ALFRED

Personal Interactive Assistant for Independent Living and Active Ageing



WP9 – Impact

D9.2.5 – Advisory Board Summary Feedback Report

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Contributing Partners: All

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Version 1.0

The purpose of this deliverable is to describe the communication of the ALFRED Consortium with the Advisory Board (AB) members during the last months of the project. The feedbacks of the AB Members on the final status of the project are illustrated and their general opinions are also provided.



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| Deliverable Lead | Federica Righi, IESE | | | | | |
| Internal Reviewer 1 | Jorge Moreno, AITEX | | | | | |
| Internal Reviewer 2 | Peter Merz, TIE | | | | | |
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Note

This deliverable is subject to final acceptance by the European Commission.

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Project Partners

| Consulting - Development - Research | Atos |
|--|---|
| Ascora GmbH, Germany | Atos Spain sau, Spain |
| Worldline Worldline, Spain | Charité - Universitätsmedizin Berlin - Department of Geriatrics, Germany |
| Asociacion de Investigacion de la Industria Textil, Spain | TECHNISCHE UNIVERSITAT DARMSTADT Technische Universität Darmstadt, Germany |
| National Foundation for the Elderly, The Netherlands | Talkamatic AB, Sweden |
| E-Seniors, France | TIE KINETIX total integrated e-commerce TIE Nederland N.V., The Netherlands |
| IESE Business School, Spain | |

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Executive Summary

This deliverable describes the communication maintained with the Advisory Board (AB) members during the last phase of ALFRED project implementation, from M31 to M36.

It provides the explanation of how AB members' feedbacks have been taken into account in the development of the project and which actions have been implemented. This last part of the project focused on the integration of the technical component of ALFRED, the piloting of the system with end users and the analysis on the future market deployment of ALFRED. Hence, the discourse with AB members centred mostly on these issues.

Being closed to the end of the project, AB members have also been asked to express their general opinions on the project implementation status and its results. The general response was positive, giving compliments for the enormous achievements during the last phase of the project. AB members appreciated the fact that the project Consortium developed a specific analysis on the target market of Seniors Institutions, such as nursing homes and home care organizations. Finally, some contacts have been suggested for the go-to-market strategy. Some AB members suggested that the following phase of ALFRED deployment to the market should focus more on making relevant contacts and networking with the seniors care sector and the assistant living industries.

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1 Introduction

ALFRED – Personal Interactive Assistant for Independent Living and Active Ageing – is a project funded by the Seventh Framework Programme of the European Commission under Grant Agreement No. 611218. It will allow older people to live longer at their own homes with the possibility to act independently and to actively participate in society by providing the technological foundation for an ecosystem consisting of four pillars:

- **User-Driven Interaction Assistant** to allow older people to talk to ALFRED and to ask questions or define commands in order to solve day-to-day problems.
- **Personalized Social Inclusion** by suggesting social events to older people, taking into account their interests and their social environment.
- **Physical & Cognitive Impairments Prevention** with serious games that help the users to maintain and possibly even improve their physical and cognitive capabilities.
- A more **Effective & Personalized Care** by allowing medical staff and (informal) caretakers to access the vital signs of older people monitored by (wearable) sensors.

Within this deliverable, the communication among ALFRED Scientific Consortium and the Advisory Board (AB) members is reported.

1.1 ALFRED Project Overview

One of the main problems of western societies is the increasing isolation of older people, who do not actively participate in society either because of missing social interactions or because of age-related impairments (physical or cognitive). The outcomes of the ALFRED project will help to overcome this problem with an interactive virtual butler (a smartphone application also called ALFRED) for older people, which is fully voice controlled.

The ALFRED project is wrapped around the following main objectives:

- To empower older people to live independently for longer by delivering a virtual butler with seamless support for tasks in and outside the home. This virtual butler (the ALFRED app) aims for a very high end-user acceptance by using a fully voice controlled and non-technical user interface.
- To prevent age-related physical and cognitive impairments with the help of personalized serious games.
- To foster active participation in society for the ageing population by suggesting and managing events and social contacts.
- And finally, to improve caring by offering direct access to vital signs for carers and other medical staff as well as alerting in case of emergencies. The data is collected by unobtrusive wearable sensors monitoring the vital signs of ALFRED's users.

To achieve its goals, the project ALFRED conducts original research from a user centred perspective and applies technologies from the fields of Ubiquitous Computing, Big Data, Serious Gaming, the Semantic Web, Cyber Physical Systems, the Internet of Things, the Internet of Services, and Human-Computer Interaction. For more information, please refer to the project website at http://www.alfred.eu.

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1.2 Deliverable Purpose, Scope and Context

The purpose of this deliverable is to describe the communication of the ALFRED scientific consortium with the Advisory Board (AB) members during the last months of the project. AB members have continuously kept informed on the outcomes of the pilot phases and the latest results of the market analysis on Seniors Institutions and the adjustment in the business model proposition. Finally, AB members also offered their general opinions on the overall advancement of the project.

1.3 Document Status and Target Audience

This document is listed in the Description-of-Work (DoW) as "public", as it provides a summary feedback from the Advisory Board Committee.

1.4 Document Structure

This deliverable is broken down into the following sections:

- Chapter 1 introduces briefly the project and outlines the purpose, scope, context, status and target audience.
- Chapter 2 describes the communication flow with members of the ALFRED Advisory Board during the last 6 months (Month 31 to Month 36).
- Chapter 3 includes the information that was sent to AB members.
- Chapter 4 offers an overview of the feedbacks that AB members sent to the ALFRED Consortium.
- ANNEX I lists some key aspects highlighted by AB during the 3rd AB meeting and how the Project Consortium tackled them.

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2 ALFRED Advisory Board Committee

The ALFRED Advisory Board Committee is composed of a group of excellent professionals who represent stakeholders from industry and the scientific community interested in new technologies as a tool for independent living and active aging. Table 1 shows the final Advisory Board and their attendance to the ALFRED AB meetings.

| Name | Institution | Profile | Country | Attending 1 st AB meeting | Attending 2 nd AB meeting | Attending 3 rd AB meeting |
|---------------------------------------|--|---|-------------------|--|--|--|
| Oliver Heckmann | Youtube | Engineering director at YouTube | Switzerland | No | No | No |
| Diane Whitehouse | The Castlegate Consultancy/ EHTEL | Director | United Kingdom | Yes | Yes | Yes |
| Petra Wilson | International Diabetes Foundation | Director | Belgium | No | No | No |
| Jaume Raventós and Jordi Rovira | Telefónica Spain | eHealth Department | Spain | Yes | No | No |
| Koen van Os | Philips Research | Senior Scientist Intelligent Textiles | Netherlands | Yes | Yes | Yes |
| Albert Alonso | Hospital Clinic Barcelona | ICT healthcare management director | Spain | Yes | Yes | Yes |
| Heidrun Mollenkopf | BAGSO | Academic, age researcher and politician | Germany | No | No | No |

 Table 1: Advisory Board Committee and Meeting Attendance

2.1 Communication with the Advisory Board Members

During the lifespan of the ALFRED project a continuous and fluent communication with the AB committee was kept. The third AB meeting was held in Gothenburg on the 5th April 2016. Much of the feedbacks received in this meeting served as basis for the development of deliverable D2.2.4. The main recommendations provided during this meeting are also gathered and prepared as in Annex I for easy reference.

This deliverable illustrates the communication with AB members developed after the meeting in Gothenburg, showing the project progress status. The ALFRED team shared with AB members the results of the integration phase of the technical components and the consequent outcomes of the pilots with end users.

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AB members received the draft version of the D2.2.4 (Market Trends and Applicability), which contains the summary of the pilots' results and the market discovery phase with potential customers such as nursing homes. D2.2.4 also provides the Roadmap and next actions suggested to move from a prototype to a marketable product.

AB members have also been asked their opinions with regards specific questions as showed below in the e-mail text detailed in section 3.

Among the list of AB members, three of them have been very active and responsive to our requests of communication and participation: namely Albert Alonso from Hospital Clinic in Barcelona, Koen Van Os from Philips and Diane Whitehouse, eHealth consultant and policy analyst.

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3 Advisory Board Concluding Feedback

Generally, the AB feedback was positive and reinforcing. A special emphasis was put at the end of the project on the enormous efforts and great achievement from all project partners. Below you can find a set of quotes by AB members.

Diane Whitehouse – "The changes made to the project seem to be in line with the advice given by the advisory board members back in the springtime in Gothenburg. The project seems to have achieved a vast amount in the last six months."

Koen Van Os – "Congratulations to you all for achieving such a nice result. A prototype and a very good business analysis, cheers!"

AB members appreciated the fact that the ALFRED Consortium developed a specific analysis on the target market, responding, in fact, on one of the concerns they had expressed during the 3rd AB meeting. This analysis offered the **insights from potential customers** such as nursing homes and home care organizations.

They also liked the use of the **business model canvas** and the reference to the **lean start-up methodology**. However, some concerns was expressed regarding the business model that still needs validation and some challenges might be the high-end market and the consent for patients to share their data.

Albert Alonso pointed out that the new version of the exploitation plan is more solid respect to the one presented during the Third AB Meeting in Gothenburg. He continues "The consortium has sought the views of other stakeholders that can be potential customers of the solution. This is very much welcomed, albeit one could argue that the sample of customers interviewed is small. However, on these grounds the consortium has undertaken the exercise of adjusting the value proposition of ALFRED that seems to be better attuned to the market. The option for a cluster of services that has different levels: an entry level/package, a health package, a social package and a premium package sounds like a sensible approach".

Finally, Albert Alonso says that "the option for a Software-as-a-Service business model seems an appropriate one. However, in the details of the model provided, the pricing scheme seems a bit high and might need to be adapted depending of the characteristics of the market in each country. Also, the figures of the market size provided, though possibly correct in the global number of patients, need to be modulated with regard to the characteristics of the health systems in each country".

Another comment from Diane Whitehouse suggests the idea to study the possibility of targeting also other markets, apart from Germany, concretely, other Bismarck-scheme countries near to the German border, such as **new EU member states**.

Finally some contacts have also been suggested for the **go-to-market strategy** such as the TeleSCoPE project partners, AOK health insurance in Germany, EHTEL and others. Some AB members suggested that the ALFRED market deployment should focus more on making relevant contacts and networking with the care sector of older people and the assistant living industries.

AB members also valued the importance of the **consent given by the older people to share their data** with their families or carers. This is a critical issue that has constantly

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received high importance by ALFRED partners. In fact, the design of the system allows multiple protection levels in term of data privacy (D9.6.2). An extra strategy developed along the project to tackle the issue of the seniors' consent is to approach older people through their caregivers. In fact, caregivers are trusted people from the seniors' closed community who could explain the positive intentions of ALFRED platform and the benefits in terms of autonomy and better health.

AB members have also been asked which opportunities ALFRED project has in terms of **future funding schemes** to support forthcoming actions and move from a prototype status to a full deployment onto the market. All of them agreed on the idea of pushing for the solution of ALFRED integrated version. Some pointed out that ALFRED disruptive innovation might be considered the type of data-sharing and relationship that ALFRED aims to create with families/carers. Hence, this part could also be emphasised.

Regarding which features might be most interesting for the caregivers of older people, Koen Van Os made a comment worth explicit mention: "I think the core is in the two directional communication between patient and organization and others (like family). This makes ALFRED unique. This makes it different from 'free-apps on the internet, ALFRED brings secure relevant personal information from organization to patient, family and vice versa. I think this (oral) communication app is core and the other more activity or measurement apps are very nice if they smoothly connect to it".

Finally, when prompted them for some general comments on ALFRED's implementation along the lifetime of the project, Koen Van Os stated: "I really appreciate the way you organized the business development along the project. Very innovative approach and good focus on this. This makes the outcome of the project very relevant. The fact that all results are validated in different ways is very nice. Most of times this is only the intention for followups of projects. You managed it all?"

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ANNEX I - Correspondence with AB Members

Email Communique – 09/2016

Dear ALFRED Advisory Board Member,

Long time has passed since our last meeting in Gothenburg. During these last months ALFRED Consortium has been more active than ever and many activities have been organized, the most important one is the integration of the whole system.

The integrated version was developed and finalised this May/June, hence the pilots started and ended in late July. We have also organized few interviews with some Senior institutions in Spain, The Netherlands and Germany. After collecting and analysing all this data, we have revised slightly ALFRED value proposition and the business model. The document attached to this email you can find the draft of last deliverable on Market and Applicability Report. Feel free to make any suggestion on it.

As you know, ALFRED is a high innovative solution targeting a very specific population such as elderly people. We believe that by the end of the project we have achieved a high valuable prototype that, with some minor adjustments, has many good insights and chances of moving to a marketable solution. Hence, what we would like to ask you, is your honest and much appreciated opinion on how to proceed towards this goal.

At the moment we are assessing the possibility to participate in the SME Instrument Call (Phase 2),

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/smeinst-06-2016-2017.html

Below are listed a set of points we would like to share with you:

Which is the best option for us to participate for a project proposal such as the SME Instrument? Do you see more chances to continuing developing the integrated version of ALFRED, or either one specific component of it?

- 1. Considering the nature of ALFRED as a wellbeing platform, which set of apps, developed by ALFRED, you think may have more chance of success in a healthcare setting such as a nursing home or senior day centre?
- 2. Which recommendations you suggest in terms of interoperability and standardization? Any new trends or new standards have come out in the last months that may apply to ALFRED?
- 3. Which are the main learnings you take from ALFRED? Which are the most positive aspects of the project implementation.
- 4. How would you improve and better organize the communication flow between RD projects and AB members.

Last, but not least we take this opportunity to inform you that ALFRED is organizing a Workshop during the IEEE Healthcom 2016 in Munich. The day of the workshop will be this Friday 16 of September (<u>http://alfred.eu/opaa-workshop/</u>). If you are planning to attend the IEEE Healthcome Conference this year, it would be great to have you as one of our participants.

Finally, we would like to thank you in advance for your precious time. Looking forward to hearing from you soon, preferably before **Thursday 22 September**.

If you prefer, we can also organize a telephone call.

Best regards,

Federica Righi

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ANNEX II - Feedbacks from the Third AB Meeting

The third ALFRED AB meeting was very fruitful, several intensive hours of analysis and dialog happened, ideas were exchanged and new suggestions were proposed. Some of the main remarks are summarised as follows:

- Do not worry excessively on the objective to obtaining excellence in research, but rather on the innovative aspects of the project such as the results from the pilots and produce general dissemination material (blogs, video, flyer, brochures).
- State your competitive advantage of the speech recognition system created by TALK, compared to the 'Siri system' of Apple Inc.'s IOS.
- Test the T-shirt and activate the sensors during the pilots phase. Take in consideration the n^o of T-shirts needed.
- Address correctly the translation of the results from the pilots to technical developers, ensuring innovative solution to be put in place.
- During the pilot phase, be careful with your pre-set idea on end users and not to spoil the results.
- Include wearables in the business model of 'ALFRED as a whole'.
- Organize a workshop with all partners of the consortium to brainstorm on the exploitation plan of 'ALFRED as a whole'.
- Organize focused discussion with interested stakeholders (caregivers) to better understand their interest in ALFRED.
- Reconsider the idea of selling ALFRED to nursing homes and try to formulate a more convincing story.
- Participate in forum directed to the caregivers sector to better understand the simple message you have to produce.
- Formulate a short and clear message on ALFRED addressing the potential customers or real users.
- Evaluate the idea of using a world-café formula during the AAL forum.

In order to take in considerations these comments and opinions expressed by AB members in the last face to face meeting held in Gothenburg, ALFRED partners have developed the following strategy.

This final phase of the project focused especially on the innovative aspects of the project. The main aim was to integrate all technical components of ALFRED and building an innovative prototype. Once this integration was successfully achieved, the project was ready to be tested with end users.

However, what the project intends to do for the next market deployment phase is testing the prototype also with customers such as nursing homes or home care organizations. Up to now, we have organized interviews with potential customers to get first insights.

Following the market analysis with nursing homes and the interviews with some managing directors, we have reviewed the Value Proposition of ALFRED. In fact, we have noticed that the Value Proposition developed so far was mostly addressing older people. This is due to the great importance we paid to have an excellent prototype with high user-friendliness. Having a product that got very good feedback from its end-users is a first fundamental step to achieve a good product that can be easily accepted by the market.

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However, in order to understand ALFRED potential customers, we have also completed a market analysis which aimed at looking at their pains, desires and needs. At the conclusion of this analysis, we have suggested a slight revision of the Value Proposition adapted to the needs and insights of potential customers, such as nursing homes or home care organizations. All this process is detailed in D2.2.4.

The smart T-shirt developed by AITEX is included in the revised business model (D2.2.4) including a tentative pricing strategy. Due to the high costs of this product, a leasing model is probably the best approach and study possible funding schemes with health insurances, such as AOK in Germany.

Regarding the inputs for the organization of the second workshop, we refer to D9.3.2 describing the outcome of the event hosted by the IEEE eHealthcom Conference 2016 in Munich.

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