



# Inquiry into technological and service innovation in Western Australia

AIIA response

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# Introduction

## 1.1 About AIIA

The Australian Information Industry Association (AIIA) is the peak national body representing Australia's information and communications technology (ICT) industry. Since establishing 35 years ago, the AIIA has pursued activities aimed to stimulate and grow the ICT industry, to create a favourable business environment for our members and to contribute to the economic imperatives of our nation. *Our goal is to "create a world class information, communications and technology industry delivering productivity, innovation and leadership for Australia".*

We represent over 400 member organisations nationally including hardware, software, telecommunications, ICT service and professional services companies. Our membership includes global brands such as Apple, EMC, Google, HP, IBM, Intel, Microsoft, PWC, Deloitte, EY and Oracle; international companies including Telstra, Optus; national companies including Data#3, SMS Management and Technology, TechnologyOne and Oakton Limited; and a large number of ICT SME's.

## 1.2 Submission Overview

The AIIA appreciates the opportunity to provide comments on this important issue. Australia's future prosperity depends on a visionary and sustainable innovation policy and actionable innovation strategy. Growing Australia's innovation capacity is an economic necessity, requiring bi-partisan commitment to structural reform, investment and human capital. Building sustained innovation capital must not fall prey to short-termism or populist trends.

This submission provides the Committee with our views on:

- What drives innovation and the important role that innovation plays in driving productivity, growth and competitiveness
- The key success factors - pillars - for an effective innovation system, and current impediments to these in WA and Australia more broadly.
- Critical actions for industry, government and the research sector in Australia required to improve the effectiveness of Australia's innovation system.

It is not intended that all the actions included in this submission fall on the shoulders of the Western Australian government. It is incumbent on both the public and private sectors to commit to the future of Australia's innovation system and in particular, a system that drives growth and global competitiveness at both state and national levels.

Australia's future prosperity depends on the cooperation of government, academia and industry to build and maintain an ecosystem in which innovation is not only possible but thrives.

AIIA strongly encourages the Economics and Industry Standing Committee to develop a bipartisan vision for the future of WA's innovation system. This needs to be supported by a clear roadmap for action, metrics to measure success and engagement by government of the research, academic and business sectors in the prosecution of that plan. AIIA urges the Committee to act decisively and urgently to ensure Western Australia, and Australia more broadly, are not left behind in the global competition stakes.

# Innovation for long term economic growth

The Australian economy is entering a critical phase, with a number of 'disruptive' trends and pressures which provide both opportunities and risks for Australian business.

The resources boom has had a significant impact on the structure of the Australian economy. A critical outcome of the resources boom has been the impact on productivity. Australia's productivity growth - the envy of the developed world in the 1990s - has slowed dramatically in the last decade (primarily due to significant falls in mining and agriculture productivity). While increasing terms of trade has, so far, sustained incomes, despite slower productivity growth, this is not sustainable. In the long run, productivity growth is essential to Australia's, and Western Australia's prosperity.

Notwithstanding the need for a renewed focus on productivity, the economic and demographic landscape is different and rapidly advancing technology is driving profound change at local and international levels and across all sectors. Technology is transforming business operations and business models and disrupting traditional value and supply chains globally. With the global distribution of supply and value chains, products, services and labour are all tradeable.

To sustain the level of prosperity Western Australia has enjoyed (and expects) productivity growth is imperative. However, this is only possible if we remain, indeed improve our global competitiveness. In the current global digital economy this translates to both the ability to participate and effectively compete in the global market as well as the ability to compete locally to retain skilled employees, reskill other employees and target domestic customers.

Competition in the market place is the key driver of innovation. Competition is the process by which rival businesses strive to meet customer needs by developing and offering desirable goods and services on the most favourable terms. Competition spurs ongoing productivity growth. More competitive markets lead to greater efficiencies in the use of scarce resources. The benefits of competitive markets include lower resource costs and overall prices, better services and more choice for consumers and businesses, stronger discipline on businesses to keep costs down, faster innovation and deployment of new technology, and better information allowing more informed consumer choices. Competitive markets are dynamic and innovative, which can benefit Australians both now and into the future.

The benefits of innovation encompass direct benefits to innovative firms and consumers and social benefits through knowledge spill overs. Spill overs are benefits which are not directly captured by the innovator. They arise where ideas and concepts from innovation are mimicked or adapted in further innovation. Spill overs from innovation provide a multiplier effect across the economy, and are the primarily rationale for government funding support for research, particularly basic research.

In the case of digital innovation and entrepreneurship, evidence shows a direct correlation to increased business opportunities, economic growth and job creation. With the right support it is estimated that *"the Australian tech startup sector has the potential to contribute \$109 billion or 4% of GDP to the Australian economy and 540,000 jobs by 2033 with a concerted effort from entrepreneurs, educators, the government and corporate Australia"*.<sup>1</sup>

While Australia's position in the 2015 Global Innovation Index<sup>2</sup> has marginally improved on previous years, we still rank only 17<sup>th</sup> overall, still well behind countries such as Switzerland, the UK, Finland, the US, Singapore and Canada.

In a world where our population remains reasonably stable whilst the number of people in productive employment is reducing and the cost of our ageing population increasing, innovation is imperative to future growth and productivity improvement. The Government knows this - and articulates that link explicitly. How they are responding is much less clear.

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<sup>1</sup> PwC Consulting, (2013) The Startup economy. How to support tech starts and accelerate Australian innovation.

<sup>2</sup> <https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf>

# Pillars of an effective innovation system

Despite the critical role innovation plays in powering productivity and growth, Australia's innovation system is not structured, or supported, to ensure that it is as effective as it can be. In the case of Western Australia, there seems little clarity or focus on an "innovation system" at all - it is more a case of specific niche areas or disparate initiatives.

Of course, innovation is not an end in itself. It is the means to achieve higher order outcomes - the growth, productivity and competitiveness that underpins state and national prosperity. It is because innovation is so critical to achieving these outcomes that a more informed and systematic approach to building innovation is necessary.

Recognising that an innovation system is by nature multidimensional and dynamic, Australia's approach to building innovation capacity requires a holistic, co-ordinated and agile approach. AIIA advocates for the development of a National Innovation Framework to underpin Australia's innovation agenda. Components of the framework must include a focus on:

- Collaboration: industry, university and government
- Human capital: building skills and transforming culture for knowledge generation
- Structural reform: removing barriers and incentivising competition
- Investment and Funding: modernising funding paradigms and investing for long term growth

Critically these do not stand alone. The success of the innovation depends on their interconnection.

Furthermore, it is crucial there are state based approaches or frameworks closely aligned and connected to a national agenda to ensure broad, collaborative innovation outcomes and strong alignment to local, national and global market opportunities.

## 1.3 Collaboration: industry, university and government

The Australian Innovation System Report series annual reports show that Australia does not do well in producing original goods, with very little high-tech products making their way to global markets.<sup>3</sup>

International comparisons of Australia's performance support this finding. The 2014 Global Innovation Index (GII)<sup>4</sup> ranked Australia 17 out of 143 economies across 81 indicators. Our 17th position overall was based on a relatively strong performance in its innovation inputs (i.e. public research funding), ranked 10, while its innovation outputs ranked 22 demonstrating the low efficiency of Australia's innovation system, which overall achieved a score of 0.70, below the average of 0.74 of all 143 countries.

This essentially means we have the right fundamentals for innovation, such as public research spending, but we do not use these advantages for outcomes that are on par with the most competitive countries. In fact, we are outclassed by countries such as Malta and Estonia.

International evidence confirms that collaboration is key to innovation performance and outcomes and that research and innovation are most effective when collaboration is maximised.<sup>5</sup> This includes collaboration between universities, research institutions and businesses; collaboration between large companies and smaller businesses; government, research and business collaboration; and more broadly connections to global research and business networks.

Collaboration increases the capacity to create and absorb new knowledge, develop and access new skills, reduce costs through eliminating duplication, driving economies of scale and democratising access to potentially expensive and scarce resources. It spreads cost and risk and in the case of

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<sup>3</sup> Ibid 6

<sup>4</sup> The Global Innovation Index 2014, <https://www.globalinnovationindex.org/content.aspx?page=GII-Home>

<sup>5</sup> See: Public-Private partnerships for Research and Innovation: An Evaluation of the Australian Experience, OECD, 2004, Meetings Around the World: The Impact of Collaboration on Business Performance. Frost and Sullivan, 2008 and Powering ideas. An Innovation Agenda for the 21st Century. Australian Government, 2009

research organisation and industry collaboration enables ‘good ideas’ to be applied and commercialised. Engagement in international collaboration and global value chains builds world standard competitive capability.

Spill over benefits from knowledge diffusion are a critical component of the overall value of innovation and core to this is an underlying, effective collaboration framework.

While at one level Australia simply lacks an appropriate supporting collaborative infrastructure, at another, incentive arrangements for some publically funded research organisations actively mitigates against collaboration.

In our view incentives for researchers and business are misaligned and this is a barrier to commercial returns being realised. The current systems incentivise universities to focus on research publications rather than commercial applications. Current practices typically ‘lock’ intellectual property in universities and/or also expect academia to have the skills and experience to market and align to commercially viable outcomes.

Similarly, the business environment can hamper research collaboration - short business planning cycles and risk aversion can limit the extent to which business seek research collaboration opportunities. Business, understandably, are primarily focused on their own commercial strategy, therefore research opportunities need to be appropriately targeted to engage business properly. This misalignment - with researchers focusing on research excellence and business focusing on commercial outcomes, can lead to many missed opportunities.

The Cooperative Research Centres Programme by the Federal Government is a good start for collaboration. However the lack of well-structured or permanent information sources available to participants in the innovation system combined with the absence of innovation hubs that provide a focal point to bring together the relationships and resources they need to innovate - are symptomatic of the bigger issue in an innovation system that lacks formal and effective collaboration frameworks.

## 1.4 Human capital: building skills and transforming culture for knowledge generation

### Skills and education

Australia, like most developed countries, is facing critical shortages in professions which require Science, Technology, Engineering and Mathematics (STEM) skills - particularly the ICT profession. It is these STEM based professions which will drive economic growth in the future and which will generate the job opportunities of the future.

Some 75% of the fastest growing occupations today require STEM skills and knowledge.<sup>6</sup> As the Federal Chief Scientist said in releasing his *Science, Technology, Engineering and Mathematics: Australia’s Future Report*<sup>7</sup> last year, Australia is the only OECD country without a science or technology strategy. He went on to say “...other countries have realised that such an approach is essential to remaining competitive in a world reliant on science and science-trained people”.

The shortfall in STEM limits innovative capability and productivity improvement. STEM education is important not as an end in itself, but as a means to develop the foundations to support innovation: skills that promote inquiry, critical thinking and analytics, enable interpretation of data, learn from hands-on experimentation, identify connections between different disciplines, persist in problem solving (even at the risk of failure), work collaboratively and strengthen research skills.

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<sup>6</sup> Becker, K. and Park. K. effects of integrative approaches among STEM subjects on students’ learning. Journal of STEM Education 12, July - September 2011

<sup>7</sup>Australian Government Chief Scientist, Science, Technology, Engineering and Mathematics, Australia’s Future (2014)  
[http://www.chiefscientist.gov.au/wp-content/uploads/STEM\\_AustraliasFuture\\_Sept2014\\_Web.pdf](http://www.chiefscientist.gov.au/wp-content/uploads/STEM_AustraliasFuture_Sept2014_Web.pdf)

While countries such as the US, UK, Singapore, China, Brazil and India are investing heavily in building their STEM capability precisely because they regard these disciplines necessary to future economic and social wellbeing, Australia's performance is lagging behind many of our comparable peers.<sup>8</sup>

- Singapore has nearly 50 % of STEM degrees as a percentage of the total
- 41% of all degrees awarded by Chinese institutions in 2011 were in a STEM subject (almost twice the proportion in the UK and three times the rate in America)

In their *2015 World in 2050 report*, PwC predicts that Australia's economy will drop 10 places in world rankings by 2050 from its current rank of 19. This will take Australia out of the G20 and put us behind countries such as Bangladesh, Egypt, Iran, Pakistan, Philippines and Thailand. In PwC's opinion, this slump is based on an assessment that Australia has under invested in non-resources areas of the economy, with STEM education identified as a key example of under investment.<sup>9</sup>

STEM skills are critical to the management and success of the day-to-day operations of competitive firms.

STEM education must go beyond the traditional disciplines in order to maximise Australia's competitiveness. At an international level a more comprehensive view of STEM has emerged focused on developing creativity, imagination and entrepreneurship skills. Schools and universities often offer specific programmes for entrepreneurship education which use active, learner-centred and context-rich pedagogies (imitating real-world situations). Even where specific programmes do not exist, "entrepreneurial skills" are seen as a competency to develop across subjects and school levels.<sup>10</sup>

## Culture

Innovators and entrepreneurs are a nation's job creators. With increasingly rapid advances in technology, they are also the 'creators' of the jobs and careers of the future - a point borne out by Michael Mandel's recent analysis, *Jobs in the Australian App Economy*<sup>11</sup>.

Notwithstanding that repeat entrepreneurs who have failed once before have been shown to have a higher chance of success than those trying for the first time<sup>12</sup>, Australia's tolerance for business risk and failure is low. The low acceptance of business failures means potential innovators are often reluctant to launch new ventures for fear of harming their reputation. It is also reflected in the reluctance of talented people to transfer from the tertiary education sector to private sector organisations - the perception that it is a failure to go from research in university to business.<sup>13</sup>

The Innovation Systems Report 2012<sup>14</sup> includes an analysis suggesting that around 70% of businesses have some degree of innovation culture, but 44% have an ad hoc approach and 6% do not practice it despite having a strategy in place. Only 18%, mostly large businesses, are strategic innovators. Additionally, the University of Melbourne and the Australian Institute of Management conducted a

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<sup>8</sup> AiGroup, *Progressing STEM Skills in Australia* (2015)

[http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE\\_CONTENT/Publications/Reports/2015/14571\\_STEM%2520Skills%2520Report%2520Final%2520-.pdf](http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE_CONTENT/Publications/Reports/2015/14571_STEM%2520Skills%2520Report%2520Final%2520-.pdf)

<sup>9</sup> PwC, *The world in 2015: will the shift in global economic power continue?* (2015)

<http://www.pwc.com.au/consulting/assets/publications/World-in-2050-Feb15.pdf>

<sup>10</sup> For example: Denmark formalised in 2009 a strategy for education and training in entrepreneurship (targeting all levels of education) and in 2010 ran a competition to establish a University of Entrepreneurship. Finland has issued Guidelines for Entrepreneurship Education (2009); Ireland's National Strategy for Higher Education (2011) promotes entrepreneurship training as part of their curricula; Norway has developed an action plan for entrepreneurship in education (2009-14) and included entrepreneurial skills as a core competency in the National Qualification Framework for Higher Education; in Norway and New Zealand, moreover, how to set up and develop a business is part of the business or economic studies curriculum in secondary schools.

<sup>11</sup> Mandel, M. 2014. *Jobs in the Australian App Economy*. Progressive Policy Institute.

<sup>12</sup> P A Gompers et al., "Performance Persistence in Entrepreneurship and Venture Capital", *Journal of Financial Economics*. Vol 96. No.1 2010

<sup>13</sup> Ibid.

<sup>14</sup> Australian Government, Department of Industry, Innovation, Science Research and Tertiary Education, *Australian Innovation System Report, 2012*, <http://www.industry.gov.au/science/policy/AustralianInnovationSystemReport/AISR2012/index.html>

survey of 2,400 business professionals from all sections of industry and government that found that poor leadership is the main reason organisations fail to innovate.<sup>15</sup>

A characteristic of countries with a mature innovation ecosystem is that they typically have a more established history and culture of entrepreneurship.<sup>16</sup> This must be an explicit goal of Australia's and Western Australia's innovation ecosystem/s.

## 1.5 Structural reform: removing barriers and incentivising competition

Countries with a strong innovation performance typically demonstrate the value of a supportive policy, regulatory and institutional environment. Policies designed to incentivise innovation and support early stage and more established entrepreneurial ventures provide a critical underpinning in an effective innovation ecosystem.

This includes, for example, appropriate tax relief for investment and risk taking, simplifying rules to help companies raise equity and debt capital, reducing the administrative burden of tax, regulation and reporting requirements; improving the accessibility and transparency of regulatory arrangements; and streamlining compliance requirements.

Importantly, in forums discussing services export development, the interest of AIIA members is not export opportunities but opportunities to re-locate their business offshore. Reasons for this include:

- perceived more favourable treatment of innovative start-up businesses overseas;
- more generous R&D opportunities overseas;
- better access to relevant skills;
- perceived access to funding, including venture capital funding;
- higher tolerance for business risk and innovation overseas.

These issues reflect a perception by parts of the industry that the government is not committed to nurturing and growing Australia's domestic ICT/digital technology capability and that innovation in this area is better understood and valued by a range of overseas partners and competitors.

The US, UK, South Korea, Singapore and the European Union for example, all have well articulated growth agendas focussed explicitly on ensuring the existence of a robust and sustainable business ecosystem in which innovation thrives, and from which productivity and economic benefits can be derived.

## 1.6 Investment and Funding: modernising funding paradigms and investing for long term growth

Entrepreneurs need an environment that is conducive to investment in activities that drive new ventures, new products and services and new jobs.

Australia has one of the lowest rates of venture capital investment in the developed world. According to the 2013-14 World Economic Forum Global Competitiveness Report Australia ranks 19<sup>th</sup> in the availability of venture capital - well behind the US, Singapore, Malaysia, Norway, Sweden, Israel and China.<sup>17</sup>

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<sup>15</sup> The report Innovation: The New Imperative, 2013, identified three main barriers to innovation that were all leadership related. It found that: organisations are too risk adverse; employees do not get rewarded for innovating; and it takes an exceptionally long lead time to develop ideas.

<sup>16</sup> The Power of Three. Together, governments, entrepreneurs and corporations can spur growth across the G20. EY. 2013

<sup>17</sup> [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2013-14.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2013-14.pdf)



On a per capita basis venture capital investments in start-ups in Australia is currently US\$4.7 per capita per annum. This compares to US\$170 in Israel, US\$85 in the United States, US\$20 in South Korea, US\$15 in the UK and US\$5 in New Zealand.<sup>18</sup>

With limited venture capital and private equity funding opportunities many Australian start-ups and entrepreneurs struggle because they cannot access essential financial support. Lack of access to 'affordable' capital - at reasonable rates and on reasonable terms - is one of the most significant market failures in the Australian start-up ecosystem.

To support an effective innovation ecosystem, Australia and/or Western Australia needs to develop more innovative funding platforms. These include crowdfunding, microfinance, targeted venture capital funds and incentives for private sector investors to focus more on innovative and entrepreneurial businesses.

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<sup>18</sup> Referenced in Crossroads. An action plan to develop a vibrant tech start up ecosystem in Australia, Startup AUS, April 2014. P48

# Actions to support an Australian innovation system

In support of our proposition that sustained innovation is most effectively enabled by a system comprising the interconnection of the themes outlined above, AIIA makes the following recommendations in support of the future of competitive innovation in both Western Australia and Australia more broadly.

Importantly, this needs to be supported by a clear roadmap for action, metrics to measure success and engagement by government of the research, academic and business sectors in the prosecution of an innovation framework.

## 1.7 Collaboration: industry, university and government

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*Recognising the critical role of collaboration (at all levels) to drive high performance innovation and outcomes it is recommended that:*

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- Universities are incentivised to collaborate with industry to develop the commercial potential of their research. This requires reassessment of performance based block funding arrangements under the Excellence in Research in Australia (ERA) program to rebalance the current focus on producing published research papers as opposed to applied outcomes;
- A national, or at least state based register of intellectual property (IP) for Government funded research institutions and/or IP developed within Government itself, be established to speed up the commercialisation process. IP could be charged (or not) at different charge rates. Where IP from university based research is not used within a specified timeframe that IP is made commercially available;
- A mechanism is implemented to support small and medium sized businesses contact with universities and/or government to provide stronger research capacity to their projects;
- Government work with industry to recommend and help develop successful models of collaboration for people with STEM skills to work with business. This could include for example, working with the [Digital Careers](#) initiative to facilitate an 'hour of code' event with students, industry and Ministers at Parliament House.
- Establish cross disciplinary and cross sector collaborative models such as the [UK Catapult program](#) to facilitate increased collaboration between researchers and business.
- Investigate options to work with industry, universities and/or vocational training sectors to effect cross-training, re-training or job transition opportunities for employees from other disciplines or sectors into broader STEM related fields. Eg: Resource sector workers/FIFO workers

## 1.8 Human capital: building skills and transforming culture for knowledge generation

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*Recognising the critical role that STEM skills play in driving innovation and Australia's global competitiveness it is recommended that:*

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- Australia's STEM capacity building is aligned to clearly articulated national goals;
- WA advocate that the rollout of a national STEM strategy is supported by a comprehensive statistical database that includes data on initiatives and performance relating to education, training, workforce, research, international engagement, competitiveness and the workforce;

- Clear objectives, targets, milestones and a STEM measurement framework are developed to monitor progress in building Australia's STEM capability. This includes:
  - mapping outcomes against workforce needs; and
  - tracking the maturity of Australia's innovation capability relative to increased STEM capability;
- Helping re-skill existing (and in particular older) workers (to provide them with core IT skills) who will lose their jobs as the combination of technology advances and growth in computing power makes many roles obsolete

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*To enable Australia to build an effective and sustainable STEM education system it is recommended that:*

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- WA advocate that a national education strategy is developed incorporating all aspects of Science, Technology, Engineering and Mathematics. This includes:
  - Introducing a mandatory Digital Technologies course in to the school curriculum for K-12;
  - Inquiry-based learning, project-based learning, creative learning and entrepreneurship are incorporated with a focus on real-world contexts and situations;
  - Working with the VET and tertiary sectors to ensure courses remain relevant to employer requirements. At the tertiary level this must include embedding work integrated learning (i.e. internships, job placements, etc) in to degrees;
- Incentives are introduced to encourage and support well qualified STEM tertiary graduates and high performing STEM students leaving school to progress into careers that make direct use of their talents including the all-important teaching professions. This involves:
  - Better marketing of the career opportunities available to ICT professionals - this must include working with teachers, parents and career advisors who are such strong influencers of student career choices;
- An actionable program to support teacher professional development training in STEM education is developed, where:
  - Educators are incentivised to specialise in teaching STEM and ensure their knowledge is up to date with relevant contemporary developments;
  - There is a commitment to long term acceleration of STEM career pathways through industry matched support that goes beyond pilot programs;
- STEM internship support incentives and training materials that help businesses (particularly SMEs) host, engage and work with students are developed.
- Encourage the WA Chief Scientist and the newly appointed Government CIO to collaborate on agendas and initiatives to drive STEM related focus.

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*To drive a culture of entrepreneurship AIIA recommends that:*

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- More emphasis is placed on nurturing a supportive, national innovation and creative culture that is tolerant of business risk;
- Innovation and entrepreneurship are incorporated into the broad range of university degrees, including STEM professions.

- WA Government taking a leadership role in delivering innovative approaches to government service delivery and allowing opportunity or broader trials of creative or new approaches to technology within government.
- Actions that remove the stigma of ‘failure’, particularly in relation to business start-ups. This could include advocating to amend bankruptcy laws to strike the right balance between protecting the interests of creditors and giving entrepreneurs another chance and providing additional tax relief for investors engaged with companies that go bankrupt.
- Develop an entrepreneur scholarship program targeted at young people. In addition to providing financial support for young entrepreneurs to access relevant support programs and/or provide them some financial support while they focus on their idea, the program legitimises a career focus on entrepreneurship.
- Showcasing success. This includes businesses showcasing success and emphasizing the benefits of entrepreneurship including job creation and broader social and economic impacts.

## 1.9 Structural reform: removing barriers and incentivising competition

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*To ensure Australia has an attractive and effective business ecosystem that incentivises competition and businesses to remain and grow in Australia it is recommended that:*

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- A whole of government approach to innovation policy, with a focus on mechanisms that coordinate policies and activities across agencies is developed;
  - This is necessary to leverage scarce resources and ensure a focused state and national innovation effort aimed to incentivise Australian business to operate from Australia rather than relocate to other jurisdictions/countries that are perceived as more attractive;
  - A focus on supporting start-ups by fostering a regulatory and business environment that is open to exploration of techniques and testing of ideas with rapid shift in focus with minimal blowback;
    - For example, government might consider a mechanism for virtual start-ups supported by investment of time and resources from established corporations.
- Stimulate innovation precincts or working environments:
  - An innovation park or innovation community should be in affordable and/or accessible location/s with access to collaborative/flexible working environments across a range of locations.
  - It often helps to be close to the CBD or at least a key University to obtain maximum cross benefit. Furthermore, a range of locations or environments that allow for flexibility in workplace activity, collaboration and location could also return significant benefits thus enabling a more “agile” culture that can align working style and needs to location or activity.
  - Encourage cross-promotion and cross-fertilisation opportunities at the grassroots level for SMEs who generally find getting access and connections more difficult
- Reduce the administrative burden of tax, regulation and compliance
  - Creating convenient, accessible online tools that help entrepreneurs and innovators navigate regulatory requirements and simplified rules to help companies understand and raise equity and debt capital. This includes streamlining ways for business to deal with all levels of government.

- Support tax reforms that promotes competition in the market place such as improving the R&D tax incentive, reducing the company tax rate and abolishing stamp duty for SMEs.
- Reform WA government procurement processes to facilitate increased take-up of innovative solutions offered by small and medium sized business. Government can play a key role in driving innovation and developing innovative skills by using its purchasing power to engage with and ‘invest in’ companies with innovative solutions and capabilities. This also facilitates the maturity and growth of businesses and strengthens innovative supply chains.
- Broader thinking more generally around procurement would be recommended to include more open submissions and innovative or creative solutions to be presented. Prescriptive tendering of common use agreements often stifle creativity and are a disincentive for innovators.
- Aligning procurement to business outcomes or specific problem solving opens up more innovation and thinking to address real outcomes.
- Further support from Government and Business to collaborative problem solving and/or access to data also supports innovation. GovHack and the like, encourage innovative thinking to come to the table and help deliver outcomes or ideas.

## 1.10 Investment and Funding: modernising funding paradigms and investing for long term growth

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*To assist innovators and entrepreneurs access the capital they need to fund innovation and to appropriately recognise and support investors AllA recommends:*

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- Develop innovative funding platforms such as crowdfunding and microfinance as a means to encourage increased private investment.
- Tax relief for investors in innovative start-ups and high growth companies. This includes relief in the form of tax credits or a reduced rate of tax in the first instances and/or relief in the form of capital gains tax reductions or exemptions for qualifying venture investments.
- A government innovation fund to source new products, services and solutions from small business to support the development of solutions for government. The U.S. Small Business Innovation Research (SBIR) program is an example of such a model.<sup>19</sup>
- Develop or coordinate broader joint venture opportunities and incentives across multiple industries to drive “outcome based” innovation agendas for specific business needs or issues combining the industry specific knowledge and experience of multiple or even disparate industries to solve complex business or manufacturing issues.

Eg. Bringing together agriculture/mining/academia and technology to deliver a specific business outcome or solution in agriculture OR mining OR technology OR perhaps another non-aligned industry.

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<sup>19</sup> <http://www.sbir.gov/>