ALFRED

Personal Interactive Assistant for Independent Living and Active Ageing

WP9 – Impact

D9.2.3 Advisory Board Summary Feedback Report

Deliverable Lead: IESE

Contributing Partners: CHA, ASC

Delivery Date: 10/2015

Dissemination Level: Public

Version 1.0

The purpose of this deliverable is to describe the communication of the ALFRED Consortium with the Advisory Board (AB) members between month 19 and month 24 of the project.

SEVENTH FRAMEWORK PROGRAMME

Document Status	
Deliverable Lead	Esther Vizcaino, IESE
Internal Reviewer 1	ASC
Internal Reviewer 2	WORLD
Type	Deliverable
Work Package	W9: Impact
ID	D9.2.3: Advisory Board Summary Feedback Report
Due Date	30.09.2015
Delivery Date	30.09.2015
Status	For Approval

Note

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

Disclaimer

The views represented in this document only reflect the views of the authors and not the views of the European Union. The European Union is not liable for any use that may be made of the information contained in this document.

Furthermore, the information is provided "as is" and no guarantee or warranty is given that the information is fit for any particular purpose. The user of the information uses it at its sole risk and liability.

Project Partners

Ascora GmbH, Germany	Atos Spain sau, Spain
Worldline, Spain	Charité - Universitätsmedizin Berlin - Department of Geriatrics, Germany
Asociacion de Investigacion de la Industria Textil, Spain	Technische Universität Darmstadt, Germany
National Foundation for the Elderly, The Netherlands	Talkamatic AB, Sweden
E-Seniors, France	TIE Nederland N.V., The Netherlands
IESE Business School, Spain	

Executive Summary

This is the third Advisory Board Summary Feedback Report, of five foreseen reports by the project as part of the task 9.2 "Advisory Board Coordination and Interaction". The first year activity was covered in deliverable D9.2.1, which included the selection of the AB members and the first interactions with the ALFRED project. The second report submitted at month 18 contained a description on the second AB meeting; it summarized the main AB recommendations and described the diverse interactions between ALFRED consortium and AB members. The main objective of this third report is to update on the communication with the ALFRED AB members during the last six months, between April and September of the current year.

Table of Contents

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.
- A more **Effective & Personalized Care** by allowing medical staff and caretakers to access the vital signs of older people monitored by (wearable) sensors.
- **Physical & Cognitive Impairments Prevention** by way of serious games that help the users to maintain and possibly even improve their physical and cognitive capabilities.

Within this deliverable, the selection process, invitation and first Advisory Board meeting are reported. Also, a feedback form from the AB members with their assessment and recommendations for the project is provided.

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.

3rd Advisory Board Summary Feedback Report	Document Version: 1.0	Date: 2015-09-30	For Approval	Page: 6 / 14
http://www.alfred.eu/	Copyright © ALFRED Project Consortium. All Rights Reserved. Grant Agreement No.: 611218			

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. This deliverable 9.2 Advisory Board Summary Feedback Report, is the third of five deliverables as part of the task 9.2 Advisory Board Coordination and Interaction. Next versions are due at months 30 and 36.

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 form 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 of the ALFRED scientific consortium with the Advisory Board (AB) members

2   Communication with the Advisory Board Members

Besides the communication within the ALFRED Consortium, it is very important to convey ideas, research and outcomes of the ALFRED project to the relevant stakeholders, to receive their feedback, and make sure that final outcomes of the project are aligned with the vision of industrial partners, user associations, research institutions and public bodies.

In order to achieve so, the ALFRED project has set up, as part of the WP9, the task of establishing an Advisory board (AB) which is following and guiding the project with recommendations and neutral feedback. The ALFRED Advisory Board committee consists 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. D9.2.1 described the selection of the AB committee and its field of expertise. The AB members are:

- Oliver Heckmann, YouTube ICT, Switzerland.
- Diane Whitehouse, The Castlegate Consultancy/ EHTEL, United Kingdom.
- Petra Wilson, International Diabetes Foundation, Belgium.
- Jordi Rovira, Telefónica Spain, eHealth Department, Spain.
- Koen van Os, Philips Research, Netherlands.
- Albert Alonso, Hospital Clinic Barcelona, Spain.
- Heidrun Mollenkopf, BAGSO, Germany.

During these two years of ALFRED project, we have kept a continuous and fluent communication with the AB committee. The first AB meeting was held in Barcelona on the 13th March 2014 and the second was held in Paris on the 12th March 2015. They have provided us valuable recommendations through the meetings and feedbacks forms (for further details see D9.1.1 and D9.2.2).

It is very important for the ALFRED project to keep a constant communication with the AB members, update them in the progress of the project and get their assistance and recommendations for the continuous improvement of the project. We update them regularly on the work developed to obtain their comments and suggestions. Annex I shows an example of the communication maintained with the AB members to facilitate the exchange of information about the status of the project. The AB members are very positive about the work developed so far in ALFRED and are looking for the future developments of ALFRED. For the Consortium, the experience of having an external AB committee is being very fulfilling, contributing to the project success.

Annex I –Correspondence with AB members

Email sent on 6th October 2015:

Dear Advisory Board Members,

I hope this email finds you well.

We would like to take the chance to send you an update on the status of the ALFRED project.

We would like to highlight some of the achievements during these last months:

- **13 deliverables** were submitted to EC by the end of March 2015 (M18) as planned. **24 deliverables** are being prepared and will be submitted within the next two weeks.

- We are happy to announce that ALFRED is one of the 5 EC-ICT projects selected to be exhibited in the **ICT 2015 conference in Lisbon** https://ec.europa.eu/digital-agenda/en/ict2015

- ALFRED has been selected to participate in the 1st edition of the **Lean Launch pad Pilot**, an initiative for European Start-up entrepreneurs and researchers in the ICT domain. The Lean Launchpad initiative aims at increasing chances of success and fast commercialisation of research results and deliver innovative solutions, products and services, stemming from EU funded projects. Representatives from Ascora and IESE attended 3 Workshops in Rome, in a total of six days.

The second review of the project by the EC will be held in Utrecht the 6th November 2015 alongside the 5th ALFRED consortium meeting. We will update you with the main outcomes.

Please find enclosed an update on the project progress, where you will find detailed information about advancements on WPs and deliverables. If you are interested in any of the submitted deliverables, please let us know and we will send you the reports. Because the large volume of files (and size), we believe it would be better to send you upon request.

We look forward to receive your comments and suggestions on the work developed.

Please do not hesitate to contact me if you have any question.

Thank you very much for your contribution to the ALFRED Project!

Best Wishes,

IESE team, on behalf of Alfred Project

Annex II –ALFRED Project Update sent to AB members

PDF Enclosed to the Email

ALFRED Project

Update for the Advisory Board members – October 2015

Project progress summary

During these last months, the project has realised advancements in all
the prototypes and made important efforts to integrate ALFRED components. We have
been also preparing the exploitation plan, disseminating and coordinating the
standardization of the project results. 13 new deliverables were submitted to the EC by
end of March 2015 (month 18) reflecting the results achieved during this period. 24
deliverables are being prepared and will be submitted within the next two weeks. Important
results of WPs are described below:

WP2 Concept, Requirements & Specification

As a continuous task over the whole course of the project, the market watch has been
updated during this period. The work was done in parallel to the Exploitation plan (T9.1)
and the standards, policies and ethical issues (T9.6) since they are interconnected topics.
We attended the LeanLaunchPad Pilot initiative (more details further below) , which helped
us to better define ALFRED business model.

WP3 ALFRED Core

The following prototypes were created or improved:
*   First prototype for CADE; focus on data annotation for improved speech
    recognition.
*   Improved prototype for the Personal Manager; focus on the user profile
    management with the help of an android extension.
*   First Prototype of the Authentication and Authorisation Mediator (AAM); focus on
    authentication services.
*   A renewed version of ALFREDO Marketplace
*   A newly designed ALFREDO Client
*   The Personal Assistant has been further developed for integration purposes.

The following Deliverables were submitted:

D3.1.1Privacy-Aware Data Management

This deliverable provides a description of the first prototype implementation of Task 3.1
Privacy-Aware Data Management. It specifies the scope of this version and the degree of
fulfilment of the requirements to be covered by the component. Moreover, it specifies how
to install and execute the different subcomponents implemented. Furthermore, it provides

an overview of the limitations of the current prototype and an outlook on the further developments.

D3.2.1 Mobile Assistant Foundation

Based on the information gathered in deliverables D2.4 and D2.5 about the architecture, functionality and technical specifications, this delivery presents the degree of progress in the development of some of the main components for the mobile solution. It also includes the state of the art of the two prototypes delivered. Finally, this document also describes the further development steps that will be taken until the second release of this deliverable (D3.2.2).

D3.3.1 Context-Aware Speech Recognition

In this deliverable challenges related to automatic speech recognition are explained and how they are dealt with. Speech recognition is generally a difficult task, and additional challenges can be expected when dealing with older users. In the ALFRED project, the challenges are addressed in ways which allows decreasing the number of failed interpretations by the system without improving the accuracy of the speech recognizer as such.

D3.4.1 Personalization Framework

This document provides a detailed overview of the Personalization Framework. The Personalization Framework concerns the information of ALFRED users which will be handled by the Personalization Manager. Additionally, the document provides an overview of the technologies, tools and frameworks used for the implementation of the Personalization Manager components, the development details and the deployed services. The document concludes with the next steps and activities planned for task 3.4.

WP4 Pillar I: User-Driven Interaction Assistant

The work in this WP was focused on the XML format for grammars. A first version was implemented, validated and tested. In addition, WORLD installed the first CADE release and got acquainted with the development environment for dialogue-enabled app development. The Grammar compiler for the xml format for CADE was developed.

The following Deliverables were submitted:

D4.1.1 Question-Answer Modelling

This deliverable deals with dialogue-enabled app development. It presents the first version of a formalism which allows app developers to define how spoken utterances by end users and the ALFRED system relate to app functionalities. The major benefit of the chosen approach is that domain knowledge provided by the app developer is clearly separated from general and advanced dialogue capabilities that are built into the dialogue manager.

WP5 Pillar II: Personalized Social Inclusion

We worked intensively on the User Profile Editor GUI for generating user profile. First versions were developed by TIE and evaluated internally by the technical partners and undertook necessary improvements. Moreover, work on this task involved end user partners. The NFE made an analysis on the first requirements and needs of older people in relation to user profile generation for the participation and recommendation of events. The events department of NFE participated in giving their expert opinion on needs and requirements from an organization point of view. Additionally the events department provided for an extensive statistical analysis on the types of events older people are mainly interested in, as well as requirements related to mobility levels and accessibility to participate in these events. Surveys, KPIs and technical implementation for analytics of the events and participants are providing the basis for development of algorithms and services which will offer personalized recommendations of events to users.

The following Deliverables were submitted:

D5.1.1 User Profile Generation and Social Context

This document provides an overview of the developments in the Personal Assistant and the Event Manager components. The focus is on the developments in regards to the User Profile Generation and Social Context task. Specifically it presents the User Profile Editor developed as part of Personal Assistant and the Events Data Warehouse of the Event Manager. Both are provided with implementation details, available services, target performance, installation and deployment guides. Finally, a description of the next steps in task 5.1 is also provided.

WP6 Pillar III: Effective & Personalized Care

The work on this WP was devoted to provide a detailed description of the User Health Profile, defining and classifying all the required parameters, and related information, like alerts and monitoring configuration data. AITEX has been working further in the firmware that controls the sensors in order to optimize the algorithms and signal filters. AITEX has also worked in the design of the t-shirt in order be more comfortable and easy to use.

The following Deliverables were submitted:

D6.1.1 Users Health Profile and Carer-Relationship Definition

D6.1 provides a detailed description of the User Health Profile, defining and classifying all the required parameters, and related information, such as alerts and monitoring configuration data. In addition, the different confidence relationships between the older user and his carers are identified and described, and a full discussion about the permissions required to access the Health Profile is followed. Finally, the requirements of a Web front-end for accessing the Health Profile are described.

WP7 Pillar IV: Serious Games for Physical & Cognitive Impairments Prevention

The efforts in this WP are directed towards the development of the functionality of the Game Manager component, the suggestion of games that are suited to this specific user. An initial version of the game description format enhanced by the risk classification scheme has been completed during these months. Discussion about how to integrate the aforementioned game description format into the ALFREDO Marketplace component have been performed. The results of the usability test were analysed to create further improvements on the serious games prototypes.

The following Deliverables were submitted:

D7.1.1 Personal Risk Classification and Game Selection

This deliverable provides the conceptual basis to find and select those (health) games from a set of serious games that best match the individual needs and characteristics of a specific user. This includes a description of the health status and potential risks of users on the one side and a metadata format for the description of serious games/health games on the other.

WP8 Piloting & Validation

The first iterative testing and evaluation of the ALFRED prototype was conducted by CHA, NFE and ESE in M16-M18 with overall 12 test participants. It aimed to test the speech interactions of ALFRED with older end users. Individual usability tests on the ALFREDO open market application and several games with older end users were performed.

The following Deliverables were submitted:

D8.1.2 Piloting Definitions

The purpose of this deliverable is to present the first results of the pre-prototype evaluation. This was done by analysing the data that was collected in first Wizard of Oz testing sessions that were performed in France, the Netherlands and Germany. Furthermore, additional specifications about the interrelated planning of the three pilots from a usability-, health-, user-, and economic perspective will be provided.

WP9 Impact

The following Deliverables contain all the work developed within WP9:

D9.1.1 Exploitation Plan

The exploitation plan mainly focuses on the business exploitation of ALFRED. It defines the exploitable ALFRED results and provides a first market analysis and some research of the potential competitors of ALFRED. It also describes the individual IPR strategy of each partner, and how it can be matched with the overall business exploitation of the ALFRED solution. Finally, it outlines the action plan towards bringing and implementing ALFRED in the market.

D9.2.2Advisory Board Summary Feedback Report

This is the second of five versions of this document. The deliverable describes interaction with AB members during last six months, the second AB Meeting and the feedback from the AB members on the project progress.

D9.3.1Workshop Report I

This report presents the results of the first ALFRED workshop. It will detail how it was organized, with which objectives and what the results were. The activities for the workshop organization were closely interrelated with the collaboration and dissemination activities of the project in WP9.

D9.4.2Dissemination Report

D9.4.2 is an update on D9.4.1: The first report was updated to reflect the lesson learned at the High Visio workshop. The second report starts by explaining the dissemination strategy which forms the basis for all ALFRED dissemination activities. The goal of this refined strategy is to provide clear objectives and enable a more effective monitoring and evaluation of the dissemination progress. In addition, the results of the dissemination activities carried out so far are described in relation to the defined strategy and evaluated against it

Dissemination, workshops and meetings

We attended the **LeanLaunchPad Pilot initiative**, a programme for European Start-up entrepreneurs and researchers in the ICT domain. The workshop gave us important insights into what is the best way to get into the market, how to better define our business model and which is the road map to follow to put ALFRED in the market.

ALFRED have been selected to be exhibited in the **ICT 2015 conference in Lisbon** from 20-22 October. ALFRED can be found off-site, at Praça do Comércio in Lisbon (https://ec.europa.eu/digital-agenda/events/cf/ict2015/catalogue-list.cfm?village=offs) This part of the exhibition open to the wider public will show 'What European ICT is doing for you?' and giving a snapshot of the contents of the main CCL exhibition.

The second review of the project by the EC will be held in Utrecht the next 6th November 2015. The 5th Alfred consortium meeting will take also place in Utrecht alongside the second review meeting. We will update you with the main outcomes and recommendations.