

THE LIVING USABILITY LAB PROJECT

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Demographic ageing is probably the greatest achievement of mankind. With suitable natural interfaces and the possibilities offered by next generation networks, the introduction of technological solutions can facilitate the daily life of the elderly, fighting isolation and exclusion, increasing their pro-activity, work capacity and autonomy.

The Living Usability Lab for Next Generation Networks (www.livinglab.pt) was a Portuguese industry-academia collaborative R&D project that aimed at creating the conditions to idealize, develop and evaluate innovative services to support healthy, productive and active citizens. The project, which lasted two years and represented an investment in R&D of more than 1.2 million Euros, adopted universal design, natural user interfaces, next generation networks and distributed computing. This Project gathered Microsoft Portugal (project coordinator), two SMEs (Micro-IO and PLUX), two research institutes (IEETA and INESC Porto), two universities (Aveiro and Porto), over 1000 senior citizens or with disabilities, two nursing homes, a social solidarity institution and 25 senior universities.

The project mainly focused on:

- Creating conditions for the existence of a distributed virtual lab to support creating, developing and evaluating new technological solutions for the senior population;
- Developing technologies, such as sensors and speech recognition, for integration into new services and applications;
- Creation and evaluation of demonstrators.

Besides the active leadership regarding the definition of the distributed virtual Living Lab architecture and of the development method, UA contributed to the project with

the development of applications and services instantiating the architecture (ex: Home Gateway), the development of a framework to support the use of multimodal interaction in new applications, the conception and development of a new Telerehabilitation service, the development of a home robot and the definition of a complete evaluation methodology.

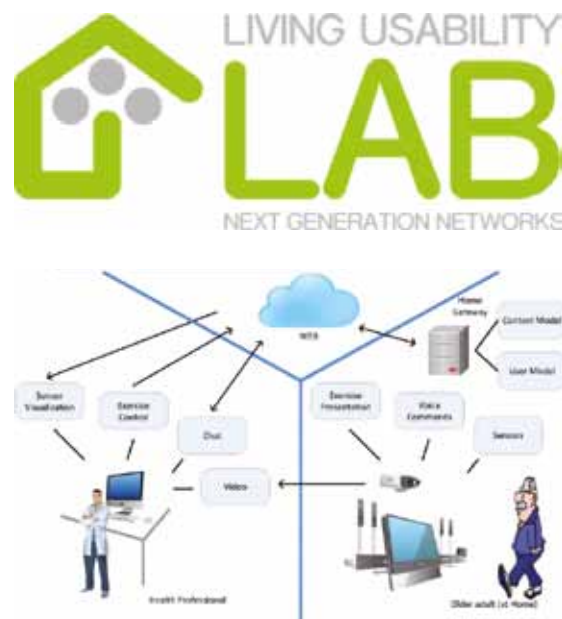


FIGURE 1

LAB - Living Usability logo.

FIGURE 2

The Living Usability Lab New
Telerehabilitation Service.