

Australian Design Strategy 2.0

Introduction

A shared and immediate challenge facing all Australians; our governments, businesses and institutions, is to transition our society from an economy based on finite resources with limited options, to a future where infinite knowledge and creative enterprise create unlimited opportunities to thrive.

We compete in a region that is rapidly urbanising. It's forecast that around US\$20 trillion will be invested in urban infrastructure by 2050. Around half of the construction activity this will generate will occur in the Asia Pacific region. Our neighbours seek the products, materials, technologies and services required to support unprecedented growth and change.

Supporting Australia's design sector is essential if we want to meet this demand, and boost our own capacity for creativity and innovation.

Competing in our region means lifting Australia's ability to enter international markets and 'win the existing game' thanks to being better on cost, value, time or client relationships. Developing a competitive advantage requires modifying existing value chains. In simple terms, it means redesigning existing industry practice.

Here at home, Australia's grand challenges have been most recently identified in a report by Innovation and Science Australia "Australia 2030: Prosperity through Innovation. A plan for Australia to thrive in the global innovation race"



Education

Respond to the changing nature of work by equipping all Australians with skills relevant to 2030

Industry

Ensure Australia's ongoing prosperity by stimulating high growth firms and improving productivity

Government

Become a catalyst for innovation and be recognised as a global leader in innovative service delivery

Research and development

Improve research and development effectiveness by increasing translation and commercialisation of research

Culture and ambition

Enhance the national culture of innovation by launching ambitious National Missions



Grand challenges demand new partners and new perspectives. Smart businesses are inviting their workers to co-design strategy. Citizens are co-producing policy. Companies ask customers to help design new products. The governments of New Zealand, Singapore and Korea have developed strategies to grow and promote design as a defining national characteristic, and as a strategic capability to surface fresh solutions to difficult problems.

Australian design is recognised, and recognisable, around the world. Australian architects, landscape architects are designing tomorrow's cities across the Indo-Pacific region, graphic and industrial designers give shape to the products we use everyday; fashion, film and animation, web and interaction designers craft the experiences that define both our analogue and digital worlds.

Australia's indigenous designers connect ancient traditions to contemporary culture. Our service designers are reinventing business models for some of Australia's most successfully global businesses. Australian design education offers consistent high standards in teaching, learning and research. And yet, Australia is lagging behind.

This paper asserts that Australia can, and must do more to promote the scale and capability of our nation's design sector if we are to seize the opportunity of our domestic and international ambitions. Australia does not have current data on its design sector - a sector that has succeeded through its own ingenuity, and in the absence of co-ordinated, strategic support from government. Without real and relevant data, Australia can not harness design in the innovation equation. We can not manage what we have not measured.

And we know that design and innovation go together. Australian businesses that innovate have twice the productivity, offer four times the range of goods and services and are five times more likely to be exporting overseas¹. Innovation activity accounts for 50% of economic growth in the OECD. The UK's Design Council found that people who use design skills are 47% more productive than the average UK worker².

A stronger design sector can boost Australia's competitive advantage, and deliver a strategic advantage for industry.

¹ <https://industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/Australian-Innovation-System/2016-AIS-Report-Snapshot.pdf>

² https://www.designcouncil.org.uk/sites/default/files/asset/document/Designing_a_future_economy.pdf p8

“Our nation’s future prosperity depends on the contributions of a strong creative design industry.”

The Hon. Malcolm Turnbull, Prime Minister of Australia

Design products and services are essential to the growing demands of a growing middle class in Australia's own region. A vibrant and competitive industry is a source of cultural and technical exchange, innovation and professional services export that can be a catalyst for trade in the technologies, products, materials and services we need for more healthy and sustainable lives, in smarter cities. As cities grow, they move up the food chain - from securing basics like reliable power and clean water; to other kinds of infrastructure; like the social infrastructure that bring knowledge workers together.

Australian design is globally renowned. Our designers are part of a globally-respected knowledge-based export market - designing cities, landscapes and infrastructure across the world; including transport projects, science and technology clusters, universities and market trading centres; advanced prefabricated modular building assemblies and more, using multi-disciplinary expertise through local offices in Vietnam, Thailand, Indonesia, Hong Kong, Singapore, China, the middle east, UK and US.

On 8 March 2018, a National Design Summit assembled voices from across the sector; including our universities, design firms, regulators, peak bodies, government and finance to find practical ways to support, promote and grow the sector in the next decade.



Do Australian's care about good design?



When Galaxy Research polled 2,500 Australians aged 18-64 years in June 2014, almost 97% believed that cities and towns are better to live in when public buildings and public spaces are well designed. 96% of us believe that homes and apartments provide a better living experience when they are well designed,. The research shows that Australians appreciate good design, and support design quality. Australians understand the consequences of poor design, and want government's to do more to promote good design³.

³ <http://www.aaca.org.au/wp-content/uploads/2015/07/REPORT-Benefit-of-Design-FINAL-REPORT-28-July-2015.pdf>

Fine starts and failed promises

The backstory to Australian design reveals a remarkably resilient sector that has survived despite being left to its own devices, and thrived in spite of poor and disjointed efforts by government to build the support infrastructure evident in comparable cities, states and nations around the world.

1958

The Industrial Design Council of Australia (IDCA) is formally established by a group of design and industry professionals and funded by the Commonwealth Government. The Council is conceived as a national umbrella organisation, based on the British 'Design Council' model. Its aim is to establish, maintain and promote high standards of design in manufactured goods, and to foster the understanding and appreciation of design in the community at large.

1967

The Prince Philip Prize for Australian Design is introduced, supported by His Royal Highness, Prince Philip, The Duke of Edinburgh. With the aim of promoting greater awareness of good design in Australian engineering, this prestigious award recognises a product or system of Australian design closely associated with Australian life and industry and had the potential to make a substantial contribution to Australia's economic progress.

1979

The first Australian Design Awards Yearbook of Award winners is published. Publicity for design is at an all time high with televised coverage of the Australian Design Awards Presentation on ABC television reaching audiences of more than four million. The Awards Presentation is hosted by popular Australian TV celebrity, Ita Buttrose.

1980

Prime Minister Malcom Fraser contributes to the Foreword for the 1980 Australian Design Awards Yearbook.

1984

The Prince Philip Prize is replaced by the Australian Design Award as Australia's most prestigious design accolade.

1987	The Government re-launches the IDCA as the Australian Design Council and establishes a new role for the Council in design information and training.
1992	Powerhouse Museum, part of the Museum of Applied Arts and Sciences (MAAS) establishes the Powerhouse Museum Design Award and Selection as part of the Australian Design Awards program.
1995	National Design Review, chaired by Desmond Freeman publishes its recommendations to the Keating Government
2003	Innovation by Design: The Economic Drivers of Dynamic Regions
2009	Creative Industries Innovation Centre launched at UTS (funding ceased 2015)
2010	<p>The Australian Design Alliance is launched in September 2010, seeking;</p> <ul style="list-style-type: none"> • A national design policy linked to Australia's innovation agenda. • Better education and design skills at all levels from school to tertiary and professional education. • Case studies demonstrating how good design can contribute to improved economic growth through supporting superior business models and improved public sector service delivery.
2012	Australian Design Alliance hosts event 'towards a National Design Policy', Brisbane.
2016	Victorian government launches 'Creative State' - a 4-year strategy designed to strengthen and grow the state's creative industries and the value they bring to Victorians.
2017	NSW Government proposes to amend the Objects of the Environmental Planning & Assessment Act to embed 'good design'.

This brief overview of initiatives to support and promote Australian design over a 60 year period reveals that a consistent commitment by industry has paralleled a decreasing investment by government in the sector. Australian design has succeeded in the last 30 years despite a lack of support from successive governments.

Design involves the skilled integration of intelligence and resources to deliver effective solutions which meet the existing and future requirements of consumers, industry and the national interest.

- Des Freeman 1995

National design review 1995

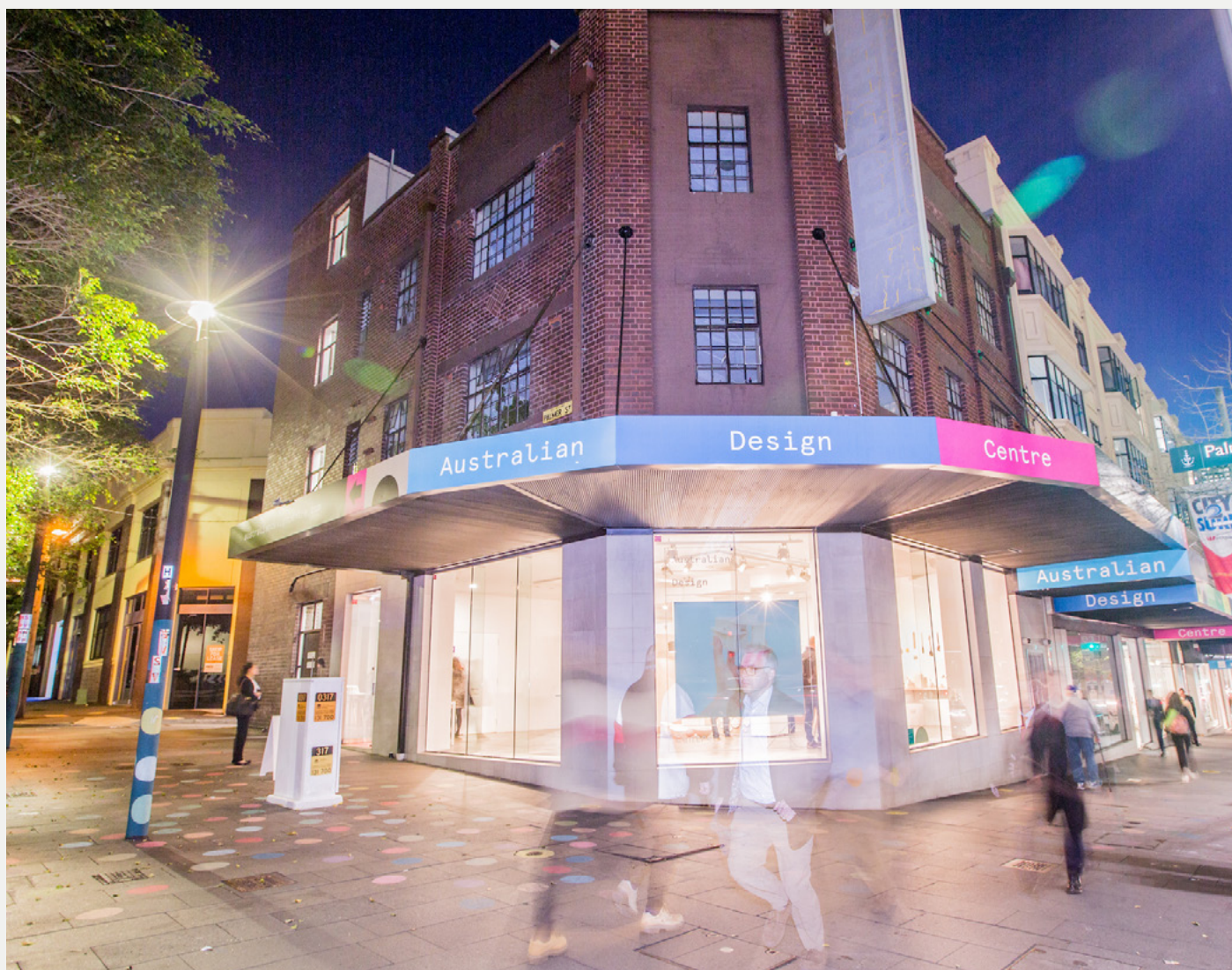
In 1995, the Australian government commissioned the National Design Review as an acknowledgement of the importance of design to Australian innovation, economic welfare and social values. It recognised that we had to place a higher priority on enhancing policies and strategies for design - claiming that a greater role for design would enable Australia to more effectively address the competitive, market and sustainability challenges it faces. Put more directly, the Review stated that design is essential to the process of innovation and a source of competitive advantage to industry; with the capacity to improve industry performance, add value, secure market positions, lead to lower product cost and increase revenue and profits.

The terms of reference for the Review called upon it to review how Australia might best:

- monitor and respond to leading international developments in Design
- enhance industry use of and international competitiveness through Design
- raise the profile of Australian Design within industry and markets worldwide
- realise the potential in its significant professional design capabilities and skills.

In addition to these terms of reference, the Review team identified issues focusing on firms and how their use of Design could be enhanced through:

- competitiveness and the impact of design on the customer
- awareness and demand for design services
- investment and links with strategic planning
- management of design and whether in house or outsourced
- the design service market and how outsourced services are utilised
- relationships between industry and the design professions
- design education and the training required to provide design services
- intellectual property, its value and its protection
- brands and market position and the market impact of Design
- design's relationship with other major competitiveness improvement strategies.





The Review's nine key recommendations included:

- Position design as a strategic discipline essential to the management of Australia's industrial and commercial future.
- Position design as a key competency in the continuum of quality, continuous improvement, best practice and innovation leading to sustainable competitiveness.
- Celebrate Australia's design successes throughout industry and the media to generally lift domestic and international public and consumer awareness as to the benefits of Australian design.
- Develop a body of knowledge on design practice and management in Australia and internationally to provide a significant resource base on design as a value added and competitive strategy.
- Direct action to encourage firms to gain competitiveness through design.
- Direct action to benefit and encourage the design profession to be accepted as a broader management and industry discipline.
- Direct action to remove the barriers to the use of design by industry.
- Direct action to identify the opportunities available for the effective use of design in Australia.
- Ensure that policies and recommendation outcomes are delivered by a coordinating process and are endorsed by industry and the design community.

Valuing Australia's Creative Industries Final Report

Creative Industries Innovation Centre

December 2013



This 2013 review into Australia's Creative Industries incorporates writing, visual and performing arts, television and radio - resulting in a field defined more broadly than the design sector alone. Within this expanded domain, design and software development were identified as some of the strongest performing categories within the creative industries, in terms of real annual output growth over the preceding 5 years⁴.

At the time, the report found that creative industries contribute more than \$90 billion to Australia's economy annually in turnover, add more than \$45 billion to GDP and generate annual exports of \$3.2 billion.

Software and digital content contributed around 50% to both total Industry Gross Product and total employment for the creative industries - foreshadowing the rise of digital design domains embedded in applications for web, fintech and the gig economy. The report identified that workers in the design and creative fields are commonly embedded in other industries; with the largest proportion found in manufacturing, wholesale trade and professional scientific and technical services. Each of these industries have more than 10% of their workforce made up embedded creatives⁵.

⁴ P.09 <https://www.sgsep.com.au/assets/Valuing-Australias-Creative-Industries-Final-Report.pdf>

⁵ P.10 <https://www.sgsep.com.au/assets/Valuing-Australias-Creative-Industries-Final-Report.pdf>

Other countries are busy reshaping their innovation systems in conjunction with targeted industry policies to identify areas of current and future competitive advantage⁶.

Innovation and Science Australia 2018

Innovation and Science Australia released a plan to spark industry innovation. The 2030 Plan makes 30 recommendations for governments to help achieve this goal, including launching a landmark National Missions program to inspire innovators, progress solutions to big problems, and generate national passion and pride in innovation and science achievements.

The report cites a number of leading Australian innovators, including Resmed, Cochlear and Atlassian - but fails to note the central role that design has played in bringing these innovations to market.

The 2030 Plan acknowledges that Australia's National Missions must be well-designed, with a clear articulation of the long-term vision, and a strategy to achieve it – including credible starting points. However, the Plan is yet to articulate the design infrastructure that is essential to delivering on the ambitions of Australia's innovation agenda

⁶ <http://www.afr.com/opinion/columnists/we-still-dont-have-a-joined-up-innovation-and-research-system-20180131-h0r12c>

International benchmarking

Some of Australia's most competitive and developed economies understand the role that design plays in global competitiveness, innovation, productivity and sustainability. Singapore, India, the UK, New Zealand and South Korea understand that design can be an instrument of public policy; driving greater productivity for industry, and better cities, towns and regions for their communities.





The UK's Design Council - the design economy

The Design Council is a charity and is recognised as a leading authority on the use of strategic design, and is the UK government's adviser on design. In 2013, the Design Council estimated that design contributed £71.7bn to the UK, employed 5% of the UK workforce and created jobs at three times the national average⁷.

But the research also showed the pipeline of design-aware workers is narrowing. In 2017, just under 166,000 students in their final year at school took Design and Technology subjects, a 61% decrease from the year 2000.

An integrated strategy to support and promote design requires teaching and learning resources, events and experiences for educators and school-aged children.

Exports from the design sector in Ireland were valued at more than €37bn in 2013 - greater than the £9.8 bn (estimated at €12.78 bn) reported by the UK for exports from a similar set of Design Sectors⁸.

⁷ <https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20Economy%20report%20web%20Final%20-%2020140217%20Yea%201.pdf>

⁸ <https://dbei.gov.ie/en/Publications/Publication-files/The-Irish-Design-Footprint.pdf>

Singapore - a 15 year commitment

In 2003, the Singapore Economic Review Committee outlined key recommendations to remake Singapore into:

- a globalised economy where Singapore is the key node in the global network, linked to all the major economies;
- a creative and entrepreneurial nation willing to take risks to create fresh businesses and blaze new paths to success; and
- a diversified economy powered by the twin engines of manufacturing and services, where vibrant Singapore companies complement multi national corporations, and new startups co- exist with traditional businesses exploiting new and innovative ideas⁹.



Recommendations included to:

- Embed arts, design and media with in all levels of education.
- Establish a flagship art, design and media university programme
- Establish a National Design Council to champion the design cluster

In 2015, DesignSingapore valued the impact of design on Singapore's economy at an estimated \$34.3 billion. The current priority for Design Singapore is to :

- Strengthen the competitiveness of design firms
- expand the role of design in business and government
- bring design in to the community
- develop the Singapore design brand
- Infuse design into the national skillset¹⁰

⁹ https://www.mti.gov.sg/ResearchRoom/Documents/app.mti.gov.sg/data/pages/507/doc/1%20ERC_Main_Committee.pdf (See Preface)
¹⁰ Design 2025 Masterplan, Design Singapore (see Executive Summary)

New Zealand - The Value of design to New Zealand

As the first ever attempt to put an economic value on design in New Zealand, this report estimated that design added \$10b to New Zealand's gross domestic product (GDP), 4.2% of total GDP, and 4.4% of New Zealand's total employment. The report found that, if design were treated as an individual industry, its contribution to the New Zealand economy would be larger than agriculture (\$8.1b) and comparable with retail trade (\$10.6b) and food, beverage and tobacco product manufacturing (\$10.6b).

The manufacturing industry contributed the greatest amount to design-related economic activity in 2016. Manufacturing had just under \$2.7b of design activity, contributing 27% of design's contribution to national GDP. The human health (\$895m to design's contribution to national GDP), financial (\$757m), environmental (\$651m) and construction (\$607m) industries were also notable market verticals.

The work also identified the value and contribution of specific design sectors in New Zealand, for example;

Product Design	\$2,286m
Interactive Design	\$2,273m
Graphic Design	\$1,431m
Strategy	\$1,169m
Spatial Design	\$1,039m
Motion	\$844m
Design Education	\$434m
Service Design	\$354m
Innovation/Invention	\$268m

To deliver on the research, six entities have joined together to form DesignCo to speak with a louder voice and advocate for the value of design in New Zealand¹¹.



¹¹
<http://designco.org.nz>

South Korea - an original design identity

K-Design is a vision declared by Korea Institute of Design Promotion (KIDP) in December 2012, and now underpins Korean design policy. K-Design refers to the strong desire for the development of an original “Korean design identity” that appeals to the world¹².

The volume of output by the design industry of Korea has been valued at KRW 13.7 trillion (USD 12.4 billion) in 2012. This figure takes into account investment by the public sector, sales of design-specializing firms, design-related investment of general companies, sales of design freelancers, and sales of design education institutes. As in other countries, the design industry also contributes to other industries' production. The total added value that the design industry contributed to the economy in 2012 was calculated to be KRW 69.4 trillion (USD 63.1 billion), which accounts for up to 5.5% of the nation's GDP¹³.



¹² K-Design: the New Design Vision for the New Korean Government

¹³ http://unctad.org/en/PublicationsLibrary/ditcted2017d4_en.pdf p.31



India - designed in India

The vision of India's National Design Policy (2007) envisages:

- a platform for creative design development, design promotion and partnerships across many sectors, states and regions for integrating design with traditional and technological resources.
- presentation of Indian designs and innovations on the international arena through strategic integration and co-operation and international design organizations.
- global positioning and branding of Indian designs and making "Designed in India" a by-word for quality and utility in conjunction with "Made in India" and "Served in India".
- 'designed in India, Made for the World' integrates India's rich tradition with contemporary innovative processes.

The priorities of the policy included:

- A Design Council of India
- Form a Chartered Society of Designers.
- Form a Working Group for new Institutes of Design and strengthening of Design Education in Existing Institutions.
- To conduct Design Awareness Programmes

“Design is a powerful tool of the modern, interconnected world. It is a key component of innovation, turning great ideas into services and products that consumers want to buy and use, it can help ensure that public services are user-friendly and more efficient, and it can help make cities more attractive places for citizens and skilled migrants to live and work.”

- The Hon. Stephen Joyce, fmr Minister of Finance, New Zealand

Design defined

The design sector comprises four primary domains of making:



Image-Making

- Graphic and visual design
- Interaction and digital design
- Packaging design



Object-Making

- Industrial or product design
- Fashion
- Furniture Design



Place-Making

- Architecture
- Landscape Architecture
- Interior Design



Strategy-Making

- Service design
- Social innovation
- Social Design



It's a mantra to many of us, but it's worth restating; good design is as much about how something works as how it looks. And despite the efforts of researchers, advocates, designers and educators across the country, still the myth prevails that design is a matter of taste; superficial and subjective.

To some, it's about the 'thing'; the object - not the method of invention, research, prototype, failure, and success. For example, developing the Dyson vacuum cleaner famously involved over 5,000 prototypes. In the search for better pathways to innovation, competitiveness and growth, it's only logical that what we produce and how we produce it are connected.

Design thinking is broadly understood to be where design and strategy meet. It's the thinking and doing behind a product or thing. This is where design as a way of thinking and doing makes ultimate sense. We see it today reflected in the start up movement - with a philosophy of 'launch and learn'. Australia's flirted with the idea of design thinking for a while. But for a long time, we didn't really have a burning platform.

We'd escaped the Global Financial Crisis, and enjoyed decades of unbroken economic growth. But events change quickly. In more recent years, Australians are facing some big challenges, and post-mining boom, new ideas are needed.

Big challenges demand new partners and new perspectives. Smart businesses are inviting their workers to co-design strategy. Citizens are co-producing policy. Companies ask customers to help design new products. The UK's Sir George Cox says that 'design is what links creativity and innovation. It shapes ideas to become practical and attractive propositions for users or customers.'

Design synthesizes the often conflicting drivers and objectives of those involved in the development value chain by using design as a means to negotiate roles and responsibilities around a project in order to assemble something physical that resonates beyond function alone. This integrative capacity is essential to realising Australia's ambition for innovation through co-ordinated action.

The case for national action

Australia features prominently in virtually all global rankings measuring the capacity of the local design sector. Our universities perform well for design, architecture and digital skills. Australia is ranked in the top 10 by the worlddesignrankings.com, and Australians regularly occupy executive and leadership positions in global institutions that promote design, and develop international agreements across jurisdictions.

However, if log on to australia.gov.au and search for design, you'll find broken links to pilot programs that were discontinued, with results unpublished and lessons unlearned. Design does not have a clear portfolio responsibility in government.

A credible national design strategy demands;

- Support for today's innovators: design promotion
- Grow the next generation: design education
- Promote tomorrow's enterprise: design-smart industry
- Demand impact: policy design
- Engage with the world: exporting goods and services



Support for today's innovators - DESIGN PROMOTION

Research by UTS published in 2016 found the value generated by Australia's architectural services sector are underreported by 15%, or more than AUD\$1billion (15.43% of industry revenue) is not accounted for in the sector when the areas of technology development, business development, cultural contribution and education are considered. What other value lies unidentified, and yet to be captured?

The design sector is well placed to capitalise on innovation through its native practical problem-solving strengths, its technology skills, and international reach. The UTS research outlines five areas in which the design sector can grow through innovation in their businesses to create new revenue streams, including;

- New to Market products and systems,
- Intermediary Goods and Services produced within typical project scenarios,
- New forms of Internationalisation particularly with regard to knowledge and skills transfer,
- The development of Networks of skills and nurturing niche companies within more traditional business frameworks, and
- embracing Research and Development as core business.

Australia's regional neighbours like Singapore, India, New Zealand and Korea have mature design promotion programs that have grown the presence and footprint of design industries across manufacturing, tourism and culture, fashion, digital and graphic design, built environment and related sectors.

Australian businesses that are using design to develop new products, materials, technologies and services deserve greater support to match the sustained commitment evident in our immediate regional neighbours. This support is best delivered through initiatives that target the Australian design sector itself.



“Design thinking is an intensely human process, which is why it is so culturally dependent – it progresses to technical and financial viability only after considering the human aspect”

- Catherine Livingstone



Grow the next generation - DESIGN EDUCATION

Design is generally classified as a capability within the STEM disciplines; showcasing the value of creative thinking in complex problem solving resulting in tangible outcomes. In countries like the US, UK and China, STEM is also being expanded to include an explicit statement on the role of art, design and creativity in applying STEM in new ways to create value in the 21st century. Adding the 'A' in Arts and creative capacity to STEM is the basis of a worldwide interest in moving from STEM to STEAM.

The Turnbull Government's National Innovation and Science Agenda aims to boost Australian industry competitiveness into the future by lifting our capacity in Science, Technology, Engineering and Mathematics in primary and secondary schools. STEM skills are essential in creating and turning new ideas and inventions into lucrative, internationally competitive Australian products, services and exports. STEM studies also develop generic skills such as problem solving, critical thinking and creativity, which are used in a wide range of environments and occupations. Design is not only about products and projects, but is also a significant part of Australia's education export sector. Australia's architecture schools alone recorded 1,293 graduates from accredited Masters programs in 2013. Overall, the schools enrolled 9,524 full time students in bachelor and masters level architectural studies - collectively generating over \$200m to the university sector.

According to UNSW's Emeritus Professor Alec Tzannes AM, this sector has historically been under-funded at a time when we better understand the critical need for innovation. Cutting edge research that develops new knowledge about the structural challenges facing urbanisation not only represents value to us all, but has the potential to position Australian researchers and companies with an advantage in a region experiencing rapid growth. Tzannes forecasts not only greater labour mobility, but learning mobility across our region - predicting that universities will, in the next decade, increasingly enrol students from around the world, at different starting points but all recognised as comparable.

With respected accreditation standards underpinning teaching, research and learning, Australia has untapped potential as an education hub for tomorrow's designers; teaming university research with next generation industry products, technologies, materials and services.

Promote tomorrow's enterprise - DESIGN-SMART INDUSTRY

Design, and design thinking can help businesses create value by creating things people want, instead of competing on lowest cost to shift more units people are happy to put up with. Cochlear, Telstra, NAB and Westpac all use design thinking to develop services and products. Australian business is using design to embed a better end-user experience in to products and services through service design, interaction design, product and web.

But Research shows we must, and can, do better. Why? Barriers to growth and innovation include;

- a focus on design product as the only form of innovation
- a skills shortage in firms, necessary to innovation through the entire value chain
- overwhelming predominance of firms as SME's, with little revenue to dedicate to R&D
- lack of strategic planning around innovation and business development
- strong competitive environment preventing systemic collaboration



To compete more effectively in our region, Australian design must build demand for its products, services and technologies by embracing emerging technologies that both meet and exceed consumer desires. Some support and services from Australian governments, tailored to the particular needs of the design sector is critical.

‘Design’ is integral to the dna of each and every public service. Design is not a matter of surface appearance. How public services are ‘designed’ is central to their purpose, their function, their character. Design is about the application of hard disciplines not soft furnishings.”¹⁴



Demand impact - POLICY DESIGN

Design is often associated with an object or artefact. But more recently, governments around the world have harnessed design methods and skills to create more cost-effective public services in the 21st century. Private sector organisations adapt their service or product offering all the time with the aid of these design processes, because they help to:

- retain a focus on the user-citizen;
- give a structure for being creative about problem-solving;
- test iterations of possible solutions in order to learn more about the problem;
- identify new, more relevant ideas and services and steward them through delivery; - engage users (citizens and employees) in the design of change.

Service design, interaction design and experience design are increasingly being applied in government, for better and more effective regulation, or used to trial new regulation in a changing context.

In the UK, the public sector is strengthening their service design capabilities. The Ministry of Justice has used service design as an integral part of their teams to develop Social Finance initiatives with the Cabinet Office. More broadly, the UK government's Policy Lab has been created by the policy profession to help bring design techniques to policy making¹⁵.

¹⁵ <https://openpolicy.blog.gov.uk/2015/03/20/design-in-policy-making/>

**“..design methods
- through tools such
as customer journey
mapping, observation,
profile-building etc -
offer several ways of
quickly getting closer
to the user in order to
define the problem and
create shared intent”¹⁶**

INSET: Innovation X Change - Australia government

The innovationXchange, within the Department of Foreign Affairs, designed an ideas challenge in 2015 and 2016 to find the creative ideas that existed within the department, but which had no clear pathway to be explored further.

Partnering with a design team, the program worked to improve process design and user centred design, while the team simultaneously built and iterated the platform in response to design choices and user feedback. This iterative approach, where the core team organised work in short sprints and allowed themselves time to test their assumptions, ensured the platform and the Challenge could adapt to DFAT's unique needs.

The innovationXchange brokered 29 new partnerships with organisations as diverse as technology leaders Atlassian, Google and Intel; tertiary institutions like University of Technology Sydney and Monash University; and scientific organisations such as CSIRO and ConservationXLabs. The program allowed the Department to run 8 global challenges which sourced over 1,000 new innovations, with 65 innovations funded and partners contributing nearly \$60m.



Engage with the world: EXPORTING GOODS AND SERVICES

The demand for design is growing. It's forecast that around US\$20 trillion will be invested in urban infrastructure by 2050. Around half of the construction activity this will generate will occur in the Asia Pacific region. So how can Australia's design capability capitalise on this growth when less than 10% of firms have a local presence in Asia?

Recent trade agreements negotiated by the Australian government have removed operating restrictions for Australian designers, architects, engineers, urban planners and construction firms in Asia, and South America. In 2015, PwC published research on The Asian Century. It showed that in ten years, half of the world's economic output will come from Asia. Yet only 9% of Australian businesses operate in Asia now. It turns out Australian business invests more in New Zealand than it does in China. Labour needs to be mobile, and professional services are integral to the new economy. ASEAN is looking to promote greater labour mobility between economies. But most of our businesses are focused on short term investment; including some architectural practices that chase the project, without investing in presence.

The growth potential of architecture, design and engineering as part of a services sector offering what our international markets want, not what we think they want. Economist Tim Harcourt points to the opportunities that come from the flow on effect from China's rapid urbanisation. As Harcourt puts in, "as Beijing directs economic activity westward, demand for infrastructure grows. Australian services providers in building and construction, architects and designers are helping to build "the great mall of China", and the roads, airports and civic buildings."¹⁷

A vibrant export sector needs a thriving domestic sector to avoid a shortfall in skills locally. Add to this, the need to grow the 'pipeline' of skills being developed in those new services required by the smarter, more sustainable buildings, spaces and places.

The history of innovation policy in Australia is one of stop-start, particularly from one government to the next, as well as “slicing and dicing” to create new programs within a reduced funding envelope.

Supporting Australian design

- Commence a National Design Review 2.0 modelled on the 1995 review of the same name, with its practical recommendations made public.
- Work with industry to develop a 5 year national strategy with initiatives designed to foster growth and development in Australian design capability to support a more vibrant export-facing sector.
- Allocate Design as a portfolio responsibility of the Minister for Industry and Innovation
- Develop resources for a high-school level curriculum aimed at expanding the traditional view of STEM to recognise the value of art and design-based practice in converting technical skills for new uses, similar to the STEM to STEAM initiatives in the US.



#DesignAU #SDF18

Credits

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