

Digital inclusion and active ageing: Developing a user-centered methodological approach to investigate the use of mobile phones among older people

Category: project

Sub-objective: generation of innovation via addressing unmet needs identified by formal or informal providers of healthcare

Country: Slovenia

Intro:

Slovenian Research Agency and second largest Slovenian telecommunication operator Simobil are co-financing an applied research project titled "Digital inclusion and active ageing: Developing a user-centered methodological approach to investigate the use of mobile phones among older people". The project is run by Centre for Social Informatics, Faculty of Social Sciences, University of Ljubljana. The project was not funded through Operational Programme.

Problem:

The need of older adults to live at home for as long as possible, increasing costs of long-term care (leading to unsustainable health and social care systems), and burdened informal carers can nowadays no longer be ignored. These characteristics of an ageing society are pressuring policy makers, industry, researchers, and civil society organizations to develop and mainstream ICT-based assistive services (ASs). Despite the growing body of evidence about ICT-based ASs' positive effects, Slovenia is in its infancy regarding the adoption of smart solutions for active and healthy ageing.

Solution:

Development of an original iterative and mixed-methods methodological approach to design, development and implementation of consumer technologies for older people, which is based on principles of user-centered design, participation and integration. This robust model is titled „three stages of user involvement “ and is involving end users – older adults and informal carers – in three stages of the research and innovation process: (1) eliciting user needs and generating design ideas; (2) evaluating selected mobile application in lab setting and real environment and generating redesign ideas; and (3) evaluating redesign ideas. The project is closely connected to the home care through studying the ATs integrated in smartphones that can improve the quality of life of older adults and enable them to live in their own homes as independent and as long as possible.

Quadruple-helix cooperation roles:

The main target group (end-users) of the project are older adults and informal carers. However, the 3-staged model of user involvement is developed to be used by companies (mobile service providers) and researchers, so two types of stakeholders working together and through the co-creation process involving the third type of stakeholder, i.e. older people and their informal carers. Governmental public authorities are more indirectly (by ways of co-financing) supporting this type of user involvement.

Impact:

The project develops an integrated theory-driven and evidence-based approach in order to stimulate the uptake of technological solutions for active and healthy ageing for a “triple-win” outcome: 1) improved wellbeing of older adults and their informal carers; 2) financial gains for the health and social care sectors; 3) new market opportunities for providers of mobile services.

By establishing a methodology of participatory user-centered design of ATs integrated in mobile phone applications, the project has an important impact on the methodological advances for design, development, and evaluation of new ICTs. Namely, this methodological approach for studying the needs, use, usability and benefits related to (ATs integrated in) mobile phones is quite robust and could thus be (and has been) applied by other companies (with research departments or outsourced research agencies) and researchers. Papers with more details about this robust methodological approach were presented at the conference in Slovenia and published in the conference’s proceedings and in journals.

Since the start of this project University of Ljubljana (Centre for Social Informatics at the Faculty of Social Sciences) also received expression of interest for cooperation with more Slovenian companies (Telekom, Smart Com, Marand), as well as a Dutch company (GoCiety) who are all developing market-ready e-care and/or e-health solutions and want to co-create their services through intense user involvement. Centre for Social Informatics is currently also involved in several H2020 proposal developments for different calls and in all consortia their role is to adapt, further develop and apply their 3-staged model of user involvement.

Transferability to home care:

The project does not include good practices of delivery Home Care R&I directly. Anyway, the project is closely connected to the home care through studying the assistive technologies integrated in smartphones that can improve the quality of life of older adults and enable them to live in their own homes as independent and as long as possible. Moreover, the project implemented innovative and robust model titled „three stages of user involvement“, involving end users – older adults – in three stages of the research and innovation process – eliciting user needs and generating design ideas; evaluating selected mobile application in lab setting and real environment and generating redesign ideas; and evaluating redesign ideas. This model of user involvement is appropriate to be used also by other practitioners aiming to introduce new or renewed e-care services through co-creation process.