

**AUSTRALIA**

# **AUSTRALIAN DIGITAL INNOVATION ON THE RISE**

Opportunities in the startup, venture  
capital and technology sector



Australian Government  
Australian Trade and Investment Commission



# CONTENTS

Digital innovation on the rise in Australia	3
Globally recognised innovation	4
Immerse yourself in Australia’s innovation ecosystem	6
Australian venture capital drives growth	8
About the Australian Trade and Investment Commission	11
About The Australian Investment Council	12

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# DIGITAL INNOVATION ON THE RISE IN AUSTRALIA








Australia’s technology ecosystem is experiencing rapid growth and is undergoing an exciting period of expansion and innovation.

The digital technologies sector contributes around A\$122 billion (6.6 per cent of GDP) to the Australian economy each year. This figure is expected to grow 40 per cent between 2018 and 2023.<sup>1</sup>

Australia’s exports of virtual goods and physical products enabled by digital technologies were worth A\$6 billion in 2017, with that figure likely to grow to A\$19 billion by 2030.<sup>2</sup>

Increasingly, both Australian and international entrepreneurs are utilising the stability of the Australian market as an advanced technology test bed and launch market before they take new ideas or products global.

The expansion of the technology sector is supported by a growing venture capital (VC) and private equity (PE) ecosystem, presenting many opportunities for international startups and VC firms.

	<b>A land of innovators</b>	Australia is ranked 5th in the world for entrepreneurship. <sup>3</sup> Australian technology companies which have become global names include Atlassian, Canva and Afterpay.
	<b>Early adopters and avid users of technology</b>	Australia is ranked equal first for technological readiness alongside Singapore and Sweden. <sup>4</sup>
	<b>Skilled and diverse talent pool</b>	Australia has seven universities in the top 100 – the third highest number globally. <sup>5</sup> Around 44% of the Australian workforce has a tertiary qualification. <sup>6</sup>
	<b>Springboard to Asia</b>	International companies can tap into Australia’s deep business and cultural ties with Asia to expand into or enter global value chains across the region. Twelve of Australia’s 15 largest export markets in 2018–19 were in Asia and Oceania. <sup>7</sup>
	<b>A magnet for international companies</b>	Australia hosts established companies such as Adobe, Cisco, Dimension Data, Google and IBM, while emerging ‘unicorns’ such as Dataiku, Snowflake and Eventbrite are rapidly growing their Australian teams.
	<b>The birthplace of globally successful startups</b>	Startup Muster <sup>8</sup> estimates the number of startups in Australia increased by 53% between 2015 and 2018. <sup>9</sup> In April 2020, SafetyCulture became Australia’s latest ‘unicorn’ following an A\$60.5 million capital raise led by Sydney’s TDM Growth Partners. <sup>10</sup>
	<b>Access to venture capital</b>	VC funds raised a total of A\$632 million for investment in Australia in 2019, which represents the second-highest annual total in the past decade. <sup>11</sup>

# GLOBALLY RECOGNISED INNOVATION

Australian innovators and entrepreneurs are attracting global attention, particularly in fields where there are strong synergies with Australia's traditional industries. These include agtech, medtech, fintech, cyber security, mining and resources technologies, and digital technologies.

## Fintech and regtech

Seven Australian fintech companies were ranked among the world's best in the 2019 Fintech 100 report.<sup>12</sup> Airwalex, Judo Bank and Afterpay Touch were ranked in the top 50 fintech companies.

Australia's emerging fintech companies include disaster response provider Sempo and smart receipts app Slyp.

In regtech, Sydney-based scaleup Daisee offers an artificial intelligence-driven solution for the healthcare, financial and insurance sectors in Australia and the USA. The solution 'listens' to all customer conversations and automatically evaluates regulatory and brand compliance based on the business's needs and priorities. It then creates a dynamic workflow for addressing training needs and team effectiveness.



## Agtech

Australia is aiming to boost its agricultural output from A\$60.8 billion currently to A\$100 billion by 2030. The Australian agricultural sector is one of the least subsidised in the world, so it has a long history of developing technologies to respond to challenging physical environments. The most successful Australian innovations are often those developed by producers themselves.

Australian agtech startup FluroSat developed an agriculture analytics engine to help farmers and their advisors grow better crops and grow them more efficiently. The platform uses state-of-the-art crop models, combined with remote sensing imagery and local weather data, to estimate crop performance and areas of crop stress in season and suggest precision fixes to improve the grower's triple bottom line. FluroSat has received VC backing from Microsoft M12, AirTree Ventures and CSIRO's Main Sequence Ventures Fund.

The founders of AgriDigital drew on their extensive knowledge as farmers and grain industry participants to build a digital supply chain platform. The platform enables farmers, buyers and storage operators to sell, trade and store commodities, make payments and access commodity-backed finance in one place and in real time.



## Artificial intelligence

HIVERY is pioneering hyper-local retailing. It combines artificial intelligence, operations research and human-centred design to help consumer goods companies and retailers generate a return on physical space investments, such as shelf space at Walmart stores in the US. Its solutions use technology that originated in CSIRO's Data61 laboratories. Today the company services a global customer base, with offices in Australia, Japan and the US. HIVERY was the NSW Exporter of the Year (Technology) and a National Export Finalist in 2019. HIVERY was also named in Deloitte Technology's Australian Fast 50 2019 and Financial Times's Asia-Pacific High Growth Companies 2020, and ranked ninth in the Australian Financial Review's Fast 100 2020.

MetaFuro is growing fast from its base in the Gold Coast region of Queensland. MetaFuro helps brands optimise their supply chain by taking a product idea and turning it into a successful, sustainable product using its single software solution. MetaFuro is working with Chinese partners, as well as Australian and US brands like Breeze Balm and Ritology, to help them develop and manufacture consumer products that customers love. After raising seed funding in Australia, founder Ryan Mets says that "Australia and regional centres like the Gold Coast are hubs of entrepreneurship, with talent attracted by lifestyle and community connections".

## Future cities and transport

Baraja developed a 3D machine vision system for connected and automated vehicles using Light Detection and Ranging (LiDAR) technology. LiDAR technology is crucial for autonomous vehicles to see the road and surroundings so they can respond appropriately and avoid collisions. Baraja employs more than 100 people and is based out of the Australian Government's high-technology CSIRO facility in Sydney. The company has attracted investment from Blackbird Ventures, Main Sequence Ventures and Sequoia Capital in China.

## Cyber security

Aiculus offers an artificial intelligence-driven security solution that autonomously builds behavioural profiles of safe API activity. This does away with lengthy rules and setups, or the need to continuously update attack signatures.

## Digital health and medtech

World-leading digital health innovations have been developed in Australia's growing digital health ecosystem. SmileyScope have created VR experiences to calm children undergoing needle procedures whilst TaliHealth have created a digital platform to treat attention deficits in early childhood. Stentrode have created a world-first, minimally invasive brain machine interface, with the potential to return movement and independence to the millions of people worldwide with paralysis. With over 30 health incubators and accelerators across the country, digital health and medtech continues to grow at a rapid pace.

# IMMERSE YOURSELF IN AUSTRALIA'S INNOVATION ECOSYSTEM

Australia has a thriving innovation ecosystem that welcomes international investors, partners and collaborators.

Several of the world's leading technology companies have operations in Australia, drawn to the country's resilient economy, highly-educated digitally-literate workforce, and proximity to emerging markets across Asia.

Many high-growth foreign companies have established themselves in innovation hubs in major Australian cities to tap into the local technology community. New York-based AI specialist, Dataiku, recently announced it is

expanding in the Asia-Pacific region with a major new office in Sydney. The company will be hiring dozens of local employees, from customer-facing staff to data scientists.

The cost of office space in Australia is low relative to major business centres internationally, while Australian cities consistently achieve top rankings for their quality of life. Increasingly, co-working options and accelerators are also opening in regional centres.



## Grow your tech business in Australia

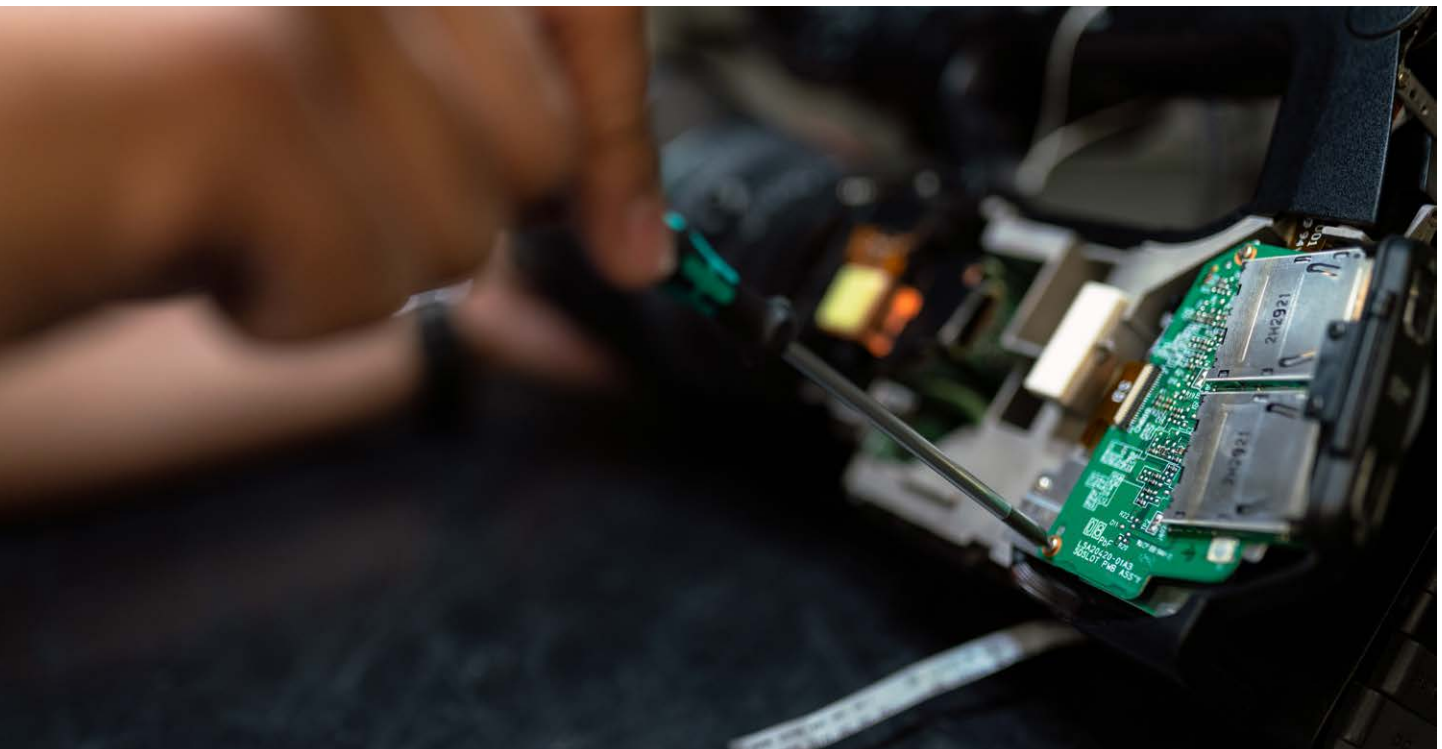
Utah-based technology skills platform Pluralsight plans to more than double its existing team in Australia over the next three years, hiring over 50 new team members across a variety of roles, including sales, customer support, marketing and operations.

“Pluralsight’s expansion throughout Australia and New Zealand supports the tremendous technology boom we are seeing in the region,” said Mike Featherstone, Managing Director of ANZ/APAC for Pluralsight. “Technology is constantly evolving and companies are seeking solutions to help their teams keep up with the rapid pace of technology. We are thrilled to have a highly talented local team that can assist ANZ organisations who want to support the technology skill development of their teams to support their technology strategies.”

US-India based Fractal Analytics is gaining increasing traction in Australia, providing transformative analytics and AI solutions to Australia’s banking and financial services, insurance, telco and consumer goods industries.

“Australia’s long-term economic stability, English-speaking market, and good talent were key factors in deciding to set up presence,” said Rohit Joshi, ANZ Head and Vice President. “Eighteen months after opening its Sydney office in 2018, Fractal Australia is contributing to expectation to the company’s global revenue and works with some of the industry leaders in the local market.”

US tech giants including Adobe, Amazon, Google and Microsoft all have a large Australian presence. Microsoft’s ScaleUp Program and Amazon’s Launchpad engage with the local ecosystem, while global multinationals like Hitachi and Boeing conduct cutting-edge R&D with Australian universities, leveraging research talent and government support.



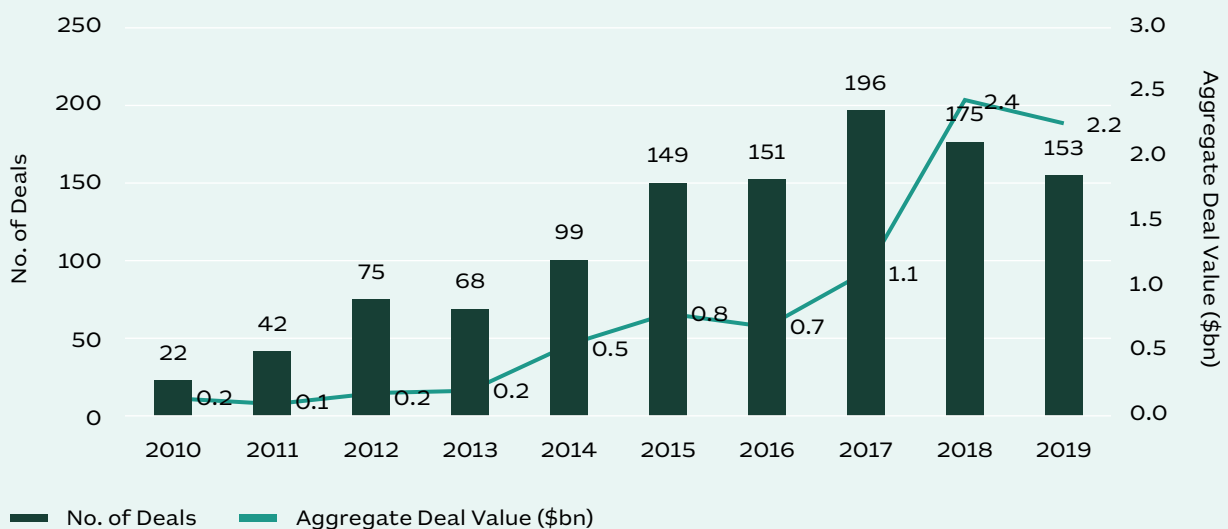
# AUSTRALIAN VENTURE CAPITAL DRIVES GROWTH

The rapid growth of technology startups in Australia has attracted an increasing amount of funding from the Australian VC ecosystem.

The Australian Investment Council reports that in 2019 the total value of Australian-focused VC deals was A\$2.2 billion, taking the sector's assets under management to A\$8 billion.<sup>13</sup> Meanwhile, VC funds raised a total of A\$632 million for investment in Australia which represents the second-highest annual total in the past decade.

The IT sector continued to dominate in terms of aggregate venture capital deal value (51%) and number of transactions (59%). Unsurprisingly, since 2017, the annual aggregate value of agtech deals has increased more than sevenfold from just A\$8.3 million to A\$60 million in 2019.

## Venture Capital Deals in Australia 2010-2019



Source: Preqin & Australian Investment Council Yearbook 2020

### In 2019<sup>14</sup>

**\$2.2BN**

aggregate value of VC deals

**\$8BN**

VC assets under management

**977**

VC deals completed by Australian startups since 2010

**\$632MN**

total raised by VC funds

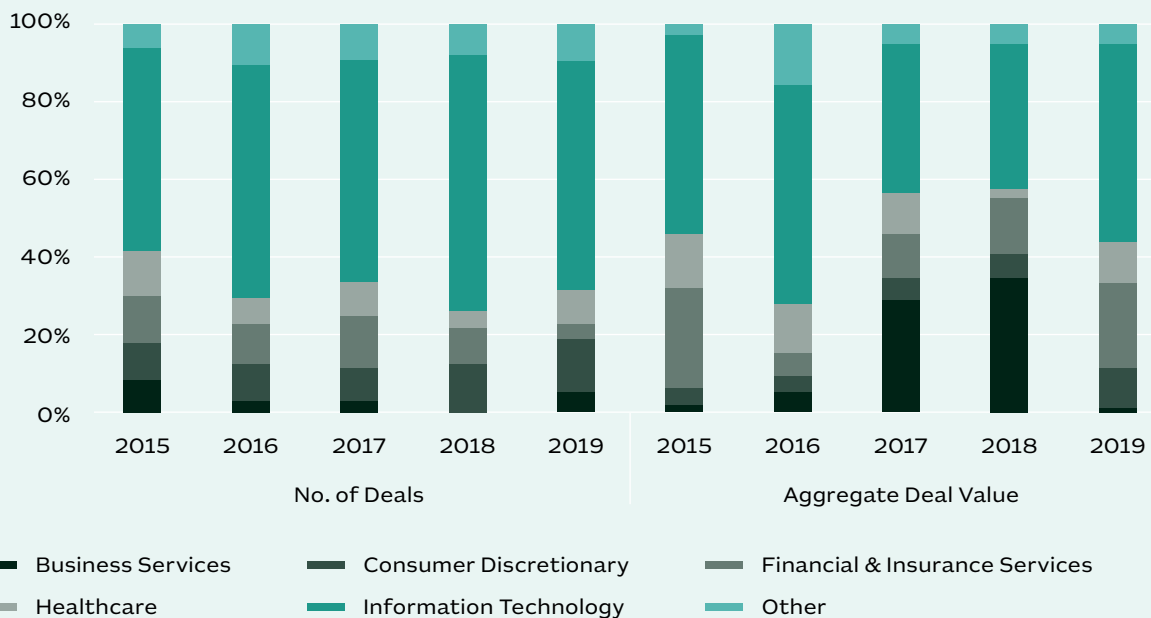


The Australian Government has also played a key role in the development of the technology industry. Industry growth centres, which build capability and collaborative networks, have been established in strategic priority areas with Australian Government funding. These include cyber security, medical technologies and pharmaceuticals, food and agribusiness,

advanced manufacturing, mining equipment, technology and services, and oil, gas and energy resources.

Investment into the Information Communications and Technology sector is further supported by the Australian Department of Defence which aims to deploy A\$20 billion in ICT companies over 10 years to 2026.<sup>15</sup>

### Venture Capital Deals in Australia by Industry 2015-2019



Source: Preqin & Australian Investment Council Yearbook 2020



## Other funding sources

Corporate venture firms, angel investors and accelerator programs also support the Australian technology ecosystem.

### R&D tax incentive

The Australian Government's R&D Tax Incentive reduces the cost and risk of undertaking R&D activities for international organisations. Available to companies for eligible expenditure on R&D, the benefit varies depending on the turnover of the business. It ranges from a non-refundable 38.5 per cent tax off-set for large business, to a 43.5 per cent refundable tax off-set for small-to-medium business (aggregate turnover less than A\$20 million).

### Industry-specific funding

The A\$500 million Biomedical Translation Fund (BTF) consists of equal parts government and business funding. The BTF is operated by three private sector fund managers who select promising Australian biomedical ideas to support. The BTF targets companies with the majority of their employees and assets in Australia and an average annual revenue of less than A\$25 million per year over the previous two years. Other significant medtech-focused funds include the Medical Research Future Fund (MRFF).

## Accelerators and incubators

Australian and international startups can benefit from Australia's accelerators and incubators. Sydney-based Cicada Innovations was named the 'Top Incubator in the World' in 2018 in a field of more than 2,200 competitors worldwide.<sup>16</sup>

There are over 90 accelerators and incubators in Australia's startup ecosystem.<sup>17</sup> These nurture and promote both local and international talent to gain traction in Australia, with some specialising in industry sectors.

University-affiliated incubator and accelerator programs are also finding rapid success. The New Ventures Institute at Flinders University was named the best university incubator in the Asia-Pacific region in 2018.<sup>18</sup>

## Industry growth centres

AustCyber is a not-for-profit organisation dedicated to growing the Australian cyber security ecosystem, exporting Australia's cyber security to the world, and making Australia the leading centre for cyber education. AustCyber and the Australian Trade and Investment Commission closely collaborate, bringing together the commission's extensive reach into global markets and AustCyber's sector insights and expertise.

Other federally-funded growth centres are Food Innovation Australia Limited (FIAL), Advanced Manufacturing Growth Centre (AMGC), METS Ignited, MTPConnect, and National Energy Resources Australia (NERA). Each focuses on increasing industry collaboration and commercialisation, improving international opportunities and market access, enhancing management and workforce skills, and identifying opportunities for regulatory reform.



# ABOUT THE AUSTRALIAN TRADE AND INVESTMENT COMMISSION

The Australian Trade and Investment Commission (Austrade) is Australia's leading trade and investment agency.

We have the power to open doors, unlock opportunities overseas and help Australian businesses go further, faster.

We also introduce foreign investors to Australian partners, strengthening global supply chains, creating local jobs and boosting the economy.

Promoting Australia's growth and prosperity is why we're here.

The Austrade Landing Pads program provides market-ready startups and scaleups the opportunity to land and expand in global innovation hubs. For more information, contact Austrade.

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# ABOUT THE AUSTRALIAN INVESTMENT COUNCIL

The Australian Investment Council is the voice of private capital in Australia. Private capital investment has played a central role in the growth and expansion of thousands of businesses, which when combined represents a multi-billion-dollar contribution to the Australian economy. Our members are the standard-bearers of professional investment and include: private equity, venture capital and private credit funds, alongside institutional investors such as superannuation and sovereign wealth funds, as well as leading financial, legal and operational advisers.

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# ENDNOTES

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- <sup>3</sup>2018 Global Entrepreneurship Index
- <sup>4</sup>Economist Intelligence Unit, Preparing for disruption: Technological readiness ranking report
- <sup>5</sup>Academic Ranking of World Universities (ARWU) 2019
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- <sup>8</sup>Startup Muster is an organisation that measures the progress of Australia's startup ecosystem.
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- <sup>11</sup>Preqin & Australian investment Council Yearbook 2020
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