A shrinking tech talent pool or an opportunity?

Evaluating your options to overcome the digital skills shortage

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Introduction - what does the skills shortage mean for our digital future?

The skills shortage brought on by the pandemic has hit the tech sector especially hard, and is having a knock-on effect to all industries.

Until COVID-19 hit, **4,000 - 5,000 tech professionals** have immigrated to New Zealand over the last five years. But with the New Zealand borders intermittently closed or severely restricted, the tap of talent has been closed off almost overnight and for now, almost two years.

"With over 20,000 high tech firms in New Zealand, plus most users of digital technology attempting to become more digital, the demand for digital skills has well and truly outstretched supply," **says NZTech CEO Graeme Muller.** *"You can't expect to go from 5,000 international workers to zero and expect business as usual."*

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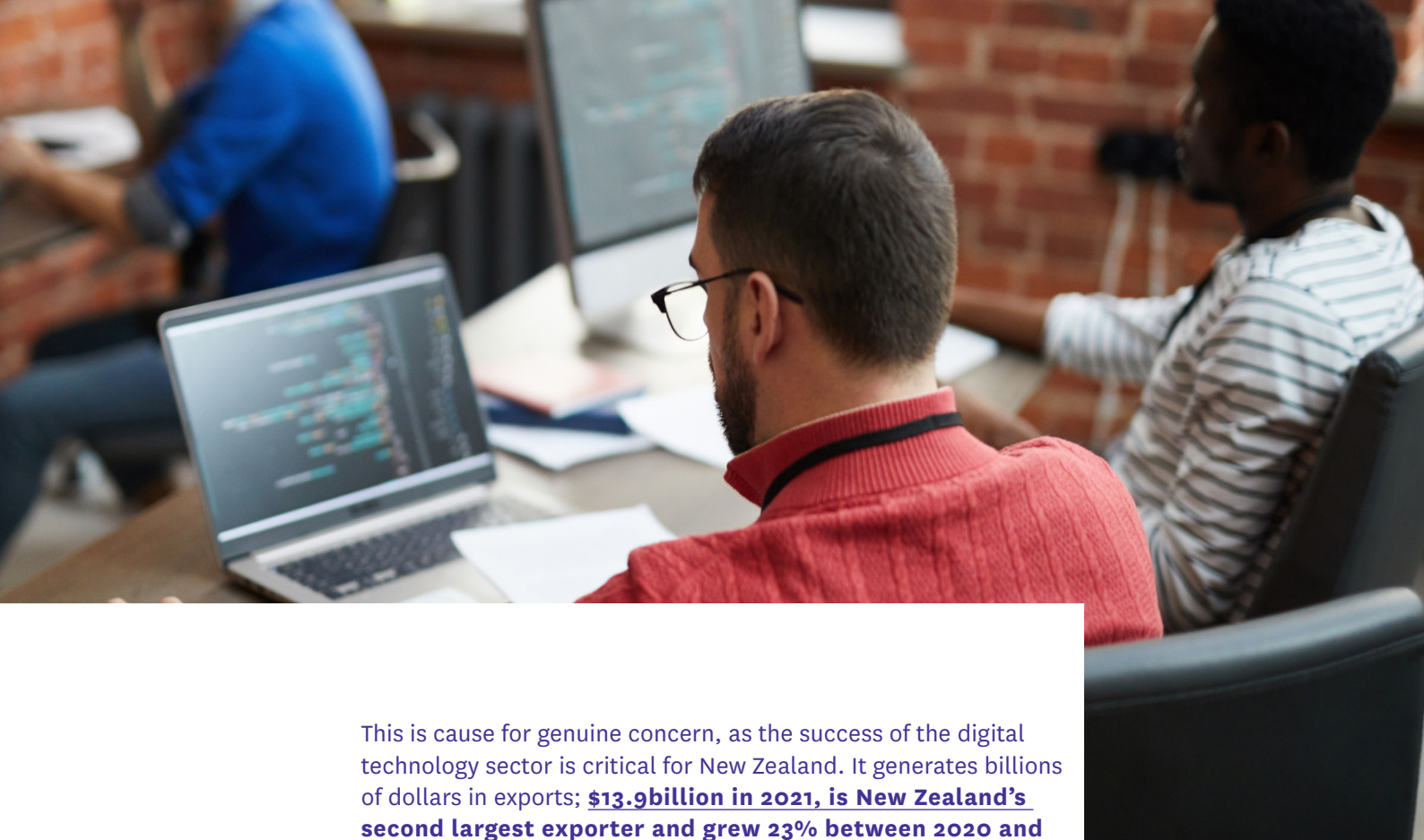
This is cause for genuine concern, as the success of the digital technology sector is critical for New Zealand. It generates billions of dollars in exports; **$13.9billion in 2021, is New Zealand's second largest exporter and grew 23% between 2020 and 2021** — a trend set to continue. The tech sector enables the ongoing digitisation of the economy and is of huge economic value. In other words, if the skills shortage is not addressed, New Zealand is risking its digital future.

How do you undergo business transformation projects when recruiting is tough? How do you get the quality and experience you need to get a business transformation project to market and stay ahead of the competition?

The good news is that there are ways to meet the challenges of the digital skills shortage. In this eBook, we'll help you to understand your options so you can continue to innovate and grow.

Grappling with the challenges of the tech sector skills shortage

As with most problems, gaining a good understanding of why they exist is essential. So let's take a closer look at the specific challenges surrounding the digital skills shortage and see if any of them apply to your organisation.

High level of demand

For too long, Kiwi businesses have relied on immigration to fill digital technology roles. The high demand for people with advanced digital technology skills has resulted in very favourable immigration settings for New Zealand employers, and they've been sourcing their talent from the global pool. Combine that with a decline in tertiary enrolments for tech courses, and the fact that digital technology study and careers are not attracting women and under-represented minorities[1], and you can see how COVID-19 has impacted drastically on the tech sector.

Experience and upskilling

People with proven experience in the tech sector are in high demand, especially since their numbers are dwindling. These are people who have upskilled either with previous employers or on their own initiative, but the reality is that most organisations spend less than 10% of their training budgets on digital technology upskilling[2]. Those that do invest more resources in on-going training for their staff will have higher levels of retention and are better able to focus on business transformation projects.

1   NZTech Report: Digital Skills For Our Digital Future, pg 11
2   NZTech Report: Digital Skills For Our Digital Future, pg 13

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Hanging on to skilled and experienced staff

We just touched on retention, and it's worth looking at in a bit more detail. The notion is a simple one, however, if businesses don't invest in their staff, those people will not feel valued and they're likely to take their skills and experience somewhere that will appreciate them. With no way of knowing how long the pandemic will restrict immigration arrivals, Kiwi organisations need to support the transition from education to digital technology careers and help those already working to upskill or reskill with in demand digital skills.

The cost of upskilling

Of course, investing in staff training is not always as easy as it sounds. The reality is that budgets have tightened significantly, and organisations are finding themselves too financially stretched to continue to upskill their staff. This, of course, perpetuates the cycle; if a company can't find the time or money to upskill their employees, they risk their more driven staff looking for work at an organisation with learning and development at the forefront.

Poaching by forward-thinking companies

You can see how these challenges flow. A tight labour market can see good staff being headhunted and being offered bigger salaries and better packages to make the move. This hugely competitive environment can mean significant financial cost to retain the base of staff you have.

The acceleration of digital transformation

It's ironic that COVID-19 is largely responsible for the digital skills shortage — not just because the global talent pool is drying up, but because business continuity is now highly dependent on digitisation. As businesses close their bricks-and-mortar doors and open their virtual ones, there's been a drastic rise in the need for digital technology. What this means, of course, is that the demand for digital skills is higher than ever.

If any of these challenges sound familiar to you, it's because your organisation, like many others, is becoming increasingly reliant on a skilled digital labour force. Advanced digital skills are no longer the domain of the IT sector; digital transformation is impacting on all industries, creating a huge demand for those with experience and expertise.

"New Zealand has not invested in skills and innovation to nearly the same extent as high performing small, advanced economies," says NZ's Productivity Commission's David Skilling. "It has not focused on developing knowledge intensive competitive advantage."[3]

What does a digital skills shortage mean for your business?

Increasingly, businesses are looking at ways to streamline and automate their business processes as a means of freeing their staff from time-consuming manual processes and allowing them to focus on more high-quality tasks.

If organisations don't begin a digital transformation journey, and stay on it, continually seeking ways to innovate, they will rapidly fall behind the competition and struggle to catch up. From small business to large scale enterprises, there is technology available to digitise where possible and ensure companies move with the times.

What this means, of course, is that you need people on your team with digital skills, no matter how rudimentary. If you're going to harness digital technology, then everyone on your team needs to have some level of aptitude to get the most out of it.

If an organisation is lacking in digital skills, they'll limit their ability to:

- Work remotely
- Connect with customers virtually
- Keep up with and stay ahead of their competition
- Take on advanced projects
- Gain efficiencies
- Take advantage of opportunities to profit from digital exports
- Grow their business

Digital transformation continues to accelerate and to disrupt businesses on a global scale; if your organisation isn't keeping up and if you don't have the staff with the necessary skills, the survival of your business is at risk.

How can we meet the challenges of the digital skills shortage?

The good news is that the digital skills issue is manageable, it's not an insurmountable problem. Solving it means getting both creative and proactive —and you'll find that you can transform the digital skills challenge into an opportunity. Let's look at how.

Upskilling your team

By now you'll have realised the importance of upskilling. If you invest resources in your current workforce, you're not only going to benefit from their increased expertise, but you're also more likely to retain them. Upskilling is critical across the spectrum — from providing training around a new administration system to sending people on advanced courses and gaining new certifications and qualifications. Remember that although the costs of training may stretch your budget, you'll realise a healthy ROI further down the track. While it is difficult to fully calculate the cost of turnover it can often equate to **25% of the average employee salary** – and this is a conservative estimate.

Talk to your teams and pinpoint the areas that require greater expertise. Find out if they've looked into training courses that will benefit your organisation. And when you invest in digital technology designed to streamline your business processes, it's absolutely critical that your staff receive all the training they need to get to grips with that tech and use it productively.

Offer incentives for completing new digital accreditations, as this encourages your workforce to keep their digital skills sharp and up to date.

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Retaining digitally skilled staff

Offering training and the opportunity to upskill isn't the only way to retain staff. Look at ways you can offer increased flexibility in their role, such as working remotely or changing working hours. The more flexible you are, the more attractive your organisation will be when it comes to recruiting.

It's also important to manage performance with regular, detailed performance reviews. This kind of feedback is essential to make sure your staff are engaged, and it needs to be a friendly process that encourages discussion and interaction.

And speaking of managers and team leaders, make sure you regularly evaluate their performance too. They need to motivate and inspire your teams and set useful goals.

Working with an outsourced partner

Digital skills don't have to be sourced exclusively in-house. There are tech companies that will partner with your business and provide you with the knowledge, skills and experience you need to remain competitive in an increasingly digital landscape. This may be a more daunting option, but the rewards are often worth it. Especially since resources to complete key projects becomes the providers responsibility, relieving you of the headache of finding digitally skilled staff. Outsourcing means that you and your team can focus on your core business tasks, secure in the knowledge that you're continuing your digital transformation journey and are not being left behind.

Look for a partner with proven digital experience in your industry, one that takes the time to understand your business and its goals. They should be focused on building an on-going relationship, collaboration and have great ability to listen to your requirements and architect them into a solution.

Automate wherever possible

This is known as Business Process Automation (BPA) and it's about using digital technology to automate repetitive tasks. Applying BPA means eliminating manual processes (which are prone to error) and gives your teams more time to focus on core, high value tasks. BPA is one of those digital innovations that don't require major IT infrastructure or expert personnel; the rise of cloud-based automation platforms means BPA can be achieved by any enterprise, large or small.

When you use BPA as much as possible, your staff are free to work on more satisfying parts of their job. Manual, time-consuming processes utilising legacy systems can be tedious and frustrating, leading to staff dissatisfaction and possible resignations. Focus on a fresh, innovative approach that keeps your team's digital skills sharp while gaining efficiencies and boosting productivity.

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Using low-code solutions to achieve enhanced digital projects

When it comes to the development of software apps for business, a **low-code approach** is the agile, rapid way to achieve them. For that reason, the low-code market is exploding with innovation, driving unprecedented value for customers as software applications can now be delivered in days, not weeks or months.

Low Code is increasingly being known as Augmented Application development. It enables a development team to:

- deliver more with less

- focus on innovation rather than mundane tasks

If your organisation is large and complex, you need to consider low-code technology as a means of rapidly delivering software solutions — it's how you'll meet the challenges of an increasingly digital marketplace.

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Conclusion

The greater the digital skills shortage, the more important those skills become.

Kiwis of every age and background are increasingly being required to use digital technologies in day-to-day transactions and interactions. Digital technology underpins both our society and our economy now more than ever. It's used to keep businesses running, and it has already proven essential for our recovery from the pandemic. That's why it's crucial that the digital skills shortage is addressed; the government needs to take immediate action, but there are ways for organisations to be proactive and find ways to combat it within their own teams.

"The need for digital skills throughout our economy continues to grow," says Carolyn Tremain, Secretary for Business, Innovation & Employment and CEO. "The challenge is encouraging organisations to invest in their talent from entry level, right through to senior level roles."[4]

The more digitally skilled your team is, the more they can innovate and keep up with the challenges of the digital age and contribute to the economic growth of the country. And that means taking steps now to ensure the digital skills shortage doesn't have a detrimental impact on your business down the track.

Here at Optimation, our distinctive and particular blend of innovative thinking and smart technology means we have the expertise and experience to help you overcome the digital skills challenge. Let's get a discussion started.

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