

Te Wao Toi Whānui

The Toi Whānui forest

Te kano ki te rau

Report summary

Te Wao Toi Whānui is the first workforce development plan for Toi Whānui (Enabling Technologies), New Zealand's digital technology sector, created by Toi Mai Workforce Development Council.

Te Wao Toi Whānui is the result of engagements with technology businesses, government, rangatahi, learners, teachers, employees, education providers, Māori technologists and members of the Pacific and tāngata whaikaha communities – combined with research and data to produce insights on what is needed to ensure a thriving workforce and productive digital technologies industry.

Our research and engagements have highlighted challenges in attracting, training and retaining Toi Whānui employees, including:

- training not being able to keep up with the industry's growth and needs
- low digital literacy in Aotearoa due in part to a lack of access to foundational training in technology
- decline in funding for technology-specific training
- an industry-wide reliance on international tech specialists that limits local demand and education opportunities
- a gap in wrap-around support and pastoral care for interns and apprentices
- lack of access to internships and on-the-job training for learners
- unsustainable short-term training initiatives with no consistent funding models
- the lack of value put in transferable skills as opposed to technical skills by the industry
- the major, industry-wide inequity in the representation of women, Māori, Pacific peoples and tāngata whaikaha
- bias in recruitment practices being an impediment to attracting those currently underrepresented in the sector
- the overlooked capability of tāngata whaikaha
- inconsistent integration of technology in primary and secondary schools
- limited visibility of tech pathways to rangatahi and people from underrepresented communities.

To help contextualise the workforce's situation, we have drawn inspiration from our beautiful environment here in Aotearoa and called this workforce development plan Te Wao Toi Whānui, the Toi Whānui Forest. Being able to walk through a thriving forest, full of kauri, tōtara, kōwhai and mānuka, bursting with the birdsong of tūī and korimako, while being followed by a cheeky pīwakawaka is what makes Aotearoa special. However, when we look at the landscape of our digital technology sector, we don't see a forest full of native trees and thriving birdlife. To create a place full of kai to sustain our manu (birds), we need to encourage, nourish and protect the forest to grow and flourish. The following actions and recommendations are suggestions of how we can reverse this trend.

Kia pua i te hua

Actions and recommendations

Toi Mai actions

- **Toi Mai will review existing qualifications and develop new products to promote opportunities for work-based learning, foundation skills and flexibility in provision.**
 - Toi Mai to review all vocational IT qualifications strengthening transferable skills and incorporating industry-specific knowledge.
 - Toi Mai to develop micro-credentials and skill standards to enable more flexible delivery including work-based learning opportunities.
 - Toi Mai to work with providers and community groups to strengthen digital skills pathways through the development of micro-credentials and skill standards at levels 1–3.
 - Toi Mai to advocate for a widening of the criteria for provider funding to include pilot funding for non-NZQCF (New Zealand Qualifications and Credentials Framework) listed, industry-defined and delivered short-form courses and stackable micro-credentials that are flexible, nimble and meet immediate industry needs.
- **Toi Mai will set progressive workforce targets and improve quality of data sources to enable workforce mapping.**
 - Toi Mai to set real targets for Pacific, Māori and women in post-secondary study to achieve population parity by 2040.
 - Toi Mai to gather data about workforce composition and work with industry and Stats NZ to have more up-to-date data. Census data is too infrequent and slow to understand true industry needs.
 - Toi Mai to advocate for ANZSCO to be updated and to include new IT occupations.
 - Toi Mai to work with industry to develop medium- and long-term capability pipelines.

Our recommendations

- **Facilitate growth of a diverse workforce through work-based learning and new delivery options.**
 - Providers to prioritise development of work-based learning programmes.
 - TEC to prioritise new delivery in regional areas and West and South Auckland
 - TEC and NZQA to create a definition of, and funding provision for, digital apprenticeships specific to the IT industry, that includes IT qualifications and levels 5,6 and 7.
 - TEC to reinstate \$22 million in funding for sector.
 - Toi Mai to work with Māori Tech and Pacific Tech organisations, MBIE, Summer of Tech and other work-based learning organisations, and providers, to develop digital apprenticeship models.
- **Improve coordination of training and industry initiatives to achieve better outcomes.**
 - Toi Mai to work with the Digital Government Leadership Group to better coordinate and align the sector, including training so that models developed are fit-for-purpose and there is no duplication of pilots and initiatives between government departments and ministries.
 - Toi Mai to work with industry and government as an employer, in conjunction with providers and placement organisations, to create more opportunities for work-based learning across the entire technology sector.

To download the full plan, visit toimai.nz