

Technology Radar: BusinessLab's summary of technologies that are making the news, January 2010

An ActiveAge Report

A simple device for social networking

According to an Age Concern poll in 2009, only one in six people aged over 55 embrace social networking services like Facebook, Skype, Twitter or YouTube.

Yet, despite the small numbers of older people getting online and using social networks, Age Concern research found that those who did, reported an improvement in their lives.

103-year old Ivy Bean has recently been raising the profile of older people using social networks, with over 4, 968 friends on Facebook and 54, 820 followers on Twitter.

Another 'silver surfer' who has been making headlines is 81-year old Peter Oakley also known, to his YouTube fans, as Geriatric 1927. Peter has over 49,000 subscribers to his video blogs and his channel (youtube.com/geriatric1927) has been viewed over 2.3 million times.

However many older people do not have the help or support to get online and find new technology a daunting thing. This is a problem many designers and technology-focussed companies, alongside charities like Age Concern, have been trying to overcome.

Ben Arent is a product designer at the TRIL (Technology Research for Independent Living) Centre. He has designed what is being touted as 'a next generation accessible experience to enhance social connections, among older people, their friends and family'. The product known as Bettie has the following purpose and functions:

- To keep up-to-date with the people you know
- Send messages
- View your families latest photos
- Keep up-to-date with local services and information

Bettie isn't really a computer but is described as being 'somewhere between a digital photo frame, a computer and a mobile phone'. Bettie is designed to be a plug and play product in the sense that she comes with a built-in Internet connection and only requires electricity to carry out all her intended functions.

Bettie is primarily a communication device. However, unlike other social networks Bettie creates a link between the physical and virtual world by using 'friend passes'.

These provide a physical link to each friend's virtual identity. The 'friend pass' looks like a key token with a photograph on it and aggregates each person's online identity onto the token, which then interacts with the device itself.

For example, if a person has seven friends with whom they want to communicate, each friend will have a unique friend pass. When the user wants to communicate with one particular friend, he or she places the friend pass onto Bettie's screen, which automatically knows who that person is, and updates all their personal information including photos and live news feeds.

In order to chat with the selected friend or send a message the user simply moves the 'friend pass' to the appropriate part of the touch screen and starts writing a message using the attached keyboard.

This product is currently at the prototype stage with several beta versions expected to be available by the end of 2010.

For more information visit:

<http://www.bett.ie/>

<http://bett.ie/blog/>

Technology that allows early hospital discharges

The Patient Briefcase is a new product developed by Medisat, which makes the early discharge of patients with COPD and other chronic diseases possible. It allows for the movement of parts of the patient's treatment from the hospital to the home. This means that the hospital releases beds, and the patient avoids a lengthy stay in hospital.

The Patient Briefcase (MediSat®) is a specially developed, portable communications device that includes video-conferencing equipment and medico technical equipment. Connections to a specialist doctor or nurse are via ADSL / LAN, satellite, or mobile phone. The specialist doctor on duty takes calls from patients, alongside a computer equipped with electronic medical health records.

The procedure for using the Briefcase is that the patient is initially submitted to the hospital but after a concluded prognosis and observation, the patient will be discharged 24-36 hours later. Medisat installs the Patient Briefcase into the patient's home, and helps the patient get started.

The patient opens the briefcase, presses a button and obtains video contact with a doctor or a nurse. The patient and the doctor/nurse take required measurements together. The doctor/nurse records the measurements directly into his or her system.

After the procedure is over, typically after 7 – 10 days, Medisat will collect the Patient Briefcase. If the patient does not have an Internet connection the briefcase will be delivered as well as a satellite link.

For more information visit:

http://www.medisat.dk/default.asp?V_LANG_ID=8

A home assistant robot

South Korean Scientists from the Korean Institute of Science and Technology (KIST) have developed a walking robot helper, capable of mimicking human limb movements and carrying out household chores.

The Institute who developed the robot say it can work autonomously in the home and is capable of putting clothes into a washing machine, delivering a package, using a toaster, microwave and preparing a drink or sandwich.

The robot known as Mahru-Z is 1.3 meters tall and weighs 55 kilograms, with arms and legs, plus numerous joints so it can move its elbows, hands and three fingers.

The Head of KIST's Cognitive Robot Centre claims Mahru-Z is the most advanced robot of its kind in terms of its ability to mimic human movements and is ahead of other Japanese robots.

The robot could also be plugged into a central network, enabling it to work with other robots to carry out tasks and be operated by remote control. It is believed this type of robot could be used to assist people with mobility problems in their own homes.

For more information visit:

http://www.youtube.com/watch?v=n_-PxqtrwK8&feature=player_embedded

http://www.koreaherald.co.kr/NEWKHSITE/data/html_dir/2010/01/17/201001170006.asp

A wearable health monitoring system

A company who calls its collective group of health monitoring devices the "WIN Human Recorder" system has released a new device called "HRS-I". The latter has been designed to measure and record a person's electrocardiographic signals, body surface temperature and overall body movements.

HRS-I is a small sensor that can be worn against the skin, under your shirt or top, whilst you're going about your daily business. The device was based on research results from the Advanced Institute of Wearable Information Networks (WIN), a nonprofit organisation established by researchers at the University of Tokyo.

It is specifically targeted towards companies trying to monitor the health of their employees. For example, stress levels can be measured based on the state of autonomic nerves determined from an electrocardiogram, and the fluctuation of heartbeat periods can be analysed.

The sensor module has a wireless communication function and can be continuously operated for three or four days with a CR2032 button battery. The data obtained from the sensor is wirelessly transmitted to a PC or a mobile phone.

As well as monitoring the stress levels of employees it is thought another possible use for the device could be the monitoring of long-term health conditions, especially of older people who live alone.

For more information visit:

http://techon.nikkeibp.co.jp/english/NEWS_EN/20100119/179393/