



Accenture and Philips Announce Proof of Concept App



- Innovative technology shows how ALS patients could gain greater control of their lives through brain, voice and eye commands
- Software connects Emotiv Insight Brainware to wearable display that allows wearers to command Philips Hue lighting, SmartTV and Lifeline products

Royal Philips and Accenture have announced that they have developed proof of concept software connecting a wearable display to Emotiv Insight Brainware that could ultimately give more independence to patients with amyotrophic lateral sclerosis (ALS) and other neurodegenerative diseases.

Affecting more than 400,000 people per year*, ALS, also known as Lou Gehrig's Disease, impairs brain and spinal cord nerve cells, gradually diminishing voluntary muscle action. Late-stage patients often become totally paralysed while retaining brain functions.

"This proof of concept exemplifies how people, devices, data and technology could be brought together quickly to connect beyond the hospital walls in a way that can potentially help improve the quality of life for patients, wherever they are in their journey," said Jeroen Tas, CEO, Healthcare Informatics Solutions and Services for Philips. "Philips will continue to collaborate with innovative technology companies such as Accenture to explore new wearable and sensor solutions that change peoples' lives and create a healthier future."

How it works

When a wearable display and the Emotiv Insight Brainware, which scans EEG brainwaves, are connected to a tablet, users can issue brain commands to control Philips products including Philips Lifeline Medical Alert Service, Philips SmartTV (with TP Vision), and Philips Hue personal wireless lighting. The tablet also allows control of these products using eye and voice commands. In both cases, a person could communicate preconfigured messages, request medical assistance, and control TVs and lights. Accenture and Philips developed the software that enables the integration and interaction between these multiple technologies.

The proof of concept application demonstrates how existing technology could be used to transform the quality of life for ALS patients. When patients lose muscle control and eye tracking ability, they can still potentially operate the Philips suite of connected products in their home environment through brain commands. The Emotiv technology uses sensors to tune in to electric signals produced by the wearer's brain to detect, in real-time, their thoughts, feelings and expressions. The wearable display provides visual feedback that allows the wearer to navigate through the application menu.

The Accenture Technology Labs in San Jose, California collaborated with the Philips Digital Accelerator Lab in the Netherlands to create the software to interact with the Emotiv Insight Brainware and the wearable display. Fjord, a design consultancy owned by Accenture Interactive, designed the display's user interface.

"This proof of concept shows the potential of wearable technology in a powerful new way —helping people with serious diseases and mobility issues take back some control of their lives through digital innovation," said Paul Daugherty, Accenture's chief technology officer. "It is another demonstration of how Accenture and Philips, collaborating with other technology innovators, seek to improve the lives of people with healthcare challenges."

"Empowering people with Lou Gehrig's disease to live fuller lives is at the heart of the ALS Association's mission," said Ineke Zaal, spokesperson for Stichting ALS in The Netherlands. "We are tremendously excited about the potential for this proof of concept to give people with ALS greater independence and quality of life as we continue to actively search for a cure."

*International Alliance of ALS/MND Associations

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Published on : Fri, 8 Aug 2014