

A.A.G. Sponselee, B.A.M. Schouten, D.G. Bouwhuis, P.G.S. Rutten. *Effective use of smart home technology to increase well-being. Gerontechnology 2008; 7(2):211.* The use of smart home technology in home health care situations depends on the acceptance of the technology by both users and end-users, as well as on a thorough implementation plan that includes changes in organisation, care giving, and financing. In the Netherlands many projects have started to introduce smart home technology and telecare in the homes of elderly people, but only some have been successful. This paper highlights the features for success and failure in the deployment of new (ICT) technology in home care. We hypothesize that features for effectiveness involve organisational issues, technological issues, including interaction issues, with the eventual experience by the end-user as main goal (*Figure 1*). After all, smart home technology is introduced in order to support care giving and increase people's quality of life by enhancing their independence and their well-being. **Organisation** Initial technology acceptance depends on organisational issues, or facilitating conditions. These external control issues involve commitment and cooperation of the relevant stakeholders involved, beyond financial issues. The implementation of new technology in home care also involves changes in care giving. The technology should therefore be accepted by both the care organisation and the care professionals. Social acceptance can be helpful in convincing (end) users to use new technology¹. In order to increase technology acceptance, there should be a communication plan, which includes a stepwise plan on how and what to communicate to both care professionals and care receivers. **Technology** The interaction with, or use of, the technology can be viewed from a technology acceptance perspective. According to Melenhorst² the adoption of new technology by older adults depends more on their perception of benefits - or the lack of benefits - than on the perception of costs. This means that intrinsic (for instance, playfulness) as well as extrinsic motivations (for instance, goals and rewards) should be clear to the older user in order to increase the technology acceptance³. Porter and Donthu⁴, however, mention the perceptions of difficulty and cost as an important aspect for older users to overcome. Not surprisingly, (perceived) ease-of-use has been the main focus for many interaction designers in order to create a user-friendly interface. **Experience** Smart home technology is expected to support care giving and increase people's quality of life by enhancing their independence and their well-being. When organisational and technological features for effectiveness are taken into account, the eventual use and experience by the end-user come into play. The dependent variable in this study is the well-being of older adults who make use of smart home technology in their homes. Their experience is studied by measuring older adults' health, vitality, independence, perceived self-efficacy, sense of safety and technology evaluation.

References

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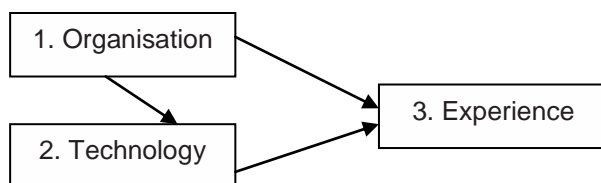


Figure 1. Features for successful experience