

PRESS RELEASE

Population ageing is one of the most pressing societal issues of the 21st century. Life expectancy has increased rapidly over the last century due to improved living standards, better healthcare, medical progress and increased awareness of health issues. Despite a drop in life expectancy caused by COVID-19, life expectancy at birth is still at 83,2 years for women and 77,5 years for men in the European Union (Eurostat) and 87,57 years for women and 81,47 years for men (Japanese Ministry of Health, Labor and Welfare).

In this context, new conceptual solutions for prevention and health promotion are needed by using intelligent technology to support older adults in healthy and active ageing.

The e-VITA virtual coach provides a solution built on socio-technology excellence of "Made in Europe" and the excellence of technology "Made in Japan", by combining the most advanced partners and expertise from both areas, and by following the concepts from Society 5.0 (Japan) and Digital Europe (EU). The e-VITA virtual coach will provide personalized recommendations and interventions to older people, for sustainable well-being in a smart living environment at home, through different technologies. In a first step, research centers, IT companies and universities in European and Japan developed the interactions with the users, specifically the so-called Natural Language Processing (NLP). The challenge was to make technologies directly interact with older adults through the voice, listening and answering to requests.

Then and for the first time in research, technologies of the e-VITA coaching system such as Gatebox, OuraRing, NeU and chatbots were tested 2 to 7 weeks by 22 older adults in Japan, Germany, France and Italy in their private homes.

The older people show that:

- They would like to receive information and recommendations in different ways (audio and visual).
- Robots seem to be the preferred technology for interaction.
- Older people would like to choose the voice, the physical aspect, and the avatar.
- The system must be able to answer the participants' questions accurately and converse continuously.
- Older people would like to turn on/off the coach so it does not intervene in their daily and social life.
- Different devices should be integrated e.g. that a reminder is provided by a robot but also by the smartphone.

What's next?

Based on the feedback from older people, the e-VITA coaching system will be adapted to be more of a conversational companion that can be switched on and off. The adapted e-VITA virtual coaching system will then be tested in 2023 with 180 people.

What is e-VITA?

Launched in January 2021 as part of the European research and innovation programme (Horizon 2020), the e-VITA project is designed to meet the major societal challenge of an ageing population. Carried out in cooperation with Japan for a budget of 8 million euros over 3 years, the project's challenge is to design a smart virtual coach capable of supporting the active and healthy ageing of older people.

If you would like to know more about e-VITA, have a look at our website (www.e-vita.coach) and follow-us on social media.

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e-VITA partners: Siegen University (coordinator, Germany); INFAI Institut fur angewandte informatik ev (Germany); IXP Institut fur experimentelle psychophysiologie gmbh (Germany); CARITAS Diozesan-caritasverband fur das erzbistum koln (Germany); AGE Platform Europe (Belgium); Engineering – ingegneria informatica spa (Italy); UNIVPM Università Politecnica delle Marche (Italy); INRCA Instituto nazionale di riposo e cura per anziani (Italy); APHP Assistance Publique Hopitaux de Paris (France); Delta Dore sa (France); IMT Institut Mines-Telecom (France); Tohoku University (coordinator, Japon); The National Center for Geriatrics and Gerontology NCGG (Japan); National Institute of Advanced Industrial Science and Technology (AIST) (Japan); Waseda University (Japan); IGOU The Institute of Gerontology (Japan); Gatebox (Japan); Misawa Homes Institute of Research and Development Co., Ltd (Japan); NeU (Japan); JQA (Japan); Shibaura Institute of Technology (Japan).