

Kevin's 12 Days of Technology Enabled Care@Home for Christmas 2017

Santa may need to bring our older relatives some items of technology to help them bring in the New Year safely and with good cheer. Many of these products are relevant to anyone who lives alone and to others who are challenged by declining senses i.e. all of us! I have assembled a list of 12 products and services that I am considering giving to my nearest and dearest this year. The list is inspired, in part, by the Occupational Therapy, Physiotherapy and Social Work lecturers and researchers at the University of Cumbria where I was fortunate enough to deliver a workshop on Digital Health and Care in November. They are not all new high tech products, and include some old favourites perhaps with a modern twist. They won't all be popular with everyone – but Christmas presents should be selected on the basis of individual needs and preferences (I can't get away from the importance of good assessment even at this time of year!)

They're not in a particular order – but the first half of the list is given over to standalone devices that don't necessarily connect to other systems or to people remotely. The latter devices belong to the connected world. Installation needs to be considered, along with an idea of who might help with minor maintenance issues as they arise.

1. Smart light bulbs



These are simple replacements for conventional bayonet or Edison screw bulbs. They automatically come on in the dark when they detect movement, and therefore provide light when a light switch is inaccessible (or when people choose not to switch on lights at night to save money!) Although they could be used in ceiling rose arrangements, I find them more satisfactory in a table lamp or standard lamp which can then be left permanently switched on at the mains. They are particularly useful at the bottom of the stairs where it's sometimes impossible to switch on the hall light from the landing, but also useful in the garage, shed or attic.

They come in a large range of light levels (typically from 5 Watts to 13 Watts) and costing between £10 and £20 each depending on power. They are available from LEDEL: https://www.amazon.co.uk/Motion-Sensor-Stairs-Garage-Hallway/dp/B075WVFFK9/ref=pd_lpo_vtph_60_bs_t_1?encoding=UTF8&psc=1&refRID=CGVJKA6APYEA71D48VV

2. Digital Day Clock with Battery Backup & 5 Alarm Options



This main-operated DayClock by American Lifetime is the only one of its kind to include a set of 5 multi-function alarms that will allow, for example, the option of reminders to take medications throughout the day. It also has a BATTERY BACKUP allowing it to be moved from room to room, without having to reset the time. The ENGLISH display can be replaced with FRENCH, GERMAN, DUTCH, SPANISH, ITALIAN, POLISH or WELSH display – so is my ideal choice for Auntie Myfanwy! They are available in different sizes – generally for under £40.

The device shown is from Lifetime Europe at: https://www.amazon.co.uk/Newest-Version-Day-Clock-Impaired/dp/B01B6VE64W/ref=pd_sim_201_7?encoding=UTF8&refRID=AQK1GEQEA6Z4QKX7JWAY&th=1

3. Auraglow Motion Activated Toilet Bowl Light



Navigating one's way to the toilet during the night can be a problem for young and old alike. Bright lights in the middle of the night can result in trips and falls, and can make it harder to fall asleep again. These low cost units fit on the edge of any toilet and turn the pan into a beautiful light show every time someone walks into the bathroom at night. There are options on a standard colour display rather than rainbow effects. They can also be used to support potty-training for children.

The battery-operated unit is available for £9.99 from <https://www.auraglow.co.uk/auraglow-led-motion-activated-toilet-bowl-night-light.html>

4. Robovac



This is an attractive Robot Vacuum Cleaner with a bacteria killing UV lamp and a handy mop attachment for kitchen floors. Unlike many similar devices it has a reasonably powerful suction action and a decent-sized (0.8 Litre) dust bin. It is suitable for wooden, tiled, linoleum and carpeted floors but not for long thread carpets. It can be programmed to keep the floor clean when there is nobody at home, and has sensors to avoid collisions with furniture.

It is available from <http://uk.thinkgizmos.com/product/robovac-robot-vacuum-cleaner/> at £149.99

5. Daewoo 2 slice Glass sided toaster



The glass viewing panel at the side of this low-cost toaster allows the user to judge how well the toast is browning. The result is a reduction in the likelihood of burnt toast and the embarrassment of smoke detectors being activated elsewhere in the house early in the morning.

Available from Wilko: <http://www.wilko.com/toasters/daewoo-2-slice-glass-toaster/inv/0433372> at £30

6. Natural gas (Methane) alarm



Most people now have at least one smoke detector in their homes, and should also have a carbon monoxide detector to help manage the risk of poisoning from faulty gas appliances, chimneys and flues. The latest wireless alarm to be available detects gas leaks in pipes, boilers or old appliances. It can also detect if gas continues to flow when the hob of an old gas cooker, for example, has been extinguished (perhaps by a saucepan boiling over). The result could be catastrophic both for the household, the property and for neighbours. Mains operated gas alarms have been available for several years, and the range now includes battery versions as shown above.

Available from <https://www.fireangel.co.uk/products/ng-9b> at £41.99

7. The Ring Video door bell



Cold callers (as well as more innocent but unexpected visitors such as carol singers) can result in an individual rushing to the door, putting themselves at risk of falling. But a failure to answer the door can imply that the home is empty and an opportunity for a potential burglar to exploit. A video door-bell with a built-in outdoor intercom and announcer can provide protection by allowing the caller to be viewed remotely and for a conversation to be had with them before considering the most appropriate action.

The Ring2 system has a motion detector and can store images in the cloud or display them immediately on a smart phone, a tablet or a laptop. It operates through the home's wifi system. (A broadband link and router are essential for it to work properly). The door bell must therefore be no more than 10 yards away from the broadband router.

Available from <https://www.safe.co.uk/products/ring-smart-video-doorbell-2.html> at £159

8. Tile - Slim



We all misplace (and sometimes lose) small but valuable items such as keys, wallets and purses, and electronic devices such as smartphones, tablets and laptops. A number of different tags (or trackers) have been introduced in recent years which connect these items to our smartphone using Bluetooth. These tags have now become thinner and more energy efficient enabling their batteries to last up to a year and for the range to be extended to over 30 metres in open space.

The tile shown above is called Slim and it is the thinnest Bluetooth tracker available. It is ideal for wallets, passports and anything else with a thin profile. It has four different ring tones, enabling specified and protected items to be found quickly and easily from a smartphone using a dedicated app that can also remember where the item was last close by. The tile can also be used to find a smartphone, simply by double-clicking at the centre of the tile, and it works even if the phone is in silent mode.

Available worldwide for £30 for 1 or £120 for a pack of 8 from

<https://www.thetileapp.com/en-gb/store/tiles/slim> at £30

9. Amazon Echo Show



Voice control offers everyone a simpler interface for asking questions and for controlling appliances in the home. Alexa is being embedded in increasing numbers of products and is enabling homes to become ever smarter. The Echo Show is the latest version of Amazon's personal electronic assistant, and with a video screen and camera can allow video calling, display music lyrics, messages and video clips. It could become the next generation of telecare.

It is available for £200 from <https://www.amazon.co.uk/Introducing-Echo-Show-Black-Now-Alexa-Can-Show-You-Things/dp/B01KGEWACK>

All digital assistant devices link into a home's wifi system. Broadband and router are requirements.

10. OwnFone



Many older people refuse to carry or use a mobile phone even though they can offer them a vital lifeline in emergencies. They are often the same people who fear going out in case they have an accident but are also reluctant to wear a conventional telecare alarm trigger because it may stigmatise them.

A slim, light-weight OwnFone may be the best choice for some people, especially if they have the dexterity to press a button, and have the hearing needed to make a meaningful call. Units are personalised with 2, 4, 8 or 12 names or images and are available in a range of colours. They have roaming SIMs and will use the most appropriate network for optimum coverage.

Personalised phones are available for £75 from <https://www.myownfone.com/make-your-ownfone>

An air-time contract must also be purchased to enable the phone to work. Different length contracts are available at, typically, £2 a week.

11. Hive Active Heating



This system controls the central heating boiler in a property. It consists of a special wireless thermostat, a hub and a receiver, and enables the smart control of heating and hot water at home, or from a mobile, tablet or laptop with the potential for reducing heating bills. It is also compatible with the Amazon Echo series, enabling “Alexa” to switch on the heating using voice control. It is suitable for self-installation, though professional services are offered by British Gas for ~ £100.

Hive is available for ~ £179 from various outlets such as <https://www.hivehome.com/products/hive-active-heating>

It is designed for use in homes where there is an existing router and broadband.

12. Pix-Star 15 Inch Wi-Fi Cloud Digital Photo Frame



Digital picture frames allow people to display images without having to print out pictures that may quickly fade. The attraction of the Pix-Star version is the 15 inch screen which is ideal for people with failing eyesight. However, the greatest feature is that it is wi-fi enabled, and can therefore receive pictures directly from the Internet because it has its own dedicated email address.

It is available from https://www.amazon.co.uk/Pix-Star-Digital-FotoConnect-Providers-Android/dp/B00MTWDG6W/ref=sr_1_13?s=electronics&ie=UTF8&qid=1512749883&sr=1-13&keywords=wifi+digital+picture+frame and is priced at £179.99

Only works where there is broadband available in the home.

Unfortunately, these devices are not for the sole use of disabled people, and are therefore unlikely to be exempt from VAT. However, some retailers may offer one or more items VAT-free for people with chronic disease or disability. In principle, if this is the case, then the same exception should be available from all sellers provided that the appropriate declarations are made at the time of purchase.

I have personally tried out most of these products and have found them to be useful in my intended applications. This should not imply that I endorse them, as I will not have subjected them to a full usability testing process. However, manufacturers and resellers may take advantage of formal evaluation opportunities through independent specialists such as T-Cubed Ltd. (<http://t-cubed.co.uk/consultancy/>) who have developed a bespoke 7-point product evaluation framework to fully evaluate a product or system against a comprehensive range of key factors. They work with a panel of iCUHTec members to provide feedback and expert review.

Readers are reminded that members of iCUHTec is free at <http://icuhotec.org/membership/>

May I wish you all a Happy Christmas and a successful New Year.

