5 June 2019

Technological change and the future of work

To: New Zealand Productivity Commission
The Terrace
Wellington 6143

Electronic submission via website https://www.productivity.govt.nz/make-a-submission

1. The Blind Foundation (Foundation) welcomes the opportunity to make this submission on Technological change and the future of work.

2. The Blind Foundation is the operating name of the Royal New Zealand Foundation of the Blind, an incorporated charitable society under the Incorporated Societies Act 1908.

3. The Blind Foundation's purpose is to enable over 12,500 Blind Foundation clients and members who are blind or have low vision to be self-reliant and live the life they choose.

4. Our vision is a life without limits. As the main provider of practical and emotional support to people with vision loss we work with clients to find the tools and technology for them to be as independent as possible, enabling them to enjoy life and participate fully in society.

5. Our services include providing vision loss rehabilitation, equipment and training to continue reading and communicating, and services that facilitate mobility, socialisation, recreation, education and employment.

6. This submission relates to Technological change and the future of work.

General comments

7. We have analysed the Issues Paper in conjunction with the four scenarios for the inquiry into technology and the future of work here in New Zealand. Below are our responses to the sections of the Issues Paper that we think are of specific relevance to the Blind Foundation.

8. People with disabilities are innovators. They have to think creatively every day to overcome accessibility barriers to do simple things, like how to access information and communication. The future of work must tap into the innovative potential of this workforce.

9. Adaptive technology is essential in compensating for sight loss. Blind people and those with low vision are unable to use much of the technology that is widely used in work places. Technology needs to enable self-reliance for those who are blind or have low vision. Over the past two decades, there has been a growing trend towards the use of visual interfaces such as onscreen menus and touch screens on a wide range of mainstream equipment and technology. A considerable proportion of this equipment is not accessible to people who cannot see the visual display or locate trigger points on the touch screen.

10. Blind people and those with low vision should have access to job opportunities equal to everyone else. To achieve this, funding and processes for supporting disabled people into work need to be modified to reflect the specialised types of support in the workplace. Access to reliable adaptive equipment and technology is critical for blind and low vision labour force seeking to maintain their employment or self-employment, or wishing to join the labour market. The Blind Foundation's Access Advisors works to address the barriers to employment by supporting employers to become more accessible and inclusive and educating them about the opportunities that exists if technology is accessible for people with disabilities in the workplace.

Blind Foundation responses to a selection of relevant questions

Question 1: Are the scenarios developed by the Commission useful for considering the future labour market effects of technological change? How could they be improved?

More technology in the workplace is imminent, but what isn't said is that the technology and the roles available must be accessible for the whole labour force, including for those who have a disability.

Question 3: How might the impacts of each scenario vary across different groups in society or across different locations in New Zealand?

Technological changes, and corresponding changes to ways of working must be accessible for people with disabilities. People with disabilities are an innovative part of the New Zealand labour force, with untapped potential. The New Zealand Institute of Economic Research found in the 2017 "Valuing access to work" report that[1]:

- 925,000 working age New Zealanders have a disability (ies).
- 40,000 people with disabilities are unemployed.
- 184,000 people with disabilities are not active labour market participants.
- The rate of unemployment for people with a disability is 50% higher than the unemployment rate of the total workforce.
- If 14,000 people with disabilities were employed, the modelling for an increased labour productivity by 2% through better educational outcomes, showed potential increases in real GDP ($862 million).
- Improved education outcomes, new technologies and an increased level of accommodation provide the potential for getting more people with disabilities into active labour market participation, both for those already looking for work and the larger group of people with disabilities not currently looking for work.
- Technology is an important tool for mitigating impairments. Some traditional examples include glasses, walking canes, wheelchairs and braille. Technologies for reducing the impact of impairments have advanced significantly in the information age. Some examples of tools for people with sight impairments include the following: Apps, Screen readers, Screen magnifiers and Electronic braille devices.

Question 5: What policy objectives should governments pursue for the labour market of the future?

Accessible technology and workplaces - Use a mix of policy tools, including legislation to require that technology in the workplace is accessible for the whole labour force, including for people with disabilities.

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[1] Full paper can be downloaded from https://nzier.org.nz/publication/valuing-access-to-work

Question 19: What, if any, further measures are needed to improve skills among adults with low proficiency to enable them to successfully participate in any future labour market?

It will be essential that people have access to technology and training especially for job seekers or employees with a disability. Often sudden changes to technology can result in this group being out of work as they face accessibility barriers to completing tasks, and might require training or further assistance to adjust to new technology.

Question 20: What evidence is there of digital divides in New Zealand? What are the consequences for labour market participation and which groups are most disadvantaged?

People who are blind, deafblind or have low vision are no strangers to using new technology to access information and communications. However, we have observed many times that when new technology being introduced, often it's those with a disability, or lower education who are first to be made unemployed.

The Internet NZ digital divide map lays out levels of digital inclusion and social wellbeing[2].

The freshly released "Digital Inclusion 2019 Action Plan" identifies the government's areas of focus in 2019 as it works towards making sure the New Zealand population is digitally included. Work is being led by Department of Internal Affairs (DIA).[3]

Question 21: What, if any, further measures are needed to address any digital divides in New Zealand?

Training and access to technology and funding to assist with the cost of being connected. Often specialised technology or technology that includes accessibility tools can be more costly, training often needs to come from a specialist agency and marginalised groups can't meet the ongoing costs to be connected.

Question 25: What programmes exist to support people to retrain, upskill or adapt to changing technology, and how effective are they?

The programmes out there often struggle to support people with disabilities.

Conclusion

We believe adaptability or resilience to future technological change should be included as an objective when considering the future of work. There does need to be an effort to ensure the future of work can cope with future technological advances, but care needs to be taken any technological change is inclusive of disabled people in work.

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[2] Map can be found at https://digitaldivide.nz/
[3] See more at https://www.digital.govt.nz/digital-government/digital-transformation/digital-inclusion/2019-action-plan-building-the-foundations/ .