Next Steps Tech
Steps Event

Conference Report
November 2018

Includes links to Presentations & Assistive Technology Resources
Globally, technology is developing at an exponential pace. This fast pace of development is equally evident in the area of Assistive Technology (AT). Researchers and AT experts are discovering new and innovative benefits that technology can offer to people with disabilities and the aging population in a range of aspects of life.

Without being immersed in this world of technology, it can be challenging to keep up with developments and their potential in supporting people with disabilities.

In response to these challenges and to explore how our member organisations can harness the potential of assistive technology to enhance the independence and quality of life of people we support, the National Federation of Voluntary Bodies’ Next Steps Tech Steps Assistive Technology event was convened on 18 April 2018.

The event planning took place as part of the work of the Next Steps Community of Practice and Learning. Members had requested the National Federation to host an interactive, hands-on event to showcase the available technologies that have the potential to support individuals to maximise their independence - whilst also providing an insight into the ways that AT can demonstrate value for money. Therefore the two key areas of focus of the event were:

1. How can AT support our member organisations and the people that they support to live lives of their choosing and maximise independence?
2. How can AT support service providers in achieving value for money whilst supporting individuals?

Significant preparation including consultation with relevant organisations and experts took place to prepare a programme bringing together a wide range of AT speakers and users.

The conference presented up to date knowledge on how AT can assist in everyday tasks that include communication; finding your way around; independence and safety within the home, learning new skills, supporting advocacy and medical support. It also shared a glimpse of the future of AT in the rapidly changing digital environment, with the potential of technologies such as Virtual Reality being showcased in ways that can support individuals in a range of innovative ways.

This report presents a selection of the technologies that were introduced at the conference as well as links for further reading and contact.
Communication

Many of the expert AT users at the event shared their learning and life stories by communicating through the use of assistive technologies. For instance, David Fraughen showed how he uses ‘Browsealoud®’ technology to support him in his advocacy role. David is a member of the Steering Committee of the National Platform of Self Advocates. Browsealoud® technology is a piece of software that reads text from a screen out loud.

This allows David independence in his work, as letters and documents can be uploaded remotely to a private site. He can then use Browsealoud® to read the documents and this frees him from needing to seek assistance in his work. To demonstrate the value of the software, David delivered his presentation through the programme - which read portions of his presentation out loud. Through his presentation David also shared the research that he has been involved with through the National Platform of Self Advocates on using an iPad to help people with reading challenges to be more independent.

A number of presenters at the conference, including Tracey McCann and self-advocates from St. John of God Community Services also used various talking apps, and shared a range of other widely available technologies that facilitate communicating in ways that support independence. For instance simple video production apps allow for minutes to be created by self-advocates in video format that suits everyone, including people who prefer video to reading. The apps presented included Adobe® Spark Video, Speech to Text, Voice to Write and Claro Scan Pen®. You can access a list of the technologies presented by the team from St. John of God Community Services by clicking on this link.

Finding your way

Focusing specifically on how people can be supported in traveling and getting around independently, Talita Holzer and Dr Kevin Kelly from Trinity College Dublin talked about the WaytoB application and how it works.
“It is a smartphone and smartwatch platform to help its users navigate independently. WaytoB allows people to go to new places by themselves by giving them icon-based, turn-by-turn directions on a smartwatch or smartphone. The instructions are based on real time location and orientation data, which makes the navigating experience as easy and stress free as possible. It also provides peace of mind to a connected partner, who can monitor the user’s location, heart rate and battery usage while they are on a journey. WaytoB also offers notifications to a connected partner about key journey events (such as getting lost), identification of crossings, traffic lights, dangerous zones; and provides activity reports containing key performance measures.”

The platform is divided into two sides: one for the user, and the other for their partner, who can make sure they are safe at all times. The partner adds the routes and customises them to support the user in knowing when to turn, where to cross the street and other personalised content. The use of a **smartwatch** has been carefully thought out as a valued modern piece of technology for the user to wear (in other words non-stigmatising), while at the same time being much less susceptible to theft than a hand-held device.

The **WaytoB app** is at beta stage and the team from Trinity College Dublin sought individuals who would like to be part of the testing group. Following the event, members were keen on finding out more about the WaytoB app and some were interested in signing up for the testing group. Feedback after the event from members emphasised the importance for individuals they support to have their independence and feel safe when they are out and about. One participant noted;

‘The WaytoB app can be something that can ensure both their safety and independence and give peace of mind to their family members, staff and the community’.

**Independence and safety within the home**

Many individuals have diverse needs to be taken into account in order for them to live safely in their home and enhance potential independence. In this area a focus was placed on finding technologies and speakers who could help with answering:

1.) How can AT facilitate independence? and

2.) How can AT enhance safety within the home?

It was evident from the presentations of the speakers - including **Patrick Mulvihill** from **Independent Living Ireland** and **Siobhán Long** from **Enable Ireland and FreedomTech**, that there are many simple, cost friendly devices, apps and systems that can be easily installed to ensure both independence and safety within an individual’s home.
Independent Living Ireland is a social enterprise which specialises in providing technology solutions to support independence. Patrick Mulvihill presented on the wide range of devices, apps and systems that the enterprise has to offer which support people in their homes, places of work and community. These items include switch devices, door entry/exit, and personal alarm systems to name a few – many of which were on display on the day. As detailed in the presentation, the best way to access this kind of support is at an individual level. To this end Independent Living Ireland have worked with many of our members to find solutions for specific challenges in order to support individuals. A case study at the end of this report details how one member organisation engaged the support of Independent Living Ireland following on from the conference, and was able to identify tailored solutions that both facilitated increased independence and freed up support hours to be used to best advantage for the person.

Michelle Gaynor, a self-advocate and disability campaigner, also shared a range of AT devices that she uses in her home and in her life; including Housemate; a projection alarm clock (which means that she doesn’t need to ask anyone in order to know the time at any time of day or night); a mini keyboard and tracker-ball. Shelly shared with the audience how AT has transformed her life through a video which is linked in her presentation.

Support for medical needs

For many individuals with medical conditions it is necessary to have the support of a staff member for taking daily medications. Assistive Technology, through the wide range of physical devices, apps and technologies can now support some individuals to take their medication independently at a consistent time of day, every day. For example medication dispensers can be programmed to release precise medication at particular times and avoid repeat doses or missed doses with sophisticated built-in monitoring. This can be a source of increased independence and for some, can also lead to reduced staff hours required for support.

Technology can also facilitate better quality of life in relation to health in a wide range of individual tailored solutions that can include fall detection, epilepsy monitoring and other targeted health-related needs. The presentation from Independent Living Ireland provided some examples of such solutions, with the advice again being to seek individual consultation with assistive technology suppliers in order to address the specific needs of the individual supported.
Learning new skills

At the Next Steps Tech Steps event, self-advocates and staff from St John of God Community Services shared their use of a skill-teaching app; ‘Mefacilyta DeskTop’. The group has been working on this application in partnership with other Saint John of God organisations in seven European countries as part of an Erasmus+ European funded project. Mefacilyta DeskTop (Skills Teaching APP) is an Android App and it creates step-by-step instructional activities to support the person to do everyday tasks independently and with more autonomy. This app, which uses photos and video from the person’s own life to facilitate learning goals, has the potential to support many individuals to go about their daily routines independently and with ease.

Value for money

Siobhan Long from Enable Ireland and FreedomTech presented on the cost effectiveness of using AT and highlighted significant potential savings for individuals and service providers, sharing with us the findings from a survey conducted to inform the Assistive Technology for People with Disabilities and Older People: A Discussion Paper (2016).

In her presentation, Siobhan illustrated how the cost of AT has been reducing as technology advances, and that this now means that 64% of AT costs less than €1,000, 22% costs between €1001 - €3,800, with just 14% cost more than €3801. This brings much technology that would previously have been prohibitively expensive into the reach of many individuals who can benefit.

Siobhan illustrated the potential savings to the State and benefits within a person’s life that can be achieved with appropriate choice and application of suitable AT support. For one person whose case study was presented, the use of AT has led to more freedom of choice and less dependence on personal assistant support, thereby achieving a saving of €59,000 per year in support hours. Without AT the same person would be totally dependent on PA support, and would also experience many restrictions in freedom. The total support requirement without AT for this individual would be 168 hours per week on PA support.

Siobhan also presented on the need for an Assistive Technology Passport to ensure that the potential of AT can be harnessed and policy translated into meaningful outcomes for people with disabilities across the country.
The future of AT is now!

Dr. Ruchi Palan and Tim Komarov from Rehabcare gave us a glimpse of the future of AT... and told us that the future is now!

Dr Ruchi Palan shared the vast possibilities of virtual reality and augmented reality as assistive technology, including to support individuals to ‘try out’ and learn techniques for situations that in real life can prove frightening or challenging at first. Tim reflected on what the future of AT might look like.

Together they demonstrated how Tobii Dynavox® eye gaze tracking works and during the discussion it was demonstrated that you can even use your ordinary mobile device to access eye gaze, through a free app called ‘Eye tracking Vision Applications’ (EVA Eye). Eye gaze technology can help users with different needs and diagnoses such as ALS, spinal cord injury, aphasias, cerebral palsy, Rett syndrome, autism, Parkinson’s and muscular dystrophy and can provide support to communicate without the necessity of speaking. It provides benefits in many fields such as research, gaming, and speciality applications such as diagnostics, hands-free control, and security.

Dr Ruchi and Tim also shared the many things that Amazon Alexa and Google Home™ facilitate a person to do in the home, for example to control devices through voice communication; to control Philips Hue lights® or lights in general; to use gaming consoles such as the Wii™, television, Google Chromecast™; and to operate motorised roller blinds and Smart Plugs®.

Experts through experience

A key goal of the Next Steps Tech Steps event was to bring together the lived experience of existing expert AT users and provide an inclusive approach to encourage new users to try out technologies.

To achieve this, people who use AT in their own lives shared and showcased the many applications and devices that they use on a day to day basis.

The objective was to create an accessible atmosphere through the use of easy-to-read materials and an interactive approach, where the delegates had plenty of time to meet with suppliers and speakers. Delegates were invited to think about areas of their own lives in which AT might be useful and to have fun interacting with the technologies available.
‘Who better to share their experiences with AT than the people actually using it, experts in their own life?’
Evaluation and follow-up from the Conference

Feedback and evaluations clearly showed positive experiences of attendees at this AT event. It was apparent that individuals attending this conference enjoyed the hands-on practical element of the conference, which facilitated learning about the practical benefits of AT in the lives of people with ID. Members strongly welcomed the wide range of information, apps, devices, systems and possibilities that were shared and explored on the day. Participants also noted the importance of maintaining momentum and welcomed an opportunity for future engagement with the National Federation on AT matters – encouraging the AT conversation to be kept going and maintained as a key agenda item going forward.

Sample of feedback given on the day

‘Incredible day because people with lived experience facilitated-with and without disabilities.’

‘Sharing of information very important for all organisations as assessment tools, procurement frameworks, apps etc. Maybe the Federation could host an accessible / Assistive Technology website.’

‘Very useful for: seeing different technologies available; hearing from users of the technology first hand; networking and sharing information with speakers of other delegates’

‘I am more informed- I can take this information back to my organisation and apply it to individuals and specific circumstances.’

‘St. John of God services stood out and the use of technology for minutes, agenda’s etc. for advocates and for other meetings that take place across our organisation.’

‘I hope to educate my colleagues in regards to simplicity and availability of apps.’

‘Thanks so much for organising such a worthwhile day. I have already implemented things that I have learned last week and have also been in contact with Independent Living Ireland.’
Going Forward-Keeping Assistive Technology on the Agenda

Following the Next Steps Tech Steps event, Niamh Mc Gauley, National Federation of Voluntary Bodies, and self-advocate Martin Dooher presented a summary of this event at the Next Steps meeting of its community of learning in May 2018. The recap of the event created further rich conversation and feedback highlighting the need to keep Assistive Technology on the agenda and to look at possible ways to continue to harness the ongoing developments and potential of AT to support people with intellectual disabilities.

In this regard, the National Federation will engage with speakers from the event and key actors in the AT environment in Ireland to further explore collaboration to ensure that the learning will be harnessed into the future.

Keep an eye on the National Federation’s Twitter page (@NatFedVolBodies) and our website (www.fedvol.ie) for developments in the near future.

Follow up to the conference:

Case study examples of how attendees have used the learning

1.) ‘Susan’ is a 50 year old woman who lives in her own home. She currently has support staff for 22 hours per day. Susan’s support team have been working with her to build on her competencies in her own home and in the community. Her competencies have continued to grow and she now cooks basic meals independently and is responsible for the overall upkeep of her own home, with prompting and encouragement. Susan shops in her local supermarket and walks her dog independently without prompting or supports from staff.

The reduction of two hours support each afternoon has been very positive. Susan has reported to staff that she is happy to have time on her own in her apartment. She uses this time productively to walk her dog and prepare her lunch.

One area the team have been focusing on with Susan has been her competencies around her safety at home. The team currently prompt her to ensure that her front door is locked when she is at home independently. This is an area that she still requires support with.

Currently, there are assisted technology supports available that would enable the organisation to promote Susan to spend more time independently. The main support the team provide in the home at this time is safety and reassurance. With the technologies in place (safety pendant, intercom doorbell and reminder prompt to lock doors) staff would be in a position to support her with her safety competencies without needing to be present at all times of the day/night.

Recently, Susan has spent a night in her home independently while staff remained in the centre on call. This trial was very successful and Susan reported that she would be willing to trial this again. With assisted technologies in place, this would be a really positive opportunity for staff to continue to empower Susan to live independently and reduce some supports. Supports could then be utilised to continue to explore socially valued role opportunities with her in her local community.
2.) ‘Ruth’ is a 65 year old woman who moved from a residential setting to her own home nine months ago. Due to living in an institution for a number of years Ruth expressed a lot of anxiety and unwillingness to spend time alone in her new home. She has felt more comfortable with staff present supporting her. For this reason, Ruth’s home was furnished with a sofa bed in which staff sleep on each night.

Ruth’s team have worked consistently with her to improve her confidence at home and in the community. She now successfully spends six hours at home each day without supports, however is still not in a position to spend time alone overnight due to heightened fear and anxiety. Members of Ruth’s team have expressed concern around her vulnerability at home unsupported, in case of certain callers coming to her home, as she is a very trusting and charitable person, there are concerns that Ruth would welcome strangers in to her home. There are also currently concerns around Ruth being a falls risk due to her mobility deteriorating. Ruth is presently awaiting a visit from Occupational Health.

Assisted technology supports in the form of a safety pendant and doorbell intercom would ensure that staff could monitor Ruth safety at home without taking away the competencies she has achieved to date spending time alone. The goal for Ruth is to eventually stay in her home overnight without sleepover supports. The implementation of AT will mean the team can reinforce to Ruth the supports available from the centre when she is home alone. The reduction of sleepover staff in Ruth’s home will improve practicality for staff as it is not sustainable to continue sleepovers on a sofa bed daily. The reduction of sleepovers will also mean that working hours with Ruth can be utilised to support her during the day to continue building on her competencies in her home and explore socially valued role opportunities in her community.

3) “Overall everyone that attended really got plenty of ideas from the day. From chatting with advocates we support about the day they would like information on each presentation what apps they used and what they recommend. We would find this very useful as we move into using technology. The presentation from St John of God services stood out and the use of technology for minutes, agenda’s etc. for advocates and for other meetings that take place across our organisation. We work a lot with Independent Living Ireland and they have helped us develop creative solutions in safeguarding people we support while also maintaining their privacy and dignity.

The WaytoB app was fantastic. I would love to get more information on this in order to pass on to a number of interested people in this organisation.”

For most people, Technology makes things easier..... For people with disabilities however, technology makes things possible!!
Full list of presentations:

- **Siobhan Long, Freedom Tech Enable Ireland**: Assistive Technology: A tool to independence
- **Independent Living Ireland**: looking at ways in which Assistive Technology can support individuals to live lives of their choosing with more independence; Patrick Mulvihill, Independent Living Ireland
- **Doing IT for ourselves**: Sarah Gavra Boland, Fiona Earley, Polly Walsh  Lisa Mc Evoy, David Deane and Patrick Herterich– Staff & Self Advocates from St. John of God Services
- **Using Technology to Support Self Advocacy**: David Fraughen, Self-Advocate, National Platform of Self- Advocates
- **AT & Me**: Michelle Gaynor, Disability Advocate
- **WaytoB App –Independence Navigation for Everyone**: Talita Holizier and Dr. Kevin Kelly, Trinity College Dublin
- **The future of AT is now**: Dr. Ruchi Palan & Tim Komarov- Rehab Group
- **'Metamorphosis is not just reserved for the moths and the butterflies’**: Tracey McCann, Self-Advocate & AT User

*Conference photos: Arun Asan*