

UPTEMPO Dec 2023

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What is Uptempo?

Uptempo works directly with 100+ South and West Auckland Pasifika "aiga (families), and partners with government agencies, employers and Pasifika-centred community providers, to test ways to grow Pasifika intergenerational wealth and wellbeing through workforce innovation. A priority group for Uptempo is lowincome households with members working long hours in low-paid jobs and particularly families with children, for whom in-work poverty is especially pronounced. A key means to shift households out of financial struggle is to ensure working household members progress into higher-paid work.

Uptempo is part of Alo Vaka, the Auckland Pacific Skills Shift Programme funded through the Ministry of Business, Innovation and Employment (MBIE) and by the Peter McKenzie Project (JR McKenzie Trust), and powered by The Southern Initiative (TSI) – a social innovation unit nested within Auckland Council.

We acknowledge the Uptempo "aiga, workforce intermediary partners and employers we interviewed, for their contribution to this report. Mālō, thank you for sharing so generously.

Also, we acknowledge the NZTech Digital Skills reports and the Digital Technologies Industry Transformation Plan (ITP).



Pu'apinga Our Values

Our values are the foundation for how we show up in our work, the mindsets we bring and our actions.



Tausi le va

SAMOAN

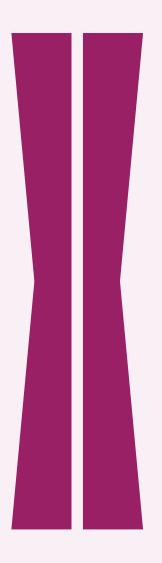
We honour our relationships and recognise that everything is connected. We are culturally grounded and through this, build trust, respect and impact.



Loto to'a

TONGAN

We have the courage to do new things and not being afraid to make mistakes, accepting our failures and learning from them. We are brave enough to challenge the status quo and hold ourselves and other people accountable.





Manaakitanga

MĀORI

Our actions demonstrate our love and care for our people and our kaupapa.





Haivae 'ag

ROTUMAN

We openly share and work together with others to achieve our goal of intergenerational wealth for all our people.



Fakamoliaga

NIUEAN

Our culture is a superpower!

We are unapologetically Pasifika and walk our talk every day.

Purpose of the Report

O le ala i le pule o le tautua – The pathway to leadership is through service

SAMOAN PROVERB

This report aims to increase understanding of and talanoa (discussion) about:

- Factors contributing to the low number of Pasifika in tech.
- How we can change systems and conditions to support Pasifika into the tech industry
- Factors influencing Pasifika progression in tech

In this report, we propose recommendations to support Pasifika aspiring to work in or progress in tech roles. There are different challenges and requirements for the following groups:

- Pasifika who do not hold formal digital tech qualifications and may have limited higher educational qualifications, but who can potentially upskill into tech roles.
- Pasifika who hold higher qualifications who are trying to move into tech roles or into the tech industry.
- Pasifika currently working in tech roles or tech industries who are seeking to progress.



Our approach

Fofola e fala kae talanoa e kāinga – Roll out the mat so the people can dialogue.

TONGAN PROVERB



While we have broad figures on the number of Pasifika working in digital tech, and general evidence on where the education pipeline is failing, there is a lack of granular data on the specific qualifications and status of Pasifika workers currently in different types of digital tech roles. Additionally, we need to better understand the specific barriers they may be facing in obtaining qualifications and progressing in these jobs, and the effectiveness of bridging courses for those initially without digital tech qualifications or degrees for moving into tech roles.

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As such, this report provides a series of case studies and talanoa-based insights capturing Pasifika voices and experiences across the tech environment. This report draws on existing Uptempo practice-based learning and research evidence, and also new talanoa to uncover diverse perspectives relating to Pasifika in digital tech, including:

- Uptempo 'aiga members
- Rangatahi¹
- Microsoft's Māori and Pasifika group
- · Community tech training providers.

OVERVIEW OF THE TECH INDUSTRY IN AOTEAROA

E le'e se 'ua e tōtō ai – The rain will stop; no storm lasts forever

FIJIAN PROVERB

The situation for the digital tech industry² in Aotearoa New Zealand reflects global trends that have reshaped the industry in recent years, with 2022 seeing widespread layoffs in tech companies worldwide. Here, these have included Amazon, Salesforce, Twitter, Vodafone (One NZ), Shopify and Microsoft. These layoffs were largely attributed to over-hiring during the COVID-19 pandemic and the disruptive influence of artificial intelligence (AI), leading to job cuts and the replacement of staff with automation.

However, just as the dotcom bust of the 2000s resulted in an exodus of startup workers into other industries, precipitating the mainstreaming of the digital economy, Big Tech company layoffs have yet to substantially ease the demand for digital skills across the Aotearoa New Zealand labour market. Indeed, the tech worker shortage still appears acute, and remains on Aotearoa New Zealand's long-term skills shortage list. While the reopening of borders has led to a gradual increase in visa numbers for tech-related roles, they have not yet reached pre-pandemic levels. Aotearoa New Zealand is simply not producing enough local graduates to fill digital tech roles, with some in the tech industry noting a mismatch between existing tech skillsets produced by our education pipeline, and industry needs.

As noted by NZTech studies, Aotearoa New Zealand's tertiary provision of advanced digital tech education is not at the scale required in the labour market (NZTech, 2023), and faces a lack of resourcing and qualified instructors, and a mismatch with rapidly shifting industry

requirements. The lack of availability and resourcing of relevant digital tech skills being taught in schools is likely a symptom and a cause of the overall digital skills shortage and inadequate supply of skilled university graduates. Uptempo analysis of detailed Ministry of Education (MOE) subject data shows a decline in 'tech' subjects, however, this is mainly due to basic vocational computer and word processing subjects being increasingly outmoded - something we would expect to see as tech has advanced. Yet these subjects have not been replaced by a surge in advanced digital skills subjects across the board, likely due to the slowness of curriculum change and a lack of teachers with advanced digital tech skills - e.g. teaching relevant coding languages as opposed to 'using Microsoft Word' (Ministry of Education, 2022a).

These systemic challenges in the education pipeline have meant little progress to improve diversity and equity in an industry dominated by male Pakeha and Asian university graduates. This is a serious concern for Pasifika in particular, who experience some of the worst systemic barriers to digital tech education, as discussed further below.

² The digital tech industry is defined as follows: "Due to the cross-cutting and dynamic nature of the tech sector, well-established boundaries around the digital technologies sector do not exist...digital technologies are part of the New Zealand 'Tech Sector', a broader grouping of ICT industries that includes telecommunications and certain manufactured products." MBIE, 2023.

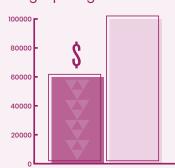
Underrepresented and Underpaid:

The tech environment for Pasifika people

Tagata ne ai kiva e tau lima, nakai fai tonuhia ke fai talahauaga – Those whose hands are not dirty should not have a say in important village matters.

NIUEAN PROVERB

Pasifika are significantly underrepresented in the digital tech industry. This has intergenerational implications in terms of income, equity and wealth generation, as digital tech skills represent a high-paid growth industry with strong social



mobility prospects. In 2021, the industry offered significantly higher average wages (\$100,000) compared to the national average in Aotearoa New Zealand (\$59,7031) (NZTech, 2021).



According to NZTech, in 2021 Pasifika made up 4.4 per cent of the workforce in tech-related fields, even though they currently represent about 8 per cent of

the national working-age population, and close to 15 per cent of working age people in Auckland where digital tech jobs are clustered (Statistics New Zealand, 2022). The NZTech figure is fairly consistent with detailed Census 2018 occupational data, which also has Pasifika workers at around 4 per cent of tech occupations.

In 2018 this came to just under 2,000 people, or half as many Pasifika workers in ICT roles than there should be compared with their share of the population (Statistics New Zealand, 2018). While the figures are unacceptably low, the small size of the ICT workforce means that rapid improvement can theoretically be made – as shown by the increase in the rate of Pasifika digital tech workers from 2.8 per cent to 4.4 per cent over six years in the NZTech survey (NZTech, 2023).



Census data also shows that Pasifika ICT workers have a \$12,000 income gap compared to others in their fields (Statistics New Zealand, 2018). Ethnic income disparities in Census data suggest that the typical barriers to career and pay progression affecting Pasifika workers generally (Cochrane & Pacheco, 2022; The Southern Initiative & Ministry of Business Innovation and Employment, 2018; The Treasury, 2018), are just as bad if not worse for Pasifika in higher-paid, higher-skilled industries such as digital tech. This underlines the need to not only focus on entry pipelines into digital tech for Pasifika, but on career and pay progression within the industry.



What is wrong with the education pipeline for a digital Pasifika workforce?

He po'i na kai uli, kai ko'o, 'a'ohe hina pūko'a – Though the sea is deep and rough, the coral rock remains standing.

HAWAI'IAN PROVERB

Building a robust pipeline of skilled, diverse digital tech workers is essential, not only for Pasifika social mobility, but for the tech industry and society as a whole. The benefits of diversity in tech are well-documented, including increased innovation, better problem-solving, and the creation of products and services that effectively serve a wider range of users effectively. Growing tech skills pathways for Pasifika aligns with three of the four focus areas of Aotearoa New Zealand's Digital Technologies Industry Transformation Plan (ITP):

- Growing export success: growing the export potential of Aotearoa New Zealand's digital technology companies, with an initial focus on Software-as-a-Service (SaaS) firms (and game development as a future priority subsector).
- Telling our tech stories: showcasing the scope and potential of digital technologies in Aotearoa New Zealand to both overseas and domestic audiences.
- Enhancing the skills and talent pipeline: equipping more New Zealanders, from a wider variety of backgrounds, with the technical and soft skills needed to work and thrive in the digital technologies industry, and to grow businesses in the industry (as well as other sectors now reliant on digital technologies).

Pasifika access to the educational pipeline is suffering from an equity deficit. Building the Pasifika pipeline of skilled digital tech workers needs to start well before secondary school. It begins with nurturing an interest in tech, fostering STEM (Science, Technology, Engineering, and Mathematics) education, and providing mentorship opportunities from a young age³.

Pasifika digital tech leaders and Uptempo practice-based learnings acknowledge that awareness of digital tech as a career pathway is low among low-income Pasifika communities, which have been systematically ushered into manual and trades sectors via historical labour migration policies. The long-term structural and systemic inequities affecting Pasifika communities as a result, have been welldocumented (Uptempo, 2023). More recently, the local and global impacts of the COVID-19 pandemic have made this worse, in terms of the impacts of disengagement from school during lockdowns, and the disproportionate impact of the cost-of-living crisis on the already poor. Meanwhile, pre-pandemic disparities such as the persistent pay gap between Pasifika and other New Zealanders remains unresolved (Cochrane & Pacheco, 2022; New Zealand Human Rights Commission, 2022). These factors lead to many 'aiga prioritising their immediate needs, leaving

little bandwidth for pursuing career pathways that would put household income at risk. Pursuing digital tech pathways can have high barriers to entry for Pasifika workers, such as student fees, periods of time out of work to train, mindset shifts to consider untraditional careers, limited social capital in the industry, and NCEA requirements subjects that were never provided as options.

Analysis of 'tech decline' in schools tends to conflate digital tech with 'technical' vocational subjects – there is actually high participation in 'technology' subjects in low-income neighbourhoods where Pasifika communities are concentrated. However, this reflects participation in trades or vocational subjects, including basic computer and office software use, compared with a relative gulf in advanced STEM teaching or advanced digital skills (Ministry of Education, 2022a). Detailed subject analysis by ethnic group shows that Calculus, a key requirement for the most sought-after ICT engineering degrees, is declining in uptake across the country, but markedly more for Pasifika students. The number of Year 13 Pasifika students taking calculus since 2011 has more than halved from its 15-year high of 748 in 2011, to only 351 students in 2021 (Ministry of Education, 2022b), an alarming trend given that the Pasifika rangatahi (youth) population overall is steadily increasing. This adds weight to earlier findings about how inequities in the school system are shutting off opportunities for Pasifika rangatahi by streaming them out of advanced STEM subjects (Johnston & Singh, 2016; The Southern Initiative et al., 2020).

In this context, it is unsurprising that in 2021 only 110 ICT graduates from Aotearoa New Zealand universities were of Pasifika descent, or 4.2 per cent of all ICT degrees, compared to with only 120 Māori graduates and 990 Pakeha graduates (NZTech, 2023).

Key data points about Aotearoa New Zealand's digital skills pipeline for Pasifika in 2021 (NZTech, 2023):

- 351,863 secondary student learners
 - 10 per cent were Pasifika
- Year13 NCEA technology students
 - 8 per cent were Pasifika
- 1,710 domestic IT degree graduates
 - 4 per cent were Pasifika
- 1,955 entering tech degree level courses
 - 5 per cent were Pasifika
- 2,690 graduated at degree level in computer science, information technology or software engineering
 - 4.2 per cent were Pasifika (110 Pasifika compared to 1,530 of Asian descent and 990 of European descent).
- Pasifika make up 4.4 per cent of the tech workforce.
- 60 per cent of respondents in the 2023 Digital Skills survey said they have no Pasifika in their workforce.



Going around the barriers

Totō hau tōkiga nei, aua na tupulaga e fāi mai – Plant a seed today, for the future generations.

TOKELAUAN PROVERB

Due to these systemic barriers to entry into – let alone completion of – ICT-related tertiary degrees in engineering and computer science for Māori and Pasifika rangatahi, for the last five years TSI innovation programmes, including Uptempo, have focused on ways in which Pasifika rangatahi can sidestep the need for a degree to enter the digital tech workforce.

This has been possible precisely due to the mismatch between digital skills curricula at universities on one hand, and industry requirements on the other, which has arisen due to the fast-paced development of digital technologies compared with the pace of curriculum change. This technique of 'going around the barriers' has been led within TSI's work by Joel Umali, a social innovator specialising in tech upskilling and a digital equity champion.

Umali found that there were many digital tech jobs that did not necessarily require advanced degrees, and that digital tech employers have been very receptive to hiring based on skills rather than degree-level qualifications. It was clear that leveraging this workaround would mean that "Pasifika communities have immense untapped potential in the tech sector". Umali's experiences implementing initiatives in this space have highlighted two key enablers:

 Connection to a Pasifika tech community providing representation, exposure and guidance:

"When young Pasifika individuals don't see people who look like them in tech roles, it can be discouraging. Representation is key to inspiring the next generation... When we empower Pasifika individuals with tech skills, we not only address the diversity gap but also unlock the potential for them to drive positive change within their own communities."

Mentorship to support exposure to tech is a key part of this.

 Resources for clear, accessible and collaboratively supported journeys:
 Requiring coordination between government agencies, private tech companies, trainers, and community organisations, that might include mentorship programmes, scholarships, and partnerships with educational institutions.

The model of short bridging courses or specific digital skills training, alongside brokerage support into employment has yielded results like Sela's and Jake's journey. Bridging courses that they took, as well as those offered by Mission Ready (case study also below) are good examples of how Pasifika without degrees can move into tech. These stories highlight the underused potential of Pasifika talent that has been screened out by barriers to digital tech education, and emphasise the crucial role of culturally competent wraparound social, educational and employer support to build confidence and readiness for upskilling and work transition.

Case study Building confidence and resilience through training and employers

Sela is a Pasifika rangatahi in her early 20s who described herself as usually 'shy and introverted', and who lacked parental support and presence growing up due to her parents working multiple jobs and long hours. Her initial career path was marked by uncertainty and doubt, but this changed with the programme and support offered by Rea, a Māori-owned tech education provider. Rea aims to empower rangatahi and adults without formal degrees by upskilling them with in-demand tech skills and placing them into work with trusted partners. With no formal qualifications, but with the right support systems, Sela was exposed to new opportunities such as further studies with Rea to complete the Switch-Up: Pathway to Work course⁴, and went on to start a career at one of The Big Four, in one of the world's leading consulting firms. She transitioned into a tech consulting role, embracing a field she hadn't initially considered.

"I went from saying 'no to tech' to being a tech consultant. I consult with clients on tech, advising them on what can be done and what can't be done on their apps. It's an amazing experience... I feel like I'm in a really good position right now. Even without a degree, there are so many doors open to me."

Uptempo has found from its 'aiga insights that perhaps the most the crucial piece to upskilling, especially into new sectors, for low-income Pasifika is increasing confidence in order to shift mindsets and take in expanded possibilities. This is best achieved within a culturally safe environment like Rea, where Sela spoke of the confidence the programme gave her in her own cultural strengths:

"Participating in programs like this encouraged me to stay true to my values and what I have to offer. It made me realise that my culture and beliefs are an essential part of my identity."

The turning point in Sela's career was when the Rea course had her explore potential career pathways by going to prospective employers and interviewing them to learn more about their work rather than the other way around. This reversed the power dynamics and gave Sela agency over her career choices.

"They [Rea] encouraged us to interview all potential employers, even if we weren't sure. [One consulting firm] stood out because they valued our input and made us feel like our voices mattered."

Sela's experiences have given her a renewed sense of hope and perspective. She believes that success does not hinge solely on having a degree and is optimistic about the opportunities that lie ahead. She comments, "I'm not sure about the future, but I know I'll be okay. Everything will work out because what's meant for me will come to me."

Furthermore, Sela highlights the positive work environment she experienced from her employer, citing strong support systems in place and a learning culture that improved confidence and derisked the fear of failure. Uptempo has previously highlighted this as a big barrier for its Pasifika 'aiga with a low baseline of formal qualifications. Sela was onboarded with:

"buddies, career coaches, and project coaches. I feel confident and supported in my role here... There's a group here dedicated to helping Pacific Island and Māori, so there's heaps of these different cultural groups as well that you can join, they're more like a support system for you... One thing they were really good at was just encouraging you to speak up... they would always like tell you to just be curious. One of the first things that they said to me was, we don't expect you to know everything...we don't expect you to be perfect. And I think that's what helped me a lot as well because I'm usually quite a shy and introverted person."

⁴ The Switch-up course: Pathway to Work course is over 18weeks and prepare people to start in paid work with one of the Rea's employers. More information here https://rea.coach/switchup/

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Case study Mission Ready - bridging the tech skills gap

Mission Ready, a private tech training provider in Aotearoa New Zealand formed in 2018, is on a mission to bridge the tech skills gap by offering an alternative to traditional university degrees. They focus on supporting four key groups, Pasifika, Māori, women and those living below the poverty line who are considering a career change into digital tech. Diana Sharma, the Co-founder and CEO of Mission Ready, discusses the challenges they encounter and their commitment to diversity and social impact through scholarships and financial aid programs.

One of the challenges Mission Ready noticed is a mismatch between the skills of graduates and the expectations of employers. Diana shares:

"We have a lot of talent coming out of two to three to four-year degrees but not getting a job at the end of it. At the same time, we have industry saying, 'We need people.' The challenge is that industry would advertise for junior roles but demand two years of experience."

The issue here is that tech skills evolve rapidly, but educational materials can become outdated. The challenge lies in keeping course material up-to-date and relevant in an ever-changing tech landscape. Diana comments that, "Tech skills are shifting rapidly, and education isn't necessarily keeping up with it. Course material can become outdated, and textbooks may be ten years old."

Mission Ready encountered instances of candidates believing that tech is not for them. This mindset shift for candidates is a significant challenge, and Mission Ready aims to shift this. "One of the biggest challenges is the perception that tech isn't for everyone. We need to shift the awareness of the opportunity in tech and break the 'I don't see myself in tech' barrier", Diana.

Another barrier that Mission Ready noticed amongst candidates, is the time and commitment constraint, "People often find it hard to make a career switch due to time and commitment constraints, especially in the face of the cost of living crisis," Diana notes.

In response to these barriers, Mission Ready offers scholarships and financial aid through their charity, Mission Impact Foundation, several training programmes, and a flexible training environment, these include:

- 10 Weeks of Training and 10 Weeks of Experience, helping candidates gain the skills and experience needed for tech roles.
- **Pay when hired model**, where candidates may enrol in a programme and only pay when they are hired into a tech role.
- **Part-Time Programs:** To accommodate candidates with time constraints, Mission Ready offers part-time options, allowing them to balance their current commitments while transitioning into tech careers.
- **Remote Training Environment:** To accommodate candidates from across the nation and other commitments in their lives. "And so the good thing is it can work around your life and we have recordings and people can catch up in their own time", Diana comments.

Mission Ready has provided over 136 scholarships in 2023 with an additional 30 scholarships to give to potential candidates, had 649 enrolments in 2022, and an 87 percent placement rate.

Mission Ready's innovative approach to tech training, combined with their social impact mission, "Ensuring no ones left behind", demonstrates their dedication to addressing the challenges in the tech industry while ensuring that no one is left behind in the pursuit of a tech career.

Opportunities to support Pasifika in tech:

'Village-based' models

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Aramas chok angang – People must work together to accomplish great tasks.

FEDERATED STATES OF MICRONESIA (CHUUKESE) PROVERB

Pasifika tech leaders acknowledge that awareness of digital tech as a potential career is extremely low in their communities, given the 'broken' nature of the formal digital tech education pipeline. As discussed, the shortage of high-quality digital tech and and STEM teaching is an issue that affects the whole public education system, but particularly impacts Pasifika rangatahi due to existing systemic inequities. As such, there must be a focus on Pasifika-led community organisations providing culturally competent tech education initiatives to bridge awareness gaps for Pasifika rangatahi and their families. Digital tech must be brought into the communities to be seen as a viable educational and career option.

The village-based model of bringing tech into the community, has produced a positive impact as shared in the stories of Mez and Microsoft. They also emphasise the crucial role of culturally competent wraparound social support to see Pasifika progress in tech roles and Pasifika become more aware of tech as a potential career.

In contrast, Lina's story highlights the missed opportunity when employers are not supporting Pasifika in a culturally safe manner to enter tech.



Case Study 'Bringing the industry to the community' to raise awareness of digital education-to-employment pathways

South Auckland Steam (SAS) and Coconut Wireless have emerged as community-based initiatives targeting Pasifika and Māori rangatahi, both led by Mary Aue (NZOM) also known as 'Mez'. SAS was established to empower Pasifika rangatahi through education, technology and community engagement, providing a wide range of activities that were not yet being adequately offered locally, from school holiday programmes to intergenerational learning experiences. SAS takes a community-centred, intergenerational village-style approach to education, fostering a sense of belonging and mutual support among participants. Coconut Wireless is a general interest Pasifika community online noticeboard and social network brand with a combined following of close to half a million followers across Facebook and Instagram, which Mez also uses to promote tech literacy, not just in Aotearoa New Zealand but across the Pacific. One of the highlights of this platform is that it offers digital literacy education for community members of all ages including elderly who are a part of their iMATUA programme. This creates opportunities for intergenerational learning: "Our kids teach our elderly how to use technology, and in return, they receive lessons in traditional skills like weaving".

"It's time for the tech industry to recognise the value of community knowledge and collaboration. Community has been the core of everything we do" says Mez.

"Unless we incorporate community knowledge into education and technology, there will be a disconnect."

This reflects key Uptempo findings about the value of leveraging existing Pasifika cultural strengths and models of collective learning, leadership and knowledge transfer to 'move as a group' into uncharted waters, including digital tech upskilling.

Mez emphasised the importance of involving industry leaders to inspire Pasifika rangatahi, "bringing the industry to the community" – specifically, out of the CBD and into South Auckland, in order to build awareness and engagement.

"We are in the awareness phase" says Mez.

SAS organised the first South Auckland STEM Conference and Expo in 2023, with the theme of 'Weaving Indigenous Knowledge with 21st Century Innovation'. There was a high level of engagement from rangatahi and families - more than 2,500 people attended with an estimated 1,500 being students, providing students, parents, grandparents and teachers with the opportunity to meet well-known industry experts and gain insights into the tech industry.

This was a high-calibre event that involved cultural performances and music. "The students loved the hands-on experience of tech and the feedback was that the food and music was good", Mez.

TSI's research on similar events suggests that for sustained impact and engagement, Expos should be directly connected to curriculum and job opportunities, supported by pastoral care, which SAS as 'village-model' curriculum providers are well-placed to potentially explore for future iterations.

Case study The village approach at work – a diversity opportunity

Closing the representation and wage gap for Pasifika in tech jobs requires proactive diversity and inclusion programs across all employers with digital tech needs, which is nearly all employers. Some big tech employers have made reasonable headway in fostering an inclusive workplace ecosystem that supports Pasifika values, although some initiatives may be under threat due to challenges for tech employers in the current economic climate. In this case study, a group of Māori and Pasifika employees at Microsoft who are passionate about Pasifika in tech (including the Co-Chair of Pasifika and Global Co-Chair Indigenous) reflect on the organisation's approach to supporting Māori and Pasifika in the workplace.

"...we should also provide a korowai or a cloak around them... Pasifika and Māori in particular need a wraparound of support just so they can get that manaaki especially in early on in the career because it's so much harder for them", Dan.

Dan Te Whenua Walker (Dan) and Teresa Otineru (Tes) represent unconventional paths into the organisation. For Dan, holding a tech related degree was not the entry point, and Tes's background was in finance, underlining Microsoft's flexibility around various pathways into the organisation. Notably, internships are not considered a strong pathway at scale.

"There are different routes to get in, but it's not always the traditional routes. Internships are quite locked. There are only a few internship roles each year", Tes.

As an industry leader, Microsoft is generally considered strong on diversity, equity and inclusion. As well as the establishment of a Pasifika network group, other initiatives that Microsoft is actively working on to support Pasifika employees include:

- **Reverse Mentoring:** Pasifika employees are matched with mentors at the senior leadership level. This two-way learning approach aims to build professional mentorship connections for employees, and cultural capability and understanding for senior leaders.
 - "So we have, I think about 15 or so Māori and Pacific within Australia Aotearoa New Zealand matched to a mentor at the SLT, and it was reverse mentoring. We designed a programme to talk about things greater than just business, to give an understanding of both sides that they will both be coming and learning something from it."
- **Cultural Exchange Activities:** The company is considering the implementation of programmes that showcase the rich cultural heritage of Pasifika employees.
 - "We have an opportunity here to go through language weeks as an example, and showcase what our cultures are about so that people understand us more than what they see at face value", Dylan.

The group was also positive about Microsoft's recognition of Pasifika worker context that previous TSI and Uptempo research has highlighted, such as:

- recognition of 'non-CV' cultural capital and soft skills that Māori and Pasifika employees bring to the table from community leadership, communication and interpersonal skills.
- "knowing that as an employer or as an interviewer that [Pasifika candidates or employees] are not going to talk themselves up because that's not how they roll"
- the need to ensure mentorship, support and community-building: "Pasifika and Māori in particular need a wraparound of support just so they can get that manaaki, especially early on in the career because it's so much harder for them"

A member of the talanoa group, Dylan, felt that the support he received from the Māori and Pasifika network was:

"definitely a core foundation of my success, and I do owe this to the likes of Dan and Tes. That ability to make me feel welcomed in this space that traditionally may have emitted an energy that may not make you feel that way, because of the certain looks and feels of the office does hinder the confidence level. And confidence is very important, and with the right support that confidence can be built".

Key challenges from the tech employer downturn highlighted in the talanoa were that the 'reverse mentoring' programme had been put on hold indicating broader organisational dynamics that can impact the implementation of DIE programmes, and the limited entry points into Microsoft potentially limiting the diverse talent pool that it seeks to attract.



Case study Missed opportunity to enter tech

Lina who is of Pasifika heritage, attended university in Tāmaki Makaurau as a mature student and completed a Bachelor of Commerce with a double major in Information Systems and Commercial Law. She was aware of her tech skill limitations and pushed herself to undertake information systems, as a means of preparing for a career in tech. Lina's main motivation was to support her young family.

"I knew that I had a lack of tech skills and actually had a fear of not being able to do simple things in tech like use an excel spread sheet. I wondered what my future was going to look like if I was not comfortable using tech and online tools, so I decided to major in Information Systems", Lina shares.

However, armed with her BCom and a keenness to enter a tech role, Lina applied for various tech roles across different industries with no luck of an interview. Refusing to feel defeated, Lina looked at her options and decided to enter an HR role and pursue an HR data analyst role or similar, once she successfully secured a job.

"I kept applying for tech roles with no call back, just the usual 'you were not successful in your application' email. At first it was disheartening and then I reminded myself that I had a child that relied on me, and I didn't have time to feel sorry for myself. So I decided to try the HR route because my other major was Commercial Law. I thought this could be a means of getting to a HR data analyst or HR systems role".

Luckily, Lina managed to secure a HR Coordinator role in a large tertiary organisation and quickly made it known to her manager that she would like to pathway into a data analyst or systems role. At first the manager was supportive, connecting Lina with the HR Systems Manager to learn about the role, and what skills she needs to develop in preparation for this role. However, as the year passed Lina noticed that there was no further effort to help her move into the tech role.

At one point the HR Systems Analyst role became vacant. Lina thought that having demonstrated a can-do attitude, made an effort to learn the HR system, Microsoft Power BI, the internal Sharepoint site, and improve some of the fields of the HR system, that if she applied for the role that she would have a good chance of getting it, if not at least an interview.

"I had been learning about the HR Systems role when it became vacant a year later. I really thought that the team would give me a chance, but they didn't even offer me an interview. They hired externally and told me they needed someone with experience. How am I meant to gain experience when I don't even get an opportunity at the role? Also, why did the HR Systems Manager spend time mentoring me as a systems prodigy if she had no plans to give me an opportunity?", Lina laments.

After almost two years and several attempts during her one-on-one with her manager, again, sharing that she would like to enter a tech role within HR, Lina gave up on her tech dream. She decided to get pregnant and use her time off on maternity leave to re-evaluate her next career move.

"I tried to apply for other entry level roles into tech within the organisation and externally, and I kept being told I had no experience. Yet, in my current workplace I was learning but they wouldn't give me the opportunity to move into a systems role because I had no experience. It was starting to feel like a losing battle, and I just gave up. I needed to find a way to move into a higher paid role to support my family so I decided to move on from the idea of working in tech. So I got pregnant, went on maternity leave and took a different career path."

While Lina has gone on to do well in the entrepreneurial and education space as she will be undertaking a PhD in 2024, it remains that finding an entry point into a tech role was difficult. Despite holding a qualification, having the right attitude, and being in an environment that had tech roles vacant, Lina was not given the opportunity to enter tech for reasons that she had control over.

Recommendations

Kua tuwhera te tomokangga a Hina – Hina's door is open. We start with the fundamentals.

MĀORI PROVERB

RECOMMENDATION FOR GOVERNMENT - SPECIFICALLY THE MINISTRY OF EDUCATION (MOE)



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Improve the schooling and education pipeline for Pasifika tech skills⁵

- Improve funding to schools in areas with high deprivation and large Pasifika
 populations, earmarked for high-quality, culturally competent and equitable STEM
 and digital tech teaching, that will enable Pasifika students to take up tertiary
 degrees in STEM subjects. This should include community-based extracurricular
 activities linked to the core STEM curriculum that takes a collaborative 'village'
 approach to socialising digital tech and STEM concepts with Pasifika parents.
- Provide long-term and consistent government funding to established communityled Pasifika initiatives fostering tech awareness that are explicitly linked to school curriculum provision and pastoral care.
- Improve Pasifika access to quality tech-related education by intermediate school level or earlier. This could include early childhood education programmes, tutoring and scholarships.

RECOMMENDATION FOR GOVERNMENT



Create a supportive environment for Pasifika workers to move into tech

• Implement the NZTech Digital Skills recommendations⁶

Recommendation **Details** A Pasifika Approach Our collective response • Have a plan - create a digital Create a digital technology industry to digital skills challenges technology industry workforce plan. workforce plan that incorporates te need to mature rapidly ao Pasifika principles and values • Set targets - focus on realistic absolute numbers. Understand the issues for Pasifika undertake further deep dive research Understand the issues - undertake into specific challenges experienced further deep dive research into by Pasifika in tech. specific challenges. Use an Industry Standard - rapidly deploy the SFIA framework

This report does not focus on university student experience, but there are also numerous studies and reports examining institutionally racist barriers facing Pasifika students undertaking tertiary degrees in STEM and other subjects, which are also important to the overall picture of the pipeline, for example McAllister (Te Aitanga a Māhaki) et al., 2022. Technology, Engineering and Mathematics

NZTech recommendations:

[•] Our collective response to digital skills challenges need to mature rapidly

[•] Our largest employers must show leadership

Industry must prioritise collaboration and abandon rhetoric

Recommendation	Details	A Pasifika Approach
Our largest employers must show leadership	 Install leadership - responsibility should be entrusted to a senior Government official. Create entry level jobs - The Government should establish a wide range of entry level digital roles. Enhance the visibility of available support - maintain funding assistance for entry level roles and improve their accessibility. Address underlying causes - allocate resources towards ensuring universal internet and device access for all our rangatahi. 	 Install leadership - responsibility should be entrusted to a senior Government official. Ensure that there is Pasifika representation on this level. Create entry level jobs - The Government should establish a wide range of entry level digital roles and ensure 5% procurement of these for Pasifika people. Tailor the enhancement of the visibility of available support for Pasifika peoples - maintain funding assistance for entry level roles and improve their accessibility for Pasifika people. Address underlying causes - prioritise the allocation of resources towards ensuring universal internet and device access for all our Pasifika rangatahi.
Industry must prioritise collaboration and abandon rhetoric	 Engage in collaborative attraction efforts - work as an industry to support the attraction of rangatahi into tech. Collaborate on planning - support and improve workforce planning. Collaborate on new pathways - codesign and support work integrated learning. Collaborate on a platform - to make it easier to find industry courses, initiatives and information about tech careers. 	 Engage in collaborative attraction efforts - work as an industry in conjunction with the Pasifika community tech providers to support the attraction of Pasifika rangatahi into tech. Collaborate on planning - support and improve workforce planning. Ensure that there is Pasifika representation at the planning process. Collaborate on new pathways and incorporate te ao Pasifika - codesign and support work integrated learning. Collaborate on a platform - to make it easier to find industry courses, initiatives and information about tech careers. Ensure that there is Pasifika representation in the codesign and collaboration process of this platform.

- Foster collaboration between tech companies, educational institutions, and community-based education providers to scale up current effective provision of culturally appropriate, short, demand-led digital tech training programmes for Pasifika with limited formal qualifications. This should include job brokerage and employment support.
- Ensure digital tech upskilling pathways for Pasifika come with financial support to mitigate the opportunity cost of taking time out to study such as 'pay when hired' models that incentivise trainers to provide supported work-brokerage, earn-as-youlearn paid internships and apprenticeships, and training initiatives that come with family support services (Uptempo, 2022b, 2022a).
- Establish a government-level coordinated tech industry association led by or in collaboration with Toi Mai Workforce Development, and in collaboration with large tech employers to develop more entry level roles with training pathways into advanced digital tech careers, including through professional-level digital apprenticeship pathways.

RECOMMENDATION FOR EMPLOYERS



Ensure employers recruit, value, develop and progress the existing Pasifika tech workforce

- Adopt the Great Employer Matrix (GEM) standards (to be published early 2024) with particular emphasis on:
 - Promoting a holistic "village" approach within tech companies to support isolated Pasifika tech employees, including mentoring, peer group training, and Pasifika networks.
 - Building cultural competency and a deeper understanding of the motivations, family responsibilities and risks that Pasifika people may encounter in an industry where they are not well represented.
 - ▶ Recognising and financially resourcing the additional cultural labour, role modelling, and mentoring that Pasifika staff may be asked to undertake to develop the Pasifika tech workforce.

RECOMMENDATION FOR EMPLOYERS



> Promote industry-wide leadership on Pasifika representation

- Large tech employers to commit to targets in improving Pasifika representation in digital tech jobs.
- Challenge leadership of the largest tech employers to deliver on pay transparency in collecting and publishing both gender and ethnic diversity and pay equity data, if not already doing so.
- Invest in Pasifika leadership programmes within the industry to help build Pasifika social networks and social capital.
- Make visible via various organisational communication channels the stories of great practise and what Pasifika bring to tech, internally and externally.



Proverb

Section

Appendices

Glossary of Proverbs

Language	
Samoan	Purpose of the report
Tongan	Our approach
Fijian	Overview of the tech industry in Aotearoa
Niuean	Underrepresented and underpaid: The tech environment for Pasifika people
Hawai'ian	What is wrong with the education pipeline for a digital Pasifika workforce?
Tokelauan	Going around the barriers
Federated States of Micronesia (Chuukese)	Opportunities to support Pasifika in tech: 'Village-based' models
Māori	Recommendations
	Samoan Tongan Fijian Niuean Hawai'ian Tokelauan Federated States of Micronesia (Chuukese)

Language

UPTEMP()

Glossary of Terms

Translation Term

Rangatahi	Younger generation or young person
Talanoa	Discussion, conversation or chat – formal and informal
Korowai	Cloak
Manaaki	To support, take care of, give hospitality to, protect, look out for - show respect, generosity, and care for others.

Acronyms

Meaning of Acronym Acronym

DIE	Diversity, Inclusion and Equity
MOE	Ministry of Education
Digital Technologies Industry Transformation Plan (ITP)	Digital Technologies Industry Transformation Plan
STEM	Science, Technology, Engineering and Mathematics

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