

Startup employment in Victoria, Australia

July 2021

About this report.

The purpose of this report is to provide a detailed picture of the jobs being created by the Victorian startup sector in Australia. While we recognise LaunchVic has commissioned other reports into the impact of startup jobs on the Victorian economy, to the best of our knowledge, this report is the first attempt to capture the role of Victorian startups through the lens of employment, using both curated data and human expertise.

In this report you will find fascinating new insights with a spotlight specifically on Victorian startups.

Find out how Victorian startup jobs' growth measures up against the Victorian economy; the impact on jobs growth during COVID-19; where the most jobs are being created in the startup lifecycle; which startups are creating jobs vs employing people; the sectors with most startup growth; how startup job creation stacks up against traditional industry; and the growth of VC-backed vs non-VC backed startups.

While it is widely accepted that innovation drives the creation of high-skill quality jobs, it is difficult to quantify where startups sit in this mix. **Startups are often seen as investments instead of job creators – when in fact they are both**. It is also difficult tracking employment data for startups on a fast growth trajectory where this ever-changing metric requires constant monitoring and careful analysis. Startups, as private companies, are also largely exempt from reporting requirements otherwise imposed on public companies, Universities and research facilities.

As a result, the social dimension of startups is often overlooked. Startups not only help create value to economies, but they are also job multipliers, creating high-skill, high quality jobs in their own communities and beyond. In the US, the National Venture Capital Association <u>estimates</u> that VC-backed companies generated as many as 2.27 million jobs in 2019. In the Netherlands, <u>Dealroom research found</u> that the Startup sector has been the fastest growing in terms of job creation since 2017.





Scope of the study.

This report highlights the role of Victorian startups, scaleups and Unicorns in creating jobs and value domestically.

As a result, it focuses solely on local jobs created by Victorian startups. We include startups founded in or after 2000, so long as the company is currently active and maintains its main presence in Victoria.

Since this report focuses on the Victorian startup sector, we do not count jobs created by foreign startups in Victoria.

Think of foreign startups which chose Melbourne as their regional headquarters, such as Slack, Zendesk, Germany's Signavio or Switzerland's <u>Tradeplus24</u>. We also exclude (Australian) startups with their main center of business outside Victoria.

We only consider startups with at least one employee, i.e. a headcount of at least two.

Founder-only startups and startups lacking employment data fall in the 'micro-startups' category, which is excluded from the scope of this study. According to our count, there are more than 350 micro-startups in Victoria. A comprehensive list of further criterion used to determine which jobs are counted is provided in the methodology section.

Unicorns receive special treatment: we include all homegrown unicorns, so long as they achieved their main growth in Victoria.

Some were founded outside Victoria (Afterpay). Others are registered outside Victoria, but maintain a significant domestic presence (Airwallex, Catch, eNett). Older companies founded in the information age (since 1990), which achieved Unicorn status since 2000 are also included: MYOB, REA, SEEK, Carsales and PolyNovo. Together with Aconex, PEXA, Envato, Judo Bank, Culture Amp, Mesoblast, Clinuvel, Redbubble and Victoria's latest Unicorns A Cloud Guru and MessageMedia, Victoria is home to 19 Unicorns.



Key findings.

In Victoria, startups create jobs faster than conventional industries. The startup sector is growing: it creates jobs faster than the Victorian economy. p.6 Startup sectors grow faster than their conventional industries. p.7 Startups have a lot (of jobs) to offer. Ages of firms impact level of job creation. p.9 Smaller startups employ the most people. Scaleups create more new jobs. p.10 Every startup sector has been growing over the past two years, albeit at various speeds Unicorns boost employment but new jobs emerge elsewhere p.12 Just three sectors provide half of the new jobs... p.13 ...but many more are growing at record speed p.14 Overview of growth trends by startup sector p.15 A deep-dive into the determinants of startup employment in Victoria Valuation and employment are inversely proportional p.17 Venture capital backing boosts job creation p.18 The Jobs Board, a new tool for job seekers and startups to meet p.19 Put your startup on the map: findingstartups.launchvic.org p.20 See also... Methodology and definitions p. 22 - 25

5.9K new jobs in just two years

10.75% annual growth (2018-2020), local jobs

total jobs created by homegrown startups globally

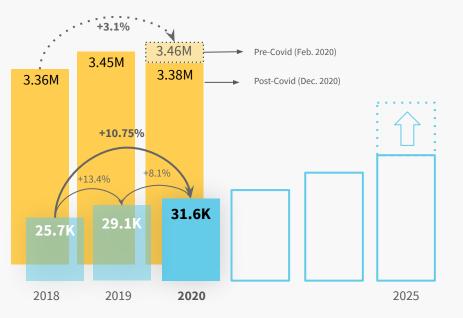


In Victoria, startup employment grows faster than in conventional industries.



Victoria's startup sector is growing: creating jobs at a faster rate than the Victorian economy.

> Employment figures in Victoria's Startup sector and Victoria's economy, 2018-2020



Employment in Victoria, 2018-2020 Local jobs at homegrown startups, scaleups and unicorns, 2018-2020 Year-on-year startup job growth is reaching record levels, at 10.75% between 2018 and 2020. This translates to over 5,900 new local jobs being created by homegrown startups since 2018. Looking more closely at the data, annual growth between 2018-2019 reaches 13.4%. This is significantly higher than job growth in Victoria's economy, which was set to reach 3.1% annual growth between 2018 and 2020, according to the Australian Bureau of Statistics (pre-Covid).

A 'Covid-19 effect' is visible, but appears limited. Year-on-year job growth between 2019 and 2020 fell to 8.1%. Still, this is far higher than ABS's pre-Covid estimates for the Victorian economy. With Covid striking many industries, ABS's figures for December 2020 suggest that overall job growth might be even lower, although trends currently observed could help recover some of the lost jobs. Meanwhile, the Victorian Startup sector had already created 25.7k jobs by 2018, it has now grown to provide 31.6k local jobs.

Startup creation and job growth trends look promising. At the current pace, there will be 3,000+ active Victorian startups by 2023, out of which over 2,000 will be creating jobs. Fuelled by the growth of existing companies and boosted by an expanding startup base, which could double by 2025, Victoria's startup sector could employ at least twice as many people in 2025 as it did in 2018. Not to mention the multiplier effect, which <u>according to previous research commissioned by LaunchVic</u>, could help boost both value and job creation further, by as much as five times the current pace.

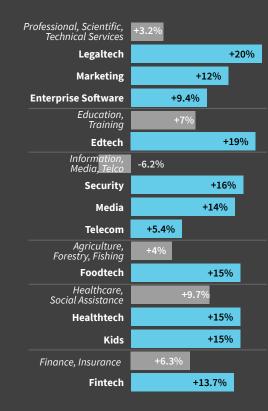


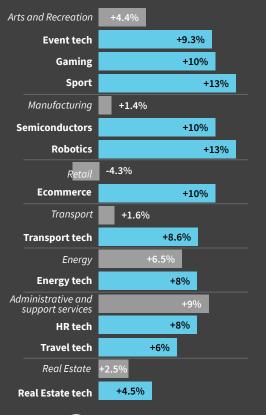
Startups add jobs faster than their conventional industries.

Over the past two years, startups recorded a stronger growth rate than the Victorian average in their respective industries, in all but two sectors. Even in booming industries, startups grew faster: healthtech companies added new jobs 55% faster than the already-over performing healthcare sector (+9.7% growth). Fintech and Energy startups also outpaced their respective industries, despite an annual growth rate more than two times higher than the Victorian average. Although startups still only provide a fraction of total jobs, the speed at which startups grow their ranks confirms that job-seekers can confidently turn to startups across all industries, to look for opportunities.

Annual job growth (2018-2020) across startup sectors and conventional industries.

Conventional Industries, annual growth 2018-2020 🚦 Startup sectors, annual growth 2018-2020







Startups have a lot (of jobs) to offer.



Leigh Jasper LaunchVic Chair Startups by their very nature are job multipliers, led by founders that catalyse job creation through their unyielding ambition to build innovative technology companies with global reach."



Older startups employ more people : the average team size at companies aged 10+ years is 30 employees. This compares to 19 employees at companies aged 5-10 years and nine employees at companies founded since 2016.

What is more, older startups still create jobs 10+

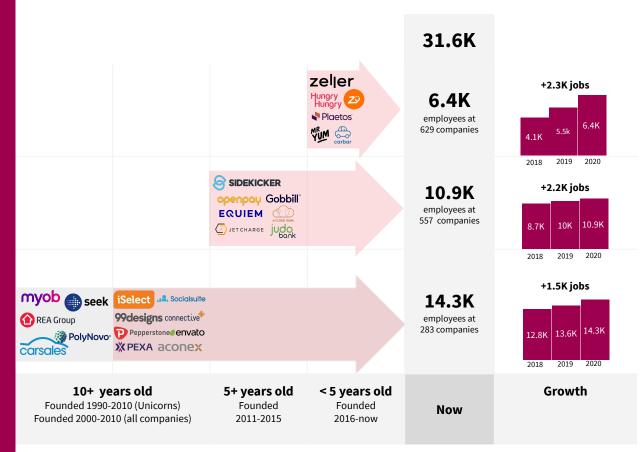
years on: each company founded more than 10 years ago created an average of 3.6 jobs since 2018. Companies launched since 2016 created just 0.2 more jobs on average.

But there are far fewer older companies than

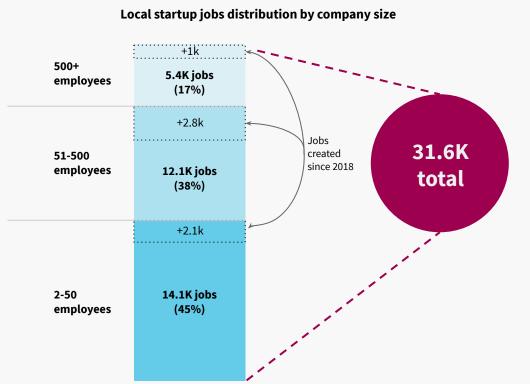
younger startups: owing to companies' life cycles and a sign of a growing startup ecosystem in Victoria, just 283 active startups are 11 years old or more (as well as another 5 Unicorns founded before 2000). This compares to 629 companies founded in the past four years, which already created over 6,400 jobs.

The newer the startup, the more new jobs. Startups founded since 2016 generated 39% of all jobs created since 2018, or 2,300 new jobs, while startups aged 5-10 years contributed another 35% (2,100) new jobs. Older startups (10+ years old), created the remaining 26% (1,500) new jobs.

Startup ecosystem employment and job creation by company age.



The majority of startup employees work for early-stage startups, but a maturing ecosystem means growing job creation at mid-sized scaleups.



Just five big employers - those with a local headcount of 500+ employees, all of which are unicorns - have created 17% of all startup jobs. These are REA Group, MYOB, SEEK, Afterpay and Carsales.

Looking at the bigger picture, however, smaller startups - those with fewer than 50 employees - employ most people, as they account for 45% of all startup jobs.

Smaller startups also tend to be younger: companies with fewer than 50 employees have an average age of 10. Scaleups (50 to 500 employees) are 14 years old on average, while $\frac{4}{5}$ of the 500+ employers are at least 20 years old.

As startups grow and become scaleups, job growth

accelerates. Just 115 scaleups have created 2,800 jobs since 2018. This is 700 more jobs than those created by the 1,300+ smaller companies (2,100 new jobs). Critically, this indicates that 23% of all scaleup jobs were created in the past two years alone, and that maturing scaleups are playing a central role in creating jobs in the ecosystem.



Victoria is home to a host of fast-growing startup sectors.

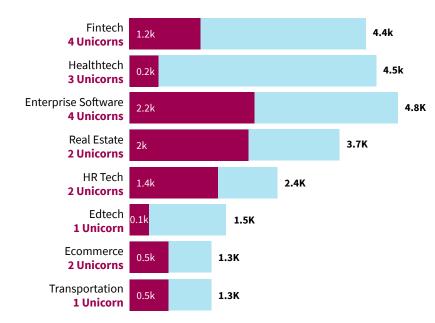


Leigh Jasper LaunchVic Chair Home-grown heroes such as Afterpay, Culture Amp or Judo Bank are proof that there's immense potential in startups to revitalise the economy by creating new jobs and sectors. It might also surprise some people that they employ twice as many Australians as the jobs we have imported from Facebook, Twitter and Slack."

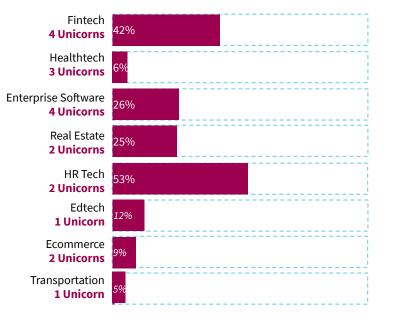


Even in sectors with unicorn startups, job creation is not limited to unicorns. Most <u>new jobs</u> are created by smaller startups and scaleups.

Local startup jobs (2020) in sectors with at least one Unicorn, incl. jobs at Unicorns



Unicorn contribution to new jobs since 2018 per industry





Half of all new jobs have been created in just three sectors.

Distribution of new jobs by sector.

5.9k jobs created since 2018





In 10+ startup sectors, more than 20% of all jobs didn't exist just two years ago.

There are 11 sectors where at least 2 out of 10 jobs were created in the past two years alone.

More than 130 jobs were created by Legaltech startups since 2018: this is 30% of now 430+ jobs in this sector. Edtech is also growing fast: over a quarter of the 1,400 Edtech jobs didn't exist two years ago. These fast-growth sectors collectively make up a powerful jobs growth engine, in high-paid, high-productivity roles.

Percentage of new jobs added since 2018 per sector.

Legaltech	30%
Education	26%
Security	25%
Foodtech	25%
Kids	25%
Healthtech	24%
Fintech	22%
Media	22%
Sports	22%
Robotics	21%
Marketing	20%



Startup job creation momentum continued in almost every startup sector during the pandemic.

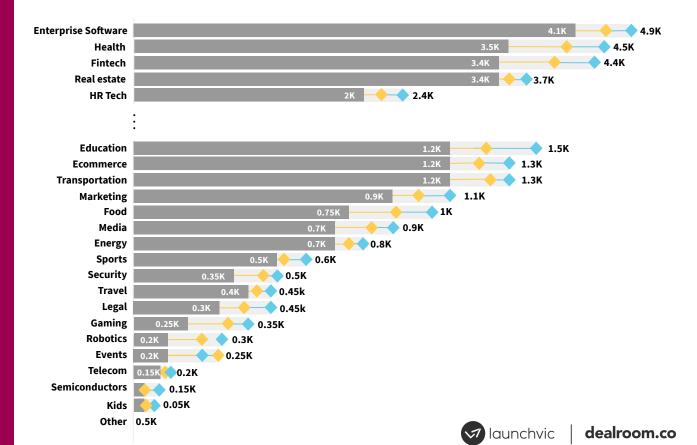
By breaking out job growth from 2018-2019 and job growth between 2019 and 2020, we can see the impact of the pandemic on startup job creation in Victoria.

While job creation may have slowed in some sectors, startups continued to hire at pace during Covid-19, with the exception of Victoria's Event Tech startups most acutely affected by lockdowns. This is virtually offset by growth recorded a year prior, however. Reversely, Real Estate and Sports startups created more jobs between 2019 and 2020 than a year before.

Local job growth per sector, 2018-2020

Jobs in 2018 Change 20

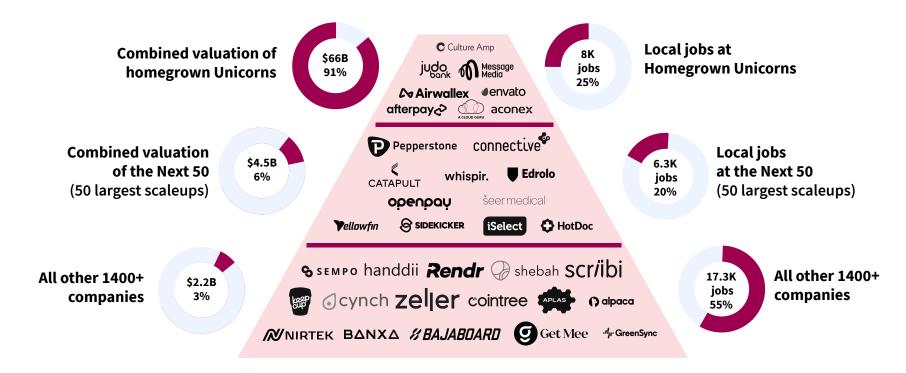
Change 2018-2019 Change 2019-2020 Jobs in 2020



Deep-dive into the determinants of Startup employment in Victoria



Jobs and valuation are inversely proportional (<u>Power Law</u>): while startups provide the majority of jobs, valuation is concentrated at the top.



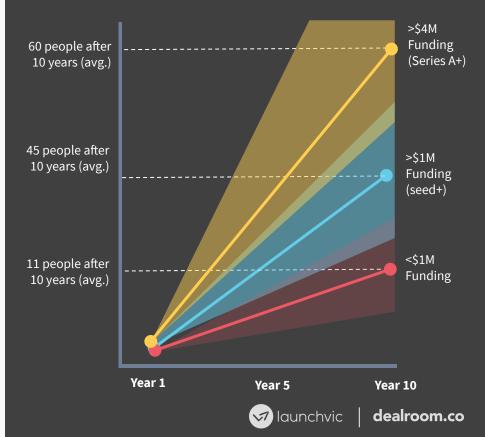
Venture Capital backing boosts job creation

Venture backing has become the norm for many startups. **Today, 82% of unicorns are VC-backed, compared with 20% a decade ago.** And it's no surprise that VC-backed startups scale faster. On average, startups receiving seed funding scale four times faster than those that didn't. Series A+ funded startups scale 6 times faster.

Funding rounds can be tracked on findingstartups.launchvic.org Transaction values are realized from exit or implied unrealized valuation from the latest VC round, which is either announced or estimated by Dealroom based on market-based assumptions for dilution. Reporting or even tracking funding rounds takes time: there may be reporting lags resulting in temporarily under-reported newer rounds.

Explore funding rounds

Startup growth trajectories by level of VC backing



Introducing the Jobs Board on findingstartups.launchvic.org



"The LaunchVic Jobs Board is a dedicated place to find startup jobs in Victoria using data collected from job websites, startup, scaleup and unicorn's job pages and dealroom." - Kate Cornick, LaunchVic CEO

Research undertaken by LaunchVic found many job applicants didn't know where to find a startup job; or were simply unaware of the potential opportunities. **The Jobs Board on findingstartups.launchvic.org has been created to counteract this.**

This is a dedicated place to find startup jobs in Victoria, aggregating data from different job websites including the jobs pages of those startups already listed on Dealroom. Jobseekers are able to search with unprecedented levels of precision (see example on the right), while startups have a free platform to advertise available roles within their company - without having to do anything.

Combining job openings data with Dealroom data enables more detailed job searches than ever before:

"I am a back-end developer looking to work for an impact startup that raised a series A, is growing fast and uses Kubernetes as a technology."

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unding rounds	Airwallex	PI.EXCHANGE	iSelect	Seer Medical	
oits	is hiring Senior Data Analyst bused in Melbourne	is biring Intern, Associate and Product Data Scientists (Melbourne, AU and Singapore)	is biring Senior Data Applications Engineer based in Cheltenham	is hiring Neurophysiology Scientist based in Carberra	
iccelerators	posted on 21 Dec 2020	based in Melbourne posted on 18 Dec 2020	posted on 18 Dec 2020	posted on 17 Dec 2020	
Vorkspaces	517 employees	27	417 employees	150 employees	
Iniversities		employees			
lew startups	\$502M Funding from Greencoks Capital Partners, Skip Capital& 23 more	\$300K Funding from Boab AI \$1-2M valuation (estimate)	Funding from Spectrum Equity	\$447K Funding from Australian Government for Research & Dev	
fatching tool	\$2.68 valuation (latest)	47-44 Astronom (community)			
nvestment heatmap	View on website (via PredictLeads)	View on website (via PredictLeads)	View on website (via PredictLeads)	View on website (via PredictLeads	
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	In biting Data Compliance Manager based in Melbourne posted on 37 Dec 2020	is bring Deep Learning Engineer based in Melbourne posted on 17 Dec 2020	is bling Deep Learning Engineer based in Netbourne posted on 17 Dec 2020	is hiring Senior Data Scientist based in Melbourne posted on 17 Dec 2020	
	150 employees	150 employees	150 employees	618 employees	



Put your startup on the map.



Let the best Investors find you



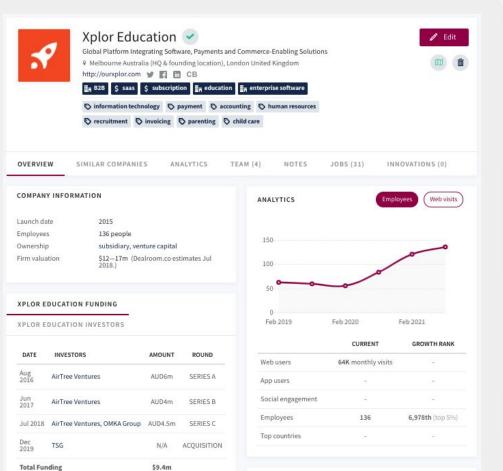
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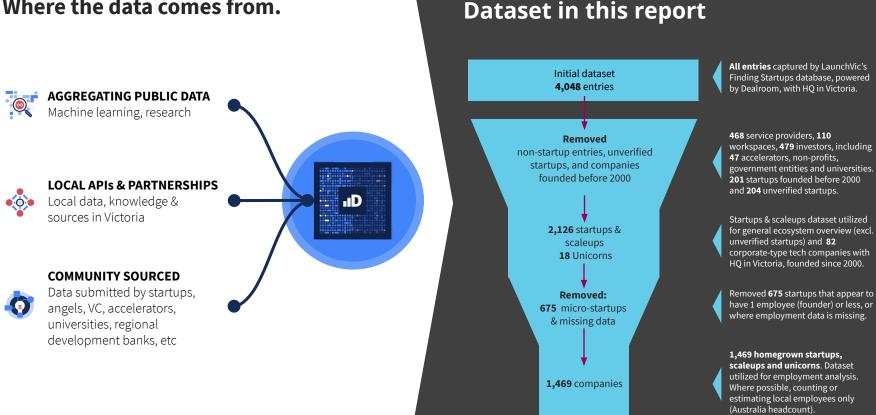
Claim your profile!

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Methodology & definitions





Where the data comes from.

🤝 launchvic

Source: Dealroom.co. Page / 22

Startups?

 Δ

Maxwell

The term startup is often used and seldom understood. "A startup is a company designed to grow fast" wrote <u>Paul Graham</u>, the legendary startup builder, investor and Co-founder of Y Combinator. Notice the absence of the word "tech". This is deliberate.

"Being newly founded does not in itself make a company a startup. Nor is it necessary for a startup to work on technology, or take venture funding, or have some sort of "exit." The only essential thing is growth. Everything else we associate with startups follows from growth."

At Dealroom, we've found this the most useful explanation of the term startup.

Why? Indeed, most startups are tech enabled. But so are lots of companies. Many traditional companies work more deeply on technology than the majority of startups. When talking about "technology" in the context of startups, we mean information-age technologies (internet, software, AI, algorithms) that enables companies to decouple output from costs and achieve non-linear growth. **The common denominator is not tech, but the intention to scale very rapidly.**

For the purpose of this report, we further distinguish between three sub-types of entities, as shown on the right.

Startups

A company founded in or after 2000 that is designed to grow fast. This typically involves either developing tech or using tech to operate its business. In other words, these are venture-backable companies. In this report, we include over 1,330 active and job-creating startups, out of over 2,000 startups mapped on LaunchVic's Finding Startups Database powered by Dealroom.co.

Scaleups

A former startup in its growing phase: a growing revenue and 51 employees globally. By our count, there are 115 scaleups in Victoria.

Unicorns

Unicorns are companies founded since 1990 that reached US\$ 1B / \in 800M / AU\$ 1.3B valuation. This includes companies that reached this valuation when or after being acquired, and companies which valuation have since dropped below the \$1B mark.

According to Dealroom data, there are 19 Homegrown Unicorns in Victoria.

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NIRTEK	Rendr
Jcynch	ΒΔΝΧΔ

openpoy šeermedical
HotDoc whispir.
Zeller @dubber.

afterpay~>

aconex

envato



Culture Amp







dealroom.co



Which jobs?

Employment data is sourced from publicly available data including company statements and professional social media. User-submitted contributions on the Victoria Startup Database and manual research is also used.

This report counts jobs created directly by Victorian startups on the domestic job market. However, we do not distinguish between 'HQ' jobs and Australian jobs. Therefore, jobs at secondary locations in other Australian States may be included. International jobs are excluded from the count, unless otherwise mentioned. Contractors and outsourced jobs, whether in Australia or abroad, are also discarded. We do not include jobs created by non-Victorian startups. Foreign startups and Australian startups with a secondary location in Victoria do not fall within the scope of the report.

No distinction is made between job types: from data engineers to business development, from operations to receptionists, concierges and helpdesk, all jobs are counted. Likewise, all contract types are counted, whether it be full-time, part-time, contract or casual jobs, or even internships. We do however exclude gig workers (e.g. riders, drivers, couriers, ...), self-employed individuals offering their services on online platforms, as well as independent contributors (e.g. artists on Redbubble and 99designs, ...), where applicable.

The words "jobs" and "employees" are used interchangeably. Number of jobs represent the total estimated number of employees at Victoria-founded startups. Jobs at companies not referenced on the Victorian Startup Database are not included.

Conventional industry data is sourced from the Australian Bureau of Statistics quarterly reports. Startup employment is included in conventional industry figures. Vertical comparisons between conventional industries and startup sectors may overlap or contain inconsistencies. For instance, while we consider animal health startups as part of healthtech, veterinary services fall under ANZSIC's "professional, scientific and technical services".



Startup sectors glossary

- Ecommerce Online retail, connecting buyers to sellers and products on shopping sites and digital marketplaces.
- → Gaming Startups involved in the development, marketing, and monetisation of games (video games, online games, board games...)
- → Foodtech Startups addressing agrifood (from production to distribution), innovating on the products, distribution, marketing or business model.
- → Education Startups developing solutions, software and tools designed to enhance teacher-led learning in classrooms and improve students' education outcomes
- → Energy Startups working towards transitioning to sustainable energy, making our energy consumption more green and more efficient, solutions for recycling and handling waste.
- → Fintech Computer programs and other technology used to support or enable banking and financial services. Technology and innovation that aims to compete with traditional financial methods in the delivery of financial services.
- Security Cyber security or information technology security are the techniques of protecting computers, networks, programs and data from unauthorised access or attacks that are aimed for exploitation.
- → Semiconductors Startups developing innovative semiconductors (chips), working on processors, chips for sensors, chips for the automotive sector, AI chips, IoT chips, data centre chips...
- → Enterprise software Startups developing computer software designed to satisfy the needs of an organisation rather than individual users.
- → **Transportation** Startups developing solutions, software, tools and machines used to solve problems or improve conditions in respect to the movement of people and goods

- → Real estate Real Estate tech or PropTech (property technology) is the use of information technology to help individuals and companies research, buy, sell and manage real estate
- → **Travel** Startups developing services and products focused on travel and tourism, including booking services, search and planning platforms, on-demand travel, and recommendation sites.
- → HR Tech Startups developing solutions, services & software designed to improve the recruitment process within a business or for individuals seeking a job.
- → **Robotics** Startups dealing with the design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing
- → Marketing Marketing technology (also known as MarTech) describes any number of systems and tools that help marketers better engage with potential and existing customers.
- → Event Tech Startups developing solutions and technologies helping you plan, manage, and organise data when putting on an event (conference, wedding, party, etc)
- → Legal Legal technology, also known as Legal Tech, refers to the use of technology and software to provide legal services.
- → **Telecom** Startups developing solutions aiming at disrupting the telecommunications industry: startups offering mobile plans, internet subscriptions, better communication services...
- → Kids Startups developing products, solutions and tech for children or to help parents with their children
- → Sports Startups developing tech products and services designed to improve sporting performance, provide sporting activities and engage sports fans.
- → Media Media technology is any hardware, software, or tool that is used to compose, create, produce, deliver and manage media including audio, video, images, information, interactive media, video games, virtual reality, and augmented reality environments.



