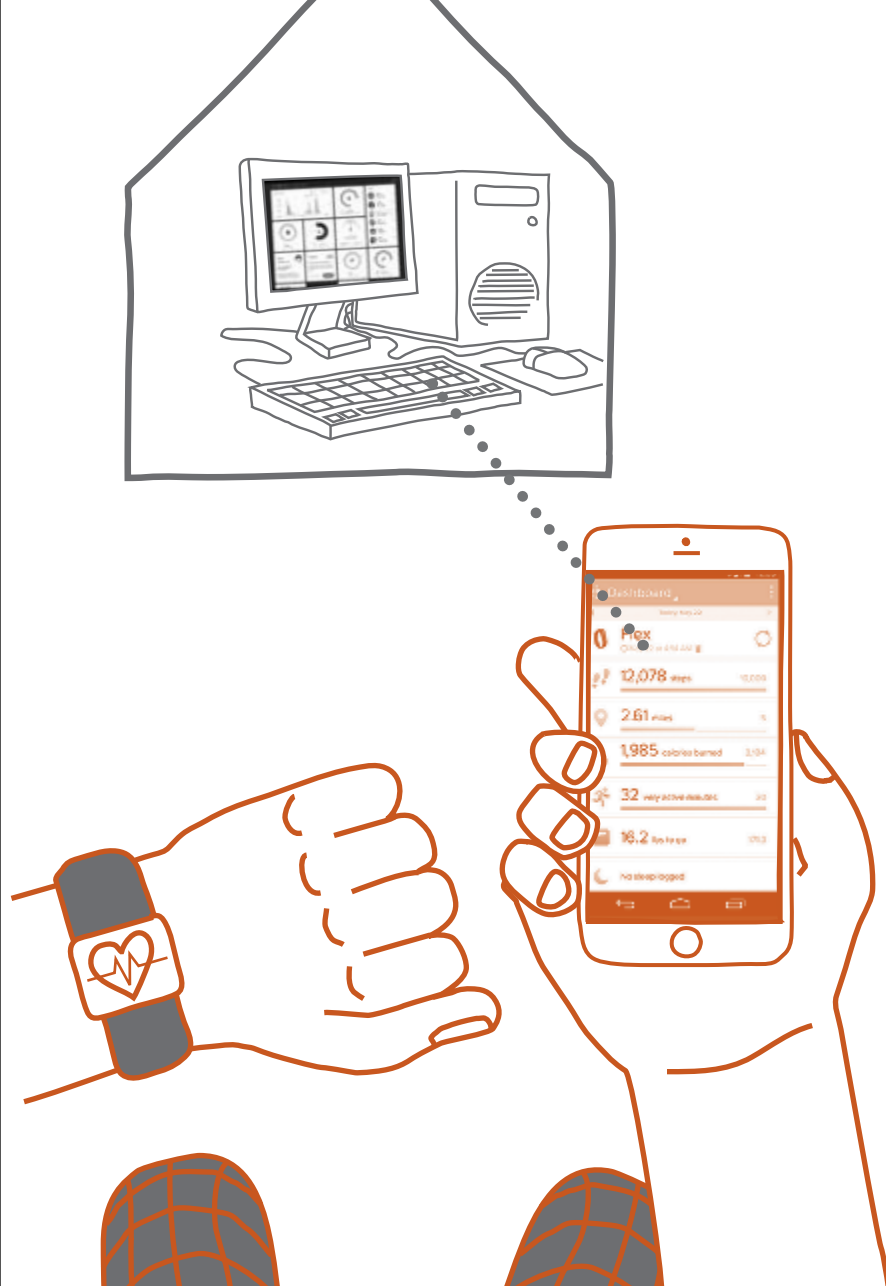
For whom?

For the informal carers of older adults with mild cognitive impairments who are still living independently. Professionals can use this system to support informal carers, for example by giving them information about the subject's changing health status.

What is the added value?

CoME improves the well-being, self-sufficiency and independence of older adults who are suffering from cognitive impairments. It takes the pressure off informal carers and helps relieve anxiety. The system also cuts care costs, as early identification can prevent worsening of impairments.

See www.zonmw.nl/come.



PALETTEV2

Helps older adults to stay socially active

What is it?

How do you stay socially active after retirement? And what if you lose your job before that? The PALETTEv2 electronic platform can help people find another job, be it paid or unpaid. Or it can help them set up their own business, providing a mutual coaching framework in which participants share knowledge and exchange experiences. The platform can also direct participants to those in need of assistance.

For whom?

For older adults who lose their jobs before retirement, who retire early or who have only recently retired and want to stay socially active.

What is the added value?

PALETTEv2 does not develop completely new solutions but combines the power of existing, popular applications. For example, it can combine the simple search function of eBay with the appeal of Klup, an app that matches up older adult neighbours, based on their shared interests and hobbies.

See www.zonmw.nl/palettev2.





THE DRIVING FORCE:

'Technology can provide excellent support to ageing individuals or those dealing with limitations. It makes them less dependent on others such as relatives or professional care providers. However, evidence shows that these groups are still hard to reach. For many people it is a matter of pride. They are reluctant to admit that they might need assistive devices. The key is to make new AAL products and services fun and attractive. That way, everyone will want to use them at home.'

Ad van Berlo, R&D Manager at Smart Homes, Expert Centre on Home Automation & Smart Living

ACTIVEADVICE

Supports selecting ICT solutions

What is it?

ActiveAdvice aims to provide a complete market overview of regional, national and international AAL products and services. This will create an advisory and decision-support network in Europe that is accessible via the web and mobile applications. The end users can share their own experiences, by writing reviews of technological solutions or mobile services. In this way, they take on an active advisory role in the network and contribute to new solutions.

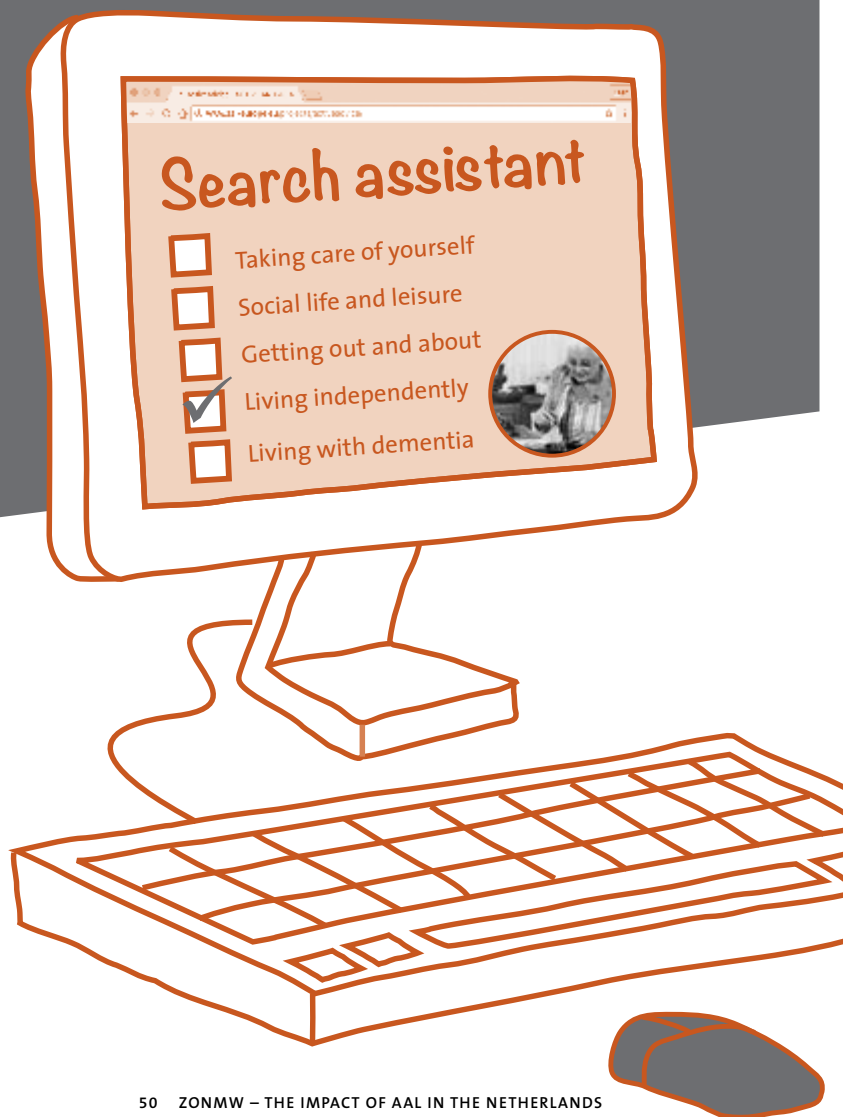
For whom?

For older adults, informal carers and local advisers who are looking for technology based solutions that fit people's aspirations, wishes and needs. And also for companies that are keen to explore the commercial potential of these technologies.

What is the added value?

Websites designed to present technological solutions, often lack decision aids. As a result, users are often uncertain about what suits them best. This platform solves that problem by providing a comprehensive overview of available smart technology solutions.

See www.zonmw.nl/activeadvice.



THE ALDERWOMAN:

'Technology is your friend, not a threat. It helps you to continue living independently, and to retain autonomy. This added value is quite literally made visible at the Smartest House in Alkmaar, where care organisations, entrepreneurs and members of the public encounter one another. We also take part in ActiveAdvice. We invest in pilot projects aimed at smarter care provision, through the use of modern technology. I have come across many promising initiatives. One is Voor Mekaar, in which local residents, volunteers and professionals cooperate and encourage one another to make use of technology. By bringing everyone together we can move things forward.'

Anjo van de Ven, alderwoman in Alkmaar with responsibility for public health and social support



Technology is constantly evolving. Prototypes are refined in successive experiments, based on new insights, while some solutions also turn out to be useful for other target groups. Here are a few examples, along with some additional benefits to emerge from AAL projects.

5

ADDED BENEFITS AND FURTHER DEVELOPMENT

Connected Vitality Network

What was the idea?

Using telepresence technology to tackle loneliness among older adults. This system has two combined display screens, one of which shows the caller's face (in the case of video calls) while the other shows their upper body and hands. This makes sharing a meal or playing a game much more realistic. The planned two-screen device is too expensive at present, so a tablet stand featuring additional lenses has been designed to achieve the same real-life effect.

What is the outcome?

The application has been further developed for people with psychiatric problems who are being supervised at home, following a period of admission. A group of clients form a so-called MiiND community with a care professional and an expert by experience. Using the tablet, users can chat securely, follow workshops together, or visit a virtual living room. The MiiND support network has been shown to reduce loneliness and to enhance social skills.

See www.yoom.nl (tablet stand),
www.mind.org and www.zonmw.nl/cvn.



Happy Walker

What was the idea?

Helping people with mild dementia to independently participate in activities and to find their way around when they go out. Informal carers can schedule activities in the application, which will then send a timely reminder to the user. There is a navigation feature to assist users when they are out walking or using public transport. Images of their surroundings provide an extra frame of reference.

What is the outcome?

The navigation aid is almost ready to be introduced for people with dementia. However, pilots showed that travelling by public transport is too complicated for this group. The public transport aid has now found another use, in the GoOV app for people of all ages who have limited intellectual abilities. A version for the general public in the Netherlands is under construction.

See www.go-ov.nl and
www.zonmw.nl/happyywalker.



Is-active

What was the idea?

Encouraging people with COPD to exercise while taking their physical condition into account. They are supervised remotely while exercising. The Activity Coach uses sensors to measure activity, giving feedback and motivational instructions via a smartphone. An additional serious game, which can be played on the computer, offers exercises to improve their fitness.

What is the outcome?

Until cheaper sensors become available, the Activity Coach will be adapted to target groups other than COPD patients. For example, it is used for frailty screening in older adults ([Perssilaa](#)), and as part of a supportive home environment for individuals with chronic conditions ([eWALL](#)). The same sensor technology is used by 'Fitter na Kanker' (Fitter after Cancer). The game has been tested but has not been developed any further.

See www.zonmw.nl/is-active.



Added Benefit 1

Instruments for co-creation

AAL has gained extensive experience in the co-creation of ICT solutions, together with older adults and other users. This has been incorporated into a toolbox and a set of guidelines: 'The art and joy of user integration in AAL projects'. The [toolbox](#) describes creative methods suited to the various stages of a project. These methods often generate a more in-depth understanding of issues than standard questionnaires and focus groups.

See www.aal-europe.eu (search for 'Involving end users').

Phase	Method	Evaluation				Effect
		Identify the user	Identify the user	Identify the user	Identify the user	
Identifying	Planning	●	●	●	●	●
	Identifying the user	●	●	●	●	●
	Identifying	●	●	●	●	●
	Identifying the user	●	●	●	●	●
Co-creating	Identifying the user	●	●	●	●	●
	Identifying	●	●	●	●	●
	Identifying the user	●	●	●	●	●
	Identifying	●	●	●	●	●
Evaluating	Identifying the user	●	●	●	●	●
	Identifying	●	●	●	●	●
	Identifying the user	●	●	●	●	●
	Identifying	●	●	●	●	●

Added Benefit 2

Priority for the end user

The People Value Canvas shows what users really care about. It is a simple model – consisting of nine modules – based on the ‘users as designers’ principle. The model, which was developed in the AAL project Express2Connect (E2C), is described in a book entitled ‘Connect – Design for an empathic society’. The Waag Society uses this model in co-creation training courses. Organisations can also receive guidance on processes involving cooperation with end users.

See www.waag.org (search for 'empathic').



Added Benefit 3

The Elderly Ombudsman – information services for older adults

Care@Home is an information platform for topics such as housing, care, welfare and local authority services. A pilot implementation is taking place in Rotterdam, under the name of ZoDichtbij. The Electronic Ombudsman for Older Adults has been added to the platform. There is a special app that makes it even easier for older adults to identify and access appropriate care and support services in their local area. They can also use the app to easily update their personal information dossier.

See www.ouderenombudsman.nl, www.zonmw.nl/careathome
and www.zonmw.nl/zodichtbij.



European cooperation promotes care innovation

‘Vilans is a centre of expertise and has no fewer than twelve staff members who specialise in care technology. Rightly so, because technological innovation is essential to the quality of care. However, ensuring that innovations are accepted and widely implemented is no simple matter, not least because many professionals are wary of new developments. They often associate technology with ‘impersonal care’. Bearing this in mind, the implementation needs to be careful and those involved must be given every opportunity to familiarise themselves with the new situation. Often people only become enthusiastic about a new product once they have experienced it for themselves. We therefore employ targeted implementation strategies.

The Netherlands is just too small

Development programmes like AAL are not above criticism. Within our organisation we regularly debate their usefulness. I am among those who are convinced of the benefits to be gained from cooperation at European level. If only because the Dutch market is too small to make development processes commercially attractive.

High technological level

AAL has really been giving a helping hand to some smart ideas. Current care technologies – both at home and in

the institutional environment – have now reached the highest possible level. More and more care providers use the latest generation of domotics. Although no individual project can take all the credit for results like this, without AAL such solutions would probably never have existed at all.

Tricky revenue model

In my view, there is still a lot of work to be done by the programme. For example, it provides a framework for the promotion of less ‘sexy’ innovations. Care robots can count on media coverage, but developments such as lifestyle monitoring also deserve a place on the agenda. It also gives us opportunities to systematically carry out evaluation studies. One of the biggest problems for introduction of innovations is the revenue model. The purchaser of an ICT solution (e.g. a care organisation) almost never receives the profits generated by implementing the innovation. If you can continually present new evidence of the benefits to be gained from technology, this can be a powerful argument in favour of structural funding. And that is starting to work. The negotiations are far from over, but health insurance companies are also beginning to see how they could play a part in care innovation with technologies.’



Interested in creating your own innovations for older adults? Then why not take advantage of AAL's experience? Some of the challenges involved are described below along with suggestions for solutions that have proven themselves in everyday practice.

6 QUESTIONS AND SOLUTIONS

Cooperation with end users

QUESTION

How can you ensure that ICT solutions are fit for purpose?

SOLUTION

One crucial lesson learned in practice is that end users should be involved in the entire innovation process. Starting from an exploration of people's aspirations, wishes and needs, to the testing of prototypes, and evaluating the added value generated. Furthermore, the development of business models and commercialisation should not be forgotten. Taking this approach ensures that ICT solutions are more in keeping with what older adults actually want. It also clarifies the issue of who is going to pay for the solution. Meanwhile it is worth remembering that the term 'end users' is not only referring to older adults or their informal carers. It can also include care professionals. After all, they are the ones who will have to adapt their working methods to incorporate the solution in question.

QUESTION

What are the interests of the various parties involved?

SOLUTION

Appropriate ICT solutions can make the everyday lives of older adults easier, or more fun. Nevertheless, the innovation process is not solely restricted to the interests of the older adult target group. For informal carers, convenience and peace of mind can be a factor, along with a reduction of care-related stress. Professionals want to provide better care, while care organisations endeavour to achieve quality and efficiency. Insurance companies and local authorities want to cut costs, yet still retain sufficient capacity to meet the growing demand. Make sure to be keenly aware of the interests of all of the parties involved in the process.

QUESTION

What part can end users play in co-creation?

SOLUTION

The end users' role varies from one stage to another. The orientation stage places users' aspirations, wishes and needs in the spotlight. What is their attitude to the planned innovation? Then, during the design

stage, you and the end users work together to develop the concept. So-called 'lead users' can be a great help in this process. These are older adults whose experience can be used during concept development and in creative design processes. The test and pilot stages focus on different questions – will people with no ICT experience be able to use the new product? And how practical will the system be in everyday life or work routines?

QUESTION

What's a good way to involve end users?

SOLUTION

End users' input is indispensable throughout the entire innovation process, and every stage requires its own methods. In order to streamline this process, a handy toolbox and guidelines have been developed within AAL. The universal rule is 'use an iterative process with repeated feedback loops'. Develop ideas, build prototypes and semi-finished products, get user feedback, and keep making improvements. Do not wait until you have a 'final' prototype, but work steadily on improvements with the help of the end users.

From invention to market-ready solution

QUESTION

How do you fund a development process?

SOLUTION

The search for perfection is still causing too many great inventions to wither in the bud, and the same applies to ICT solutions for older adults. However good an idea may be, it takes money to make it viable. There are plenty of funding options for the development stage – ranging from an AAL grant to support from various innovation funds. But in the end, the main issue is longer-term funding. So make sure you investigate early on which incentives will help to get stakeholders involved in the co-creation of smart technology. Understanding their concerns and desires will greatly improve your chances of getting them on board.

QUESTION

How do you develop effective business models?

SOLUTION

A business model is not a simple recipe for guaranteed profit. It's not something you just copy from a book. Looking for a suitable business model together with your partners is part of the process

leading from an invention to the market. A business model describes how an organisation – in this case a consortium developing an innovation for older adults – creates value. In partnerships like this you develop the model together, with the aid of the Business Model Canvas, for example. The development process, like the innovation process itself, involves an iterative approach. This ensures that the business model can always be adapted to the changing environment.

QUESTION

How do you convince insurance companies, local authorities, or care providers?

SOLUTION

Aside from the commercialisation of ICT for the consumer market, financing the use of innovations through parties in the care sector or (local) governments is also an option. You will need to show them that they also stand to gain, both in terms of quality and money. Use a convincing business case to sketch an overall picture – what impact will your innovation have on people's quality of life? Will it result in good quality and sustainable care? Will it help people to continue living at home for longer? How much will it cost to buy and use, and what savings are involved? Exploring these issues together automatically generates greater commitment.

QUESTION

How do you turn an invention into commercialisation?

SOLUTION

One of the lessons learned is that many innovators tend to focus mainly on the development of their particular product or service. There's a risk that they'll spend too much time on R&D and further refining their prototypes. Market development has to be a key concern from the very beginning. Consortia should include experts who are capable of achieving successful commercialisation. In the end, this will enable more older adults to benefit from ICT.

Support in implementation and scaling up

QUESTION

How do you push ahead with implementation and scaling up?

SOLUTION

Anyone who wants to scale up their innovation after the product development stage and an initial market introduction needs money and advice – from investors, for example. But large companies could also play a part. More and more initiatives are taking on the role of 'incubator' or 'accelerator'.

The European Connected Health Alliance, an international networking organisation, operates as a matchmaker between the parties involved in innovations, including end users. The Enterprise Europe Network helps entrepreneurs and researchers to find partners anywhere in the world, free of charge. Closer to home, important partners for scaling up innovations are local authorities, provincial authorities, and insurance companies.

QUESTION

How can you help your innovation gain (widespread) acceptance in the Netherlands?

SOLUTION

ICT solutions for older adults are not bound by national borders. So how can you ensure that an innovation, developed by an international consortium will gain widespread acceptance in everyday situations in the Netherlands? With special dissemination and implementation grants (the so-called VIMP) the Netherlands Organisation for Health Research and Development (ZonMw) supports the implementation of promising AAL results. Over the next four years, the Dutch Ministry of Health, Welfare and Sport will be making 20 million euros available – under the ‘FastTrack eHealth’ scheme – to support the scaling up of eHealth solutions.



We will continue to stimulate ICT solutions for older adults, both internationally and within the Netherlands. AAL will run until 2020 at least. Throughout that period, there will be many opportunities to link up with the various. So stay tuned!

7

LINKING UP WITH AAL

FIND funding and partners

Got some ideas for an ICT solution for older adults? Each year, approximately €2.5 million is made available for Dutch partners in AAL projects. The plan is to issue annual calls for proposals to be submitted, so keep an eye open for news on these calls.

www.zonmw.nl/aal

www.aal-europe.eu

FIND inspiration and information

AAL holds numerous events to inspire developers, and anybody else with a good idea. AAL also makes every effort to further develop their ideas and solutions, and to bring them to market – hackathons, feasibility studies, challenge prizes, support actions and workshops are all part of AAL's activities, all of which generate lots of potential new solutions.

www.zonmw.nl/aal

www.aal-europe.eu

FIND help with commercialisation

In 2014, AAL launched AAL2Business, one of the programme's support actions. It involves a team of experts, who help projects achieve a successful market orientation and commercialisation process. In this way, older adults will ultimately have access to more AAL solutions.

www.aal-europe.eu

FIND opportunities for scaling up

Ready to put your ICT solution to practical use? Or looking for an opportunity to scale up? AAL would be happy to help. In this context, we work closely with Zorg voor innoveren (Care for Innovation). Keep up with developments at the websites.

www.zonmw.nl/aal

www.zorgvoorinnoveren.nl

FIND ICT solutions for older adults

Want to use AAL's ICT solutions in everyday care practice? Take a look at one of the platforms offering ICT solutions for older adults, such as:

www.zorginnovatie.nl

www.beteroud.nl

www.hulpmiddelenwijzer.nl



AAL as a connecting agent

‘The future of ICT solutions for older adults is difficult to predict. When the first tablet computer arrived on the market in 2010, no one could have foreseen the impact it would have. Now you can’t imagine a world without these devices. Not only have they become a vital part of our everyday lives, they are also of key importance in a variety of professional settings. Tablets are also a crucial element in making ICT accessible to older adults. This is due to their ease of use and to the new solutions that can be developed for them, in the field of communications, for example.

To integrated solutions

What’s the next big thing? What can we expect from virtual reality, for example? Will it become easier for older adults to continue to take care of themselves, with the help of e-health applications and treatments at home? And what about the recent developments in the area of self-driving cars? What will this innovation mean for the mobility of older adults? I don’t think anyone really knows, and neither do I. But I am sure that this will be the start of a trend favouring increasingly integrated solutions – a move towards customisation that fits the personal situations of older adults, and those of their family and friends.

Making connections

That may very well be where the greatest opportunities lie for programmes such as AAL. We want to stay involved in making connections – between end users and developers, between science and everyday practice, and between the public and private domains. But also between enthusiastic young entrepreneurs and big companies, and between local needs and international developments. This all revolves around an important central theme: the connection between the everyday lives of older adults and the growing capabilities of smart, easy-to-operate technology.

Part of a movement

This all comes together in European stimulation programmes like AAL, as part of a broad international movement that helps give older adults the ability to be autonomous and self-reliant through the joint development of appropriate ICT-based solutions. And that movement shows no sign of slowing down. It will continue well after 2020.’

ZonMw (The Netherlands Organisation for Health Research and Development) funds health research in the Netherlands and promotes the actual use of the knowledge this research produces. ZonMw's aim is to promote quality and innovation of health research in order to make health care better and to keep it affordable.

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Want to know more?

www.zonmw.nl/aal

www.aal-europe.eu

Disclaimer

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An ageing population *plus* dejuvenation. A growing demand for care at a time of increasing staff shortages. More and more people who are growing old in their own homes and who want to stay socially active. How can these social challenges be met? Whatever the case, solutions involving smart technology are indispensable.

In the context of the European Active & Assisted Living (AAL) stimulation programme, numerous government bodies, businesses and organisations are working on ICT-based solutions to promote the self-reliance of older adults. The goal is to support older adults in maintaining their independence, also in the face of increasing physical or mental limitations. The Netherlands is involved in dozens of AAL projects that contribute to this endeavour. They create a connection between the everyday lives of older adults and the growing capabilities of technology.

This publication shows what AAL has delivered for the Netherlands until now, often in the words of those directly involved: from older adults contributing their own ideas about new ICT solutions, to companies bringing tangible products and services to the market. Their stories provide an inspiring glimpse into the future everyday lives of older adults.

ZonMw stimulates health research
and innovation

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