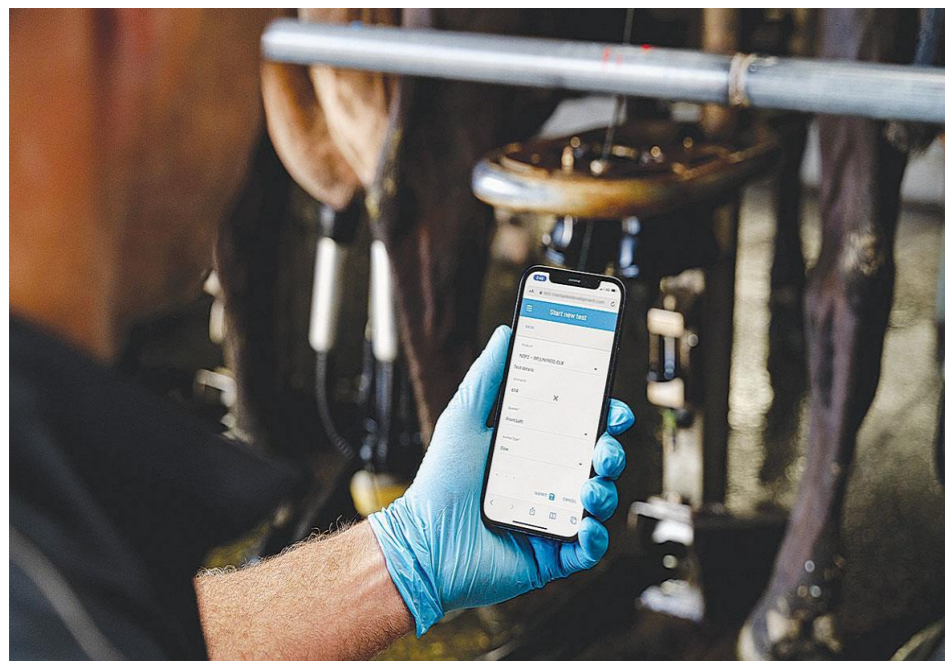


TOP REGIONAL INSIGHTS



The Tech sector in the Waikato continues to report skills shortages particularly in mid/advanced level skills. While this issue has been exacerbated by the border closure, local tech companies are investing more in rangatahi by providing work experience opportunities to help build the local pipeline of future skilled labour.

One barrier to technology skills supply is the low numbers of school leavers in the region who do not study STEM subjects at school or go on to study tech-related tertiary qualifications. For example, transition data shows that between 2019 to 2021 only 6,986 (8.5 per cent) out of 82,109 school students in the Waikato chose to study in IT. There is also the broader issue regarding fundamental technology/computing skills being taught as a core subject to all students (and their parents, grandparents and caregivers seeing this as a valuable pathway), equipping them with essential base knowledge, regardless of which industry route they may wish to pursue.

The Education Sector reports that students who leave school without the relevant skills continue to struggle to transition from low skilled jobs. They have identified that one of the keys to overcoming this barrier is to provide young people in the secondary sector with transferable skills across numerous pathways. The NCEA Change Programme is an example of improved guidance on how to support these rangatahi to find meaningful employment.

Despite high-speed digital connectivity improvements in the region, there is still an issue, particularly in rural areas, where there are examples of predominately Māori communities not being able to participate in the education system, or the digital workforce.

The demand for tech skills in the Waikato will continue to grow as the region's primary sector automates in robotics and Artificial Intelligence and with the emergence of innovative tech start-ups such as Waikato Milking Systems, Agrismart, Modusense and Farmgate. The region has enough graduates in the tech sector but is short of skilled workers (including at the migrant level) with more senior skills (e.g., experienced software engineers and ICT management roles). Further, tertiary tech-related qualifications offered across the region do not cover enough practical application learning to meet industry expectations concerning overall skill set requirements.

TRENDS AT A GLANCE



Waikato continues to be a high-performing region with a strong ecosystem of tech companies. Ten of the Technology Investment Network (TIN) 200 companies are based in the Waikato. Four of these - Gallagher Group, LIC, NDA Group and TOMRA Fresh Food - have maintained strong growth and are ranked in the top ten largest companies in the TIN Agritech Insights Report 2022.



Waikato makes up a large proportion of New Zealand's total agritech sector accounting for 41.1 per cent of the sector's growth. TIN200 firms in Waikato employ 62.8 per cent of all Agritech employees and give out the highest average wage of \$105,401. While Waikato reported the lowest revenue growth of the regions at 4.9 per cent, the positive growth is still a good sign that overall, the region is doing well.



While it remains a challenge, access to high-speed internet in more rural parts of the region is beginning to improve. The Crown Infrastructure Partners Quarterly Connectivity update shows the Ultra-Fast Broadband programme and the Rural Broadband Initiative achieving 84 per cent of the rural connectivity target for Waikato. In June 2022, there were 8,634 rural households and businesses across the region with improved broadband access.

TOP LABOUR MARKET OPPORTUNITIES

- There are a range of locally driven initiatives helping to provide rangatahi with tech experiences,** including *HCL Technologies*, who deliver IT integration services, to support skills development within the Hamilton region through collaboration with local governing and trade bodies and schools. As its next initiative, HCL is planning to focus on secondary school leavers as a cohort upskilling them in digital technology. Programmes run by HCL help attract individuals into the tech domain with the hope that they follow through fulfilling education/training requirements in relevant fields and at a future time join the local tech workforce. Other programmes in the region achieving similar outcomes are the *Code Avengers*; *Cultivate Trust* ("*Tech in the Tron*" and "*Speed Networking*"); and *Tahi, Rua, Toru Tech*.
- A couple of initiatives are currently being considered under the Māori Trades and Training Fund that can support Māori entities** in facilitating digital technology in-work training meeting industry-based requirements to assist in moving candidates towards tech-related employment.
- The NCEA Change Programme is enhancing learning.** It is promoting equitable access for all students, ensuring literacy and numeracy are now co-requisites to gaining an NCEA qualification. Māori knowledge is also being recognised as having equal status and will be equitably valued and resourced. This ensures deeper learning and clearer pathways (including in tech-related subjects) to further education or work across all communities in the Waikato.
- MAKE NZ, Hanga-Aro-Rau and The Learning Wave are working with industry stakeholders to explore micro-credentials** smoothing the pathway for digital skills in Manufacturing targeted at up-skilling team leaders to support increasing digitalisation of processes.

TOP LABOUR MARKET CHALLENGES

- Low number of enrolments in IT qualifications across the region.** One of the problems is, there are a limited number of streams taught in primary education because there is a small pool of digital technology teachers – reducing the number of students taking tech subjects at high school/higher learning and subsequently the supply of tech skills going into industry.
- Schools are struggling with the retention of students.** School attendance numbers are declining due to the pandemic with some struggling to engage students in the school curricula. They are facing challenges such as self-esteem issues, low interest levels and the demand on students to bring income into the home because of pandemic pressures.
- Women, Māori and Pasifika are under-represented in the Waikato's tech sector (and more likely to be employed in lower skilled occupations).** Workforce diversity is a key challenge for the sector. The example of TOMRA Fresh Food Scholarships for Women in STEM is a step in the right direction but there is still more work to be done.
- Higher learning qualifications.** There are indications from industry that some higher learning fields of study, while facilitating the teaching of technical elements of the qualification, are not fostering practical learning industry says it desires enabling new hires to "hit the ground running". Further, such qualifications are cost prohibitive (there has been anecdotal evidence that individuals are dropping out of higher learning courses because they need immediate financial security and therefore enter low-skilled jobs) and take too long to complete which deters people from course enrolments.

REGIONAL WORKFORCE PLANS

Digital technologies is a key sector and broader skills consideration within the Waikato RWP. Insights from this report are feeding into related focus areas (and actions that sit under these), such as:

Focus on up-skilling workers into higher value employment that leverages an increasingly automated future of work and eases career movement across unrelated industries by allowing workers to develop universal digital skills that are highly transferable:

- Identify industries/employers in target priority industries across the Waikato that have workforces most impacted by Industry 4.0 and need support with the transitioning from manual skills to Industry 4.0 relevant digital skills; and develop programmes to support upskilling.

Identify how the application of technology will transform the Waikato economy, and use this insight to form future recommendations and actions:

- Appoint a Futurist to support ongoing regional workforce plan development.

Close the gap between learning and working across the digital/ICT sector:

- Introduce digital/ICT apprenticeships/micro-credentials to close the gap between school and workforce.
- Initiate dedicated tech hubs sub-regionally (or mobile) for students to access as part of the STEAM (Science, Technology, Engineering, Arts and Mathematics) school curriculum (e.g., Mini MindLab).
- Support 'Equitable Opportunities for Tech Employment' pilot initiative to simplify/improve tech education-to-employment pathways facilitating opportunities for a wider spectrum of learners. Resulting in a deep pipeline of locally grown, work-ready tech talent supporting industry, iwi (Waikato Tainui) and regional growth.

OUR FOCUS FOR THE NEXT 3 MONTHS:

Construction/Infrastructure and Logistics/Freight and Manufacturing/Engineering