NSW Innovation and Productivity Council
Investment NSW

Accelerating NSW:

Insights from startups and startup support organisations

February 2024

NSW GOVERNMENT

Acknowledgement of Country

The Department of Enterprise, Investment and Trade acknowledges, respects and values Aboriginal peoples as the Traditional Custodians of the lands on which we walk, live and work. We pay our respects to Elders past and present.

We acknowledge the diversity of Aboriginal people and their ongoing connection to their country, waters and seas. We also acknowledge our Aboriginal and Torres Strait Islander employees who are an integral part of our diverse workforce.

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About the NSW Innovation and Productivity Council

The NSW Innovation and Productivity Council (the Council) was established by the *Innovation and Productivity Council Act 1996* (the Act). It advises the NSW Government on priorities for innovation-led economic development and productivity.

Council members are leaders from industry, education, and academia. Appointed for a 3-year term, members bring a rich and diverse range of experiences and expertise to the Council's work. The current Council was appointed in 2023.

Council publications are independent reports and do not constitute NSW Government policy. This is consistent with the Council's role and its object under the Act.

Further information is available on the Council's website.

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About Investment NSW

As part of the NSW Government, Investment NSW's vision is to stimulate jobs growth and reinforce New South Wales as a prosperous, inclusive and thriving global hub for business, innovation, talent, students and residents.

We achieve this by targeting opportunities aligned to our key pillars: fostering startups and innovation, growing priority sectors and precincts, attracting global investment and talent and exporting to the world.

To learn more about the support and services Investment NSW provides, go to investment.nsw.gov.au

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About University of Technology Sydney research team

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Contributors to the broader study include Dr Katrina Skellern, Dr Sabina Doldor, Liz Stephens Counter and Kiia Strömmer.

About Startup Muster

Startup Muster is an independent organisation focused on measuring and publishing the progress, challenges and opportunities found within the Australian startup ecosystem, to demonstrate and accelerate progress.

Founded in 2013, it ran for 5 years, was on pause for 5 years, and restarted in June 2023. Startup Muster conducted its 2023 survey in July and August 2023, and conducted data cleaning throughout September 2023. Startup Muster released its report in October 2023.

Glossary of CAISH definitions

Coworking space

Coworking spaces are **flexible, shared office spaces.** Typically, they're available on a short-term contract. Unlike incubators and hackspaces, coworking spaces usually provide **minimal business development services** and **no technical facilities.**[1]

Accelerator

Accelerators are **cohort-based support programs of fixed duration.** They provide mentoring, peer-to-peer interactions, business skills training, **investment readiness** training and **connections to investors.** Typically, such programs are **selective** about the people and organisations they support, basing decisions on criteria such as sectoral focus and growth potential.[2]

Incubator

Incubators are startup support organisations that **provide startups with physical space and additional growth-related services.** Residencies are not **cohort-based or for fixed terms,** though they may have a maximum duration. The **provision of services** is an important distinction between incubators and coworking spaces. Most incubators also provide services such as investment readiness training, connections to investors, intellectual property advice (directly or via third-party service organisations), technical support and peer-to-peer interactions.[3]

Startup hub and innovation hub

Startup hubs and innovation hubs are **physical spaces (buildings or campuses)** where startup support organisations or initiatives (such as accelerators, incubators and coworking spaces) are **co-located.** Such hubs involve some form of **intentional coordination** between the entities or initiatives.[4]

1 Centre for Entrepreneurs (2022), *Incubation nation: The acceleration of UK startup support.* https://centreforentrepreneurs.org/cfe-research/incubation-nation
2 Centre for Entrepreneurs (2022), *Incubation nation: The acceleration of UK startup support*, p 10. https://centreforentrepreneurs.org/cfe-research/incubation-nation
3 Centre for Entrepreneurs (2022), *Incubation nation: The acceleration of UK startup support.* https://centreforentrepreneurs.org/cfe-research/incubation-nation
4 Developed by the UTS team in consultation with Investment NSW and the NSW Innovation and Productivity Council's Expert Advisory Group.

From the NSW Innovation and Productivity Council Champion

Welcome to the NSW Innovation and Productivity Council and Investment NSW's second report on the impact of coworking spaces, accelerators, incubators, and startup hubs (CAISH entities) on the startup ecosystem and, more broadly, the economy.

We released our first report in this series, *Accelerating NSW: the impact of coworking spaces, accelerators, incubators, and startup hubs*, in August 2023.

This new report, *Accelerating NSW: Insights from startups and startup support organisations*, presents an analysis of CAISH-focused data from the Startup Muster 2023 survey of the Australian startup ecosystem, which made a welcome return after a 5-year hiatus. The data was gathered from startups and startup support organisations around Australia.

Our report contains quantitative analysis and targeted recommendations, building on the ecosystem mapping, literature review and insights from qualitative interviews in our first *Accelerating NSW* report. The insights in this latest report shift the dial an important notch further in our understanding of the impact of CAISH entities throughout the economy.

We acknowledge commentary in the ecosystem about the 2023 Startup Muster survey and its report. The Startup Muster survey is one tool that can be used to measure the CAISH ecosystem. We recognise that it has limitations, but this is true of any survey. The survey findings in this new *Accelerating NSW* report are not presented as a census but rather as a starting point for continued measurement and conversations.

We can now consider and build on the qualitative evidence and impact measurement framework in our first report and the data analysis in this new report. Combined, they offer important ammunition for evidence-based policymaking to foster the NSW and Australian innovation ecosystems.

Our analysis validates opportunities we identified in our first report to increase the impact of CAISH entities by supporting more startups to internationalise. The analysis also reveals the importance of exploring the need to increase regional entities' capacity and for greater focus on diverse client groups.

Since the 2018 Startup Muster survey, there has been a dramatic shift to remote working (14% reported remote working in 2018, compared to 44% in 2023). This impacts the delivery models of CAISH entities. More needs to be done to facilitate online service delivery and a hybrid model for CAISH entities to address this change in our way of life.

This report also shows the need to consider the life stage of startups and scaleups when developing supportive policy. This will ensure that interventions and programs are best targeted to help startups and CAISH entities move through the lifecycle and achieve scaleup status and growth.

We demonstrate the importance of internationalisation in achieving startup growth, however we note that a significant portion of respondents have not yet captured international markets. Assisting startups and scaleups to internationalise requires further consideration in growing our ecosystem.

And as we highlighted in our first *Accelerating NSW* report, the CAISH ecosystem does not undertake widespread or robust measuring of its impact. The data shows that half of CAISH entities that responded to the survey do not track or report on their own impact on metrics ranging from jobs created to revenue generated.

In particular, the responses to the 2023 Startup Muster survey on jobs created, investment raised, and revenue generated by CAISH-supported startups and scaleups lack the robustness we need to publish the metrics in this report. This supports our main recommendation to improve this data, and the next phase of our project will focus on improving the data picture in these areas.

On behalf of the Council, I commend the project team at Investment NSW and UTS, as well as the members of our Expert Advisory Group and the Startup Muster team, for their support and contributions to this report.

I hope the insights in *Accelerating NSW: Insights from startups and startup support organisations* inform your work and help make NSW the most effective place in Australia to live, study, invest and do business.

Richard Kimber
Member, NSW Innovation and Productivity Council

Executive summary

Measuring the impact of CAISH entities

This report builds on our first report on the impact of coworking spaces, accelerators, incubators, and startup hubs and innovation hubs (CAISH entities) in NSW.

It uses the holistic CAISH impact measurement framework developed for *Accelerating NSW: the impact of coworking spaces, accelerators, incubators, and startup hubs*. This framework is designed to measure impact across 4 levels of analysis: individual founders, startups, the CAISH entity itself, and the broader ecosystem.

Using this framework, the NSW Innovation and Productivity Council (the Council) and the UTS research team collaborated with Startup Muster (**www.startupmuster.com**) to embed additional questions about CAISH impact in the Startup Muster 2023 online survey. The Council did not commission the survey for this report; rather, it took the opportunity to collaborate, avoiding the need to run a separate survey of CAISH entities and startups.

The 2023 Startup Muster survey attracted 1,094 participants from around Australia – a small portion of the national startup ecosystem – who provided 165,308 self-reported answers. After post-survey validation and cleaning, the final sample used for the analysis in this report comprised 92 CAISH entities (51 from NSW) and 507 startups (221 from NSW). In the first *Accelerating NSW* report we found that as of June 2023, there were 889 active CAISH entities across Australia, and that there were 276 in NSW.

In our analysis, we triangulated survey responses with insights from qualitative interviews and academic research undertaken as part of the first *Accelerating NSW* report.

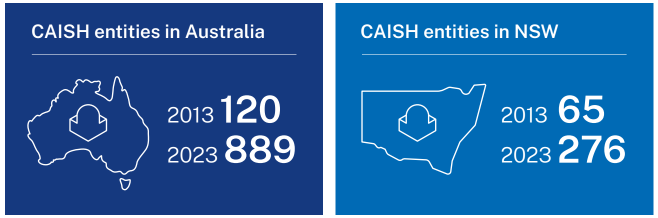
We note that any survey-based approach to impact measurement has limitations. The results should be read with an understanding of the challenges related to the distribution of an Australia-wide survey. We also note that the Startup Muster survey was long, which may have discouraged some respondents. While the methodology of the Startup Muster survey is consistent to the last time it ran in 2018, we note that the 2023 survey ran for a shorter period of time.

While survey data often has limitations, the 2023 Startup Muster survey provides the closest look yet at the state of the NSW and Australian startup ecosystem and the impact of CAISH entities in NSW.

The 2023 Startup Muster survey enabled the creation of the first Australian dataset since the COVID-19 pandemic to include a broad swathe of insights from startups and startup support organisations. These insights will support data-driven decision-making.

A mature CAISH ecosystem with increased capacity

In the first *Accelerating NSW* report, comprehensive mapping of all CAISH entities known to have operated or to be operating in NSW revealed an increase from 65 entities in 2013 to 276 entities in 2023.



The maturity of the NSW CAISH ecosystem was confirmed by insights in the 2023 Startup Muster survey, which showed a **higher proportion of experienced CAISH entities.** CAISH entities with more than 5 years of experience represented 69% of all respondents to the survey in 2023, almost double the rate in 2018.

Overall, CAISH entities that responded in 2023 can support a significantly higher number of startups annually, growing from a median of 11 in 2018 in NSW to a median of 16 in 2023. Along with the growth in the number of CAISH entities, this indicates that more startups received support from CAISH entities in 2023 than in 2018. The increase also suggests that CAISH entities are becoming more efficient and are scaling their operations.

CAISH entities generate significant economic activity

Self-reported responses from CAISH entities and startups suggest the CAISH-supported startups are significant contributors to job creation, revenue generation and investment within the NSW economy.

NSW startups that have been supported by CAISH entities reported having billions in funding (through equity, venture debt, crowdfunding and IPOs) and generating significant revenue in the previous 12 months as outlined in our first report.

NSW CAISH entities reported that the startups they supported have created tens of thousands of jobs.

We note that CAISH entities' data on jobs, revenue and investment is somewhat limited, highlighting the need for better forms of data collection by governments across Australia. If governments take a collaborative approach to data collection, it will assist in establishing comparable data across jurisdictions.

Given the challenges of self-reported data, an effort should be made to corroborate the data, testing, and validating it for use in policymaking and program development.

We also note that startups can and do go through multiple programs, so we need to be careful about potential double counting and avoid attributing impact to a single entity.

Collaboration and competition between CAISH entities

The survey responses indicated high-level collaboration between CAISH entities and with universities. Almost half of NSW CAISH entities actively collaborate with other CAISH entities and startup networks in delivering their services.

Despite this, 30% of NSW CAISH entities state that they do not collaborate with other startup support organisations. This confirms insights in the first *Accelerating NSW* report suggesting that the startup support ecosystem is characterised by high levels of collaboration and competition known as 'coopetition'.

Artificial intelligence, manufacturing and fintech are the most common industries for NSW startup respondents

Artificial intelligence, manufacturing and fintech were the most common industry categories among NSW startups that responded to the Startup Muster survey.

Since the last survey in 2018, the number of startups reporting a focus on greentech rose by 9%, the highest increase of all sectors.

I2N and MGA Thermal

CAISH entities create ecosystems and build communities

NSW startups supported by CAISH entities reported that networking opportunities provided by coworking spaces and incubators were the most important element in supporting their growth.

Overall, startups viewed enhanced social capital as the main benefit of participating in accelerators and incubators, with networking (36%), mentorship (27%), peer interaction (11%) and community (5%) among the top 10 benefits.

These findings emphasise the value of CAISH entities in community building and contributing to entrepreneurs' social capital.

CAISH entities' role in facilitating interactions within and outside the entities' walls highlights the value of these entities as ecosystem builders connecting people and organisations within regions and sectors.

These findings resonate with the findings in the first *Accelerating NSW* report on the importance of CAISH entities for building social capital.

Regional CAISH entities have lower capacity

Regional NSW CAISH entities have a strong place-based emphasis in their value proposition.

Half of regional NSW CAISH entities that responded to the survey were run by universities, highlighting their important role in CAISH support outside cities.

Despite their importance serving diverse founders, regional CAISH entities are less able to support the number of startups compared to their counterparts in capital cities, which could be since they service a smaller population. These findings are consistent with the findings in the first *Accelerating NSW* report, which found on the whole, most regions outside Sydney and the Hunter are relatively underserved by CAISH entities, on a per capita basis.

Limited focus on supporting startups and scaleups to internationalise

The findings highlight low levels of internationalisation among Australian startups responding to the survey. Only 14% of supported and unsupported startups across Australia reported having international customers.

It is important to note that startups being supported by CAISH entities are often early-stage ventures that may not have begun exploring internationalisation. Even startups that are 'born global' often need help to better understand international customers and become export ready.

According to the survey responses, the main market for expanding Australian startups is the US, followed by the UK and New Zealand.

Expansion into Asia has been limited. While this may seem like a missed opportunity, several factors make it difficult to crack the Asian market first. These include differences in language and business culture, unfamiliar government policies and regulatory environments, and a lack of personal networks.

CAISH entities have an opportunity to support internationalisation. Of the survey responses to the question on internationalisation, 86% of startups said they wanted to expand overseas in the next 2 years.

Awareness of the opportunities available in overseas markets needs to be improved as a first step toward greater internationalisation. Special Envoy for Southeast Asia Nicholas Moore AO discusses this in his report on Australia's Southeast Asia economic strategy.[5]

Haymarket HQ, an advisory firm that supports tech companies and exporters to expand, says it is vital to raise awareness about opportunities in Asia. In October to November 2023, the firm hosted the Southeast Asia Tech Immersion Mission, taking 13 NSW-based investors and members of startups to meet investors, channel partners and governments in Indonesia, Singapore, and Vietnam. Investment NSW funded this mission, which was designed to increase awareness about opportunities in Southeast Asia and to build more people-to-people links.

5 https://www.dfat.gov.au/countries-economies-and-regions/southeast-asia/invested-australias-southeast-asia-economic-strategy-2040/chapter-2-critical-enablers

ANSTO's *nandin*

For many of the investors and founders who went on the mission, it was their first business trip to Southeast Asia. Many were surprised by the level of innovation and sheer size and competitiveness of the markets. The mission is already leading to partnerships, potential investment in local companies and funds by Asia's largest venture capital firms, and a deeper appreciation of the opportunity.

CAISH entities could address under-representation of women entrepreneurs in the startup ecosystem

Survey responses suggest that the Australian startup ecosystem is still a male-dominated world. Women founders accounted for only 27% of startup respondents, highlighting their under-representation.

However, NSW CAISH entities flagged gender equality as important, with responses indicating that supporting women entrepreneurs was the area they most focused on for making an impact.

The under-representation of women aligns with prior studies that have highlighted this gender disparity. For example, on the Mastercard Index of Women Entrepreneurs,[6] Australia ranks eighth globally for percentage of women business owners, yet they represent just 31.6% of total business owners. This suggests that while Australia is doing relatively well on a global scale, there is still work to do.

Enhancing gender representation in the startup ecosystem has important implications for economic performance. Multiple studies highlight gender discrimination in startup funding – and the outperformance of startups with women founders.[7]

Regional CAISH entities support First Nations entrepreneurs

Regional CAISH entities across Australia are supporting a higher proportion of First Nations founders compared to capital city-based organisations. The limited number of First Nations entrepreneurs supported by CAISH entities highlights an opportunity to create dedicated, Indigenous-led programs to support First Nations entrepreneurs.

NSW has a more diverse startup ecosystem

Survey results show that the NSW startup ecosystem appears to be more diverse compared to the rest of Australia. More than a quarter of migrant founders and 15% of entrepreneurs grew up in low socioeconomic status households. We do however note that the NSW participation rate was higher than other states and territories, which may affect the result.

NSW founders are more linguistically diverse compared to the rest of Australia, with a quarter speaking English as a second language.

All stakeholders in the ecosystem need to consider tracking diversity metrics. In particular, CAISH entities and government departments should play a role in gaining a clearer picture of diversity in the CAISH ecosystem. This was also identified in the impact measurement framework in the first *Accelerating NSW* report.

6 https://www.mastercard.com/news/insights/2022/mastercard-index-of-women-entrepreneurs-2021
7 https://www.smartcompany.com.au/opinion/opinion-venture-capital-funds-leaving-money-on-table-diversity, https://www.bcg.com/publications/2018/why-women-owned-startups-are-better-bet, https://10years.firstround.com

Dominance of university-educated entrepreneurs

Most of the survey respondents are university educated, regardless of location or CAISH support. Compared to the 2018 survey results, more startup founders have a PhD (15% in 2023 versus 6% in 2018). This might indicate a potential bias among survey participants, considering the role of university-led CAISH entities in distributing it.

Lasting impact of COVID

The most significant lasting effect of COVID reported by NSW CAISH entities compared to the rest of Australia was the shift towards remote working (44% versus 14%, respectively). This finding reflects the broader trend of remote working across NSW.[8]

This shift toward remote working has affected NSW CAISH entities based in Sydney and regionally.

Today, 35% of NSW CAISH entities offer all or most of their services remotely or online, compared to 19% outside NSW.

Many CAISH entities don't track their impact

Almost half of CAISH entities that responded to the survey don't track or report on their impact. Only about a quarter of NSW CAISH entities track founder diversity metrics, job creation and the economic impact of supported startups.

The limited impact measurement practices of CAISH entities calls into question the reliability of the data that can be collected using survey-based approaches.

More work should be done to understand data that is available from national data sources such as the Australian Bureau of Statistics (ABS).

We also note that answering surveys can place an administrative burden on respondents. Additionally, surveys have varying reach and response rates. These constraints show that the Australian, state and territory governments should collaborate to measure the innovation ecosystem and CAISH sector.

Recommendations in brief for policymakers

1. Develop better data on the impact of CAISH entities.
2. Explore the need for greater capacity and awareness of CAISH entities in regional and rural NSW as they are core to supporting diverse founders.
3. Determine the best way to provide CAISH support for startups and scaleups to internationalise.
4. Support CAISH initiatives focused on gender equality in the startup ecosystem, including researching which initiatives are having the most impact.
5. Continue to fund and research the development of Indigenous-led CAISH initiatives for First Nations entrepreneurs and build on successes to date.
6. Amplify support for entrepreneurs from culturally and linguistically diverse backgrounds.

8 https://www.investment.nsw.gov.au/innovation/nsw-innovation-and-productivity-council/our-publications/nsw-remote-working-insights

Recommendations in detail

This report focuses on presenting impact measurement results based on analysis of the 2023 Startup Muster survey findings.

But it is important to emphasise that our recommendations are not based on those findings alone. We also used qualitative analysis of literature and more than 60 interviews from the first *Accelerating NSW* report.

In analysing the survey findings and triangulating the results with findings from the first *Accelerating NSW* report, the Council has uncovered several urgent tasks.

The Council makes 6 overarching recommendations to enhance the impact of CAISH entities in NSW. These recommendations are mainly directed at the NSW Government, but all stakeholders across the innovation ecosystem will need to partner with government to produce results.

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Recommendation 1

Develop better data on the impact of CAISH entities

The startup support ecosystem needs reliable data on jobs created, revenue generated, and investment raised. Surveys such as Startup Muster can provide some insights into the role of CAISH entities in creating jobs and helping startups to raise investment, but more concrete and reliable data is needed. Reliable job and financial metrics are critical for economic analyses of investments versus operating costs.

The performance of startups and scaleups supported by CAISH entities could be analysed at de-identified, aggregate levels. These startups and scaleups could also be compared with other startups in the NSW economy, with minimal administrative load on CAISH entities. This could be done using existing firm-level government data sources, such as the ABS Business Longitudinal Analysis Data Environment. However, it would require CAISH entities and the ABS to cooperate with the NSW Government. The Council notes that this aggregated data could be included in its **NSW Innovation and Productivity Scorecard**.

Recommendation 2

Explore the need for greater capacity and awareness of CAISH entities in regional and rural NSW as they are core to supporting diverse founders

Regional NSW CAISH entities have a strong connection to the regions in which they are embedded. They play a critical role in helping retain local talent and creating opportunities for aspiring entrepreneurs and early-stage startups (see **Section 6.1**). Regional CAISH entities across Australia support a higher proportion of First Nations founders (see **Section 6.2**). In NSW, regional CAISH entities also have a stronger focus on supporting women entrepreneurs.

Despite their importance, regional and rural CAISH entities have less capacity to support startups compared to city-based entities (see **Section 6.1**). They also have fewer customers, who are often spread over a large area.

The first *Accelerating NSW* report's mapping of CAISH entities across regional NSW found there were both hotspots of activity and geographic gaps in CAISH coverage. On a per capita basis, overall most regions outside Sydney and the Hunter are underserved with CAISH.

Increasing support for and awareness of regional and rural CAISH entities is vital for providing services that cater to the diversity of founders in regional NSW. Further, CAISH entities can foster new employment options for people in the regions, contributing to economic diversification and improved social outcomes.

Recommendation 3

Determine the best way to provide CAISH support for startups and scaleups to internationalise

The survey insights suggest that Australian startups have a low proportion of international customers (only 14%) despite a strong desire among founders to access global markets in the near future. Further, the few startups that have expanded into international markets have mainly focused on the US, UK and New Zealand, with very limited expansion into Asia (see **Section 5.4**).

It is important to note that CAISH entities usually support early-stage ventures that may not have begun exploring internationalisation. Even startups that are born global often need help to understand international customers and become export ready.

CAISH entities have an excellent opportunity to support Australian startups to enter international markets, capitalising on existing trading relationships around the world. The NSW Government should support CAISH entities to develop programs that assist startups to scale internationally and connect with existing services, including the joint Austrade–NSW TradeStart advisers and Going Global Export Program.

An important first step is to increase awareness about internationalisation. Special Envoy for Southeast Asia Nicholas Moore AO discusses this in his report on Australia's Southeast Asia economic strategy.[9]

Haymarket HQ provides a great example of a CAISH entity focused on helping startups scale into new markets. It has a range of programs supporting expansion into Asia, including the Global Innovation Alliance Singapore–Australia Market Accelerator, the Southeast Asia Tech Immersion Mission (supported by Investment NSW), the Australia Vietnam Growth Program and the China Canvas Challenge.

Recommendation 4

Support CAISH initiatives focused on gender equality in the startup ecosystem, including researching which initiatives are having the most impact

The Australian startup ecosystem is male-dominated. This report reveals the stark contrast between women and men in the sector, with women entrepreneurs accounting for less than a third of founders (see **Section 6.2**).

Previous studies have also highlighted this gender disparity. And while Australia may rank eighth in the Mastercard Index of Women Entrepreneurs,[10] suggesting it is doing relatively well on a global scale, there is still work to do.

Although supporting women entrepreneurs is reported as the most common impact focus for NSW CAISH entities (see **Section 7.1**), more effort is needed. It is vitally important to support CAISH entities that specialise in supporting women founders and improving gender equality.

Enhancing gender representation could also improve economic performance, with studies highlighting the outperformance of startups with women founders.[11]

9 https://www.dfat.gov.au/countries-economies-and-regions/southeast-asia/invested-australias-southeast-asia-economic-strategy-2040/chapter-2-critical-enablers
10 https://www.mastercard.com/news/insights/2022/mastercard-index-of-women-entrepreneurs-2021
11 https://www.smartcompany.com.au/opinion/venture-capital-funds-leaving-money-on-table-diversity, https://www.bcg.com/publications/2018/why-women-owned-startups-are-better-bet, https://10years.firstround.com

Recommendation 5

Continue to fund and research the development of Indigenous-led CAISH initiatives for First Nations entrepreneurs and build on successes to date

Indigenous-led and designed CAISH entities are essential for ensuring support for First Nations founders. The report finds a small percentage of Indigenous-led startups are served by CAISH entities, and additional research around the impact of this support to determine how to both increase the level and impact of support would be beneficial.

In line with Recommendation 3 in the first *Accelerating NSW* report, CAISH entities could develop dedicated, Indigenous-led programs to support First Nations entrepreneurs.

Numerous Indigenous-led organisations are active in the entrepreneurship support ecosystem and could be involved in co-designing NSW CAISH offerings. These include The Scale Institute, Barayamal, First Innovators, Gandaywarra: First Nations Innovation Hub, The Circle – First Nations Entrepreneur Hub, and Yarpa NSW Indigenous Business and Employment Hub.

Recommendation 6

Amplify support for entrepreneurs from culturally and linguistically diverse backgrounds

Creating a diverse and inclusive entrepreneurship ecosystem requires engagement with complex structural and systemic issues.

NSW has the most linguistically diverse community of founders in Australia, with over a quarter of founders in NSW reporting English as a second language. In contrast, outside of NSW, only 10% of founders have English as a second language (see **Section 6.2**). Yet only a handful of CAISH entities specialise in diversity and inclusion, with the aim of ensuring that startup support is available to underserved groups.

The Council recommends increasing support for CAISH initiatives that focus on migrant, refugee, and culturally and linguistically diverse entrepreneurs. This type of specialisation could greatly improve diversity and inclusion in the startup ecosystem.

Setting the scene

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Section 1
Introduction

1.1 Report focus

This report builds on the first *Accelerating NSW* report. The series is designed to measure the impact of coworking spaces, accelerators, incubators, and startup hubs (CAISH entities) in NSW.

The number of CAISH entities has increased by 325% in NSW since 2013. But limited information is available about their outputs and outcomes, value to the NSW and Australian economies, and scale and performance compared to other jurisdictions.

This report increases our understanding of the outputs and impact these startup support organisations have across NSW.

The first *Accelerating NSW* report contained the multi-level impact framework the Council and the UTS research team developed for measuring the impact of CAISH entities at the levels of founder, startup, CAISH entity and ecosystem.

Based on this measurement framework, the Council and the UTS research team collaborated with Startup Muster to embed additional questions on CAISH impact into the Startup Muster 2023 online survey. The Council did not commission the survey for this report. It merely took the opportunity to collaborate, avoiding the need to run a separate survey of CAISH entities and startups.

In our analysis, we triangulated survey responses with insights from qualitative interviews and academic research undertaken as part of the first *Accelerating NSW* report.

1.2 Methodology

The Startup Muster 2023 survey was conducted during July and August 2023 via the Startup Muster website: **www.startupmuster.com**.

The survey was promoted to people running startups (founders) and organisations providing support to startups (CAISH entities and other support organisations, including investors, mentors, educators, service providers, membership organisations, professional services providers, and government).

We note that any survey-based approach to impact measurement has limitations. These results should be read with an understanding of the challenges relating to distributing an Australian-wide survey. We also note that the length of the Startup Muster survey may have discouraged some respondents.

Throughout this report, the main comparisons are between NSW and non-NSW startups.

While survey data often has limitations, the results of this survey provide the most comprehensive picture yet of the state of the NSW and Australian startup ecosystems and the impact of CAISH entities in NSW.

The resulting dataset is the first since the COVID-19 pandemic to include a broad swathe of insights from startups and startup support organisations, to support data-driven decision-making.

The promotion and distribution methodology used was largely the same as for the previous survey in 2018, though the survey was open for a shorter period.

Survey respondents

A total of 1,094 respondents provided 165,308 answers.

We categorised respondents into CAISH entities or startups.

A CAISH entity was classified as any organisation answering that it provided ‘Coworking’ or ‘Acceleration/Incubation’ in response to the question: ‘Which of the following do you provide to startups?’

A startup was classified as any organisation answering that it was a ‘Founder’ or ‘Cofounder’ when asked: ‘Please select ALL options that describe you.’

After post-survey validation and cleaning, the final sample of respondents is displayed in this infographic.

92 CAISH entities

41 Non-NSW

51 NSW

City-based[12] (NSW, non-NSW)

74
40 NSW
34 Non-NSW

Non–capital-city-based (NSW, non-NSW)

18
11 NSW
7 Non-NSW

507 startups

221 NSW
213 Non-NSW
73 NAs (missing, skipped, no useful data)

CAISH-supported startups

223 Supported by CAISH
114 NSW
106 Non-NSW
3 NA*

284 Not supported
107 NSW
107 Non-NSW
70 NA*

City-based vs non–capital-city-based (NSW, non-NSW)

378 Capital city
193 NSW
185 Non-NSW

49 Non-capital city
24 NSW
25 Non-NSW

80 NA*

* Missing location data

12 UTS team methodology note: capital city and non-capital city data was derived from postcode data in conjunction with the ABS correspondence tables for the Greater Capital City Statistical Areas. This classification splits each state into the greater metro area for its capital city and the ‘rest of’ the state.

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Of the 92 CAISH entities that responded from around Australia, 51 were from NSW and 41 were from the rest of Australia.

A total of 507 startups from around Australia responded, with 221 from NSW.

It is important to note that we are not claiming that we have provided a complete picture of startups in NSW or Australia.

The survey's coverage of CAISH entities in NSW is comparable with international studies, including the UK Centre for Entrepreneurs' *Incubation nation: The acceleration of UK startup support* released in 2022. About 14% of the UK's 700-odd incubators, accelerators and support programs were surveyed for the report. This compares with Startup Muster's survey of around 18% of the 276 CAISH entities in NSW, accounting for about 10% of Australia's 889 CAISH entities. As with our project, the Centre for Entrepreneurs supplemented its analysis of survey findings with interviews. The coverage of CAISH entities in Startup Muster's dataset for this report is comparable to that in *Incubation nation*. Similarly, our research findings and recommendations triangulate literature, interviews, and data.

1.3 Definitions of CAISH entities

We use definitions of CAISH entities from the Council's first *Accelerating NSW* report.

These definitions were derived from *Incubation nation: The acceleration of UK startup support* and underpinned by supporting definitions from the academic literature.

The following table summarises these definitions and highlights each entity's key defining features, and similarities and differences, drawing on practitioner and academic literature.[13]

We acknowledge that in practice the CAISH entity types have a high level of overlap, often involving one organisation running a range of incubators, accelerators and coworking spaces.

CAISH entity	Definition	Key features
Coworking space	Coworking spaces are **flexible, shared office spaces**. These are usually available on short-term contracts. Unlike incubators and hackerspaces, coworking spaces usually provide **minimal business development services** and **no technical facilities.**	Shared physical space; networking; public events
Accelerator	Accelerators are startup support programs that are **cohort-based** and thus **fixed duration.** Almost all such programs provide mentoring, peer-to-peer interaction, business skills training, as well as **investment readiness** training and connections to investors. Such programs are **typically selective**, based on criteria such as sectoral focus and growth potential.	Fixed length, selective entry, graduation, structured learning, mentoring, connection to investors, online or in-person delivery
Incubator	Incubators are startup support organisations that **provide physical space to startups**, along with **additional growth-related services** but are **not cohort-based nor fixed-term** (though there may be a maximum residence duration). The **provision of services** is an important distinction between incubators and coworking spaces: most incubators also provide services such as investment readiness training, connections to investors, intellectual property (IP) advice (directly or via third-party service organisations), technical support, and peer-to-peer interaction.	Physical space, networking, growth-related services/ assistance/workshops
Startup hub or innovation hub	Startup hubs and innovation hubs are **physical spaces** (**buildings**, **campuses**) where startup support organisations/initiatives (such as accelerators, incubators, and coworking spaces) are **co-located.** Hubs involve some form of **intentional coordination** between the entities/initiatives.	Physical spaces/ location, co-location of distinct startup support organisations/ initiatives that feed into each other, networking, public events

13 Centre for Entrepreneurs (2022), *Incubation nation: The acceleration of UK startup support.* https://centreforentrepreneurs.org/cfe-research/incubation-nation

Section 2
The CAISH landscape

2.1 The growth of CAISH entities

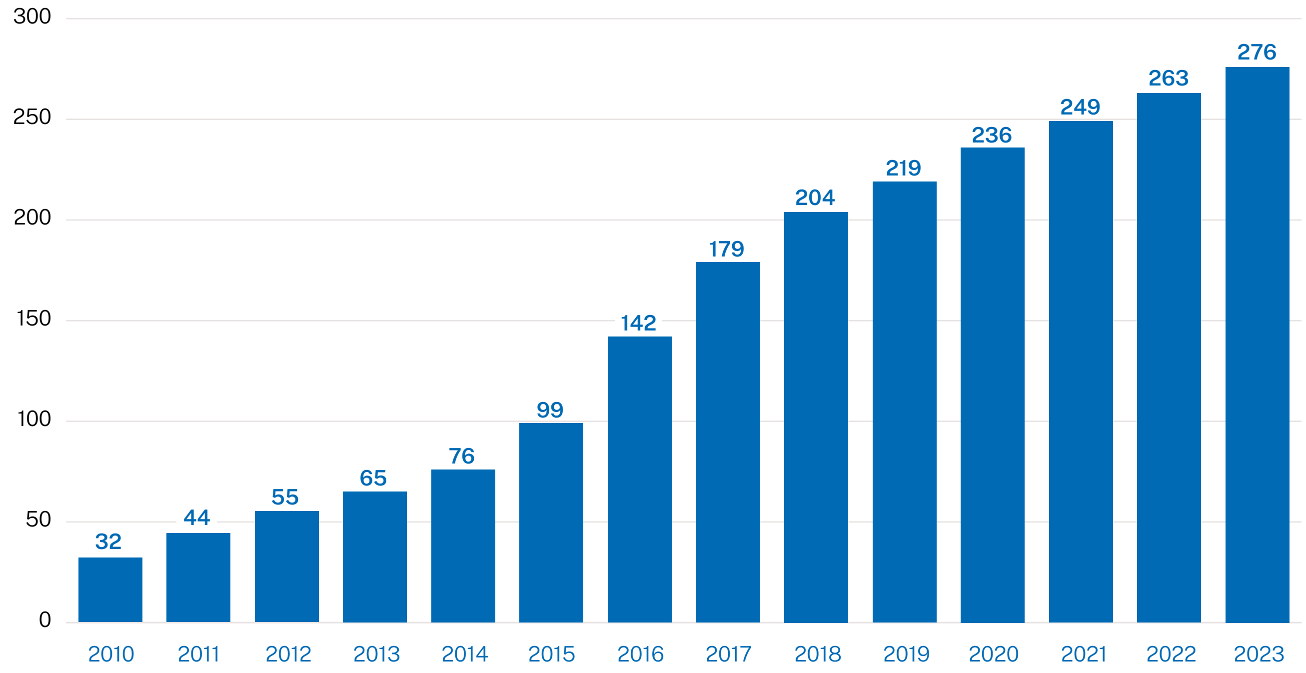
The first *Accelerating NSW* report undertook comprehensive mapping of the CAISH ecosystem. This highlighted that the number of CAISH entities in Australia has increased rapidly over the past decade.

As of June 2023, there were 889 active CAISH entities across Australia.[14] This is a dramatic increase on the 120 CAISH entities active in 2013.

In NSW, the number of **CAISH entities has increased 325% over the past decade, rising from 65 entities in 2013 to 276 in 2023.**

The graph on the right shows the growth in NSW CAISH entities since 2010.[15]

Number of NSW CAISH entities, 2010 to 2023



Source: Based on UTS analysis (2023) and data from Dr Chad Renando and Startup Status

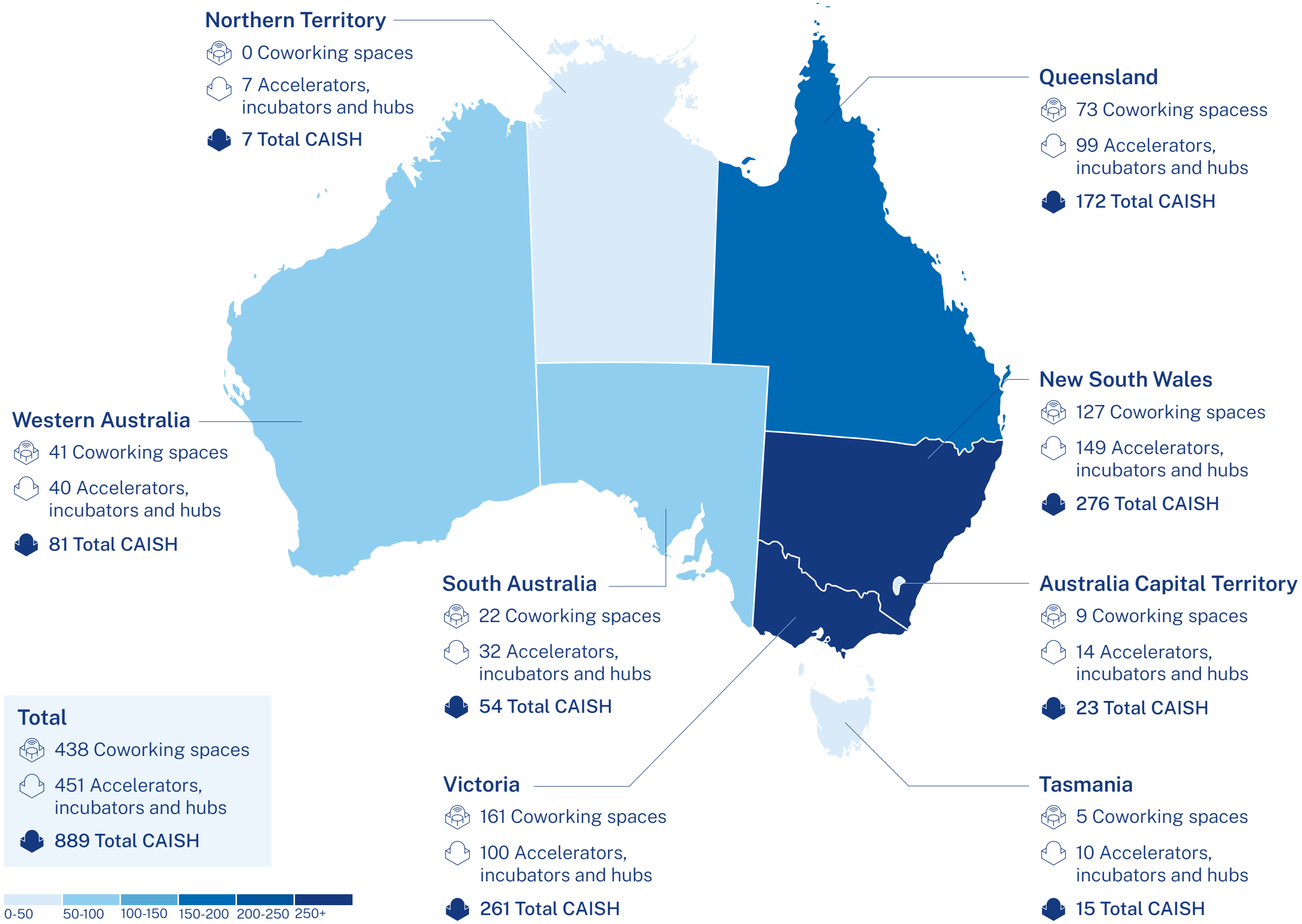
14 Using the work of Dr Chad Renando of Startup Status (https://your.startupstatus.co/map) as a starting point, with our own verification of NSW CAISH entities.
15 This figure is based on the work of Dr Chad Renando of Startup Status (https://your.startupstatus.co/map) and our own verification of NSW-based CAISH entities.

2.2 The spread of CAISH entities across Australia

The first *Accelerating NSW* report contains comprehensive mapping of all CAISH entities known to have operated or to be operating in NSW.

To develop the map, we synthesised insights from previous mapping approaches at the regional, state, and national levels. These included the mapping work of Dr Chad Renando of Startup Status and the University of Southern Queensland.[16]

The figures show that NSW accounts for the highest number of CAISH entities in Australia, with 276 active CAISH entities in 2023.



16 https://your.startupstatus.co/map

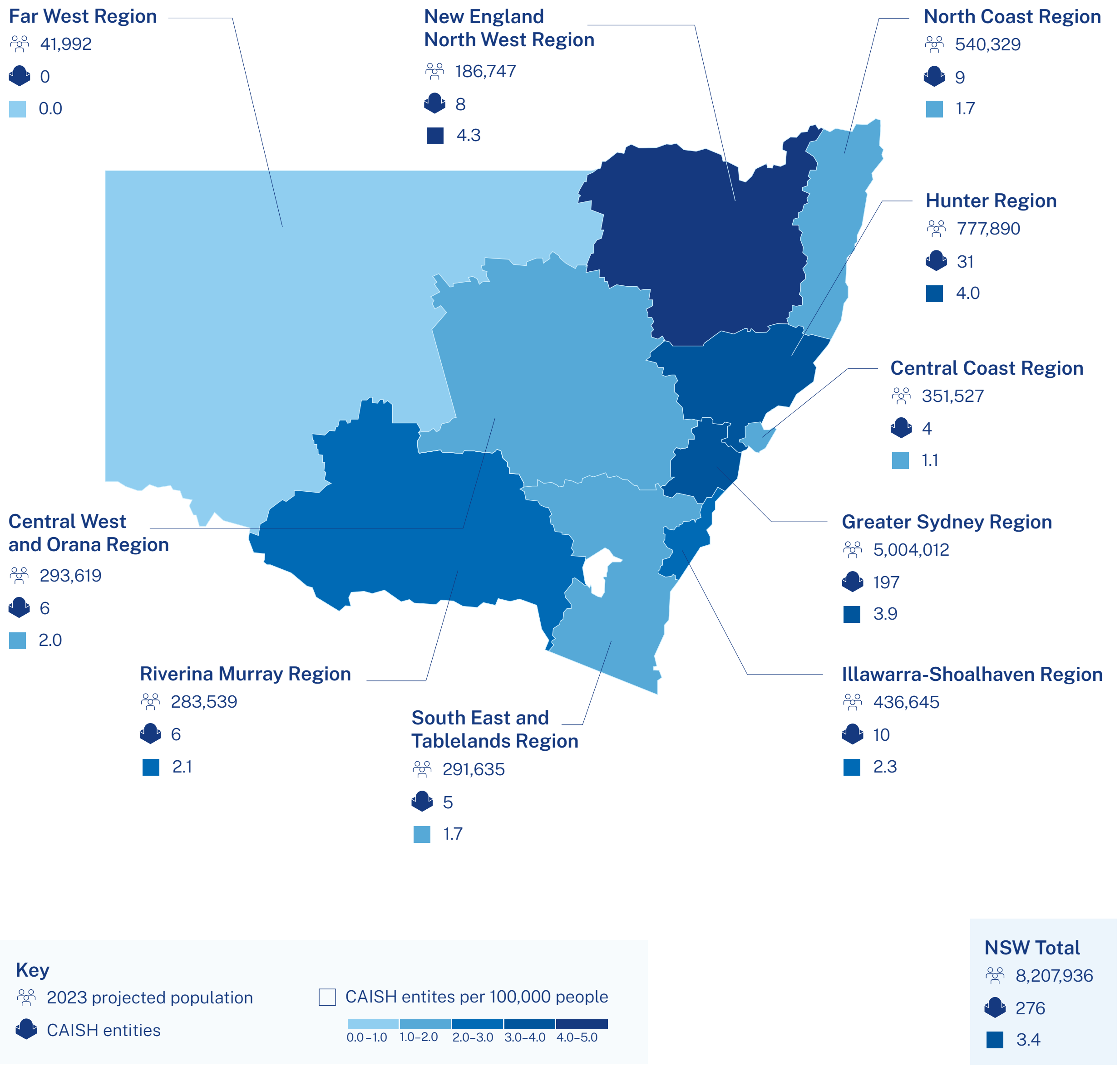
2.3 The regional spread of CAISH entities in NSW

The map on the right highlights the number and density of CAISH entities across NSW.

To avoid solely relying on absolute numbers, the map shows CAISH density at the regional level in terms of population.

Mapping the CAISH entities across the regions reveals hotspots of CAISH activity – such as Sydney, Wollongong, and Newcastle – and geographic gaps in some areas. We note that CAISH entities are actively building ecosystems in the New England North West region and in the North Coast region.

As highlighted in the first *Accelerating NSW* report, these regional CAISH entities play an important role as ecosystem builders and contribute to broader economic development in their area.



Section 3

Measuring the impact of CAISH entities

3.1 CAISH impact measurement framework

The following impact measurement framework was developed for the first *Accelerating NSW* report.

The framework is based on academic and practitioner literature and interviews, and with input from the Council's Expert Advisory Group.

This framework was used to help shape the Startup Muster survey. It provides the organising framework to capture the multiple levels of CAISH impact for this report. Note that some metrics align with pre-existing Startup Muster survey questions, while others were included in the survey question set for the first time and will provide an opportunity for better time-series data in the future.

Level	Categories	Example questions	
Individual founder	Founder perceptions on the impact of CAISH programs	Startup	How has working in a coworking space or incubator supported the growth of your organisation?
		Startup	List the most important benefits from using a recent/current accelerator/incubator.
		Startup	List the most important benefits you received from using a coworking space.
	CAISH perceptions of main impact for entrepreneurs	CAISH	What do you consider to be your unique value proposition to potential client startups?
	Founder desires for future CAISH support	Startup	Which of the following will you be looking for help with in the next six months?
		Startup	In what areas do you feel you need more mentorship?

Level	Categories	Example questions	
Startup	Investment raised	Startup	Which of the following have you used to fund the company? (Source of funding)
		CAISH	How much funding has been raised by startups you have supported?
	Job creation	Startup	What is your current number of employees?
		CAISH	How many jobs have been created by startups you have supported?
	Revenue generation	Startup	Which of the following was your largest source of revenue in the last 12 months?
		Startup	What was your revenue in the past 12 months?
	Internationalisation	Startup	In which country are your customers most commonly located?
		Startup	What percentage of your revenue was from customers outside Australia?
		Startup	Which countries do you intend to expand into or increase your focus for customer acquisition in the next two years?
CAISH entity	Engagement metrics	CAISH	What stage of development were your clients when you supported them?
		CAISH	How many startups has your organisation helped per year?
		CAISH	How many applications do you receive from startups for your programs per year?
		CAISH	How many startups do you have capacity to help per year?
	Diversity metrics	Startup	How many women are in the founding team?
		Startup	Do you identify as any of the following? (EDI identification)
		Startup	Is English your first language?
		Startup	What is your highest level of education?
		CAISH	How many startups have you supported with First Nations founders?
	Network metrics	CAISH	How many events have you hosted in the last 12 months?
		CAISH	What is the total attendance at events you have hosted over the last 12 months?
		CAISH	Which other support organisations do you collaborate with?

Level	Categories	Example questions	
System	Diversity metrics	CAISH	In which areas of impact does your organisation have a specialised focus?
	Market/industry development	Startup	Which of the following industries strongly apply to your product or service?
		CAISH	Which of the following themes apply strongly to the kinds of startups you would like to support?
	Belonging and connection in ecosystem	Startup	Do you feel engaged in your local startup ecosystem?
		CAISH	What percentage of your alumni engage in support? (e.g. as mentors, investors, supporters)

Sydney Startup Hub

3.2 CAISH demographics

For the remainder of this report, figures are based on the Startup Muster data analysis. All findings are based on self-reported data from those who responded. The insights from the survey data align with qualitative insights from the first *Accelerating NSW* report. Having multiple sets of evidence provides a more robust basis for the findings and recommendations than just one source.

Reduced number of CAISH entities responding to Startup Muster survey

- Only 92 CAISH entities responded in 2023, representing about 10% of total CAISH entities in Australia.
- We define a CAISH entity as an entity providing accelerating, incubating, coworking or a mix of these startup support services.
- Respondents in 2018 and 2023 provided a similar mix of services.
- Fewer CAISH respondents participated in 2023 compared to 2018.
  - We note that this decrease occurred despite a 35% increase in the number of CAISH entities in Australia (as per the first *Accelerating NSW* report).
- 'n' equals the number of CAISH entities.

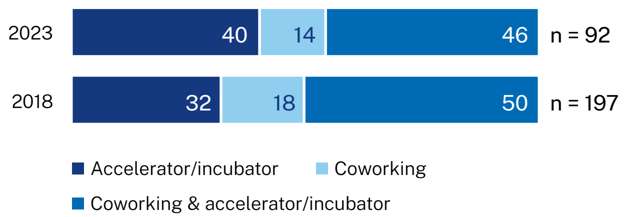
Dominance of NSW CAISH entities in Startup Muster survey

- The location breakdown for NSW and non-NSW CAISH entities was similar in 2023 and 2018.
- Startup Muster is a Sydney-based organisation that receives support from the NSW Government, which may help explain the higher proportion of NSW-based CAISH entities and startups. In 2023, Startup Muster was also supported by Atlassian, Microsoft, Antler, and The Gild Group.

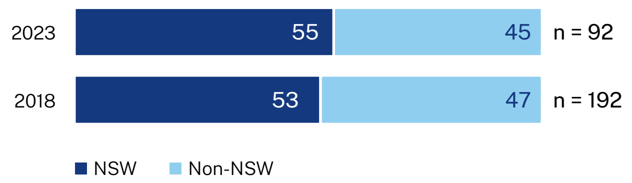
Maturing CAISH sector with more established entities

- The 2023 respondents had a higher proportion of experienced CAISH entities, underscoring the growing maturity of CAISH entities.
- CAISH entities with more than 5 years of experience represented 69% of all respondents in 2023, almost double the rate in 2018.
- The higher proportion of established entities in 2023 suggests the presence of many well-established CAISH entities, and that there is sustained demand for their support from startups.

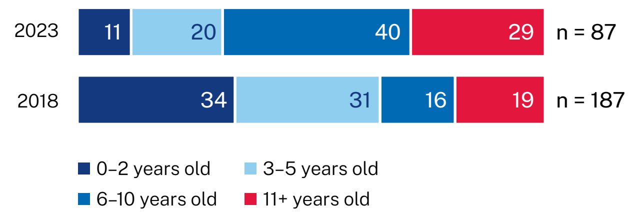
Percentage breakdown of the CAISH services provided by Startup Support Organisations in 2018 and 2023



Percentage breakdown of the location (State) of Startup Support Organisations in 2018 and 2023



Percentage breakdown of the age of Startup Support Organisations in 2018 and 2023

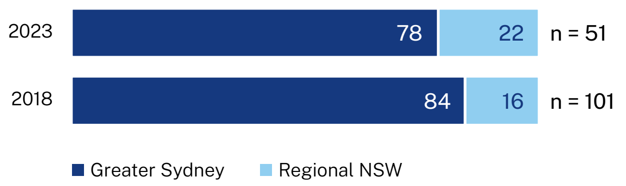


Under-representation of regional and rural CAISH entities

- Regional and rural CAISH entities are under-represented in Startup Muster data.
- According to the first *Accelerating NSW* report, regional and rural CAISH entities represent almost 30% of CAISH entities in NSW, yet only 22% in this report.
  - We note that like any research, survey-based data collection has limitations, and this may help explain the lower proportion for regional NSW.

Percentage breakdown of the location (region) of Startup Support Organisations in 2018 and 2023

Percentage breakdown of the location (region) of NSW Startup Support Organisations in 2018 and 2023



3.3 Startup demographics

507 startups respondents in 2023

- Fewer startups responded in 2023 compared to 2018 (507 and 820, respectively).
- Fewer startups that responded use coworking services compared to 2018. This could be explained by the impact of the COVID-19 pandemic and shift to remote working.
- The lower response rate could be due to the 5-year gap between the Startup Muster surveys.
- The high number of questions and time needed to fill in the survey may have contributed to the lower response rate.

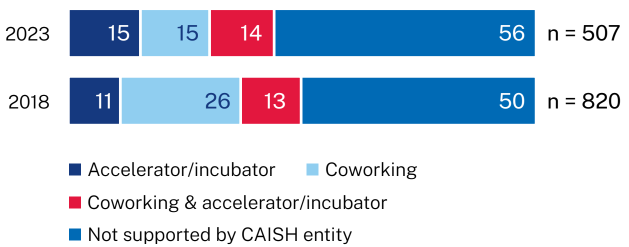
Higher proportion of established startups in the 2023 Startup Muster dataset

- The proportion of early-stage startups (0 to 2 years old) was lower among 2023 respondents.
- This could be due to an increase in risk aversion during the pandemic and a tighter job market coming out of it. This may be increasing the disincentive for people to start new ventures.

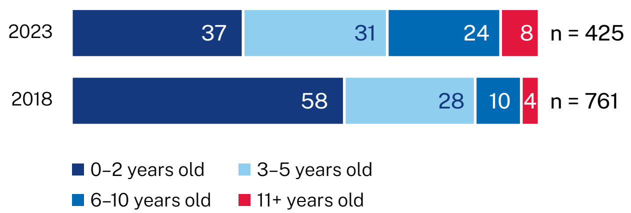
Even split between NSW and non-NSW startups

- The percentage of startups in NSW compared to the rest of the country is almost the same, and is unchanged from 2018.

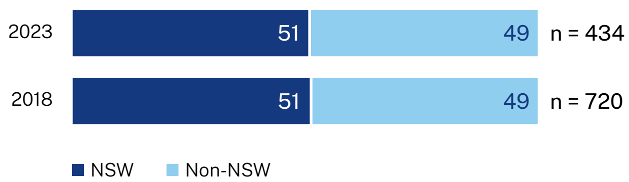
Percentage breakdown of CAISH services used by Startups in 2018 and 2023



Percentage breakdown of the age of Startups in 2018 and 2023



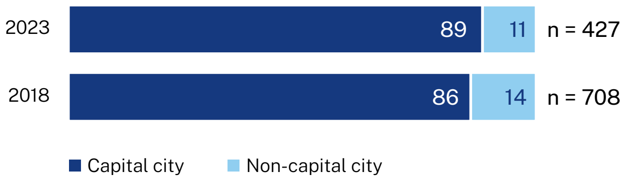
Percentage breakdown of the location (state) of Startups in 2018 and 2023



Dominance of capital city-based startups in the survey

- Survey responses were biased towards the experience of capital city-based startups (89%).
- Where possible throughout the report, we show comparisons between startups in Greater Sydney versus those in regional NSW.
- The lack of representation outside capital cities highlights the need for future surveys to focus on partnering with regional stakeholders to increase reach.

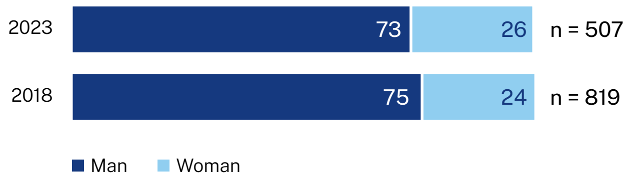
Percentage breakdown of the location (region) of Startups in 2018 and 2023



Under-representation of women founders

- Women founders accounted for only 26% of startup respondents, highlighting their under-representation in the Australian startup ecosystem.
- These insights on the under-representation of women align with findings in prior studies. For example, the Mastercard Index of Women Entrepreneurs[17] highlights that Australia ranks eighth in the world for the percentage of women business owners, yet women represent just 31.6% of total business owners.

Percentage breakdown of the gender of Startups' Founder in 2018 and 2023



In 2018, 6 founders selected 'Other, or prefer not to say' and in 2015, 1 selected 'Non-Binary' while 5 selected 'Other, or prefer not to say'.

17 https://www.mastercard.com/news/insights/2022/mastercard-index-of-women-entrepreneurs-2021

Measuring impact

ANSTO's *nandin*

Section 4

Entrepreneur-level impact

4.1 Founder perceptions on the impact of CAISH programs

Network and peer interactions as most important CAISH support for growth

- NSW startups supported by CAISH entities report that networking opportunities from coworking spaces and incubators are the most important element in supporting their growth.
- The range of responses relating to social capital – such as peer-to-peer interactions and access to mentors, investors, and partners – underscore the value of CAISH entities in supporting startup growth by connecting startups within the ecosystem.

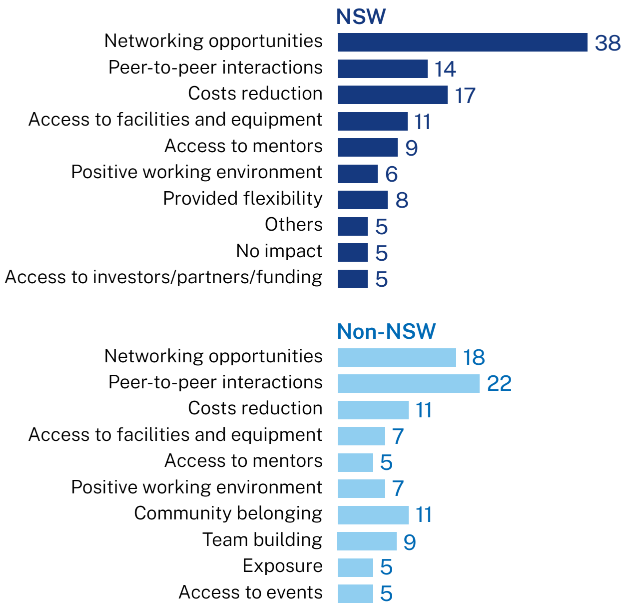
Networks and mentorship as leading benefits of accelerator and incubator programs

- Overall, startups view enhanced social capital as the main benefit from participating in accelerators and incubators, with networking (36%), mentorship (27%), peer interaction (11%) and community (5%) among the top 10 benefits for NSW startups.
- Startups also highlighted the human capital benefits of engaging in accelerator and incubator programs, although non-NSW startups put greater emphasis on the benefits of new knowledge (non-NSW startups 20% versus NSW startups 15%).

Networks and mentorships as leading benefits of coworking spaces

- Similar to accelerators and incubators, networks were viewed as the main benefits of coworking spaces.
- These social capital benefits appeared to rank higher than the value of facilities and equipment.

How has working in a coworking space or incubator supported the growth of your organisation? (%)



List the most important benefits from using a recent/current accelerator/incubator (%)

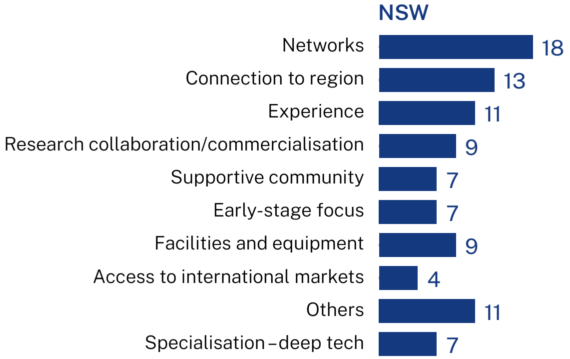
List the most important benefits you received from using a coworking space (%)

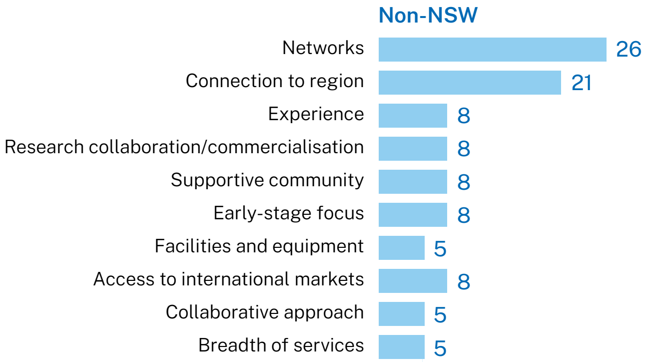
4.2 CAISH perceptions of main impact for entrepreneurs

CAISH entities view their networks as the main value to startups

- Insights from CAISH entities into their unique value proposition align with the views of startups.
- CAISH entities appear to have a good understanding that their value is derived from their ability to connect startups with their networks and to embed them within the ecosystem.

What do you consider to be your unique value proposition to potential client startups? (%)

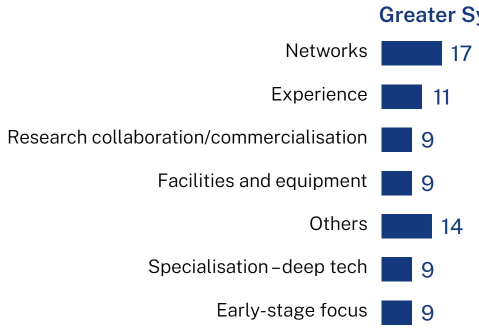


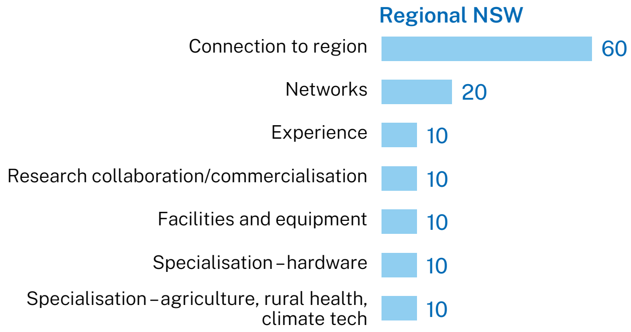


Regional CAISH entities view connection to region as a core value proposition

- Regional NSW CAISH entities have a strong place-based emphasis in their value proposition.
- 60% of regional NSW CAISH entities highlight connection to the region as the core value proposition. Note: the number of regional NSW respondents for this question was relatively small (n = 10).

What do you consider to be your unique value proposition to potential client startups? (%)





4.3 Founder desires for future CAISH support

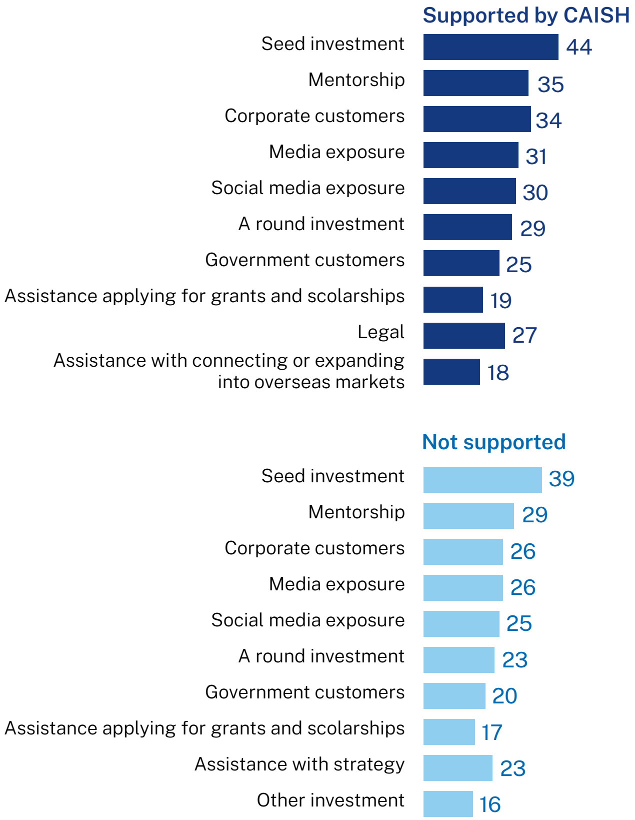
CAISH-supported startups more active in seeking help

- Overall, non-supported startups appear less likely to seek help, suggesting they might be more independent and self-sufficient.
- All startups, whether or not they are supported by a CAISH entity, appear to have a relatively similar ranking of needs – seed investment, media exposure, corporate customers, and mentorship.

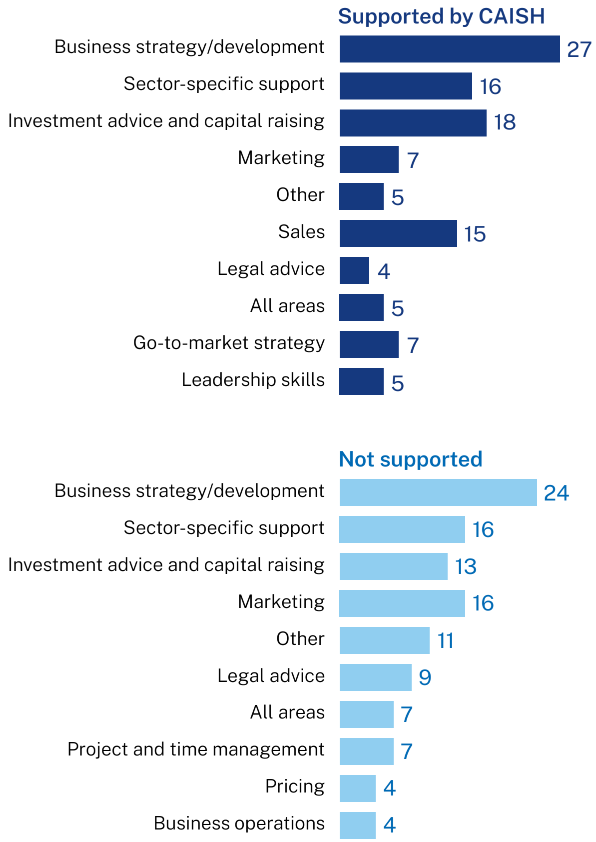
Mentoring needs of startups – sector-specific support is important

- Business strategy and/or development, sector-specific support and investment advice are core areas where startups need mentorship, highlighting the importance of both generalised and sector-specific startup support services.

Which of the following will you be looking for help with in the next six months? (%)



In what areas do you feel you need more mentorship? (%)



Section 5
Startup-level impact

5.1 CAISH-supported startups make significant contributions to the economy

Responses from CAISH entities and startups suggest that CAISH-supported startups are significant contributors to job creation, revenue generation and investment within the NSW economy.

NSW startups supported by CAISH entities report raising billions in funding (through equity, venture debt, crowdfunding and IPOs) and generating significant revenue in the past 12 months.

NSW CAISH entities reported that the startups they supported have created tens of thousands of jobs.

However, the data on jobs, revenue, and investment from CAISH entities is somewhat limited, highlighting the need for better data collection by governments in Australia.

The startup support ecosystem needs reliable data on jobs created, revenue generated, and investment raised. Surveys such as Startup Muster can provide some insights into the role of CAISH entities in creating jobs and helping startups to raise investment, but more concrete and reliable data is needed. High-quality jobs and financial metrics are critical for conducting economic analyses to compare investments with operating costs.

The performance of startups and scaleups supported by CAISH entities could be analysed at de-identified, aggregate levels. Additionally, CAISH-supported startups and scaleups could be compared with other startups in the NSW economy, with minimal administration by CAISH entities. Government data sources such as the ABS Business Longitudinal Analysis Data Environment could be used for comparisons. However, CAISH entities and the ABS would need to cooperate with the NSW Government to gather data. The Council notes that the publication of such aggregate data could be included in its **NSW Innovation and Productivity Scorecard**.

Data for these metrics would be correlated with business growth stage. Early-stage commercialisation support programs would be assessed against the same measure as comparatively less successful programs. But most of those programs and their early-stage participants are a long way from delivering outcomes on these metrics in the short term.

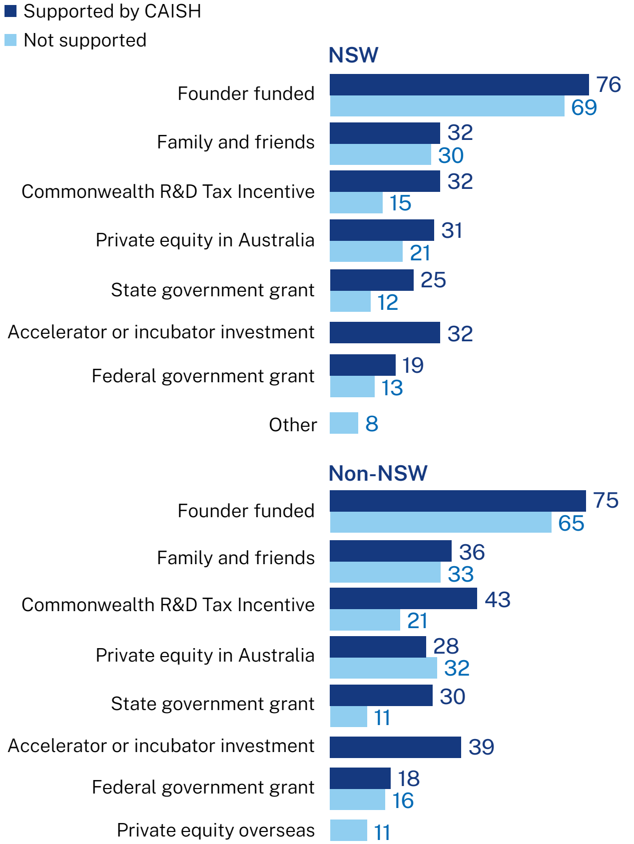
At this stage, the self-reported data on funding, revenue and jobs is too limited to provide the robust evidence needed for strongly evidenced policymaking.

5.2 Investment raised

CAISH-supported startups used a wider range of funding sources

- Overall, funding sources are similar for CAISH-supported and unsupported startups in NSW and the rest of Australia. The top 4 sources are own cash, private equity, family and friends, and the Australian Government's Research and Development Tax Incentive.
- Investment by accelerators and/or incubators is an additional funding source for CAISH supported entities.
- CAISH-supported startups seem more likely to take advantage of the Research and Development Tax Incentive, perhaps highlighting the role of CAISH support in directing startups to such opportunities.

Which of the following have you used to fund the company? (%)

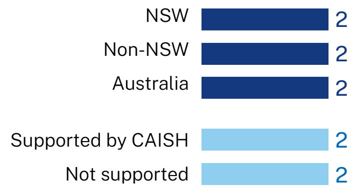


5.3 Job creation

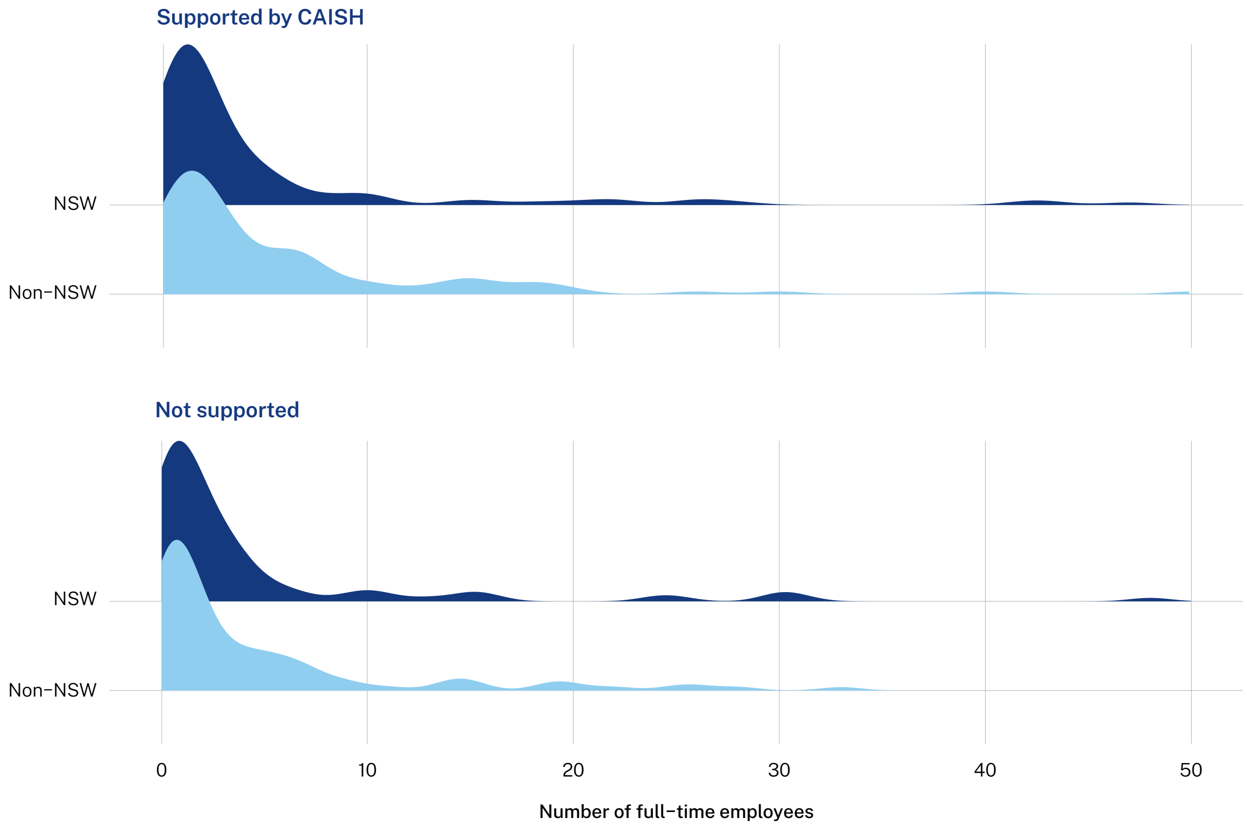
Australia's startup ecosystem is characterised by micro enterprises

- Two full-time employees is the median number employed by startups, regardless of location or CAISH support.
- Density plots highlight that a small number of larger startups are responsible for a boost in average employment numbers for startups.

Current number of full-time employees (median)



Current number of full-time employees (distribution)

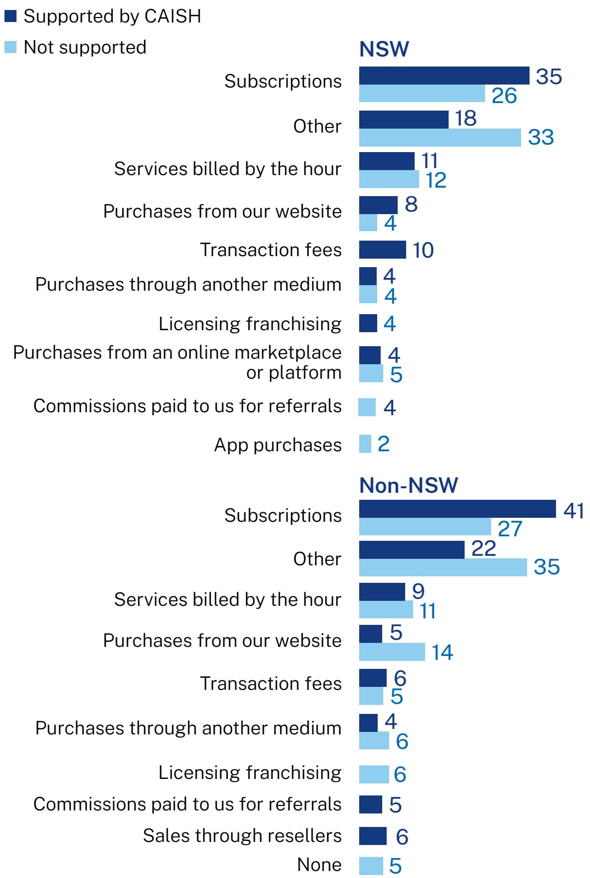


5.4 Revenue generation

Subscription fees are a key source of revenue for startups

- Startups responding to the survey appear to rely on subscriptions as a key source of funding.
- CAISH-supported startups make even greater use of subscriptions as a source of recurring revenue.
- This suggests that more startups that participated in the Startup Muster survey have service-based than manufacturing business models.
  - The Council notes that this highlights the potential limitations of survey-based research.

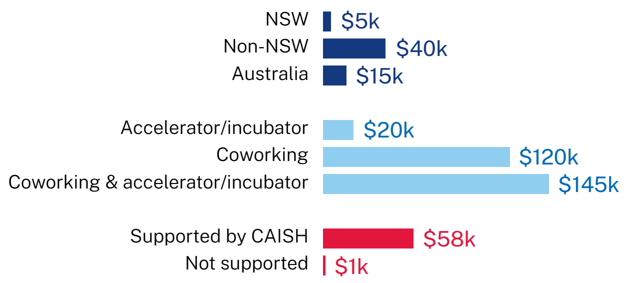
Which of the following was your largest source of revenue in the last 12 months? (%)



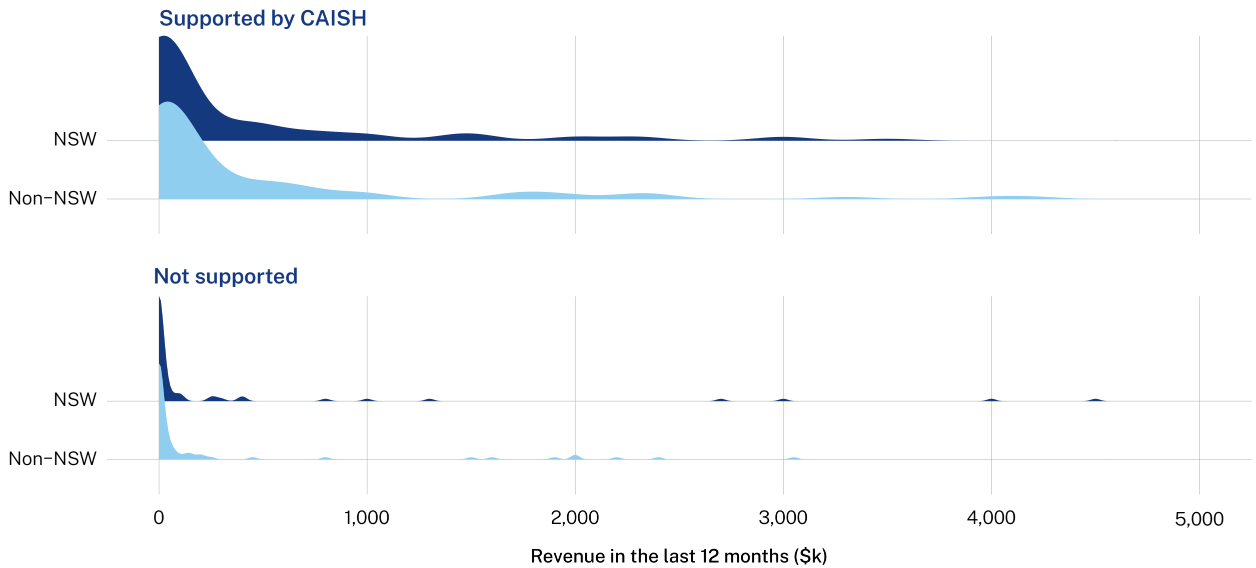
CAISH-supported entities report generating higher revenue

- The data on startup revenue over the past 12 months highlight how different CAISH entities are targeting different stages of startups.
- CAISH entities providing accelerator and incubator programs without associated coworking appear more focused on pre-revenue startups.
- Unsurprisingly, startups using coworking spaces appear to be generating some revenue.
- Overall, startups supported by CAISH entities generate substantially more revenue compared to those that are unsupported.
- The relatively low median revenue for non-CAISH supported startups suggests that many are still at the idea stage, or could perhaps be viewed as experimental 'side hustles'.
- Many startups in NSW are not generating revenue, which has lowered the median value.
- The following density plot shows how a relatively small number of successful startups are skewing average revenues.

Revenue in the past 12 months (median)



Revenue in the past 12 months (distribution)

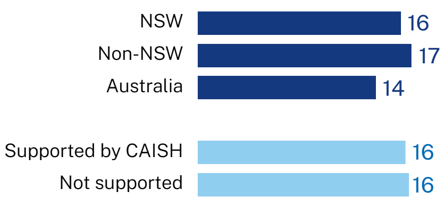


5.5 Internationalisation

Low levels of internationalisation among Australian startups

- Across Australia, only 14% of supported and unsupported startups that participated in the survey have international customers.
- Of the startups that responded to the question, 86% said they wanted to expand overseas in the next 2 years.
- Across the board, the relatively low percentage with international customers raises the question of whether Australia needs more 'baby born-globals'. It also suggests that Australian startups risk having only a domestic market.
  - We note however that many startups that participated in the survey are not yet earning revenue, let alone export income.
- We also note that some emerging sectors do not have sufficient depth locally to sustain startups. This leads to some born global startups focusing on accessing international markets from the beginning.
- Even startups that are born global often need support to better understand international customers, become export ready and sell into international markets.
- Greater awareness is an important first step in increasing internationalisation. Special Envoy for Southeast Asia Nicholas Moore AO discusses this in his report on Australia's Southeast Asia economic strategy.[18]

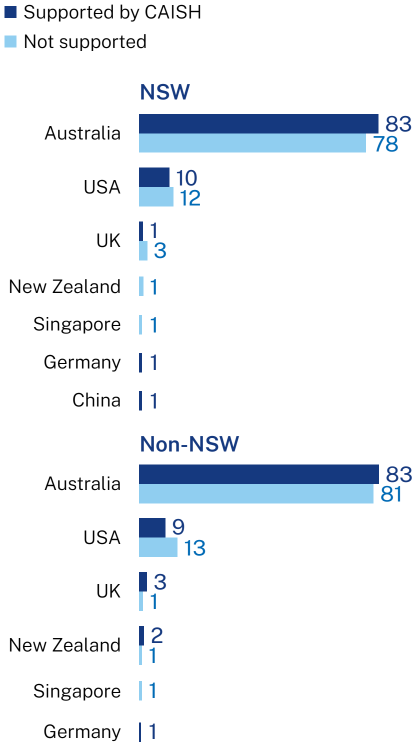
What percentage of this revenue was from customers outside Australia? (mean)



US the main market Australian startups expand into

- The limited number of startups that have internationalised have entered the US market.
- The key reason is that the US is the world's largest source market for growth capital.
- Very few Australian startups have expanded into Asia.
- Startups focus on the US, the UK and New Zealand as first markets for a few key reasons, including familiar language and business culture. In some sectors, it is also due to regulatory considerations. For example, mutual recognition of health certifications means many companies will go through regulatory processes in the US, the UK and/or Europe because it is cheaper and quicker than in Asia, where mutual recognition either doesn't exist or is not as easy to access.

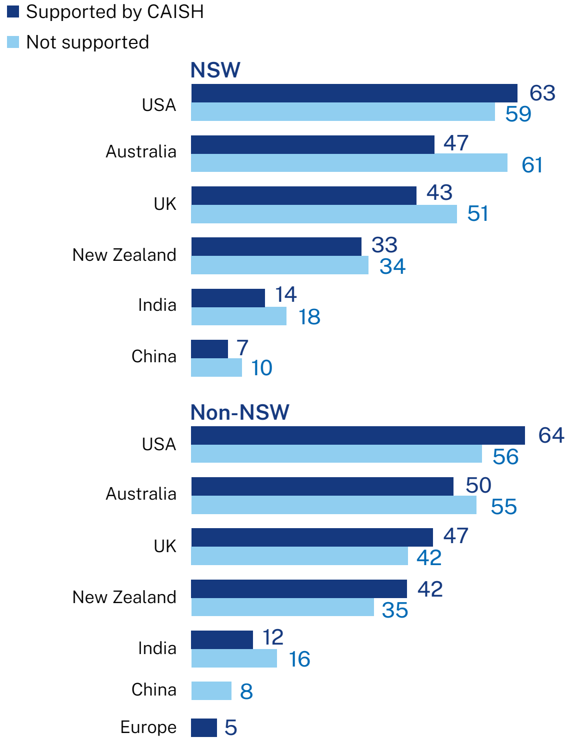
In which country are your customers mostly located? (%)



Opportunity for greater internationalisation by startups and scaleups

- Surprisingly few startups that responded to the survey reported focusing on Asia as an opportunity for international expansion.
- The US, the UK and New Zealand were the main countries of focus for supported and unsupported startups.
- CAISH entities have an opportunity to support Australian startups and scaleups to enter international markets, capitalising on existing trading relationships around the world. The NSW Government should support CAISH entities in developing programs that assist startups to scale internationally and connect with existing services. These include joint Austrade–NSW TradeStart advisers and the Going Global Export Program.

Which countries do you intend to expand into or increase your focus for customer acquisition in the next 2 years? (%)



18 https://www.dfat.gov.au/countries-economies-and-regions/southeast-asia/invested-australias-southeast-asia-economic-strategy-2040/chapter-2-critical-enablers

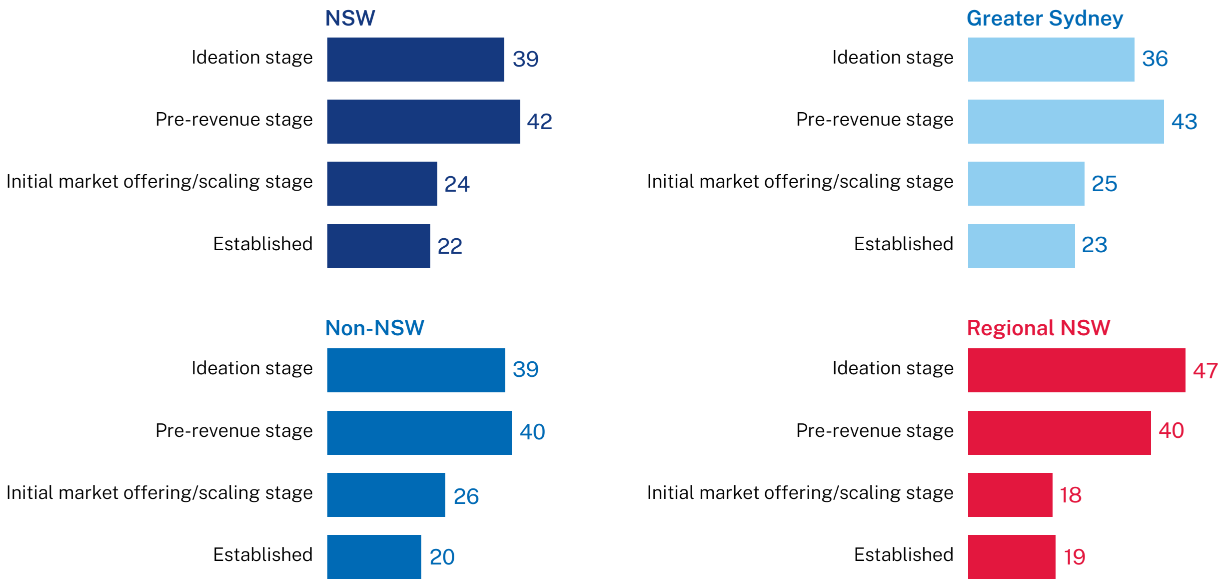
Section 6
Program-level impact

6.1 Engagement metrics

Dominant focus on early-stage ventures

- Based on data provided by CAISH entities, the majority focus on supporting startups in the ideation (39%) or pre-revenue stage (42%).
  - We note that support at the early stage of a startup's formation and growth can have a significant impact on its business development and future direction.
- This focus on early-stage ventures is slightly more pronounced in regional NSW.
- Related to insights in **Section 5.4**, an opportunity exists to support startups wishing to scale into international markets.

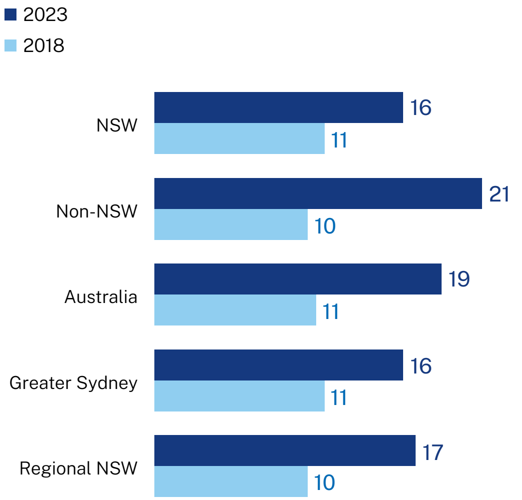
Percentage of clients by the development stage they were at when you supported them



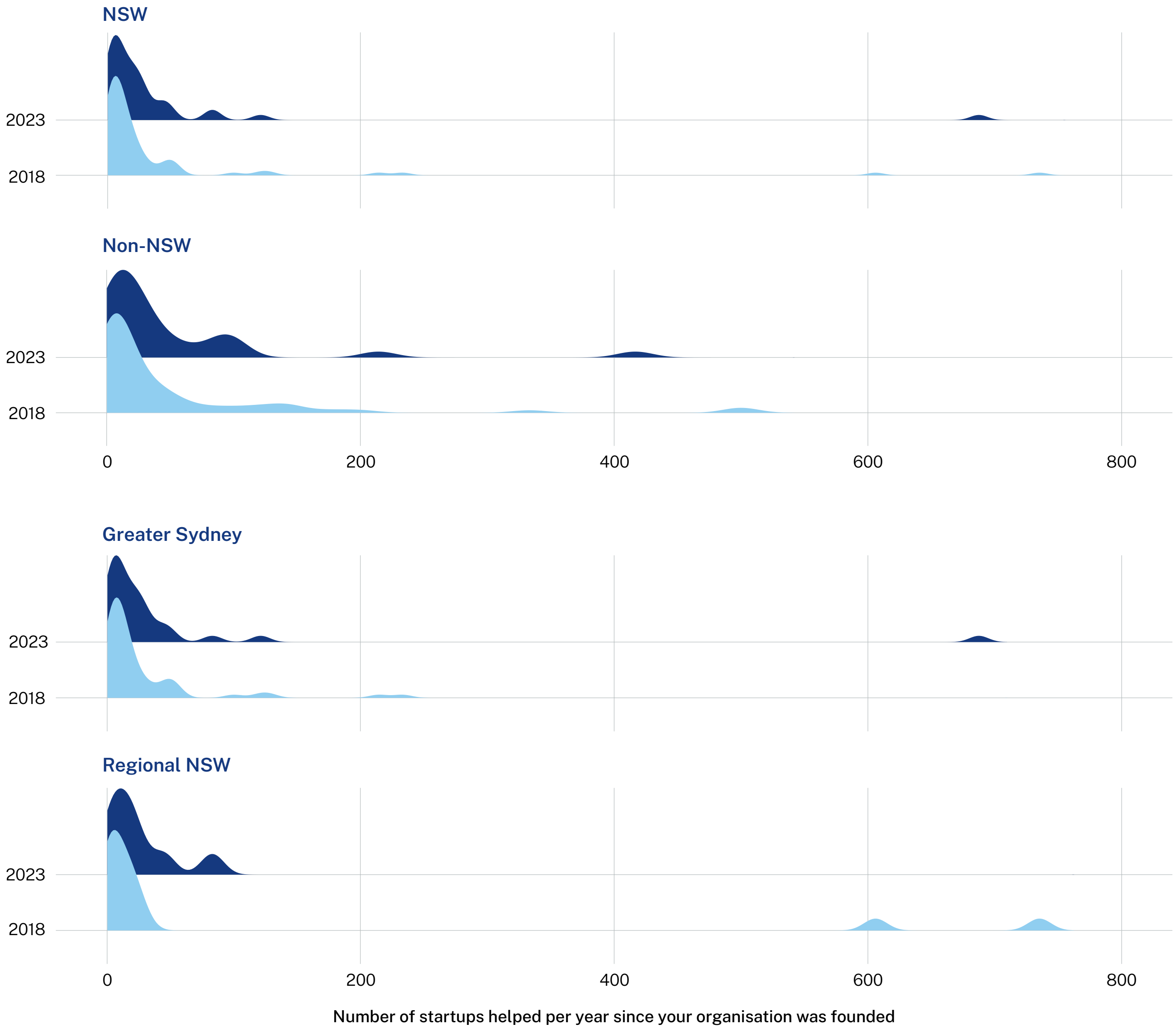
CAISH entities responding in 2023 have higher capacity, reflecting a more mature ecosystem

- Overall, CAISH entities can support a significantly greater number of startups annually, compared to 2018.
- The figures, along with the growth in the number of CAISH entities, suggest that more startups received support from CAISH organisations in 2023 than in 2018.
- This growth is largely consistent across NSW and other states and territories and matches the national average.
- The increase in capacity also suggests that CAISH entities are becoming more efficient and scaling their operations.
- The density plots to the right highlight that a small number of large CAISH entities are driving up total CAISH support across the ecosystem.
- This finding aligns with the findings in the first *Accelerating NSW* report, which mapped out the significant growth in the CAISH ecosystem. The first report found that CAISH entities were maturing and had been around for longer. Many had survived the COVID-19 pandemic and learned from their experiences.

Median number of startups your organisation has helped per year



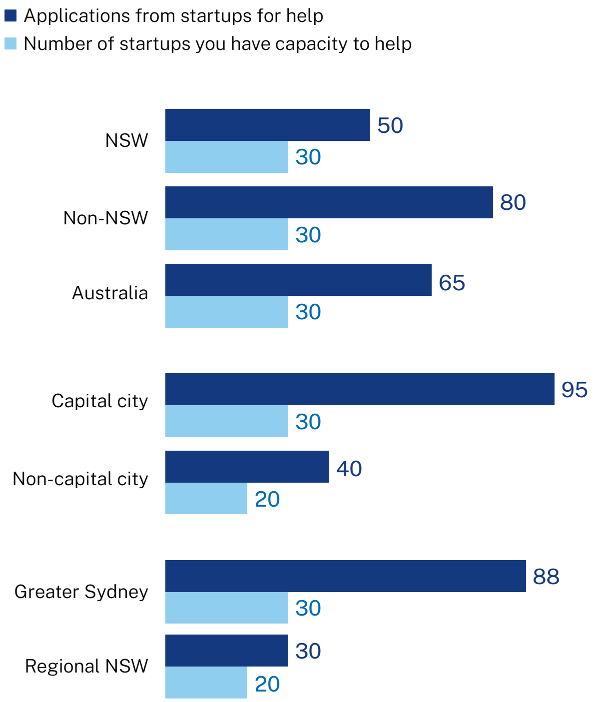
Number of startups your organisation has helped per year since it was founded



Strong demand for CAISH services outstrips capacity

- The median number of applications for CAISH support outstrips supply across Australia, especially in capital cities.
- Comparing the figure below with the figures on capacity suggests that, on average, 50 NSW startups compete for every 30 spaces in CAISH programs.
- The acceptance rate is even lower in Greater Sydney, with 88 applicants competing for every 30 places.

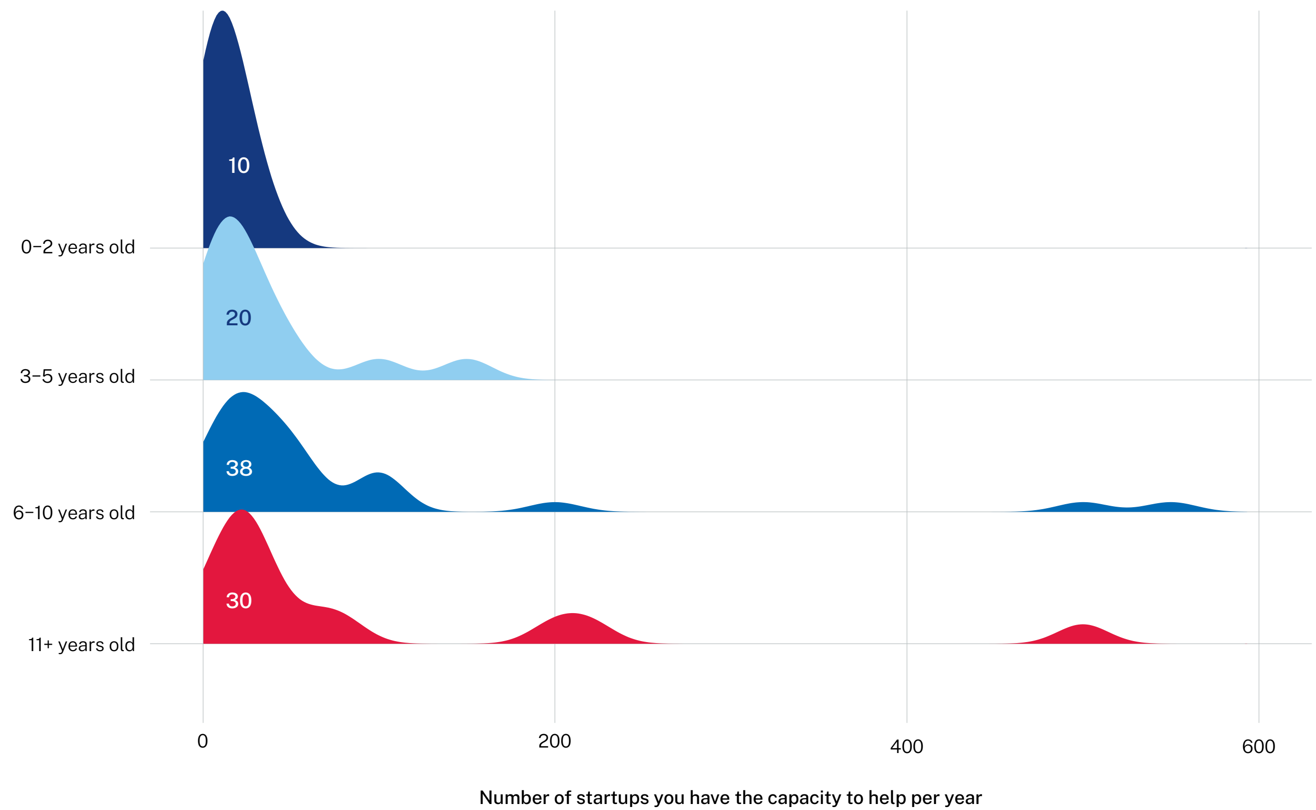
Median applications from startups requesting help in the last 12 months and median number of startups you have capacity to help per year by state and region



Large established CAISH organisations driving overall capacity of the sector

- The density plot emphasises that established CAISH entities have a much greater capacity to support startups than those in their first 5 years of operation.
  - We note that many of the organisations that have been operating for 11 or more years represent university-run CAISH initiatives.

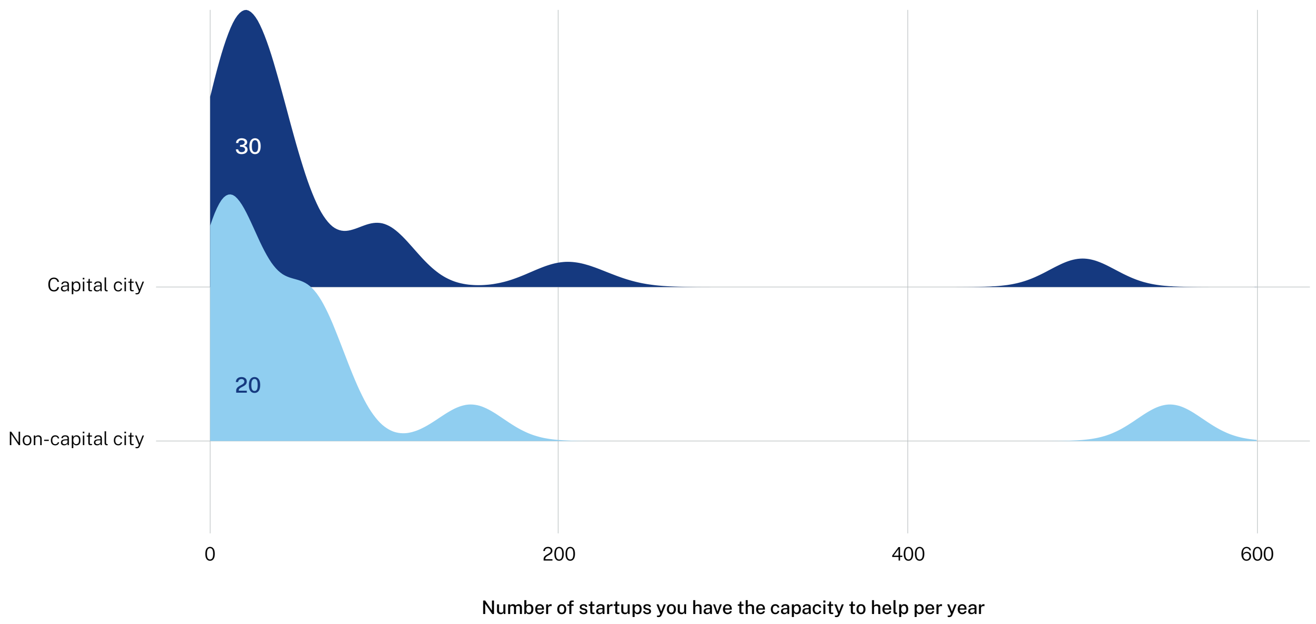
Number of startups you have the capacity to help per year by organisation age (median)



City-based CAISH entities have greater capacity

- The density plot reveals that capital city-based CAISH entities have greater capacity than regional CAISH entities to support startups each year

Number of startups you have the capacity to help per year by region (median)



6.2 Diversity of supported founders

NSW startups report having a slightly higher representation of women founders

- The Australian startup ecosystem is still a male-dominated world.
- The continued under-representation of women founders underscores the importance of specialised CAISH initiatives focused on women founders.

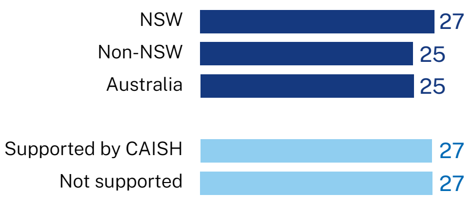
NSW startup ecosystem more diverse than the rest of Australia

- Survey respondents from NSW appear to be much more diverse.
- The NSW startup ecosystem appears to be characterised by a higher proportion of migrant entrepreneurs and entrepreneurs who grew up in low socioeconomic status (SES) households.
- The diversity of startups supported by CAISH entities highlights the importance of accelerators, incubators and coworking spaces in supporting inclusion within the startup ecosystem.

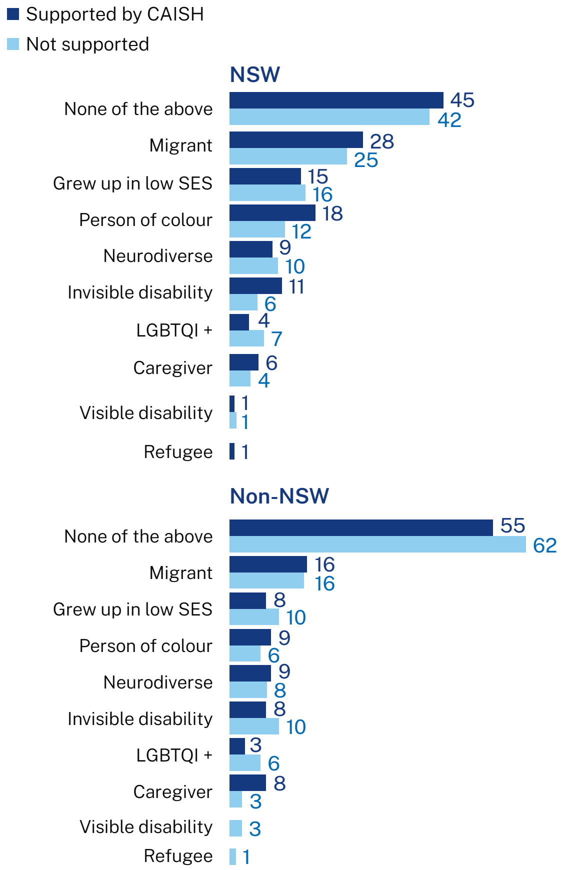
NSW founders are more linguistically diverse

- NSW founders are more diverse than the rest of Australia in relation to their first language.
- Founders who speak English as a second language account for more than a quarter of NSW founders, while only around 10% of founders outside NSW speak English as a second language.

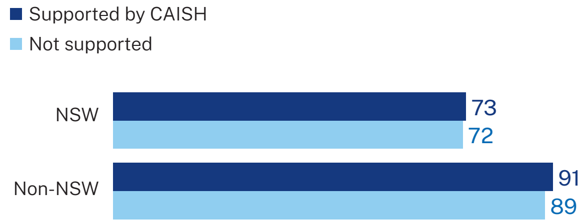
Percentage of women in the founding team, including yourself (mean)



Do you identify as any of the following? Select all that apply (%)



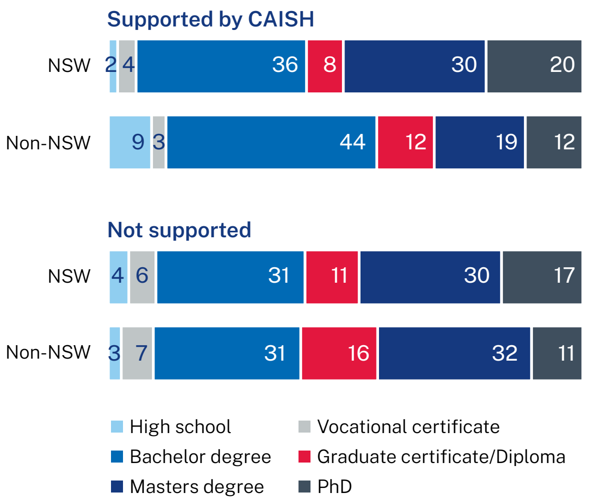
Is English your first language? Percentage answering (% yes)



High proportion of university-educated founders

- Respondents were mainly university educated, regardless of location or CAISH support.
- This suggests a potential bias among survey participants, especially given the role of university-led CAISH entities in distributing the survey.
- It emphasises the importance of using other avenues to reach out to non-university educated entrepreneurs when distributing the survey.
- These insights highlight an important opportunity for CAISH entities to ensure they also target their support to high school and non-university educated aspiring entrepreneurs in the community.

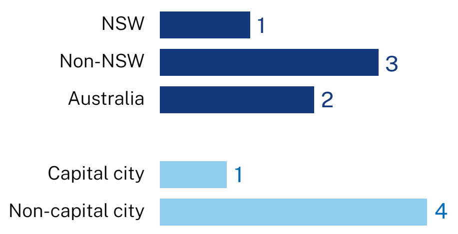
What is your highest level of education?



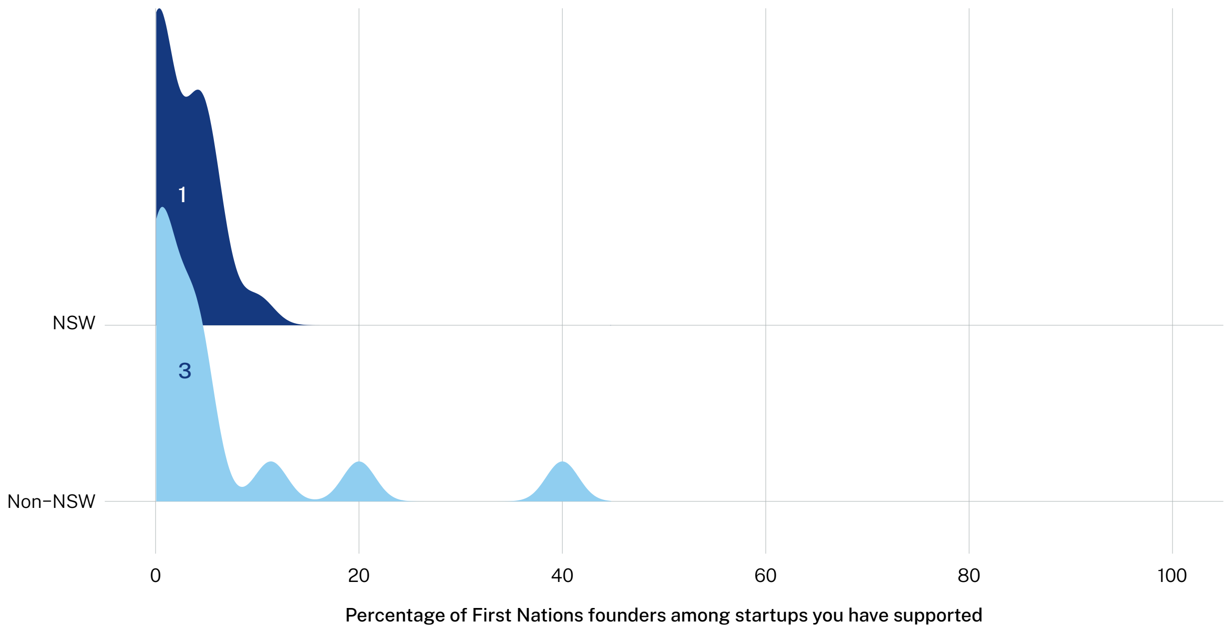
Opportunity for CAISH entities to better support First Nations founders

- As highlighted in the first *Accelerating NSW* report, very few CAISH entities in NSW explicitly focus on First Nations entrepreneurs.
- Regional CAISH entities across Australia support a higher proportion of First Nations founders compared to capital city-based organisations.
- The median number of CAISH entities that responded to the survey report that just 2% of their cohort are First Nations founders. (This percentage is lower than the number of First Nations people as a proportion of the Australian population – 3.8% according to the 2021 census.)
- As was highlighted in the first *Accelerating NSW* report, a significant opportunity exists for CAISH entities to develop dedicated, Indigenous-led programs to support First Nations entrepreneurs.
- The density plot below highlights the important work being done by a small number of First Nations-focused CAISH entities outside NSW.

Median percentage of startups you have supported with First Nations founders by state and region (median)



Percentage of the startups you have supported that have founders who identify as First Nations by organisation's state (median)



6.3 Network metrics

CAISH entities host events that contribute to collaborative networks

- CAISH entities are contributing to connectedness within the startup ecosystem by hosting a large range of events for a wide variety of stakeholders.
- The 51 NSW-based CAISH entities reported hosting more than 1,500 events, with nearly 100,000 attendees, over the past 12 months.
- The number and scale of events being hosted by CAISH entities align with insights presented in **Section 4** on how CAISH entities are enhancing networks and communities for startups.

Number of events hosted in the last 12 months (CAISH)

3,372 events in the last 12 months

1,508 NSW CAISH

1,282 Greater Sydney CAISH

1,864 Non-NSW CAISH

226 Regional NSW CAISH

Total attendance at CAISH-run events over the last 12 months

- We note that the total attendee number could overstate the total number of unique attendees, given that some individuals will attend multiple events.

152,080 CAISH-run events attendees

94,220 NSW CAISH

83,320 Greater Sydney CAISH

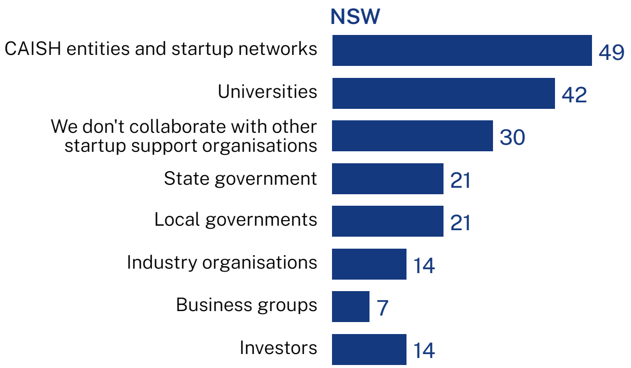
57,860 Non-NSW CAISH

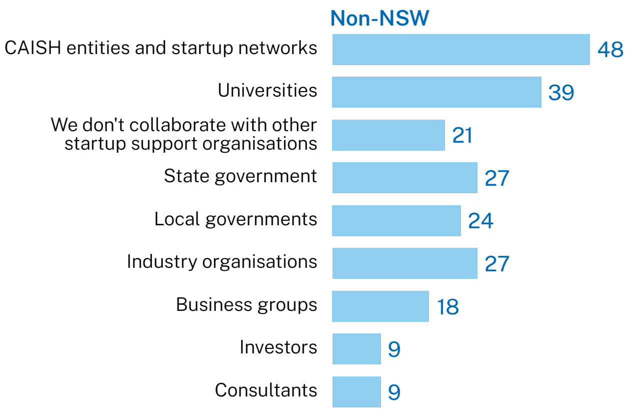
10,900 Regional NSW CAISH

High levels of collaborations between CAISH entities and with universities

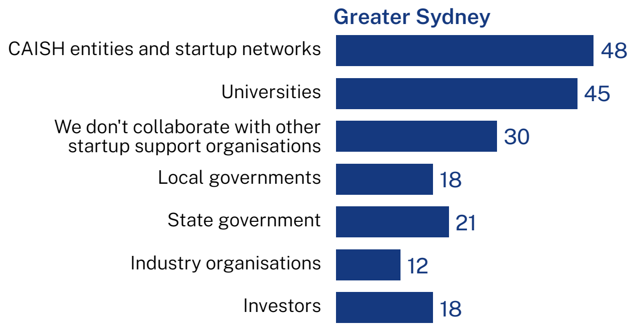
- Almost half of NSW CAISH entities actively collaborate with other CAISH entities and startup networks in delivering their services.
- Despite the high levels of collaboration, 30% of NSW CAISH entities state that they do not collaborate with other startup support organisations. This confirms insights from the first *Accelerating NSW* report suggesting that the startup support ecosystem is characterised by high levels of collaboration and competition (coopetition).

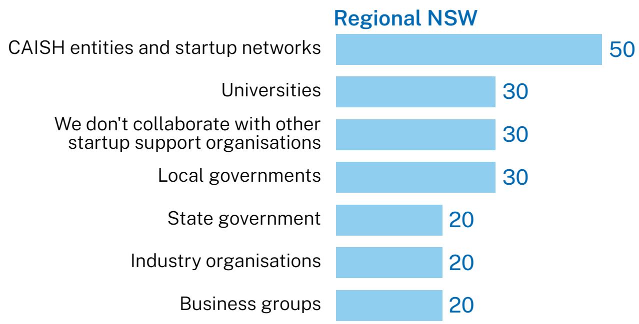
Which other support organisations do you collaborate with? (%)





Which other support organisations do you collaborate with? (%)





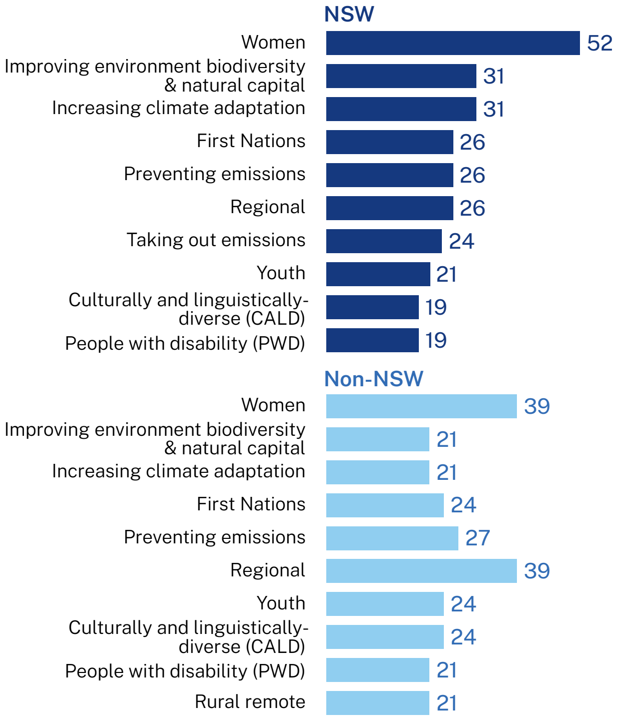
Section 7
Systems-level impact

7.1 Creating a diverse and inclusive startup ecosystem

NSW CAISH entities focus on impact on gender equality

- Among NSW CAISH entities, supporting women entrepreneurs is the most common focus area for making an impact.
- CAISH entities from NSW and outside NSW responded that First Nations founders were among their top 10 areas of focus. However, CAISH entities outside NSW seem to be more successful in reaching their goal of supporting First Nations founders compared to CAISH entities in NSW.

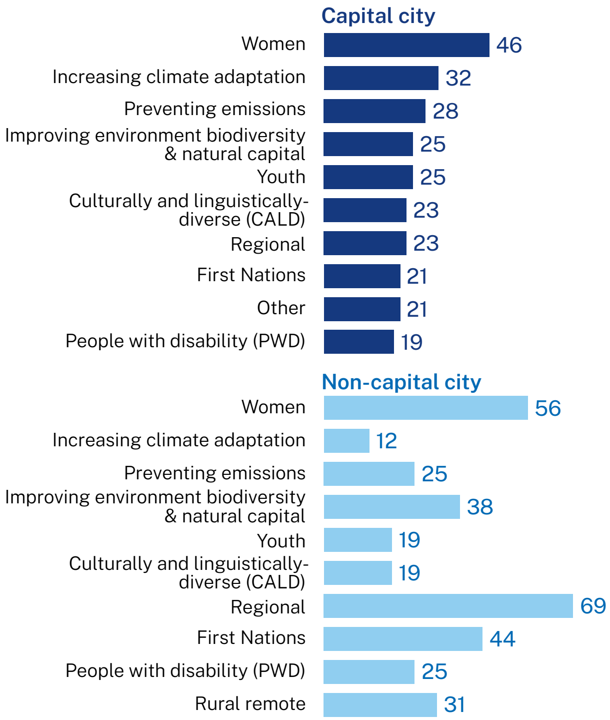
Which areas of impact does your organisation have a specialised focus?



CAISH entities outside capital cities are more focused on diverse participants

- CAISH entities outside capital cities were more focused on diverse participants, showing greater emphasis on women and First Nations entrepreneurs.

Which areas of impact does your organisation have a specialised focus?

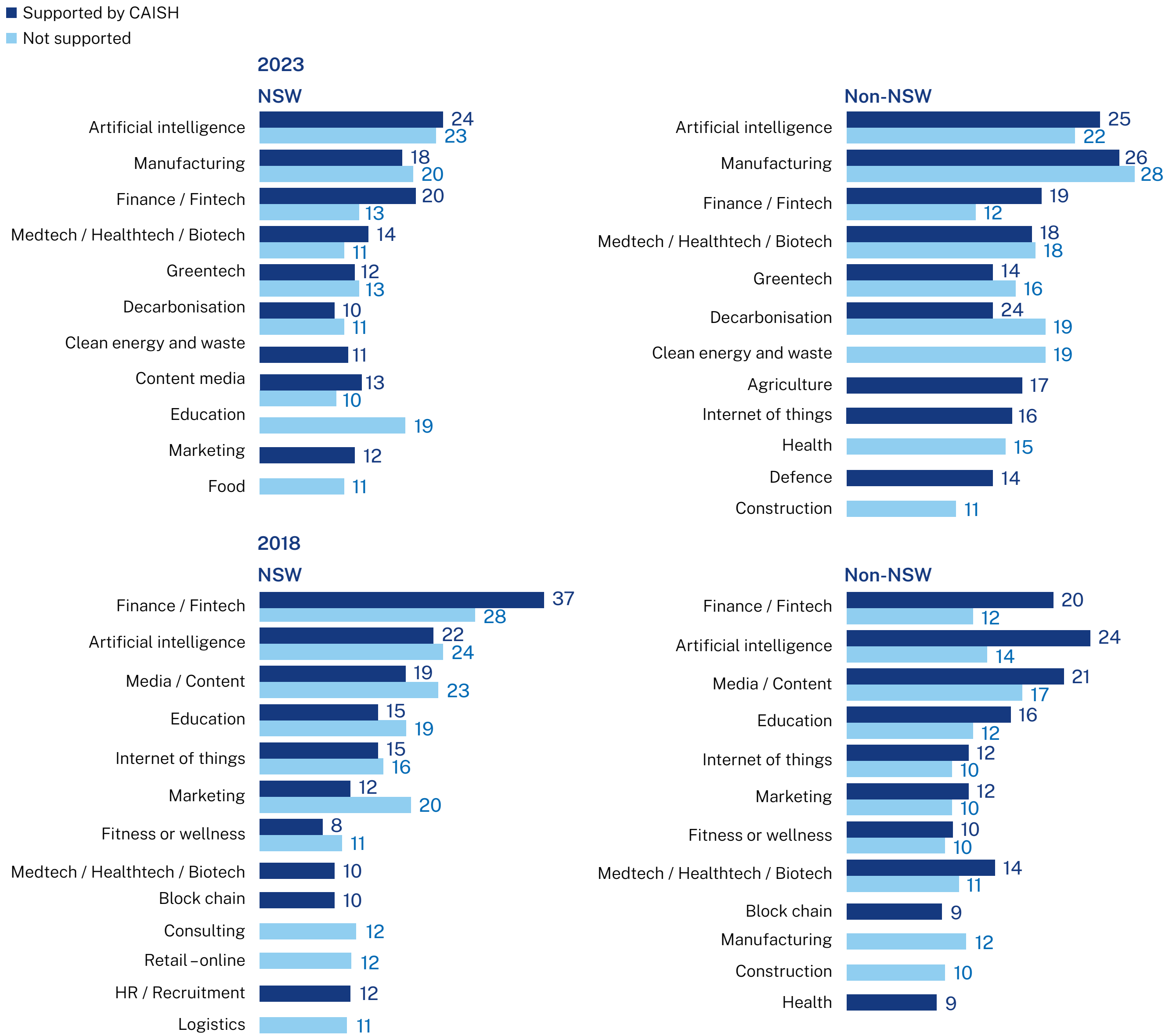


7.2 Market and industry developments

Artificial intelligence, manufacturing and fintech are the most common industry categories for startups

- In 2023, artificial intelligence (AI), manufacturing and fintech were the most common industry categories for startups, regardless of location or CAISH support.
- Compared to 2018, startups focused much more on manufacturing, greentech, decarbonisation and clean energy, and waste.
- These figures are unsurprising given the global hype surrounding generative AI and blockchain technologies.
- Sectors such as agrifood, clean economy, health and life sciences, and defence and aerospace were under-represented among NSW startups.
  - We note that the number of startups in each sector is influenced by many factors, including accessibility of information and networks, availability of required technologies, and the inherent complexity of science and engineering.
  - The time to product or service launch and the path to scale varies for startups in different sectors. Compared to software-as-a-service or other services business, product development startups often take longer, have higher costs and are riskier.
- The under-representation of certain sectors highlights the value in continuing to support specialised CAISH entities focused on these sectors.
  - As noted in the first *Accelerating NSW* report, specialised CAISH entities play an important role in supporting startups to reach their potential.

Which of the following industries apply to your product or service? (%)

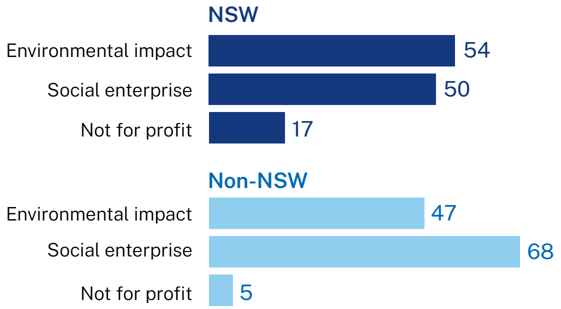


7.3 Belonging and connection within ecosystems

Potential to increase focus on environmental impact and responding to the climate crisis

- Half of NSW CAISH entities highlight social enterprises as a key theme of startups they would like to support. This figure is much lower than in other states and territories (50% compared to 68%, respectively).
- NSW CAISH entities appear slightly more likely than other states and territories to view startups that aim for an environmental impact as something they would like to support (54% compared to 47%, respectively). However, this figure could indicate a need to direct CAISH support towards startups focused on sustainability transitions and the climate crisis.

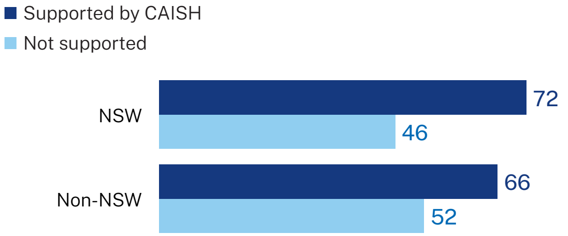
Which of the following themes apply strongly to the kinds of startups you'd like to support by state?



CAISH-supported startups have a stronger sense of belonging in the ecosystems

- CAISH-supported startups are more likely to feel part of their local startup ecosystems (70%) compared to those not involved in CAISH activities (51%).
- This finding provides clear evidence that the strongest impact of CAISH entities is supporting networks and creating a sense of community for startups.

Do you feel engaged in your local startup ecosystem? (% yes)



Relatively high level of resource recycling in Greater Sydney compared to regional NSW

- The percentage of alumni involved in CAISH programs as mentors, investors and/or supporters is slightly higher in Greater Sydney than in regional NSW.
- This figure could partially be explained by regional startups moving to other areas in NSW.
- This finding suggests an opportunity to explore how to keep members of regional startups who graduate from CAISH programs engaged as alumni.

What percentage of your alumni engage in support? (e.g. as mentors, investors, supporters) (mean)

Insight into CAISH practices

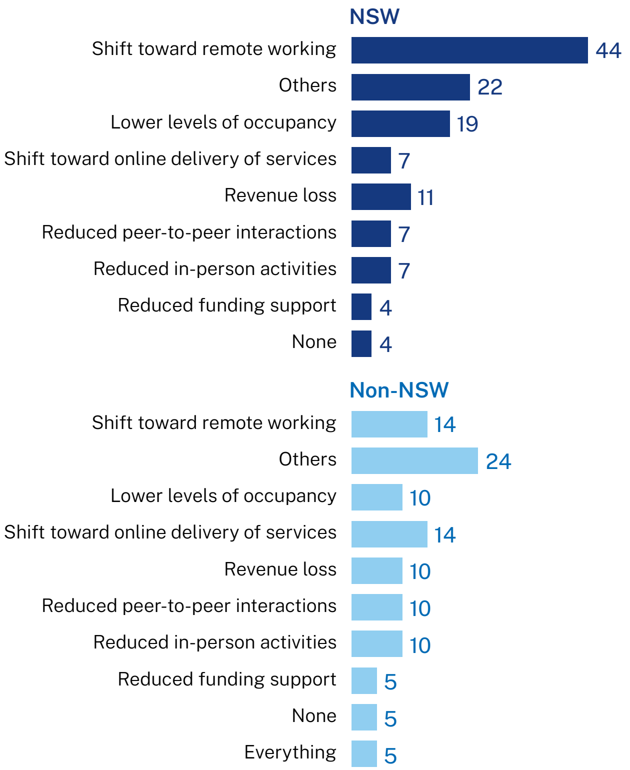
Section 8

Lasting effects of COVID

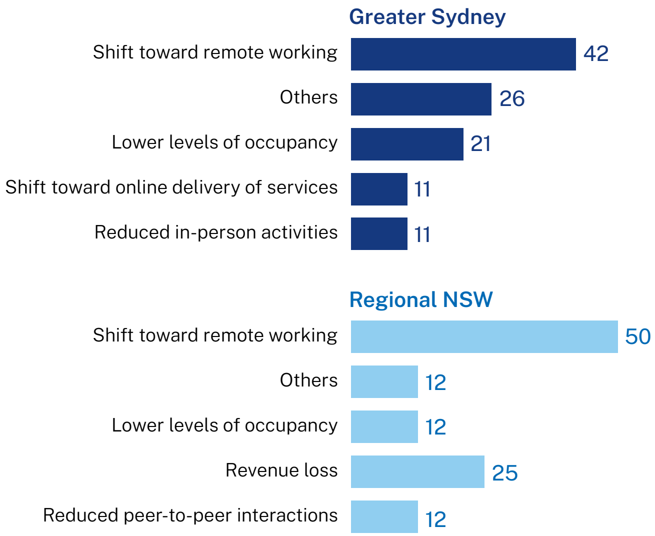
NSW CAISH entities most affected by shift to remote working

- Compared to CAISH entities outside NSW, a significantly higher proportion of NSW CAISH entities report the shift towards remote working as having a lasting effect on their organisation (44% versus 14%, respectively).
- The shift is affecting Sydney-based and regional NSW CAISH entities.

What have been the main lasting effects of the COVID-19 pandemic on your organisation? (%)



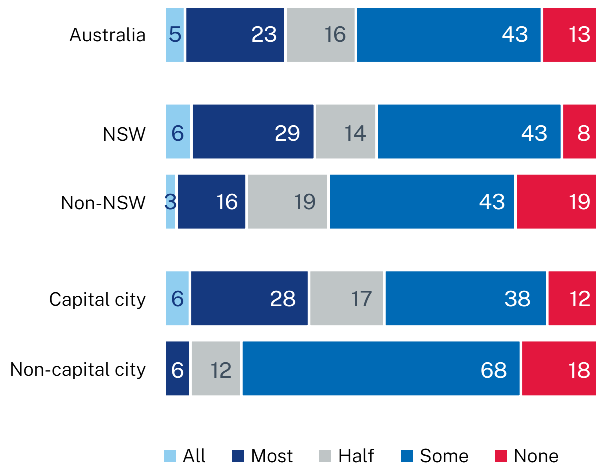
What have been the main lasting effects of the COVID-19 pandemic on your organisation? (%)



Higher proportion of online or mostly online service delivery by NSW CAISH entities

- 35% of NSW CAISH entities offer all or most of their services remotely or online, compared to 19% outside NSW.
- Across Australia, mostly in-person delivery is much more common in regional and rural settings, with CAISH entities outside capital cities offering none or only some services online (83%) compared to those in capital cities (50%).
- The limited number of online programs reportedly being run by regional CAISH entities suggests that regional NSW CAISH entities are accessing programs from capital cities. Further research is needed to understand how many regional or rural startups are accessing remote and/or online services from capital city-based CAISH entities.

How much of your services are delivered remotely or online?

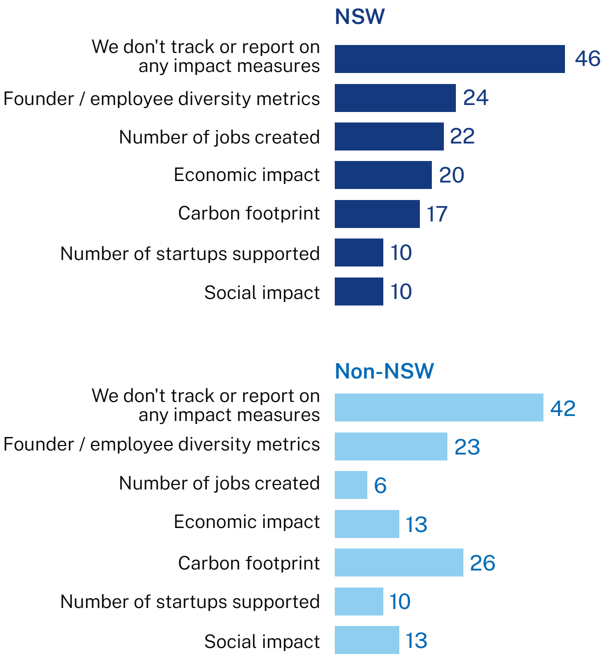


Section 9
Impact measurements

CAISH entities aren't measuring their impact

- Almost half of CAISH entities surveyed don't track or report on their impact.
- About a quarter of NSW CAISH entities track founder diversity metrics, job creation and the economic impact of supported startups.
- Some pay attention to their carbon footprint but it is unclear whether this extends to the carbon footprint of supported startups.
- The limited impact measurement practices of CAISH entities calls into question the reliability of data collected through survey-based approaches such as Startup Muster.

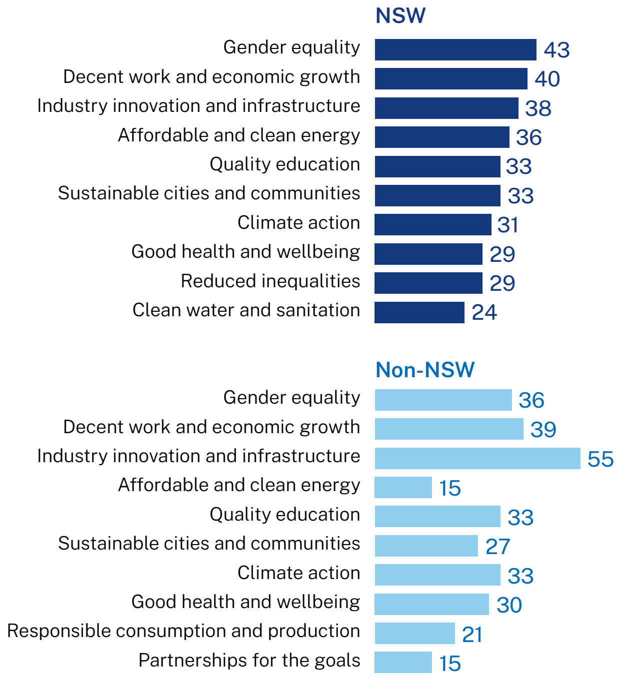
Which impact measures do you track and/or report on? (%)



Gender equality is the Sustainable Development Goal most NSW CAISH entities focus on

- NSW CAISH entities have a strong focus on Gender Equality, the United Nations' Sustainable Development Goal (SDG) 5, with nearly 43% highlighting their organisation's contribution to SDG 5.
- Unsurprisingly, Industry Innovation and Infrastructure (SDG 9) and Decent Work and Economic Growth (SDG 8) are the next most common SDGs of focus.
- A higher proportion of NSW CAISH entities (36%) focus on Affordable and Clean Energy (SDG 7) compared to outside NSW (15%).

Which Sustainable Development Goals does your organisation impact? (%)



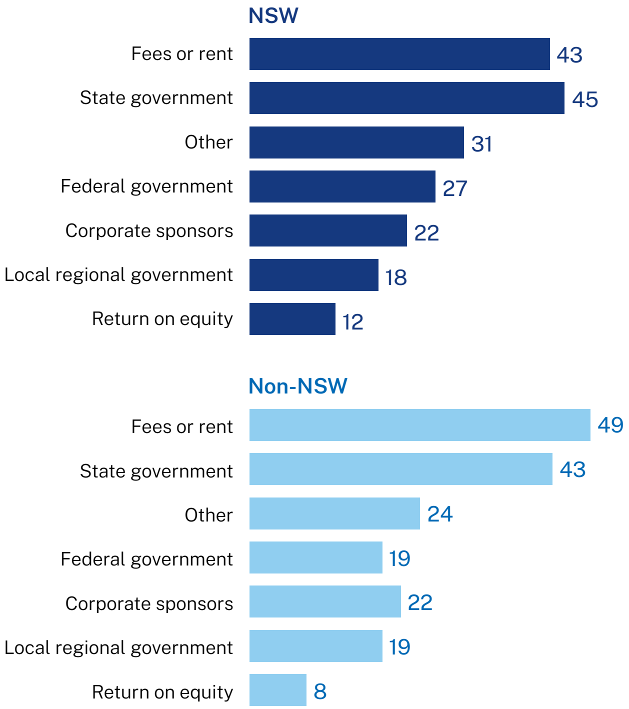
Section 10

CAISH business models

Government funding is core to CAISH business models

- CAISH entities are heavily reliant on federal, state, and local government grants as a source of funding. This finding is unsurprising as governments around Australia have played an enabling role in the CAISH sector over recent years.
- The insights from NSW also reflect that the NSW Government has been a key funder of CAISH initiatives through supporting programs, including the Boosting Business Innovation Program.
- Charging startups fees and rent is a much more common source of revenue than taking an equity stake in supported startups.

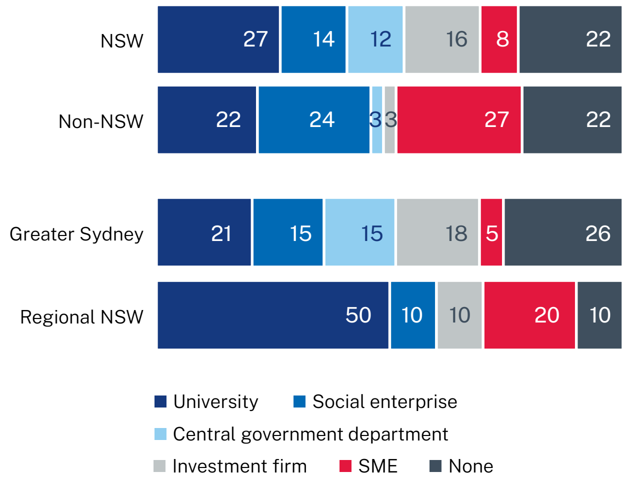
What are the main sources of funding for your organisation? (%)



Universities play a big role in the NSW startup support ecosystem, especially in the regions

- Universities play a big role in CAISH support in regional NSW, with half of regional NSW CAISH entities run by universities.
- NSW appears to have relatively fewer social enterprise CAISH entities, with universities, government and investment firms playing a bigger role in providing CAISH services.

What best describes your parents organisation, or the organisation that owns your program/initiative?



Section 11

Concluding comments

The findings in this report resonate with insights gained from the qualitative interviews and academic research conducted for the first *Accelerating NSW* report.

The insights from the 2023 Startup Muster survey provide a point of triangulation with the analysis of qualitative interviews.

As with any survey-based research relying on self-reported data, we view this report as a conversation starter rather than a definitive state of play. We hope the insights and recommendations it contains, and those in the first *Accelerating NSW* report, provide a starting point for conversations about how various stakeholders in the entrepreneurship ecosystems can enhance the impact of CAISH services.

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