

Advanced Technology Services for Supporting Active Seniors: The Mobile.Old Project

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Residential & outdoor services advancing the mobility of older persons

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Global aging challenges → the initiation of **innovative concepts, programs and actions aiming at better managing the needs of seniors.**

The developments of smart technology apps, able to support seniors' mobility and daily life, assure the infrastructure of **the currently evolving non-human component of seniors care.**

In Europe, the value of this type of care is recognized and promoted through several programmatic initiatives:

- the third priority area of *Madrid International Plan of Action on Ageing* (April 2002),
- the third pillar - “Active Ageing and Independent Living”, of *the Strategic Implementation Plan of the European Innovation Partnership on Active and Healthy Aging (2011)* [3],
- *The Ambient Assisted Living Joint Programme (AAL JP)* which financially supports cross-national research projects for supporting people with special needs through innovative ICT-based products, services and systems.

Currently, the development of smart, non-human support to active and independent seniors is evolving within many EU funded projects

The MOBILE.OLD - *Residencial & Outdoor Services Advancing the Mobility of Older Persons* project (www.mobiledotold.eu)



University of Applied Sciences
Upper Austria
University of Applied Sciences



The Netherlands



Romania



Austria - Coordinator



Spain



Spain



Germany



Romania

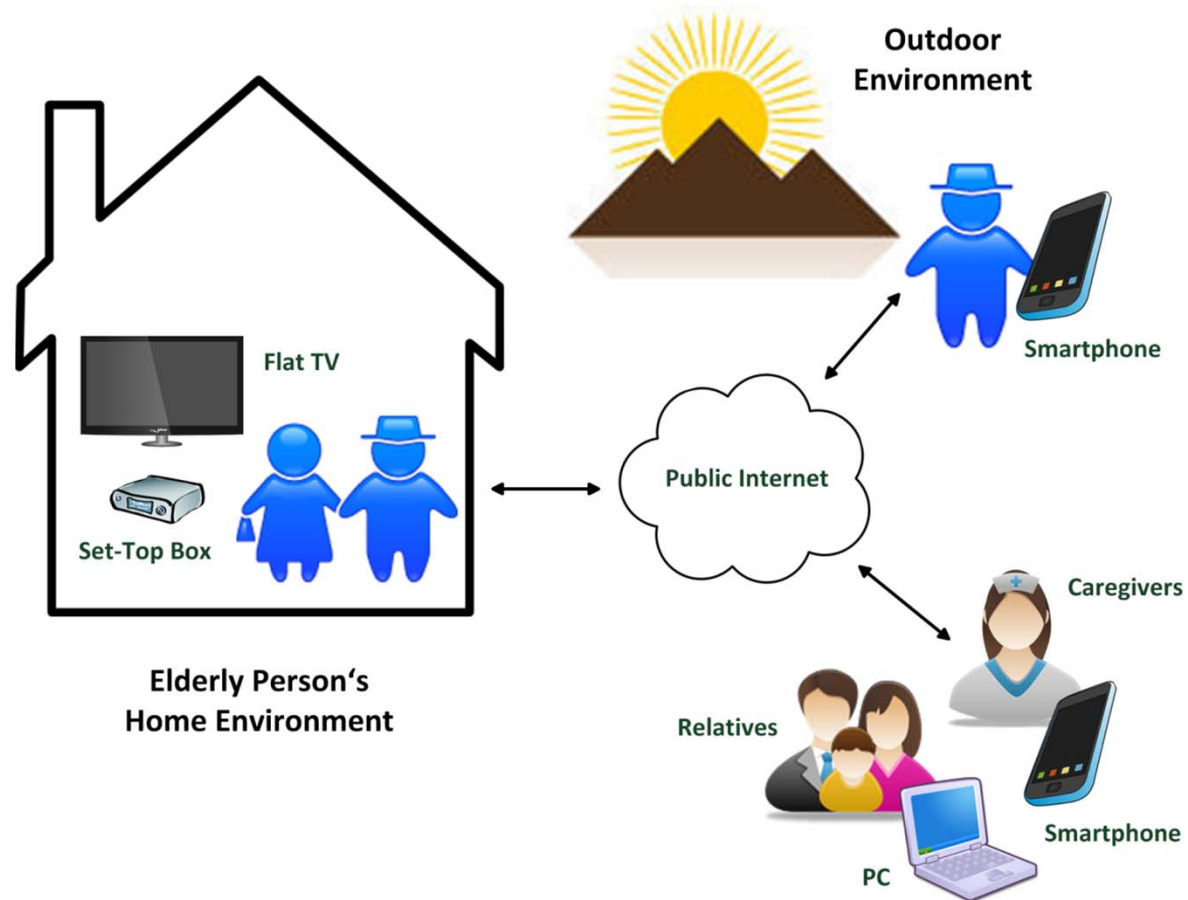


Romania



UK

To develop a smart app for seniors – a set of combined smartphone, tablet and TV-based services that are intelligent, multimodal and highly personalized, capable of supporting a crucial feature of healthy and active aging - the indoor and outdoor mobility.



Based on the previous detection of the requirements expressed by the voluntary end-users, the Mobile.Old app was designed to provide ten services:

- **The “Mobile.News” service** - offers quick access to the latest traffic news.
- **The “Mobile.Activity” services** - allow the end-user to record, share and compare various walking routes.
- **The “Mobile.Trip” service** - for travel route planning.

- **The “Mobile.Training” service** - physical training based on appropriate videos, with the possibility of reminding the schedule , as well as record and stock the physical training parameters.
- **The “Mobile.Aid” service** - illustrated instructions for emergency cases.
- **The “Mobile.Checklist” service** - for organizing trips, shopping, medication etc.
- **The “Mobile.Compass” service** - for orientation and navigation outdoor and abroad.
- **The “Mobile.Quiz” service** - play the digital version of the famous “Scavenger Hunt” game.
- **The “Mobile.Insight” service** - for exploring points of interest around the world.
- **The “Mobile.Security” service** - safety during the traveling.

Main Results & Lessons Learned



The Mobile.Old app prototype is currently at its final testing with the end users within their own home, for duration of 21 days and based on a complex testing protocol elaborated by the consortium.

The previous trials (with 73 seniors, 35 males and 38 females) showed that, despite the myth that older people are more reluctant to advanced technology apps, **the acceptance of the Mobile.Old app**, (i.e. a complex set of ten services), **is high**.

Almost all the old people in the end-users group proved interested in the Mobile.Old virtual companion and thus well motivated to proactively contribute to the accomplishment of project activities.



However, their interest of getting the services offered by the app was marked by the estimated intrinsic costs:

- almost 2 third of the end-users were interested in buying various bundles of the services, according to their needs;
- only four participants would like to buy the services as one single application.



For bundling, the most preferred services were :

- “Mobile.Compass” (preferred by 34 from the 73 voluntary end-users),
- “Mobile.News” (33),
- “Mobile.Trip”(32)
- “Mobile.Training”(31).

For the other six services the preferences were as follows:

- “Mobile.Activity”(28),
- “Mobile.Aid”(28),
- “Mobile.Security”(23),
- “Mobile.Checklist”(20),
- “Mobile.Insight”(20)
- “Mobile.Quiz”(12).

- **Friendly interfaces,**
- **easy access and navigation through various functions**
- **a good initial training with a human assistant**

are important prerequisites for the acceptance of a smart application by the seniors.

Mobility is an essential feature ***of healthy and active ageing.***

Human mobility has physical, cognitive, psychosocial, environmental, and financial determinants.

impaired mobility in elderly will lead to:

- **functional loss,**
- **social isolation**
- **higher vulnerability to various diseases**
- **dependence**
- **institutionalization.**

The smart assistive devices and apps are proved to be valuable solutions for preserving or improving mobility, or successfully compensating mobility impairments.



Thank you for your attention and comments!

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