

Policy

Putting the \$4b 'Assistive Tech' market at risk

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Contributor
24 June 2021

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The recent report on [Human Rights and Technology](#) by the Australian Human Rights Commission (AHRC) made a landmark statement on technology as an enabling human right, and called for changes to the way in which the NDIS considers and funds assistive technology.

This significant human-rights statement also serves to highlight the economic impact of a vibrant and growing assistive technology market, estimated to be in the order of \$4 billion per annum in Australia alone.

Assistive technology (AT) is broadly described as any tool, product, software or device that helps people do things they would otherwise have difficulty doing or would not be able to do. Examples include sensors, immersive environments, tablets, exoskeletons, wheelchairs, speech synthesisers and robots.

It is also significant that the AHRC report highlighted the human rights implications of the complexity, delays and inconsistency of NDIS assistive technology processes.



Marie Johnson: Innovations in assistive technology are an opportunity

And here's why these statements matter. And why every technology provider, entrepreneur and government seeking an innovation-led economic recovery, should be concerned.

The dog whistling going on over the NDIS costs, misses this far more economically significant factor: the squandered potential of a massive assistive technology market which directly impacts Scheme sustainability and domestic innovation.

The brilliant foresight of the [2011 Productivity Commission Report](#) into Disability Care and Support, emphasised the absolute necessity of innovation and technology.

So given the massive size of the AT market and the transformative impact of AT on jobs, the lack of analysis regarding AT by the NDIA is concerning.

Deep analysis and future casting is urgently needed, to provide essential insight on the shifts and possible futures of the AT and innovation industry.

Without this, of what use is financial forecasting on Scheme sustainability? And without this, how will "market thinness" into the future be understood?

In a number of submissions to inquiries, the Australian Rehabilitation and Assistive Technology Association (ARATA) pointed to the systemic deficiencies and a culture against a return on investment approach by the NDIS for the funding of AT over time. Specifically, [ARATA emphasised](#) the need for..."methods to create a culture of selection of AT based on ROI."

So, this is what a lack of an ROI culture looks like and how this risks dampening the AT market.

In my 2017 evidence as an Allia National Board Director [to the Senate Committee](#) on the Delivery of Outcomes Under the National Disability Strategy 2010-2020, I spoke about the actual example of a physiotherapist consulting with patients on the other side of the country by using a digitally network-connected exoskeleton.

ROI in this case was not a like-for-like comparison between a wheelchair and exoskeleton. An exoskeleton does not replace a wheelchair: the combined augmented life-long benefits were documented across all dimensions of life.

This actual example from this exoskeleton NDIS provider demonstrated the human impact, time and cost of trying to prove ROI involved in introducing new servicing innovations for NDIS participants.

The article ['Second Best'](#) by a former NDIS Senior Local Area Coordinator (LAC) also spoke about the NDIA's resistant culture regarding the investment benefit of AT innovations.

In the 'Second Best' article, the former LAC described the situation of hearing-impaired people who have been fighting with the NDIA over visual alert systems such as 'Visualert' and haptic alert systems.

In Australia, smoke alarm legislation is very strict. For hearing people, the alarm must be heard from wherever they are in the home.

The 'Second Best' article offered that hearing impaired people would need a similar system.

Occupational Therapists and audiologists around Australia have been recommending visual alert systems because it keeps hearing impaired people safe.

But according to the 'Second Best' article, the NDIS is refusing these. Instead funding only cheaper systems that rely on batteries, pagers and WiFi. The 'Second Best' article reported that these systems do not meet the same strict safety requirements that hearing systems must meet.

And even the most fundamental of human rights and basic human care – for an incontinent person to be kept clean – is a domain of radical innovation.

Innovation almost impossible to imagine, given the reports from the Royal Commissions of the appalling rationing of incontinence garments.

The 2020 Report of the ['Global Incontinence Products Industry'](#), projects that the global market for incontinence care products will reach US\$17 billion by 2025, with product innovation driven by RFID and sensor wafer chips.

Sensors will detect when the diaper has been soiled, as well as monitor body temperature, detect abnormalities in urine composition, and even help prevent bed sores by tracking how long it's been since a person has moved.

Could smart diaper data, sensors and data analytics become part of a quality and safeguard framework. Think about what this would mean for the skills and management of attendant care staff.

And while there is an urgent need for discussion about jobs as part of Scheme sustainability, this discussion is incomplete without a discussion on the rapidly changing nature of work, an augmented services and care ecosystem of AI, robotics, immersive technologies, sensing and remote servicing.

Worryingly, most of these innovations would likely not be funded, not because these are not reasonable and necessary, but because there is not a culture or capability that understands the ROI of AT to Scheme sustainability.

As ARATA stated, creating a culture of ROI – not just "reasonable and necessary" – is absolutely necessary to fully leverage the \$4 billion AT market to transform the jobs and skills market.

And over 10 years, that's a \$40 billion market.

It is unfathomable that the government is driving a narrative on Scheme sustainability, when the actuarial forecasting itself lacks any analysis on the ROI or adoption of AT.

And with the recommendations of the AHRC Human Rights and Technology Report, assistive technology has suddenly become a very significant human rights, sustainability and economic question.

But there is no clear pathway for the market.

I have lost count of the many entrepreneurs, providers and companies who have sought my help navigating the massive NDIS AT ecosystem and what it takes for a new innovation to be accepted as a funded support.

In the lead up to the Federal election, all parties should address the NDIS as an assistive technology innovation market catalyst – that enables human rights – and not squander this massive market on the false altar of cost-cutting.

Do you know more? Contact James Riley via [Email](#) or [Signal](#).

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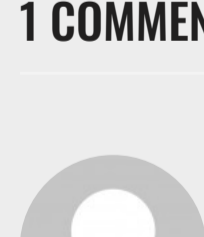
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Marcus Wigan
2 weeks ago

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While these points are well made-they ignore the HUGE elephant in the room: if we dont get onto the NDIS by 65 we are sentenced to the quite appalling conditions of the RC on #agedcare... and would have Zero chance to gain access to 99% of assistive technologies gained by NDIS users even today-let alone in the future-and carried forward into their older ages. As an ~80 year old with strong technical skills-currently being exercised in the public interest- this makes me see ~rd in a personal capacity at this blatant age discrimination, if not supportive in a purely technical one. Is not ageism is alive and well in Assistive Technology culture?

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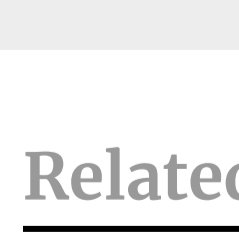
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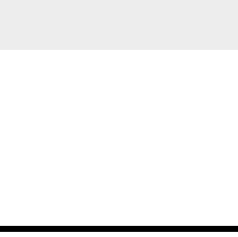
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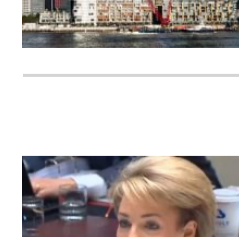
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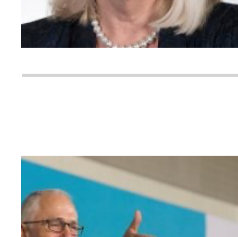
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