

UPSKILLING AND RESKILLING IN THE DIGITAL TECHNOLOGY SECTOR - A DEEP DIVE

Seeking your views on what is working well and what needs to change

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IT Professionals
NEW ZEALAND

Te Pou Hangarau Ngaio

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SUMMARY

PURPOSE

The Skills Steering Group for the Digital Tech Industry Transformation Plan is doing a deep dive into upskilling and reskilling in the New Zealand digital technology sector, to ensure that investment in this area will help meet the demand for experienced digital technology professionals.

The purpose of this paper is to get your views on:

- Existing opportunities for upskilling and reskilling: what's out there and is it any good?
- What is getting in the way of people being able to upskill and reskill: do the barriers and problems identified so far resonate with you? What else might be going on?
- How to change things up so more people have the chance to upskill and reskill in the digital technology sector: what are the most effective things that could be done?

CURRENT STATE TO FUTURE STATE

The digital technology industry is suffering greatly from a mismatch of skill supply and demand at different stages of the skills pipeline.

This makes it difficult for firms to find the experienced people they need, for graduates to get their first job, tech workers to get career progression, and for the sector to grow and in turn support the New Zealand economy.

Upskilling and reskilling is one of the ways we can address the skills mismatch in the digital technology sector by helping to fill the demand, especially for the senior roles where we have the greatest shortage. The only way we are going to fix this long-term is if we invest in the development of domestic talent.

The future state is one where there is clear career progression for the people joining and working in our digital technology sector. They know the skills they need to develop, there is training appropriate to their needs, and they have support to do it. And employers have the people they need, because they have helped develop them.

While immigration will remain important, investment in domestic talent, coupled with less reliance on the immigration pipeline, will bring more benefits for employers, people working in the sector, and New Zealand as a whole. This is not just a question of investing for the long term. There are global skills shortages and immigration constraints that mean the time is right, right now.

WORK TO DATE

The [Digital Skills for Our Future](#) report (released in January 2021) provided an updated analysis of the digital skills landscape in Aotearoa New Zealand, highlighting a number of system wide challenges needing urgent national attention.

The [Skills and Talent Plan \(released late 2021\)](#) proposed 10 actions¹, addressing all parts of the pipeline. It identified upskilling and reskilling as a key way to address

¹ The ten actions were:

- Action 1: A strong strategic focus on reskilling and upskilling
- Action 2: Rapidly expand pathway options to industry
- Action 3: Refine the immigration system to be more targeted
- Action 4: Industry to step up and lead the transformation
- Action 5: Māori to be a crucial partner in skills
- Action 6: Expand the Tech Story to a local audience
- Action 7: An All-of-Government strategic approach to skills
- Action 8: Increased support for digital tech learning in schools
- Action 9: Radically re-defined standardised job “roles”
- Action 10: Strengthen the tech sector through greater diversity

the mismatch, but found a lack of opportunities and coordination in this area. It recommended a strong strategic focus on re-skilling and upskilling (Action 1).

The Skills and Talent Plan was commissioned as part of the skills workstream for the [Digital Technologies Industry Transformation Plan](#), which is an industry/government collaboration.

WHAT'S HAPPENING NOW

The Skills Steering Group is working on the first action in the Skills and Talent Plan. It is undertaking a deep dive into existing opportunities for upskilling and reskilling, the barriers to it happening, and what needs to happen to encourage more upskilling and reskilling.

Our focus is on:

- **Upskilling people already working in the digital technology sector** in Aotearoa New Zealand to be able to take on more senior roles that are in greater shortage
- **Reskilling people already working in the digital technology sector** in Aotearoa New Zealand to be able to make sideways moves into the areas of higher demand and opportunity
- **Reskilling folks to move into digital technology from other sectors.** The focus here is on people already in the workforce with transferrable skills who could be awesome in tech.

Other actions from the Skills and Talent Plan focus on rangatahi (younger learners).

The results of this deep dive will help us put together an Upskilling and Reskilling Plan. This document isn't that plan, but it is a step along the way.

WHAT WE KNOW (OR HAVE HEARD) SO FAR

An initial scan found there are various opportunities for upskilling and reskilling across all three areas of upskilling and reskilling (listed above). We found a number of tertiary qualifications, short courses, intensive training opportunities such as boot camps, certifications, and on the job opportunities.

But while there are some excellent initiatives, the current landscape is fairly ad hoc and uncoordinated. There are barriers to accessing the opportunities, and in some areas gaps in what is being provided. Research and engagement to date suggests:

- Employers and hiring managers often don't have the skills, knowledge, resources or incentives to support their people with career development and provide an environment that is welcoming for a diverse workforce. Or they don't know how this can benefit their business. As a result, structured on the job training and other support tends to be limited to some employers –

usually larger employers, and those who recognise and understand the value of retaining and upskilling staff.

- Despite being a fast-changing industry, digital and tech workers often don't focus on upskilling and moving ahead in their career to the same extent as other professions. Often workers only "move ahead" with a change of employer rather than within their workplace.
- There isn't specific enough information on the exact skills that are in demand now (and ongoing), and those needed to support emerging areas of digital technology. Without this information, employers, people working in digital technology, and education providers don't know what to invest in.
- The current Reform of Vocational Education brings the potential for better industry alignment and more innovation, but this hasn't been realised yet.
- It can be difficult to know what upskilling and reskilling training is available, what would best suit a person on a particular path, and what is acceptable to employers.
- There are gaps in current training offerings. This includes a shortage of:
 - Earn while you learn options, which are needed to bring greater equity and diversity to the sector
 - Programmes designed for and by Māori and Pacific
 - Bare minimum programmes to allow faster upskilling and reskilling for people already working in digital technology
 - The work experience opportunities needed to go alongside reskilling training (especially important for those reskilling into digital technology from other sectors)
 - Intensive training opportunities (such as the Dev Academy model to retrain to become a software developer) at scale and for a broader range of digital technology roles.

SO WHAT NEEDS TO HAPPEN?

Some initial ideas

The evidence and insights from initial engagement and research suggest some steps we can take to fix these problems and fill the gaps, which are outlined here.

They include:

- Training and tools for employers to help them realise the benefits of developing and supporting domestic talent and how to go about it
- More leading and learning from example, especially by the bigger employers (including government)
- A simplified and categorised “directory” of digital tech offerings that makes it easy to know what upskilling and reskilling training options are available
- Collaborating on *earn while you learn* options, such as apprenticeship degrees and apprenticeships for those looking to reskill into digital tech
- A greater range of “bare minimum” top up training options for those already in the sector wanting to get to the next level
- An awareness-raising campaign highlighting opportunities and how to move into the digital technology sector.

Prioritisation

The Upskilling and Reskilling Plan will need to:

- Prioritise what will work for the people who are currently under-represented and not well supported in the sector.

Let's make this the starting point rather than an afterthought. There are some significant developments in Māori and Pacific communities to address the challenges outlined above. There could be opportunity to, for example, support the work that has been undertaken within a te ao Māori perspective and in partnership with those leading those initiatives, help scale it to the wider community.

- Shine a light on existing ideas and help these to scale if they can fix the problem. We don't always have to come up with something new.
- Focus on the things that could help us solve more than one problem in the skills pipeline. For example, when we are thinking about reskilling and upskilling we should also be thinking about diversity and inclusion.
- Be mindful of the work being done to support earlier parts of the pipeline.

HOW TO HAVE YOUR SAY

Before making recommendations to government and the digital technology and education sectors, we want to test initial thinking with you and get your perspective on what else could be done.

You can share your thoughts with us by completing the consultation feedback survey: <https://survey.zohopublic.com/zs/wjCCvP>

If you prefer, you can also email additional comments to consultation@itp.nz

Questions

What have we missed in our summary of the existing opportunities for upskilling and reskilling? What is working really well?

What is getting in the way of people being able to upskill and reskill: do the barriers and problems identified here resonate with you? What else might be going on?

What can be done to give more people the chance to upskill and reskill in the digital technology sector? Tell us what you think of the ideas outlined here, what else could be done, and what would be most effective.

The last day to get your thoughts to us is **22 May 2022**.

NEXT STEPS

The Skills Steering Group will consider all feedback and perspectives, and complete development of the Upskilling and Reskilling Plan. This will then sit alongside the Skills section of the Industry Transformation Plan for the Digital Technology Sector.