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**NZTech Alliance Survey**  
Critical Workers Border Exemption Survey  
July 2021

**Creating a prosperous New Zealand underpinned by technology**



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# About NZTech

NZTech is a purpose driven, not-for-profit NGO that brings together 22 technology associations with over 1,500 member organisations who collaborate to help *create a socially and economically prosperous New Zealand underpinned by technology.*

We help members work together effectively, making connections, sharing insights, collaborating and enhancing New Zealand's ability to benefit from technology.

NZTech drives the national strategy for the **NZ TECH ALLIANCE.**



NZTech is the producer and guardian of Techweek

techweek

# NZTech Alliance

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**22** Tech Associations

**1,500+** Paying Members

**10%** of New Zealand's Workforce



**AFFILIATE GROUPS**

- CULTIVATE IT
- Canterbury Tech
- NZ HI-TECH AWARDS
- nzsa
- NZGDA NEW ZEALAND GAME DEVELOPERS ASSOCIATION
- NZHIT Enabling a Healthier New Zealand
- MANAWA tech

# Executive Summary

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The growth in demand for digital skills has increased as a result of Covid as more organisations and government agencies attempt to further digitise their operations and our global tech businesses continue to grow. There are currently more than two thousand open jobs for highly paid tech people with specialist or technical skills in New Zealand.

While most companies have been trying to recruit domestically a growing supply shortage is forcing an increasing need for access to new talent via immigration.

Currently the immigration pathway available is 'Other Critical Workers' and this has less than a 40% success rate with most applications being defined as failing the *'unique experience and technical or specialist skills that are not readily obtainable in NZ'* criteria.

This inability to access highly paid, technical or specialist tech people has created a critical skills shortage that is impacting all parts of the economy, including Government IT work. There is now evidence that the critical shortage is causing delays or freezes in digital transformation work across all

sectors and halting the growth of our digital exporters.

The government is also investing \$44m from the last budget in driving business demand for digital transformation for small businesses, potentially increasing digital skills demand.

New Zealand digital exporters and New Zealand owned and based global technology businesses are often more attractive working environments taking staff from the IT services side of the market further slowing digital uptake across the economy.

The strong growth of New Zealand digital businesses means they are unable to access enough skills domestically and some have already starting to shift roles outside of New Zealand.

For each role not employed in New Zealand the downstream impact will be graduates that are unable to be employed as there are not enough experienced staff to support them. The lost growth also represents a significant level of lost income tax.

The roles needed via immigration are senior, highly paid and will enable increased support of local staff development, increased export revenues and increased digitalisation of the New Zealand economy in critical areas such as the health and primary sectors.

There is a global talent war creating competitive pressure on these skills with evidence already of international firms recruiting out of New Zealand universities.

Now is a time when New Zealand is a particularly attractive destination for software engineers and senior experienced technology and creativetech professionals from offshore who often have clean, green orientations, and/or live in countries where our relatively peaceful, tolerant society is regarded with envy.

**An urgent review of what constitutes unique experience and technical or specialist skills is needed to better enable access to the advanced skills needed to support New Zealand's Covid recovery, digitalisation and export growth.**

# Background

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## Digital Skills Pipeline

In January 2021 the [Digital Skills for a Digital Future](#) report analysed the past five years of digital skills demand and supply. Each year almost 5,000 new jobs are created, but fewer than 3,000 local graduates enter the workforce. For many years immigration has been a source of advanced experienced talent to support the growth of New Zealand's global technology businesses and to support the digitalisation of New Zealand businesses and agencies.

The Covid related border restrictions have greatly reduced the flow of critical tech skills into the economy creating a sudden shortage that cannot be quickly addressed via the education system. The industry and Government have identified and published a draft [Skills Plan](#) to address various parts of the pipeline including attracting more students into tech careers, improving diversity, supporting transitions from education to employment and upskilling the current workforce.

## Immigration Still Essential

Improving the local supply of experienced tech talent will take some time. Meanwhile the growth in demand for digital tech skills continues to increase across all sectors resulting in labour market shortages, rapidly increasing salaries, high levels of churn, increased worker stress and delayed projects.

Consequently, there is an increasing demand for better access to these critical skills via immigration. As can be seen by the Industry / Government collaboration in the Skills Workstream of the [Digital Technologies Industry Transformation Plan](#), there is strong commitment to developing the domestic skills pipeline. However, while this is underway immigration is still essential.

The current pathway available to obtain a visa to bring a skilled digital worker into New Zealand is the 'Other Critical Worker' pathway. Employers are still expected to genuinely seek to fill job vacancies with New Zealanders.

## Other Critical Worker

A worker needed in New Zealand for the long term (six months or longer) is considered an '[other critical worker](#)' if they meet the following criteria:

- they earn at least twice the median salary — NZD \$106,080 a year AND
- they have unique experience and technical or specialist skills not readily obtainable in New Zealand.

Unique experience and technical or specialist skills not readily obtainable in New Zealand' can include, but is not limited to, skills and experiences such as expertise gained in a specialist training institution or by working in a highly-specialist firm, or can be shown by having global experience, or skills and experiences inherent to a person.

Skills are considered not readily obtainable if there are no workers in New Zealand who can do the role, or there is a limited pool of available workers who can do the role and they are not available to the employer.



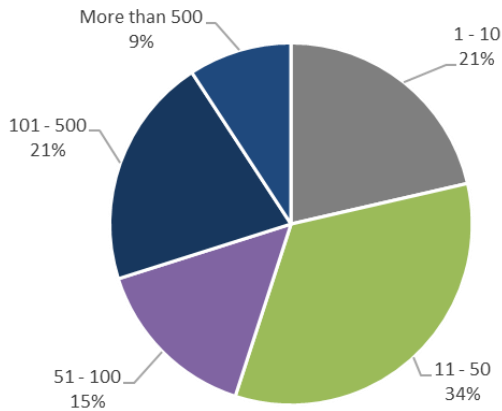
# Demographics

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## Organisation Size

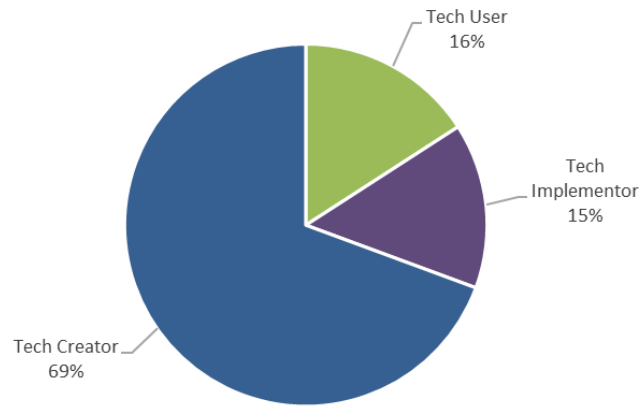


n = 271

Companies of all sizes are experiencing critical shortages of digital technology workers.

There were 365 responses to the Critical Workers Survey during June and July 2021. Following the removal of duplicates and insufficient responses there were 271 clean completed responses.

## Type of Organisation

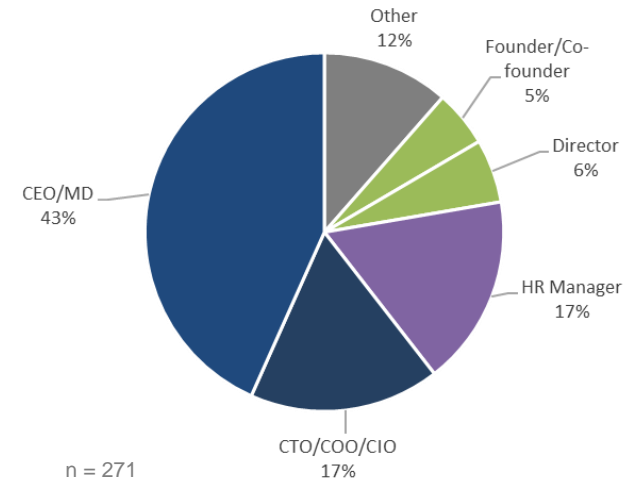


n = 271

While there was a range of sizes, more than two thirds of respondents were creators of technology. These mainly included Software as a Service (SAAS) and Game Developers, however robotics and high-tech manufacturing also responded.

Respondents also included large tech users such as banks, universities and DHBs and implementors of tech such as IT service providers.

## Respondents Title



n = 271

A majority of survey respondents were C-Level showing the critical importance of skills issues within these organisations.

Respondents from tech users were primarily CTO/CIO roles whereas in implementors it was the Managing Directors or HR managers that responded.

The primary respondents from creators were the CEO's, Founders or Directors.

# Open Roles

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## Number of Open Roles

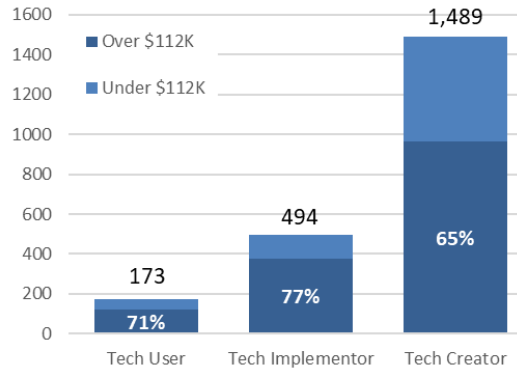


n = 180

Of the 271 survey respondents 180 provided details of the roles they are currently recruiting.

These 180 firms are currently looking for 2,156 people to fill critical digital roles.

## Open Roles by Org Type

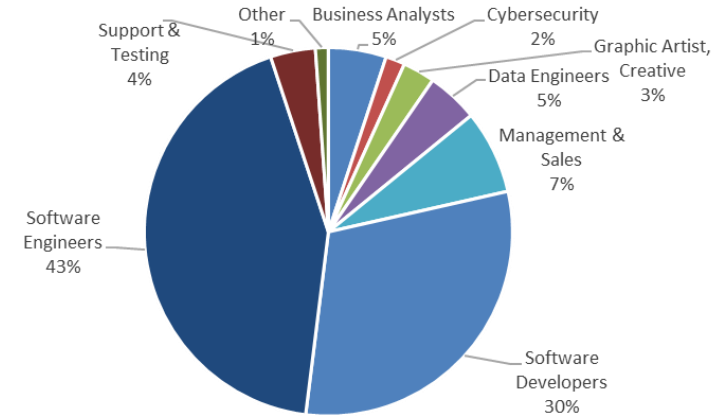


n = 180

Most of these roles (68%) have salaries higher than twice the New Zealand median wage (\$112,320) which is a key criteria for a Critical Worker Exemption.

All types of organisations, tech users, implementors and creators are seeking a large number of high paying roles.

## Type of Open Roles



n = 180

There is a very broad range of skills being sought however the majority of open roles are for different types of software engineers and software developers.

Even within these “categories” there are an enormous number of job titles such as full-stack developer, UX developer, front end developer, python developer, back end developer, blockchain developer, java developer etc

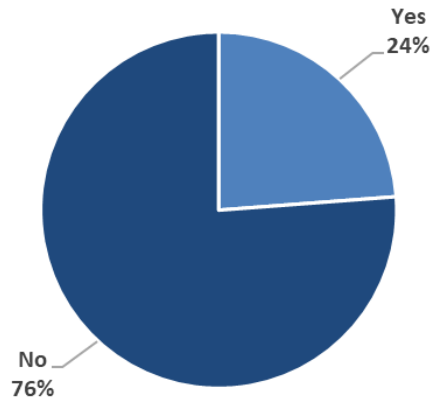
# Visa Applications

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## Applied for Visa

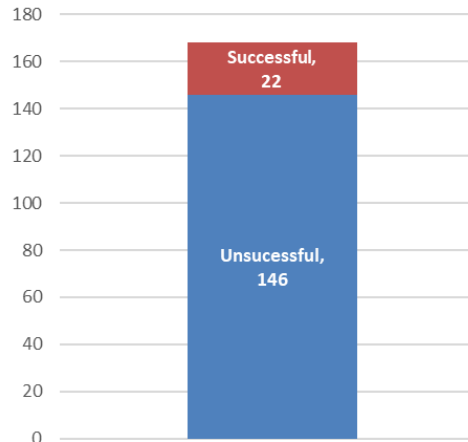


n = 269

The majority of organisations haven't looked to immigration as a solution to their critical skills shortages. Reasons for this are discussed on the next page.

However, 68 of the respondents have lodged an Other Critical Worker border exemption application, putting in a total of 168 applications.

## Number of Applications



n = 269

Of the 168 submissions lodged with Immigration NZ for Other Critical Worker border exemptions by survey respondents only 22 have been successful.

This represents a very low 13% success rate versus the average of around 40% reported by immigration.

## Applications

To meet the criteria for Other Critical Worker the candidates had to have unique experience and technical or specialist skills not readily obtainable in New Zealand. There doesn't seem to be clear logic for why one role is acceptable and another is not.

### Example of Successful Applications

- Data Scientist
- Chief Technology Officer
- Software Engineer
- Software Developer
- Customer Offerings GM
- Salesforce Functional Lead
- Platform Architect

### Example of Unsuccessful Applications

- Data Architect
- Chief Operations Officer
- Lead Software Engineer
- Software Developer
- Growth & User Acquisition Director
- Salesforce Architect
- Senior GIA Architect
- Algorithm Expert
- Security Operations Analyst
- Security Penetration Tester



# Unsuccessful Applications

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*If unsuccessful, what was the reason(s) provided by Immigration New Zealand?*

**Organisation:** Tech Creator  
**Role:** Chief Operating Officer

*“Immigration New Zealand is not satisfied based on the information provided that the worker has unique experience and technical or specialist skills that are not readily obtainable in New Zealand. Nor are we satisfied that the worker is undertaking a time-critical role for work in the relevant areas. As such, immigration instructions H5.30.5(a)(i) and H5.30.5(a)(ii) are not met.”*

**Organisation:** Tech User  
**Role:** Business Intelligence Architect

*“The reasons for this are because the information provided with your expression of interest does not demonstrate that your employee has unique experience and technical or specialist skills that are not readily obtainable in New Zealand. Immigration instruction H5.30.5(a)(i) is not met and therefore not meeting H5.30.5(c).”*

**Organisation:** Tech Creator  
**Role:** Engineering Toolmaker

*“Position was not considered unique. We are based in the regions servicing regions (farmers) and our export market is 50% of our turnover.”*

**Organisation:** Tech Creator  
**Role:** User Acquisition Director

*“Unfortunately, we are not able to forward your request for a consideration. For a reconsideration request to be considered, the applicant has to provide new/compelling evidence. It appears you have not provided sufficient compelling evidence to support your statement.”*

**Organisation:** Tech Creator  
**Role:** Senior GIS Architect

*“Not deemed to meet the threshold of exceptional skills.”*

**Organisation:** Tech Creator  
**Role:** Lead Software Engineer

*“The reasons for this are because the information provided with your expression of interest does not demonstrate that your employees have unique experience and technical or specialist skills that are not readily obtainable in New Zealand. Immigration instruction H5.30.5(a)(i) is not met. Nor is the role deemed time-critical and immigration instruction H5.30.5(a)(ii) is also not met and therefore not meeting H5.30.5(c).”*

**Organisation:** Tech Implementor  
**Role:** Security Penetration Tester

*“They deemed it as not critical enough. We are an essential business and protect New Zealand's cyberspace!”*

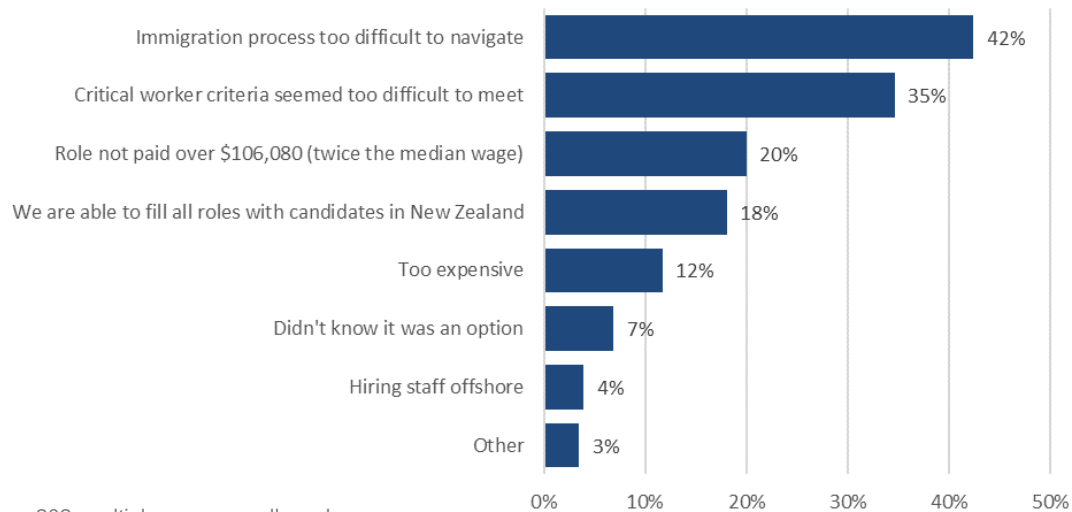
# Why Not Visa Applications

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*If you haven't lodged any critical worker (border exception) requests to INZ, why?*



n = 202, multiple response allowed

While 76% of respondents hadn't tried immigration to solve their skills shortages it was primarily due to them finding the immigration process too difficult to navigate or the other critical worker criteria too difficult to meet. Some respondents were not even aware it was an option.

A portion of respondents were recruiting junior roles that didn't meet the salary criteria.

There are also a number of organisations that have given up on accessing critical digital talent in New Zealand and are actively shifting jobs out of New Zealand.

## Other Comments

*"Have been advised by Immigration Advisor these are not considered with a blanket denial email sent for practically all."*

*"Process just not helpful, we have potential staff offered roles we can't get into the country."*

*"Our main problem is actually getting visa renewals for current staff."*

*"Currently we're planning on opening overseas offices to access more talent."*

*"Didn't know it was an option given how difficult it is to keep our existing migrant workers."*

*"Difficult to travel into NZ, putting candidates off."*

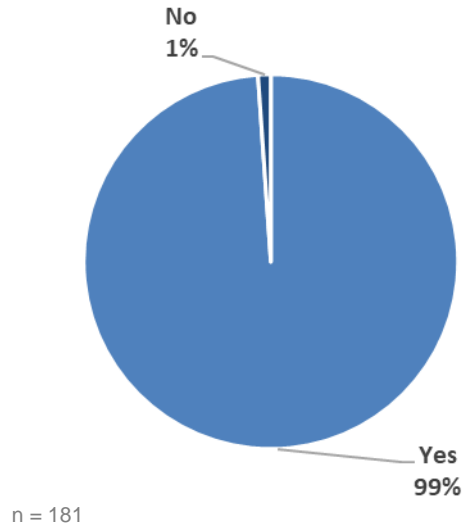
# Recruiting Kiwis

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## Tried Recruiting in NZ



Almost all (99%) respondents have tried recruiting New Zealanders.

The few that haven't tried recruiting New Zealanders are actively recruiting talent into their offshore offices instead.

## Roles recently filled by recruiting in New Zealand



Over recent months 169 of the respondents have placed 1,076 New Zealanders into roles.

## Other comments

*"We are trying to retain overseas workers who are currently employed with us. We would prefer to retain current employees (resident or not) rather than having to replace them with new staff."*

*"We are recruiting remote employees overseas."*

*"The roles require unique skills and there aren't many similar roles in NZ."*

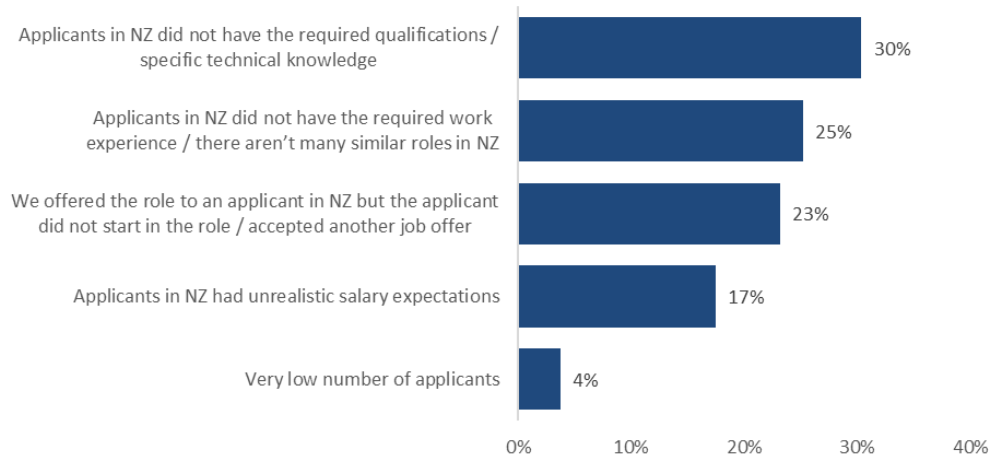
# Why Not Recruiting Kiwis

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## What is the reason(s) you have not filled vacancies with applicants in NZ?



n = 163, multiple response allowed

While 99% of respondents are trying or have tried to recruit New Zealanders the success rate has been low. The primary reasons is that applicants did not have the needed qualifications, technical knowledge or experience to undertake the work.

A sign that the market has a supply shortage can be seen in the results. For example, respondents had offered a job but the applicant accepted another offer, applicants had unrealistic salary expectations and low levels of applicants.

## Other comments

*“Outbid for applicants by consulting companies or large corporates, everyone competing for smaller talent pool.”*

*“We are all just poaching from each other in a limited pond. Since October, remuneration in these roles have gone up by up to 50%.”*

*“The market is very challenging. We have lost developers to companies who have offered them 2X their base salary.”*

*“The talent pool here isn't huge and most of them already work for other small NZ game companies.”*

*“No strong qualified people for the roles available. Would need to poach staff from other good kiwi tech companies which would be regrettable. Struggling to find qualified people for some key roles. Too many companies looking for the same skills at the same time where there are large shortages.”*

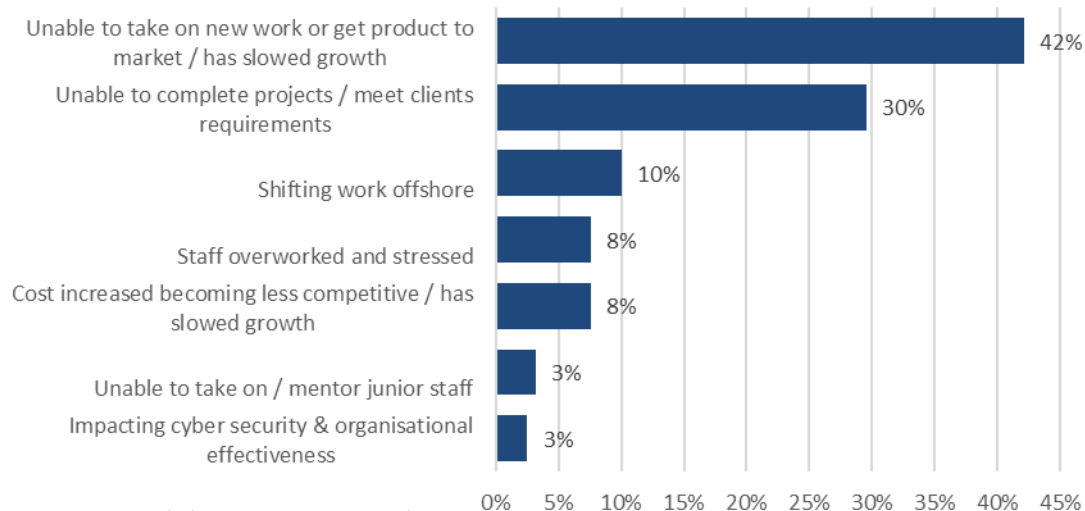
# What is the Impact

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## What is the impact to your business in not filling these roles?



n = 163, open ended responses re-grouped

The majority of organisations haven't looked to immigration as a solution to their critical skills shortages. Reasons for this are discussed on the next page.

However, 68 of the respondents have lodged an Other Critical Worker border exemption application, putting in a total of 168 applications.

Of the 168 submissions lodged with Immigration NZ for Other Critical Worker border exemptions by survey respondents only 22 have been successful.

This represents a very low **13% success rate** verses

## Other comments

*“Critical projects are not being delivered on time as the teams are not resourced to hit pre-determined deadlines and targets. This leads to a lag in revenue generation, revenue that is critical for VC-funded startup to be successful and not fail as a company. As a result, current employees are working longer hours to make up for the demands of understaffed teams which is not a sustainable solution.”*

*“Unable to achieve growth targets, customers not getting systems they need delivered (affecting their businesses) , increasing costs and losing talent - ie we have lost some applicants who then got approved and into Australia in 2-3 months recently so we missed out. We have one applicant stuck in Sth America for almost a year (who was approved to come and now cannot) who has been working remote but is sick of that and now considering other options.”*

**More direct responses on next page.**

# What is the Impact

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## Other comments

*“Work we need to do for our clients doesn't get done, our clients are unhappy. Unhappy clients consider alternatives to us. Our people are under extra pressure - which has led to increased turnover. We are considering whether to establish a development centre outside of New Zealand. We are unable to take advantage of opportunities to grow our business as our customers globally recover from the pandemic.”*

*“Staff are overwhelmed, projects on hold and internal mental wellbeing impact.”*

*“Growth will slow as we can't achieve targets without these roles. People are doing more than their share, and getting stressed and tired.”*

*“Repressed growth. Putting current employees under significant additional pressure to oversee multiple projects.”*

*“Longer time to hire, loss in productivity, staff working longer hours, stress increasing.”*

*“Increased risk of cyber attacks. Unable to start important business projects.”*

*“Unable to train lower level cybersecurity staff.”*

*“Security actions are delayed. Our security posture is not where it needs to be. Data platform engineering tasks not started. Therefore a dedicated data programme of work is holding up our mahi.”*

*“Unable to meet client obligations which has a flow on impact to our clients. Severe impact on our growth and ability to reinvest. Impact on our ability to train and mentor graduates (current graduate intake is 14 NZ graduates).”*

*“We can't grow the business and continue hiring junior staff unless we have the experts that will train them on the specific skills that they need to become senior staff. Once we have enough to train current staff and they become senior employees we can be locally self-sustainable. If we want to continue growing the business and training junior New Zealand staff we need an offshore expert to support learning and development. We can't train through video conference because it is too complex and our business operates in nanoseconds.”*

*“We are unable to grow to service the current demand. None of the top roles were able to be filled. We are currently looking to widen our intern programme to increase the supply of talent. However, that takes some years to mature into the type of skill we're short of.”*



# Next Steps

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An urgent review of what constitutes unique experience and technical or specialist skills is needed to better enable access to the advanced digital and technology skills needed to support New Zealand's Covid recovery, digitalisation and export growth.

1. This information is being shared with relevant Ministers and policy advisors.
2. More than 100 CEO's and Tech Leaders from across the New Zealand tech ecosystem who responded to this survey have offered to make themselves available to support discussion and policy improvement.



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