

The COVID-19 Recovery Baseline Engagement and Data Project



TOI MAI
Workforce
Development
Council

Introduction:

purpose, methodology, structure and data

Purpose

In 2020, the Tertiary Education Commission (TEC) established the WDC/TITO COVID-19 Response Projects Fund to 'enable Transitional Industry Training Organisations (TITOs) and Workforce Development Councils (WDCs) to lead COVID-19 response projects that support the recovery of industry from the impacts of COVID-19.'

Toi Mai utilised this TEC Fund to undertake a COVID-19 Recovery Baseline Engagement and Data Project (BED), which comprised:

- an engagement process through six hui and a survey; and
- the gathering of data about the Creative, Cultural, Recreation and Technology (CCRT) workforce drawing on Stats NZ's Integrated Data Infrastructure and Longitudinal Business Database.

With many of Toi Mai's sectors negatively impacted by COVID-19 lockdowns and restrictions, there is an urgent need to assess the lasting impact of the pandemic on labour demand, the mix of occupations, and the workforce skills required in Toi Mai's diverse sectors.

Some of Toi Mai's sectors have thrived during the pandemic, leading to an urgent need to prepare industry and workforces for a post-pandemic economic recovery which is likely to see many Toi Mai sectors grow even more in importance and impact.

The BED project builds on the previous research completed in the Skills Active Aotearoa environmental scan for CCRT industries (Hāpaitia te tāngata, hāpaitia te iwi COVID-19 Recovery Project).

BED is designed to:

- ensure that Toi Mai is engaging with, and attending to, the needs of sectors that have been most affected (negatively and positively) by the pandemic; and
- provide trusted, useful and accessible data, advice and information to funders, providers and stakeholders so all can be confident that Toi Mai's

interventions and public investment are making a measurable difference to Toi Mai's industries and learners.

Specifically, the project sought to:

- develop a better understanding of the impact of the COVID-19 pandemic on the CCRT sector;
- identify and plug gaps in the evidence-base underpinning Toi Mai's engagement with the CCRT industries; and
- gather insights into the CCRT sector in New Zealand from industry leaders.

Methodology

Insights were derived through two streams of work:

1. A structured and facilitated prioritisation and engagement process undertaken by Te Amokura and Toi Āria: Design for Public Good, who facilitated six engagements with 56 industry leaders and knowledge experts in mid 2022. In addition, 33 representatives of peak bodies and industry leaders completed a survey, and more acquainted themselves with the content. Toi Mai also contracted a data analyst from Talent International to clarify data gaps and advise how they might be filled.
2. The research firm Scarlatti analysed data in the Stats NZ Integrated Data Infrastructure and the Longitudinal Business Database to draw out insights about the workforce, so as to identify and plug gaps in the evidence base underpinning Toi Mai's engagement with the CCRT industries (more information about the data and results is provided on the following page).

Structure

This report:

- a. Sets out a five pou framework, developed by Toi Āria and Te Amokura during the initial engagement design process to better reflect Toi Mai's industries, which was used in this report to analyse and present data about the CCRT industries;
- b. Provides high level findings and insights into the overall CCRT sector derived from the research. This report includes a selection of graphs on aspects of the CCRT workforce such as size, workforce changes due to COVID and so on;
- c. Gathers the project's key insights and present this for each pou, in order to gain a better understanding of each (this repeats in part some of the material from (b) above); and
- d. Provides recommendations.

The data

The qualitative data gathered by Te Amokura and Toi Āria through hui and a survey, enables Toi Mai to incorporate important expert industry voices in its mahi. As with all such types of qualitative data gathering through engagement, it is preferable to have as many industry leaders and knowledge experts as possible involved, and to undertake this in person, something that was not possible (other than at the Pacific Fono) due to COVID-19 protocols in the first half of 2022.

Te Amokura and Toi Āria also noted the limitations of Australia New Zealand Standard Industrial Classification (ANZSIC) codes, suggesting that the Australia New Zealand Standard Classification of Occupations (ANZSCO) codes offer a better fit for Toi Mai's work.

Toi Mai contracted a data analyst from Talent International to clarify data gaps and advise how they might be filled. The analyst noted the importance of access to the Integrated Data Infrastructure. The utilisation of data in the Integrated Data Infrastructure to undertake this workforce research allows for a quantum leap in both scope and quality. Further work undertaken will only serve to improve the quality of the data.

However, as with all data, of whichever type, it is necessary to proffer a disclaimer.

The results secured by Scarlatti through analysis of the Integrated Data Infrastructure are not official statistics. They have been created for research purposes from the infrastructure and database, both of which are carefully managed by Stats NZ (<https://www.stats.govt.nz/integrated-data/> provides more information). The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the Integrated Data Infrastructure for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

Use of the Integrated Data Infrastructure is contingent on no individual or business being identifiable from any output. As such, Stats NZ requires raw data to be suppressed if below certain thresholds and any unsuppressed data to be randomly rounded to specified bases.

Section A:

The five pou

Following an initial audience map, Te Amokura and Toi Āria determined the original sector titles used by Toi Mai did not account for their complexities.¹

Five new working titles were designed, with a descriptor (instead of an English translation) aimed at providing a more holistic identification process.² The new titles used throughout this project embed Te Tiriti o Waitangi and Te Ao Māori across all titles to ensure growth of understanding with a collective responsibility, and to assist Toi Mai to prioritise Te Tiriti o Waitangi and Te Ao Māori.

The five titles are:

Toi Whānui – Enabling Technologies:

Innovative technology platforms, products and services for industry and end-users;

Toi Pāho – Broadcast and Screen:

Content delivered through broadcast and screen media; film, radio, television and online interactive media;

Toi Puaki – Expressive Arts:

Expressive art forms and technologies in music, stage and theatre (including actors);

Toi-a-Ringa – Art and Design:

Hands-on art, design and beauty; and

Toi Ora – Recreation and Cultural Organisations:

Activities, technologies and places that foster wellbeing, physically, mentally and socially (including GLAM industries).

Te Amokura and Toi Āria note that ‘in general, participants in the engagement hui felt that the accuracy or otherwise of the titles was not a priority at this time, but indicated these titles warrant further engagement and exploration. This was particularly the case if the title and categorisation of their sector might possibly have an impact on investment by Toi Mai.’

¹ For instance, a graphic designer who might easily align themselves to Toi Hangarau, Ngā Toi Māori, and Toi Auaha.

² Te Amokura and Toi Āria both suggest Toi Mai undertakes more in-depth explorations into the sectors and their titles.

Section B:

Initial findings and insights

This section sets out the key insights from the Scarlatti data analysis — presented primarily through graphs — and the Te Amokura / Toi Āria engagement with industry leaders.

Many of the charts within the Scarlatti report can be found in an online dashboard: [Toi Mai workforce dashboard](#).

B1 *The impacts of COVID-19 on the CCRT sector*

B 1.1 What we are hearing from Industry

Industry representatives' feedback on the impact of COVID-19 on the CCRT sector provided through the Te Amokura and Toi Āria industry engagement noted that:

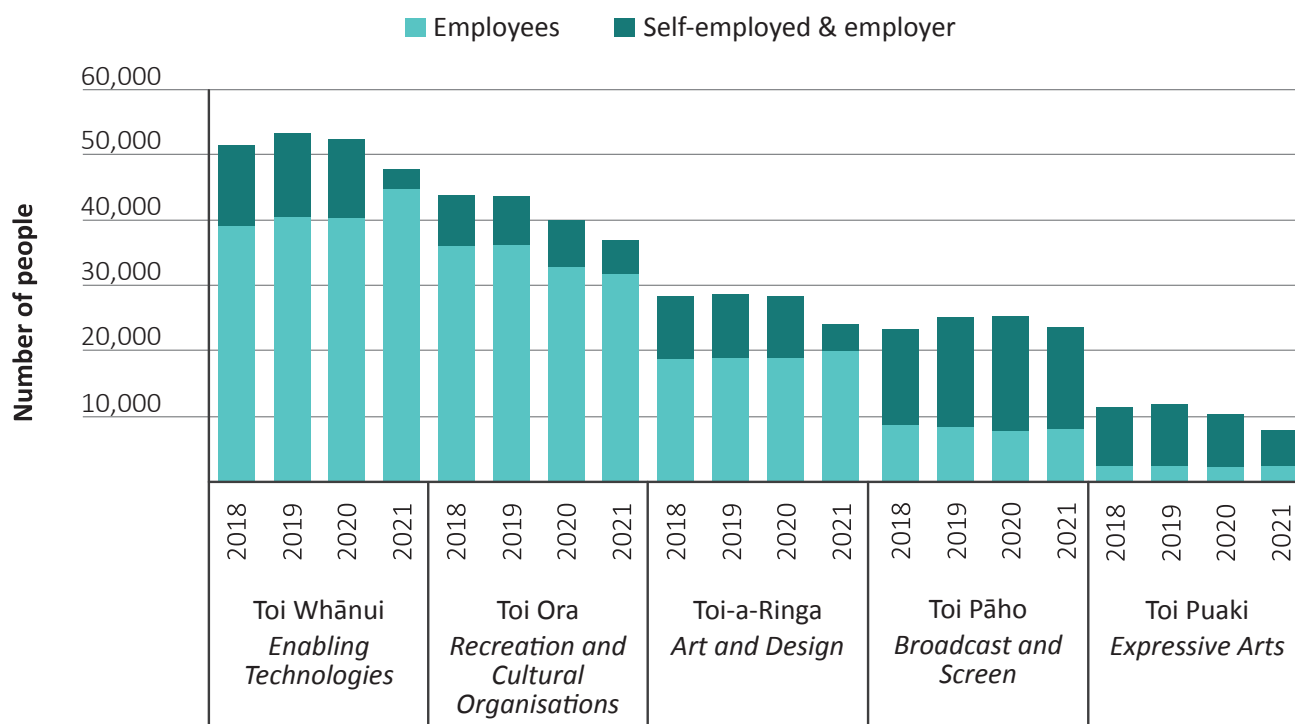
- For Pacific communities, the impact of COVID-19 has been substantial, and it has been, and remains, about survival for many (this is discussed in detail in section B4 below);
- The Toi Pāho - Broadcast and Screen sector has been heavily impacted by COVID-19. Previous issues or challenges were exacerbated during the pandemic and there is a concern that impacts are still to be felt in the sector;
- The Toi Puaki - Expressive Arts sector was strongly impacted, through such things as downsized production companies;
- The Toi Whānui - Enabling Technologies sector saw a significant increase in remote learning (the 'new normal'), an impact on study and workplace culture, and a decrease in knowledge transfer because of the absence of personal interaction in workplaces;
- The Toi-a-Ringa - Art and Design sector reported varied COVID-19 impacts, with the hairdressing sector significantly impacted, but the design sectors (visual design, fashion) less so, and the advertising, media and communication sector impacted by short term gaps due to illness and a significant impact on wellbeing; and
- The Toi Ora - Recreation and Cultural Organisations sector saw inequalities experienced prior to COVID-19 compounded during the pandemic. A large portion of the squeezed funding allocation went to more essential needs, and some sectors missed out. Digital inclusion, especially for Māori and senior communities, was exacerbated.

B 1.2 What we are seeing in the data

All sectors experienced steady growth in their workforces in the period leading up to the COVID-19 pandemic, followed by a decline in the size of their workforce in 2020, most likely as a result of COVID-19.

- Toi Pāho - Broadcast and Screen has the smallest decline in workforce size, with no reduction in 2020.
- Toi Ora - Recreation and Cultural Organisations saw a notable decline in employee numbers between 2019 and 2021 (a 12% decline over this period).
- Toi Puaki - Expressive Arts showed a similar decline in numbers between 2019 and 2021 (approximately a 34% decline), possibly due to lower demand as a result of COVID-19 restrictions.

Workforce size over time

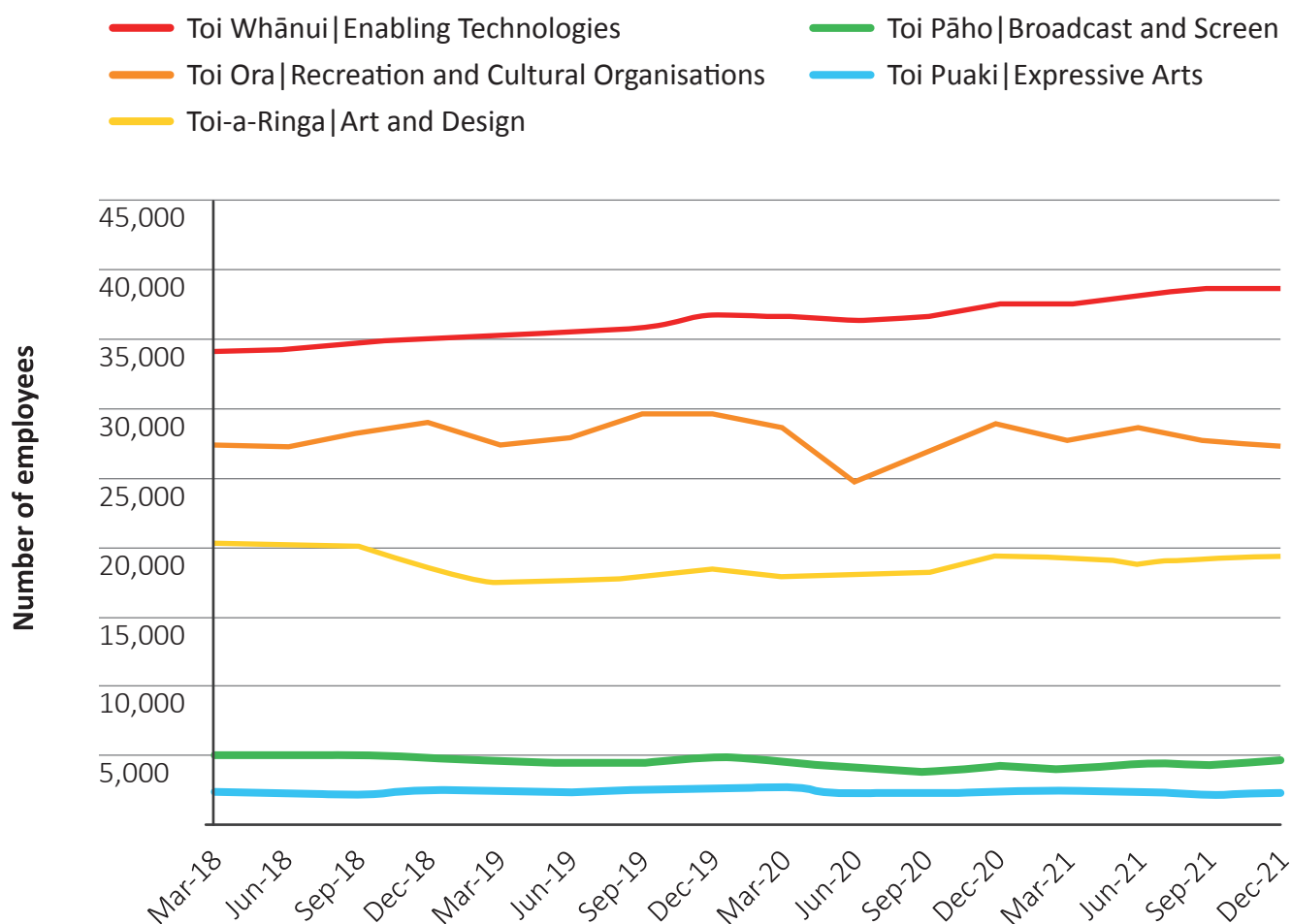


[Note: There is a lag in reporting of self-employed income. 2021 figures may be under-counted, and will be updated as new data becomes available in the Integrated Data Infrastructure]

Monthly employee numbers can provide an indication of the short-term impacts (any 'shock' effects) of COVID-19.

The number of employees in Toi Mai sectors dropped from 90,000 to 85,000 between March 2020 and May 2020, a 6% decline, and increased again by December 2020. Toi Ora - Recreation and Cultural Organisations appears to have been affected most by COVID-19.

Employee numbers over time



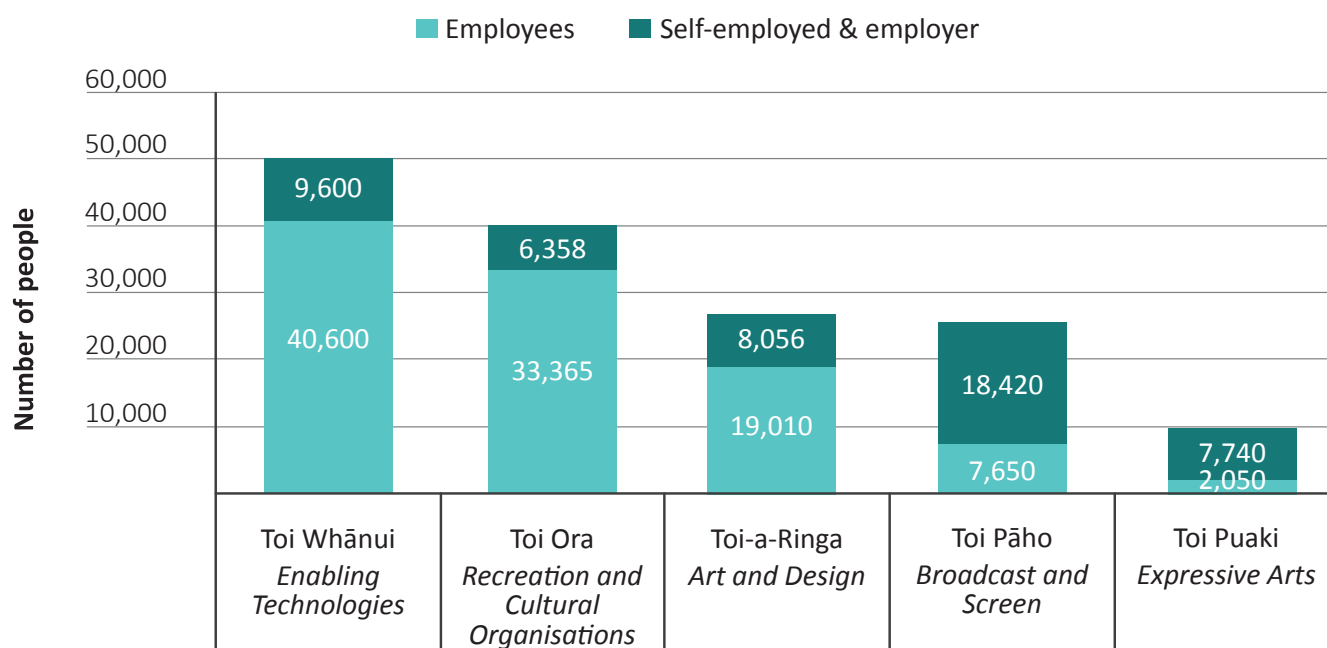
[Note: the above chart does not apply an income threshold — it includes every instance of an employee earning income from a Toi Mai sector. This is a more-inclusive workforce definition than the chart on the previous page]

B2 Workforce size and composition

In 2020 the total workforce size of Toi Mai sectors was 152,900;

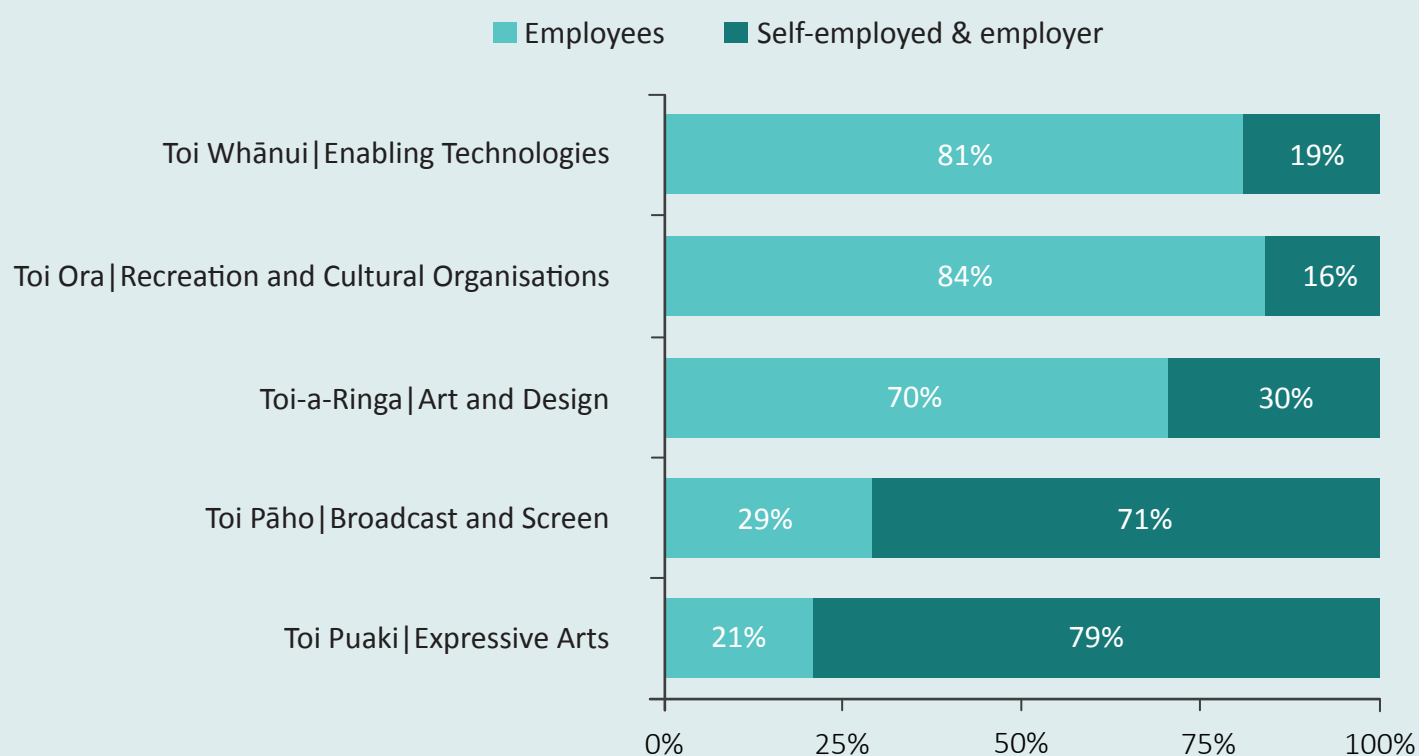
- 102,700 employees (67%); and
- 50,200 self-employed & employers (33%).

Workforce size by sector (2020)



[Note: The workforce definition used here includes only those employees earning above a 'minimum wage monthly threshold' of 30 hours x 4 weeks x minimum wage (roughly \$2,300/month in 2020). When we remove this income threshold, the number of employees in the Toi Ora - Recreation and Cultural Organisations sectors increases from roughly 33,000 in 2020 to 55,000, suggesting many people work part time]

Employment type by industry (2020)

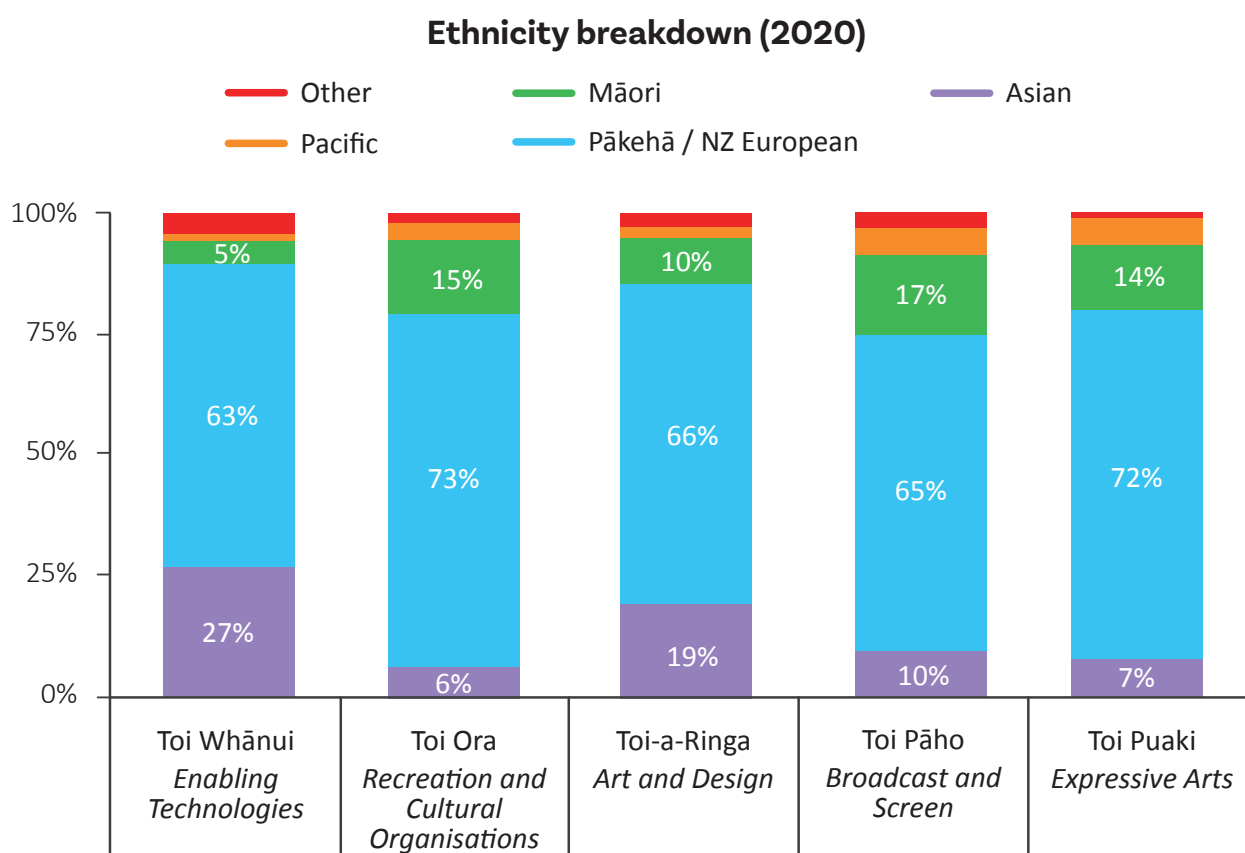


B 2.1 Ethnicity

Those identifying as Pākehā / NZ European make up more than 60% of the workforce of each Toi Mai category.

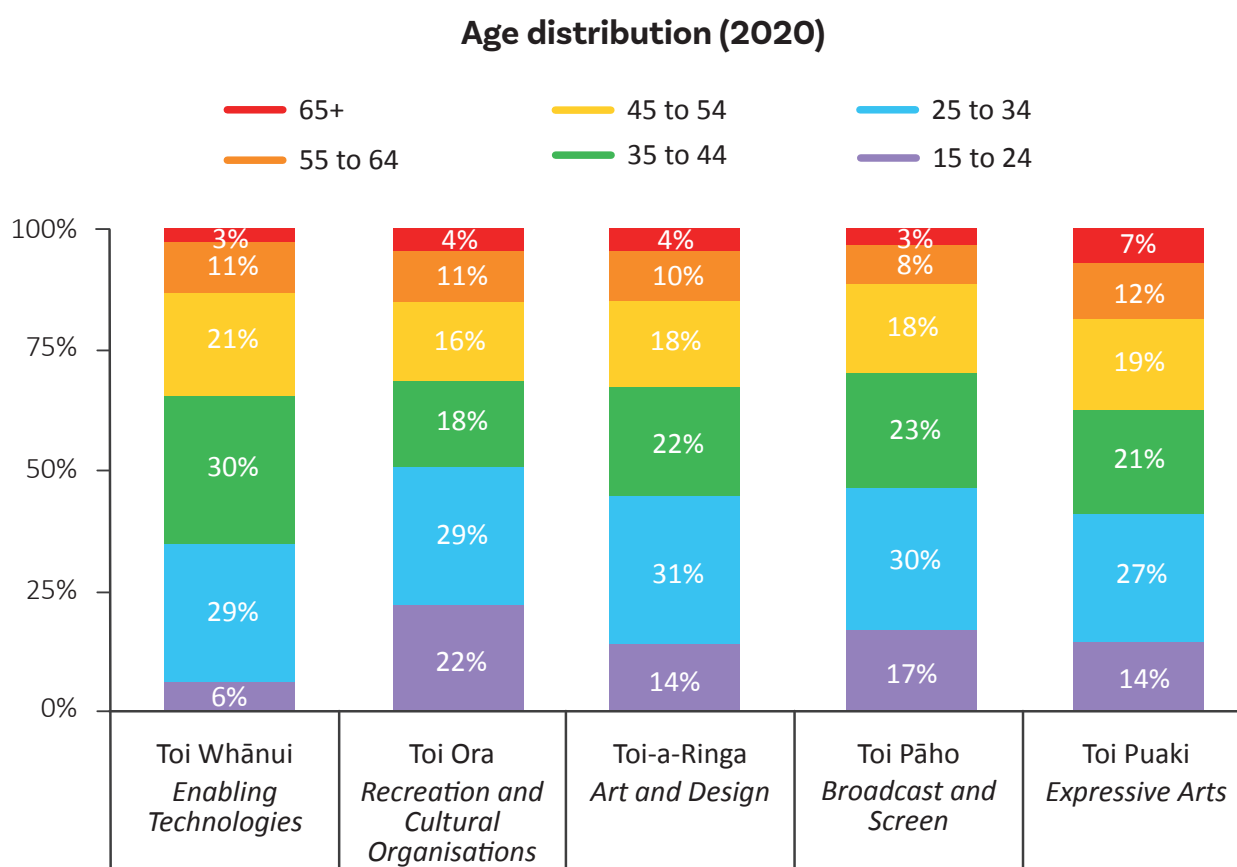
Toi Whānui - Enabling Technologies has the smallest representation of Māori, making up only 5% of its workforce.

Toi Pāho - Broadcast and Screen has the largest representation of Māori, making up 17% of its workforce.



B 2.2 Age profile

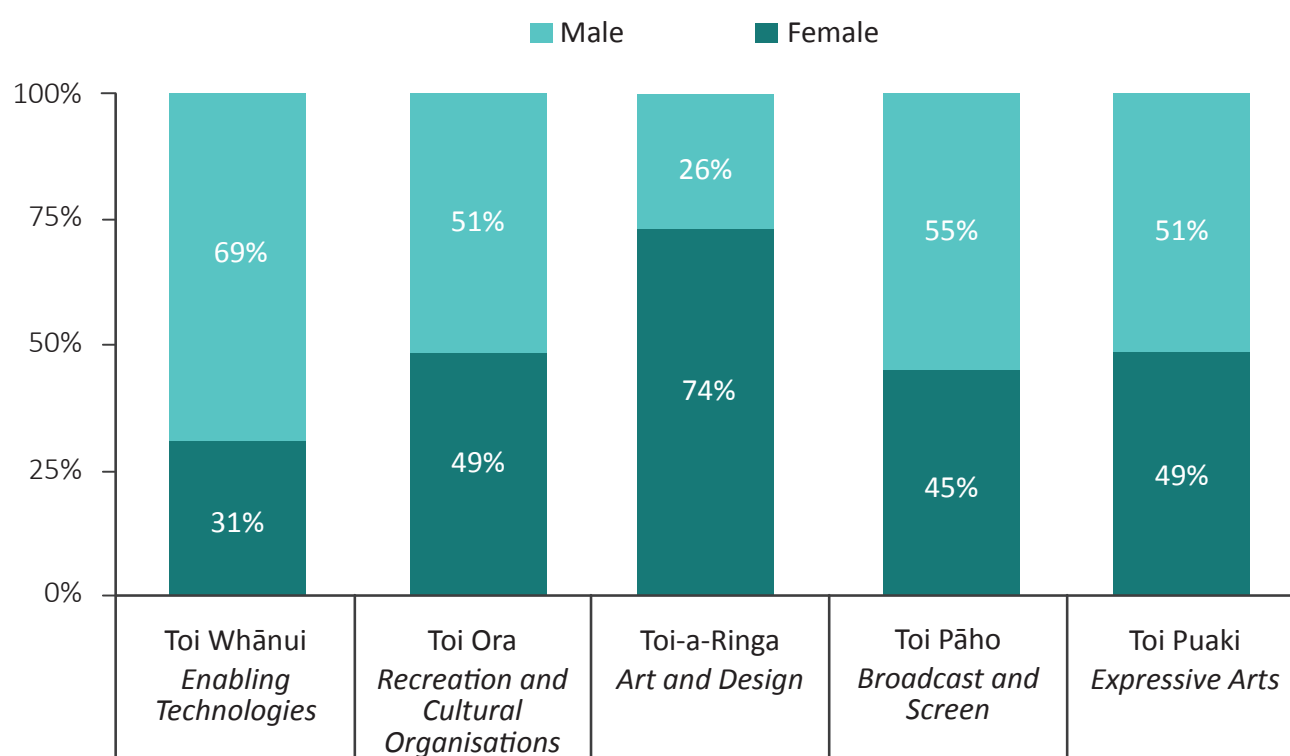
There is considerable variety in the age profile across sectors: 65% of the Toi Whānui - Enabling Technologies workforce is over the age of 35, whereas 51% of the workers in the Toi Ora - Recreation and Cultural Organisations sector are aged between 15 and 34 years.



B 2.3 Gender

Toi Whānui - Enabling Technologies, and Toi-a-Ringa - Art and Design, have contrasting proportions of female workers; 31% and 74%, respectively.

Gender Breakdown (2020)



B 2.4 Source of new entrants

Career changers, rather than young people entering the workforce for the first time, make up the majority of the new entrants into each Toi Mai category; more than half of new entrants into each category.

Further research is needed to identify which industries they are coming from, and their transferable skills, so as to assist the design of training aimed at filling skills gaps within CCRT industries.

Scarlatti notes that at this stage the data has not been analysed to determine which industries these career changers are coming from. They may in fact be moving from an industry similar to one in the CCRT sector which is not

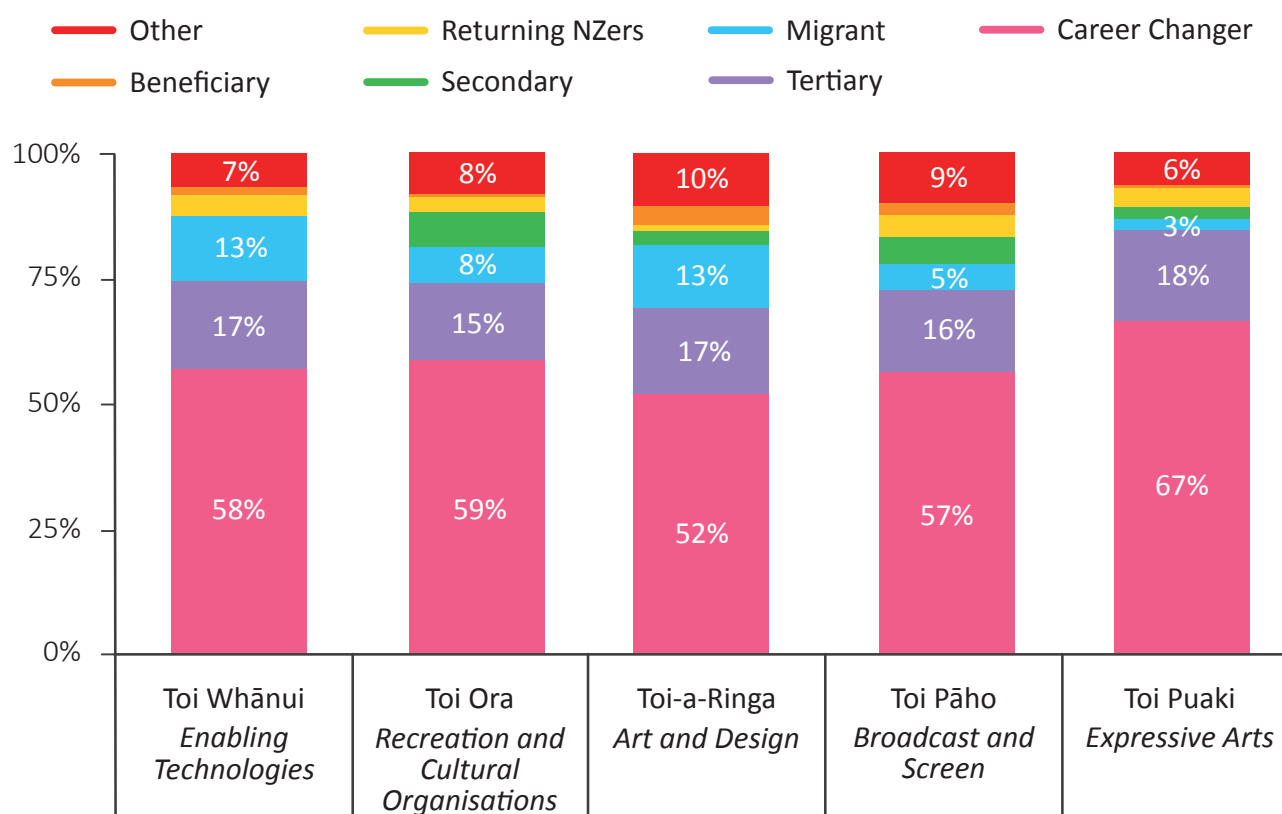
included under Toi Mai i.e. F373200- Watch and Jewellery Retailing to C259100- Jewellery and Silverware Manufacturing.

Tertiary graduates make up the second largest group.

The data does not currently show whether new entrants originating from tertiary education have completed a qualification associated with the CCRT sector or have completed an alternative qualification with transferable skills which allow them to work effectively in CCRT industries.

Gaining this information will provide vital insight into understanding whether learners graduating from Toi Mai tertiary programmes enter into the sector or have an alternative destination.

New entrant source breakdown (2020)



B 2.5 Skills and qualifications

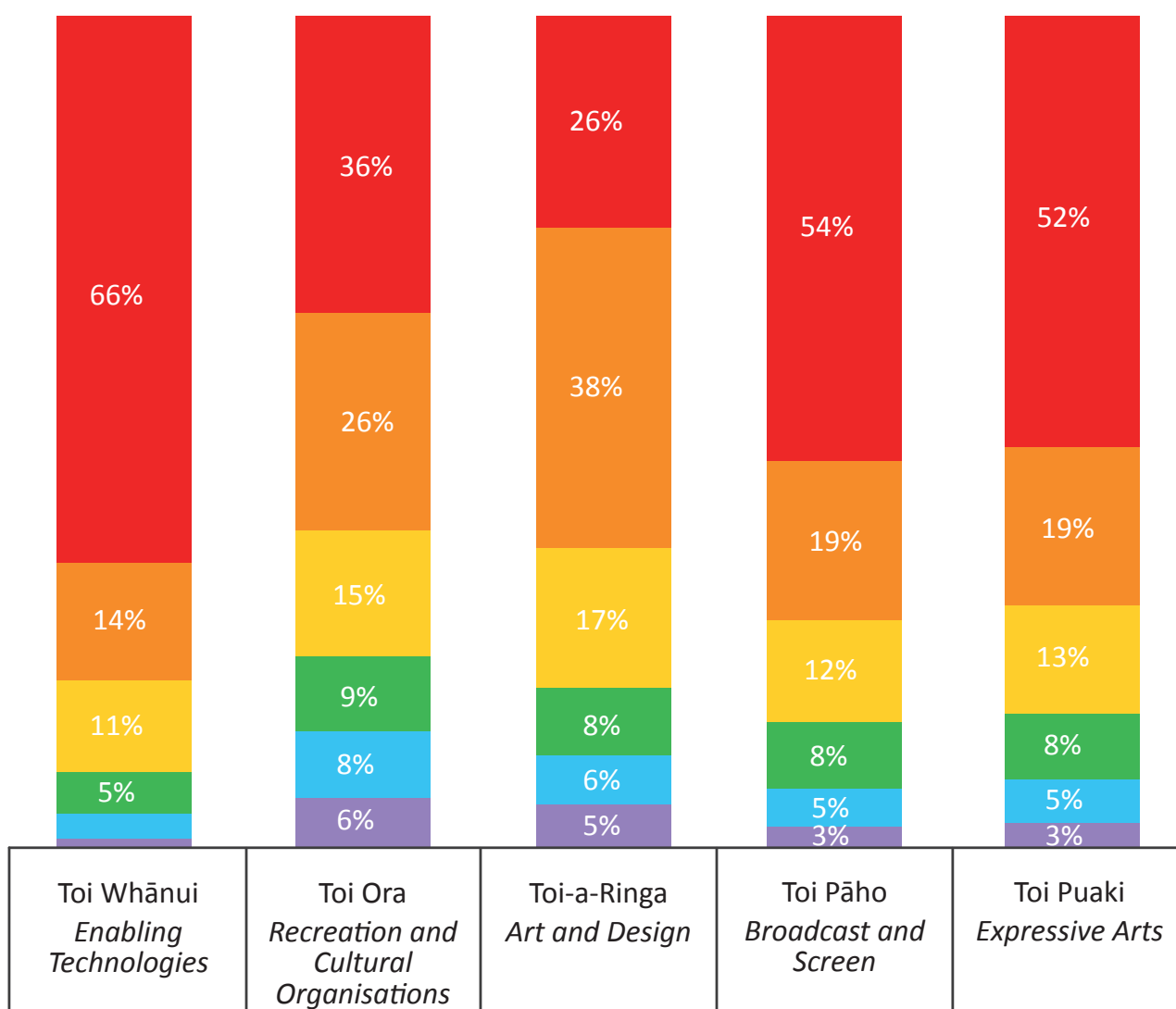
Of the Toi Whānui - Enabling Technologies workforce, 66% have a Bachelor's degree or higher. An additional 14% have a post-school certificate or diploma.

This high level of qualification in the workforce has significant implications for the training needs of the sector, as this is identified as a sector that is growing, with the number of employees increasing from 33,500 in 2015 to 43,400 in 2021 (an increase of 30% in six years). This increase is important to consider, as Bachelor's degrees take years to complete; training cannot be delivered immediately. It would make sense to consider which provision of training will meet the demand and projected increase in the workforce size, and how this will impact the provision of that training (i.e. training requiring a long period of learning, or shorter training). This training could comprise, for instance, work-based learning through on-the-job training or an apprenticeship-style delivery method.

A large proportion of the Toi-a-Ringa - Art and Design workforce has a post-school certificate or diploma (38%). Toi Ora- Recreation and Cultural Organisations appears to have the broadest range of skilled roles, fairly equally distributed across levels (including no qualification).

Highest qualification (as at 2018 Census)

— Bachelors or above — NCEA L3 or equiv — NCEA L1 or equiv
— Post school certificate/diploma — NCEA L2 or equiv — No qualification



B 2.6 Retention of new workers

This analysis considers all workers that earned an income in a Toi Mai industry for the first time in 2015.³ It then calculates the number of subsequent months they are working in that industry (note; these months do not have to be in a row — there can be gaps):

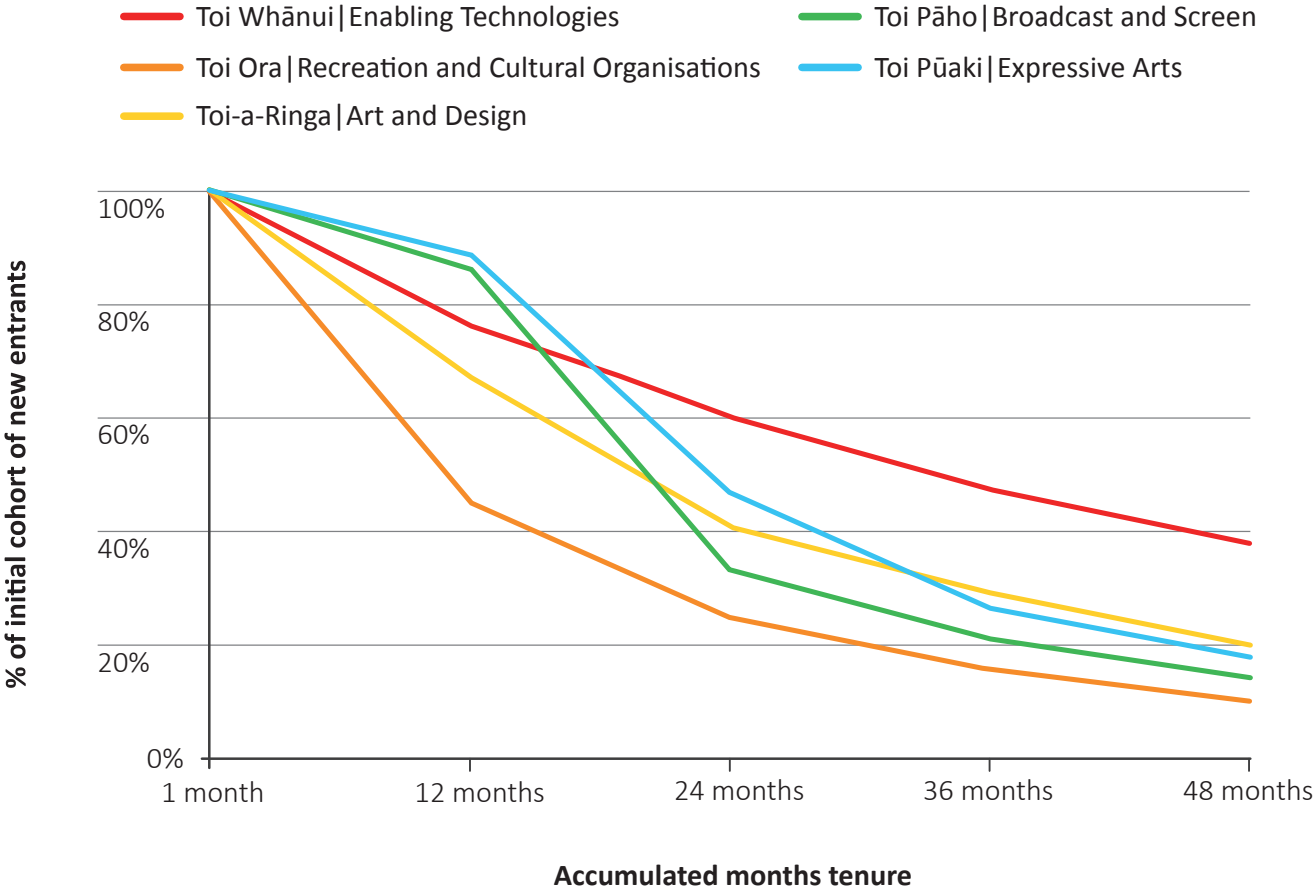
- Just 45% of new entrants to Toi Ora - Recreation and Cultural Organisations go on to accumulate 12 or more months of experience in that same industry;
- By comparison, close to 90% of those in Toi Puaki - Expressive Arts and Toi Pāho - Broadcast and Screen accumulate 12 months of tenure; and
- Interestingly, these two pou experience large drop-offs by 24 months, to, on average, 40%.

The significant drop-off in the workforce numbers in Toi Ora - Recreation and Cultural Organisations in Year 1 raises issues concerning the most appropriate type and timing of training prior to and during employment.

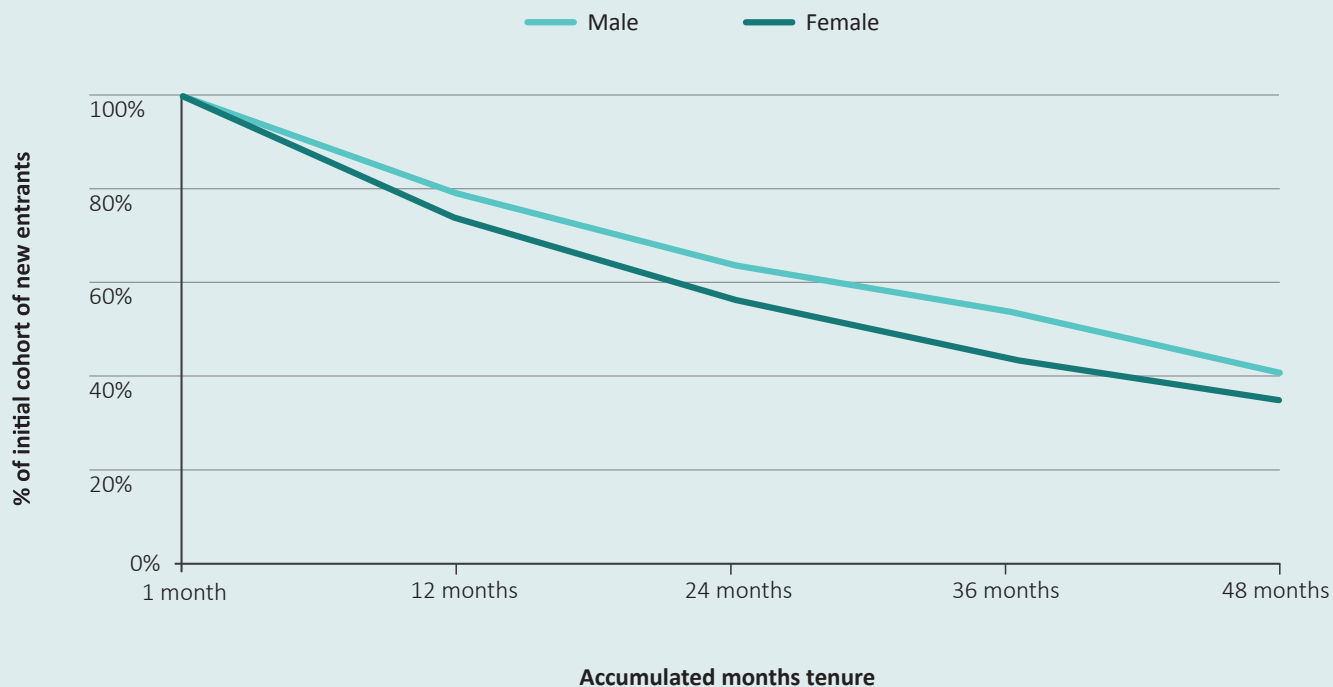
The large drop-off for Toi Pāho - Broadcast and Screen, and Toi Puaki - Expressive Arts, between 12 and 24 months suggests there could be a career pathway gap at this stage. Further investigation is needed to understand why employees are leaving the industry at this point.

³ In order to identify the percentage of new entrants that are retained for 48 months i.e. at least 4 to 5 years in one industry, a starting date at least 5 years in the past is required, which is why the starting cohort is 2015. If a more recent starting cohort date is selected (for example, 2019), the data indicates that the 12 month retention rates are similar, indicating that these trends are still relevant, albeit slightly out of date.

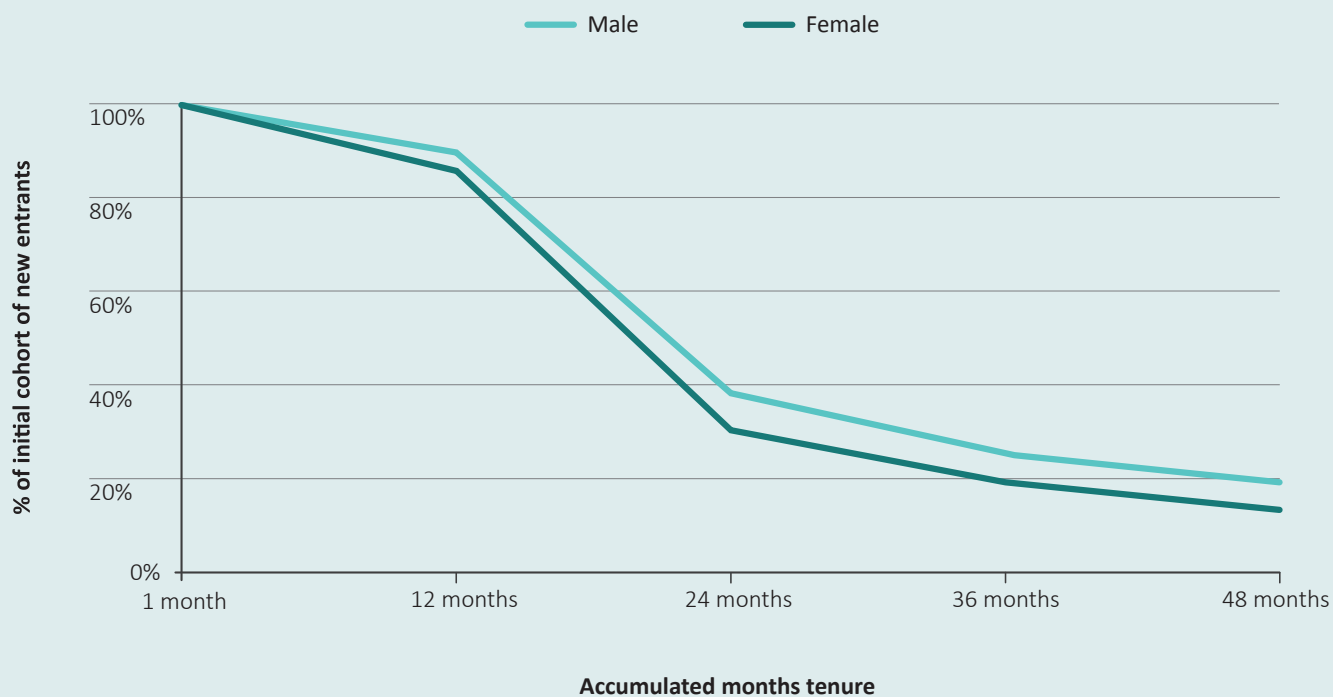
Months of retention of new entrants (starting cohort in 2015)



Toi Whānui - Months of retention of new entrants (starting cohort in 2015)



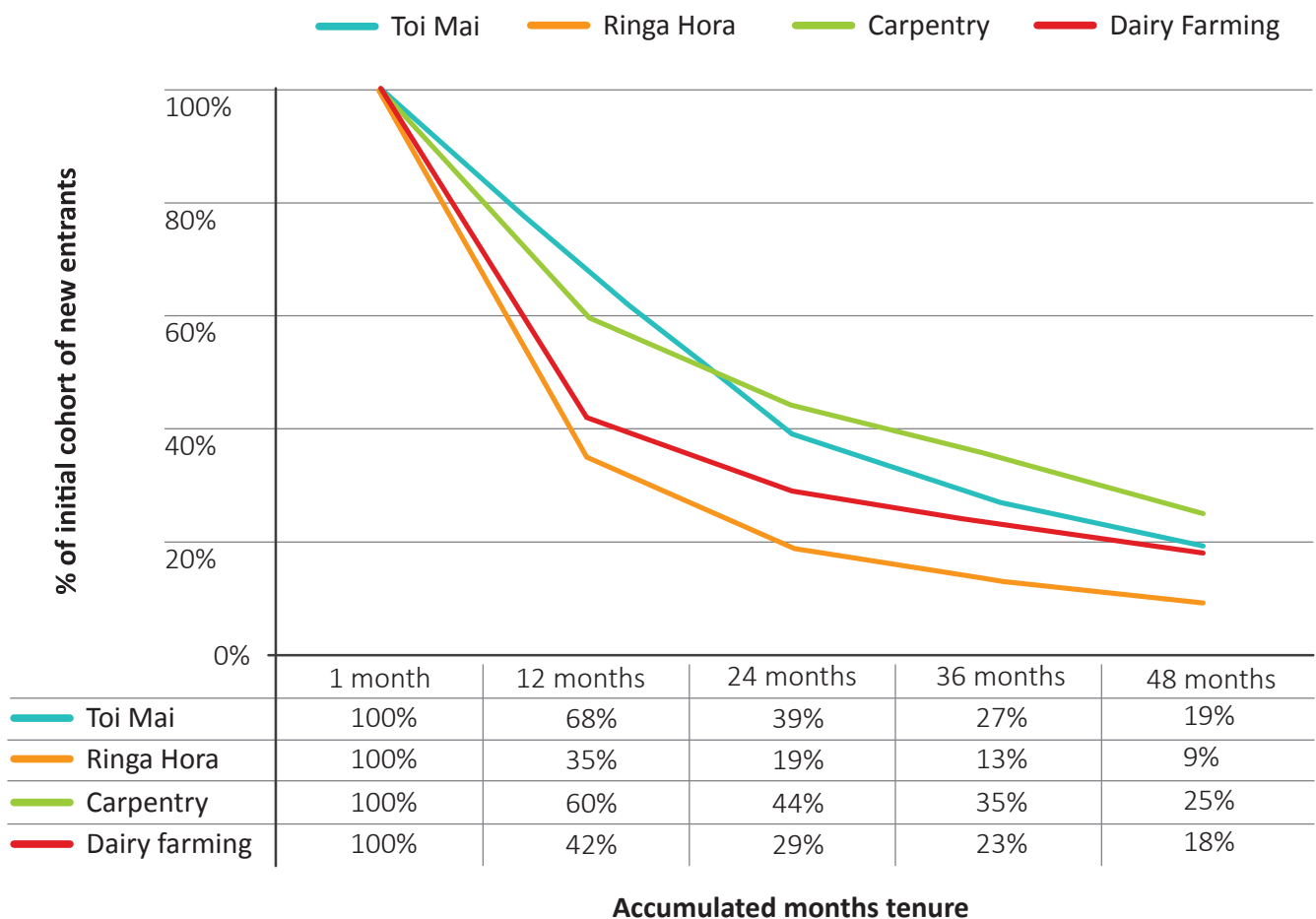
Toi Pāho - Months of retention of new entrants (starting cohort in 2015)



There are differences in the attrition of new entrants by gender.

- For both Toi Whānui - Enabling Technologies and Toi Pāho- Broadcast and Screen, the attrition of female new entrants is slightly greater than that of males.
- The difference in attrition for Toi Whānui - Enabling Technologies appears to widen around 36 months (i.e. equivalent to three years in the industry). 54% of male workers are retained for longer than 36 months in Toi Whānui - Enabling Technologies industries, compared to just 44% of their female counterparts. This difference might suggest that there are barriers preventing females from progressing beyond three years in these technology industries.

Months of retention of new entrants (starting cohort in 2015)



We compared retention within Toi Mai industries to another workforce development council, Ringa Hora (services), and to two other large industries, carpentry and dairy farming, to see whether the retention rates with Toi Mai's sectors were anomalous. Retention in Toi Mai sectors was above those in services, and comparable to dairy farming, but below carpentry.

B 2.7 A snapshot of industry tenure

Another way of understanding the mobility or intermittency of a workforce is by looking at its industry tenure profile. For this analysis, a cross section of the workforce at a point in time is taken, in this case March 2020. The percentage of the workforce that has been in the workforce for less than a year (up until March 2020) is identified, and then those that have been in the workforce for between one and two years is identified, and so on.

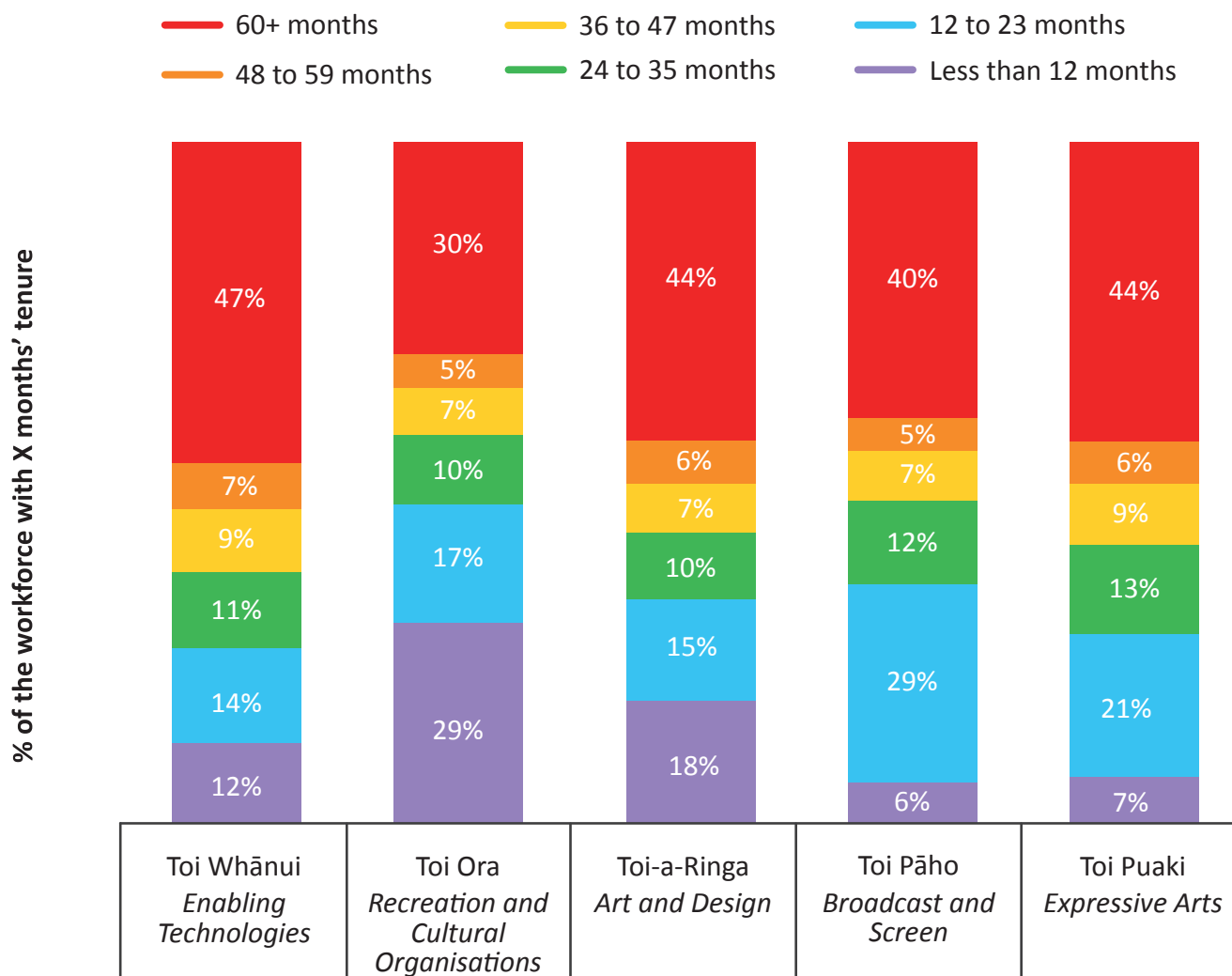
Using Toi Ora- Recreation and Cultural Organisations as an example, as of March 2020 there were roughly 50,000 people who earned income in that month, and 29% of them had been working in the sector for less than 12 months (14,500 people). This percentage indicates a relatively inexperienced industry.

It may be worth considering whether the training provision in the sport and recreation area (in particular) is suited to a mobile workforce, and if an investment in, and emphasis on, transferable, generalist skills and adequate short course options might be warranted given the turnover.

All other pou show relatively experienced (and potentially more stable) workforces. Approximately 40 – 50% of the workforce has been in the industry for longer than 60 months (at least five years).

A third of the Toi Pāho - Broadcast and Screen workforce has between 1 – 2 years' experience (29%). Further work is needed to understand what is driving this issue. Possible explanations include a surge in new entrants to broadcast and screen industries before 2020, and a career pathway gap, in which workers leave the industry after two years (note that just 40% of the Toi Pāho - Broadcast and Screen workforce has 60+ months experience).

Industry tenure by Pou (2020)



B 2.8 Destinations of leavers/workforce 'exiters'

This analysis identifies all employees that earned in a given industry for the last time in 2020 and considers them workforce 'leavers' (i.e. we have no further record of their employment in that industry up until March 2022).

- This crude 'churn rate' of employees is highest in Toi Ora - Recreation and Cultural Organisations: of the 33,400 employees in 2020, almost 5,000 of them did not return in 2021 (about 14%).
- Overall, the majority of people that leave Toi Mai industries are 'career changers' – they go on to work in a different industry in the following year. The majority of career changers (~90%) go into an industry not covered by Toi Mai.
- The 'Other' destination is a catch-all to include all other leavers that don't fit into other categories, including those that go into retirement. Of all leavers aged 55 to 64, a third are in this retirement category, suggesting a large proportion decided to go into early retirement instead of transitioning into a new industry.

For this analysis, we do not know which proportion of leavers intended to leave, and which were impacted by job losses as a result of COVID-19.

Further work is needed to understand the number and type of workers that left the workforce in 2020 – 2021, likely as a result of COVID-19, and what this could mean in terms of employment support for at-risk cohorts — how might Māori, Pacific and older workers be better supported to transition successfully (if needed)?

Destinations of leavers (2020)



Pou	Total employees in 2020	Number that don't return in 2021	Crude 'churn' rate
Toi Whānui – Enabling Technologies	40,600	5,334	13%
Toi Ora – Recreation and Cultural Organisations	33,365	4,659	14%
Toi-a-Ringa – Art and Design	19,010	2,197	12%
Toi Pāho – Broadcast and Screen	7,650	783	10%
Toi Puaki – Expressive Arts	2,050	254	12%

B 2.9 Career changers' time between employment

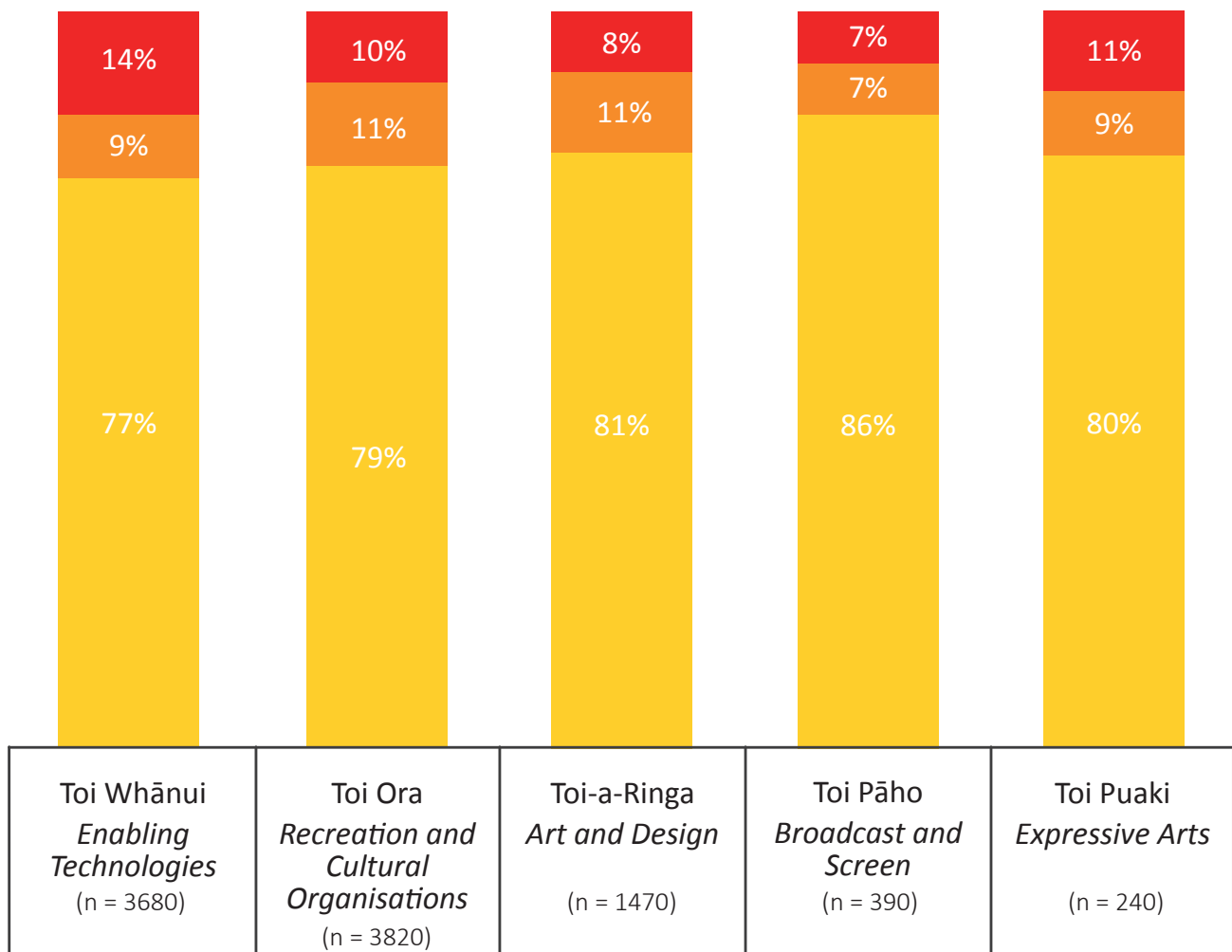
Of those in the workforce that changed industries (leaving a Toi Mai industry in 2020), it is of interest to see how long it took them before earning income from another industry. This analysis counts the number of months between an employee's last tax return from one industry, and the first tax return from a different industry.

In 2020, 80 – 85% of career changers were earning from a new industry within three months of leaving their initial industry.

No strong differences between pou can be detected. This data suggests that individuals who worked in Toi Mai industries were fairly resilient to change, and were able to transition into new industries relatively quickly.

Career changers: months between employment (2020)

— More than 6 months
 — 4 to 6 months
 — Within 3 months



[Note: this analysis does not include those who had to change jobs within the same industry]

B 2.10 Frequency of job and employer changes

Another way of thinking about the mobility of a workforce is job mobility. That is, how many times does a person change jobs (and employers) within a given period of time (three years and five years). Individuals could be changing jobs within the same industry, switching back and forth between a couple of industries, or changing industries each time they change employer.

We observe that those in Toi Whānui - Enabling Technologies industries appear most 'stable' (which is likely linked to the fact that it is also an older cohort on average). Of those in the starting cohort in 2015, 59% remained with the same employer for the 3-year period. A further 30% had just one job change (two employers in total over this period).

By comparison, those in the Toi Ora - Recreation and Cultural Organisations and Toi Puaki - Expressive Arts industries display greater signs of intermittency and mobility.

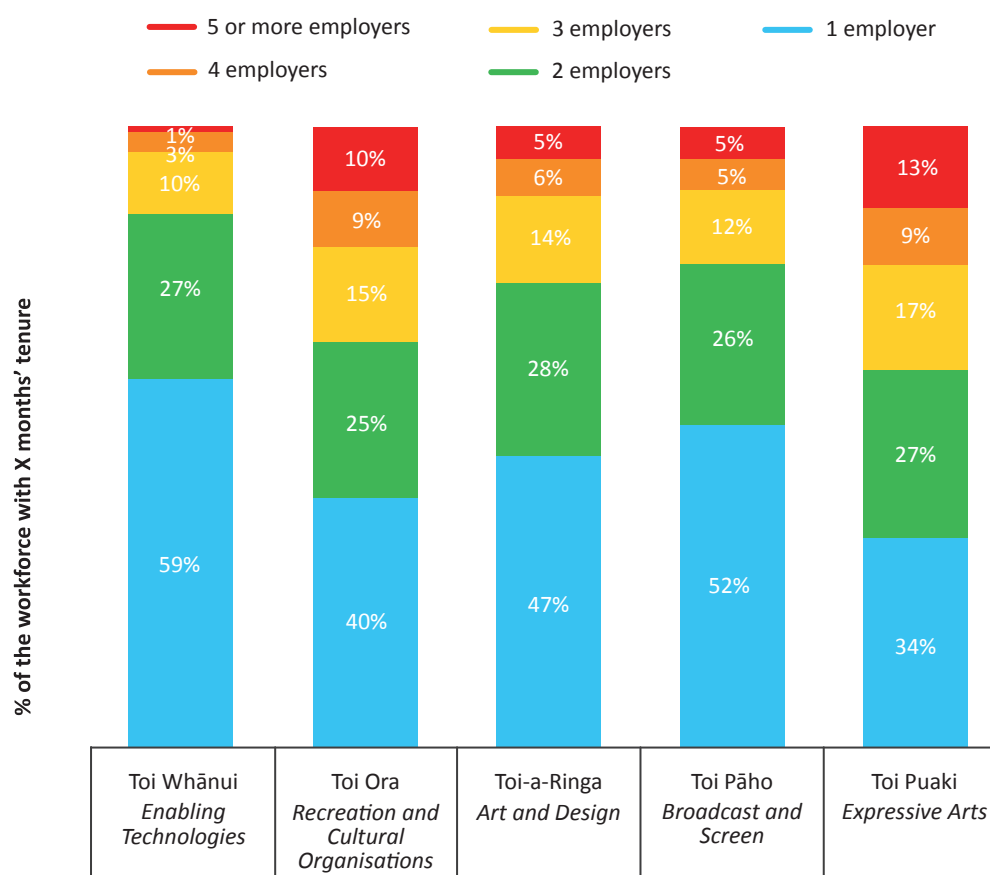
This data might reflect the fact that those working in Toi Whānui - Enabling Technologies are predominantly employees whereas those in Toi Ora - Recreation and Cultural Organisations and Toi Puaki - Expressive Arts tend to be self-employed or contractors.

Of those in the Toi Puaki - Expressive Arts workforce in 2015, 40% went on to have three or more employers within a 3-year time period (to 2018). Likewise, 34% of those in Toi Ora - Recreation and Cultural Organisations industries had three or more employers.

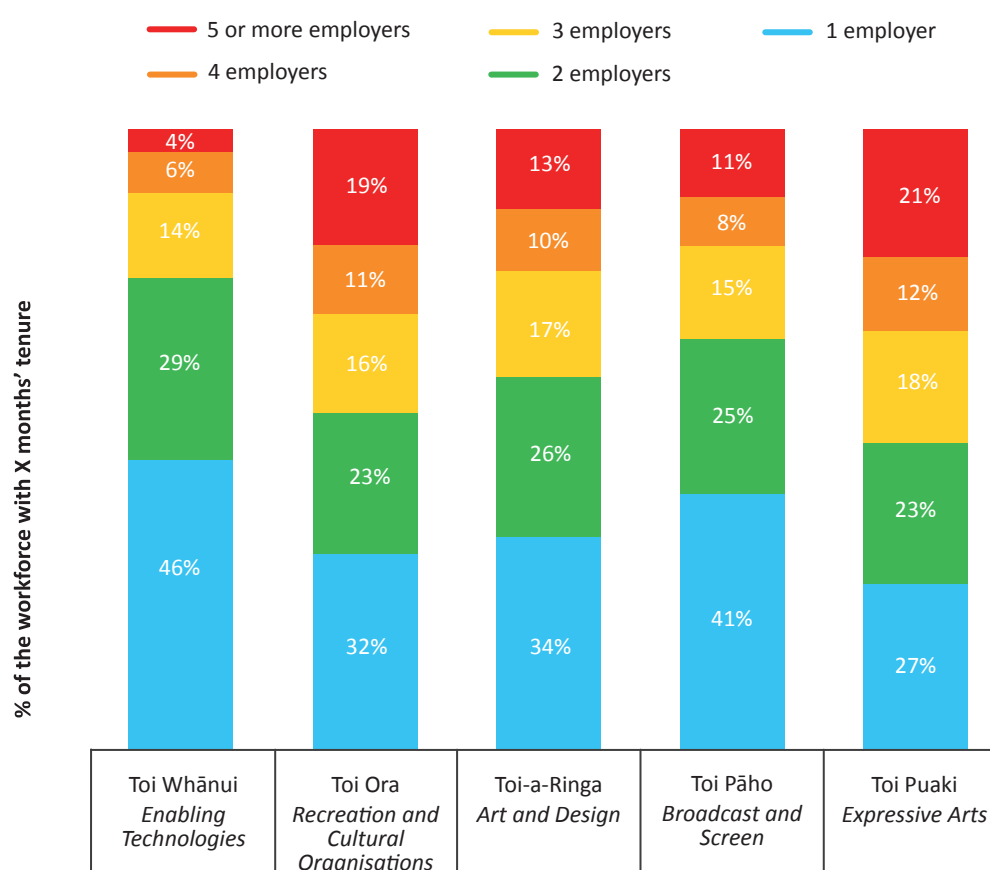
Similar trends can be observed when we track job movements over a 5-year period.

Note that this analysis uses a 2015 workforce cohort in order to track movements over a long period of time: five years (to 2020). Further work (and more data) is needed to confirm whether these trends still hold. Further analysis to distinguish between job movements within a pou, compared to job changes out of a pou, would also be of benefit.

Number of employers within a 3-year period (starting in 2015)



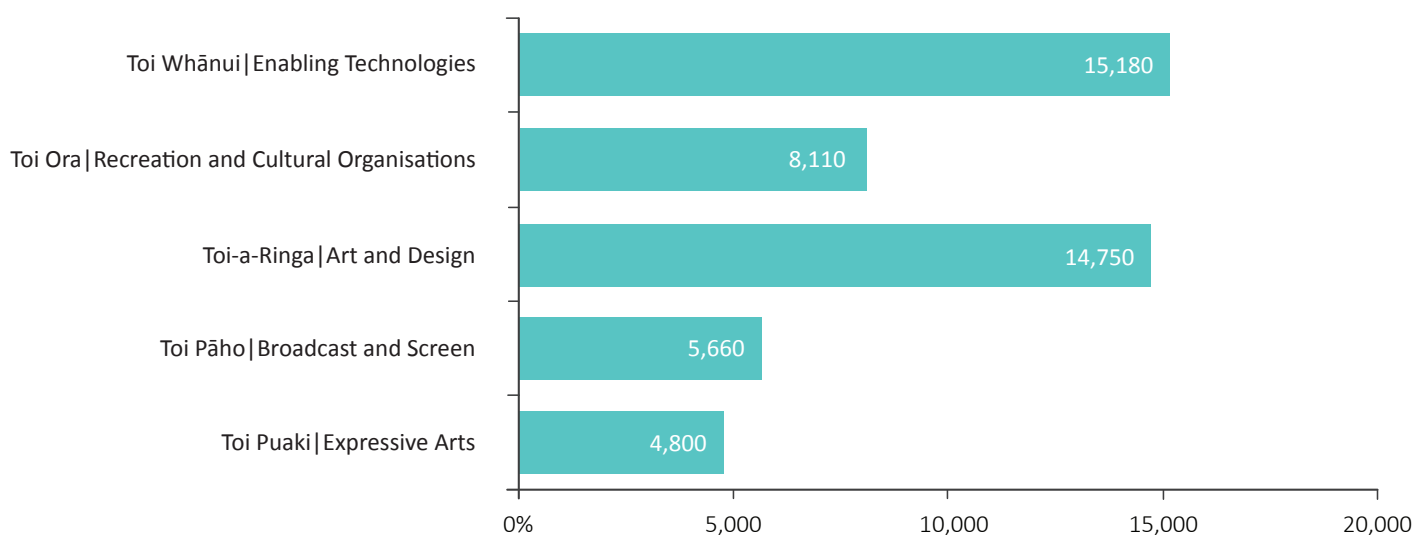
Number of employers within a 5-year period (starting in 2015)



B3 Business analysis

B 3.1 Number of businesses

Number of businesses by Toi Mai sectors (2020)



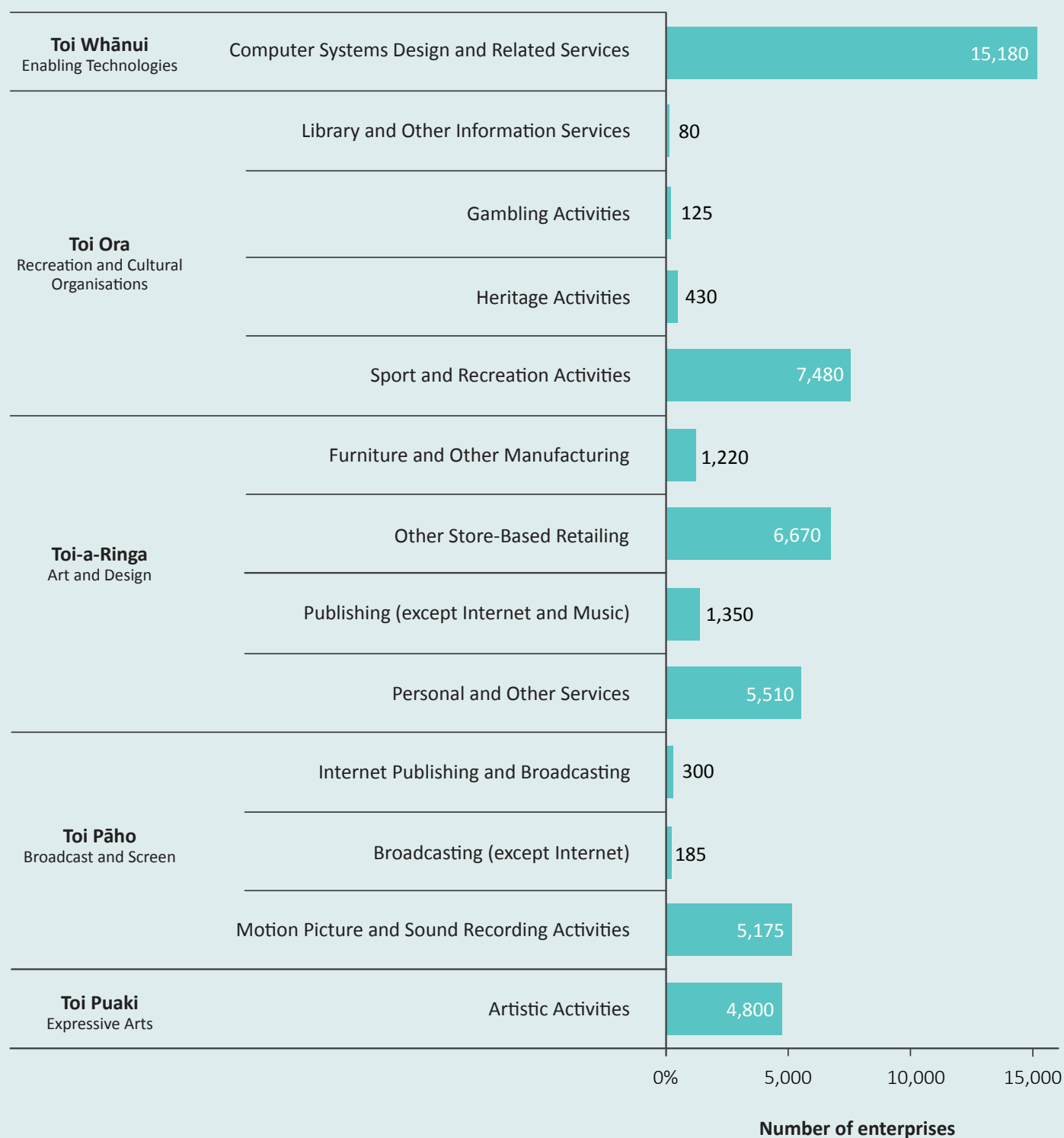
The total number of businesses (including sole traders) in CCRT industries in 2020 was approximately 48,500.

The largest number of businesses were in the Toi Whānui - Enabling Technologies sector, closely followed by Toi-a-Ringa - Art and Design.

Within Toi Ora - Recreation and Cultural Organisations, by far the largest number of businesses were within 'Sport and Recreation Activities.'

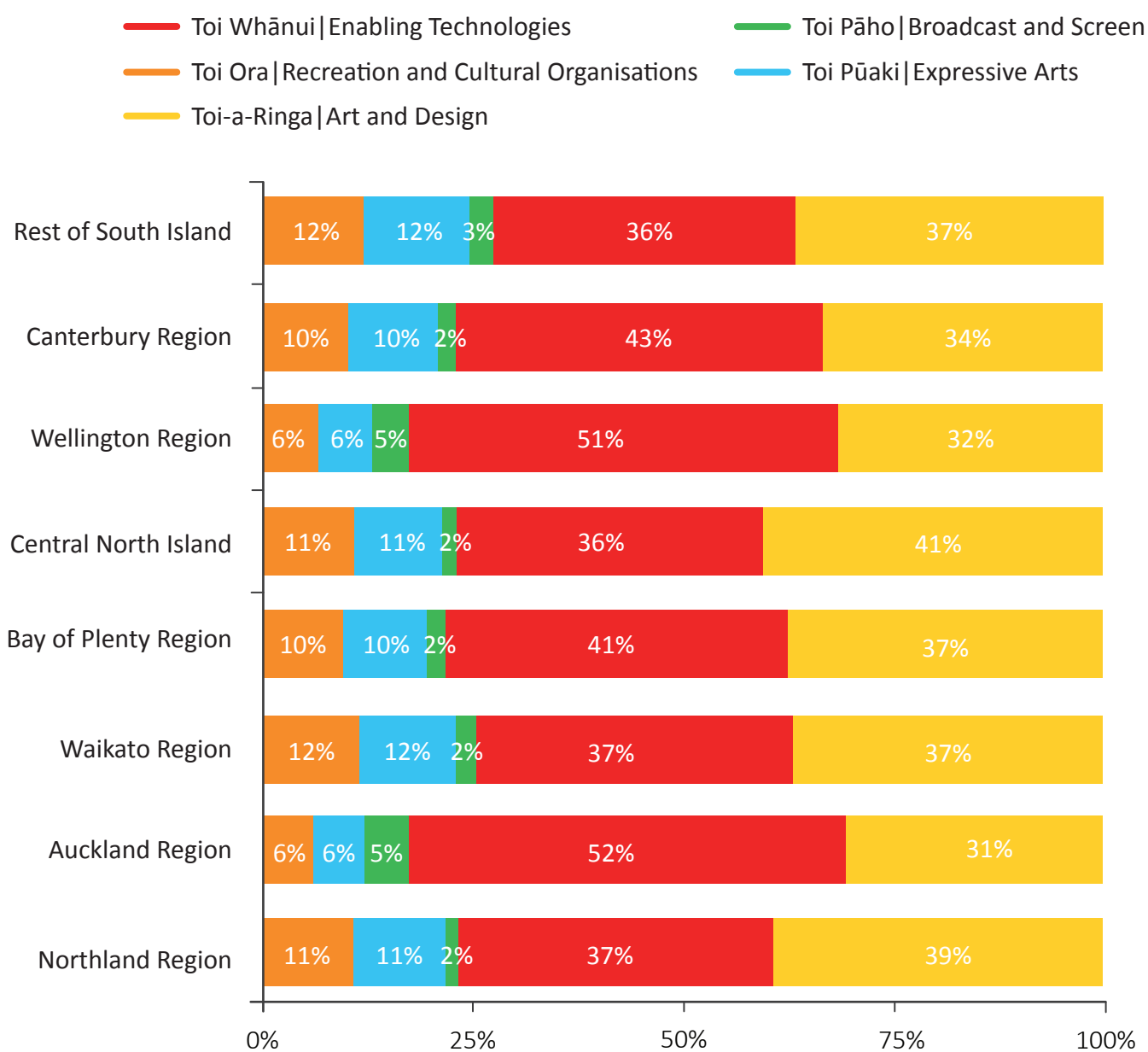
This data will act as a valuable baseline from which to track changes over time.

Number of businesses by Toi Mai sectors (2020)



B 3.2 Business distribution by region

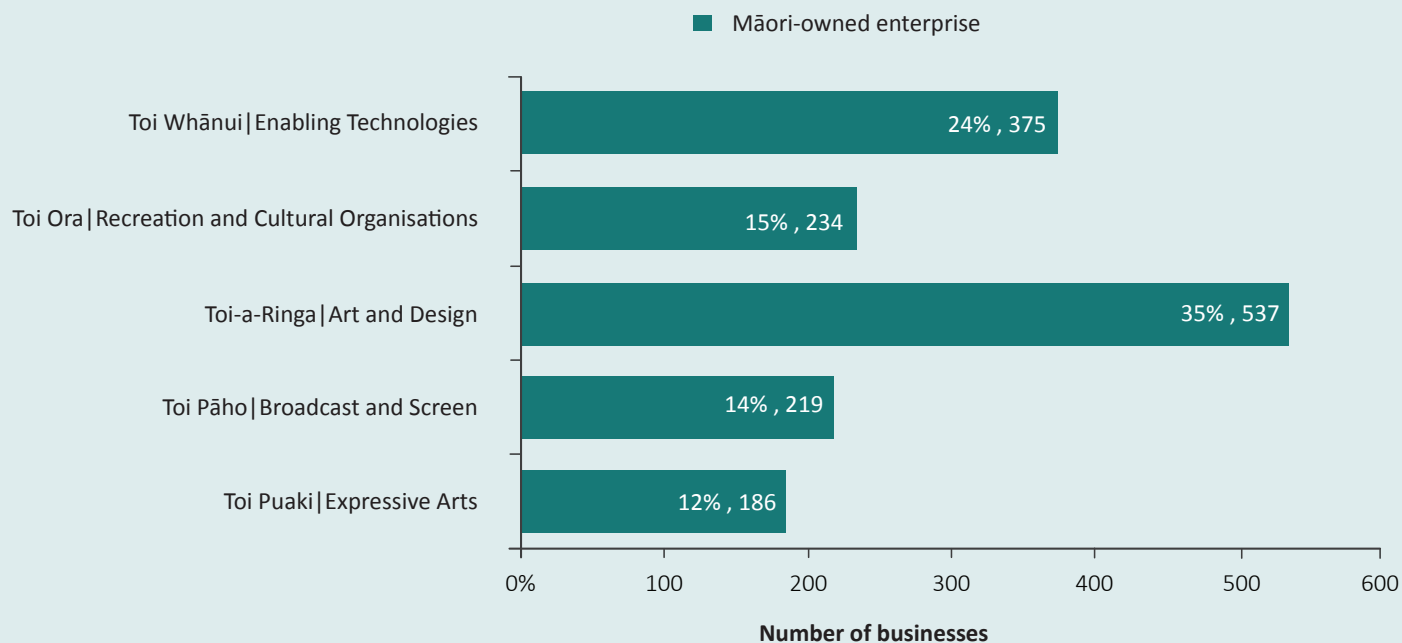
Business distribution by region



B 3.3 Māori-owned businesses

- Across all sectors in New Zealand, 6% of businesses are Māori-owned (based on the 2019 Te Puni Kōkiri report Te Matapaeroa 2019 — looking toward the horizon. Some insights into Māori in business).
- Drawing on available business shareholder records, it is estimated that 8.5% of businesses associated with CCRT industries are Māori-owned (~1,550 Māori-owned businesses identified).
- Toi Whānui- Enabling Technologies, the largest Toi Mai workforce, has the oldest workforce (65% over 35) and the smallest proportion of workers who identify as Māori (5%). This data indicates a need for interventions to overcome barriers to entry for Māori.
- A similar picture is reflected in the distribution of Māori-owned businesses and significant employers of Māori. Toi Whānui - Enabling Technologies is under-represented by these businesses compared to the CCRT sector and national distributions.
- Further work is urgently needed to identify and mitigate barriers to Māori employment and business ownership in the Toi Whānui - Enabling Technologies sector.

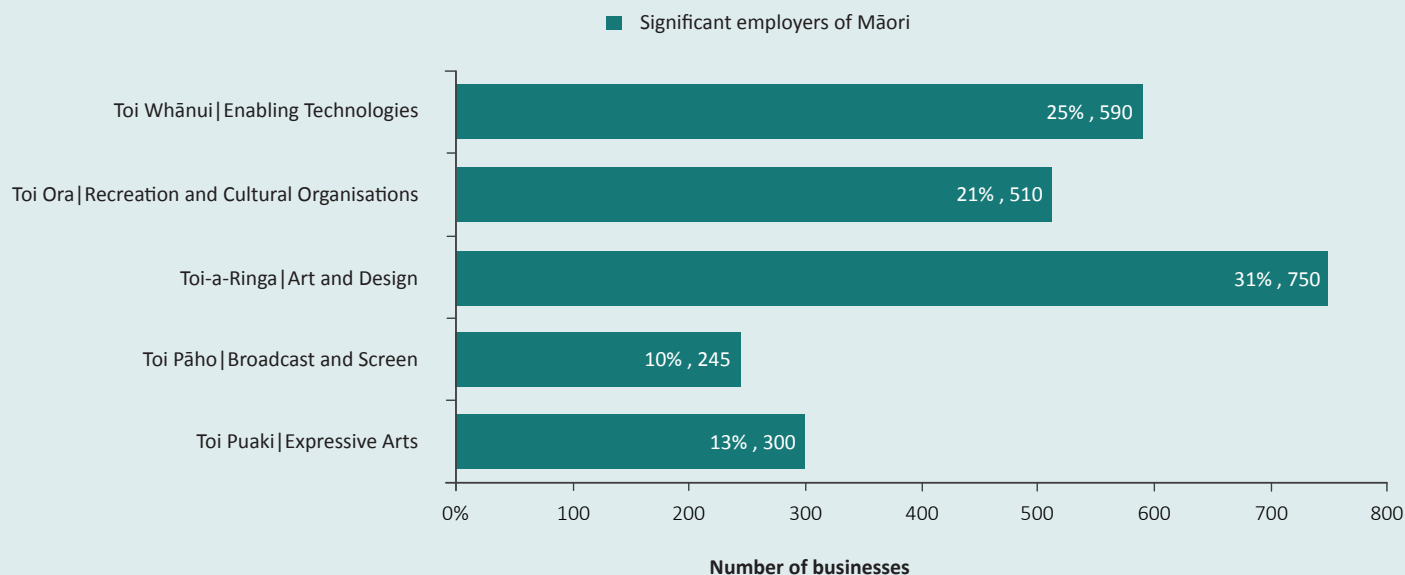
Number and percentage of all Māori-owned CCRT enterprises



Significant employers of Māori

- 2,400 significant employers of Māori have been identified within CCRT industries.
- 31% of them (750 enterprises) are in Toi-a-Ringa- Art and Design.
- A quarter of them (25%, 590) are in Toi Whānui- Enabling Technologies.

Number and percentage of significant employers of Māori within CCRT



B4 Industry leaders' cross-industry feedback through the engagement hui

This section presents findings and feedback across all five pou concerning Te Ao Māori and the CCRT sector, and Pacific Peoples, from the engagement hui undertaken by Te Amokura and Toi Āria (specific insights for each pou are provided in section C).

B 4.1 Te Ao Māori and the CCRT sector

Te Tiriti o Waitangi

While Te Tiriti o Waitangi and cultural competency is seen as important in the CCRT industries, few have been able to establish practical ways to embed these. Urgent matters take precedence, lack of resources is another handbrake, and in some cases ignorance is the barrier.

Whilst the majority of CCRT industries have struggled to recognise Te Tiriti o Waitangi, there are signs that some are taking a very active role in implementing change in their sector for now and for the future. Sport NZ and Recreation Aotearoa are two examples of how a top-down commitment and approach to Te Tiriti o Waitangi has been beneficial.

Representation

In many cases, Māori don't see themselves represented in particular workforces, which discourages their interest and ultimately their involvement in these industries.

Low representation could also be attributed to the disconnected pathways into the different sectors. Without clarity of what the career journey is for an individual, or a realistic outlook for employment and training requirements, it's hard to attract anyone, let alone Māori.

When Māori do pursue a career across certain sectors, they often incur a 'cultural tax' whereby they are more often than not expected to uphold tikanga Māori practices and te reo Māori requirements during their employment. While this is valued per se, there is usually no extra remuneration for this mahi.

Pathways

Whenever possible, Māori are best placed to train Māori. The nuances that are uniquely Māori can be hard to see but are immediately felt amongst their own. This recommendation is likely to lead to better supported, better equipped and better qualified Māori being trained and recruited for the CCRT workforce.

Successful models that have either been run by iwi or industry to support Māori within or into various sectors include:

- Tokona te Raki — Māori Futures Collective, created by Ngāi Tahu in partnership with others to train, empower and activate the next generation of rangatahi into the digital space;
- The newly established Te Rito journalism cadetship, which has had its first cohort of Māori through its doors this year; and
- The G8- Ngā Hua Toi programme, which supports Māori theatre and dance practitioners with apprenticeships, funding and other support mechanisms.

B 4.2 Pasific Peoples' feedback

The Te Amokura / Toi Āria engagement with the Pacific creative community primarily focussed on the impact of COVID-19. However, many other issues such as vocational education, access and barriers to knowledge and technology were also discussed.

COVID-19 Sector Impacts

The continued impact of COVID-19 on this community has been unrelenting. For young learners very few qualifications have been achieved in the last two years. Pacific youth have had to get work unrelated to their creative ambitions to support their family.

These pressures exacerbate mental health issues and make it difficult to have time to focus on studies. COVID-19 meant:

- Many, and continued, lost opportunities for live performance, and the halting of creative work in development due to uncertainty;
- The promotion of online learning in Pasific communities. However, online education requires access to devices and connectivity. As this is not a given for the Pacific community, many learners got left behind; and
- A high number of the creative community didn't understand how to access formal support mechanisms offered by the government during COVID-19, and if they did know about grants and subsidies, often didn't have the business infrastructure to access them.

Rethinking education

Education provision is not currently fit-for-purpose for Pacific learners. Supportive learning environments for Pacific learners are embedded in real projects and are action-based. The future provision of barrier-free access for Pacific learners should be accessible, free of racism, culturally responsive and well supported by others (a collective model).

Alternate models and qualification systems were discussed as better supporting Pacific learners, such as digital badging, micro credentialing or apprenticeship models. These systems allow Pacific learners to feel valued and affirmed in their learning.

Section C:

Combined insights, by pou

In order to present unified insights for each pou, this section combines for each pou data gathered by Scarlatti (which draws on Stats NZ's Integrated Data Infrastructure and the Longitudinal Business Database), and data gathered through the engagement process undertaken by Te Amokura and Toi Āria: Design for Public Good.

C1 *Toi Whānui - Enabling Technologies*

Insights from the data

- The largest Toi Mai sector, with a high rate of employees (81%).
- Has the oldest workforce (65% over 35 years). Only 6% of its workers are aged between 15 – 24 years.
- Comprises 31% females in 2020, the lowest of the five pou.
- Has the smallest proportion of workers in CCRT sectors who identify as Māori (5%), and the highest proportion (27%) who identify as Asian.
- Has the highest proportion of New Zealand residents (32%) in its workforce.
- New entrants: 58% career changers, 17% tertiary, 13% migrants.
- 66% of the workforce has a Bachelor's degree or higher and 14% a post-school certificate or diploma.
- 69% of leavers / workforce 'exiters' are career changers, and the 'crude' churn rate from 2020 to 2021 was 13%.
- Predominantly located in Auckland (49%).
- A Māori-owned business representation of 5.6%. This amount is 36% less than the national average.
- The lowest Toi Mai sector in terms of distribution of significant employers of Māori (3.9%).

Engagement from Toi Whānui - Enabling Technologies industry leaders

- People now work well remotely. This is having a significant impact on the way businesses operate — for instance, remote workers are not training others.
- Increased salary expectations and remote learning mean that some firms can't compete financially. Culture has become really important and it works: it helps retain staff. Some staff turn down job opportunities with salary rises from other companies if the culture at their current company is to their liking.
- Demand is extreme and there is a massive shortage of senior-level developers. The gap is not being touched. There is recruitment from offshore, rapidly rising salaries and lots of churn.

- There is a big demand for skill sets such as security, machine learning, etc, but there is not a good offering of training courses for these areas. Employers need financial support for training, and on the job training. It is not realistic to invest huge money in a graduate who may only stay 12 months.
- Human skills are coming to the fore. Indigenous people have these soft skills. Māori and Pacific learners are already ahead of the curve in this respect.
- For some participants, graduates need to be better prepared for the workplace; although another participant noted that the education sector (in its widest sense) is creating excellent candidates from diverse backgrounds. Educational institutions that are more dialled into industry are better.
- A clear pathway is needed for learners, and this needs to be communicated to them through schools, role models, whānau, parents, careers advisers and others. Information about roles in the sector needs to be very current.
- Rangatahi Māori are not being encouraged. Visibility is really really important. They need to see themselves in these jobs in tech and innovation, and see Māori tech business owners in the sector. Pathways and their promotion are important.
- Once employed, cultural and pastoral care, cultural safety and ongoing training are crucial, particularly for Māori and Pacific students, especially to aid retention.
- To stay in the job, rangatahi need training in leadership and other elements. The Ngāi Tahu co-design initiative (Tokona Te Raki), an excellent pipeline model for rangatahi, could be a model for scaling numerically and across disciplines (tech to multiple areas), and developing critical thinking, learning and research skills.
- Feedback concerning women in tech indicated that it was still a struggle. Mentors make a difference — but quite senior-level people are leaving (i.e. the best mentors).

C2 Toi Pāho - Broadcast and Screen

Insights from the data

- The second smallest sector of the Toi Mai workforce (roughly half the size of the largest, Toi Whānui- Enabling Technologies).
- Has the smallest decline in workforce size due to COVID-19; no reduction in 2020 and a 5% decrease in 2021. This resilience possibly indicates high flexibility in adapting to change, and a likely low reliance on direct face-to-face contact.
- Had the second highest proportion of Toi Mai sectors of employers and self-employed in 2020 (71%). Likely dominated by sole-proprietors/ independent learners.
- Comprises 45% female and 55% male in 2020.
- New entrants: 57% career changers, 16% tertiary, 5% migrants.
- 73% of the workforce has either a post-school certificate / diploma or a higher qualification (54% a Bachelor's degree or higher, 19% a post-school certificate or diploma).
- Close to 90% of new entrants accumulate 12 months of tenure, but the sector experiences a large drop-off by 24 months, to, on average, 40%. This large drop-off between 12 and 24 months suggests a career pathway gap at this point.
- 85% of leavers / workforce 'exiters' are career changers, 14% are 'other', and 2% 'overseas'. Had the lowest 'crude' churn rate from 2020 to 2021 of 10%.
- 82% of its workforce is in Auckland (63%) and Wellington (19%), potentially due to larger customer bases in these areas, and a high reliance on technology, which may be less available elsewhere.
- Has the highest percentage amongst sectors of those identifying as Māori (17%).
- Has at least a 50% higher representation of Māori-owned businesses over the national average (across all sectors in New Zealand, 8.8% of businesses are Māori-owned).
- 4.3 % of businesses in Toi Pāho- Broadcast and Screen are significant Māori employers.

Engagement from Toi Pāho - Broadcast and Screen industry leaders

- People are often going from contract to contract, the sector needs to scale up and down dramatically depending on production timetables, and there are personnel shortages across the entire sector. There is a need to upskill, train and retrain, and huge skill shortages at every level.

- Vocational programmes are a mixed bag. In some areas, there are little to no programmes that lead students into their desired roles. Reviewing the type of skills being taught will mean better alignment with the sector.
- Industry has tried to address this through workshops, training programmes and attachments to fill the widening gaps of skills. Technology is evolving at an exponential rate, changing the way current vocations function and expanding into new roles, such as, for instance, digital imaging technician.
- There is a need to look beyond simply creating courses, because this does not address issues such as how to sustain people in the industry.
- The screen sector knows where the gaps lie, and has identified pathways and established industry-led training programs. In the view of one of the participants, more industry funding is required for training and there needs to be better alignment between the current education system and industry standards.

C3 Toi Puaki - Expressive Arts

Insights from the data

- The smallest sector of the Toi Mai workforce.
- Shows a decline of 36% in workforce size between 2019 (pre-COVID-19) and 2020, possibly due to lower demand as a result of COVID-19 restrictions.
- Had, in 2020, the highest proportion amongst all sectors of employers and self-employed (79%).
- An evenly-spread age distribution, and the highest percentage (7%) of workers over 65.
- Has a close to an even split between female and male (49 / 51).
- Those identifying as Māori make up the second largest group (14%) after those identifying as Pākehā / NZ European (72%).
- New Zealand citizens and residents combined make up 98% of this workforce.
- About half of the workforce (48%) is located in Auckland.
- 67% of new entrants are career changers, and 18% tertiary.
- 71% of the workforce has either a post-school certificate / diploma or a higher qualification (52% a Bachelor's degree or higher, 19% a post-school certificate or diploma).
- Close to 90% of new entrants accumulate 12 months of tenure, but the sector experiences a large drop-off by 24 months, to, on average, 40%. This large drop-off between 12 and 24 months suggests a career pathway gap at this point.
- 94% of leavers / workforce 'exiters' are career changers (the highest of all the Toi Mai sectors), and the 'crude' churn rate from 2020 to 2021 was 12%.
- 13.6% of businesses are Māori owned (the second highest amongst sectors). 6.3% of businesses are significant employers of Māori.
- The top three occupations in Toi Puaki- Expressive Arts are painter, musician and author.

Engagement from Toi Puaki - Expressive Arts industry leaders

- Those working in the sector need to have a range of income streams and skills to survive, and pay rates are a challenge. It is still a huge struggle to get funding.
- The nature of work in the sector is not always accurately set out or understood. Expectations need to be realistic but also accurate and positive.

The sector has huge cultural, economic and career value. Pathways, and their promotion, need to educate those who are interested in becoming practitioners about the ways they can contribute to society, and the impacts on communities.

- Vocational pathways in the school system are important — teachers need to tell students about the options. In some communities parents don't see this sector as a viable career option.
- Industries are wanting their story to be told, and having a clear narrative of their value and what they have to offer. It's not about puffing their chests out but about getting the right kōrero out there to capture their audience.
- There are shortages in the industry, particularly technicians and producers, and there are now not enough people to deliver the work that's been funded. People often get burned out in a few years — there are now very few senior producers left in New Zealand.
- There needs to be more teaching of skills required to work in the world, to prepare students to find and do a job (time management, CV writing, licensing, copyright, softer skills such as empathy and communication etc).
- In addition to aligning training to industry skills, prioritising cultural competency is required across all sectors, targeted at those already involved in the workforce, and new recruits coming through the pipeline. This will arm these sectors with a solid foundation in future.
- There is a need for more mentoring and advisory roles.
- There was support for the role which Toi Mai can play in bringing threads of the community together (to counter a tendency towards acting as individuals and organisations, rather than as part of a sector), in linking industry and the sector with its work, disseminating relevant research, and acting as a strong advocate for the sector. The link between education and industry is critical.

C4 Toi-a-Ringa - Art and Design

Insights from the data

- A middle ranking sector by size.
- 70% are employees.
- The highest proportion of females (74%) of any of the Toi Mai sectors.
- Those identifying as Asian are the second largest group (after those identifying as Pākehā / NZ Europeans).
- New Zealand citizens and residents combined make up 91% of this workforce.
- 52% of new entrants are career changers, and 17% tertiary.
- A large proportion has a post-school certificate or diploma (38%). However, 26% have a Bachelor's degree or above, the lowest percentage of any sector.
- 67% of leavers / workforce 'exiters' are career changers. The 'crude' churn rate from 2020 to 2021 is 12%. 6% of leavers go on to a benefit after leaving the industry.
- 8% of businesses are Māori owned.
- 5.1% of businesses are significant employers of Māori.

Engagement from Toi-a-Ringa - Art and Design industry leaders

- The impact of COVID-19 on the sector has varied.
- Many of those who are graduating are not getting up-to-date career advice. A better process through which to connect with schools is needed. The onus to do something about this is on the industry.
- There was a call for greater clarity about the roles of those in the polytechnic sector, a more comprehensive repository of available training, and strong linkages between industry, education and government.
- The importance of fit-for-purpose data was stressed, especially given the paucity of quality data available to Toi Mai (particularly in comparison to other sectors, and despite the sector incorporating 131,000 small businesses).

C5 Toi Ora - Recreation and Cultural Organisations

Insights from the data

- The second largest sector, with the highest percentage of employees (84%).
- Has the highest proportion of workers in the 15-24 age group (22%).
- Has an almost even split between female and male.
- Those identifying as Māori are the second largest group in this sector after those identifying as Pākehā / NZ European.
- Has a very high percentage (82%) of New Zealand citizens.
- Comprises the lowest proportion of its workforce in Auckland of all the Toi Mai sectors.
- 59% of new entrants are career changers, and 15% tertiary.
- 36% of the workforce has a Bachelor's degree or higher (the second lowest percentage of the Toi Mai pou) and 26% a post-school certificate or diploma. The broadest range of skilled roles of all the Toi Mai sectors, fairly equally distributed across levels (including no qualification).
- The significant drop-off in the workforce numbers in Toi Ora- Recreation and Cultural Organisations in Year 1 raises issues concerning the most appropriate type and timing of training prior to and during employment.
- 82% of leavers / workforce 'exiters' are career changers. Of the 33,400 employees in 2020, almost 5,000 of them did not return in 2021 (the 'crude' churn rate from 2020 to 2021 was 14%, the highest of any sector).

Engagement from Toi Ora - Recreation and Cultural Organisations industry leaders

- The sector still suffers from low paid roles, across the board. There are high workforce shortages throughout the sectors, including customer service-facing roles in which the remuneration is minimal. Low pay hinders recruiting new talent, or providing long term employment. The GLAM sector is also concerned about the lack of diversity throughout the sector.
- Māori representation is low so there's a real lack of mātauranga Māori and added pressure on the small number of Māori working in these spaces. There aren't enough Māori to meet the demand. A better, more encouraging environment would help attract more Māori. Work is needed to build stronger relationships with local hapū and iwi.
- There are skill shortages in different pockets of Toi Ora- Recreation and Cultural Organisations, some due to current, changing environments, others long-standing problems yet to be addressed, such as interpersonal skills. Some new to Toi Ora- Recreation and Cultural Organisations are not well

equipped with basic business skills that would allow them to operate as a sole trader. This not only hinders their own experience but puts even more pressure on the sector.

- There are about 7,000 people working in the library sector. Only a small percentage have qualifications to become professionally registered. A wide array of skills are needed, but the education pathway is outdated.
- It was suggested that prioritising cultural competency would be of value, as well as more mentoring and advisory roles.

Section D:

Recommendations

Following their industry engagements, Te Amokura and Toi Āria made the following set of next step recommendations for Toi Mai and the Tertiary Education Commission:

Priority recommendations

1. **Support the most vulnerable sectors:** Prioritise investment in the most vulnerable and essential sectors which have a significant role in growing the Māori and Pacific workforce, but which are under extreme pressures due to COVID-19. Specifically:
 - Provide Pacific community leaders with representative roles in decision-making environments across the cultural and creative sectors.
 - Provide the Toi Pāho- Broadcast and Screen sector with funding to develop a fit-for-purpose training model that supports transferable skills across the sector.
2. **Support sectors that are trending toward growth**
 - Prioritise investment in adaptive and innovative high dividend sectors (i.e. tech), which would benefit from identifying and then replicating successful models.
 - Build fit-for-purpose vocational education pathways including exploration into new models of training such as apprenticeships and short-term learning programmes.
3. **Whole of system journeys:** Commission a review into the whole of system pathways, mapping a learner through the sector system from start to end, to understand what is required to ensure:
 - employers are getting learners who are work-ready;
 - learners are receiving the specific training required and continually upskilling in soft skills and hard skills; and
 - learners are aware of and have access to current career pathways and roles.
4. **Centre cultural knowledge:** To ensure Māori knowledge and Pacific knowledge is upheld for all learners and trainers, Toi Mai should implement a sustained and enduring process of cultural upskilling that will ensure:
 - Teachers and training providers have an understanding of the basic principles of Te Tiriti o Waitangi;
 - Sector employers encourage and embrace culture and diversity; and
 - Sectors and industries are encouraged to develop cultural competence to better engage with Māori/Pacific talent and communities.

- 5. Develop our digital workforce:** Invest in developing the digital workforce (all sectors require digital upskilling), and develop a digital education strategy and responsive fit-for-purpose provision.

Other recommendations

- 6. Build a responsive sector:** To make the sectors attractive to new talent and retain current talent, Toi Mai should appoint sector advisory groups, composed of industry representatives who meet regularly with Toi Mai to:
- understand current and future sector needs
 - help inform training specific funding models
 - help inform the design of specific sector qualifications
- 7. Sector database:** Sector specific data is limited and can be pivotal when trying to understand the market trends and behaviours with learners entering the industries. Toi Mai should:
- invest in building a shareable and searchable sector database, to ensure there is a sector wide (and industry wide) sharing of existing and future data.
- 8. Wellbeing as a key metric:** Toi Mai should work with the sector and industry to prioritise wellbeing and pastoral care.
-



www.toimai.nz

October 2022