



Sydney2030/Green/Global/Connected

CITY OF SYDNEY  

Tech Startups Action Plan

March 2016

city of villages

Tech Startups

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01

Lord Mayor's message

I want Sydney to be a leader in the tech startup field and this Action Plan will guide our work.

Lord Mayor Clover Moore

Sydney is a smart city and we are developing a global reputation for supporting innovation.

We have an active and growing ecosystem of tech startups. Over 64% of Australia's tech startups and up to 15% of Australian workers employed in the ICT sector are located in our local government area.

There is fierce international competition for the jobs and economic benefits that the startup sector is creating. The next multi-billion dollar company to follow in the footsteps of Twitter, Uber or Airbnb is already being developed. We must ensure that Sydney is a supportive location for such development so that our most talented companies and the entrepreneurs behind them grow their business in Sydney.

The City of Sydney will continue to work with industry members, educational and cultural institutions and other levels of government to ensure Sydney is a global startup capital.

I want Sydney to be a leader in the tech startup field and this Action Plan will guide our work.



A handwritten signature in black ink that reads "Clover Moore". The signature is fluid and cursive, with a horizontal line underneath the name.

Clover Moore
Lord Mayor

02

Executive summary

Encouraging technology entrepreneurs to start and grow global businesses will create more jobs, boost Sydney's economy, strengthen global connections and make the city a more desirable place to live, work and visit.

Supporting Sydney's technology startups

The City of Sydney supports a thriving business community that offers exceptional opportunities for technology entrepreneurs.

We intend to work with industry and government partners to create an environment that enables these entrepreneurs to start and grow successful global businesses.

Sydney's tech startup ecosystem is in the early stages of development and the needs of tech startups are very different to those of small businesses.

Entrepreneurs and tech startup companies need a local environment that provides support networks, business and entrepreneurship education, infrastructure and financing opportunities.

The City wants to increase the number of entrepreneurs starting high-potential businesses. We want to increase opportunities for these businesses to access investment, talent and skilled support networks. We also aim to create a more connected ecosystem and reduce regulatory barriers.

This action plan focuses on creating an ecosystem that enables knowledge-based, innovation-driven businesses to flourish.

It adopts a 'lean startup' approach, where the City regularly measures, evaluates and reviews programs that best support these businesses. The plan also includes scope for us to amend our programs as needs and demands change. It is designed to address the needs of individual tech startups as well as support organisations that help them to launch and scale, such as accelerators and incubators.

“As the competition for investment and entrepreneurial talent reaches global proportions, municipal support for nascent entrepreneurial clusters becomes a must-have, especially for large metropolitan areas.”

McKinsey & Company, Creating growth clusters: What role for local government?¹

Our five areas of focus

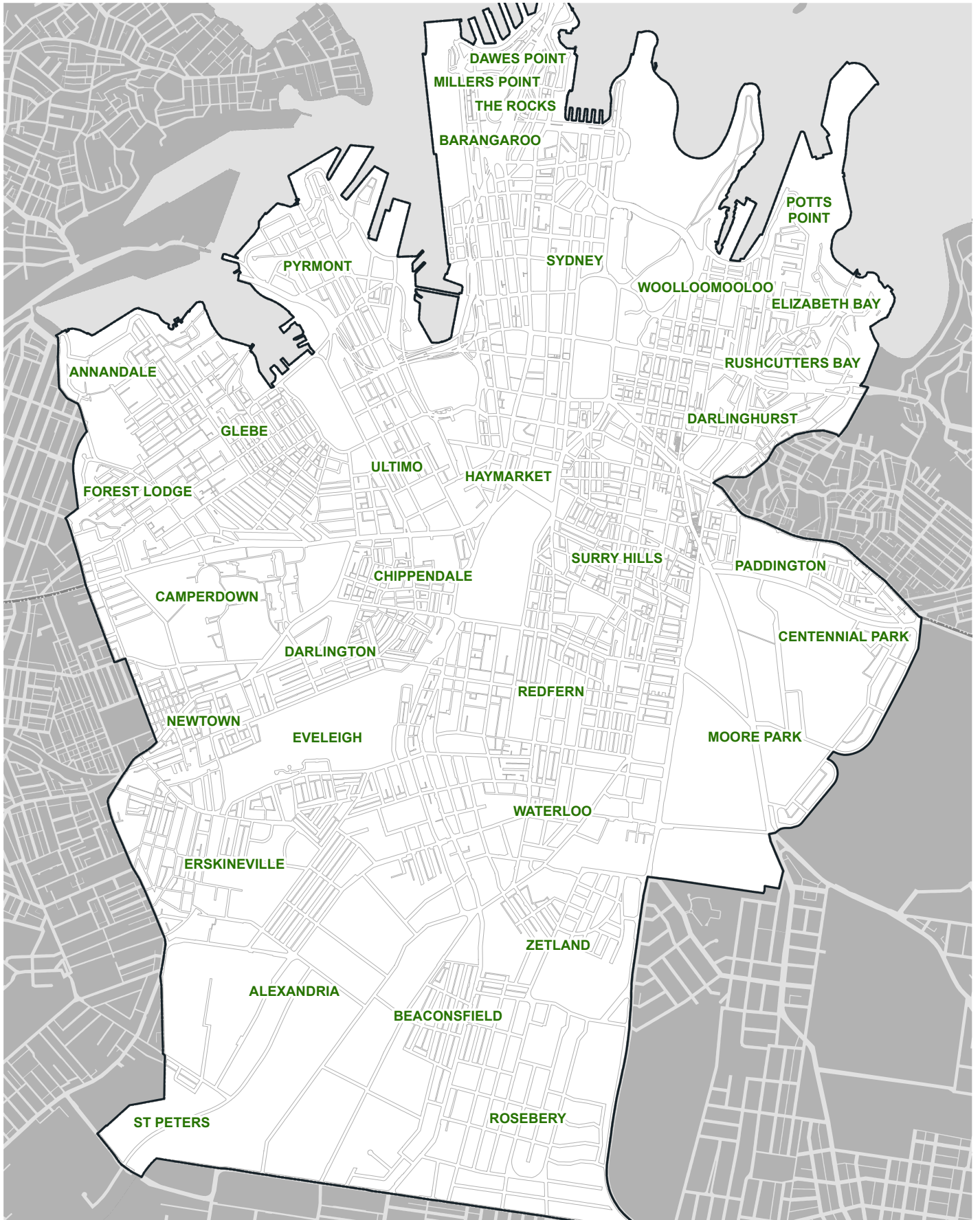
1	Build a strong entrepreneurial culture and community. Encourage more people to become technology entrepreneurs who start and develop high-growth companies.
2	Create skilled and connected entrepreneurs. Build a robust ecosystem in which technology entrepreneurs have the capacity and networks to launch local companies that become global companies.
3	Increase the startup ecosystem density. Ensure startups and the organisations that support them are able to scale, and can be located close to one another so they can connect, share ideas, mentor and partner with others.
4	Support entrepreneurs’ access to funding. Generate more investors and more investment in tech startups, and connect entrepreneurs with investors and businesses.
5	Develop technology entrepreneurs’ access to markets. Increase the number of consumers prior to and after the release of an entrepreneur’s product or service.

The City’s proposed projects to support technology entrepreneurs include:

- investigating the need for an **entrepreneurship centre**, to provide a critical mass of office and event space for entrepreneurs in tech startups and the organisations that support them
- creating an **awareness campaign** focused on Sydney’s entrepreneurs and the tech startup ecosystem
- creating a **Sydney tech startup festival** to celebrate and promote the ecosystem
- including **digital technology education activities** in the City’s programs, such as providing sessions on how to code in our youth and library programs
- hosting **‘Startup 101’ business seminars** to inform the Sydney community about the tech startup ecosystem, how to found and grow startups, and enable them to network with others
- using our **engagement and communication channels** to discuss and debate the impact of innovative technology, and to showcase tech startups
- implementing the City’s **Knowledge Exchange Sponsorship program** to support education and networking activities coordinated by the entrepreneurial ecosystem
- creating a **visiting entrepreneur program** to fast-track the business skills of technology entrepreneurs
- collaborating with partners to develop business and entrepreneurship **education and mentoring opportunities**
- assisting **‘angel’ investor associations** or other members of the ecosystem to hold investor recruitment education events
- leveraging our **international sister-city relationships** to strengthen knowledge and investment exchange.

Within this document, the organisation, the City of Sydney, is referred to as 'the City'.

The geographical area managed by the City is the local government area, and is referred to as 'the city' or 'the local area'



03

Introduction

What are tech startups?

Technology startups – or tech startups – are new businesses that are innovative; they generate new ideas, new products, new services and new ways of doing things.

Business and product ideas are now driving innovation as much as technology ideas, so entrepreneurs don't have to be 'in IT' to start a technology-driven company.

In fact, making the distinction between a 'tech company' and any other new company is difficult, as all businesses are increasingly built around technology.

Those with successful business models have the ability to reach a global market rapidly, which results in swift economic and employment benefits locally.

This is why startups where technology is central to the product or service being offered, particularly those that utilise the internet, are transforming the way we work, live and play.

In other words, entrepreneurs who found tech startups can very quickly create high-growth, high impact businesses.

International research shows that a focus on promoting innovation and potentially high-growth companies creates employment opportunities and economic wealth.

The global community of people founding, working in, supporting and investing in tech startups refers to the sector as an ecosystem. Various entities within the sector connect, link up, interact and help each other, strengthening the ecosystem while increasing their own value.

Governments across the world are establishing programs to support tech entrepreneurs in an effort to spur economic growth and job creation.

“During our lifetime, every industry and every business will evolve to become a technology- and data-driven business. The tech entrepreneurs who have left Australia, and their equally talented counterparts still in Australia, are the key to our future.”

Dr Jana Matthews, ANZ Chair of Business Growth, University of South Australia²

Sydney startups are competing in this global marketplace without similar levels of support.

The barriers to the growth of the Sydney tech startup ecosystem include: the low number of entrepreneurs starting high-potential businesses; limited access to investment, talent and a skilled support network; a fragmented ecosystem; and stifling government regulation.

Our economic development strategy

During 2007–08, the City undertook the most comprehensive community consultation in its history. We spoke to residents, workers, students, business operators, industry associations, community organisations and visitors about their vision, goals and aspirations for the future of the city. The result is Sustainable Sydney 2030 – a comprehensive plan for the development of the city to 2030 and beyond. The plan sets out a series of actions to achieve a green, global and connected city, and identifies synergies between various themes, such as the links between community, liveability, creativity, innovation and productivity outcomes.

The City's Economic Development Strategy 2013 built on and updated the broad economic themes in Sustainable Sydney 2030. It provides an overarching framework that guides the City's economic development initiatives, setting out the City's economic development aspirations, role, priorities and approach.

The strategy is intended to be read alongside our action plans for priority sectors and places, one of which is this Tech Startups Action Plan.

“If you’re looking to start a company, start with the future. Imagine what things will be like in 10 years, not what they’re like now. The most important thing you can do is to solve a real problem. If you solve a problem that lots of people care about deeply, you’ll be able to figure out the rest.”

Melanie Perkins, Cofounder, Canva⁴

About this action plan

The City of Sydney’s Economic Development Strategy recognises that supporting entrepreneurs is integral to our vision for the city’s economy. Entrepreneurs are agents of change and we understand that supporting entrepreneurs as they become employers is an effective way to grow jobs and job diversity in the economy.

In addition, the City of Sydney’s Cultural Policy and Action Plan acknowledges that creativity is a prerequisite of innovation, not to mention critical to community wellbeing and economic strength and prosperity.

As part of the vision outlined in the policy and action plan, Sydney aspires to be a city that supports creative experimentation and innovation, and makes space for trial and error.

Tech startups, by their very nature, embody one of the policy’s founding principles: the idea that initiative, experimentation and enterprise are the bedrocks of developing a creative culture. The Cultural Policy and Action Plan also acknowledges that creative risk is a precondition of innovation and industry growth.

The City acknowledges that businesses using technology innovatively have been described as the ‘new economy’, and will continue to play a central role in Sydney remaining green, global and connected over time.³

In implementing the Economic Development Strategy, the City will consider and respond to emerging trends and new business models.

This Tech Startups Action Plan aims to do that by outlining how the City can influence the success of entrepreneurs who are founding startup technology businesses, given their potential for high growth and high impact on the City’s local economy and employment.

This action plan responds to the findings of extensive research and consultation, as well as number of programs and pilot projects.

We compared Sydney’s tech-startup ecosystem with that of other global cities and identified the major trends and issues.

The City of Sydney acknowledges:

- the *Silicon Beach – A Study of the Australian Startup Ecosystem* report, produced by Startup Genome in partnership with Deloitte Private, From Little Things and Pollenizer⁵
- PwC’s *Startup Economy* report, commissioned by Google Australia⁶
- StartupAUS’s report *Crossroads – An action plan to develop a vibrant tech startup ecosystem in Australia*⁷
- the *South East Queensland 2014 Startup Ecosystem Report*, produced by Boundlss⁸
- the Startup Muster survey, produced by Murray Hurps⁹
- the expertise and input of startup-ecosystem consulting firm Spike Innovation.¹⁰



Tony Burrett, Sebastien Eckersley-Maslin, Alan Jones, bluechilli.com

Our consultation captured the views of entrepreneurs – and those of the businesses, educational institutions, financial organisations, incubators and accelerators, and co-working spaces that interact with them to enable tech startups to be founded and to scale.

The City worked with a number of partners to implement pilot projects that helped clarify the issues facing technology entrepreneurs; to test what role the City could play in addressing these; and to further develop relationships with individuals and organisations within the ecosystem to ensure this action plan is relevant and appropriate.

Pilot projects included educational, networking and mentorship projects – for example, City of Sydney Tech Startup 101 Seminar, the 66 Meet-Ups networking group, and Practical Business Learning for Entrepreneurs: UTS@Hub Sydney.

We also support ongoing initiatives, including the CeBIT business technology exhibition and conference, Startup Week Sydney, Springboard Enterprises Australia, the REMIX Summit, the Global Coworking Unconference Conference Australia, and the startup Good360, which received a City of Sydney grant.

This action plan has been peer reviewed by startup ecosystem consulting firm Spike Innovation to ensure the information is accurate and the proposed actions are relevant and credible.

A dynamic plan

This action plan is intended to be dynamic, changing as the needs and priorities of the ecosystem change.

The City acknowledges the need to adopt a 'lean startup' approach so it can change, cancel or add programs as quickly as possible.

Many of the actions in this plan identify how the City will act; however, each specific project will need to be scoped and implemented in partnership with other members of the ecosystem.

The City intends to report regularly on its progress with the identified projects. We will report on progress in achieving targets or identifying trends annually, although some data will not be refreshed this frequently.

We will assess priorities annually based on the outcomes achieved and as new information on the needs of the sector becomes available.

We will undertake a major review of the action plan after five years.



A partnership approach

In delivering this action plan, the City cannot act alone. We will seek to create strong partnerships and networks with industry members, governments, community members and other stakeholders so we can achieve more together.

In fact, we will work out the details of many the actions in this plan in collaboration with others in the ecosystem. We need to understand what is currently working successfully in Sydney or elsewhere, and amplify or replicate those programs and initiatives rather than detailing new projects without industry input.

The City acknowledges that the Sydney ecosystem is bigger than the companies and organisations located within its local area and a collaborative approach is essential.

The City will support entrepreneurs, government bodies, StartupAUS and other organisations in developing this crucial part of Sydney's innovative economy.

At the end of 2012, the *NSW Government Response to the Digital Economy Industry Action Plan*, outlined a vision "for NSW to be recognised globally for leading innovation and driving productivity gains in all areas of the economy, enabled by strong, vibrant and connected ICT, creative industries and education sectors".¹¹

In early 2016 the NSW State Government sought community feedback on the directions for a NSW Innovation Strategy which is expected to be released in late 2016.

In March 2014, StartupAUS produced *Crossroads – An action plan to develop a vibrant tech startup ecosystem in Australia*, which it updated in 2015. This report sets a clear direction for a national startup ecosystem and identifies key policy areas that require government intervention.

Wherever possible, the City will align its actions with the NSW Government's response to the industry taskforce and other reports.

We will also seek opportunities to engage with the NSW Government to collaborate or jointly deliver new programs.

04

What is a tech startup?

“To grow rapidly, you need to make something you can sell to a big market. That’s the difference between Google and a barber shop. A barber shop doesn’t scale.”

Paul Graham, programmer, writer and investor¹³

Defining tech startups

StartupAUS defines a tech startup as an emerging high-growth company that uses technology and innovation to tackle a large and often global market.¹²

StartupAUS identifies two important characteristics:

1. The potential for high growth. While not all startups need to raise capital to grow, StartupAUS advocates an ‘investability test’ as a proxy for high-growth potential, in which the ability of companies to raise capital from professional, arm’s-length investors is a good indicator of their growth potential.
2. Disruptive innovation. Startups are reshaping entire industries by displacing established competitors through their use of technology and business model innovation.

The distinction between a tech startup and other companies is an important one. The city is home to many businesses selling products and services online. They are all important to the diversity of the city’s economy and many create local jobs. However, for the purposes of this action plan, we will follow the StartupAUS definition and not consider businesses as tech startups unless they have a focus on high-growth and disruptive innovation.

05

A tech startup case study

This is an article written by Tasnuva Bindi, Editor, Startup Daily, 'Image editing startup Pixc soaring in sales, averaging 1000 a week', 14 January 2014

www.startupdaily.com.au¹⁴

Image editing startup Pixc soaring in sales, averaging 1000 a week

From paintings to photo prints, we've been heavily influenced by images for centuries. Today, in the eCommerce space, an image can be the difference between making and not making a sale. Unfortunately for the uninitiated, this may require using sophisticated Image Editing Software such as Photoshop – a skill that takes time to master. Now with Pixc, a product image can be edited and returned within 24 hours for \$2.

Founded last year by 26-year-old entrepreneur, Holly Cardew, Pixc is a new online photo editing service built expressly for eCommerce businesses. Cardew knew all too well the difference an image can make to a product's sellability, having previously run a regional online marketplace.

She says, "When I was building a regional online marketplace, I realised the problem wasn't necessarily that people needed help with selling online. They just needed better product images."

"You can't touch a product when you're shopping online, so an image is the first point of contact. Research shows that an image of a product on a contrasting background can increase sales by 39%; and a large image can increase sales by 9%. So images are really important. People look at images before they read the product description."

Given there are over 25 million individuals and businesses selling online, with 2 million products being uploaded daily on eBay alone, Cardew realised the potential for a business.

"Everyone has smartphones with cameras these days, so I thought to myself, 'wouldn't it be cool if they could just take a snapshot of their product using their phone, upload it onto the cloud, and have it edited for them so they can display it online?'"

Cardew didn't rest on her idea. She was quick to build a Minimum Viable Product (MVP) on WordPress – that is, a simple site with email contact details, calling on people to email product photos they want edited. It was not long after, that Cardew received an order of almost 700 images by a single buyer.

Now, people can simply upload photos through the 'Submit Your Photos' section of the website and have the edited image returned to their email within 24 hours – for \$2 per image. The experts in the startup will remove crowded backgrounds to achieve a simple contrast with the product.

Pixc is averaging 500 to 1,000 sales per week. Cardew says sales depend on seasons. Over Christmas, people weren't sending as many images because they were too busy selling. It was the months before Christmas that they would send orders when they received new stock. Since launching, Pixc has processed thousands of product images.

The images are being outsourced to an international team of photo editors. Cardew says that much like Gengo (human-powered editing) and Flightfox (human powered flight search), Pixc is human-powered image editing.

Their primary marketing methods include word-of-mouth, cold calling, and social media – all cost-effective options.

“Everyone has smartphones with cameras these days, so I thought to myself, ‘wouldn’t it be cool if they could just take a snapshot of their product using their phone, upload it onto the cloud, and have it edited for them so they can display it online?’”

Holly Cardew, Founder, Pixc



Holly Cardew, pixc.com

“We don’t have a huge marketing budget. And I found that social media works quite well. All our customers are eCommerce business owners who are active on social media to drive their own business,” says Cardew.

The two biggest challenges Cardew has faced throughout this venture has been scaling and dealing with negative feedback, though the latter never put her down.

“Although I never took it to heart, there were people who said my idea wouldn’t work. I know the exact problem I am solving, so I chose to ignore sceptics. I think someone else in my position, would have been discouraged by that,” says Cardew.

“At the end of the day, perseverance and self-teaching is most important. Although there’s a great startup community in Australia, you don’t know what interests people have. You will get lots of opinions thrown at you, but you have to make up your own mind about what’s best for your business.”

Cardew’s biggest advice to aspiring startup founders is to start with an MVP – a term she learned from the book, *The Lean Startup*.

“Build something that you can do manually via email or through a WordPress site. This way you can determine whether there is a market for your product. This is better than building a full-scale product, and then trying to go out and sell it, because you can manipulate the business to suit the market,” says Cardew.

“I was originally going to create a mobile app, but then I realised that half my customers don’t take pictures with their phones. They use proper cameras.”

Although the business has been entirely bootstrapped (personal finances) to date, Cardew is open to raising investment capital in the future so she can grow out her team. But she says she would prefer to test all her assumptions first, before taking that leap.

Cardew is also looking to take part in an accelerator programme with her co-founder, and is currently shortlisted to *murud*.

Pixc won the Telstra Digital Scholarship in 2013 at Melbourne, and the duo will be heading over to San Francisco in March. Cardew thinks this will pave a favourable path towards developing partnerships in Australia and overseas.

www.pixc.com

Postscript: Holly Cardew was selected to be part of the 2014 international Blackbox Connect program run by Google for Entrepreneurs and Blackbox in Silicon Valley as well as one of 28 startups selected into the 500 Startups 2015 accelerator program in the US. Holly is now based in both San Francisco and Sydney.



Melanie Perkins, Cliff Obrecht, Cameron Adams, Cofounders, canva.com

This is an article written by: Fran Foo, The Australian, 'Grand designs on iPad as Canva takes tablet plunge', 16 October 2014

www.theaustralian.com.au¹⁵

Grand designs on iPad as Canva takes tablet plunge

It's a long way from being recognised as a verb but online design start-up Canva hopes to dominate the world one pixel at a time, with its sights firmly set on one day unseating \$US32 billion market leader Adobe.

Canva's free drag-and-drop design tool will launch on the iPad following what it deems as a successful showing on non-mobile platforms.

People use it to create flyers, birthday and business cards, Facebook covers, posters, info graphics and other designs, with premium images costing \$1 each.

Since opening its doors in mid-2013, Canva has garnered 870,000 users who have created 6.2 million designs, with 1.27 million done in the last month alone.

Chief Executive and Co-founder Melanie Perkins estimates a new design is created on the Canva platform every two seconds.

Canva's largest following stems from the US, then Australia, Britain, Canada, Spain, India and Brazil.

Multi-language support is in the offing with Spanish likely to be tackled first, said Canva chief operating officer and co-founder Cliff Obrecht.

There are plans to support other mobile platforms like Google's Android in future, Ms Perkins said.

Canva's main weapon is ease of use: images are selected then dragged onto a template to create professional-grade designs.

Top names in the venture capital and angel investment community have sunk in a total of 47m into Canva. They include Facebook investor Founders Fund, Paul Bassat's Square Peg Capital, Matrix Partners, Twitter investor Bill Tai, Google Maps co-founder Lars Rasmussen and Yahoo Chief Financial Officer Ken Goldman.

Mr Tai and Mr Rasmussen addressed the media this week at Canva's new premises, a few streets down from its previous base in the trendy Sydney suburb of Surry Hills.

The duo hailed Canva's engineering smarts and said the company had the right ingredients to take on giant Adobe.

This is an article written by: Shira Ovide, The Wall Street Journal 'Campaign Monitor wins \$US250m venture capital funding from Insight', 16 April 2014

www.wsj.com¹⁶

Campaign Monitor wins \$US250m venture capital funding from Insight

A 10-year-old Australian 'start-up' is joining the rarefied strata of buzzy young companies like Uber and Dropbox.

Sydney-based Campaign Monitor, which makes software for email-marketing pitches, is raking in \$US250 million (\$266.9 million) from venture-capital firm Insight Venture Partners. It's the first time Campaign Monitor has taken a cent from investors, a rarity for a decade-old company.

The injection is among the biggest recent venture rounds. Since the start of 2013, only a few companies, including Dropbox, Airbnb and Uber, raised more money from venture-capital firms, according to data provider Dow Jones VentureSource and Wall Street Journal reporting. It's also unusual for a single firm to make such a large investment.

Campaign Monitor says its email templates are easy enough for non-tech-savvy employees to use, and it says its prices are flexible enough for companies that blast thousands of emails, or for people who just send a couple of emails a year.

The company is among a growing roster catering to an increasingly digital-obsessed marketing industry. Now that spreadsheets are more common in marketing agencies than the "Mad Men"-era office bar, technology firms are crafting software to help marketing departments manage digital pitches, keep tabs on social-media messages and analyse the impact of their spending.

Marketing-technology companies have been a hit with investors, too. ExactTarget and Responsys were acquired in the last year in billion-dollar-plus takeovers. Marketo, which went public in May 2013, reached a market value of \$US1.8 billion before falling about 30% in the past two months.

"Marketers are going to get more aggressive in their tech spend," said Deven Parekh, a managing director at Insight, who also said email remains a core pillar of marketing campaigns. "When we look at the trends in marketing, [Campaign Monitor] certainly plays on those trends," he said.

Campaign Monitor germinated out of a late-1990s university business started by Ben Richardson and Dave Greiner, who grew up across the street from one another in the Sydney suburbs. The pair said they grew frustrated when they tried to use email marketing tools for their company creating custom websites.

Richardson and Greiner spent their spare hours writing software to improve on those clunky tools. About a year after they launched Campaign Monitor software in late 2004, it had three times the revenue of their web-design firm. The pair decided to focus on that business.

The founders declined to say how much revenue the company generates, but said Campaign Monitor has been profitable every month of its life. That has allowed them to self-fund the company.

Richardson and Greiner said about six months ago they began to weigh bringing in an investor for expertise and to help the company expand.

"We're proud of the last 10 years. If we look at the next 10 years there are a whole lot of growth opportunities ahead for us," Greiner said.

The pair said they plan to use the fresh investment funds to expand their own marketing, and to hire more sales people to court new customers. Campaign Monitor also plans to open its first U.S. office. About 80% of the company's customers are in North America and Western Europe, but roughly 40 of the company's 65 employees are in Australia.

The company also plans to give its employees ownership stakes in the company for the first time, and may expand senior management.

Parekh said the unusually large \$US250 million investment reflects Campaign Monitor's maturity and greater revenue than most young companies starting to bring in outside investors.

06

Why are tech startups important?

Our innovative, global city

Sydney is recognised as Australia's primary global city and the leading knowledge-based economy in the nation. More than \$100 billion is generated each year within the City of Sydney local area, representing more than 7% of Australia's economy and providing more than 437,000 jobs across all skills levels and communities.

Despite the growth of business districts such as North Sydney, Parramatta and Olympic Park, and the growth corridor to the northwest, the City of Sydney local area has maintained its pre-eminent role thanks to its large economic base, which includes a dense network of globally competitive industries, well-developed infrastructure, good governance, and outstanding amenities and living environments. Keeping Sydney globally competitive is central to Sydney's and Australia's future.

Entrepreneurs in tech startups create innovative solutions to problems, harnessing the creativity and energy of people to build companies that ensure Sydney's continued participation in the global economy. They are critical to building a city that is innovative, prosperous and lively.

Economy

Rapidly growing entrepreneurial companies are important sources of innovation, increased productivity and employment. They are also key drivers of economic and social progress.¹⁷

In the US, high-growth venture capital-backed companies account for 21% of gross domestic product (GDP), US\$3.1 trillion in revenue, and 11% of private sector employment, or 12 million jobs.¹⁸

Government policies that reinforce and develop accessible markets, human capital, and funding and finance will increase the likelihood of a vibrant ecosystem emerging over time.¹⁹

International research demonstrates that a small number of high-growth companies will contribute most to aggregate economic growth in a region, and that enabling these companies to scale is imperative.²⁰

Advances in technology are a fundamental driver of income and welfare, and may well generate the most profound changes to the economy in the City of Sydney local area over the next two decades.²¹

The impact of 'unicorns' – tech startups that achieve significant scale before an 'exit' (initial public offering (IPO) or acquisition) with a market capitalisation of \$1 billion or more – is significant.

The IPOs of Google, Facebook and Twitter together created close to 4,000 millionaires, many of whom will go on to start and invest in the next wave of startup companies and mentor the next entrepreneurs.²²

Startups that achieve this scale are rare but vital to the creation of a vibrant economy.

“These startups are good and useful ... They bring in a diverse set of people with diverse retail needs, supporting a wide variety of services ... But more importantly, they’re good for the country ... They hold the potential for the creation of good jobs and local firms that pay local taxes and nurture local talent.”

Cory Doctorow,
UK Tech Startup Entrepreneur²³

Employment

New firms add around 3 million new jobs to the US economy each year, while over an extended period “existing firms have been net job destroyers”, losing a total of 1 million jobs per year. In fact, the 4% of companies with the highest growth are responsible for creating more than 70% of all new jobs in the US.²⁴

In the UK, the 6% of businesses with the highest growth rates generated half of the new jobs created by existing businesses between 2002 and 2008. These businesses were far more likely to be innovative, and research shows that their innovation was a source of growth.²⁵

With this in mind, international research recommends that economic policy should focus on promoting innovation and on nurturing the small number of companies with high-growth potential.²⁶



The Australian tech startup sector has the potential to contribute \$109 billion, or 4% of GDP, to the Australian economy and to generate 540,000 jobs by 2033. Realising this potential will require a concerted effort by entrepreneurs, educators, government and corporate Australia.²⁷

07

Disrupt or be disrupted

“If we don’t start investing in the new economy, \$3.5 trillion is going to transfer out of our economy because of disruption and it will go overseas.”

Dr Michelle Deaker, Director, OneVentures²⁸

Business evolution

The largest companies of the last century were industrial corporations born of the Industrial Revolution in the 1800s: mass production companies such as Ford, Volkswagen, Toyota, GE and Bayer, and the suppliers of raw materials such as Exxon, Shell, BP and BHP.

But over recent decades, computer, software and now internet companies such as Apple, Google, IBM, Microsoft and Facebook have been vying with these post-industrial corporations to lead the pack.²⁹

Over the last 15 years, a significant portion of job and economic expansion in the US has come from high-growth technology companies such as Amazon, Google, Salesforce, VMware, Facebook, Twitter, Groupon and Zynga.³⁰ Apple’s new product innovations from 1999 onwards transformed it from a struggling organisation to the company with the largest market capitalisation on the planet – quadrupling its value (to more than US\$770 billion) in just the past five years alone.³¹

The entire US GDP is \$15 trillion. Collectively, these nine companies, which barely existed a decade and a half ago, have directly created almost a trillion dollars in new wealth.³²

Recently, Malcolm Maiden commented in *The Sydney Morning Herald*: “By virtue of its 119-year history, the US Dow Jones Industrial Average encapsulates the corporate history of the world’s most important economy. It is a record of the rise and fall of ideas and entire industries that the leaderboard of the Australian market, the S&P/ASX 200, rather tellingly, does not replicate.”³³

“In Australia, yesterday’s stars are still today’s stars, by and large. Since 2000, seven companies have dominated the top of the S&P/ASX: BHP Billiton, Rio Tinto, CBA, Westpac, ANZ, NAB, and Telstra. Corporate giants are continually emerging in the US market. Here, the same giants just keep getting bigger.”³⁴

The ‘digital revolution’ is really this evolution of business, rather than a function of technology. The tools that make it possible to ‘digitise’ business processes – broadband, smartphones, the cloud, the ability to analyse complex data sets, social media – are today’s innovations. But they are extensions of the computing and online advances of the past few decades.³⁵

The introduction in the 1970s of the ‘digital computer’ was disruptive; the switch from analog to digital mobile phones was too. By now, neither technology requires the ‘digital’ prefix; we take it as a given.³⁶

Currently, entrepreneurs in tech startups are reimagining industries from the ground up, using the best technology we have today. Examples include US ride-sharing and taxi services companies Lyft and Uber; health insurers such as Oscar; car manufacturers like Tesla; labour hire companies like TaskRabbit; and accommodation services such as Airbnb.³⁷

It is likely that technology and therefore tech startups will continue to have a disproportionate effect on global and local economies.



Peter Cooper, Founder, Sydstart and The Start Society

Disruption

There are seven technologies that tech startups are most likely using to create disruptive business solutions: mobile internet, automated knowledge work, the internet of things, cloud technology, advanced robotics, autonomous vehicles and 3D printing.³⁹

It is estimated that by 2025, the annual impact on the Australian economy of these seven technologies alone will be \$479 billion. That is, these technologies combined will disrupt 22% of Australia's GDP.⁴⁰

The estimates of economic disruption include consumer surplus, new revenue and GDP growth, as well as redistribution of wealth due to the impact of technology.

A mid-range estimate is that technology companies could capture 5.5% of the Australian economy by 2025. This equates to more than \$115 billion in direct revenue going to technology companies.⁴¹

But this doesn't mean local companies will benefit. US taxi service and tech startup Uber, for example, has captured 10% of the Australian taxi market in less than two years.⁴² If the barriers to the growth of the local tech startup ecosystem are not removed, this revenue will likely be captured by more US-based firms.

“22% of Australia’s GDP, \$479 billion, in 2025 will be disrupted from the application of seven digital technologies alone ... But this doesn’t mean it will be captured by local companies.”

**Boundlss,
South East QLD Startup Ecosystem Report³⁸**

It is imperative that local companies are able to create these economic and employment effects to benefit the Sydney community. Our community needs to be a creator of technology, not just a consumer.

08

How many tech startups are there?

Tech startups are difficult to measure

Standard industry classifications haven't kept pace with rapid changes to the structure of the economy. So while technology startups are operating in all sectors, there is currently little data to estimate their number or measure their impact in Australia. That said, organisations within the ecosystem have undertaken a few of their own surveys and reports.

How many tech startups are there?

In 2012, there were an estimated 1,500 Australian tech startups, ranging from one- or two-person startups created in the previous 12 months, to more established businesses that had been around for a decade. Very few startups created between 2001 and 2006 still existed in 2012, but a significant increase in activity from 2007 on resulted in the creation of many of the startups documented in 2012.⁴⁴

Of the 1,500 startups, 64% (960) were located in Sydney, followed by 24% in Melbourne.

However, with more recent detailed analysis of this data, StartupAUS now believe that the best estimate available is that there are 1,200 tech startups in Australia, or 0.06% of all Australian businesses.⁴⁵

A 2014 survey found that 48% of Australian startups were in NSW, followed by 18% in Queensland and 13% in Victoria.⁴⁶

"I believe that Australia is more than capable of building global businesses that dominate on the innovation front. I also believe that the next generation of major Australian businesses has yet to be built."

Niki Scevak, Cofounder Startmate⁴³

Tech startups in the City of Sydney

This survey also found that the largest number of startups in Australia were located in the Sydney CBD⁴⁷; Ultimo was fourth and the Surry Hills/Darlinghurst area was seventh. All suburbs are in the City of Sydney local government area.⁴⁸

Of the 11 leading Australian co-working spaces identified in the survey by startups, three were in the city.⁴⁹

Of the 22 Australian accelerators or incubators identified, nine were in the city.⁵⁰ See map on page 21 for an indication of the number, scale and location.

These results suggest the concentration of Australian startups and the organisations that support them is relatively high in the city.

Talent pool

Tech startups – particularly those focused on the internet – employ business entrepreneurs, software engineers, creative designers and marketing specialists.

The City conducts its own floor space and employment survey (FES) every five years, counting all business establishments and workers in every building in the city.

The City's FES data demonstrates that people with business knowledge, technology expertise and creativity are working in the city. This creates a talent pool where innovation can thrive and influence the launch and growth of startups.

For example, the professional and business services sector experienced the largest employment growth over the five-year period to 2012, adding more than 21,920 workers to the city, bringing the total to 77,134 workers in that sector in 2012. Collectively, creative industries, the information and communications technology (ICT), higher education and research sectors in the city grew by 12.4%, or 9,715, to 76,952 workers over the same period in 2012.

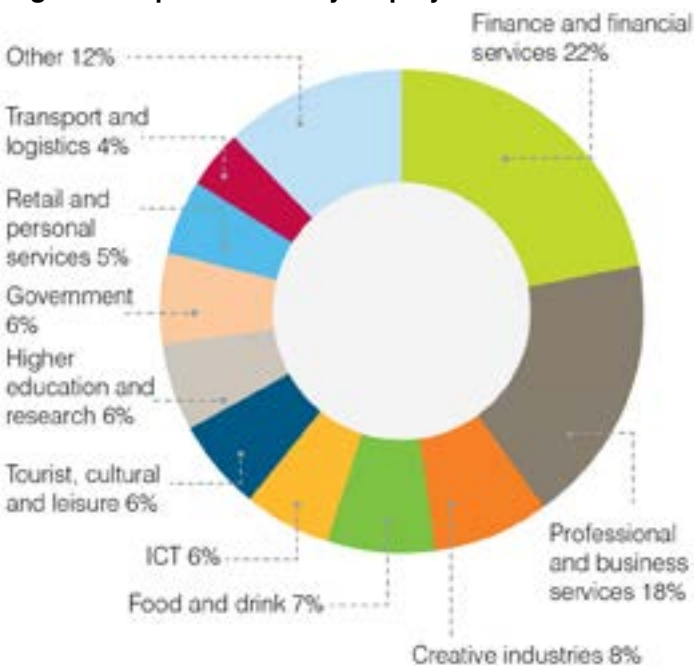
“Innovative industries bring good jobs and high salaries to communities where they cluster, and their impact on the local economy is much deeper than their direct effect ... ”

Enrico Moretti, The New Geography of Jobs⁵¹

The largest sector remains finance and financial services, with 96,517 workers, representing one-fifth (22%) of the city’s entire workforce in 2012.

Figure 1 shows the top industries by employment in the city.⁵²

Figure 1: Top industries by employment



Talent concentrated in city areas

Critically, employment trends vary when looking at areas within the city. Some are developing clusters – places where people with specialised skills are concentrated. Areas where people with ICT skills are concentrated are ideal hotspots for the exchange of knowledge and ideas that create startups.

For example, between 2007 and 2012, Harris Street had the largest and fastest growing ICT workforce in the city. Over that five-year period, the ICT sector experienced extraordinary growth in the Harris Street village, growing by 3,023 workers or 253%. While larger firms such as Google and Fairfax were a key catalyst for this growth, there were also 80 small ICT businesses operating in Harris Street and contributing around 12% of the area’s total ICT workforce.

Harris Street also experienced the largest increase in ICT businesses between 2007 and 2012, growing by 24 establishments to 94 businesses in total.

Although the FES did not specifically identify tech startups, the study did show an increase in the number of workers employed by businesses in the ICT services sub-sector.⁵³ This sub-sector is represented by industries such as computer system design and related services, internet publishing and broadcasting and software publishing which can host workers with the specialised skills required of tech startup cofounders or employees.



In 2012, there were 782 ICT services businesses in the city, employing slightly more than 24,000 workers. Some 79% of businesses in ICT services employed up to 19 workers and were classified as small businesses.

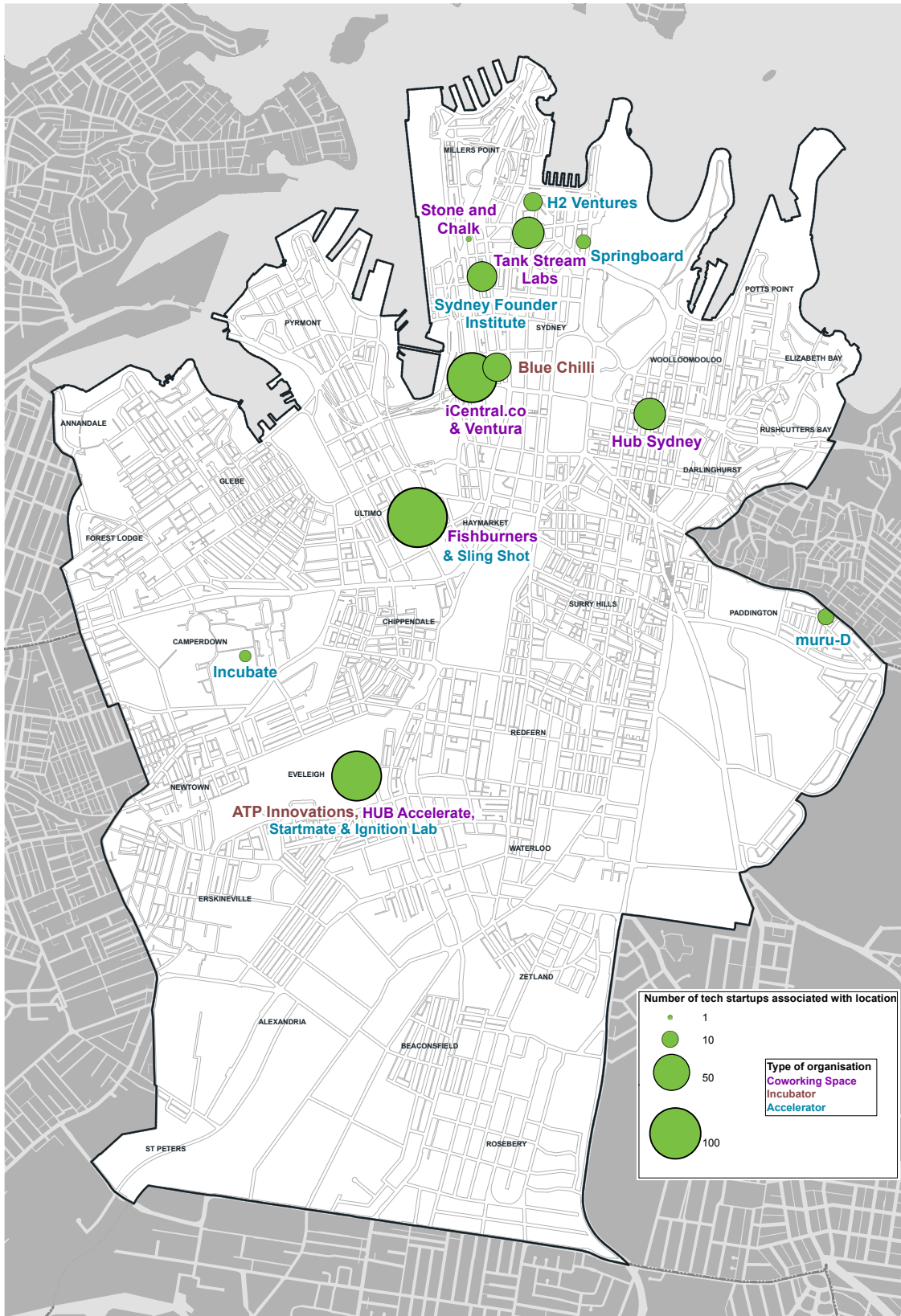
In 2012, 39 of the 40 software publishing firms in the city were small businesses and they employed around 61% of the city's entire software publishing workforce. Harris Street had the second-highest share of software publishing small businesses after the CBD and Harbour village, with 28.2%.

The relative importance of ICT services becomes even more apparent when examining the city's employment share at the national scale. According to the 2011 Australian Bureau of Statistics (ABS) Census, more than 56% of people employed in internet publishing and broadcasting and nearly 20% of people employed in software publishing in Australia worked in the city. The ABS statistical area of Pyrmont-Ultimo, which geographically aligns closely with the Harris Street village, was again noted as providing an important contribution to the nation's ICT services workforce. In 2011, nearly 21% of persons employed in internet publishing and broadcasting in Australia worked in Pyrmont-Ultimo.

The strength of these ICT service-oriented industries within the city reinforces its strong position in attracting individuals who, due to their specialised skills and talent, could be encouraged to launch, join or support tech startups.

Tech startup ecosystem: accelerators, incubators and co-working spaces

This is a May 2015 estimate of the number of tech startups housed by incubators and co-working spaces and the intake of accelerators per annum. Only the co-working spaces that focus on tech startups are included. Hub Sydney is a large co-working space and this is an estimate of the number of member companies which are tech startups. Other new spaces such as The Ventura anticipate a growth in membership. Stone and Chalk is accepting applications.



09

Sydney's tech startup ecosystem

An emerging ecosystem

People who found, work in, support and invest in tech startups refer to the sector as an ecosystem; various entities connect, link up, interact and help each other, strengthening the ecosystem while increasing their own value.

Individuals and small teams around Australia are organising themselves into startups that are launching global businesses.⁵⁵

Sydney has the biggest ecosystem in Australia, 55% larger than Melbourne's, six times bigger than Brisbane's and nearly eight times the size of Perth's.⁵⁶

However, the Silicon Valley ecosystem is 6.7 times larger than Sydney's, while New York's ecosystem is 2.6 times larger.⁵⁷ However, the differences can be in order of magnitude, for example, the relative level of investment attracted by each ecosystem.

“The beauty of the London startup ecosystem is that all parts of the startup value chain are world-class: universities and research institutions as an innovation engine; successful entrepreneurs and angel investors as mentors; a financing ecosystem that ranges from the early to the late stage; creative input and thinking from all of the arts, tech companies and large industries; and finally, some of the world's leading media companies.”

Philipp Moehring, Principal, Seedcamp⁵⁴

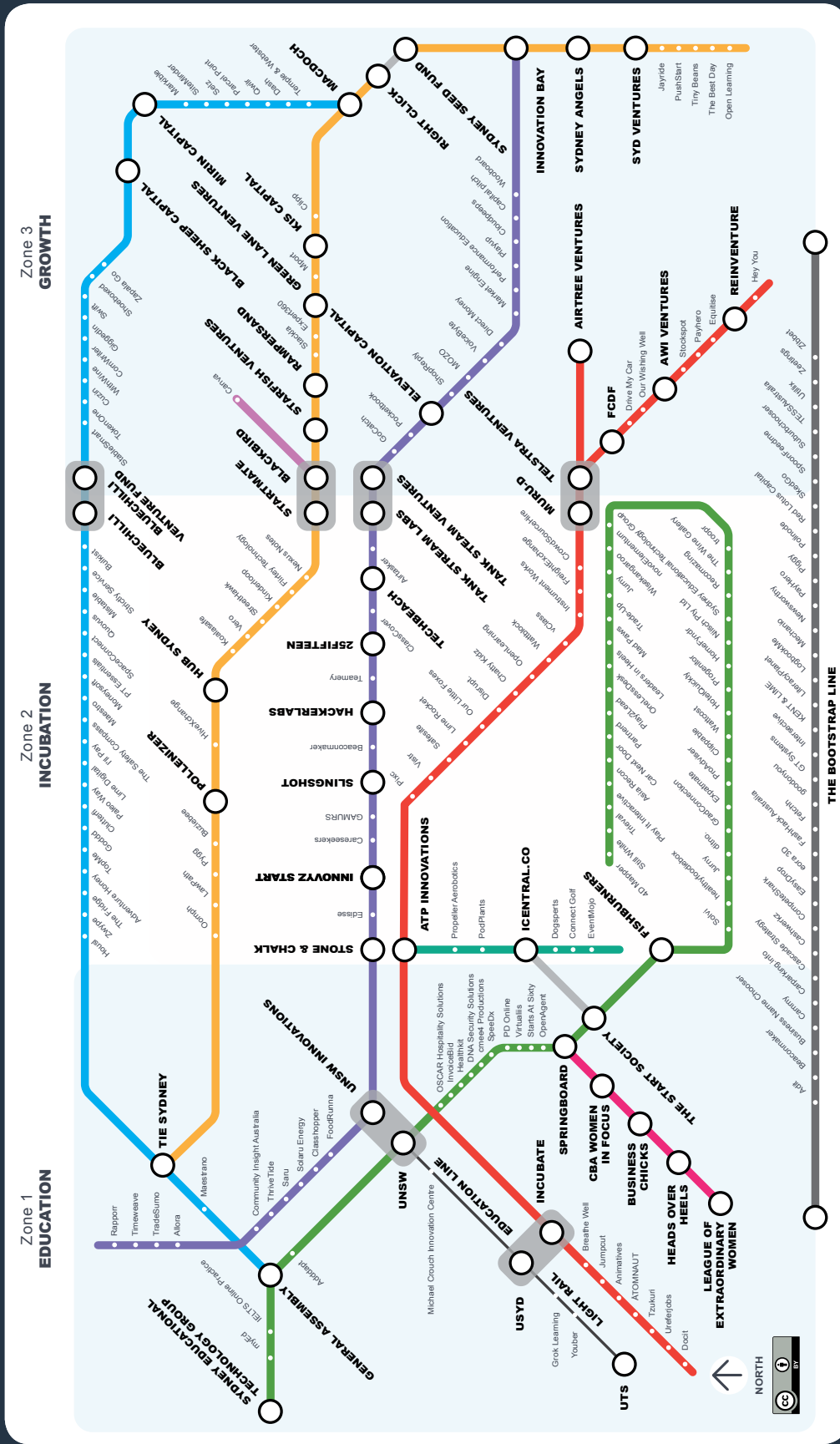
There is no definitive list of Sydney tech startups, but a Sydney startup 'map' created by startup incubator BlueChilli in 2013 names more than 100 startups in various stages of development, and the accelerators, incubators and investment organisations that support them. This map, on page 23, is expected to be updated after publication of this action plan.

Tech startups have the greatest impact on information-centric industries, which tend to cluster in big cities. These industries include financial services, advertising, marketing services, publishing, entertainment, real estate and design. Sydney is no exception. These industries are all driven by information, and their products are partly or entirely digital. Many of the startups disrupting these industries in Australia have emerged in Sydney, where the people with the talent and skills – and the customer base – for these industries are located.⁵⁸ More than three out of four Australian tech startups are targeting the information media and telecommunications sector.⁵⁹

2015 Startrail Map

A 2015 indication of startups and accelerators, incubators and investment organisations that support them.

Sydney Startup Network



Current Version: August 2015

Blue Chilli® Supporting Australian Startups
www.bluechilli.com



muu-D accelerator, muu-D.com

However, some startups targeting other industries, particularly in the 'clean tech' or 'bio tech' areas, such as those based at ATP Innovations, Australia's largest incubator.

Startups in Sydney are at different stages of development – characterised as 'early', 'growth' and 'late' stage – and cover many areas of business.

Sydney companies Atlassian and Freelancer.com are among Australia's global startup successes. Both are examples of a company in 'late-stage' development.

Atlassian

Atlassian was founded by UNSW graduates Scott Farquhar and Mike Cannon-Brookes in 2002 with a \$10,000 credit card loan. Today, Atlassian is a worldwide leader in software development, employing 750 staff and generating revenues of \$150 million per year. Boeing, IKEA, Cisco, Massachusetts Institute of Technology (MIT), Deutsche Bank, Nike, Adobe, United Parcel Service, Apache, NASA, EA, HP, HSBC, American Express and Sony are among Atlassian's customers.

Freelancer

Freelancer.com started in 2009 when Sydney-based entrepreneur Matt Barrie bought Swedish marketplace GetAFreelancer.com. Barrie improved the business model, growing the marketplace from 500,000 users to one that connects over 10 million employers and freelancers globally across 247 countries. The startup listed in 2013 on the Australian Securities Exchange (ASX), providing Freelancer.com with a market capitalisation of just over \$1 billion. It has more than 400 staff around the world.

Co-working spaces

Entrepreneurs are using co-working spaces to work, develop and collaborate. There are over 10 co-working spaces in the city – for example, Aeona, Desk X Space, Fishburners, Hub Accelerate, Hub Sydney, Tank Stream Labs, The Entourage, The Office, and Vibewire. Hub Sydney is a commercial tenant in the City's Creative Spaces William Street property.

Some, such as Fishburners, Tank Stream Labs and Hub Accelerate, focus more on supporting tech startups. More than 52% of Australian startups make use of a co-working space, highlighting the importance these places play in the ecosystem.⁶⁰

The following tables are estimates which compare the relative scale and impact of the co-working spaces (which focus on tech startups), accelerators and incubators in the city. The map on page 21 is an indication of their scale and location.



ATP Innovations, atp-innovations.com.au

IN THE CITY Co-working space	Number of startups housed**
Fishburners	130
iCentral.Co by The Start Society	75
Hub Sydney	30
Tank Stream Labs	30
Aeona	10
The Ventura	3*
Stone and Chalk	—*
Tyro	unknown

*taking applications

IN THE CITY Incubator	Number of startups housed**
ATP Innovations	60
BlueChilli	36

IN THE CITY Accelerator	Number of startups per year**
Sydney Founder Institute	27
BlueChilli	24
INCUBATE	16
H2 Ventures	10
muu-D	8
Ignition Labs	6
Slingshot	6
Startmate	6

**as at May 2015

Accelerators and incubators

Of the estimated 22 accelerators or incubators in Australia, about 10 are located in the city. They offer intensive investment and support (most in return for equity). For example, Australian Technology Park hosts ATP Innovations, Australia's leading technology business incubator, established in 2006. ATP Innovations hosts accelerators Startmate and Ignition Labs.

ATP Innovations won the 2014 Incubator of the Year and Technology Incubator of the Year 2014 awards from international industry leader, the National Business Incubation Association.

The Economist has also ranked Startmate as one of the world's leading accelerators.⁶¹

BlueChilli, Incubate, muu-D, and Sydney Founder Institute are also in the city.

The map on page 21 gives an indication of the number of startups housed by accelerators, incubators and co-working spaces in the city.

“Silicon Valley has the best combination of factors to provide for success, including the highest concentration of venture capitalists; highest density of tech entrepreneurs and engineers; great schools pumping out more smart grads every year; countless hugely successful VC-backed world-changing companies; pride in a merit-based system that rewards intelligence and hard work; and above all ... an attitude that supports collaboration to build incredible things.”

Rick Marini, Founder, BranchOut⁶²

Education institutions

The universities in or adjacent to the city drive innovation through research and the commercialisation of research. They also contribute to the pool of talented students, academics and graduates who often form startups: business entrepreneurs, creative designers and skilled software engineers.

UNSW has the Centre for Innovation and Entrepreneurship and the School of Computer Science and Engineering Incubator program. It recently opened the Michael Crouch Innovation Centre.

The University of Technology Sydney (UTS) offers entrepreneurship courses within UTS Business, including a collaboration with BlueChilli and the new Bachelor of Creative Intelligence program. In late 2014 it launched The Hatchery, a program aimed at giving students the skills needed to start their own businesses. It also launched Piivot – a partnership between Australia’s thriving ecosystem of creative and digital tech startups and our major cultural, media, commercial, government, technology and educational organisations.

iAccelerate is a University of Wollongong initiative which has a presence in Sydney within its Sydney Business School. Events such as the iAccelerate Entrepreneur Club meetings are aimed specifically at startups and a space is being developed for iAccelerate startups within the Business School premises.

The University of Sydney has the Entrepreneurship & Innovation Research Group, which delivers entrepreneurship units of study that are broadly available to students across the university. It also coordinates Genesis, a student startup competition. The University of Sydney union initiative, INCUBATE, was the first student union-run tech startup accelerator.

In addition, Sydney is home to National Information and Communications Technology Australia (NICTA), the CSIRO ICT Centre, five national centres of excellence and two cooperative research centres in ICT-related research fields.⁶³

Education

Organisations such as General Assembly, Pollenizer, Coder Factory and Fusion Labs provide valuable education and training programs in entrepreneurship and digital skills for individuals, startups and large companies.

Corporations

Sydney is a base for world-class, globally connected tech companies. For example, Google’s Australian headquarters is located in Pyrmont in the city.

Many technology, finance and telecommunications companies, including Optus-Innov8 Seed, Microsoft BizSpark, ANZ Innovyz, Telstra, Commonwealth Bank of Australia, Westpac and PwC focus on opportunities to work with startups. Almost all are located in the city.



Investors

Startups in Sydney have received funding from angel investors and venture capital firms. Angel investors are individuals who provide financial backing to a startup, often called 'seed funding', usually in exchange for convertible debt or ownership equity.

Associations of angel investors – who share research, pool their investment capital and provide advice to their portfolio companies – are growing in membership and increasing the amounts invested. Sydney Angels is one such example.

Venture capital (VC) is financial capital provided to early-stage startup companies with potential for high growth. The venture capital fund earns money by owning equity in the companies it invests in. It is typically the first round of institutional capital to fund growth after seed funding.

Venture capital and other investment firms that are investing in Sydney startups include Blackbird, Southern Cross Venture Partners, OneVentures, Elevation Capital, and Future Capital Development Fund, and new venture funds are being established, such as BlueChilli Venture Fund, Artesian Venture Partners and Westpac Reinventure.

Australian Securities Exchange ASX

ASX is the world's eighth largest stock exchange. It offers Australian tech startups capital investment, a respected marketing channel, reassurance to customers and suppliers that the company is well-governed and the distinct brand recognition that comes with the ASX stock code.

Three out of the five Australian "unicorns" – startups worth more than \$1 billion – are listed on the ASX. Top businesses reaping the rewards of an ASX-listing include Seek and REA Group, which have a market capitalisation of \$6.3 billion, followed by Carsales on \$2.5 billion.

The ASX is also steadily building its reputation in other countries for the ease with which tech startups can list and the availability of institutional money willing to back high-risk ventures.

American-based companies coming to the ASX for funding include LiveTiles, a company that provides cloud-based software to the business and education markets and AHALife a platform for selling curated luxury content.

Events

There are a number of events related to Sydney's tech startup ecosystem, such as REMIX Summit, SydStart, Tech23 and CeBIT, as well as meetups that are growing in membership, such as Sydney Tech Startup Meetup (3,968 members), Disruptive Startups Sydney (936 members), Sydney Startup Community (879 members), Startup Grind Sydney (835 members), and Lean Startup Sydney (794 members).⁶⁴

Media

As well as the mainstream business and technology sections in *The Sydney Morning Herald* and *The Australian Financial Review*, a number of online media report on and are sources of information about startups, for example, *Startup Daily* and *StartupSmart*.

10 Startup cities

“We want to be Europe’s leading startup hub. To achieve this, we all have to pull together: politicians, established companies, organisations that support businesses, chambers of commerce and professional associations, and – of course – entrepreneurs. For a long time, key market players were completely unaware of startups. Happily, that is now all in the past.”

Klaus Wowereit, Mayor of Berlin⁶⁵

Many governments in industrialised nations encourage entrepreneurship and startup activity to spur job creation and economic growth, although policy makers at the regional and municipal levels are closer to sources of innovation than those at the national level.⁶⁶

Supportive government policies may not be needed to seed entrepreneurial activity, but they can be critical in enabling a cluster to scale.⁶⁷

Government policy should therefore focus on tackling the bottlenecks and constraints that might otherwise inhibit a vibrant startup ecosystem, rather than picking winners by supporting investment in particular sectors or business models.⁶⁸

International government support

Governments across the world, including China, Germany, Israel, New Zealand, Singapore, Sweden, the UK and the US, have established significant programs designed to support tech entrepreneurs and foster the development of high-growth startups.⁶⁹

Local and regional governments in cities such as Adelaide, Auckland, Berlin, Brisbane, London, New York and Tel Aviv are focused on supporting tech startups.⁷⁰

Sydney startups are competing in this global marketplace without similar levels of support.

Local government support

In comparing the startup programs of city governments it is important to note that they vary across the world, as different governments have responsibility for different functions and cover different-sized geographical areas. The City of Sydney is directly responsible for a local area of 26 square kilometres and is part of the greater Sydney metropolitan area.

Berlin

The former mayor of Berlin, Klaus Wowereit, was a vocal supporter of the city’s startup ecosystem since being elected in 2001. His government established a startup delivery unit, located primarily in the mayor’s office, dedicated to implementing and encouraging all startup initiatives. Wowereit championed a number of startup-focused initiatives, including:

- implementing a ‘Berlin startup curriculum’ in the city’s universities to train entrepreneurs and academics in startup best practice
 - establishing a multilingual startup agency to provide practical advice and support to foreign entrepreneurs who have moved to Berlin
 - developing The Factory – a 16,000-square-metre startup campus and incubator in Berlin that provides flexible space for tech startups, established companies and investors, and houses a training centre for startups. Google was attracted as the anchor tenant and also contributed €1 million to the project
 - establishing a €100 million fund to support tech companies needing capital infusions of €3 million or more. The city’s funding will be leveraged by private investors.⁷¹
- There are also a number of other initiatives at play in Berlin and Germany more generally.
- Foreign entrepreneurs can obtain a three-year Entrepreneur Visa, which is granted on the condition of having raised seed funding. Recipients have the option to receive permanent residency and then citizenship. This infuses the local startup ecosystem with a regular flow of skilled entrepreneurs from around the world.



Chris Wilkins, Cofounder, podplants.com

- The German government is currently considering committing \$230 million from 2014–16, to provide angel investment rebates equivalent to 20% of the amount invested.
- German Valley Week is an annual program that takes 100 entrepreneurs for a week-long trade mission to Silicon Valley in California to foster learning and networking.⁷² The program – organised by the German Startups Association and led by Germany’s Federal Minister of Economics and Technology – aims to build a bridge between the startup scenes in Germany and the US.
- The German Silicon Valley Accelerator in Palo Alto, California supports German tech startups by providing mentoring, access to networks, introductions to angel investors and VC investors, as well as a three-month training program in Silicon Valley. It has support from the German Government and a number of corporate sponsors. A large proportion of the companies that take advantage of this opportunity are from Berlin, and the Berlin startup community benefits from the dissemination of knowledge and networks that these entrepreneurs bring back to the city.
- Berlin’s Long Night of Startups event brings together startups and major investors and potential partners, and offers the public an insight into the startup scene.
- Berlin’s VC fund ‘Technologie Berlin’ is a public funding instrument with a total fund volume of €52 million, and a ticket investment of up to €3 million to support leading Berlin-based startups.⁷³
- The relatively low cost of living is also a major factor in the growth of the Berlin startup ecosystem, which now includes between 2,500 and 3,500 startups.

London

London’s Mayor Boris Johnson, has been a strong advocate for the city’s startup ecosystem via his support for events and training programs, and by talking to the media about how important startups are to the city. In November 2014 he led a group of UK startups on a trade mission to Indonesia, Malaysia and Singapore with the aim of attracting foreign investment and raising the profile of the London startup ecosystem.

Tech City is a technology precinct located in the Shoreditch area of East London. Established by the British government in 2010 with support from the Mayor’s office, Tech City was based on an existing cluster of 15 to 20 technology companies around the Old Street Roundabout. The area has grown into a major European startup hub, with more than 5,000 technology companies currently located in the area.

Tech City has attracted a number of large tech companies, including a major Google campus, which has become a focal point for the local startup community. Between 2009 and 2012 the number of technology companies in London grew by 76%, representing 27% of all job growth. Approximately 582,000 people are now employed in the tech sector in London.



Fishburners co-working space, fishburners.org

Other UK startup support programs include:

- the London Co-Investment Fund, an A\$167 million early-stage fund catalysed by a A\$50 million commitment from the mayor's office and A\$120 million from private sector partners. The fund plans to invest in 150 companies over three years, creating 2,600 new jobs in London
- UK Angel CoFund, a A\$185 million early-stage matching fund to support the growth of an angel investment sector. Startups benefit from ready access to early-stage capital as a direct result of increased angel investment thanks to government matching of committed funds
- the Start-Up Loan scheme, a A\$285 million program to provide seed capital and mentoring to early-stage businesses
- the Enterprise Capital Fund program, a A\$440 million program to support the creation of new early-stage VC funds⁷⁴
- the Future Fifty program, which aims to identify and directly support 50 of the most promising high-growth companies with bespoke assistance and incentives
- aggressive inward investment attraction programs, including actively encouraging startups from other countries (including Australia) to relocate to Tech City in London, led by UK Trade and Investment. This strategy has injected a diverse range of experienced entrepreneurs into the London startup ecosystem
- an Entrepreneur Visa program, to encourage the best entrepreneurs from around the world to establish their business in the UK
- the Global Entrepreneur Programme, which encourages high-calibre, early-stage companies and entrepreneurs to set up in the UK by offering bespoke advice and capital raising assistance from a team of experienced entrepreneurs⁷⁵
- the Entrepreneurs' Relief program, which provides a reduced capital gains tax rate of 10% for startup founders who sell their businesses
- the Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS), which stimulate early-stage investment by providing upfront income tax relief and capital gains tax exemptions for angel investors
- the UK Innovation Investment Fund, a \$300 million fund that co-invests with private sector investors in high-growth, knowledge-based businesses
- the Business Finance Partnership, a \$2.2 billion program to improve growing businesses' access to finance by matching funds contributed by private investors
- changes to IPO regulations that aim to increase technology company listings
- the promotion of entrepreneurship in schools via business immersion programs and guest talks delivered by entrepreneurs
- competitions with \$28 million in prize money to encourage digital entrepreneurship.

The above policies and programs have significantly contributed to London becoming the location of the largest cluster of tech companies in Europe and one of the largest in the world. The city is now home to 32 startup accelerators and incubators, and 34,000 technology companies.



Jessica Ruhfus, Founder, collabosaurus.com

Tel Aviv

Tel Aviv's Mayor mayor, Ron Huldai, has been a longstanding supporter of the city's startup ecosystem. He was responsible for the creation of the city's major startup hub; The Library (a converted public library); several smaller startup spaces; and Campus Tel Aviv, a startup incubator run jointly with Google.

He has also lobbied the Israeli government on policy matters that affect startups, such as immigration policy and funding programs.

In 1991, Israel had almost no VC industry and few tech startups. As a direct result of the government's Yozma⁷⁶ program (in which it committed \$100 million to match private investment in new VC funds), Israel now boasts 33,000 startups and 70 VC funds with \$10 billion capital under management. It has more venture capital invested per capita than any other country, more tech startups per capita than any other country (second in absolute terms behind the US), and more NASDAQ-listed companies per capita than any other country (third in absolute terms). Israel has 120 high-tech companies on the NASDAQ; Australia has four.

The Israeli government allows angel investors to recognise startup investments as losses in the year of the investment. This effectively provides a tax break for those who have capital gains in other businesses or startups.

The government also provides tax incentives for foreign investment in new venture capital funds, and generous tax breaks for startups.

Singapore

The Singapore government is investing significant resources in initiatives and programs that support tech startups, including:

- the Incubator Development Program, a network of government funded incubators
- \$2.4 million contributed towards the expansion of the Joyful Frog Digital Incubator, Singapore's leading startup incubator
- funding for startup co-working spaces to ensure costs are low enough for all startups to access the spaces
- the Early Stage Venture Fund, which invests on a 1:1 matching basis to catalyse the formation of VC funds that invest in Singapore-based technology companies
- co-investment of up to \$440,000 in Singapore-based startups (to match private investors 85:15)
- the Startup Enterprise Development Scheme, a startup co-investment program in which the government invests alongside VC funds, matching dollar for dollar up to \$900,000
- the Business Angels Fund, a startup co-investment program in which the government matches approved angel investors on a dollar-for-dollar basis up to \$1.3 million
- the Technopreneurship Investment Fund, a \$1.1 billion venture fund that invests in local entrepreneurs and attracts high-growth venture-backed companies to Singapore. The government invests up to \$3 million in matched funding for eligible companies



Jacqueline Fuller, Director, Google.org

- the Technology Enterprise Commercialisation Scheme, in which the government provides funding of up to \$440,000 to support the development of proprietary ideas at the conceptualisation stage
- iSTART: Accelerate & Catalyse Entrepreneurship – a grants scheme that helps startups develop technologies by funding up to 50% of the salaries of five technical staff for one year, up to \$220,000
- the Young Entrepreneurs Scheme, a national program to develop entrepreneurship education in schools
- an overseas immersion program that places 400 university students each year as interns in startup hubs such as Silicon Valley
- the National University of Singapore's Entrepreneurship Centre (Singapore's national centre of excellence for entrepreneurship), which arranges for up to 150 students to undertake a one-year internship to Silicon Valley and other tech startup ecosystems
- the revision of bankruptcy laws to protect entrepreneurs who take normal business risks and fail
- concessional tax rates for startups – a corporate tax rate of 0% on the first \$90,000 of taxable income, 8.5% on the next \$180,000, and the normal corporate tax rate of 17% for income above \$270,000
- relaxed criteria for startups to list on the stock exchange
- the ability for startup employees to defer capital gains tax payments for up to four years under an Employee Stock Option Scheme.

Auckland

GridAKL is a 48,000-square-metre innovation precinct on the waterfront in Auckland, which houses and supports technology-based businesses, VC firms and angel investors, and acts as a hub for entrepreneurship in New Zealand in the same way as Tech City in London. Phase one of the development has been completed and further buildings will be completed over the next five years.

The GridAKL project was led by Auckland Tourism, Events and Economic Development, the city's economic development agency, and received a funding commitment of NZ\$17 million from Auckland Council.

Other government initiatives in New Zealand include:

- allowing foreign entrepreneurs to obtain an Entrepreneur Visa on the condition of having raised \$44,000 in funding. This benefits the local startup ecosystem by attracting a diverse group of experienced entrepreneurs to establish high-growth businesses in New Zealand
- the Visiting Entrepreneur initiative, which attracts experienced US entrepreneurs and angel investors to help accelerate the growth of a vibrant startup ecosystem
- the Incubator Support Program, a national network of 11 government-funded startup incubators
- grant funding of up to \$425,000 per startup company, supported by the government-funded incubators
- the Seed Co-investment Fund, a \$37 million early-stage direct investment fund that stimulates angel investment
- the New Zealand Venture Investment Fund, a \$150 million direct investment fund that stimulates VC investment
- regulatory changes that enable crowd-sourced equity funding, which commenced in April 2014

“Despite the rapid expansion of Australia’s startup ecosystem, we are still in the bottom half of the developed countries. Even though we are focusing more resources on helping new tech startups, fewer companies are breaking past the ‘startup’ phase to high growth. We need to know more than how to start up; we need to know how to scale up.”

Dr Jana Matthews, Managing Director, ANZ Innovyz START accelerator⁷⁷

- Kiwi Landing Pad, a startup support program in San Francisco, that helps New Zealand startups establish a presence in the US
- Callaghan Innovation, the country’s national innovation agency, which focuses on supporting high-growth technology-based businesses.

Brisbane

The City of Brisbane’s Digital Strategy has created a Visiting Entrepreneurs Program, which brings experienced entrepreneurs to Brisbane from around the world for periods of up to two weeks, during which time they intensively mentor and coach entrepreneurs in high-growth tech startups.

The City of Brisbane has established a small grants program, Brisbane City Lord Mayor’s Budding Entrepreneurs Program. Each year, the council awards \$1,000 to \$5,000 per recipient to around 20 young entrepreneurs who are establishing high-growth tech startups, to help them access quality support, education and mentoring. Brisbane’s libraries host the volunteer-led program CoderDojo, which teaches kids aged seven to 17 how to code.⁷⁸ The City of Brisbane has also sponsored a number of existing organisations in the ecosystem, contributing to the viability of several recently formed programs that have not yet achieved critical mass or financial sustainability.

Australian government support

The Australian Government’s Entrepreneurs Programme provides growth support to both established small to medium enterprises (SMEs) and technology startups. A key element of this program for startups is Accelerating Commercialisation, where startups are eligible for up to \$1 million each on a competitive basis, with substantial mentoring and advisory support from experienced former technology executives, founders and investors (‘Commercialisation Advisers’). Connections are also provided on a case by case basis to entrepreneurs, investors, channel partners and domain specialists. Over 300 of such, who donate their time, are formally registered on the Accelerating Commercialisation Expert Network.

Accelerating Commercialisation also manages the former Commercialisation Australia portfolio and the combined portfolio of over 600 companies nationwide including more than 200 in NSW, most of which are in the Sydney city region. It includes many emerging Sydney based international success stories including Canva, ingogo, Building IQ and IPscope.

Startups that have been successful in obtaining Accelerating Commercialisation support and established SMEs with turnover in the range \$1.5 million and 100 million are also eligible for support through other elements of the Entrepreneurs Programme. This includes growth advisory services and business growth support grants of up to \$20,000 and research connection support which can help SMEs to overcome technical challenges and collaborate effectively with research institutions.

Startups are also able to access the R&D tax incentive, which provides a non-competitive rebate of 43.5c in every dollar spent on eligible research activities. This is one of the most generous research incentives in the world.



“Mayors are in a position to facilitate connections and champion entrepreneurial efforts that provide real support to entrepreneurs. These actions may seem soft, but their impact can be profound, as entrepreneurs begin to be embraced by the city in which they live.”

**The Hon Elizabeth Kautz,
Mayor, City of Burnsville, Minnesota, USA⁷⁹**

Following the public exhibition of this draft action plan the Australian Government released a National Innovation and Science Agenda in December 2015.

It was a ‘whole-of-Government’ statement on innovation and it was announced by the Prime Minister. It’s catchphrase was ‘welcome to the ideas boom’ a reflection of the need for Australia to move from the ‘mining boom’ to capitalise on sustainable, innovative industry growth.

Areas of focus include: commercialisation of university research; commercialisation of ideas delivered through support for greater private sector investment; more funds for schools and students in STEM and computing; changes to tax regulation including incentives for investments in startups and reforms to insolvency laws; funding to boost the effectiveness of high performing incubators; the creation of five ‘landing pads’ overseas; a Digital Marketplace which aims to give smaller companies better access to government’s \$5 billion a year spend on ICT and a Public Data Policy statement which will formalise its commitment to open data and data-driven innovation.⁸⁰

The NSW Government program Innovate NSW connects technology-based small and medium enterprises (SMEs) and businesses in key sectors of the NSW economy, so they can develop globally competitive business-to-business (B2B) solutions that address compelling needs. The program focuses on rapidly developing business-driven solutions that use ‘enabling technologies’.

The key sectors include e-health; advanced manufacturing; energy technologies and services; online and interactive education; and transport, logistics and infrastructure.

The NSW Government, through NSW Department of Industry, offers three types of grant assistance:

- Minimum Viable Product grants provide matched funding of up to \$15,000 to help technology SMEs engage with potential business customers so they can demonstrate an idea, prove a concept, develop a prototype or customise a B2B solution.
- TechVouchers grants provide up to \$15,000 in matched funding so that technology SMEs can collaborate with a NSW research organisation to overcome a specific technical challenge or test a new technology.
- Collaborative Solutions provides grants of up to 25% of the project costs (to a maximum of \$100,000) for consortia that are working to develop an innovative solution.

The Australian and NSW governments also offer some more general small-business grants that startups would qualify for.

The NSW Government has supported a new financial technology (fintech) hub, Stone and Chalk, in the Sydney CBD, which provides subsidised office space rental for fintech startups. Stone and Chalk is the first project in a broader NSW Government policy to promote Sydney’s banking and technology capability by establishing a ‘financial services knowledge hub’ – that is, a collaborative research and advocacy platform. Other ‘knowledge exchange hubs’ include creative digital hub, known as Pivot, in Ultimo.

In early 2016, the NSW Government sought feedback on a NSW Innovation Strategy. At the time of publication this Strategy had not been released.

The City of Sydney acknowledges that it has a leading role to play in addressing the urgent needs of tech startups if Sydney is to remain a globally competitive city.

11

Contemporary challenges

“I can’t think of any other industry with a better wealth and productivity multiplier than technology, and the only people who are hiring people and growing are startups.”

Matt Barrie, Chief Executive, Freelancer⁸¹

Lack of entrepreneurs

In Australia, a large proportion of first-time entrepreneurs are in their thirties and forties.⁸² The majority of startup founders (25%) are between 30 and 35 years old. These entrepreneurs are often experienced, understand a market, and have capital and networks. However, young people – who are inherently more likely to take risks – are not becoming entrepreneurs. In Australia, just 6% of startup founders are under the age of 25.⁸³

In comparison, it is estimated that 20% of all students at the US universities CalTech, Stanford and Berkeley – and more than 50% of computer science students from those universities – form a startup before they graduate.⁸⁴

Lack of entrepreneurs tackling the global market

Startups follow a trajectory towards success that includes a number of stages: ideation and prototyping; incubation, where the concept is validated; commercialisation, where the business model is validated; and, finally, scaling to growth. The rate of progress may vary greatly.

The Sydney ecosystem is in early-stage development. As a result, many startups founded in Australia are at the lower end of the risk scale. They are often focused on small niches and domestic markets, or based on a business model with early revenue-generating opportunities. There are relatively few disruptive, high-risk startups tackling sizeable global markets.⁸⁵

In fact, while 30% of Australian startups estimate their target market size at over \$1 billion, 27% estimate it at less than \$10 million.⁸⁶ This is a figure for concern, as it doesn’t justify the risks in launching a startup – keeping in mind that scalable startups should be on a trajectory for a billion-dollar market cap. These aspirational startups grow into companies that define industries and create jobs.⁸⁷ This situation indicates the lack of ambitious Australian founders creating global startups and chasing huge markets.

However, research indicates that as an ecosystem grows, the appetite for risk also increases. For example, New York entrepreneurs, which are operating in a much larger ecosystem, pursue new markets 12% more often than Australian entrepreneurs.⁸⁸

Almost 5% of Australian companies are successfully scaling to become sustainable, profitable businesses – in comparison to 8% of US companies.⁸⁹

However, Australian companies that reach the scale stage sometimes incorporate outside of Australia to raise offshore capital, which could account for the reduced reporting of Australian companies that reach the scale phase.⁹⁰

Once Australian startups do reach this stage, they seem to have a low risk of failure. They have usually solved a technical problem, found a real market and can continue to grow.⁹¹



Jodie Fox, Cofounder, shoesofprey.com

Very few women entrepreneurs in high-growth companies

Women account for more than half of the population, but very few are entrepreneurs founding high-growth businesses.

In the US, for example, women lead only 3% of tech startups, and account for only 4% of the senior venture capital firm partners funding such startups. Only 3% of companies that received venture capital funding in the US had female chief executives.⁹³

The barriers in the US include that women's pay rate is not equal to men's, gender discrimination and harassment in male-dominated workplaces has been the subject of a number of lawsuits, unconscious negative bias has been demonstrated in choices not to invest in women-led companies, and the lack of coverage of successful women in the tech sector.

Further research is required to ascertain if women in Australia are facing the same barriers. However, only 4% of Australian startup founders are women.⁹⁴ As in the US, this leaves considerable untapped human potential. Typically, this is seen as a 'women's issue'; it is framed as a problem to be solved for the benefit of women, in the interest of gender equality. In fact, it is an economic issue that affects everyone.

Startups, especially high-growth startups, are key to job creation and leadership in new industries. Women now make up nearly half the workforce and more than half our university students, so their lack of representation in building high-growth firms has become a major economic deficit.⁹⁵ The nation has fewer jobs – and less strength in emerging industries – than it could if women's entrepreneurship were on par with men's. Women capable of starting growth companies may well be our greatest underutilised economic resource.⁹⁶

“The second most commonly reported problem for startups in Australia is the availability and affordability of talent, so leaving half of the potential workforce out of the equation is missing a significant opportunity.”

Murray Hurps, General Manager, Fishburners⁹²

Changing the face of business, particularly in the tech startup ecosystem, requires the involvement of men who care about the growth of the ecosystem, if not about the skills and talent of women and their right to full participation in the workforce in whatever industry they choose.

If we can remove the historical sexism and barriers limiting women from launching and scaling tech startups, it could generate economic growth and employment across the city.

Lack of skilled talent

As the quote above shows, the second most reported challenge for Australian startups is the availability of talent.⁹⁷ Australian tech startups report that they are unable to recruit enough skilled Australian workers.⁹⁸

Demand for computer science graduates doubled from 1999 to 2012, while applications for university ICT courses dropped by approximately 60%.⁹⁹

Google has a growing office in Sydney that brings engineering talent into the city, but the demand for great startup engineers still far outstrips supply.

Asian countries with strong or fast-growing startup ecosystems offer visa programs or other types of residency permits specifically for entrepreneurs – like South Korea's startup visa, Singapore's EntrePass, Hong Kong and Malaysia's investment visa, and Japan's visa extension for entrepreneurs. Countries such as Canada, New Zealand, the UK and the US also all have entrepreneur visas, meaning Australia is the only developed nation yet to implement entrepreneur-friendly immigration laws.¹⁰⁰

Attracting overseas talent can support investment in the local workforce because highly skilled workers from overseas can share knowledge with local employees.

“For Australian startups to be competitive globally, we need to be able to retain our talent and attract more of it from overseas.”

Dominic Woolrych,
Legal Product Manager, LawPath¹⁰¹

Entrepreneurial education and networks in early stages

Experienced mentors, investors and advisors who have developed tech startup businesses into global businesses are in short supply, simply because the Australian ecosystem is in early-stage development.

For example, in 2013, 53% of Australian startups did not have a mentor. Of the 47% who had a mentor, 99% thought that having one was helpful.¹⁰²

Connections of Australian startups with leading entrepreneurs and investors in other global cities that have vibrant startup ecosystems are limited, given the cost and restricted government support for international engagement in this sector.

Few high-school and university students are exposed to entrepreneurship education or practical training to help them launch high-growth businesses.

Many startups have founders who are interested in accelerating their business, but don't have access to the required support.

Currently, there are an estimated 210 accelerated startups in Australia, taking part in 12 different accelerators. Of the eight accelerators in NSW, six are in Sydney and all are located in the city.¹⁰³ About 18% of Australian startups took part in an accelerator in 2013.¹⁰⁴ NSW is home to an estimated 44% of accelerated startups each year.¹⁰⁵

On average, only 3% of applicants to the top five accelerators are accepted.¹⁰⁶ For example, Startmate accepts eight startups each year in a single batch, and has over 300 applications. Startmate is the only accelerator in Sydney that is not affiliated with a financial institution or telecommunications company, but which does provide some kind of investment.

With support, incubators and accelerators may be able to expand, or new accelerators could be created. They may also be well placed to provide entrepreneurship education and training, but will need support if they are to train and educate the companies in their programs as well as the broader startup community.

Government regulation

Government regulation is an obstacle to the growth of startup companies. While the tax regulations that applied to Employee Stock Ownership Plans (share schemes) have been changed, there is debate over whether this will assist the majority of tech startups in Australia. Crowdsourced equity funding is also complex and expensive.

Overseas ICT workers can provide much-needed skills and experience, but the restrictions to the 457 skilled migration visa create challenges for startups wanting to use overseas workers. However, changes to the Entrepreneur's Visa are expected to be operational in late 2016.

“The ecosystem has become quite large and is starting to demonstrate wins, but it is still fragmented and invisible in places. Now is the time for the community to work together for deeper impact.”

Phil Morle, Founder and Chief Executive, Pollenizer¹⁰⁷

“Space is becoming our primary concern, and we’d love to be able to focus instead on growing the ecosystem.”

Murray Hurps, General Manager, Fishburners¹⁰⁸

The ecosystem is fragmented

Several organisations and programs support startups operating in Sydney, but there is limited connectivity between them. This may be due to geographic dispersion, limited visibility and limited facilities.

‘Startup density’ is an important factor in growing successful ecosystems. That is, entrepreneurs and people who support them need to work in close proximity and benefit from frequent ‘collisions’, which enable them to rapidly share what they learn and build effective networks.¹⁰⁹

Auckland in New Zealand, for example, like many other cities, actively created startup density by establishing a large-scale startup cluster with GridAKL (see page 33).

The largest clusters of startup activity in Sydney are ATP Innovations in Redfern (a 6,500-square-metre incubator that has 60 startups and hosts two accelerators) and Fishburners, a 1,100-square-metre co-working space in Ultimo that houses around 100 tech startups.

The dispersion of startup activity across the City of Sydney may be diluting the potential of Sydney’s startups. The ability for co-working spaces to expand is critical to their business success and the growth of the entrepreneurial community. Co-working spaces also require office space that can accommodate a variety of uses (including co-working desks and team spaces), is affordable and is located in the same area as other technology entrepreneurs.

Lack of affordable space

When companies outgrow their co-working spaces or complete accelerator programs, access to affordable office space, again in close proximity to other entrepreneurs, is important.

The availability of office space and long-lease requirements can be an issue for fast-growing companies, which quickly outgrow office space but want to be in the Sydney CBD, where the public transport and character of the city is attractive to employees.

Spaces to hold conferences, training programs, pitching events, deal-screening meetings, ‘hackathons’, idea competitions and demo days are key to creating an environment where startup founders can learn from and meet other entrepreneurs.

Feedback from the startup ecosystem is that there is a lack of affordable, large-event space with audio-visual equipment, and affordable office space in the city for use by this emerging sector.¹¹⁰

Makerspaces

The maker movement, which emphasises teaching DIY skills in hardware, mechanical and industrial design has assisted many people to develop tech startups. Makerspaces give access to the specialized tools and talent required to build the ‘thing’ entrepreneurs want to create. Makerspaces are messy, noisy, and creative and for that reason they need their own spaces.

There have been a few makerspaces in the City’s local area, but none of scale which have been sustainable. Without makerspaces, the diversity of the startups that will form could be restricted.

“The test of any investment is the ratio of return to risk. Startups pass that test because although they’re appallingly risky, the returns when they do succeed are so high.”

Paul Graham, programmer, writer and investor¹¹³

Investment is in short supply

Funding for the Australian tech startup sector exists but is in short supply. There is considerable competition at all stages of the startup life cycle, particularly in the early stages.

The reality is that bringing new products to unproven markets is inherently risky and costly. Capital is therefore the lifeblood of startups, particularly pre-revenue startups that need to address operational costs as well as human capital. Unfortunately, traditional bank lending via business loans is ill suited to the high-risk nature of startups. Startups rarely qualify for traditional financing via bank loans because such loans are generally physical asset-based. Mobile applications, algorithms and patents cannot support a loan because their values are difficult to determine – or have not been realised yet.¹¹¹

More than 50% of startups fail, and the distribution of outcomes is asymmetrical; typically, around 90% of returns will come from 10% of startups in a portfolio.¹¹²

Supporting the increase in number of startups is therefore critical to expanding this ‘deal flow’ – that is, increasing the potential number of deals that can be invested in.

The termination of the Innovation Investment Fund program, announced in the Federal Budget in May 2014, contributed to the tougher fundraising environment for venture capital firms, and meant there was no new Government commitment to venture capital (VC) funds for the first time since 2007.¹¹⁵

Despite this, in 2014 VC investment across all industry sectors rose nearly fourfold year on year to \$516 million. A large part of this increase can be attributed to US-based Insight Venture Partners’ US\$250 million (\$266 million) investment in Campaign Monitor, a Sydney-based email marketing campaign developer. This was the largest ever single VC investment in an Australian technology company.¹¹⁶

“We have reached the point where a confluence of trends – digital disruption, shifts in the locus of economic power, globalisation and demographic change – each of which on their own would rank among the strongest economic forces the global economy has ever seen, are casting our world into a completely different reality.”

Catherine Livingstone, President, Business Council of Australia¹¹⁴

New commitments by Australian investors continued to decline in 2014, and they now account for 54% of all commitments to Australian private equity and venture capital.¹¹⁷

Nevertheless, even excluding this single deal, the dollar amount of venture capital investment in 2014 was still 89% higher than in 2013. This was supported by increased activity by corporate VCs, and to a lesser extent, VCs founded by startup entrepreneurs.¹¹⁸

In 2014, 73 companies received early-stage VC funding of just over \$100 million in Australia.¹¹⁹

Corporates and ‘super angels’ have stepped up to partially fill the funding gap for technology ventures, with most targeting the early investment stages.

However, Australia has one of the lowest rates of angel and venture capital investment in the world.¹²⁰

Global competition

Sydney’s businesses are exposed to new competition from companies operating all over the world. In addition, many technology companies established overseas – including Uber, LinkedIn and Dropbox – are now choosing to operate or open an office in Sydney.

Sydney’s industries have no choice but to transform; however, we can choose to create an environment that enables the creation and growth of local companies that become global companies.¹²¹

In addition, connecting local companies in other sectors – such as finance companies – with innovative local startups can help both participants innovate and respond to international and other business threats.

12

Focus and outcomes



Matt Barrie, Chief Executive, freelancer.com

The role of the City is to work with industry and government partners to help create a supportive environment in which entrepreneurs and innovation can flourish, in turn contributing to a tech startup ecosystem that can diversify, grow and develop.

The role of the City

Cities generate innovation through a wide range of networks. This is reinforced when creative people are located adjacent to financial and business activity, prompting the creation of new products, services or processes.

As set out in the City of Sydney Economic Development Strategy, the projects that we will deliver across all of the industry action plans fall under three strategic priorities:

1. **Strengthen Sydney's competitiveness** by creating a city that encourages business investment, attracts visitors and has the amenity and liveliness sought by current and future residents.
2. **Improve productivity and capacity** – by investing in the productive, transformative and social infrastructure needed to unlock the city from congestion; keep people and goods moving; and increase knowledge and capital flows – to enable workers at all levels to participate fully in the workplace and live close to their place of work.
3. **Promote opportunity**, and build on strong regional, national and global links and cross-sector networks, to support the continued development of strong industry clusters. The includes encouraging partnerships and collaboration to strengthen the established sectors as well as the entrepreneurial and small-business community within the city.

In identifying the issues of concern to the tech startup ecosystem and the actions needed to mitigate their effect, this action plan focuses on projects that are within the City's control.

Some issues identified in this plan are of great concern to entrepreneurs in tech startups but are not within our control or ability to influence – such as the restrictions on 457 visas, the cost of NSW stamp duty and the barriers to crowd-sourced equity funding. These issues are not addressed in our suggested actions.

However, the City does acknowledge that we have a role to play in advocating for changes at the state and federal government level as needed. Given that Sydney, and in particular the city area, is central to the national startup ecosystem, we can collaborate with other cities and startup advocacy groups to increase government focus on and support for tech startups.

“Ecosystems where people see opportunities to start a business, where people believe in the skills and knowledge they hold and where entrepreneurial successes are highly visible in the media are good indicators of the population’s entrepreneurial intentions and total early-stage entrepreneurial activity.”

PwC, The Startup Economy report¹²²

Focus for action

This Tech Startups Action Plan sets out five areas where we will focus our activities to support technology entrepreneurs and the Sydney tech startup ecosystem:

- 1. Build the entrepreneurial culture**
- 2. Create skilled and connected entrepreneurs**
- 3. Increase the density of the ecosystem**
- 4. Support entrepreneurs’ access to funding**
- 5. Develop entrepreneurs’ access to markets.**

Projects grouped in these areas respond to the issues, challenges and opportunities identified by the research and consultation undertaken by the City. The next sections of the action plan set out in more detail the five areas of focus and the major projects to be delivered. More detail on all the projects, including our project partners and timeframes, is provided in Section 18.

We acknowledge the need to adopt a ‘lean startup’ approach that allows us to change, cancel or add programs as quickly as possible.

Many of the actions identify how the City will act; however, each specific project will need to be scoped and implemented in partnership with other members of the ecosystem.

Outcomes

By being a meaningful part of the entrepreneurial community, we hope to enable an open, inclusive, skilled and highly connected ecosystem that has the capacity to flourish.

This will result in the city having:

- a strong entrepreneurial culture
- a plentiful supply of talent, with more skilled entrepreneurs – in particular women – creating high-growth technology businesses
- a healthy funnel of startups across the development life cycle
- a vibrant support system, including a highly developed funding ecosystem
- global recognition as Australia’s centre for innovative, globally successful tech startups.

13

Build the entrepreneurial culture

“... you want the conversation to be ‘my son’s going to be a doctor, lawyer or investment banker’ but also ‘my son or daughter is a maths wiz; she wants to be an entrepreneur’.”

Bill Barteo, Co-Founding Partner, Southern Cross Venture Partners¹²³

Why we need to act

Sydney needs more entrepreneurs creating high-growth companies if it is going to compete internationally.

Yet there is little awareness in our community about entrepreneurship and tech startups.

Another issue identified in discussions with the entrepreneurial community is the need to share success stories – to send a message that Sydney is an innovative city and that succeeding in this industry does not require relocating to Silicon Valley.

As it is an emerging area, there is also a need to undertake research that further investigates the economic, cultural and social impact of tech startups.

What we will do

The City can be an advocate for entrepreneurs and can partner with other champions to position Sydney as a global technology hub.

We will create an awareness program to increase the number of Sydney’s entrepreneurs and people engaging in tech startups.

The City will look for opportunities to work with our partners and entrepreneurs to foster a collaborative culture of sharing knowledge and ideas.

We have a role to play in helping the sector collect data and report on the impact of technology entrepreneurs and startups.

Major projects

Major projects to build the entrepreneurial culture and community include:

- creating an awareness program that raises the profile of Sydney’s entrepreneurs using channels such as events, media, advertising and other forms of communication
- helping universities and startups promote startups as a career option, by holding a startup career fair
- creating a Sydney tech startup festival, or events that encourage more Australians to become entrepreneurs and celebrate and promote the tech startup ecosystem
- developing and undertaking industry research that establishes baseline data and enables reporting over time
- considering establishing an advisory panel on tech startups to help the City determine other opportunities to support the ecosystem and ensure information is shared between industry members and the City.
- continuing to provide forums, such as CityTalks, to discuss innovation and entrepreneurship, and promote Sydney as a creative global city

Further details of all projects and programs are provided in Section 18.

14

Create skilled and connected entrepreneurs

Why we need to act

Teaching entrepreneurial and digital technology skills at all levels of education is critical to growing a robust startup ecosystem.

In all stages of startup formation, it is important to have information and advice delivered via events or mentors – particularly those who have successfully navigated through the growth stage.

However, Sydney has relatively few entrepreneurs with experience developing global companies, and the ecosystem in general is still in the early stages of development.

There is a demonstrated need for assistance in connecting entrepreneurs with resources and expertise from within the Sydney ecosystem and beyond.

Networks ensure access to capital, infrastructure and talent.

Few university students have access to entrepreneurship education or are exposed to the idea of creating a tech startup. However, internationally it has been demonstrated that young people are the most willing to embrace entrepreneurship and risk.

Sponsorship or grant funding can kickstart skills development and deepen the pool of expertise in Sydney. It can also provide the incentive for people to launch, test and explore startup companies (and possibly fail). These experiences are critical to a thriving entrepreneurial culture, skills development and the creation of even more startups.

What we will do

The City will continue to work with entrepreneurs and organisations to promote a skills-based culture of entrepreneurship.

We will play a role in increasing computer science and entrepreneurial skills in the community, particularly among young people.

The City is well placed to create opportunities for entrepreneurs, particularly women, to increase their business skills, access mentors and enhance their networks.

“It makes a huge impact every time there’s an entrepreneur at that (growth) stage in Australia. Whether or not it succeeds or doesn’t, it actually adds to the ecosystem significantly. Their experience is as important as money.”

**Mick Liubinskas,
Entrepreneur in Residence, muru-D¹²⁴**

Major projects

Major projects to create skilled and connected entrepreneurs include:

- implementing the City’s Knowledge Exchange Sponsorship program to enable entrepreneurs – and the organisations that support them – to coordinate education, mentorship and networking activities
- seeking partnerships and/or implementing the Knowledge Exchange Sponsorship Program to identify and address the barriers to women launching and scaling tech startups
- creating a Visiting Entrepreneurs Program that enables international experts to share information with the Sydney entrepreneurial community
- advocating for and supporting relevant, exciting and accessible early education in digital technology
- including digital technology and entrepreneurship education activities in library and youth programs
- supporting entrepreneurship education programs for primary school children, such as Club Kidpreneur or similar
- working with entrepreneurs and other partners to support universities to host incubators, create massive open online courses (MOOCs) or hold startup business plan competitions

- holding regular ‘Tech Startup 101’ education and networking seminars
 - working with partners to establish and develop practical business and entrepreneurship education and mentorship programs
 - exploring the creation of an Entrepreneurs Grant Program to enable entrepreneurs to gain skills and build networks.
- Further details of all projects and programs are provided in Section 18.

15

Increase the density of the ecosystem

“Geographical proximity facilitates ... networks through social collisions – this includes quick conversations passing someone in the street, an introduction to another member of the startup community, a coffee meetup or discussions in a co-working space.”

PwC, The Startup Economy report¹²⁵

Why we need to act

A collaborative culture drives the beneficial effects of networking but it can't exist without geographic clustering, which creates natural momentum for members of the startup community to interact with each other by sharing ideas, mentoring and partnering.¹²⁶

Density is critical to this interaction and connection, and we can play a role in increasing the geographic density of the startup ecosystem.

Startups that grow from co-working spaces 'graduate' to occupying individual office space but want to continue to be located in the inner city, in proximity to existing entrepreneurial and investment networks.

As such, affordable office rent is critical to the ability of these startups to grow.

Organisations that support the growth of startups, such as incubators and accelerators, need support if they are to scale. They also need event and office space, often on a short-term basis, to incubate teams, and hold pitches and similar events.

What we will do

We can optimise the City's property portfolio and infrastructure assets so they support our economic development goals.

The City's Creative Spaces program currently provides affordable rental accommodation to co-working organisations that support tech startups if the City considers it to be a creative enterprise.

We can work with government partners, businesses and the entrepreneurial community to investigate creating an Entrepreneurship Centre, using innovative funding models, to act as a focal point for entrepreneurial activity in Sydney.

The City will look for additional opportunities within its own property portfolio, as well as bringing property owners and businesses together to work collectively on providing office or event space on an affordable rental or 'in residence' basis.

We will consider using voluntary planning agreements and planning zoning to encourage more short- or long-term innovation spaces (for example, co-working facilities and affordable office space) in existing tech startup clusters.

We will explore the ongoing need for and benefits of providing affordable office and event space as we implement this action plan.



Peter Cooper (iCentral), Riley Batchelor (General Assembly), Lord Mayor Clover Moore, Melanie Perkins (Canva), Kim Heras (25fifteen)

Major projects

Major projects to increase the density of the ecosystem include:

- working with partners to establish Sydney’s need for a focal point that substantially increases the density of the ecosystem; hosts startup-related activities and events; and provides a base for tech-based businesses, incubators, accelerators, venture capital firms and angel investors
- working with the private sector, universities and other local stakeholders to investigate how to make office accommodation that has access to suitable infrastructure and is available for entrepreneurs, particularly in areas where tech startups are clustered.
- continuing to provide affordable rental space, as part of the City’s programs, to entrepreneurs or organisations that support the growth of tech startups, on a long- or short-term basis

Further details of all projects and programs are provided in Section 18.

16

Support technology entrepreneurs' access to funding

Why we need to act

Limited access to capital has been a longstanding concern for startups, along with the lack of tax incentives for investors to invest in startups.¹²⁸

Australia has one of the lowest rates of angel and venture capital startup investment in the world.¹²⁹

A lack of early-stage capital prevents new startups from forming and growing, which means the Sydney community loses the opportunity to benefit from innovative, high-growth, globally successful companies and their direct economic, employment and innovation impacts.

What we will do

The City can support industry activities that increase awareness of startups among investors and promote investment support.

We can also help the tech startup ecosystem connect entrepreneurs with investors and businesses.

“In a world where we will no longer be able to rely on natural resources for our economic wellbeing, the need for smart companies with smart jobs to deliver our economic future becomes paramount. We need to nurture these companies.”

Katherine Woodthorpe, former CEO, Australian Private Equity and Venture Capital Association (AVCAL)¹²⁷

Major projects

Major projects to support technology entrepreneurs' access to funding include:

- helping angel investor associations or other members of the ecosystem hold investor recruitment and education events
- coordinating or supporting industry events that celebrate and educate interested parties about innovative capital raising
- coordinating or supporting industry activities that connect entrepreneurs with investors.

Further details of all projects and programs are provided in Section 18.

17

Develop technology entrepreneurs' access to markets

Why we need to act

To create a global business, expansion into large markets such as the US or China is essential. However, this can be difficult for Sydney startups that don't have business and investor relationships in that country.

Promoting Sydney's technology entrepreneurs and startups to the City of Sydney's stakeholders and the broader community is key to increasing interest in products or services prior to and after their release.

Governments are also one of the largest buyers of technology, so the City and its community can benefit directly from innovative business solutions offered by tech startups.

However, very few startups can compete with large, established companies in complex government procurement processes.

Although City-based data is inherently tied to a limited geography and may not provide opportunities for a global startup, by accessing this data local startups may be able to create, develop and test ideas that solve the City's problems and create viable products or services.

What we will do

We will leverage the City's international relationships with other city governments and organisations to help the tech startup ecosystem gain a foothold further afield.

We will continue to act as a relationship broker, sharing information and connecting startups with consumers, potential investors, cofounders and other stakeholders in the ecosystem.

We will assess if tech startups need the City to encourage more opportunities for them to become suppliers through our procurement practices.

The City can open up its data resources to spark ideas and tools that serve its business needs and the community, which might create new business opportunities.

The City of Sydney Digital Strategy, currently in development, will acknowledge the value of entrepreneurs and opportunities in supporting the growth of the tech startup ecosystem.

Major projects

Major projects to develop technology entrepreneurs' access to markets include:

- leveraging the City's sister-city relationship with San Francisco or Guangzhou to strengthen the exchange of knowledge and investment
- investigating increasing the number of Sydney-based companies the Advance Innovation Program supports, and boosting its impact
- investigating if a change in the City's procurement practices would benefit tech startup entrepreneurs
- considering funding competitions or other activities that create, develop or test ideas for technology solutions to city problems, or enhance the experience of living and working in the city
- designing and administering data stores to promote the initial and ongoing quality and use of this data as an enterprise and community asset
- publishing appropriately classified data to encourage innovation and benefit our community.

Further details of all projects and programs are provided in Section 18.

18 Actions

- Changes to existing City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ◆ New City programs, services and/or events
- ★ Advocacy, facilitation and/or coordination
- Infrastructure

Major projects are highlighted in green.

1 Build the entrepreneurial culture and community

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Help the ecosystem create data, and report on the economic, cultural and social impact of entrepreneurs and tech startups	1.1 ◆	Work with entrepreneurs and organisations in the tech startup ecosystem to develop and undertake research that establishes baseline data and enables reporting over time	Tech startup ecosystem Educational institutions		✓		
Increase awareness of Sydney's entrepreneurs and tech startup, ecosystem to increase the number of people engaging and investing in startups	1.2 ◆	Create a tech startup festival or events that encourage members of the community – particularly women – to become entrepreneurs, and that celebrate and promote the tech startup ecosystem. Examples include a Startup Spring Festival, Startup Walkabout and Startup Weekend, or an event similar to Berlin's Long Night of Startups	Tech startup ecosystem		✓		
	1.3 ◆	Devise an awareness campaign using media, advertising, signage and digital media channels Generate positive media stories using external and internal communication channels Promote tech startup ecosystem events through the City's relevant communication channels, e.g. What's On calendar and e-newsletter	Tech startup ecosystem		✓		



Martin Orliac, former Chief Marketing Officer, Michael Dovey, Founder, aroundyou.com.au

1 Build the entrepreneurial culture and community (continued)

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Increase awareness of Sydney's entrepreneurs and tech startup ecosystem to increase the number of people engaging and investing in startups	1.4 ○	Ensure information about the City's initiatives is shared with entrepreneurs in the tech startup ecosystem so they can further promote awareness and disseminate relevant information about the City's initiatives		✓			
	1.5 ○	Hold a regular City of Sydney business education and networking seminar that provides an introduction to the Sydney ecosystem	Tech startup ecosystem	✓			
	1.6 ○	Provide forums, through the City Conversations program, to discuss innovation and entrepreneurship, promote Sydney as a creative global city and showcase successful entrepreneurs		✓			
	1.7 ◆	Investigate a central platform that delivers information and resources to – and promotes awareness of – Sydney's tech startup ecosystem	NSW Government Tech startup ecosystem			✓	
	1.8 ◆	Formally acknowledge the contribution of entrepreneurs and other members of the tech startup ecosystem, for example, through a Sydney innovation or young entrepreneur award		✓			
	1.9 ◆	Promote startups as a career option to university students, for example, by holding a startup careers fair	Tech startup ecosystem Universities			✓	

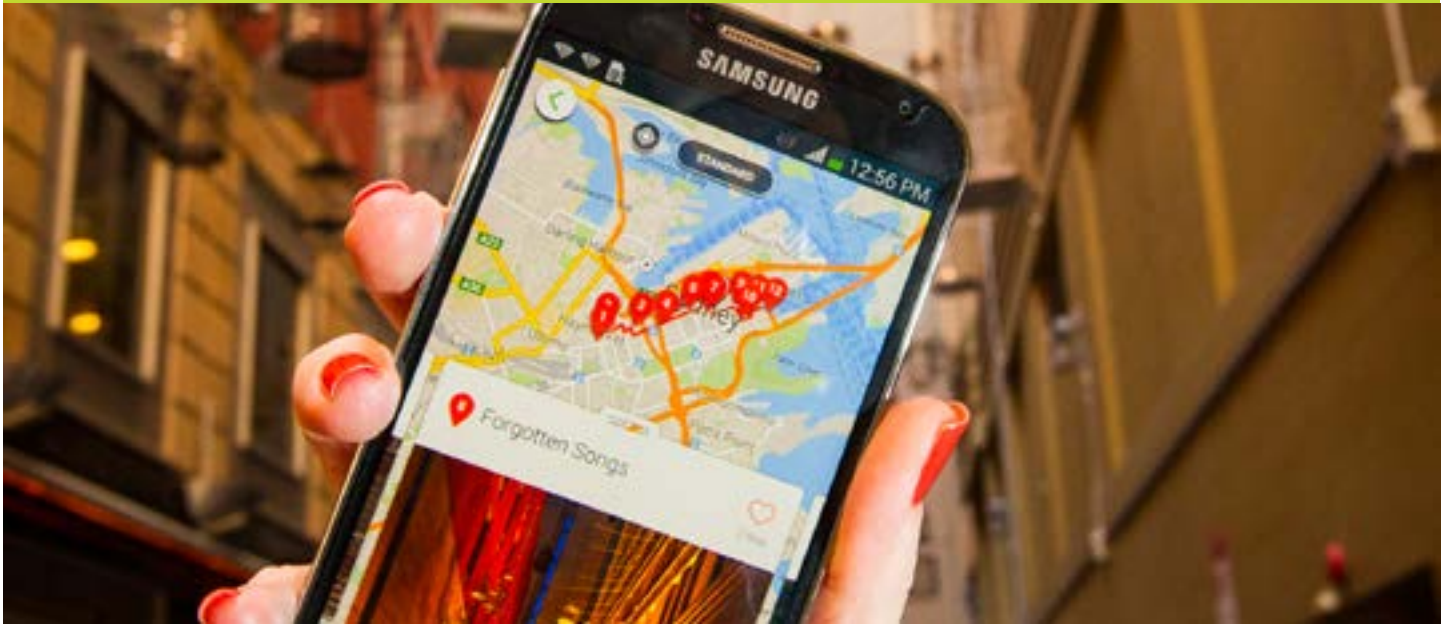
- Changes to existing City programs, services and/or events ■ Changes to City regulatory processes or planning systems
 ◆ New City programs, services and/or events ★ Advocacy, facilitation and/or coordination □ Infrastructure



1 Build the entrepreneurial culture and community (continued)

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Partner with other startup champions to increase support for tech startups and position Sydney as a global tech startup city	1.10 ★	Work with other capital cities, StartupAUS and other members of the ecosystem to create a strong and coordinated advocacy group that increases government focus on and support for tech startups				✓	
	1.11 ★	Devise an advocacy campaign that enables the Lord Mayor and Councillors to promote the merits of entrepreneurs and the value of the tech startup ecosystem, and to be active participants the ecosystem			✓		
	1.12 ◆	Consider establishing an advisory panel on tech startups to help the City determine other opportunities for supporting startups, and ensure information is shared between industry and Council (similar to the Retail Advisory Panel)	Tech startup ecosystem			✓	
	1.13 ○	Ensure the ecosystem is included in Sydney's international marketing and engagement campaigns	NSW Government	✓			
	1.14 ★	Continue to work collaboratively with the NSW Government to realise the objectives of its Industry Action Plans, where they relate to tech startups	NSW Government	✓			
	1.15 ○	Ensure the City of Sydney Digital Strategy acknowledges the value of entrepreneurs and opportunities to support the growth of the tech startup ecosystem			✓		

- Changes to existing City programs, services and/or events
- ◆ New City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ★ Advocacy, facilitation and/or coordination
- Infrastructure



2 Create skilled and connected technology entrepreneurs

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Increase business education, entrepreneurial skills and access to mentors and networks, and foster an entrepreneurial culture	2.1 ★	<p>Seek partnerships and/or implement the Knowledge Exchange Sponsorship Program to identify and address the barriers to women launching and scaling tech startups</p> <p>In particular, provide support for women to access co-working spaces, education and mentoring, accelerators and investment – for example, by sponsoring the Springboard Enterprises Australia accelerator</p> <p>Ensure women are represented, with a goal of 50%, when the City creates programs or sponsors industry activities</p>	Tech startup ecosystem		✓		
	2.2 ◆	<p>Create a visiting entrepreneurs program, and investigate partnerships with other Australian cities to secure international entrepreneurs</p>	Brisbane Marketing City of Melbourne Tech startup ecosystem		✓		

- Changes to existing City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ◆ New City programs, services and/or events
- ★ Advocacy, facilitation and/or coordination
- Infrastructure



2 Create skilled and connected technology entrepreneurs (continued)

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Increase business education, entrepreneurial skills and access to mentors and networks, and foster an entrepreneurial culture	2.3 ◆	Implement the Knowledge Exchange Sponsorship Program or develop new projects that: <ul style="list-style-type: none"> –enable expertise to be shared and skills to be developed within the startup ecosystem, via education and networking events such as SydStart –provide practical business education relevant to entrepreneurs – for example, by facilitating a ‘lean launchpad’ course –establish or support mentorship programs relevant to entrepreneurs, particularly women –link entrepreneurs who are looking for potential partners or cofounders –encourage universities to host incubators, create MOOCs, or hold business plan or startup competitions –enable entrepreneurs and others to make meaningful connections that lead to strategic partnerships across industry sectors – such as the 66 Meet-Ups network 	Tech startup ecosystem		✓		
	2.4 ○	Investigate creating an Entrepreneurs in Residence program, where the City engages a successful startup founder to help startup founders in leading incubators and accelerators	Tech startup ecosystem				✓

- Changes to existing City programs, services and/or events
- ◆ New City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ★ Advocacy, facilitation and/or coordination
- Infrastructure



EngineRoom co-working space, enginerm.com

2 Create skilled and connected technology entrepreneurs (continued)

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Increase business education, entrepreneurial skills and access to mentors and networks, and foster an entrepreneurial culture	2.5 ○	Enable the City's landmark and community venues to be used by the tech startup ecosystem (including businesses) for educational or networking events at a reduced rate or free of charge			✓		
	2.6 ○	Investigate creating an Entrepreneurs Grant Program to help technology entrepreneurs, particularly women, gain skills, build networks and launch companies				✓	
	2.7 ◆	Work with Business Events Sydney to attract a major international startup event such as TechCrunch Disrupt	Business Events Sydney			✓	
	2.8 ◆	Help NSW Government identify, create and promote business services relevant to tech entrepreneurs	NSW Government	✓			

- Changes to existing City programs, services and/or events ■ Changes to City regulatory processes or planning systems
 ◆ New City programs, services and/or events ★ Advocacy, facilitation and/or coordination □ Infrastructure



Naomi Simson, Founder, RedBalloon at CeBIT

2 Create skilled and connected technology entrepreneurs (continued)

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Increase computer science education and entrepreneurial skills in the community, especially among young people	2.9 ★	Devise an advocacy campaign to support relevant, exciting and accessible early education in digital technology, particularly for girls		✓			
	2.10 ○	Include digital technology education activities in the City's childhood and youth programs – for example, CoderDojo	Tech startup ecosystem		✓		
	2.11 ○	Include digital technology courses in the City's IT education series offered by libraries, including sessions on how to code	Tech startup ecosystem		✓		
	2.12 ◆	Support initiatives that develop entrepreneurial skills in young people, by including programs in our youth and out-of-school-hours services – for example, Club Kidpreneur	Tech startup ecosystem		✓		

- Changes to existing City programs, services and/or events
- ◆ New City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ★ Advocacy, facilitation and/or coordination
- Infrastructure



Tank Stream Labs co-working space, tankstreamlabs.com

3 Increase density of the tech startup ecosystem

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Investigate the creation of an Entrepreneurship Centre	3.1 <input type="checkbox"/>	Work with partners to establish the need in Sydney for a focal point – of significant density – for startup-related activities and events, which also provides a base for tech-based businesses, accelerators, incubators, VC firms and angel investors Determine whether a focal point is beneficial, and how existing resources could be expanded to create this or if a new facility is required Investigate innovative funding models to enable the creation of this Entrepreneurship Centre	ATP Innovations Universities State and federal government Tech startup ecosystem			✓	
Use planning regulations to encourage more innovation spaces and/or affordable office spaces	3.2 <input checked="" type="checkbox"/>	Consider using voluntary planning agreements and planning zoning to encourage more short- or long-term innovation spaces (including co-working facilities and affordable office spaces) where tech startups are currently clustered			✓		

- Changes to existing City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ◆ New City programs, services and/or events
- ★ Advocacy, facilitation and/or coordination
- Infrastructure



3 Increase density of the tech startup ecosystem (continued)

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Create affordable work spaces	3.3 <input type="checkbox"/>	Provide affordable rental space as part of the City's Creative Spaces program, which is accessible to entrepreneurs in tech startups where the City considers it to be a creative enterprise		✓			
	3.4 <input type="checkbox"/>	Review the Grants and Sponsorship program and guidelines to ensure streamlined processes and communications, refined key performance indicators, and appropriate use of properties (by function and location) to ensure program outcomes are maximised for the City and the tech startup ecosystem			✓		
	3.5 ◆	Work with the private sector, universities and other local stakeholders to investigate how to make office accommodation – with access to suitable digital infrastructure – available for entrepreneurs in tech startups on an affordable rental or 'in residence' basis, particularly in areas where tech startups are currently clustered	Educational institutions Tech startup ecosystem Property owners Large companies			✓	
	3.6 ★	Investigate the opportunities for partnership with educational institutions and other appropriate organisations to offer 'makers' access to equipment and facilities	Educational institutions Tech startup ecosystem			✓	

- Changes to existing City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ◆ New City programs, services and/or events
- ★ Advocacy, facilitation and/or coordination
- Infrastructure



4 Support technology entrepreneurs' access to funding

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Increase the number of informed investors	4.1 ◆	Implement the Knowledge Exchange Sponsorship Program or create new projects to support: <ul style="list-style-type: none"> – angel investor associations or other members of the tech startup ecosystem to hold investor recruitment education events – industry events that celebrate and educate others about innovative capital raising – startups – particularly high-growth companies and those led by women – to connect with investors. Springboard Enterprises is one example 	Sydney Angels AngelEd Angel Education Australia Scale Investors Springboard Enterprises Tech startup ecosystem		✓		

- Changes to existing City programs, services and/or events ■ Changes to City regulatory processes or planning systems
 ◆ New City programs, services and/or events ★ Advocacy, facilitation and/or coordination □ Infrastructure



5 Develop technology entrepreneurs' access to markets

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Encourage more opportunities for entrepreneurs to increase business	5.1 ○	Leverage the City's sister-city relationship with San Francisco and Guangzhou to strengthen knowledge and investment exchange	San Francisco City and County Office of Economic and Workforce Development Guangzhou Municipal Government NSW Government			✓	
	5.2 ◆	Investigate increasing the number of Sydney-based companies the Advance Innovation program supports and boosting its impact	Advance Innovation			✓	
	5.3 ○	Implement the City's Knowledge Exchange Sponsorship Program or create partnerships to support events and activities that allow Sydney's entrepreneurs to showcase their company to potential consumers or investors – like CeBIT StartUp, for example.	Hannover Fairs Tech startup ecosystem	✓			
	5.4 ○	Act as a relationship broker, sharing information and connecting entrepreneurs with City stakeholders that could be potential consumers or investors	Tech startup ecosystem	✓			

- Changes to existing City programs, services and/or events
- ◆ New City programs, services and/or events
- Changes to City regulatory processes or planning systems
- ★ Advocacy, facilitation and/or coordination
- Infrastructure



Ben Richardson, Dave Greiner, Cofounders, campaignmonitor.com

5 Develop technology entrepreneurs' access to markets (continued)

What will we do?		How will we do it?	Which partners do we need to make it happen?	Timeframe			
				On-going	Now	Next	Later
Encourage more opportunities for startups to become suppliers to the City through its procurement practices	5.5 ○	Review our policies and procedures and establish tech startup procurement guidelines if it seems these are relevant to tech entrepreneurs Investigate if a City of Sydney 'Procurement 101' information session is of interest and relevant to tech entrepreneurs, to educate them on how to apply for City requests for tender	Tech startup ecosystem			✓	
Open up the City's data resources to spark ideas and tools that serve business needs and the community	5.6 ◆	Consider funding competitions or development labs that create technology solutions to City problems, or that enhance the experience of living and working in the city, and that may provide business opportunities	Tech startup ecosystem			✓	

- Changes to existing City programs, services and/or events ■ Changes to City regulatory processes or planning systems
 ◆ New City programs, services and/or events ★ Advocacy, facilitation and/or coordination □ Infrastructure

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Measuring success

Overview

We devised the actions set out in this plan as a way to create an environment in which tech startups can flourish.

The City understands that the success of the tech startup ecosystem in Sydney will be influenced by not only the actions set out in this plan, but by factors as diverse as global economic conditions, Australia's macro-economic factors, government policies, technology trends, changes in consumer behaviour and the actions of individual business owners.

Nevertheless, it is important to understand and monitor broad trends in the sector, and to use this information to review and influence priorities and actions.

Indicator framework

The City of Sydney has developed a community indicator framework – a multidimensional approach to measuring wellbeing – which addresses the combination and intersection of the social, economic, environmental, cultural and governance conditions that exist in the city.

The indicators used to track change in the tech startup ecosystem will determine the community-level indicator of success: dynamic, resilient local economies.

Tech startup ecosystem indicators

Creating baseline data about the ecosystem is a key project resulting from this action plan.

We will use a range of quantitative indicators – such as employment; the number of accelerators, incubators, co-working spaces and active VC firms; education and networking events; the amount of investment; and the number of IPOs and exits – to track changes in the ecosystem over time.

The City may develop additional indicators as we identify new information sources.

The indicators will not be absolute measures of performance – rather, they will signal trends in the sector.

The table in Section 21 sets out the indicators, the desired trend or target, and the frequency of reporting.

20

Implementation and monitoring

Timeframe

This is intended to be a 10-year plan. We have prioritised the projects identified in this plan (see Section 18 for more information) according to the current needs of the sector, and the resources and capacity of the City.

We have identified indicative timeframes for the commencement of projects as follows:

- **Now:** projects and programs underway or commencing in the near future
- **Next:** projects and programs commencing in the medium term
- **Later:** projects and programs to commence in the medium to longer term.

Each year, we will confirm commencement dates for projects led by the City and as these projects are further developed allocate the budgets and resources needed to deliver them.

Review and monitoring

This action plan is based on the findings of extensive research and consultation. It also takes account of the NSW Government's Industry Action Plans for the Creative Industries and Digital Economy.

However, the tech startup ecosystem is dynamic, so these priorities and projects will likely change. Identified projects may not be required, and new priorities may emerge.

We will report to Council quarterly regarding our progress with the identified projects.

We will report on our progress in achieving targets or identifying trends on an annual basis, even though some data will not be refreshed this frequently.

We will assess priorities annually, based on the outcomes achieved and as new information on the needs of the sector becomes available.

We will undertake a major review at the end of the first five years of the action plan being implemented.

21

Performance measures and baseline data

Community indicator framework: dynamic, resilient local economies

Indicator	Measure	Trend or target	Reporting frequency
Economic diversity	Number of new businesses	Increase	Five-yearly from 2007

Other indicators could include:

Indicator	Measure	Trend or target	Reporting frequency
Economic growth	Number of startups	Increase	Yearly
	Number of co-working businesses and/or number of tech startups housed by co-working spaces	Increase	Yearly
	Amount of venture capital investment in startups	Increase	Yearly
	Amount of angel investment in startups	Increase	Yearly
	Number of tech startup IPOs or exits	Increase	Yearly
Vibrant support system	Number of networking and education events supported by the City of Sydney	Increase	Yearly
	Investment in networking and education events supported by the City of Sydney	Stable or increase	Yearly
	Number of participants attending networking and education events supported by the City of Sydney	Stable or increase	Yearly
	Feedback from participants attending events or programs supported by the City of Sydney	Positive	Yearly
	Number of startups accessing City of Sydney affordable rental space	Stable or increase	Yearly
Global recognition	Ranking on Innovation Cities Global Index	Increase	Yearly
	Ranking on Compass Global Startup Ecosystem	Stable or increase	Yearly

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Engagement

A strategic approach to community consultation ensured the City was informed by the community about the challenges and opportunities facing the Sydney tech startup ecosystem and the role the City could take in addressing them.

This was important in both developing the draft action plan and during the public exhibition of the document. The community engagement during this time ensured that members of the Sydney tech startup ecosystem were informed about the draft action plan and encouraged to provide comments which would inform the City's final plan.

The City engaged the community via events, briefings, advertising, printed materials, media, social media and the Sydney Your Say website. The draft action plan was on public exhibition from 18 August to 11 November 2015. The community had the opportunity to comment on the draft plan by completing a survey, participating in an online discussion forum or emailing a submission.

In total, 1,178 people downloaded the action plan and 450 copies were distributed. Feedback was received from 344 people via an online survey and 20 through an online discussion forum while 32 organisations or individuals emailed submissions. The consultation activity reached the target community as demonstrated in the number and range of participants which included tech startup entrepreneurs, employees and supporters, professionals in corporate businesses, investors, educators and students.

The participation of a high number of relevant stakeholders resulted in constructive feedback which demonstrated strong endorsement for the focus areas and specific projects of the draft action plan informing the final Tech Startups Action Plan.

A report on the Tech Startups Action Plan Consultation Results is available at sydneyyoursay.com.au/tech-startups-action-plan.

Input was received by many individuals and organisations including those listed on page 65, and we will continue to consult them, and others, as we implement the plan.

ABC	Communteer.org	GP Media
Abun	Conquest Business Solutions Pty Ltd	GrowPaths Financial Group
Aeona	Cool Webing	Hannover Fairs Australia
AIESEC	Cooper & Co	Harris Partners
Amazon Web Services	Creative Industries Innovation Centre	HeTexted
Applicative	Creative Little Soul	Hub Sydney
Arney Recruitment	CXi Software	IDATS
Artesian	Cypha	ide group
Atlassian	Demand Logic International	Inception Digital
ATP Innovations	Digital Eskimo	Incubate
Aura Coworking Space	Digital Sydney	Informatica
Australian Computer Society Foundation	DIGIVIZER	Inspiring Rare Birds
Australian Government Department of Industry, Accelerating Commercialisation	disrupt.healthcare	Insurance Australia Group
Australian Government NSW/ACT State Office AusIndustry	Dwyer Lawyers	Intergy Consulting
Aykira	EasyCase	Internationally Educated
Bauer Media	eGovAU	Jayride
Be Assured Pty Ltd	EngineRoom	JoinMe Pty. Ltd.
Binary Investments	Epic Labs	Juggle Street
BlueChilli	EY	KTM Capital
Bravura Solutions	Eye Talent	langpia.com
Bugcrowd	Fiestafy	LAP
Camelot Innovations Pty Ltd	Fin 15	left eye productions
Canva	Finnegan Australia	Lifeable
Capital Good	First ORder	Localizer.co
Capital Pitch	Fish Thinkers Research	Lotsearch Pty Ltd
Carscomm	Fishburners	Macquarie University
CBA	Flaxworks	Marketo
Celox Group Pty Ltd	For The People	Moxeto.com & Envision Consultancy Pty Ltd
Centerstage HQ PTY LTD	Freelancer	mur-D
CIM Environmental Group	Funnel Ventures	MyCatering.com Pty Ltd
Cinesmith	GE Mining	myInterview.com
CMCRC	Geeky Cloud	Nestpilot.com
Coder Factory	General Assembly	NETBiT
Cog Systems	Geopast	NME Capital Partners
Collabosaurus	GiveToCause	NSW Department of Industry
Collusion	GlamCorner.com.au	NSW Department of Premier and Cabinet
	Gleneagle Securities	Officer Diary
	Good Fuel Co.	Oovvuu Pty Limited
	Google	

OzForex Group	Squareknot	We Love Numbers
Polinode	Squiz	Whybin/TBWA
Pollenizer	Startmate	www.agency.sc
Posse	Startup Daily	www.oovvuu.com
Progressify	StartupAUS	ziipt Pty Ltd
Propeller Aerobotics	Strategic Artistry	Zottie Dottie
Pureprofile	Street Art Walking	Zumio
PushStart	Studius	Zusa
PwC Australia	Stylebase	
QFire Software Pty Ltd	SurveyMonkey	
Ramin Communications	Switch Automation	
Rapporr	Sydney Angels	
RecruitHero	TAFE NSW	
Red Burlesque, CreativeUnplugged.com and MetOnSet.com	Tank Stream Labs	
RedEye	Tapestry	
Regional Development Australia-Sydney Inc	Tapmint	
Reinventure	TCF Services Pty Ltd	
Restart	Teres Development	
Ronai Services Pty Ltd	The New Agency	
Rushfaster	The Sydney Founder Institute	
Sapien Ventures LLP	Think+DO Tank	
ScribblePost Pty Ltd	Thinkbits	
Sentibit	This Week in Startups Australia	
Setchell Technology Consulting	TiE Sydney	
SETScope	Tinybeans	
Shape Consulting	TrustMile	
ShopWings	U2a it	
SIRCA	University of New England	
Slattery IT	University of New South Wales	
Small Builders	University of Sydney	
Social Status	University of Technology, Sydney	
Spatial Technologies	University of Western Sydney	
Speed Date	University of Wollongong, iAccelerate	
Spike Innovation	ustwo Sydney	
SPORTSPASS	Vendorable	
Spot	Viator	
Springboard Enterprises Australia	Waddle	
	Warren Advisory & Big Time Media	

23

Glossary of terms

Accelerator	An accelerator takes equity in startup companies in return for small amounts of capital and mentorship. They generally provide a three- or four-month program at the end of which the startups 'graduate'
Angel investors	Individuals who provide startups with financial backing, often called 'seed funding', usually in exchange for convertible debt or ownership equity
Bootstrapping	Founding and building a company from personal finances or from the operating revenues of the new company
Digital	Relating to using or storing data or information in the form of digital signals (such as digital TV or a digital recording) or involving or relating to the use of computer technology
Ecosystem	The global community of people founding, working in, supporting and investing in tech startups refer to the sector as an 'ecosystem', where various entities connect with, link to, interact with and help each other, thereby strengthening the ecosystem while increasing their own value
ICT	Information and communications technology
ICT Services	Identified as a sub-sector that falls under the ICT sector as defined in the 2012 City of Sydney Floor Space and Employment Survey. The full list of industries which fall under this sub-sector are: software publishing, internet publishing and broadcasting, wired telecommunications network, operation, other telecommunications network operation, other telecommunications services, internet service providers and web search portals, data processing and web hosting services, electronic information storage services, other information services, computer system design and related services and computer repairs
Incubators	An incubator has an internal team that offers capital, free office space, product development support, design support, mobile marketing and mentoring to startups that are housed within the incubator, in return for payment or equity
MVP	Minimum viable product; that is, the product with the highest return on investment compared to the risk involved. An MVP has just the core features that allow it to be deployed, and no more. Creating an MVP avoids the hazard of building products that customers do not want, and seeks to maximise the information learned about the customer for every dollar spent on developing it
VC	Venture capital. VC firms or funds provide financial capital to early-stage startup companies that have the potential for high growth. The VC fund earns money by owning equity in the companies it invests in. This is typically the first round of institutional capital to fund growth after seed funding

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