

Tonsley

Software & Simulation



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The South Australian Government is driving economic growth by building the state's competitive advantage, its export capability, and by supporting new investment in the state.

South Australia is open to new people, new ideas, and new business partnerships.

Background¹

Information Communications Technology (ICT) has changed society over the past 30 years. Rapid advances in computing, connected devices, social media and data analytics are disrupting traditional industries and creating new ones in their place.

Globally:

- 'Digital disruption' is changing the market context and competitive landscape of most industries.
- Technology is also changing the way people work, with machines and software replacing an increasing number of traditionally human tasks.
- The rise of 'big data' is a significant change driver, not least because of the sheer quantity of digital data being produced. According to IBM, the world generates 2.5 quintillion bytes of data every day.

As a result, companies are reassessing many fundamental aspects of their business, from manufacturing to sales and customer interaction. There are major challenges in the areas of privacy; cyber security has emerged as a major threat to governments, business and individuals, with cyber-attacks accounting for US\$300 billion to US\$1 trillion in global losses.

Rapid movement in this sector means threats will continue to emerge that currently are unknown.

But there are also untold opportunities for improved efficiency, productivity and innovation. In the fields of robotics, automation and simulation the possibilities are almost limitless.

Innovation and operational changes are therefore essential.

South Australia's invitation to you is to help seize these opportunities together.

¹KPMG, 2015

Current capabilities

Companies looking to develop, launch and test innovative new software and simulation products need look no further than South Australia. Here they are able to maximise opportunities, while minimising risks.

- Our regulatory environment is stable. We are business-friendly, and politically low-risk.
- Our capabilities in the sector are well-established, longstanding, and expanding:
 - In **defence**, major organisations located in South Australia include BAE, Cobham, Lockheed Martin, SAAB, Ratheon, Rheinmetall, Qinetiq. There are also plenty of strong but smaller firms like Prism Defence, SASimulations and SAGE Automation.
 - South Australia is also home to software development centres for several multinational companies.
- We have a **highly skilled workforce** and an internationally well-regarded **education** sector.

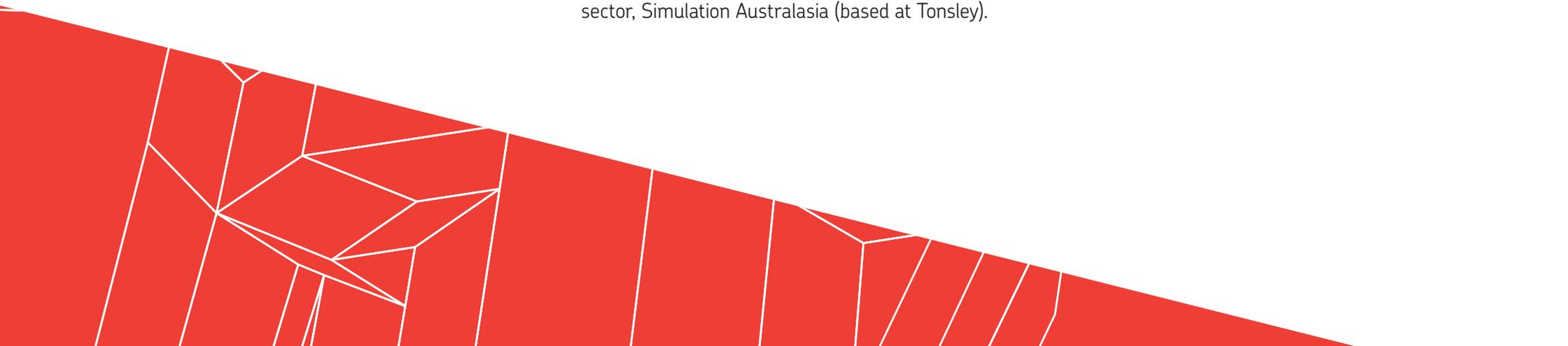
- Our **research and training** credentials are strong:

- Institutions producing cutting-edge research include the University of South Australia, Flinders University (in biomedical engineering for example), and the University of Adelaide, a world-class education and research institution (consistently ranked in the top 1 per cent of universities worldwide).
- World-class training is available through such facilities as the Adelaide Health Simulation and Skills Centre, the Clinical Skills and Simulation Unit at the Flinders University Medical School, and the simulation labs at the School of Nursing and Midwifery at Flinders University.

- **Modelling and simulation** are a particular strength; they now cross all sectors in South Australia – defence and security, health and medical, resources and mining, energy, transport and logistics, design and architecture, construction, environmental and entertainment. We are even home to Australia's peak body for the simulation sector, Simulation Australasia (based at Tonsley).

- South Australia's full time **labour costs** are 9 per cent below the national average:

- ICT company **Artis** has relocated to Adelaide because of its cost competitiveness.
- The Artis Group's new Adelaide-based facility supports application development for the company's government and commercial clients. State Super Financial Services was one of the first Artis clients to be supported out of the Application Development and Support Centre facility. Others include the South Australian Department of State Development's Dynamics CRM project, the Australian Government's biosecurity solution, and the New South Wales Rural Fire Services' emergency management technology. More Artis client support will be transferred to the centre over time.



Opportunities

The strong defence, health and medical sectors in South Australia are prime markets for software and simulation innovation. Adelaide is also becoming a national information and communications technology hub to service the minerals and energy resources sector.

All of this makes Tonsley an ideal base to network with existing industries, and emerging ones.

How so?

To promote that 'cross-pollination' – that creative spark – one initiative at Tonsley was to set up a highly successful co-working space, to support cluster development and initiatives. It's called **Co-HAB**:

“Co-HAB organically attracts like-minded people ranging from consultants to peak industry bodies and supports collaboration in a creative space.”

Brett Jackson, Co-HAB

Success stories at Tonsley include:

1 Simulation Australasia – Australia's peak industry body - relocated its headquarters to Tonsley. Corporate members include the Australian Defence Simulation and Training Centre, the Australian Institute of Medical Simulation and Innovation, BAE Systems, Boeing Defence Australia, Coal Services, Kellogg Brown & Root, the New South Wales Police Force Simulated Operations Unit, Saab Australia Pty Ltd, and TraumaSim.

The presence of Simulation Australasia at Tonsley is a resource to any company in the software and simulation sector.

2 Flinders University's School of Computer Science, Engineering and Mathematics (CSEM) at Tonsley – offers accredited courses and best practice teaching, research and consulting in the disciplines of Information Technology and Software Engineering, Biomedical Engineering, Civil Engineering, Design and Technology Innovation, Electrical and Electronic Engineering, Mechanical Engineering and Mathematics and Statistics.

3 Signostics – An Australian medical technology company developing novel portable ultrasound devices to take advanced diagnostic technologies out of hospitals and into the field. Signostics undertake both software development and hardware manufacturing at Tonsley.

4 System Simulation Hub – In an Australian first, Adelaide will gain a cutting edge system simulation hub at Tonsley. In a partnership between the State Government, Siemens and Simulation Australasia the hub will deliver training in leading edge system simulation technology to companies and universities.

“Technology precincts have great potential for industry, government and research coming together This is what has attracted us to Tonsley... (It's) the best example that we can see in Australia for such a technology precinct.”

David Pryke, Executive Vice President – Energy, Siemens

A bit more about Siemens:

Siemens is a strategic partner on the entire Tonsley project – testament to its commitment to South Australia, and confidence in our future together:

“Here in South Australia people are already working on projects including regenerative suspension systems, next-generation batteries, innovative electric drive trains and even autonomous vehicle technology.

“It’s that innovative philosophy that has started Siemens – in collaboration with a number of local companies and educational institutions – on a preliminary exploration of a virtual project using Siemens product lifecycle management software to design the world’s first electric restored and re-imagined Charger*.

“It would allow a team to test numerous technologies in a digital environment and could lead to real-world applications such as electric underground mining vehicles.”

Jeff Connolly, Siemens Ltd. Chairman and CEO

“To have this great company firstly invest, but secondly be so vocal in its commitment to Tonsley, speaks volumes for the vision the State Government has for this site as an incubator for innovation, research and technology.”

South Australian Treasurer Tom Koutsantonis



*(The Charger was an iconic Australian car manufactured at Tonsley during the 1970s)

Tonsley supports your business.

The South Australian Government is proactive, collaborative, supportive and is committed to helping generate long-term success through the ongoing commercialisation of intellectual capital. Commercialisation support services available at Tonsley include:

- Flinders University's **New Venture Institute (NVI)** – inspires, educates and connects innovators and entrepreneurs.
- **Innovyz** – generates different streams of activity, attracting clients from interstate and overseas, and provides end-to-end support to help innovators build and grow companies that bring their creations to market.

The State Government also offers competitive grant programs to support research, development and testing of new products and services.

South Australia fosters new ideas and innovation, for eventual implementation at a wider scale.

We are about investment and projects that not only meet our own software and simulation needs, but can be exported around the world.

South Australia is open for business.

As Innovyz's Philip Vafiadis says:

“We hit the ground running at Tonsley and have moved at a breathtaking pace. In six months we have established the medical device program, redefined relationships with universities in Australia, developed communications partnerships and initiated work with new technologies...”

“There are not many locations that drive and support such intense growth.”

“Tonsley offers great potential for innovation and industry collaboration, bringing together complementary businesses with leading academic institutions. It represents a new future.”

South Australian Treasurer Tom Koutsantonis

“Tonsley connects the dots.”

Brett Jackson, Co-HAB

**Become a part
of Australia's first
innovation district.**

For assistance investing in Tonsley, contact South Australia's Investment Attraction Agency. Our professional team will work with you to further your interest in our state.

Ph: +61 8 8303 2400

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