How could technology assist in the everyday life of ageing adults?

THE SOLUTION

This thesis presents a smart home solution that assists the ageing human-being. The older population is growing, and the market is in need of a solution that sees to older peoples' individual needs.

In an older human-being every age is preserved. In an 80-year-old mind there might live a little girl, a defiant teenager, a tired parent and a successful middle-aged woman, all at once. Old age is something that affects everyone, and the market of eldercare is in need of a solution that meets the older humans as individuals and keeps their integrity and independence.

How do we detect falls if the person falling does not use his/her wearable alarm? How can we alert the caregiver that the caretaker needs a visit today?

These are some of the questions we have tried to answer with our concept that is a screen for communication and a number of sensors to prevent and assist in case of accidents or issues. The main purpose of the system is to detect vitals out of the ordinary, but functions also include promoting social contact and enabling communication with caregivers.

While designing for a heterogenous group of individuals, we categorized the basic needs for an ageing older person into three categories:

- *Physiological needs*
- *Safety needs*
- *Social needs*
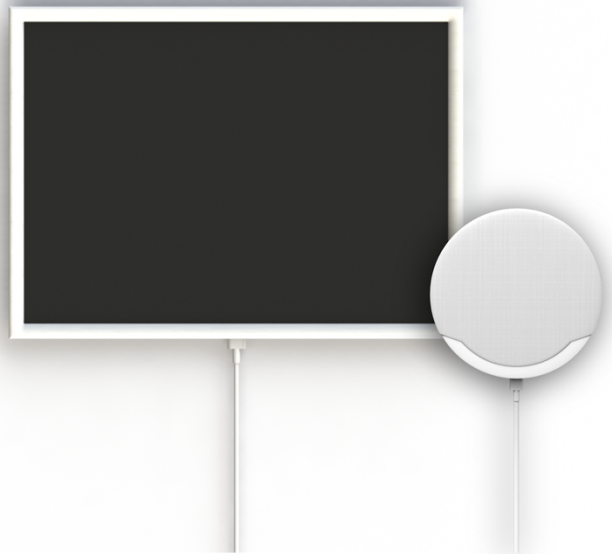
We believe the solution to meeting as many needs as possible is a smart home system with the technology specifically designed for an ageing human and aesthetics to fit into any interior by showing photographs when not in use.

While developing a solution to assist the three needs categories, a bigger goal is set as well: *Increase the level of wellbeing for the user.*

And how else would an older adult be more wellbeing than if we could assist in accidents, detect her health issues before they are harmful and help her communicate with the people she needs?

By Amanda Westin & Fiona Hay

*Department of Design Sciences,
Faculty of Engineering LTH, Lund University*
Supervisor: Johanna Persson
Examiner: Kirsten Rassmus-Gröhn