

53. Quantifying your life for a better well-being

Gathering objective data about every day life and work behaviour can help people to gain a better insight in both harmful and helpful patterns in their lives. With this aim we have developed the SWELL lifelog dashboard.

Using self-learning algorithms the SWELL lifelong dashboard combines data from various unobtrusive sensors, including workplace, smartphone and body worn sensors. All data are stored in a personal cloud store and can be downloaded or shared with others. Based on these measurements, the dashboard gives users insights into various physical, mental and work variables over a long period of time.



ICT science question

How can we unobtrusively track physical and mental well-being, both at work and at home? Which algorithms are best suited for this task? In which way do we have to display the information so that people make optimal use of the dashboard?

Our approach is unique in its focus on individual users, its flexible set of different sensors, its novel algorithms.

Application

Recent research (TNO, 2013) indicates that fourteen percent of the entire Dutch workforce shows symptoms of burnout and that stress related sick leaves account for an estimated cost of roughly nine hundred million euro per year. In an unique holistic combination of mental and physical states, by quantifying individual work and life, our SWELL lifelong dashboard can contribute to a better well-being.

Our technology partner Sense OS is currently commercializing different parts of the technology for several launching customers within her Sense Health daughter company.



Joris Janssen
 joris@sense-os.nl
 swelldemo.commonsense-dashboard.com
 www.commonsense-dashboard.com
 www.swell-project.net/

COMMIT/ project
 SWELL Smart Reasoning Systems for Well-being at Work and at Home

Alternative Application

Sensor based reasoning and decision-making can also be applied in smart cities or smart contexts. However, the SWELL platform has the largest potential in other person related monitoring and coaching situations, such as self-management of chronic diseases, e-learning systems, serious games, mental healthcare, or personal security. Because of the modular architecture of our technology, applying parts of it in other contexts will be relatively easy.

Nice to know

ASML Corporate Vitality Manager Maaïke Thijssen has won the Health Manager 2014 award based on her employee vitality program with the technology developed in the SWELL context. ASML is a launching customer for Sense's vitality solution.

Our technology partner Sense has won an EU eHealth award 2013 for a mental health application incorporating some of the SWELL technology.

Quote

At the international well-being at work conference, SWELL was the only project in which data was sensed for personalized coaching. Many reactions were like: "We should do more with this!"



Improving creativity and productivity of knowledge workers through effortless tracking and feedback of mental and physical well-being.



Real-time self-learning algorithms combine data from 15 different unobtrusive sensors, (workplace, smartphone, wearables) to infer user-centric state information like sleep, activity, valence, stress, and work task.



Low cost user-centric solution for effortless monitoring of stress and burnout symptoms to help users prevent absenteeism and improve productivity of knowledge workers.



Validated algorithms for unobtrusive tracking and visualizing of both physical and mental well-being, and work context, without the need for proprietary hardware.

