Ability Research Centre

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Accessible Technology: Where We Are and Where to From Here

Submission to the Australian Human Rights Commission Human Rights and Technology Project

1. Introduction

We are grateful for this opportunity to contribute to this worthwhile and timely project. Our involvement in the application of computer-related technology to benefit people with disability, over 27 years, gives us a significant vantage point to observe both the potential and the pitfalls that arise in this process.

Assistive technology is any technology that assists people with disability to expand their functional capabilities, improve their participation, or achieve their goals. Ability Technology deals specifically with computer-related assistive technology – also known as Computer Assistive Technology (CAT) or Information Computer Assistive Technology (ICAT) – encompassing computer, smartphone and tablet access, assistive and augmentative communication (AAC) and home/environmental control (ECU). We note that this branch of technology is conspicuous in its rate of change, its ubiquitous impact on modern lives and its significance to people with disabilities, in terms of their independence, connection and productive engagement with society.

The benefits are powerful. Computer-related technology can assist people with disability to:

- Read
- Write
- Speak
- Study
- Access information
- Engage in employment
- Engage in education

- Engage in recreation
- Develop their skills
- Be creative
- Control their home environment
- Feel safe and secure at home
- Be more financially independent.

2. Consultation questions

8. What opportunities and challenges currently exist for people with disability accessing technology?

Within a few short years, methods of access for people with disability have expanded rapidly, with the refinement of long-standing options such as joysticks and voice control, and the introduction of more complex technologies such as mouth-controlled joysticks, head-controlled pointing devices, eye-gaze technology and voice-controlled home automation systems. In short, with the right supports, many people with disability can have the same, even greater benefits from modern technology as the rest of the community.

Yet this potential is rarely reached fully in practice. There is a significant paucity of knowledge about what assistive technology is available, and how all kinds of technology can be harnessed for the specific purpose of assisting people with disability. Wheels are continually reinvented as people learn about new developments by social osmosis or serendipity. As the rate of change increases, there is greater confusion, and a tendency to grasp at what's discovered through media shorthand pieces and social media hearsay.

The potential of the sector is stymied by the fact that "you don't know what you don't know." Most people, including many people with disability and their support people, simply are not equipped to be handed a lump sum of money with the hope of navigating such a specialised field on their own. In the same way, many therapists and services providers deal with assistive technology on an ad hoc basis, drawing too often on hearsay, fellow therapists and short conferences. In essence, the sector languishes from a lack of clear knowledge about new, often generic technology, how it integrates with existing, often specialised, technology, how options can be meaningfully evaluated, compared and trialled, and where to turn for this information.

9. What should be the Australian Government's strategy in promoting accessible and innovative technology for people with disability? In particular:
(a) What, if any, changes to Australian law are needed to ensure new technology is accessible?
(b) What, if any, policy and other changes are needed in Australia to promote accessibility for new technology?

We note that Chapter 7 of the Human Rights and Technology Issues Paper "Accessible Technology" focuses heavily on laws, standards, regulation and compliance. In our view, these act as fences, not pathways, to enable people with disability to achieve benefits from new technology. They seek to regulate, not energise this process.

What is needed is an **Assistive Technology Research Centre**. This is NOT in order to provide:

- An academic review of literature.
- A scientific study of the inner workings of new technology.
- A collection of experts to talk about technology together.

What it IS:

- A team of on-the-ground, multidisciplinary assistive technology professionals and people with disabilities, working together.
- MONITORING: An organisation to be vigilant in identifying new technology that could be relevant to people with disabilities.
- TESTING AND EVALUATING: Appropriating, through a flexible budget, these new technologies, testing them in a practical way, understanding in detail how they work, what are their potential and limitations, how they work in relation to existing technology, how consumers see them in relation to their priorities, etc.
- DISSEMINATION: Producing simplified, attractive, multimedia documentation widely disseminated to people with disability, funders, therapists, NDIA, JobAccess and other funded programs, to enrich their operation by giving them access to useful, independent, reliable and application information on new technology. This will nourish the starved sector with the knowledge of the assistive technology that is available but broadly unknown.

This is different from “evidence-based practice”, in its pure form, an approach that transplants large-N, quantitative methods from the world of science and clumsily applies it to the lives of a group of human beings whose diversity in their impairments and abilities makes replication, and consideration of the full scope of human experience, impossible. Evidence is important, but it must be the right kind of evidence, presented to the right people. This is extremely important in an area of rapid change, such as computer-related assistive technology.

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