

<b>Report date</b>	31/10/2014
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**PUBLISHABLE PROJECT INFORMATION (TO BE USED BY AALJP)**

<b>1A. PROJECT</b>	
<b>Project full title</b>	Personal Assistant to Enhance the Social Life of the Seniors
<b>Project acronym</b>	PaeLife
<b>Project No.</b>	AAL-2009-2-068
<b>Project Website</b>	<a href="http://www.PaeLife.eu">www.PaeLife.eu</a>
<b>Project duration</b>	Starting date: 24/02/2012 Termination date: 31/10/2014 (after an 8 months extension)
<b>Coordinator's name and details</b>	Full name: Miguel Sales Dias E-mail address: Miguel.Dias@microsoft.com Telephone number: +351 (96) 2093324

<b>1B. PROJECT PARTNERS</b>					
<b>No.</b>	<b>PARTNER ORGANIZATION NAME</b>	<b>PARTNER ORG. ACRONYM</b>	<b>TYPE*</b>	<b>PROJECT COSTS: PUBLIC GRANT IN EURO</b>	<b>PROJECT COSTS: PARTNER OWN CONTRIBUTION IN EURO</b>
1 (coord.)	MSFT - Software para Microcomputadores, LDA	MSFT	Large	81322,53	81322,53
2	Instituto de Engenharia de Sistemas e Computadores, Investigação e Desenvolvimento em Lisboa	INESC-ID	RTD	71 062	0
3	Budapest University of Technology and Economics	BME-TMIT	RTD	256 100	0
4	The Bay Zoltán Foundation for Applied Research	BZN-IKTI	END USER	192591, 82	0
5	Knowledge Society Association	SSW	END USER	67 481, 74	16 886, 23
6	Genitech	GENITECH	SME	179 881	288 724
7	Troyes University of Technology	UTT	RTD	221 803	113 867
8	Universidade de Aveiro	UAVR	RTD	73 131	0
*Please select one of these options: SMEs, Large, END USER, RTD, other					

## 1C. PUBLISHABLE PROJECT RESULTS SUMMARY (1 PAGE)

*In this section, please present the results of your project, including the following information:*

### *1. What is your product/service (result of the AAL JP project work)*

As a solution to facilitate the life of the Elderly we proposed AALFred, a personal life assistant that helps and guides users in the access to Information and Communication Technologies (ICT's). With AALFred, social networks, email and video calls can be easily accessed and used to make the elderly more active and less isolated. Also, interesting information such as news and access to nearby services is delivered in an easy and integrated way. To achieve such a goal, AALFred is based in two main principles: simple and unified user interface and multimodal human-computer interaction.

AALFred offers a simple and unified user interface that integrates and delivers all its features in a unified approach. For instance, AALFred offers an integrated system to manage contacts from several services. The user will not have to worry about if the contact is a Facebook contact or an email contact. From the user's perspective it's a contact, agnostic of its place of origin. It can always be used to reach the person in the same manner, regardless of the service to use. Another example is the messaging service. If the user wants to send someone a message he/she doesn't have to be concerned if the message will be delivered using Facebook, Twitter or Email. By providing a single contact point with different technologies, users are no longer forced to learn and deal with the specifics and idiosyncrasies of different tools and apps. Also, unnecessary complexity is hidden and the most important features are made available in an easy and accessible approach.

### *2. What needs/problems does your product/service respond to*

PaeLife and AALFred aim to simplify the access to today's Information and Communication Technologies (ICTs) and improve its usability for the elderly in order to increase their quality of life by making them more active, more social and less isolated. With AALFred, ICT's benefits are directly used to serve the elderly's needs, helping them to stay social, active and healthy in their own homes, for longer periods of time.

The multimodal human-computer interaction present in AALFred improves the usability of the application and makes it a great experience. Users can interact via touch, speech, gestures or simply by using the traditional mouse and keyboard. The modalities can be used synergistically or as an alternative to each other. This allows users to choose the interaction modality that feels more natural to them or that works better in a particular context. For example, users can use speech to ask the system to help them on how to perform an action, or dictate a message instead of typing.

### *3. What are the target groups of users and payers*

We have identified 2 main segments:

1. B2C with direct customers.
  - The first channel for this approach will be done directly, via the app stores\*;
  - Traditional distribution channels will also be considered for a later stage.
2. B2B with Public and Private Institutions like retirement homes, social communities and local associations.
  - The channel for this approach will be a direct selling point via website or Partners.

#### \* Starting with Windows App Store

The sales predictions are quite hard to forecast as the Mobile market is extremely unstable. However, we expect significant progress in the first year to get a definitive momentum on the Windows Store and among key players of the Public and Private institutions. For the first year, an objective around 200-300 units seems to be a good kick starter.

Objectives of the following years will be adapted with ambitious goals as product development may be accelerated according to field feedback.

#### *4. What is the technological innovation of your product/service (in terms of novelty of concept, approach to the development etc.)*

The technological innovation of AALFred is perceptible in several of its core features:

1. **Simplified Apps:** simple access to today's ICT's. AALFred offers a simple and unified user interface that integrates and delivers all its features in a unified approach;
2. **Multimodality:** multimodality is a great complement to AALFred's simple and unified interface. It greatly improves usability and makes the user's interaction with the application an even more delightful experience. But, most importantly, in AALFred, multimodality is especially designed for the elderly.

To offer the best possible speech experience for elderly users, AALFred is provided with new Automatic Speech Recognition (ASR) engines (that were developed and optimized for the idiosyncrasies of elderly speech) for each of the PaeLife Project Languages (Portuguese, French, Polish and Hungarian). These engines are the outcome of a data collection process to gather about 90 hours of pure elderly speech (per language) that were also transcribed and annotated to create the new elderly specific ASR engines for all PaeLife participating countries.

Synthesized voices used to convert text to audio (Text-to-speech) were also based in elderly voices (something that was considered a preference in the user tests) and even the virtual keyboard was designed according to the elderly's needs.

All of this integration and innovation that takes into account the elderly's preferences and needs, makes AALfred a unique application in the software market that will surely change the way how the elderly see today's ICT services. All the social media services and more modern ways of communication will no longer be exclusive of younger generations. AALFred is here to help the elderly to stay active, social and in touch with their loved ones.

#### *5. What is the social innovation of your product/service (benefits to society and economic impact)*

The main benefit of the project is to make technological innovation easy and accessible to elderly people, and thus bring an answer to the societal problem of ageing population and the risk of social isolation among the elderly. Elderly citizens are usually described as being refractory to technology, and this digital exclusion worsens their social isolation. By simplifying access to today's online services and mediated means of communication - be it email, Skype, social networks - through improved usability and multimodal interaction, AALFred improves seniors' quality of life by making

them more active, more social and less isolated. The elderly can stay in touch with their friends of the same age, but also with their family. Using the same communication tools as one's grandchildren facilitates, enhances and triggers communication, giving the feeling of being "connected" in every sense of the word. The link between generations is ensured and the elderly' self-esteem is improved as they use present-day technology (whose use is made easy for them through AALFred).

Therefore the social impact of the application has been demonstrated in the participatory approach evaluation we made. The economic impact is that the more socially active people are, the longer they live in a healthy state, requiring less medical and social insurance or help from their children. Therefore, it is part of the answer to the demographic, social and economic problems.

#### *6. What is the expected time to market*

The expected time to market is 2 years after the end of the PaeLife Project: October 2016.

#### *7. How will you overcome the main possible barriers and exploit opportunities*

Like already illustrated before, AALFred has definitive advantages over its competitors:

1. Simplified Apps;
2. Dedicated ergonomics and multimodal technology;
3. Focus on sharing and interacting with senior circles (social, relatives and family);
4. Ludic approach to strengthen the inter-generation link.

The product will be included in a set of software packages available with associated on-demand services. AALFred will therefore be introduced into the market in 3 main versions:

1. One for tablets, named "AALFred Pocket"
  - Limited features - Free version available on app stores\*;
  - Full feature - Paying version available on app stores\*;
  - Objectives: Mobility, Low Price, Limited to Medium modalities (touch & speech).
2. One for PC, named "AALFred Desktop"
  - Limited feature - Free version available on app stores\*;
  - Full feature - Paying version available on app stores\*;
  - Objectives: Home, Medium Price, Medium modalities (gesture & speech).
3. One for both PC and tablet, named "AALFred Home" where the tablet and PC will interact
  - Packaged as a full bundle with included assistance;
  - Objectives: Home & Mobility, Premium Price, Full modalities (touch, gesture & voice).

The main objective is to cover the initial cost of the first year for a 30% time sales employee with a balanced sales repartition for each AALFred product (around 200-300 units).

Objectives of the following years will be adjusted as product development may be accelerated according to field feedback. We plan to focus on the B2B segment once the product has created a momentum on the market.

\* Starting with Windows App Store