![a2e2 logo] Adaptive Ambient Empowerment of the Elderly

![AAL Ambient Assisted Living logo]

WP8

D8.3 Annual A^{2}E^2 Dissemination report 3 and 4

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1.   Introduction

The major objective of the dissemination report is to sum up the various dissemination activities in the last phase of the A^2E^2 project. It also outlines the dissemination strategy, channels and future dissemination activities.

Effective strategies to maximize scientific, industry, and end user awareness for A^2E^2 throughout the whole development and validation process are merged in WP 8. General public, scientific, and business dissemination tasks are lead by the A^2E^2 consortium members with highest expertise in that particular area.

As objectives in this project is to view possibilities to contribute on levels:

- o   Public dissemination
- o   Scientific dissemination
- o   Business dissemination.

1.1.   The product and infrastructure

The product that is provided to the end-users exists out of the developed mobile application with a personal coach and the necessary Home Platform infrastructure to run the application. The plan is to add more AAL functionality to the application and also introduce new subjects.

The main target group are people with a need for assisted care at home for self management in activities, i.e. physical or social, that can be (partly) mediated through a personal virtual coach who can support them during their day to day routine. Next to the main target group there are supporting groups like informal carers, formal care providers and insurance companies. These parties can acquire a license for their clients and provide the product through this licence to their clients.

The app exist out of three different components where there is a part for the content. The content part can be related to all assisted home care subjects.

The second part of the application exist out of the software functionality, which gives the user the ability to monitor their activity. The target for the software is that it is easily customizable and adjust to the content of the AAL support unit. To support the content at its best the software should be able to be optimised to the needs of the end-users.

The third part is the infrastructure, which exists out of the smartphone/tablet, pc-computer, sensors and internet access. The infrastructure is well adjusted to the software which makes increases the adjustability of the application.

The application provides the end-user the ability to support and monitors him during his day-to-day routine. When necessary or requested the virtual coach will provide the end-user with personal feedback. The caregiver of family can monitor through a portal the end-users activities and participation. This brings the opportunity caregivers and family can notice in an early stage when the behaviour of the end-user is changing, which gives them the opportunity to adjust the treatment or medication of the end-user for his best interest.

In the future the application will be expanded with more AAL applications to support more end-users with different types of AAL needs. The technical part of the product is constantly in development and needs to be kept updated with the new innovations in technology. For example new sensors which can monitor the end-user in a better or more comfortable way should be updated easily with the software. This is why it is important to keep developing the software and monitoring the flow of the market to be able to supply the end-users with the best and most supporting product.

2. Dissemination strategy

The following chapter describes the dissemination strategy of A^2E^2. This includes identifying relevant stakeholders, potential dissemination channels to address said stakeholders and an overview about how to improve dissemination by using the appropriate channels for each stakeholder.

2.1. Stakeholders

In the A^2E^2 project we are distinguishing five main groups of stakeholders that are deemed relevant:

- *End users* - these are assisted persons that have interest in using the A^2E^2 system in their premises.
- *Care service providers* - these are e.g. assisted living facilities that provide the A^2E^2 system to their inhabitants
- *Social network of the end user* - these are the family, existing friends and potential friends of elderly A^2E^2 users. They do not necessarily possess the A^2E^2 system but use the online services to communicate with end users
- *Developers* - it is intended to provide developers means to extend the A^2E^2 platform with additional functionality
- *Scientific community* - the A^2E^2 project has a strong focus on testing the created projects and thus will generate results that are relevant to other researchers in this field.

2.2. Dissemination channels

Following is a list of various dissemination channels that have been used to share project results with the different stakeholders.

- *Website* - The A^2E^2 website provides an overview and informs interested users about recent developments and shares public deliverables
    - o Targeted stakeholders: All
- *Press releases* - Important milestones of the project will be released to the press in involved countries in order to improve the visibility of A^2E^2
    - o Targeted stakeholders: End users, Care service providers, Social network of the end user, Developers
- *Trade fairs* - To generate commercial interest in the system it is important to show working prototypes and important results at trade fairs
    - o Targeted stakeholders: Care service providers, Developers
- *Conferences* - Professional and scientific conferences are important in discussing project results with experts in the field
    - o Targeted stakeholders: Care service providers, Scientific community
- *Workshops* - Practically oriented workshops help showcasing distinct features and intermediate versions to ensure involvement by third parties
    - o Targeted stakeholders: Care service providers, Developers, Scientific community
- *Journals* - Publication of project results in scientific journals is a proven way to target the scientific community and share the most important scientific findings of the project
    - o Targeted stakeholders: Scientific community

2.2.1. Public dissemination channels

Exhibitions, invited speeches in workshops and other similar occasions. Also the A^2E^2 website should be activated, since now we have something to report.

2.2.2. Scientific dissemination channels

National and international scientific conferences, international scientific journals.

2.2.3. Business dissemination channels

Trade fairs? Presentations to potential customers, both in private and public sector?

2.3. Cross-relation table

A table showing how we plan to reach stakeholders via which dissemination channels and if there is any preference and priority about which channels to use.

Table 1. Stakeholders, channel cross-relation

	Press Releases	Trade fairs	Website	Conferences	Workshops	Journals
End users	Yes	No	Yes Priority	No	No	No
Care service providers	Yes	Yes Priority	Yes	Yes	Yes	No
Social network of the elderly	Yes	No	Yes Priority	No	No	No
Developers	Yes	Yes	Yes	No	Yes Priority	No
Scientific community	No	No	Yes	Yes	Yes	Yes Priority

2.4.   Conclusion

Following the identification of stakeholders, dissemination channels and how each shall be attributed we can define the overall dissemination strategy for A^2E^2 that will allow us to target all important stakeholders and optimize sharing of project results.

The A^2E^2 consortium will prepare dissemination materials for all important stakeholders with a focus on the priority channels as defined in the previous section. It is taken care of properly addressing all stakeholders and choosing appropriate topics and results that are relevant for them.

The first results of this strategy can be seen in the following section where the A^2E^2 consortium is reporting dissemination activities in this reporting period and presenting a plan for dissemination in the upcoming period.

The A^2E^2 consortium will constantly evaluate and improve the dissemination strategy if deemed necessary. We will furthermore constantly update created dissemination materials to reflect the progress of A^2E^2.

2.5.   How are the stakeholders reached via the dissemination channels

Major objective of the dissemination plan is to raise **wide public attention** for the concepts and results of the project. Dissemination is also intended to open the project to the participation of other parties, in particular experts from related domain. To increase public awareness and to make perfect use of available dissemination resources and channels, this process will be coordinated by three partners: Lead for the commercial dissemination will be a new SME iValens, while academic dissemination will be organized by VU and the general-public dissemination by the ABCC.

The dissemination process will take place within the whole duration of the project with involvement of both the whole consortium and in conjunction with individual partners. The overall strategy of A²E² for knowledge distribution and for product launch preparation is to **maximise the scientific, industry, and end user awareness** throughout the whole development and validation process. For the scientific world, this will be achieved through co-authored publications in international peer-reviewed journals and through presentations on relevant national and international conferences and workshops. Policy makers, health care service and product providers, hospitals, as well as the interested public will be reached through press releases which will be prepared by the consortium partners on a regular basis, through product presentations on health exhibitions and roundtables, through a product-related website, and through the distribution of marketing material to target group members and organizations.

Additional ways of dissemination include the development of a **web site** for the project to provide general information about the project's objectives and goals and for the announcement of major results of the project. Furthermore, the consortium will consider publishing **brochures** about the project to support the outreach. During the final phase demonstration of A²E² will be integrated in a **public conference** associated with a consortium meeting. National and international scholars will be invited and press coverage arranged.

As indicated in figure 6 dissemination follows a plan in which the first users are the health care institutions involved in the ABCC. From there national outreach to The Netherlands and local dissemination in Luxumburg, Germany, and Austria. The next step foresees an European wide extension. An awareness campaign through the EU health prevention and management systems at an early stage will prepare for **EU-wide** dissemination.

2.6. Exploitation capability and time-to-market

2.6.1. Economic feasibility and profitability

Project feasibility is being performed during august 2008. So far it shows a present ROI of 18 – 23 %.

2.6.2. Business model - generic

A new SME iValens will plan to put the system on the market. Revenue will be generated from traditional sales and services of the systems to care orgranisations, hospitals, counties, and other commercial businesses in the healthcare market. The revenue will be created by offering technological solutions including the equipment, the software, and the service needed to run the system efficiently.

The package will be introduced with a price per installed unit, connections to the central hub, installations, the project itself and the subscription. The installed unit is the equipment situated at the end user that is necessary for the functionality of the product. The central hub is the web based software and the connections with this software, including firewalls etc. A subscription is the constant incoming revenue from the software and the service provided.

iValens has experience from developing service concepts for customers where the service, the lease of the software, the installation, and the maintenance is included. To every delivered unit, which is in this case situated with the end user, there will be a subscription fee that

covers the applications included in the package. The subscription can be paid either on a monthly, quarterly or on a yearly basis depending on the customers' preferences.

2.6.3. Potential market

Market figures for 14 elected EU countries considered, with taken together, more than 31 Mio EU to be expected for ICT related costs.

2.6.4. Exploitation plan

Prototyping has started start in the ABCC in Amsterdam, followed by a first pilot. Next step is to prepare for a technical update and a large scale fiel study. So that sfter prototyping piloting will expand to the entire nation in which the prototyping took place. In the next stage, finally, EU wide piloting is desired while at the same time being established in the three referenced countries.

3.   Dissemination report

A variety of dissemination activities have been performed. Dissemination was take place in a variety of public, scientific conferences, magazines and journals. Also television media was used. The total estimated size of reached people is several millions.

A summary of the dissemination activities is given below.

3.1.   Public dissemination activities

Publications

Article Health Medicine and Technique Norwegian magazine.

Articles in Hospitality Health News

Presentations

Nokios conference in Trondheim. National gathering of municipalities focus on public health services. 20-22/8-2011

MIE conference 2011 in Oslo. International strategic IT health conference.

Inomed conference in Trondheim. Topic on elderly living independent solutions.

Schrödinger's cat a scientific TV program about new technological toolkit for independent living.

Oslo Medtech/ HospitalIT presentation to member of the Norwegian parliament

Science and technology a TV program focus on new technology.

NHO yearly business conference

Oslo University Hospital Intervention center

Exhibitions

DISPS forum in Trondheim 8/6 - 2011. Focus on electronic patient journal.

MIE conference Oslo. 29/8 - 2011.

NSH year conference. Membership organisation for privet and public Health enterprises

Rehabilitation conferences Lillestrøm 26/10- 2011.

Website

A2E2 website www.a2e2.eu contains now basic information of the project.

Consultations/ meetings 2011 and 2012

Hospital IT and Norwegian parliament committee of health

Hospital IT and municipality city of Oslo

Hospital IT and NHO/ Norwegian technology

Hospital IT and Department of Health Norway (HOD)

3.2. Scientific dissemination activities

Publications

Roelofsma, P.H.M.P. & Kurt, S. (2013) A Framework for Virtual Coaching: Modeling Expert, Motivator and Mentor coaches. In: Augusto, J.C., Bosse, T., Castelfranchi, C. Cook, D., Neerincx, M, Sadri, F. (eds) *Human aspects in Ambient Intelligence.*

Frost, J, Roelofsma, P.H.M.P. & Boukris, N. Virtual Coaches and Intrinsic Motivation: The Role of Parasocial Interaction. Paper submitted to: Communication Research Reports.

Roelofsma, P.H.M.P (2012). A Taxonomy of Ambient Assisted Living Self-Management Systems. In: Bierhoff, I., Nap, H.H., Rijnen, W. & Wichert, R, *Partnerships for Social Innovation*

in Europe, *Proceedings of the AAL Forum Lecce*, pg 59-64. 4

Roelofsma, P.H.M.P (2012). User Acceptance of Virtual Coaches in AAL to Motivate Elderly for Physically and Social activity. In: Bierhoff, I., Nap, H.H., Rijnen, W. & Wichert, R, *Partnerships for Social Innovation in Europe*, *Proceedings of the AAL Forum Lecce*, pg 136-

Roelofsma, P.H.M.P. (2012). How Avatar Based Communication Can Improve Decision Making Quality. *AmI Workshops Proceedings Amsterdam,* pg 175-180

Roelofsma, P.H.M.P. & Versteeg, L (2012). Preference for Combining or Separating Events in Human and Avatar Decisions. *AmI Workshops Proceedings,* pg 181-183.

Versteeg, L. Roelofsma, P.H.M.P. (2012). Sex Differences in User Acceptance of Avatars. *AmI Workshops Proceedings,* pg 189-191

Frost, J, Boukris, N, Roelofsma, P. (2012). We like to move it move it!: motivation and parasocial interaction,. *CHI Extended Abstracts 2012,* 2465-2470.

Roelofsma, P.H.M.P. & Kurt, S. (2012) A Framework for Virtual Coaching for Breaking Sedentary Life Styles: Modeling Expert, Motivator and Mentor coaches. *HAI AMI Workshops Proceedings,* Pisa, pg 35-48.

Ferring, D., Reljic, G., Roelofsma, P. (2012). "Why do we need it?" – An analysis of the affective-motivational factors in the use of assistive technologies. Proceedings of the AAL Forum Eindhoven, September 24-27.

Roelofsma, P., Ferring, D., Reljic, G. (2012). "Where do we go from here?" – A preliminary evaluation of the EU Ambient Assisted Living (AAL) Programs. Proceedings of the AAL Forum Eindhoven, September 24-27.

Braun, A., Roelofsma, P.H.M.P., Ferring, D. & Immonen, M. (2011). Empowering and Integrating Senior Citizens by Virtual Coaching. *Lecture Notes in Computer Science*, *10,* 369-370.

Ritterfeld, U., Roelofsma, P., Haring, P. Chakinska, D, & Van den Bosch, M. (2010). Head First Into Serious Health Gaming: a2e2 as a new approach of digital exercise coaching for seniors. *International Journal of Computer Science in Sport, 9(2*), 85-94.

Roelofsma, P.H.M.P., Liem, H. Companjen, F. & Klijsen, B.(2009). Building Cooperative Care Communities, *Health Estate Journal 2009, 63*(10), 29-35.

3.3. Business Dissemination activities

Mapping and presentations to consultancy business Ernst Young, Pwc

Industry partner building dialog with Siemens NO, DK, SE.

Industry partner building dialog whit ABB, YIT, EDB ERGO, IBM

A survey mapping of the Scandinavian and European marked.