Canberra Innovation Network's Economic Impact

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pwa

November 2024



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Executive summary

Canberra Innovation Network (CBRIN)

CBRIN is a not-for-profit organisation that connects businesses and entrepreneurs with services, facilities, and stakeholders to boost innovation and growth. It aims to foster a culture of innovation and entrepreneurship, enhance the ACT's innovation ecosystem, and support economic diversity and growth. Predominantly funded and housed by the ACT Government, CBRIN also receives support from corporate partners and its founding members, which comprise major tertiary and research institutions in Canberra.

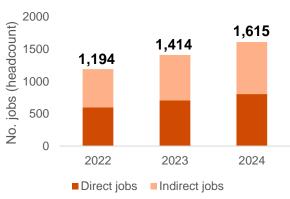
ACT innovation system

The size of the innovation ecosystem in the ACT is significant, especially given its size and population. The advantages of an educated population, high quality education and research institutions, and government support have been able to be leveraged in an innovation ecosystem that is one of the most connected in Australia. A key part of that ecosystem is the Canberra Innovation Network (CBRIN) which supports and connects a variety of stakeholders to develop innovation and entrepreneurial capacity in the ACT. With that context, this report estimates the economic impact of CBRIN both in terms of the benefits it generates for individuals and the ACT economy.

Quantified economic benefits

While there are clearly benefits for individuals and businesses that engage with CBRIN, the analysis acknowledges that benefits are broader than that. As a foundational element of the ACT's innovation ecosystem, CBRIN also delivers benefits for ecosystem stakeholders, as well as for parts of the economy that benefit indirectly – through increased capacity and activity in the ACT and improved reputation of the ACT. The graph below demonstrates the growing numbers of jobs that CBRIN supports directly (as a result of stakeholder interaction with CBRIN and agglomeration effects) and indirectly (through supply chains in the ACT) each year.

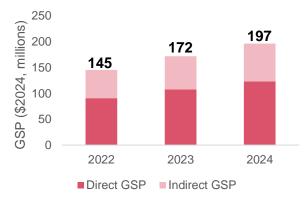
Employment impact by component (headcount)



On our estimate, these jobs contributed \$123 million directly to gross state product (GSP) and \$197 million including indirect effects in 2024, as per the graph below. This quantitative analysis shows two main themes:

 These impacts grow significantly over time as the businesses that engage with CBRIN realise a range of commercial and economic benefits. CBRIN is still relatively early in its support of long-term benefits.

GSP impact by component (\$2024, million)



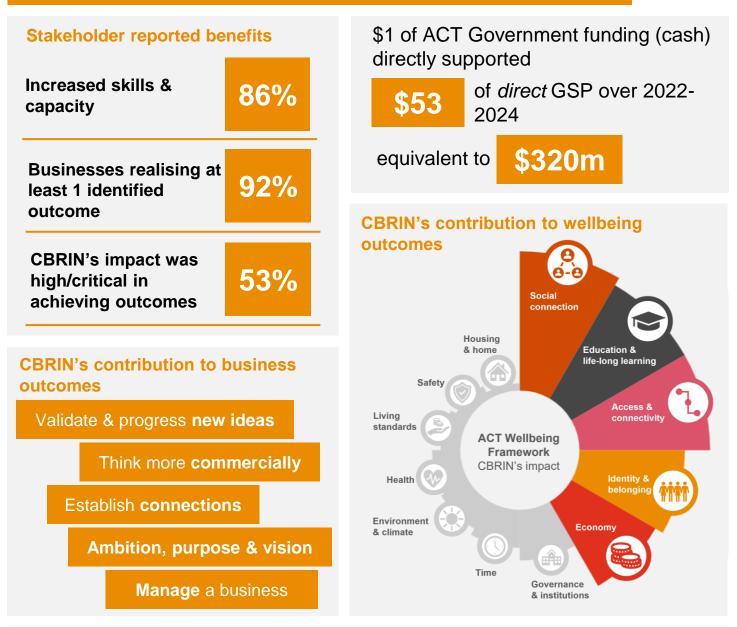
 The quantum of benefits is significant compared to the funding CBRIN receives. In 2024, CBRIN directly supported around \$57 in GSP for every dollar (cash) of ACT government funding it received. This is over \$90 of GSP per dollar of ACT government cash funding when indirect impacts are also included.



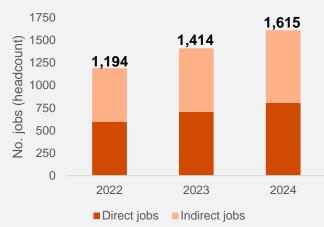
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2022-2024 CBRIN Impact Report Highlights





Employment impact by component (headcount)



GSP impact by component (\$2024, million)



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Acknowledgement of Country

PwC Australia acknowledge the First Peoples – the Traditional Owners of the lands where we live and work, and recognises their continuing connection to land, water and community. We pay respect to Elders – past, present and emerging – and acknowledge the important role Aboriginal Peoples and Torres Strait Islanders continue to play within the World Science Festival Brisbane and Queensland community.



Introduction



This report estimates the impact of CBRIN on the Australian Capital Territory (ACT) economy.

CBRIN

The Canberra Innovation Network (CBRIN) is a not-for profit organisation with the primary aims of:

- Providing a network linking businesses and entrepreneurs to services, facilities and stakeholders that accelerate their innovation and growth
- Promoting a culture of innovation and entrepreneurship
- Taking a central role in growing the Australian Capital Territory (ACT) innovation ecosystem and building capability
- Developing innovative approaches to provide services that support the growth and diversity of the ACT economy.

CBRIN operates with base funding and accommodation provided by the ACT Government, with additional support from a group of corporate partners. CBRIN foundation members include major tertiary education and research institutions in Canberra. The network is also supported by a group of corporate partners.

Context

Since its establishment in 2014, this is the third key examination of CBRIN's impact.

The first, in 2018 and summarised later in this report, was a primarily qualitative analysis which concluded that it was difficult to quantify benefits only a few years after CBRIN's establishment.

The second was undertaken in 2021 and was PwC's first report which surveyed CBRIN's stakeholders to quantitatively assess CBRIN's economic impact on the ACT economy.

This report builds on the 2021 quantitative analysis and provides a contemporaneous assessment of CBRIN's economic impact.

Scope of analysis

CBRIN engaged PwC to assess the economic impact of the ACT government's investment in innovation through CBRIN. The analysis presented in this report is based on:

- Desktop analysis of internal information provided by CBRIN
- Collation and analysis of public information on innovation ecosystems
- An online survey of over 190 CBRIN stakeholders
- Economic modelling of jobs and economic activity supported by CBRIN.

Report structure

The remainder of this report is structured in the following manner:

- Section 2 Innovation ecosystem: a highlevel overview of the innovation ecosystem in which CBRIN operates.
- Section 3 CBRIN overview: provides an overview of CBRIN and its strategic focus.
- Section 4 CBRIN's economic impact: presents analysis of the key economic impacts CBRIN delivers in the ACT including quantification of supported jobs and contribution to gross state product (GSP)

The appendices set out sources, approach and further detail of the analysis.



Case study: Viden

Company overview

Viden is an Australian-based, professional services and cyber security company headquartered in Canberra with teams in Brisbane and Melbourne. A small to medium enterprise, the company specialises in delivering critical and cutting-edge capabilities, projects, and programs, primarily for Government clients. As a veteran-centric organisation, Viden's employees have extensive operational experience across land, air, maritime, space, and cyber domains.

Viden operates two distinct business units: Viden Consulting, which focuses on professional project delivery services, and Viden Labs, which specialises in information technology assurance and evaluation services. The company's mission is to help clients navigate complex, ambitious, and evolving environments to deliver innovative and challenging projects that enhance, protect, or grow their businesses. By working closely with its clients, especially within the Government sector, Viden aims to support some of Australia's most critical and advanced projects and programs.

Connection to CBRIN & ACT innovation ecosystem

Viden continues to support the ACT innovation ecosystem, demonstrated by its involvement in the *Founders Fireside Chat* podcast as part of CBRIN's *Billion Dollar Panel* series. The series serves as a platform for founders to share their journeys of building and scaling successful companies. Viden's CEO and founder, Anthony Barnes and COO, Davina Mansfield shared their experiences. This included the process of deciding to start the business, building the right team, engaging with customers and navigating work life balance. The event offered guidance to the 31 individuals who attended.

"The fireside chat was a fantastic way to spend an evening. Not only did we have the opportunity to hear from market experts, but we also got to network with other Canberra entrepreneurs." – Founders Fireside Chat attendee



Additionally, Viden's COO Davina Mansfield featured in CBRIN's *Women in Innovation Series*, where women in the innovation community are interviewed about their experience as an entrepreneur and why innovation is important to them.

"The Canberra Innovation Network (CBRIN) has been instrumental in our journey, providing invaluable support and resources both in the early stages of our business and as we've grown. Their guidance and community have empowered us to innovate and scale with confidence. CBRIN have created an ecosystem that fosters innovation and belonging. We are extremely grateful to the whole CBRIN team for their support of Viden."

- Davina Mansfield (COO, Viden)

"I represent multiple businesses now and launching a new startup next month largely due to the resources, connections and strategies I have gained from CBRIN in the past four years."





Importance of innovation in Australia

The role of innovation and SMEs in driving economic growth in Australia

Importance of innovation

Innovation enables private, public and social sectors to improve competitiveness and productivity. This in turn leads to improved standards of living and enhanced welfare through measures such as job creation, improvements in health and life expectancy, lower prices for goods, and protection of the environment. Countries that have a high capacity for innovation are able to adapt to change and create economies and societies that are resilient.

The impact of entrepreneurial activities through newly founded firms is a key driver of economic growth.¹ Reserve Bank of Australia (RBA) analysis has shown that 50 per cent of growth in OECD countries can be attributed to innovation.²

Small to medium enterprises (SMEs)

SMEs are widely represented across the sectors of the Australian economy. A significant contribution of SMEs is in the labor market, where they provide two-thirds of private sector jobs and generate nearly 60 per cent of company profits.³ Persistent innovation has a significant, positive and direct effect on a wide range of growth variables, particularly for young SMEs.⁴

Investment in innovation



Australian businesses invest an estimated \$32-\$36 billion annually in innovation, with about \$17 billion directed towards research and development (R&D).⁵ Government R&D was \$4.3 billion in 2022-23, up 20 per cent in two years.⁶ Government support in innovation is multifaceted, including programs, funding, and in-kind support to non-government entities, although defining this support comprehensively is challenging.







Defining innovation ecosystems in Australia

Innovation is important to the Australian economy and it is supported in different ways

Innovation ecosystems

There is a range of research looking at the circumstances that best support an environment in which innovation can occur. Innovation ecosystems combine internal and external factors, as well as direct and indirect supports. As such, innovation ecosystems are made up of organisations and specific policies and programs that can have complex interdependencies.

There is no single taxonomy for describing these ecosystems, or for defining the most critical parts of them. There are different taxonomies to describe elements of innovation ecosystems, but it is hard to establish one that describes elements as mutually exclusive and collectively exhaustive (as one organisation can support different roles in the ecosystem).

Innovation ecosystems can be broadly grouped into seven parts:

- Strategy policy settings: specific innovation policies
- Spaces and connection: organisations and supports that provide specific spaces (both physical and virtual) for innovation and connection
- Business programs: programs for innovative businesses to start, grow and invest
- Individual programs: programs for individuals to develop their individual capacity and entrepreneurial skills
- Advocacy: broader support for the innovative ecosystems and the players in it
- **Investment:** financial support and access to capital
- **Research:** institutional support and capacity for research.

This taxonomy shows the scale and coverage of Australian innovation ecosystems but it is likely to include some overlap (i.e. an organisation might plan both an advocacy and research role, or run programs for both businesses and individuals).

Innovation ecosystems are also supported by a range of factors that support many parts of the economy, such as skilled workforce, ease of access to capital, and legal settings that allow for protection of intellectual property, amongst others. However, these are generally not considered part of an innovation ecosystem as they serve a range of purposes.

The size of the innovation ecosystem in the ACT is significant, especially given its size and population. The ACT hosts almost 5% of Australia's innovation ecosystem stakeholders, which is over 2.8 times what would be expected based on its population, making it the highest per capita in the country.⁷





CBRIN's objectives and vision

CBRIN supports entrepreneurs to drive growth in the ACT innovation ecosystem

CBRIN overview

CBRIN is a non-profit organisation dedicated to fostering innovation and entrepreneurship in the ACT. CBRIN's key objectives include:

- Connecting businesses and entrepreneurs: to programs, facilities, and stakeholders to accelerate their growth.
- Growing the ACT innovation ecosystem: playing a central role in building the innovation ecosystem and building capability in the ACT.
- Supporting economic growth and diversity: developing innovative approaches to support the growth and diversity of the ACT economy.

CBRIN's vision is for Canberra to be globally recognised as a smart, connected, and creative city driven by excellence in research, innovation, and entrepreneurship, contributing to a diversified economy and social impact.

CBRIN empowers entrepreneurs, including startup founders, researchers, innovators, and business operators, to make a global impact.

The organisation's work is guided by principles of an innovation-driven entrepreneurial ecosystem and collective impact. CBRIN's collaborative efforts involve foundation members such as ANU, UC, UNSW Canberra, CIT, and CSIRO, supported by the ACT Government, as well as private sector partners like King Wood Mallesons, Optus, Canberra Airport and PwC. Together, they work to enhance and grow the support services available for ambitious innovators and entrepreneurs in the ACT and surrounding regions.



CBRIN offers a range of programs that support innovators and the growth of innovation capacity in the ACT, as outlined below.



Overview of CBRIN's programs

Case study: Instaclustr

Company overview

Instaclustr is a technology company specialising in providing fully managed services for opensource data infrastructure technologies. Founded in 2012, the company offers expertise in deploying, managing, and optimising a range of open-source software solutions, including Apache Cassandra, Apache Kafka, Redis, and Elasticsearch, among others.

A majority of Instaclustr's customers are located internationally, particularly in the US and Europe, which together account for over 80% of their customer base. The company, now employing over 250 people across India, Vietnam, and the United States, has gained recognition, winning the 2021 ACT Exporter of the Year at the ACT Chief Minister's Export Awards. In 2022, Instaclustr was acquired by Nasdaq-listed NetApp for approximately \$500 million.

To manage its global operations, Instaclustr employ a hub-and-spoke model for sales and marketing, ensuring they remain close to their customers and provide 24/7 support.

Connection to CBRIN & ACT innovation ecosystem

Instaclustr continues to support the next generation of ambitious tech entrepreneurs, evidenced by their collaboration with CBRIN and the University of Canberra on an Open Source Hackathon.



of respondents engaged with *SME* and/or *Scale Up* programs reported CBRIN as having a **high** or **critical** impact in achieving their identified outcomes

In an interview with CBRIN, Doug Stuart, COO and Co-Founder of Instaclustr, emphasised the quality of companies emerging from Canberra, noting that many 'sit under the rader, but are truly amazing businesses.'

"We will never forget our CBRIN and Entry29 roots. Without the support in the early days we may have not achieved our first big hair goal of survival."

- Doug Stuart (COO, Instaclustr)

"Having been involved in a number of startups in CBR and around Australia, I have seen that CBRIN creates a unique collaboration and learning environment for entrepreneurs and scaling businesses that they and the Canberra community are richer for."

- Business owner/manager (SME and/or Scale Up program attendee)

CBRIN core directions and activities

CBRIN's impact is driven by the specific role and activities it undertakes in the ecosystem

CBRIN's strategy

CBRIN's mission is to empower entrepreneurs to make an impact and change the world. The analysis in this report aims to both identify and quantify the specific impacts that CBRIN delivers within the ACT economy. To be able to analyse that impact, it is first important to understand CBRIN's specific activities (which drive outcomes).

CBRIN sets strategic directions, which guide their operations. The 2023 to 2028 strategic directions are the most relevant to this analysis, as it covers two thirds of the period between the last impact report and this analysis. For this period, CBRIN has three key strategic directions: innovation capacity, entrepreneurial capacity and placemaking. These directions drive future outcomes and impacts and are outlined in more detail adjacently.



Journey of CBRIN Strategy

Exploration 2014 to 2017

Finding gaps & experimenting with approaches \rightarrow opportunistic

Focus

2018 to 2022 Focusing on what works → standardising & scaling

Growth

2023 to 2028

Amplification of impact through funding, marketing, partnering, coordination & central innovation building

2023-2028 Strategic Directions

Direction 1: Innovation Capacity

Build capability in segments of the community that do not identify as entrepreneurs with the aim to drive more innovation, collaboration and job creating entrepreneurship.

Direction 2: Entrepreneurial Capacity

Grow the entrepreneurial capacity of our innovation ecosystem by developing, delivering and linking programs and resources that support growth of ambitious innovation and technology companies.

Direction 3: Placemaking

Strengthen the role of CBRIN as the ACT's central innovation hub with active linkages to a powerful network of innovation precincts that work together to grow new industries and solve complex problems by leveraging science, innovation and entrepreneurship.

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CBRIN's Theory of Change[®]

Purpose Statement

CBRIN curates a vibrant innovation ecosystem that empowers entrepreneurs to make an impact and change the world. Delivering and linking programs and services that grow ACT innovation capacity, entrepreneurial capacity and innovation placemaking, we help diversify ACT economy and establish Canberra as an innovation hotspot, globally attractive for its world-class knowledge-based activities and enhanced social and environmental wellbeing accessible to all.

Stakeholders

ACT Gov, Foundation Members and Partners.

Inputs

Founders, students, researchers, experts, service providers, mentors, investors, makers, innovators, SME owners and operators, NGOs, education and research organisations, industry, innovation hubs, intermediaries, philanthropists, community (inc. the under-represented), larger businesses and corporations, clients and users of innovation activities.

Outputs

Community and individual citizens industry, academia, government.

Long-term impact/

Human

A committed team with a diverse set of skills and knowledge, investing in its professional growth. A pool of experts, mentors and experienced entrepreneurs in the community.

Financial

Adequate (and steadily increasing) financial resources committed in the long-run.

Physical

State of the art innovation infrastructure (office space, labs, makerspaces, events and collaboration facilities and resources) that is attractive, flexible, scaleable, accessible and enables establishment of a critical mass.

Institutional

Strong network of partners and collaborators. A supportive policy environment and access to research and technological expertise.

Intellectual (philosophical)

Collective impact methodology (Stanford Social innovation Review) Innovation-driven entrepreneurial ecosystem theory (MIT) Rainforest theory (Hwang/Horrowitt) Kauffman: Measuring ecosystems CBRIN Know-how & frameworks Strategy + Workplan + Monitoring and evaluation system Innovation Capacity Development and delivery of events that introduce innovation and entrepreneurship through outreach. Facilitating collaborative innovation workshops, codesigns, competitions and hackathons. Partnering with educational institutions, industry, government and non-government partners for industry- and community-focused innovation and

Activities

Entrepreneurial Capacity

entrepreneurship activity.

Active development and support of a strong pipeline of entrepreneurs and their innovation projects. Development, delivery and evaluation of growth programs to companies from prestartups, startups, scaleups to SMEs. Connecting companies to funding, expertise, tools, resources and opportunities that enhance company capabilities and

Placemaking

ecosystem.

progress.

Designing and delivering engagement, marketing and promotional activities and events that showcase success stories and facilitate access to opportunities. Managing and enhancing the physical infrastructure of the central innovation hub in the ACT. Building and nurturing partnerships that connect other innovation hubs and grow vibrancy, diversity and connectivity of the

Innovation Capacity Participations in a diverse set of partner events that introduce innovation skills and opportunities. Initiatives that foster multidisciplinary cooperation. Community sectors not traditionally engaged with entrepreneurship reached and encouraged to engage in innovation ecosystem.

Entrepreneurial Capacity Availability of and

participations in adaptable and evolving targeted programs for entrepreneurs and innovation companies. A growing pool of resources, connections and services that support innovative company growth in the ACT. Events and activities that create entrepreneurial communities and connect entrepreneurs with investors, mentors, resources, markets and each other to support their growth.

Placemaking

A central neutral innovation hub with facilities accessible and used to host innovation activity. Growing diversity and critical mass of residents and activity. Growth, strategic linkages, partnerships and collaborations with and between innovation precincts. Engaging stories, growing audience, variety of events for different entrepreneur cohorts, including the under-represented.

Innovation Capacity Canberrans exhibit greater innovative thinking, problem-solving and innovation-adoption abilities. Canberra shows increase in collaborations and innovative activity that cut across various sectors, including community initiatives. Variety of entrepreneurs (including nontraditional) actively participate in the innovation ecosystem.

Outcomes

Entrepreneurial Capacity

ACT has above average participation in entrepreneurship, growing numbers of startups, scale-ups and innovative SMEs. Increased (and above average per capita) levels of venture capital and angel investments in the ACT. ACT companies more scaleable with larger market reach (nationally and globally).

Placemaking

Canberra region has a vibrant, connected, dense and fluid innovation ecosystem (feedback, event frequency and attendance). New industries are growing (jobs and value added), contributing to a more diverse and more resilient economy. Complex locally relevant [social, technical and environmental] issues addressed through locally embedded innovative solutions.

Canberra's diversified economy is home to a growing pool of talented people and sophisticated globally relevant innovation activities. We have a reputation as an innovation hotspot where research excellence and entrepreneurship catalyze knowledge-based economic prosperity, enhanced social and environmental wellbeing, and overall high-quality of life for all.

Impact on wellbeing:

Economic

Increased per capita income. Higher employment rates in new industries. A robust variety of investment opportunities and diversified economic activities.

Social

Greater community engagement in innovation processes. Increased accessibility of innovative products and services that address social challenges. Enhanced social cohesion and community empowerment through participatory innovation practices.

Environmental

Growth in environmentally sustainable businesses and green technologies. Improved urban environment due to innovative infrastructure and solutions. Reduction in carbon footprint through the adoption of innovations in energy and waste management.

Individual

Enhanced job satisfaction and work-life balance within the innovation sector. Increased opportunities for personal and professional growth.



Types of CBRIN impact

This analysis looks at four categories of impact: personal, business, ecosystem and economy wide

Definition of impact categories

As with taxonomies to describe the actors in innovation ecosystems, there is no single accepted way to describe and measure innovation impacts. Depending on specific activities (and the system in which those activities occur), there are different ways to examine their outcomes and impacts.

For example, for internal organisation analysis and planning, it is likely useful to group impacts by activity, or purpose of activity. This would mean examining/surveying just the participants in a particular activity. CBRIN has actively been doing this internally.

However, for external communications, and to fully articulate the impact that CBRIN delivers as a whole ecosystem driver, not just in single events, we have set out a methodology in this analysis that looks at impacts on different cohorts.

This allows for a simple and robust method for estimating as each benefit is designed to have a mutually exclusive and collectively exhaustive population that avoids any double counting. These populations are defined below and in further detail on the following page. However, looking at CBRIN's impact as a whole and not focusing on any individual activity can lose some of the nuance of which activity is driving which benefit.

Each of these four types of impact are detailed over the following pages. Where practical, they have also been quantified.

When examining the quantifications, it is important to note that they are a snapshot of benefits that have been realised in CBRIN's tenure so far. Many of these benefits build over time or take years to come to full fruition. For example, support of an innovative business early in its establishment may help it to survive, but it might support only minimal jobs in those early years. Decades later it could be supporting hundreds of jobs, which would not occur but for the early support. As such, this snapshot of impact and should be read as still relatively early in those impacts and should be monitored and measured periodically as 'returns' on early investment are likely to grow over time.

The impacts this analysis examines are:

1) Individual

Impact on individuals due to increased personal capacity from engaging in CBRIN activities, over and above business impacts and even if they are not currently working for or managing an innovative business.

2) Business

Impact on businesses through engagement with CBRIN, which can include the creation of new businesses.

3) Ecosystem

Impact on the ACT innovation ecosystem, where CBRIN enhances network effects to benefit other ecosystem stakeholders.

4) Economy wide

Impact on the broader ACT economy, where CBRIN facilitates innovation and connections, thereby positively influencing businesses that do not directly engage with it through an agglomeration effect on surrounding economic activities.

This analysis follows a similar method to the 2021 report to allow for a broad comparison of results through time and understand how CBRIN's impact has changed over the last three years. The 2024 survey included several new questions to plug data gaps and capture new impact pathways to derive novel insights, such as improved outcomes against the ACT Wellbeing Framework. The findings in this report are largely based on the 2024 survey data, with economic outcomes estimated using input-output (IO) modelling (see Appendix A).

Populations of impact

To examine the variety of impacts, the populations that benefit from CBRIN activities were estimated

To avoid double counting any benefits, each category has a different population that accrues the impact of CBRIN's activities, as follows:

- Individual benefits accrue to people who engage with CBRIN activities, but do not fall in to either of the next two categories
- Business benefits accrue to the businesses whose owners or managers engage with CBRIN activities
- Ecosystem core stakeholder benefits accrue to players within the innovation ecosystem that are related to or involved with CBRIN – such as CBRIN, foundation members, universities, governments
- Economy-wide benefits accrue to any other business in the ACT that does not engage with CBRIN.

An estimate of the size of each of these populations, to support quantification in the following pages was estimated as follows:

- Assuming that CBRIN currently has a network of approximately 19,000 people that have engaged with CBRIN over time (based on data from participation in events and subscriptions through various channels).
- Using the spread of individuals, businesses and other ecosystem players from survey data for that network population
- Estimating other ACT businesses as the remainder of the Australian Bureau of Statistics (ABS) Count of Businesses for whole of ACT that is not captured above.

These population estimates are shown below, with each being quantified mutually exclusive. However, it is acknowledged that treating them separately is conservative, as someone participating in CBRIN activities might be accruing both individual benefits and benefits for their business.

Estimates of total populations that have engaged with CBRIN over time	2024	
Individuals Prospective business owner/managers engaging with CBRIN	~900 people	
2 Businesses Innovative business owners/managers engaging with CBRIN	~11,000 businesses	
3 Ecosystem Innovation ecosystem stakeholders that engage with CBRIN	~4,000 representatives	
4 Economy wide ACT businesses that do not engage with CBRIN but are part of the broader community	~25,000 businesses	
*Deceden an estimated 20.245 businesses energing at and of financial user 2024		

*Based on an estimated 36,315 businesses operating at end of financial year 2024⁹ **PwC** | CBRIN's Economic Impact

Key survey findings

Business outcome findings

A core input to understanding and measuring CBRIN's impact was surveying a variety of stakeholders who have interacted with CBRIN activities.

As input into this analysis, we developed a short survey that was sent to stakeholders. Detailed responses by question are included in Appendix C. Results that are key to the impact analysis are highlighted below.

Respondents have a high degree of engagement with CBRIN. Since first engaging with CBRIN, a majority (57 per cent) rated their level of engagement with CBRIN resources, activities, support or events as moderate to high

Almost all stakeholders (not just businesses) have seen benefits from their involvement with CBRIN.

- 86 per cent of all respondents noted some increase in their abilities due to CBRIN interactions.
- The most common impacts were increased ability to progress new ideas, think more commercially and establish key stakeholder relationships.
- More than half (53 per cent) of respondents reported their engagement with CBRIN as having a high or critical impact in achieving their identified outcomes

93%

of respondents reported CBRIN as having some level of change in terms of **connectedness** to Canberra's innovation community

CBRIN's activities have had a positive impact on **community connectedness** with fewer respondents reporting having 'no connection' to the Canberra innovation community *prior* to engaging with CBRIN in 2024 (41%) as compared to 2021 (44%). For businesses, these benefits have translated to commercial outcomes.

- 92 per cent of business respondents reported at least one of the identified outcomes
- 36 per cent of business respondents reported that they had seen seven or more of the fourteen identified outcomes since engaging with CBRIN.

CBRIN's impact on the ACT innovation ecosystem

Respondents reporting CBRIN's impact on the following as high or critical:

- Ecosystem connectedness, vibrancy, density and diversity (75 per cent)
- Entrepreneurial capacity incl. business environment for forming new successful enterprises (68 per cent)
- Innovation capacity incl. development and translation of R&D into products and services (58 per cent)

"Canberra has immense potential to grow as a technology hub, and the services provided by CBRIN are essential to encourage this growth." – Prospective business owner/manager



"CBRIN's door has always been open for the much-needed coaching and mentoring that I needed to navigate the stress and challenges of building an international startup." – Business owner/manager

"One of the best things about CBRIN is low barrier to entry - feels like everyone is welcome and able to have a go." – Higher education/research sector

Key survey findings



Wellbeing outcome findings

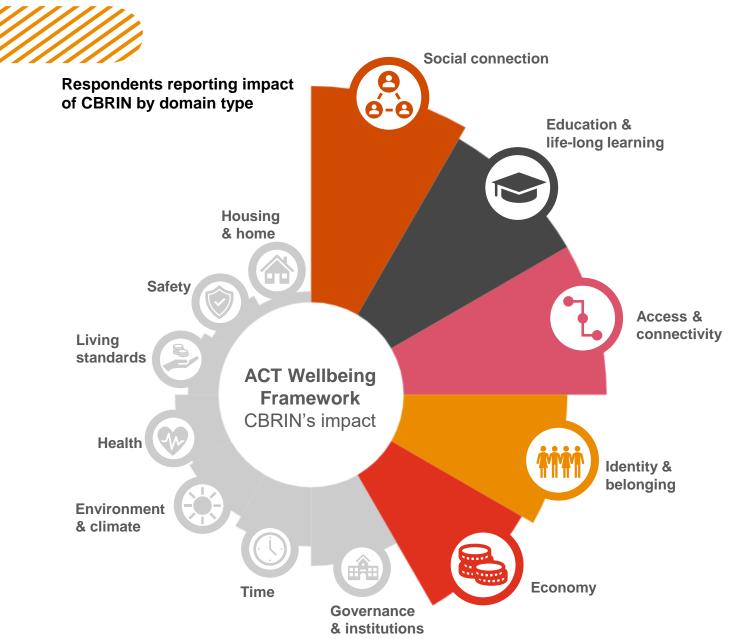
The ACT Wellbeing Framework¹⁰ consists of twelve domains that reflect key factors impacting the quality of life in Canberra. Indicators within each domain measure progress over time, revealing improvements or declines in wellbeing. Community engagement highlighted the interconnectedness of these domains, with outcomes in one area often affecting others.

These domains were used as the basis of a survey question to capture if CBRIN has an impact on wellbeing outcomes in the ACT.

The highest reported domains where improved outcomes were observed for individuals, their organisation or the ACT due to CBRIN activities were:

- 1. Social connection (51%)
- 2. Education & life-long learning (48%)
- 3. Access & connectivity (48%)
- 4. Identity & belonging (39%)
- 5. Economy (36%)

The chart below provides an overview of these results.



Case study: PPB Technology

Company overview

Founded in 2017, PPB Technology (PPB Tech) is a biotechnology company specialising in food testing and agricultural and manufacturing diagnostics. The company is set to launch food diagnostic tests that allow for immediate analysis of foods, beverages, and other biological samples. In a time when concerns about food safety, quality, and origin are prevalent, PPB Technology aims to equip producers, processors, and consumers with the tools necessary to make quick, informed decisions with confidence.

Over a 29-year career at CSIRO, PPB Tech's founder created the CYBERTONGUE technology, which enables the rapid testing of food for specific proteins, such as lactose, at speeds far exceeding industry norms. This advancement is particularly beneficial for individuals with severe allergies to substances like lactose, addressing the common issue of potentially hazardous food being shipped before proper testing can be conducted.

Connection to CBRIN & ACT innovation ecosystem

PPB Tech was accepted into CBRIN's GRIFFIN Accelerator to participate in a 3-month intensive program, led by experienced mentors.

Additionally, PPB Tech was a recipient of a \$30,000 grant as part of the Innovation Connect (ICON) program, awarded to Canberra innovators. All of the funded projects highlight the creativity and innovation of Canberrans looking for inspired solutions to everyday challenges. The impact of receiving an ICON grant cannot be underestimated. The ICON grant had a significant impact on PPB Technology, aiding in its early development and growth. Dr. Stephen Trowell, Founder and Managing Partner of PPB Tech, received the grant in November 2018, Dr. Trowell emphasised that the grant was enabled the creation of a sensitive and accurate trace lactose test that delivers results within minutes. Dr. Trowell emphasised the grants importance during the early stages, in providing essential funding and validation that helped the company survive and eventually raise over a million dollars.

"The only reason I'm here now, and able to do this, is because of CBRIN – we got an Innovation Connect Grant and went into the GRIFFIN Accelerator. That support is very specific, and what I've finally found, apart from money, which is critical, is the connection to people who know what the blind spots are and what to do going forward."

- Stephen Trowell (Founder, PPB Technology)

"Everyone in business or looking to start a business, should engage with CBRIN to learn, make connections and be inspired by the remarkable success stories of our local business people." – Business owner/manager (SME and/or Scale Up program attendee)





Individual impacts

Individuals that engaged with CBRIN saw a range of increased enterprise skills



Types of benefits to individuals

This category of benefits relates to the smallest population (i.e., prospective business owners and managers) and as such there were limited survey responses to draw analysis from, and therefore any survey analysis should be viewed as broadly indicative only.

Of reported increased ability and capacity, the most commonly reported outcomes were:

- Increased ability to think more commercially (78 per cent)
- Increased ambition, clearer purpose or vision (61 per cent)
- Increased ability to validate and progress new ideas (56 per cent)
- Increased ability to establish effective business and key stakeholder connections/relationships (44 per cent)
- Increased ability to pursue new products, services or avenues of business (44 per cent)
- Increased ability to leverage local research / educational institutions (44 per cent).

89 per cent of the individual cohort reported that their engagement with CBRIN had some level of impact on achieving their identified outcomes, with 44 per cent reporting a high or critical impact.

Quantified individual impacts

All these outcomes indicate that individuals who engage with CBRIN increase their commercial skills. The importance of this was shown in all respondents indicating that they expect further future benefits to them from their engagement with CBRIN.

There are several economic benefits that could arise from these outcomes, but are broadly categorised as either ability to increase employment outcomes from increased skills, or future ability to start an innovative business.

The main economic impact will be these individuals increased ability to start innovative businesses in the future and generate employment or their ability to contribute better to growth of existing innovation companies as their employees. Eventually this will be manifested in the business impact category explored on the next page, but is currently not practical to quantify.

In the immediate term, the increased skill in these individuals will likely still be utilised in their existing roles - benefiting their current organisation and likely resulting in increased earning capacity. For example, research into key 'human skills' which includes relationship management, innovation and enterprise skills (all aligned with reported benefits from individuals) show that a 10 per cent increase in these skills results in a 5 per cent increase in wages.¹¹

CBRIN's impact on individuals

"Being part of the CBRIN community has reduced my feelings of isolation as a sole founder. I have really benefitted from the advice and support of the CBRIN staff, as well as the other community members. It is great to feel part of something bigger!"

> CBRIN survey respondent Business owner/manager

Business impacts

The majority of businesses reported tangible commercial impacts from their engagement with CBRIN

Types of benefits to businesses

Innovative business owners and managers were the largest cohort of respondents to the survey. They widely reported benefits from engaging with CBRIN. Approximately 90 per cent that have recently participated in CBRIN activities reported that their skills and capacity increased because of that involvement.

Of reported increased ability and capacity, the most reported outcomes were:

- Increased ability to validate and progress new ideas (50 per cent)
- Increased ability to think more commercially (48 per cent)
- Increased ability to manage a business (47 per cent)
- Increased ability to establish effective business and key stakeholder connections/relationships (47 per cent).
- Increased ambition, clearer purpose or vision (46 per cent).

56 per cent of the business cohort reported the engagement with CBRIN as having a high or critical impact in achieving their identified outcomes. This is a clear indication of business outcomes being realised directly because of the engagement with CBRIN.

CBRIN's impact on SME's

"CBRIN has been a game changer for our project and I hope they are able to give the same support to many more founders, entrepreneurs and business owners in the future!"

> CBRIN survey respondent Business owner/manager

Quantified business impacts

To quantify the broad impact of all these outcomes, we have estimated the level of employment that is supported due to the businesses engagement with CBRIN. This is both because jobs are a useful metric to report, and increased employment is indicative of achieving less easily measurable outcomes (such as productivity, development and growth).

The total employment in all businesses that engage with CBRIN could be seen as an upper bound of this estimate – if assuming CBRIN activities are a threshold for business survival or creation. However, a more robust and conservative estimate would be the increment of that employment that occurs because of CBRIN, which we have estimated from the:

- population of businesses estimated as per above
- proportion that reported an outcome of increased employment in the survey, weighted by the reported importance of CBRIN, and
- average annual increase in jobs estimated by how many jobs respondents expected to be created in their business.

	2024
<i>Direct</i> jobs created in innovative businesses because of CBRIN support	697
Associated increase in GSP (\$2024, million)	114



Ecosystem impacts

CBRIN supports other players in the innovation ecosystem, as well as generating its own employment

Contribution to the innovation ecosystem

CBRIN plays a unique role in supporting other stakeholders in the ACT innovation ecosystem. CBRIN can act as an anchor for the local ecosystem, allowing for other organisations to join and contribute to innovation. While other ecosystem players are less likely to be commercial organisations (whose benefits were discussed above), they can still have economic impacts from engaging with CBRIN.

For example, by establishing and maintaining an ecosystem, CBRIN can:

- Enable these organisations to establish and employ staff
- Connect with other ecosystem players and become more successful in their own role
- Promote themselves amongst the broader community.

Quantifying ecosystem impacts

Quantifying the impacts for these ecosystem players is difficult, as unlike individuals and businesses they are likely not engaging for economic outcomes but rather for broader connection benefits. Therefore, while this role is likely significant, we have not been able to quantify it fully. The only element we can reliably measure is CBRIN's own operations, noting that CBRIN is only one of the core ecosystem stakeholders. Although employment within CBRIN is about facilitating other impacts, rather than being the main reason for operations, it is important to include this as another type of employment supported by funding. For this guantification we have assumed approximately 15 jobs in CBRIN per year (which has been constant across 2022-2024).

> "There would be no innovation community without CBRIN in Canberra. They are an essential element that brings us together."

> > CBRIN survey respondent Business owner/manager

> > > 2024

Direct jobs created by CBRIN	15
Associated increase in GSP (\$2024, million)	1.6



Economy wide impacts

Broader benefits can be supported through increasing connectedness and the innovation reputation of the ACT

Connectedness benefits

One of the key recognised benefits of investing in innovation ecosystems is that they can create benefits that are 'bigger than the sum of the parts'. That is the benefits that might accrue from separately supporting organisation or idea A and organisation or idea B, is less than if you supported both in a connected ecosystem. This is based on evidence that clustering of innovative and productivity economic activity has an agglomeration effect, where the total activity is greater than if the individual parts operated separately. This can occur through formal and informal networking, sharing of ideas, and collaboration.

This connectedness occurs between businesses that engage with CBRIN, but with such a significant network in a relatively condensed economy, it is also likely that the capacity supported by CBRIN also supports those business to connect with organisations outside the CBRIN network. Therefore, these agglomeration benefits are likely to spread to other businesses. The survey showed that engagement with CBRIN has a clear influence on how connected businesses, individuals and stakeholders are with the innovative community as:

- Prior to their engagement with CBRIN, only 2 per cent of respondents rated themselves as having a 'very high connection' with the Canberra innovation community.
- However, since engaging with CBRIN, 93 per cent reported that CBRIN had some level of change in terms of connectedness, with 20 per cent reporting a very significant change.

Reputation benefits

Another economy-wide impact could be CBRIN's influence on the brand of the ACT economy and innovation community, and its ability to therefore attract investment, talent and new ventures.

Although extremely difficult to disaggregate from other factors, this will be part of attracting and retaining certain types of economic activity. Without this innovation ecosystem, it is likely that some of the current productivity capacity in the territory would not exist.

Quantified economy wide impacts

Evidence shows that increasing employment density can increase overall productivity.¹² We estimated the increase in employment density within CBRIN engagement businesses because of CBRIN (~0.5 per cent, based on the CBRIN induced increase in business employment as a proportion of estimated total employment in those businesses) and applied this to benchmarks for how much total productivity would increase. That productivity was applied to the private sector workforce in the ACT.

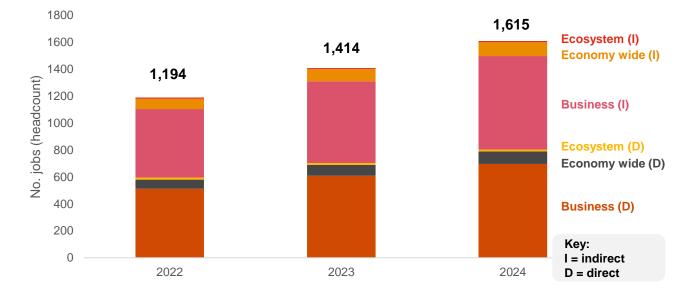
	2024
<i>Direct</i> jobs created in ACT due to agglomeration	92
Associated increase in GSP (\$2024, million)	7.8

Total employment and economic activity supported

By 2024, CBRIN is directly supporting \$57 of GSP per dollar of ACT government cash funding

The graph below shows the estimated employment over time, including both direct (through the four main impacts measured on previous pages) and indirect (supply chain impacts) impacts.

Employment impact by component (headcount)



CBRIN's impact has grown significantly over time according to the growth in total GSP (including both direct and indirect impacts) outlined in the table below, which can be attributable to the following:

- Some impacts take several years to realise benefits (i.e. 2024 benefits may be due to 2022 activities)
- Benefits accumulate over time, as a new job created in 2023 is still a CBRIN supported job in 2024, in addition to the new impacts occurring in 2024 (i.e. returns are being generated in that year from previous ACT government cash funding)
- CBRIN activities have developed and continued to engage additional stakeholders.

Total employment and economic activity supported

The table below shows the estimated economic activity (GSP) results over time, including both direct (through the four main impacts measured on previous pages) and indirect (supply chain impacts) impacts. It also includes aggregate values for CBRIN's entire lifespan (2014-2024) drawing from results from the 2021 report.

GSP impact by component (\$ nominal, million)

Category	2022	2023	2024			
Direct contribution to GSP (\$ million, nominal)*	82.5	103.6	122.9			
Total contribution to GSP (\$ million, nominal)	132.1	165.9	196.8			
Approx. cash funding (\$ million, nominal)	1.9	1.7	2.2			
					Totals	
				2014-2021	2022-2024	2014-2024
Direct GSP	42.9	60.0	56.9	21.2	53.2	33.1
per \$ cash funding	42.9	00.0	50.9	21.2	00.2	00.1

*Direct and total contribution to GSP in each year have been expressed in \$2024 throughout this report. The values in this table are an exception, which are reported in nominal terms to allow for comparison with cash funding values (which are also nominal).

The real impact on GSP of CBRIN over its entire lifespan is estimated to be almost \$900 million (in 2024 \$). This comprises approximately \$380 and \$510 million over the 2014-2021 and 2022-2024 periods, respectively.

When all funding in considered (i.e. cash and inkind support from the ACT Government,

foundation members and corporate support), the impact on direct GSP per dollar of funding is \$19 over CBRIN's lifetime. This comprises a return of \$12 and \$31 over the 2014-2021 and 2022-2024 periods, respectively.

Appendix A Economic impact methodology

Economic analysis approach

Overall approach

In this report we assess CBRIN's economic impact. Economic impact is defined as the economic activity and jobs created because of CBRIN's impact on people, businesses who interact with CBRIN, the broader ACT innovation ecosystem and the ACT economy as a whole.

CBRIN's primary pathway of impact in the ACT is assumed to be economic in nature. While CBRIN likely impacts environmental and social outcomes, for example by supporting innovation and business who deliver environmental and social outcomes, the focus of this report is on CBRIN's economic impact.

For each of the four categories of economic impact assessed, we first estimated the direct impacts (detailed below) and then used an input-output model (explained on next page) to estimate the indirect (supply chain) impact.

The one exception to this was the individual benefit (see below).

As an overarching approach, we sought to be conservative and link all impacts to what can solely and reasonably be attributed to CBRIN. For each of the categories, this is explained below.

It is worth highlighting that the survey was conducted in September, partway through the 2024 calendar year. The total estimated impacts might have been larger if data from the full year was used.

Individual impacts

Estimation methods for the individual impacts were investigated around increased earning capacity (that would contribute to GSP but not increased employment) but based on current information and the focus of CBRIN activity were chosen not to be quantified.

The true economic impact of CBRIN activities with individuals is about enabling future benefits and therefore have not been captured in this historical and current state view.

Business impacts

Assumptions for business impacts were as follows:

- The total business population in 2024 was estimated using the population from 2021 and adding new businesses which have interacted with CBRIN over 2022-2024
- The proportion of businesses that reported increased employment due to CBRIN was taken from the survey
- That proportion was then weighted by how important CBRIN was said to be (5 out of 5 is 100 per cent induced by CBRIN, 4 out of 5 was 75 per cent induced by CBRIN, 3 out of 5 was 50 per cent induced and 2 out of 5 was 25 per cent induced)
- The 2024 impact was estimated as: current business population * share of businesses reporting increased employment (weighted by magnitude of impact) – annualised based on date of first interaction with CBRIN * average annual increase in jobs.

Due to this being the most significant impact examined it has the largest scope to overcount. However, we acknowledge that it would only take CBRIN being instrumental in a few businesses that have significant employment for this estimate to increase by multiples. This is a limitation of using this population and survey approach, rather than building an estimate bottom-up through assessments of each individual business that has engaged with CBRIN.

It is noted that our estimation approach assumes that once a job is created is it maintained for a five-year period (for employment impacts over 2014-2024). This is because, in all industries, some businesses close over time, or priorities change, and some roles are reduced. If this jobs were maintained for materially shorter or longer time periods on average, this approach could result in an overor under-estimation of jobs, respectively.

Economic analysis approach

Ecosystem core stakeholder impacts

As only CBRIN employment was included here, this was taken directly from CBRIN workplan documentation provided.

Economy wide impacts

Assumptions for economy wide impacts were as follows:

- Economy wide population was estimated using the ~19,000 people estimate (as per section 4) and the proportion of survey respondents that identified as representing an ecosystem organisation
- We used a public proxy that increasing employment density can increase overall productivity – specifically doubling density can increase agglomeration by 6 per cent
- We estimated the increase in employment density as the business impact jobs created as a percentage of total employment by businesses engaging with CBRIN
- This productivity was based on the employed total in the ACT private sector workforce from the ABS Counts of Australian Businesses data
- The 2024 impact was estimated as: productivity increase * proportion increase in density * private sector workforce
- This was spread over time in line with the business impacts (which shows the timeline for employment density increasing)
- This was spread over industry assuming it impacted all ACT sectors proportionally (excluding those dominated by the public sector – public administration and education).

Input-output modelling

- We used an input-output (IO) methodology to estimate the economic impact of the various categories. IO models simulate the induced (or 'flow-on') impacts to other sectors of a change in one sector. PwC's IO models consider impacts in terms of three key economic variables:
- Output/production –the total value of goods/services produced in/by that sector
- Value-added –the value contribution made by the sector (i.e. the amount by which the value of goods/services exceeds the value of intermediate inputs to that sector)
- Employment income –wages and other compensation accruing to workers in that sector, which can be converted to an estimate of headcount or FTE using industry averages.
- The key value of IO models is providing insights into the relationships between different sectors/industries, the flow-on impacts in one sector on other sectors in an economy, and the importance of certain sectors to regional, state or national economies. It allows policy-makers to consider:
- The importance of sectors at a regional level (rather than whole of state) – i.e. what are the opportunities and vulnerabilities of regions
- The flow-on impacts of changes in one sector on others, as the region as a whole – i.e. what sectors provide the greatest flowon benefits to other sectors and the region
- Interdependencies and interlinkages i.e. what are the opportunities or vulnerabilities of one sector in relation to others.
- IO modelling can be used to demonstrate direct, indirect (supply chain) and induced (consumer spending) impacts. To be conservative and in line with similar modelling in other contexts, this report does not include induced impacts.

IO models simulate the induced (or 'flow-on') impacts to other sectors from a change in one sector.

This is based on detailed records of the sales and inputs of each sector (known as 'IO tables' published in Australian Bureau of Statistics (ABS) National Accounts). They highlight the relationships between sectors of the economy for example, what products of other sectors (and labour) are employed as intermediate inputs in other sectors. Changes in one sector (e.g. increase output) canthen be tracked through related sectors of the economy and, consequently, the economy as a whole. IO models can therefore use the data contained in an IO table to estimate the way a particular policy or project will impact the rest of the economy. They do this based on assumptions about the behaviour of the economy, using the initial IO table as the starting point. There are however some important limitations of IO models, owing to the assumptions on which they are based.

- They assume that the economy can expand in proportion to its current make-up, increasing all inputs in fixed proportions to their initial level. This means that if an industry expands by some percentage, then all costs of the industry (labour, capital, intermediate inputs) will expand by the same percentage. This does not reflect the real economy, where capacity constraints (particularly on labour), mean that costs are likely to increase by more than the output increase, particularly if those inputs must be bid away from other regions or industries.
- They also assume that the prices of sales and intermediate inputs areunchanged by the level of activity. As output increases, it's increasingly likely that business have to lower their prices to increase the volume that they sell.
- They do not include substitution possibilities between inputs. Businesses are assumed to maintain the input mix that the IO tables contain. As a result, there will not be substitution in favour of inputs that are more readily available.

Given we are only examining small incremental changes in this report, these are all reasonable assumptions.

Detailed economic impact results

Employment impact by component over time (headcount)

Previous results									Current results		
Impact category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Business <i>Direct</i>	5	25	53	87	146	218	306	405	513	609	697
Business Indirect	3	16	33	54	90	135	189	251	510	606	693
Ecosystem Direct	12	12	12	12	12	12	12	12	15	15	15
Ecosystem Indirect	5	5	5	5	5	5	5	5	9	9	9
Economy wide <i>Direct</i>	1	2	5	8	14	21	29	39	68	80	92
Economy wide <i>Indirect</i>	0	1	2	4	6	10	14	18	80	95	109
Direct jobs	18	40	70	108	172	251	347	456	595	704	804
Indirect jobs	9	22	40	63	102	150	208	274	599	710	811
Total	26	61	110	171	273	401	555	730	1,194	1,414	1,615

GSP impact by component over time (\$2024, million)

	Previous results									Current results		
Impact category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Business <i>Direct</i>	0.9	4.5	9.5	15.6	26.0	39.0	54.6	72.3	83.5	99.2	113.5	
Business Indirect	0.5	2.4	5.0	8.3	13.8	20.7	29.0	38.5	48.4	57.5	65.8	
Ecosystem Direct	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.6	1.6	
Ecosystem Indirect	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.0	
Economy wide <i>Direct</i>	0.1	0.3	0.7	1.2	2.0	3.0	4.2	5.6	5.7	6.8	7.8	
Economy wide <i>Indirect</i>	0.0	0.2	0.3	0.6	0.9	1.4	2.0	2.6	5.2	6.2	7.1	
Direct GSP	2.4	6.2	11.5	18.2	29.4	43.4	60.1	79.2	90.8	107.6	122.9	
Indirect GSP	1.2	3.2	6.1	9.6	15.5	22.9	31.7	41.8	54.6	64.7	73.9	
Total	3.6	9.4	17.6	27.7	44.8	66.2	91.9	121.0	145.4	172.2	196.8	

Appendix B Detailed survey analysis

Survey overview

Survey methodology

A short survey was drafted in collaboration with CBRIN. It aimed to:

- Replicate some of the questions asked in individual consultations for the 2021 report to allow for continuity
- Provide input to defining and estimating the impact categories examined in this report
- Gather further feedback for CBRIN.

The survey was initially sent by CBRIN via email to 188 contacts (65 responses, 35%). It was subsequently shared in CBRIN's newsletter delivered to approximately 6,100 email addresses which saw 22 additional responses. Lastly, the survey was emailed to 294 contacts (excluding the initial 188) that had engaged with a CBRIN activity in the last three months prior. This saw responses increase by 106 to give a total of 193 responses.

The survey was open for 18 days and received 193 responses noting that not all questions had 193 people answer them as they were not all applicable.

PwC has collected the survey responses independently of CBRIN, with CBRIN having no access to the data outside the summary in this report.

Survey results

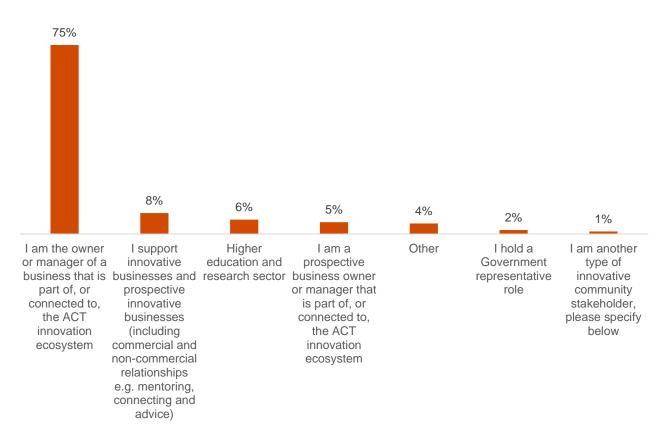
The following pages present the summary survey results by question. It is important to note that this may vary from some of the specific analysis presented in the body of the report, which reported results for a specific cohort (i.e. only from business owners/managers) whereas this general appendix shows results for all responses.



Detailed survey results

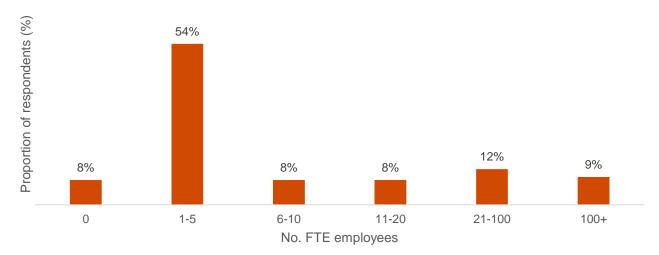
Q1. Which of the following best describes you with regards to your engagement with CBRIN?

Business owners or managers made up the largest proportion of survey respondents (75 per cent). Responses are distributed as per the graph below.



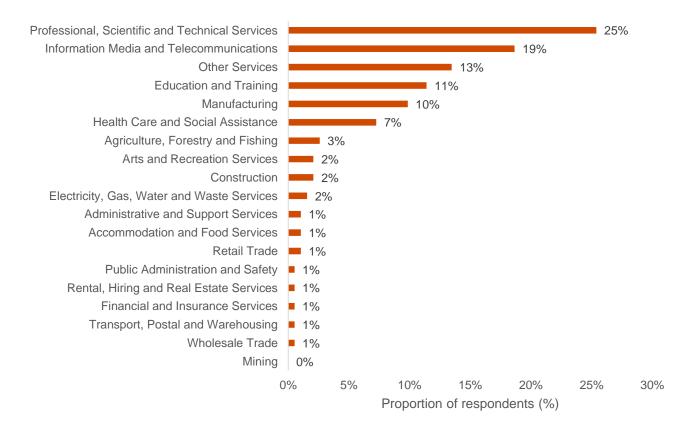
Q2. How large is your organisation, in terms of full-time equivalent (FTE) employees?

Small organisations containing 1 to 5 FTE employees made up the majority (54 per cent) of the responses. Medium to large organisations were still fairly significantly represented, with over 20 per cent of respondents being from organisations with 21 or more employees.



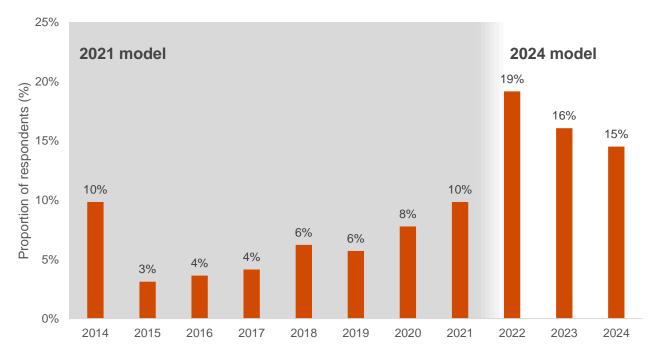
Q3. In what industry does/will your organisation primarily operate?

The professional, scientific and technical services industry represented the largest proportion of respondents (25%) followed by the information media and telecommunications industry (19%).



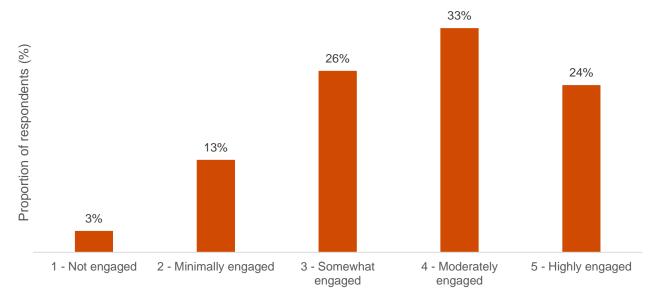
Q4. In what year did you first engage with CBRIN resources, activities, support or events? (provide your best estimate)

Most respondents (19 per cent) first engaged with CBRIN in 2022. The remainder were broadly spread across the last year since CBRIN's establishment, with 2023 and 2024 being the most common founding years.



Q5. Since you first engaged with CBRIN, what would you rate your level of engagement with CBRIN resources, activities, support or events? (5 being the highest level of engagement)

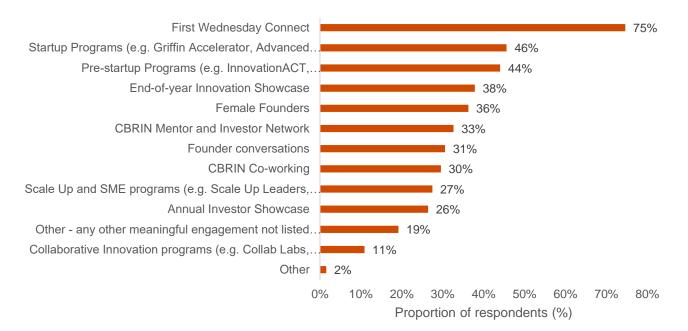
Most respondents (33 per cent) reported being moderately engaged with CBRIN since their first engagement, with only 3 per cent recording no level of engagement.



Q6. Can you select the CBRIN program(s) that you have engaged with? (select all that apply)

A significant proportion of respondents (75 per cent) reported engaging with CBRIN's First Wednesday Connect event, followed by Startup Programs and Pre-startup Programs with around 45% of respondents engaging with each.

As a multiselect question, the proportion of responses does not sum to 100%, rather it shows the proportion of respondents that identified engaging with a particular program.



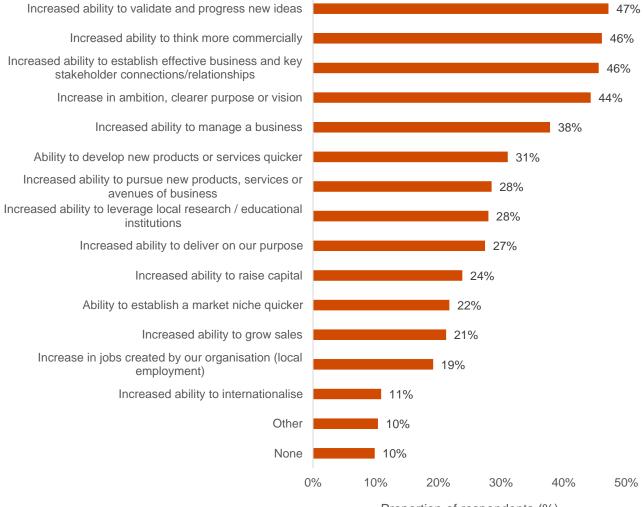
Q7. Are there any barriers to increasing your engagement with CBRIN? (if none, leave blank)

The most commonly reported barrier was the limited available time to meaningfully engage with CBRIN, mainly attributable to competing demands such as taking time away from family or full-time work commitments. Respondents had also voiced concern regarding the lack of variety of relevant events and modes of event delivery, with some reporting CBRIN's focus on start-ups as opposed to solo entrepreneurs who often have different scaling goals. Additionally, some respondents highlighted the limited grant or funding opportunities available for ACT startups as being a barrier to engagement. In saying this, the majority (over 60 per cent) of survey participants did not report any barriers to engagement with CBRIN.

Q8. Since your engagement with CBRIN, has your business seen any of the following outcomes (select all that apply)

Almost all respondents (92 per cent) realised at least one of the identified commercial outcomes since their engagement with CBRIN.

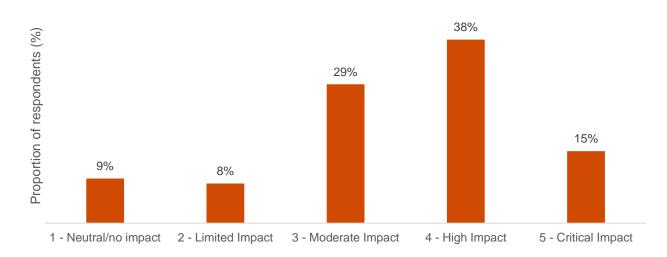
As a multiselect question, the proportion of responses does not sum to 100%, rather it shows the proportion of respondents that identified that impact.



Proportion of respondents (%)

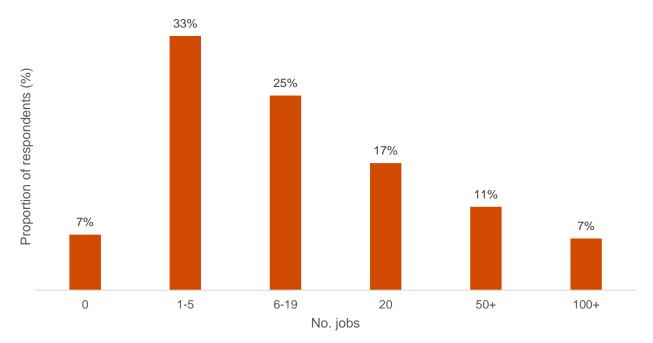
Q9. Of the outcomes selected above, how would you rate the importance of your engagement with CBRIN to achieving them? (5 being the highest level of importance)

Majority (53 per cent) of respondents reported their engagement with CBRIN as having a high or critical impact in achieving their identified outcomes, with almost all respondents (91 per cent) identifying CBRIN as having *any* impact on achieving these outcomes.



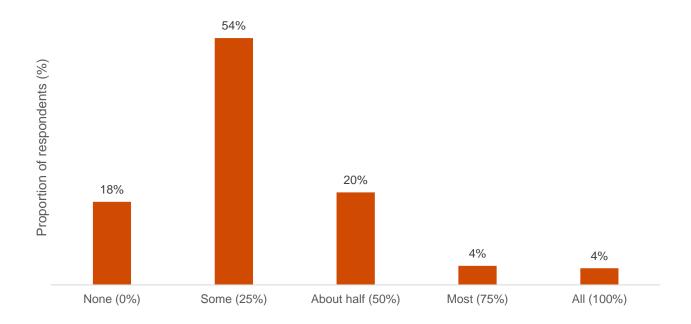
Q10. How many jobs do you expect to be created in your business over the next 5 years?

Almost all respondents (93 per cent) expected jobs to increase in their business over the next 5 years due to engagement with CBRIN, with the largest proportion (33 per cent) expecting 1 to 5 jobs to be created.



Q11. What proportion of your projected business growth over the next 5 years do you estimate is attributable to your engagement with CBRIN?

A significant proportion (82 per cent) of respondents identified CBRIN as having an impact on their projected business growth over the next 5 years.



Q12. Would you like to say anything else regarding CBRIN's impact on your business or prospective business? What would be useful to you in the future?

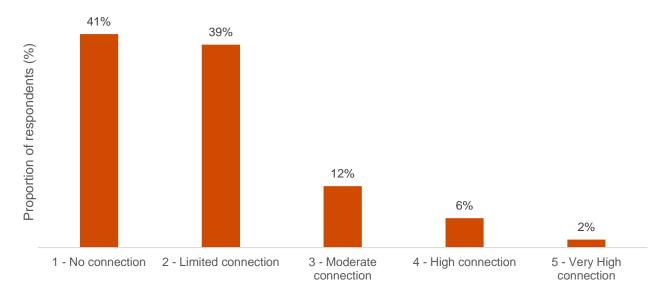
Most responses to this question were supportive of CBRIN with no requests for the future other than the supports currently available. Findings that were particularly valued by many respondents included:

- Community and networking: respondents felt that CBRIN provides a unique and supportive community that energises and empowers them through valuable connections with like-minded entrepreneurs.
- Access to resources and mentorship: entrepreneurs highly valued the access to otherwise inaccessible resources and the passionate, constructive mentorship that significantly contributed to their business progress.
- Facilities and services: CBRIN's comprehensive range of services supports businesses from early concepts to scale-ups, though there is a notable desire for access to workshops and science labs.

Regarding future improvements, respondents requested additional support in securing non-equity funding, professional development for non-founder team members, and strategies to better utilise CBRIN's resources.

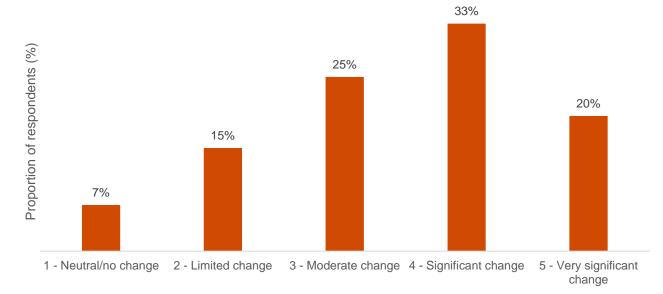
Q13. Prior to any engagement with CBRIN activities, how would you rate your connectedness to the Canberra innovation community? (5 being the highest level of connectedness)

Prior to engagement with CBRIN, a significant proportion (80 per cent) of respondents reported limited or no level of connection with the innovation community, with only 8 per cent reporting ahigh or very high connection.



Q14. Since engaging with CBRIN, how would you rate your change in connectedness to the Canberra innovation community? (5 being the highest level of change in connectedness)

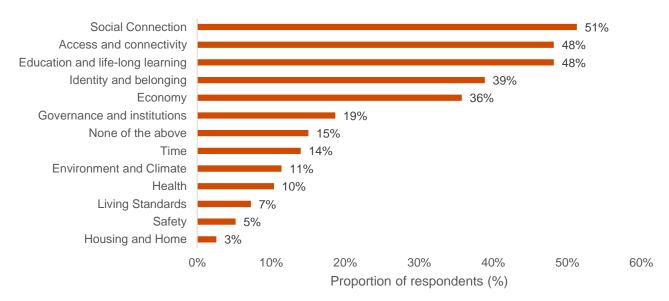
Almost all respondents (93 per cent) reported *any* change in connectedness to the innovation community significant since engaging with CBRIN, with majority (53 per cent) identifying this change as being significant or very significant. Only 7 per cent of respondents reported no neutral or no change.



Q15. In which domains have you observed improved outcomes for you, your organisation or the ACT as a result of CBRIN activities? (select all that apply)

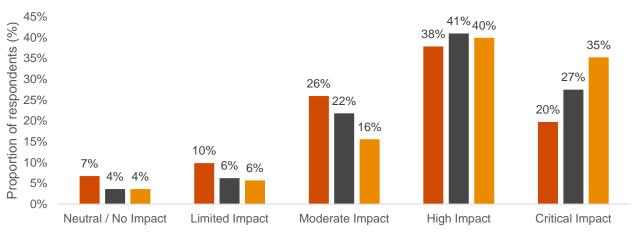
Many respondents observed improved outcomes across the identified domains due to engagement with CBRIN, with only 15 per cent reporting no improvement across the domains.

As a multiselect question, the proportion of responses does not sum to 100%, rather it shows the proportion of respondents that identified that impact.



Q16. Please rate how, in your experience, CBRIN contributes to the following aspects of the ACT innovation ecosystem.

A significant proportion of respondents acknowledged CBRIN as having a high or critical impact on innovation capacity (58 per cent) entrepreneurial capacity (68 per cent) and ecosystem connectedness (75 per cent).



Innovation capacity (incl. development of R&D but also the translation of R&D into products and services)

Entrepreneurial Capacity (incl. business environment for forming new successful enterprises)

Ecosystem connectedness, vibrancy, density and diversity

Q17. Would you like to say anything else regarding the impact of CBRIN on your business or the local innovation community and economy in general?

The responses to this question largely followed the themes of question 12, highlighting a positive narrative and emphasising CBRIN's essential role in the innovation community. Findings that were particularly valued by many respondents included:

- **Support for commercialisation:** CBRIN is instrumental in commercialising university research, connecting academia with entrepreneurs and investors to transform ideas into viable businesses.
- Impact on Canberra's innovation ecosystem: CBRIN significantly contributes to economic development and a thriving innovation ecosystem in Canberra, positioning the region as a hub for technology and innovation.
- Access to resources and mentorship: the mentorship and advice from CBRIN staff, along with access to resources and programs, are highly valued and have been crucial for business growth and overcoming challenges.
- **Community and networking:** CBRIN fosters a strong entrepreneurial community, reducing feelings of isolation and providing invaluable connections in an inclusive environment.
- Educational programs and events: the high quality and accessibility of CBRIN's formal programs and events provide practical advice and essential networking opportunities.

Suggestions for improvement were also similar to those mentioned in question 12, especially around support for funding. An additional area of improvement included a desire for more innovative and community-engaging events, such as service projects during local cultural festivals to connect with untapped markets and enhance CBRIN's visibility and impact.

Appendix C Endnotes

Endnotes

- ¹ Apostu, S. A., Mukli, L., Panait, M., Gigauri, I., & Hysa, E. (2022). *Economic Growth through the Lenses of Education, Entrepreneurship, and Innovation*
- ² Palangkaraya, A., Spurling, T., & Webster, E. (2015). Does innovation make (SME) firms more productive? Paper presented at the Reserve Bank of Australia Annual Conference, Sydney
- ³ Reserve Bank of Australia. (2024, April 4). Speech by the Assistant Governor
- ⁴ Department of Industry, Innovation and Science. (2018). *The impact of persistent innovation on business growth*
- ⁵ Alpha Beta for Office of Innovation and Science Australia. (2020). *Australia Business Investment in Innovation: Levels, Trends, and Drivers*
- ⁶ Australian Bureau of Statistics. (2024). *Government sector leading the way in R&D expenditure*
- ⁷ Startup Status. (2024). *Map of the Australian Innovation Ecosystem.* Australian Bureau of Statistics. (2024). *National, state and territory population*
- ⁸ Canberra Innovation Network. (2024). Theory of Change / Impact Pathway
- ⁹ Australian Bureau of Statistics. (2024). *Counts of Australian Businesses, including Entries and Exits, June 2020 to June 2024* (Publication No. 8165.0)
- ¹⁰ ACT Government. (2020). ACT Wellbeing Framework
- ¹¹ Deloitte Access Economics. (2019). *Premium Skills: The Wage Premium Associated with Human Skills*
- ¹² SGS Economics and Planning. (2012). *Productivity and Agglomeration Benefits in Australian Capital Cities*

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