

Creating a Modern Industry Policy for South Australia

Discussion Paper Questions

Theme 1: A strong local foundation

Beyond existing commitments, activities and programs, what else could ensure that workforce training is flexible enough to meet future industry needs in a rapidly changing global environment?

The AIUS –SA suggests placing greater emphasis on the main industries and sectors that the State is being impacted on by ongoing changes to technological and economic landscapes. Given the new economy primarily relies on knowledge, the State should continually identify new trends and advancements and tailor training and education, not only on the specific skills but also more broadly, what the future might bring and how we can continually work towards it.

Training should be insightful and empower people to generate new ideas. It's difficult to develop new businesses or sub-sectors of industries if we aren't prepared for what is possible. Schools play a great role in this, and they are already working to encourage this however we should continually consider what else we can do to prompt more curiosity and ingenuity

For example, many libraries currently have programs on 3D printing and digital training. Also, Lynda.com offers access to a myriad of online free courses on a wide range of subjects. There is an opportunity to explore how future policy could integrate with Council's libraries. In support of this, the Australian Library and Information Association published the *Future Of The Library And Information Science Profession: Public Libraries Report* (<https://www.alia.org.au/futureoftheprofession>) with a vision and strategy about the future of public libraries. Twelve strategic themes are identified in that report, five of which are linked to the contribution libraries could make to enhance community capabilities, skills and personal development (Support for the Creative Economy, Community Created Content, Maker Spaces, Enterprise Hubs and Online Learning).

What government regulations or processes are blocking South Australian businesses from pursuing innovative business growth opportunities?

The AIUS SA recently made s submission to the State Planning Commission on the Productive Economies. The submission noted, in the context of planning and land use, that whilst structural economic change is rapid (for example, as evidenced by the significant decrease in manufacturing over the past 20-30 years), innovation processes are slow – particularly in relation to innovations in activities and therefore land uses.

Therefore, to achieve the greatest return, planning policy reform should concentrate on greater development and land use diversity (as opposed to narrowing the spectrum of activities and or concentrating on new use definitions).

Essentially the AIUS SA is recommending a review of employment related zones in the planning system to ensure current or future zoning is not restricting industry expansion or diversification. The AIUS SA recommends continually working with the planning department to ensure planning policies are in align with the Industry policy and broader economic change.

How can the government help businesses access public and private equipment and infrastructure, such as research or manufacturing equipment, to enable increased innovation and collaboration?

Capital expenditure on equipment for new and emerging businesses can be quite prohibitive, is there potential for common equipment that is owned by research entities, Government entities or even in private ownership that can be shared or leased as required? This would generate greater efficiencies and return on and reduce capital costs for business that are accessing the equipment / infrastructure.

What are the highest infrastructure priorities to improve business productivity?

South Australia should seek to increase the productivity of the economy's current industries and also create the conditions for the new sectors to flourish. The AIUS SA suggests working with each sector and developing a list of relative infrastructure priorities. The AIUS SA suggests working closely with Infrastructure SA to ensure the infrastructure priorities as developed for future Infrastructure Plans unlock bottlenecks and create real economic benefits for the State.

Future industry growth and economic activity will increasingly occur digitally and therefore greater emphasis must be placed on wireless and fiber infrastructure. This should be reaffirmed as essential economic infrastructure and considered accordingly by Infrastructure SA.

The AIUS SA suggests exploring further investment and expansion of the Gig City and 10 Gigabit projects and the 10 Gigabit network offers a model that could be extended into dedicated innovation districts, where appropriate returns can be generated.

In relation to current and future Innovation Districts, the AIUS recommends exploring;

- how these are currently functioning;
- are they duplicating intent;
- do they need to specialize or generalize; and
- do we need more dedicated innovation districts or clusters or do we seek to weave future industry activity into existing employment areas?

The AIUS SA supports exploration of the benefits of 'industry collaboration infrastructure' (i.e. the tangible or intangible spaces that prompt collaboration and innovation). Those spaces support cross discipline interaction between businesses, government and academia. Given nowadays innovation occurs at the intersection of many different disciplines and sectors, we need to create the necessary conditions for those interactions to happen. Preferably in the case of physical infrastructure, the spaces should be neutral, neither in closed / inward academic, government or private domains, but potentially in new neutral places where all can convene and work together.

Given that governments are key purchasers of goods and services, what procurement reforms could be made to support innovative business growth within our economy?

Overall, there is continued role for Government to drive supply solutions through procurement. Government may play an important role by guiding the support and development of the new economy.

For instance, could the Government purchase products and services in line with circular economy practices and approaches as a way to develop that sector?

In similar fashion Government can support the development of the Blockchain by integrating it into its current or new services. As a result of that increasing awareness and activity, the demand for new services could emerge in the city and drive further the implementation and development in the private sector too.

Government can explore tools such as contests, awards, hackathons that demand particular innovative solutions for problems. The AIUS SA supports the recent Blockchain Challenge organized by the State Government (as these are true methods to prompt creation and innovation).

Government could link these practices to problems and issues we need to solve or opportunities we seek to realize. For instance, an award for initiatives/solutions/businesses that harness artificial intelligence to solve a data problem, mobility problems, or perhaps a given health issue. Other ideas include a Blockchain solution to solve a given problem in the energy sector, a solution that contributes to Climate Change mitigation / adaptation, or even a circular economy solution to contribute to housing affordability. By linking new technologies to problems Government, this could lead and drive further positive economic transformation. This all has the potential to create a truer collaborative and partnership industry approach

Beyond specific industry and procurement policies, it is suggested the Government also explores economic stimulation policies for periods when demand is low in the market place. By having economic stimulation policies or positions, this provides confidence to industry to invest. This can be more important and create greater benefits than tweaking specific procurement policies and approaches,

Theme 2: A global outlook

Beyond existing commitments and activities, are there other ways government should be helping businesses to identify and pursue global opportunities and/or partners to improve global competitiveness?

As per the introduction to the Discussion Paper, and acknowledging that a high majority of South Australian businesses are small businesses, yet larger businesses generate a wide range of benefits as described, would there be any benefit in actively pursuing or encouraging business consolidation in certain sectors? What support structures or leavers could be pulled to encourage this?

The AIUS SA also suggests exploring approaches that are relative to the various stages of business cycle (i.e. a new startup, growth business or even businesses whose future is at risk due to disruptive technologies or future impact of an all new-digital-economy).

How can we support businesses to add more value to the products and services they export to boost the value and sophistication of South Australia's exports?

In 2016, Australia was currently in 86th position in the World's Economic Complexity Index (ECI). The five countries above Australia were Albania, Morocco, Argentina, Kazakhstan and Senegal, whereas the five below were Iran, Kenya, Cuba, Paraguay and Cambodia. We don't have specific data for South Australia but the result reveals the level of wealth we enjoy is not relative to the complexity of

economic output but rather easier access to vast natural resources that can be utilized and or even exploited. The ECI is a tool developed by the MIT Media Lab and Harvard University's Kennedy School of Government and is a worldwide acknowledged measurement tool for complexity. Complexity is a vital component of value adding.

The AIUS SA suggests analyzing our economic output and exports to understand where value is added and its relationship to the overall value chains to identify opportunities for improvement and innovations. This will also assist in understanding how the ongoing technological transformation and environmental challenges will affect our added value and the industries themselves. By understanding these components better, the State can tailor policies to strengthen our competitiveness.

Theme 3: Prosperous businesses

How do we build on existing initiatives to establish a holistic entrepreneurial skills system in South Australia, so that we have more businesses starting and more businesses taking risks to grow?

Entrepreneurship is already being encouraged and taught in primary and high schools in SA. Beyond the State Government pilot initiative in five schools there are others developing their own programs. One suggestion in this regard is to broaden the concept of entrepreneurship to social entrepreneurship as well as public and academic intrapreneurship beyond the idea of business creation. The AIUS SA suggests opportunities to develop these skills, capabilities and attitudes in those four main groups and allow those actors to speak a common language and understand each other. It is considered, that eventually by understanding their different approaches and needs, they will be able to build a new generation of public, private, non-government and academic partnerships.

Entrepreneurship can be also encouraged as an approach to embrace the local and global challenges we face. That is, harnessing entrepreneurship to develop solutions for climate change, sustainable economy, democracy strengthening, our ageing society, inequality, social disadvantage etc. We could spur meaningful businesses, social enterprises and networks of public intrapreneurs by coupling entrepreneurship with complex problems.

How can we better connect investors to early-stage investment opportunities so businesses can access the capital needed to grow? And how do we increase South Australian businesses' appeal and readiness for private investment?

Without knowing the existing relationships and structures / systems in this field, there is an opportunity to explore an entrepreneur and investor 'market place' where entrepreneurs and investors, as well as researchers and academics can meet, either digitally or physically and essentially shop around their business ideas and investment aspirations.

How can we best help businesses to develop their management and leadership capabilities, including through learning from other successful businesses and business models?

Broad entrepreneurial education through school and system infrastructure (tangible and intangible) to facilitate the connection and mutual encouragement among businesses. There are already private spaces investing in these sorts of infrastructures.

We suggest exploring further co-education, co-location and co-habitation opportunities, such as innovation districts and the like to support sector thinking and the public sector. These will facilitate connections and contribute to create healthier, genuine and more productive partnerships.

Given the rapid pace of technological change globally, what mechanisms could support the acceleration of South Australian businesses to transform through the adoption of digital and emerging technologies?

Please refer to the infrastructure question and internet infrastructure

Final thoughts

Please provide any other comments or feedback on the draft policy framework.

We should seize the opportunity to source our economic development from the diversity of cultures, experiences and knowledge that is available in SA. In comparison to some other nations, we are in an enviable position of being a multicultural society living in harmony. This cosmopolitan and open community is perhaps the richest resource to nourish a 'State of creation', not only adopting new technologies but also shaping them. Our time is comparable to any other technological revolution ages that demanded a creative approach to harness those emerging technologies to transform the way we currently do things, but also envision the opportunities to develop unprecedented ideas, services and products. The challenge is not only to passively adopt the technological change but to devise what new products and services we can create upon them.

We have the chance to go beyond the building of a '*collaborative business environment*'. Public, private, not-for-profit and academic sector must partner, particularly to figure out how to develop new industries or to support those ones that demand transformation. Boundaries between these sectors are increasingly blurring. Policies should incentivise practitioners in the four sectors mentioned above to convene and shape the future economy. The public sector must be not only a mere supporter but actively involved and investing. In return it should benefit from the outcomes of those successful ventures.

Technological change operates in two different levels: one is the development of the new technologies themselves (industry 4.0, Blockchain etc). The second is what and how we harness those technologies for. Both levels demand a level of ingenuity for which the design industry can cater for. Just as an example, Industrial Design as a profession emerged as a consequence of the Industrial Revolution and the emergent need to design products according to the possibilities those new

manufacturing means brought to us. Consequently, our lives were transformed. UK, among other countries, is already working on the Design Economy and measuring its impact and outlook.

We often refer to Creative Industries as those ones clustered around the arts, media, film, games etc. However, in the context of the current technological change, in which everything must be re-thought, re-visited, invented or designed, most of the professions demand a creative approach. It might work better to frame the Creative Industries as all those ones that involved the protection of intellectual property. The most valuable process in every value chain will be that one that adds originality to the outcome. The main driver to build competitiveness will rely on the service or product originality. We should develop policies that puts our society in a 'state of creation' in all the economic domains. The person/business who develops a solution to enhance the mobility of an aged person, those who design devices that solve health issues, someone who applies Blockchain technology in an unprecedented way, a technologist that puts together a process that replaces an old unsustainable one, all those are active actors in the creative economy. Policies could focus on how we can spark SA's entrepreneurial ingenuity in support of the creation of new solutions and build new markets. In short, how can we build the Creative State.

The way policies are designed onwards should encourage that spirit of creation and competition. Exactly 100 years ago Prime Minister Billy Hughes set up a £10,000 prize for the team that could fly from UK to Australia in less than 30 days. Four teams took part of the challenge and a team of three, two of which were South Australians, won it by flying the Vickers Vimy that is exhibited at the Adelaide Airport (<https://history.sa.gov.au/events/centenary-of-epic-flight/>).

The £10,000-prize was a simple policy that became a landmark in the history of commercial aviation. One year later Qantas, the third oldest airline in the world, was created. We currently hear more and more about 'complex policy making' and very frequently we see less problem-based policies and more outcome-oriented. It is important to reflect on how a dormant entrepreneurial society and innovative economy could be spurred by simple decisions that put our community to create. As part of the 100 Anniversary celebrations of the first flight that united UK and Australia, this year there is again a Great Air Race London-Darwin 2019.

On this occasion it involves electrically-powered aircrafts. (<https://www.greatairrace.com.au/>) The recent Blockchain Challenge (<https://blockchain.yoursay.sa.gov.au/>) organized by the State Government is a very good example of the impact this approach could achieve.

What is your organisation type?

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