Towards full digital inclusion:

the Entelis Manifesto against the digital divide

The ongoing digital revolution has rapidly changed the way people live, work, learn, socialise, and participate in community life. Like all revolutions it has brought important new opportunities. Good connectivity (broadband, Wi-Fi etc.), where available (!), generates increased opportunities using widely available low cost mobile and communication devices. The success of virtual social networks demonstrates how much people enjoy the opportunity for anytime, anywhere connections. The information and communication technology (ICT) sector is increasingly relying on cloud-based data storage with growing benefits interoperability brings between actual devices and web-based applications, a process that with the advancement of the Internet of Things is likely to be further accelerated. This is forming the basis for new economic growth with global companies working in the ICT sector being the real winners, in part due to the considerable size of the market.

The good news is that many new ICTs offer real opportunities for persons with disabilities and elderly persons, some of them unimagined until some years ago. This is related to both ICT based assistive technologies – products and services especially designed to enable persons with disabilities to be more independent in their daily life, at school, at work and participate in society (ICT-AT) - and products intended for the whole population, a large percentage of which are becoming more and more usable by disabled people. ICT based assistive solutions, often based on a mix of both, have boosted the independence and opportunities to choose of millions of Europeans with disability and more results can definitely be expected. Many have been able to access education, find employment, build social networks, move around more easily and safely, live more independently and have a good quality of life.

However, some people take to the new technologies more easily and quickly than others for a variety of reasons. The

gap between those who are able to use these technologies and those who cannot or do not is known as 'the digital divide'.

The multi-faceted and complex nature of the digital divide is a sign of how difficult it is to bridge it. Different factors contribute to its existence, including personal, socio-economic, educational, cultural and linguistic factors, and often a combination of these. In the case of citizens with disabilities environmental factors can be added to that list. For example, products and their control systems may not be accessible if they are not appropriately designed for the user or designed according to universal design principles. Generally speaking, when technology does not adapt to people, but people have to adapt to technology, the risk of non-use or discard and digital exclusion is high. Also those involved in supporting people with disabilities might not be best placed to make them aware of the new opportunities that technology can offer creating a population of people described as digitally excluded. Recognising the important role of technology in modern life, digital exclusion is a subtle yet dangerous form of social, economic, political and cultural exclusion.

Unfortunately, there is considerable evidence that the digital divide exists, in particular amongst the elderly and those with disabilities. By focusing on individual abilities many people, currently digitally excluded, could develop the skills to allow them to be more independent and able to contribute to their societies. However, society has been very slow to tackle the barriers to digital exclusion although it is starting to mobilise itself in this regard, understanding it is the right thing to do and economically worthwhile. Nevertheless much more could and should be done.

Recommendations

What follows is a list of recommendations that have emerged from the work of the ENTELIS network. They are based on an extensive state of the art research described in a report, on the experiences of members of the consortium and associate partners, and on discussions and interviews with stakeholders. The endorsing organisations and individuals urge policy makers, educators, advocates for human rights and other stakeholders to follow up and to increase efforts to bridge the digital divide. Together we can make the digital revolution an opportunity for all and for our inclusive societies.

Policies and strategies

- ✓ Measures to reduce the digital divide and to provide all citizens, regardless of their condition, access to digital content, have to be mainstreamed in all policies, taking into account local differences, while using consistent terminology.
- ✓ International bodies, such as the United Nations (UN), the European Union, the Council of Europe and others, should further incorporate in their policy plans, the aim to close the digital divide, to promote digital literacy for all and to speed up the implementation of articles in the UN Convention on the Rights of Persons with Disabilities (UNCRPD) referring to universal design, accessibility and assistive technology.

- ✓ Agencies monitoring the implementation of the UNCRPD should be aware of the impact of digital inclusion and exclusion on the fulfilment of the other rights.
- ✓ There is no single cause for the digital divide and therefore strategies to bridge it should be all-inclusive and address different factors (economical, educational, cultural, etc.) at different levels (societal, community, family, personal). These should include: measures to increase awareness and competence among all stakeholders; adoption of inclusive and rights-based approaches and policies; the fostering of universal design and e-accessibility solutions; ensuring that end users have a wide range of information on the ICT-AT available and the choice to benefit from the solution that suits them best; the provision of information and independent advise on the appropriate choice and use of (assistive) technology (i.e. independent advice centres); financial support to overcome economic barriers or free provision of ICT-AT; training opportunities for end users and staff.
- ✓ National and regional governments should commit to addressing the issues of lack of data and competences to undertake positive actions. In some countries existing competence centres have been closed down. In most areas of Europe there are no independent assistive technology assessment services, which leads to inappropriate and ineffective recommendations and poorer support to children and families, early abandonment of ICT-AT solutions and a general failure of public authorities and services to meet important needs. This is further against the spirit and the letter of the UNCRPD which considers accessibility and access to information on assistive technology a basic right.
- ✓ National, regional and local governments should invest in the digital literacy of the ageing population. Research shows that the large scale deployment of integrated care platforms and remote support services for older persons is hindered by the lack of digital experience among the users.

Research (and development)

- ✓ More research is needed to map the digital divide in case of disability and/or ageing and to identify its causes and long-term effects. In particular the impact of the non-use of (assistive) technology on the development of children with disabilities, including those with intellectual disabilities. This needs to be investigated in all its aspects, as well as the impact on society and the social costs of non-intervention.
- ✓ Research and development efforts should be geared to the development of adaptive interfaces and more intuitive controls, for improved and personalized user experiences. Developers and manufacturers should be encouraged and support provided to ensure AT and ICT are available in a wider range of languages and to produce as a rule open source/free and low cost versions of technologies.
- ✓ End users should have a key role from the start in research and the user-led design process of new solutions. Living labs involving persons with disabilities or older persons supporting the development of new solutions should be fostered and made meaningful and effective.

Education and training

✓ People with disabilities and the ageing population should be informed of the benefits of assistive technology based solutions and the advantages of having basic digital skills. Anyone who wants to build up digital competences should have the opportunity to do so. Those already aware should claim their rights to have access to accessible mainstream technology or appropriate assistive technologies and independent assistive technology services in the framework of equal treatment policies.

✓ Teachers and educators should be trained in supporting all young people in developing digital skills and a positive digital identity. In the case of children with disabilities this might require special training in supporting a young ICT-AT user or working meaningfully with mainstream ICT for the child's education and development. This might involve peer to peer learning and other alternative approaches. Additional resources will be required to address the high and long learning curve.

✓ Educational institutions should make the digital inclusion of their students an essential part of their policy, make sure that all students have equal access to the curriculum or redesign it according to universal design principles and invest in the development of the digital skills of all students.

✓ All schools should engage with experts or employ staff who are familiar with a wide range of assistive technology and its use to access ICT.

✓ Schools serving different age groups should collaborate in the transition of students with disabilities from one institute to another and collaborate with the families in providing continuity in the digital skills development of the student, including in the selection and use of appropriate assistive technologies that can be used in all life environments. Especially the gap between secondary and higher education requires attention and Universities should be active in catering for the ICT-AT needs of their students with dedicated services. The student and his or her educational and life project should be at the centre of concern.

✓ Digital literacy for older people should be fostered, allowing access to leisure, education and employment, as well as communication with friends and relatives at a distance and the self management of integrated care programmes based on platforms and mobile devices.

✓ The curriculum for training professionals such as occupational and physiotherapists, speech language therapists, and other allied health providers should include competency training in ICT-AT service delivery.

✓ Teaching about web accessibility and usability as a standard of good design practice rather than an add-on should become part of all computer science, engineering and other courses that involve ICT.

Service provision

✓ Health care and social care providers and professionals should support the introduction and use of digital solutions in the care and living environment of those using their services, such as the deployment of integrated care solutions, ensuring that clients are central to the whole process and increasingly supported to manage their own health and wellbeing.

✓ Service providers and professionals should recognise the importance of ICT-AT for their clients. Staff should be encouraged to have a positive attitude toward clients that use ICT-AT and be trained to have

basic knowledge of the impact of technology on the quality of life of the people they support. They should be able to offer assistance in the use of individual technology solutions where needed.
- ✓ Professional AT and ICT-AT services have to be created or strengthened where independent advice can be sought.

Cooperation

- ✓ Involvement of people with disabilities and other minority groups in the process of combatting digital exclusion will be essential to ensure real inclusion rather than the removal of some barriers and their replacement by others.
- ✓ Different policy sectors should break through siloes and collaborate, such as the health sector, the social and social care sector, the educational sector, but also those responsible for youth, sports, culture and media policies, industrial development, research and development. Essentially it is not about doing something additional, but about doing things differently and adopting a new approach.
- ✓ National governments worldwide should make digital inclusion the core part of their digital development agendas, mainstream accessibility in public procurement regulations and stimulate the development of markets for ICT-AT devices. Good policies are not sufficient if all stakeholders are not involved in their implementation.
- ✓ Cooperation has to be fostered among all stakeholders at local, regional, national and international level. International statutory organisations like the UN and its agencies, the European Union, the Council of Europe, should increase, in collaboration with industry and other stakeholders, their efforts in the determination of (accessibility) standards, policies and programmes. Funding should be made available to support initiatives that impact on the digital divide, as well its systematic monitoring in Europe and beyond.
- ✓ The GATE program of the WHO should further be supported in its recognition of the importance of ICT-AT and its contribution to increase the wellbeing and quality of life of millions of people with disabilities worldwide. Global collaboration in this field should be enhanced.

Dublin, 12.11.2015   The ENTELIS network

For further reading and sources please refer to the ENTELIS State of the Art Report, 2015. *www.entelis.net*

How to use this Manifesto?

This Manifesto is intended to raise awareness among stakeholders; there are much more of them than one would think! The authors hope that this document will lead to discussions and actions at all levels. They therefore invite the readers to consider making active use of the Manifesto, for example by passing it on to others, or by organising a meeting to discuss its content and to commonly define one or more points of action. It is also possible to reply to this Manifesto by joining the ENTELIS network and by committing work, or to share expertise and experience. According to the philosophy of the ENTELIS network, each stakeholder is important and can start to make a difference, whether this is at a single organisation, community, regional, national or even international level.

What follows are 5 questions that you can ask yourself and the people in your network after reading the Manifesto:

1. How relevant is this for my work and for the mission of my organisation?
2. How well developed is my thinking, or the thinking of my organisation on this and what do I/we consider a priority issue?
3. Have I, or has my organisation, developed strategies and solutions that we can share and disseminate?
4. Who are the other stakeholders in my environment and can consorted action contribute to a reduction in the digital divide?
5. How can I approach them and what sort of action is feasible to propose?

This Manifesto is endorsed by AAATE, EASPD, EVBB and many other organisations.

We invite you to **endorse** the Manifesto by visiting *http://www.entelis.net/en/manifesto*

Action is needed

In case you decide TO ACT, please let us know! Whether you are a group of students challenging your teachers, a group of teachers challenging your head teacher, an educator in a day care centre, a residential facility, the mayor of a city, a designer, an AT vendor, a top manager in industry, a research centre, a manager in education, a journalist, a politician, Angela Merkel herself, we trust that your energy and commitment can help to move things further. Please contact one of the ENTELIS network members and make sure your action plan is known to us. Only by working together can we make the digital revolution the most democratic revolution of all times!

Please write your story to *we_act@entelis.net*. We will make the best stories known to the world!