



WADE
INSTITUTE

WOMEN & ENTREPRENEURSHIP

The state of women's representation in the Australian startup ecosystem, why we need to improve it, and how to get there.

The report

To build a high-growth, innovative national economy, we need more diversity in the startup landscape. But when we map women's representation across the Australian entrepreneurial ecosystem, the results are disappointing - right along the pipeline.

Women & Entrepreneurship is a wide analysis of publicly available data, drawing a holistic picture of the state of women in entrepreneurship in Australia and the opportunities for improving it.

The report highlights that while the startup ecosystem in Australia continues to grow, businesses founded by women are still underrepresented, with fewer female-led businesses starting, scaling and securing finance. There are a complex mix of barriers for women, and despite the frustrating state of play, there are a number of ways we can work to change this picture. Over 200 hours of research by author Laura Youngson has revealed a range of actions for government, organisations and individuals to actively drive Australia's leadership as a diverse and inclusive startup culture.

The Women & Entrepreneurship report was commissioned by Wade Institute of Entrepreneurship in 2017. It was researched and authored by Laura Youngson, an entrepreneur and graduate of the University of Melbourne's Master of Entrepreneurship, delivered at Wade Institute.

About the author

Laura Youngson used to run micro-social enterprises alongside her international management career. Today, she promotes gender equality in sport as founder of global non-for-profit initiative Equal Playing Field, and is co-founder of early-stage startup Ida Sports, developing the first affordable soccer boots designed for women. She holds a Master of Entrepreneurship from the University of Melbourne, and a Master of Science (Physics) from Durham University, UK.

About Wade Institute of Entrepreneurship

Wade Institute of Entrepreneurship is a leading centre for entrepreneurial training delivering a range of programs to help individuals learn, create and connect. Programs include the delivery of VC Catalyst, investor education powered by LaunchVic, and the University of Melbourne's Master of Entrepreneurship.

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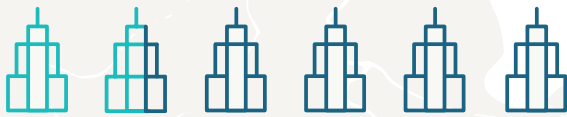
In Australia



34%
of companies are run by women, compared to 66% run by men



In 20 years, the number of female-led businesses has increased by just **3%**



29%

of funded companies have at least one female co-founder (on average)



4 of 10

Only four of the top 10 **Venture Capital** firms have women as partners



Fewer women start businesses, meaning less apply and get into accelerators and incubators, and even less female-led businesses get funded by venture capital firms

Supporting female-led startups offers opportunities to develop the startup ecosystem in Australia and become a global leader for a diverse startup culture

The underrepresentation of women in entrepreneurship affects the whole pipeline

The Barriers

- Unconscious gender bias
- Lack of visibility
- Less capital and fewer professional networks
- Lack of research and reporting
- Underrepresentation in high-growth industries
- Lower confidence



A lack of data collected on Australian startups makes the real causes of disconnect invisible

The background features a vibrant green field with large, overlapping abstract shapes in shades of blue and teal. The text is positioned in the upper left quadrant, overlaid on these shapes.

A priority for the Australian innovation agenda is to produce more successful, growth-oriented startups. Supporting female-led startups offers opportunities to develop the startup ecosystem in Australia and become a global leader for a diverse startup culture.

Introduction



A competitive economy, stimulated by innovative new companies, is crucial for continued growth. The startup ecosystem needs a pipeline of entrepreneurs to capture value from ideas and currently, Australia is underperforming compared to other developed nations. A priority for the Australian innovation agenda is to produce more successful, growth-orientated startups.

One area that is largely underserved is gender and entrepreneurship with fewer female-led businesses starting, scaling and receiving finance.

A larger pipeline for scaleable businesses would improve the chances of developing the high-growth startups needed in the Australian economy. Supporting female-led startups offers opportunities to develop the startup ecosystem in Australia and become a global leader for a diverse startup culture.

Research in the US and UK points overwhelmingly to the fact that female-led or co-founded startups have been shown to have lower failure rates, produce more capital-efficient companies and achieve

venture-level returns¹. However, historically female-led or co-founded startups have been funded at a far lower rate than male-only startups, leading to a disconnect between the dollars available and investment into these companies.

To understand the ecosystem and the barriers to progressing, this report explores the different stages of the startup journey, from inception to funding. In the setup phase, why are women not starting businesses at the same rate as men? When accelerators and incubators have been shown to be supportive of startup success, why are fewer female-led startups applying to accelerators, incubators and funds? And when entering the market, why are fewer female-led businesses receiving early-stage funding?

There are a number of different ways to support early-stage companies, from classic venture capital funds and angel investors, to incubators and accelerators. In Australia, a number of accelerators have opened their doors to early-stage startups in the last five years. In Victoria alone, there are 21 accelerators already with a further



six planned for 2018. The advantages to entering an accelerator are clear; startups that complete accelerator programs receive investment faster than those that don't². But recent headlines in the media have shown that female founders are not well represented in these accelerators.

Investment by venture capital (VC) firms in Australia is currently skewed towards male-led companies and while this appears to be a simple point to address, further research shows a number of interconnected effects which suggests the problem is more complex than first assumed.

With the rapid growth of the startup culture, Australia has the opportunity to be a global leader in gender diversity in this industry. But how can Australia encourage

“With the rapid growth of the startup culture, Australia has the opportunity to be a global leader in gender diversity in this industry.”

more women to start businesses, apply for funding and receive investment to develop their businesses? The start of the pipeline holds many of the answers.

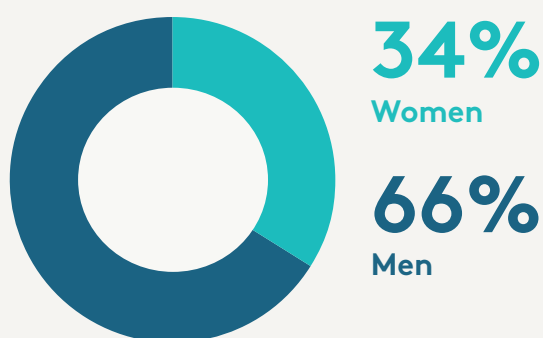




Why aren't more women starting businesses?

A 2014 ABS study of business operators shows that companies are more likely to be run by men than women, 66% to 34%³, see figure. The proportion of women starting businesses has increased by only 3%, from 31% in 1994.

Percentage of women vs men running businesses (2014)



The types of businesses that are started by men and women also differ. ABS data from the 2011 census shows that when women do start businesses, they tend to avoid high-growth industries, such as financial services and technology, and instead focus on smaller enterprises, such as health and social assistance, retail and professional services (accounting)³. Furthermore, a recent report by LaunchVic highlighted the different sectors of startups in Victoria, and noted that women are more likely to start traditionally low-growth businesses, such as social enterprises, compared with high-growth startups⁴.

A number of effects have been identified across the globe, which may explain the lack of female entrants to the startup world. Whilst company registrations in Australia tell part of the story, reporting effects may also be to blame for the lack of female startups. Fewer women self-identify as entrepreneurs and research reports that women have lower average levels of optimism and self-confidence, and a higher fear of failure⁵. Fear of failure is negatively correlated with starting a business⁵, and these combined effects have been shown to contribute to the lack of female-led startups.

Women also tend to start businesses with less capital⁶, which has ramifications for the growth of their businesses, as they are unable to scale as quickly or successfully. Women are less likely to reach higher levels in the workplace than men, and therefore have less experience in the workplace, and less personal capital with which to start a business. This lack of experience and financing exacerbates the challenges female entrepreneurs face when starting businesses⁶.

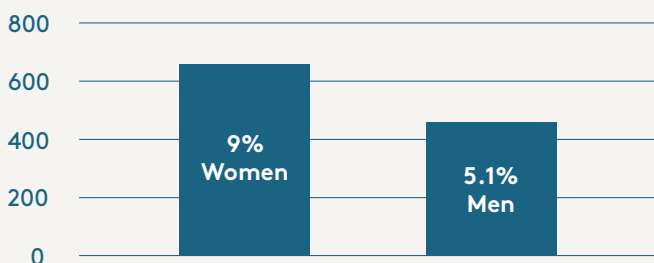
In general, women lack the same strength in professional networks as men⁷, which makes it harder to draw upon when starting businesses. A lack of visibility of female entrepreneurs has also been shown to have an influence on women starting businesses. Women are less likely to know

someone who is an entrepreneur and therefore are less likely to become one themselves⁷.

In order to encourage the next generation of female entrepreneurs, more can be done at the school age to encourage an entrepreneurial mindset. Research shows that priming students with entrepreneurial practices has an effect on entrepreneurship in later life⁸. Experiential learning in financial literacy and entrepreneurship prepare young people to apply skills to real-world problems.

A 2014 ABS study, see figure, showed that almost one in ten Australian women want more work⁹ and are currently underemployed either in part-time or flexible work arrangements. Within this pool of approximately 632,000 women, there is great potential for encouraging entrepreneurship.

Number of women underemployed '000s(2014)



Middle-aged women are more likely to run businesses with 44% of female-led businesses run by 40-54 year olds³. Whilst 28% of female-led businesses are run by women 55 years and over, only 27% of women over 55 participate in the labour market¹⁰ and given the tax concessions for women over 55, could be an untapped source for new enterprises. Research shows that most successful startups are created by people over the age of 50 because they have the access to capital, networks and experience to make the organisations

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work¹¹. Women born in the 1950's and 60's are ideal candidates as they have these resources to draw upon¹².

Given that networks and role models have an impact on women starting businesses, a more visible network of female entrepreneurs would address a number of these issues. Adding more public recognition, from different industry and government organisations, would create a critical mass of female entrepreneurial role models and more visibility across Australia. For example, Ernst & Young (EY) has been running the Entrepreneurial Winning Women programme since 2008, promoting and supporting early-stage female-led businesses.

Recommendations

1



Create more female role models and increase their visibility.

Whilst there is notable industry support for some business awards, for example Telstra's Business Women's Awards, further engagement by industry and government to create a range of public recognition awards would increase the visibility of existing role models and create more opportunities to engage with female entrepreneurs. Promoting and supporting female entrepreneurs, from different industry and government organisations, would create a critical mass of female entrepreneurial role models and more visibility across Australia.

2



Support entrepreneurial networks.

Given that networks and role models have an impact on women starting businesses, a more visible network that brings together aspiring female entrepreneurs, mentors and funding would accelerate networking. Government agencies, such as ISA, LaunchVic and Innovation NSW have a convening power to call upon mentors, leverage financial partnerships with industry and campaign widely to attract aspiring female entrepreneurs.

3



There are state and federal level cases for creating campaigns and programmes encouraging targeted segments of women to start businesses.

Underemployed women, especially those returning from career breaks, and women aged over 50¹⁴ can be encouraged to create businesses. In the US, many over-qualified women are unable to re-enter corporate businesses and are creating their own businesses instead¹⁵. Partnerships with universities to provide affordable training in entrepreneurial skills for women looking for more work would accelerate this trend and encourage more women to re-enter the economy.

4



Prime the next generation of female entrepreneurs and ensure entrepreneurship is a key part of the National Curriculum.

Focus on showcasing female entrepreneurs in schools to normalise entrepreneurship, in the same way STEM has been highlighted to female students for the last two decades¹⁶.

When there are fewer women in the entrepreneurial ecosystem, there can be consequences further down the pipeline, including fewer female-led businesses applying to incubators and accelerators.

Why aren't more women applying for, and being accepted to, accelerators and incubators?

Australia's accelerator ecosystem has grown rapidly over the last five years, as have the opportunities for startups to take advantage of these mentorship programmes.

Accelerators often take an equity stake in the startups, ranging from 6% to 10% for AUD\$20,000 to AUD\$60,000¹⁷ (for reference Y Combinator, arguably the world's most successful accelerator, takes 7% for USD\$120,000¹⁸).

Accelerators and incubators have been shown to improve the chances of startups receiving funding to scale and increasing the chances of survival¹⁹. However, recent headlines in the media have shown that female founders are not well represented in these accelerators. One of Australia's best known accelerators, Startmate, revealed their Melbourne 2017 intake had 15 startups but only one with a female co-founder²⁰, and were actively seeking measures to address the lack of successful applicants to their accelerators. However, other high profile accelerators across Australia don't actively publish their application data.

There are a number of accelerator programmes specifically targeted towards female entrepreneurs. For example, Springboard Enterprises is an international network specialising in supporting and developing female-led businesses. In Australia, Springboard Enterprises runs the Springboard Accelerator for female-led businesses. In five years, 45 female-led companies have been through the programme and raised AUD\$180 million. Springboard Enterprises was set up to give more females access to capital and networks and overcome some of the initial barriers to entry²¹.

BlueChilli, a Sydney-based accelerator, implemented SheStarts, an accelerator for female-led technology businesses²². Companies from the first cohort, such as Mentorloop, have raised over \$1 million in capital and the second cohort of companies is in flight.

Existing business networks still have a marked effect on applications to accelerators. For similar reasons as to



why fewer females don't start businesses, female-led companies are not accessing the accelerator networks in the same numbers as their male counterparts. Positive reinforcement to influence a situation, known as the 'nudge effect', could be a useful tool to improve the diversity of Australia's accelerators.

Currently, most accelerators do not publish statistics on the applicants to their programmes and so progress in this area cannot be tracked effectively. Startmate, which should be commended for publishing statistics on all stages of their application process, has already begun to reach out to the market by proposing in-person meetups and events with female entrepreneur groups and an outbound sales process to target specific companies with female

“With all that has been written about the power of a networks to encourage entrepreneurship, accelerators must actively seek out gender diverse companies for their programmes.”

founders²⁰. With all that has been written about the power of networks to encourage entrepreneurship, accelerators must actively seek out gender diverse companies for their programmes. As Springboard and SheStarts have demonstrated, there are talented, female-led businesses in the Australian market.

Recommendations

1



Create a standard for accelerator and incubator assessment that is world-leading.

With the focus on innovation and reform, the Department of Industry, Innovation and Science, with industry and other departmental collaboration, should produce and publicise a good practice standard selection criteria for accelerators and incubators and ensure it is mandatory practice for any organisations receiving Government-funding.

2



Publish and track all data related to the application and acceptance process of accelerators in Australia.

Why aren't more female-led businesses receiving VC funding?

Early-stage funding has an important role to play in the development of businesses and stimulates innovation in the economy.

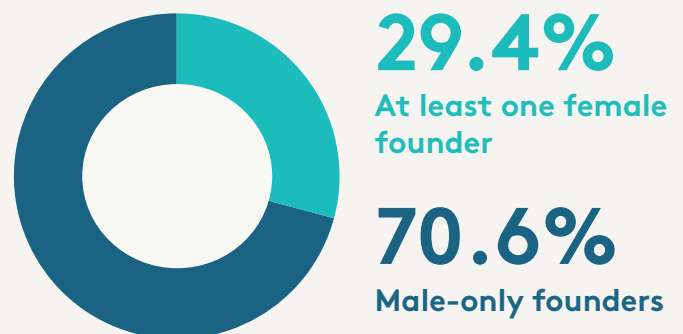
Whilst still not at the levels of other developed nations such as the US or the UK, the Australian Private Equity and Venture Capital market has grown considerably in the last ten years. These firms raised at least \$2.74 billion in the financial year 2016²³ and invested in over 200 startups, in Australia and overseas²⁴.

Ten VC firms raised 90% of the funds available in Australia, almost AUD\$2.5 billion, and have invested over AUD\$2.25 billion in Australian-based startups²⁴. The Venture Capital firms have also been instrumental in developing the startup culture in Australia, by creating accelerators and incubators and gathering funds together.

The investment portfolios of the top ten VC firms (by fund size) in Australia was analysed. Information was taken from publicly available sources of data

including the websites of the VC firms and Crunchbase²⁵. Analysis of over 200 companies revealed that of the firms funded in Australia, on average, 29% of the companies have at least one female founder, see figure.

Percentage of companies funded by top ten VCs in Australia with at least one female founder



The above contrasts with the rate of female-led business operators, which stands at 34%.

There is a marked difference in the results of the different firms:

Fund size (AUD&M)	Female VC partner?	No. of funded companies (Australia)
Square Peg	300	Square Peg No 6
One Ventures	320	One Ventures Yes 9
Airtree	250	Airtree No 13
Artisan	170	Artisan No 120
Reinventure	100	Reinventure Yes 14
Blackbird	200	Blackbird Yes 11
Brandon Capital	300	Brandon Capital No 21
Balidor	116	Balidor No 7
Telstra Ventures	500	Telstra Ventures No 6
GBS Venture partners	400	GBS Venture partners Yes 4

% of companies with at least one female founder (Global)	No. of funded companies with at least one female founder (Australia)	% of companies with at least one female founder (Australia)
Square Peg 13%	Square Peg 3	Square Peg 50%
One Ventures 29%	One Ventures 4	One Ventures 44%
Airtree 32%	Airtree 5	Airtree 38%
Artisan 33%	Artisan 41	Artisan 34%
Reinventure 19%	Reinventure 3	Reinventure 21%
Blackbird 12%	Blackbird 2	Blackbird 18%
Brandon Capital 13%	Brandon Capital 3	Brandon Capital 14%
Balidor 11%	Balidor 1	Balidor 14%
Telstra Ventures 5%	Telstra Ventures 0	Telstra Ventures 0%
GBS Venture partners 7%	GBS Venture partners 0	GBS Venture partners 0%

No. of funded companies total (Global)

Square Peg	24
One Ventures	14
Airtree	19
Artisan	128
Reinventure	16
Blackbird	25
Brandon Capital	23
Balidor	9
Telstra Ventures	38
GBS Venture partners	15

The average for the previously mentioned VC firms invested in companies with at least one female founder was 29% with firms ranging from 0% to 50%. Whilst not every opportunity is right for every firm, 0% points to room for improvement. Notable firms include Artesian ventures, which backed companies from the BlueChilli SheStarts programme, and Airtree Ventures.

VC firms often mention the lack of female-led businesses in the deal flow pipeline. This does have an effect on investments, however there are certainly opportunities to search harder for gender diverse investments.

Whilst the picture is not as bad as expected from recent media coverage and harassment scandals in Silicon Valley²⁶, there is still a combination of intangible factors that stop women accessing funding opportunities in Australia. Role models play a big part in each stage of the pipeline. Research into the lack of investment into female-led businesses reveals a correlation between firms with a female VC partner and the number of investments into female-led startups²⁷.

In Australia, only four of the top ten VC firms have female partners. Although in Australia there appears to be a limited correlation between VC partners and fund investments, overseas the difference is marked. A diversity of gender in the top tier of VC firms begets a diversity in gender within a fund.

One element of the entrepreneurial journey is the pitch process and pitch nights are an opportunity for VC firms to scope out potential investments. Pitch nights favour a

“One element of the entrepreneurial journey is the pitch process and pitch nights are an opportunity for Venture Capital firms to scope out potential investments.”

certain type of skill, which is not necessarily a predictor of future success. Research shows that investors need to be aware of the unconscious biases present at pitch nights. Investors prefer entrepreneurial pitches presented by men, even when the content is the same²⁸. Even though the pitch night is merely one data point in a large process of due diligence, more weight should be placed on the unconscious bias of what success looks like to the investors.



Recommendations

1



Eliminate unconscious bias.

Firms and organisations know unconscious biases exist, especially in the startup funding arena. There are businesses that already offer unconscious bias training in Australia. It should be imperative that all players in this industry receive training to educate on the biases. Sharing best practice within the industry and continually challenging firms to reach for parity in selection can accelerate this change.

2



A ranking system for Venture Capital firms.

Develop a public ranking system to encourage Venture Capital firms to address the founder imbalances and seek out valuable female-led startups. Collect data and publish annual reports on the investments made to female-founded companies by Australia's Venture Capital industry. There are a number of organisations, from media to independent organisations, such as Startup Muster, with the capacity to report regularly in this area.

3



Collate and publish data.

The first step should be to encourage the organisations involved in startup creation, development and funding to publish hard data to understand the scale of the gap. Organisations are starting to fill these data holes. Startup Muster is on the fourth iteration of their annual startup survey.

The collection and publication of participation statistics at all stages of the entrepreneurial pipeline would enable public accountability. A priority for the whole ecosystem should be the support of a collaborative, regular reporting system to enable improvements to be made.

4



Mix up the pitch.

The Venture Capital favoured pitch nights are not free from unconscious bias and may not be the best way to scope out diverse talent. Research shows that investors prefer entrepreneurial pitches presented by men, even when the content is the same²⁸. Even though for investors the pitch night is merely one data point in a large process of due diligence, more weight should be placed on the unconscious bias of what success looks like.



Conclusion

With so much growth potential in the Australian startup scene, there is the opportunity to set a global standard for investing in female-led businesses and female entrepreneurs. Though only if there is data to tell the story³⁰.

More developed entrepreneurial ecosystems have benefitted from accurate tracking of the state of the startup ecosystem, accelerator hubs and the Venture Capital industry.

Recent reports, such as the startup ecosystem report by LaunchVic, and the work done by both BlueChilli³⁰ and Startup Muster to develop ecosystem maps for Sydney and Melbourne have provided a strong beginning. But a lack of data collected on Australian startups hinders discussion and allows for obfuscation of the real causes of disconnect. A priority for the government should be the creation of a collaborative, regular reporting system to enable improvements to be made.

The collection and publication of participation statistics would promote public accountability. Sharing best practice within the industry and continually challenging firms to reach for parity can accelerate change.

Additionally, with most high-growth companies coming from technology, science, financial services and engineering



sectors, priority should also be given to publishing data on the numbers of STEM women entering the workforce.

Australia's networks are powerful but only if organisations have access to them. Targeted capacity building and raising the visibility of female entrepreneurs will enable more women to access these networks, ensuring female entrepreneurs are able to contribute their share of value to the Australian economy.

Laura Youngson

Founder - Equal Playing Field and Ida Sports, The University of Melbourne's Master of Entrepreneurship graduate, Wade Inc alumna



Australia's networks are powerful but only if organisations have access to them. Targeted capacity building and raising the visibility of female entrepreneurs will enable more women to access these networks, ensuring female entrepreneurs are able to contribute their share of value to the Australian economy.

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