



Growing Australia's Creative Industry Position Paper

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Introduction

The Australian Broadband Advisory Council (the Council) advises the Australian Government on how broadband infrastructure can be leveraged to accelerate economic and social benefits for Australia.

The Council has chosen the Creative Industry as a sector deserving of further attention. This choice was based on the explosive growth of streaming and immersive content, and the commercial potential of established and nascent capabilities within Australia to create it and participate in the global markets.

In the midst of the pandemic, the Australian Creative Industry¹ was two speed, with the commercial industry responding to the explosive growth globally in streaming and immersive content, while our proud and significant arts sector struggled to maintain contact with audiences.

In this paper we focus on the commercial industry and how it can gain a greater and higher value share of the global market.

We also examine how the commercial and the arts sector can collaborate more closely – to create content and to leverage each other's skills to create new audiences and build the talent pool of the future.



¹ The discussion in this paper will refer to the 'Creative Industry' as the collection of sectors that are colloquially referenced when speaking to this industry as a whole. For completeness, there is a strong alignment between what is defined by the term Creative Industry and that defined by the term 'cultural and creative industries' which is more common in Australian Federal Government usage such as explained here: [Characteristics of Employment and Business Activity in Cultural and Creative Sectors—fact sheet \(infrastructure.gov.au\)](https://infrastructure.gov.au/cultural-and-creative-industries/fact-sheet)

Introduction

This position paper relies upon the following guiding principles:

- encourage global content creators to establish and maintain a presence in Australia
- support Australian artists and producers to operate as freelancers or small businesses within the global supply chain
- profile innovation across emerging technologies in the newest forms of storytelling
- promote a uniquely Australian character to content creation in the newest forms of media.

Success for the commercial industry would mean:

- accelerating the growth of these businesses and improving their economic market position in the global supply chain
- matching existing broadband and digital infrastructure and upgrades to the future needs of the industry
- overcoming immediate and foreseeable industry skills deficits
- providing crossover training and commercialisation benefits to adjacent sectors, notably the arts, sports, entertainment and tourism sectors.



In this position paper, we examine the paths to the success of our commercial sector, and showcase, by way of case studies, a number of Australian companies that are leading the way.

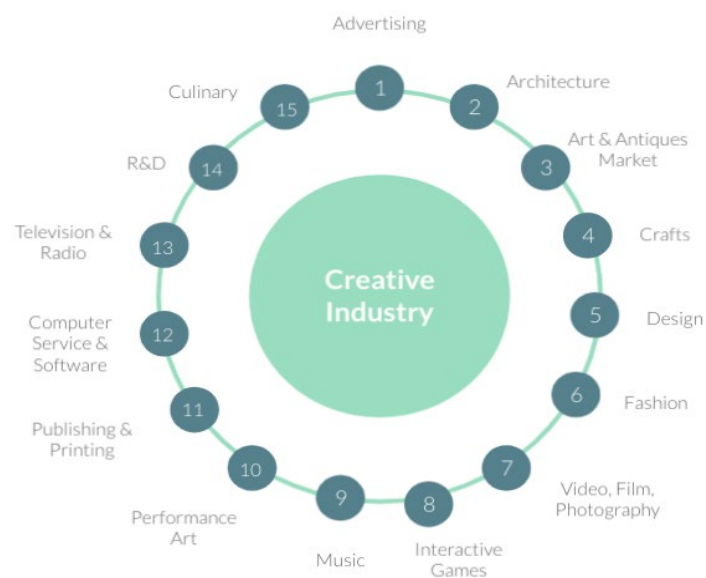
Size and Scope of the Sector

Why worry?

The Creative Industry comprises a vibrant and growing set of sectors that blend innovation, advanced digital technologies, and a highly skilled and innovative workforce. There are many sectors that can be described as contributing to the Creative Industry based on the fundamental characteristics of individual creativity, skill, and talent. These sectors create wealth and jobs through the development or production of intellectual property.

These key sectors influence much of the rest of the economy in profound and direct ways. The industry is enabled by robust, highly proficient information technology (IT) and networking infrastructure, and academic institutions. It creates opportunities for tourism and culture.

The sectors considered most important for the development of the Creative industry are the ones which attract the most investment. Also important are sectors with the largest rates of growth in investment. This is occurring in new media and entertainment content that has spillover and direct links to benefits in other sectors and industries. The main sectors of focus in this paper include games; film and television; advertising and marketing; interactive (such as augmented reality/virtual reality); and location based entertainment such as museums and galleries. While these sectors are all growing, it is at differing rates, due in part to sectors being at different levels of maturity in terms of scale.



Today's dramatic shifts in service delivery via Over The Top (OTT) services has led to a dramatic increase in film and television (episodic) content creation expenditure globally. With the always-on, always-connected life we lead, creating new content to inform and entertain is a huge business. This is changing the business models and supply chains of these important Creative Industry sectors, and creating an opportunity for innovation and growth.

While the Creative Industry has historically been slow to embrace technologies, COVID-19 and the response to it has accelerated technology trends and the uptake of digital technologies. Importantly, the demand for content, especially culturally relevant content, has not abated, and the underlying human desire for personal engagement and contact in social environments has drawn a more specific focus on creative content.

There are important social, economic and political trends underway globally and in larger markets that will influence the direction and impact of the Australian Creative industry. Our goal is to focus on those drivers which will enable Australia to catch new waves of innovation to increase our footprint in the global market.

What is driving the success of the Creative Industry and what is holding it back?

In developing our initial thinking on the importance of digital technology across the Creative Industry, we have identified nine key drivers of change.

- Growth in demand for original content will remain strong beyond the next decade.
- Traditional content distribution formats and business models will continue the shifts begun in the last decade and accelerated by COVID-19, such as embracing OTT service models.
- Emerging use of virtual production stages will grow to affect over 15 per cent of the volume of content produced, and have a structural impact on the end-to-end workflow for content creation.
- Storytelling forms and creativity will evolve into more interactive and multi-dimensional forms as technology and business models match the characteristics that younger demographics find compelling.
- The purpose for which content can be created will increase opportunities for creative content producers, putting art and storytelling into an increasing range of physical locations (retail, museums, offices, conferences, events, etc.).
- The skill sets of these talent bases will converge to a much similar combination across ALL sectors of the Creative Industry, as will the other technology capabilities needed to develop assets and Intellectual Property (IP).
- Cloud infrastructure and cloud native tools will impact all dimensions of the content value chain, becoming the primary underpinning technology of the industry for both creation and distribution.
- The commercial nature of the workforce relationships between creative talent and production companies and studios will become more fluid.
- Integration into cloud-based supply chains is essential for Australian companies to be competitive globally, with barriers to entry in each sector linked to security frameworks.

Of these nine drivers, the two most critical will be interactivity in content creation and story-telling, and location/place-based experiences. It is our view that these two drivers will have the biggest impact on growing Australia's share of the global market in the long term. They will also be important in helping to define the types of skills and capabilities that will be most valuable moving forward. And will be central to showing how investment in the Creative Industry can have flow-on effects to other sectors via crossover projects.

Drivers of Change

Australia has several strategic advantages that will support its success in transitioning into these new ways of working and production:

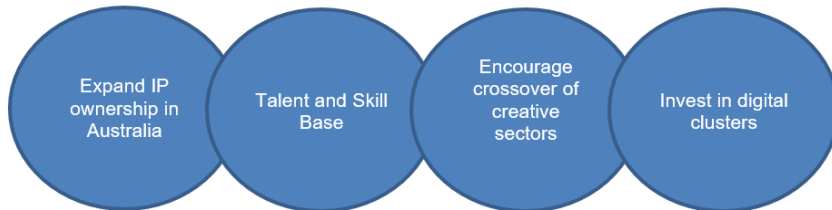
- a strong talent base of creatives and professionals, and a healthy academic and training infrastructure, both in a stable political, legal and social environment;
- a healthy ecosystem of production environments and support capabilities with meaningful economic incentive programs; and
- the National Broadband Network (NBN) and other broadband infrastructure which provide wide geographic connectivity.

There are, however, significant challenges for the Creative Industry, such as: geographical distance (domestically and internationally) and different time zones; a small scale of existing participants; content investor and distributor concentration outside Australia; and the problem of 'A Bunch of Seagulls Chasing Chips' (hyper-competition over limited resources and talent in the lowest parts of the value chain). The impact of COVID-19 on the sector, including shortfalls in skilled labour, should also not be underestimated.



Stepping Stones to Success

In this section we explore four key success factors



Issue 1: Expand IP ownership in Australia

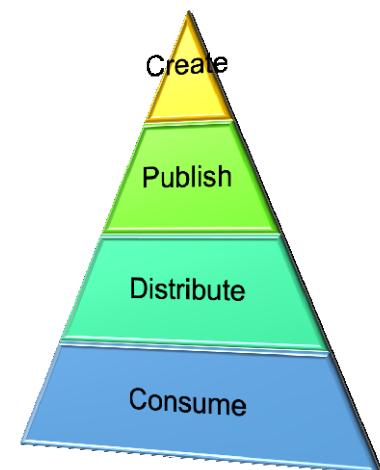
The business model of Creative Industry sectors where creative design is the underlying driver of value creation is always centred on monetisation of the IP that has been created. The traditional value chain in content has not altered in the era of new media for distribution and consumption, as shown below.²

There are striking similarities with many other industries, and the convergence of the technology sector with media and entertainment has seen these value chains overlap. However, whether the design creates a story delivered in a cinema, on a screen, or on a smartphone, the decisions around the value of content created are driven top down by this value chain. Opportunities, value, jobs and economic growth exist in every layer of this chain. However, the decision making and margins for sustainable investment decisions flow from the top.

A key priority for the growth of the Creative Industry is to invest in the development of content IP which can flow through the value chain, remaining under the decision-making control of Australian businesses. While shifting business models and disruptions occur in each layer of this value chain, decision-making power on supply chain investment will always link back to IP owners. This is key to driving more influence in supply chain value creation.

- What is the best and most sustainable way to attract investment for creating growth in Australia's Creative Industry, whilst accelerating the desired spillover effects to benefit the broader economy from a healthy Creative Industry?
- How can incentives in the supply chain also benefit IP ownership?
- Is it useful to encourage infrastructure for global supply chain integration to also facilitate global content producers and investors to shift capital to Australian sourced content?

**Value Chain for Monetization of IP
(High Level)**



² Each layer in this value chain has dynamics and specific supply chain trends that can influence investment decisions in other layers. Today, for film and episodic content, the changes in Distribute and Publish layers have begun to affect IP decision making, such as the rights of distribution, with publishers shifting to embrace and own their OTT distribution. Ownership is more clear cut in the newer forms of interactive and place based creative content.

Stepping Stones to Success

Issue 2: Talent and Skills

With creativity and design being very human capabilities, the capacity to scale businesses in this industry is inevitably tied to the volume, experience, talent, and breadth of the people working in the industry. If the foundation of a strong and growing Australian Creative Industry is the IP it creates, then the skills and talent to create it are vital.

Furthermore, the dimensions of growth, scale, and longevity of the industry depend on the extent that the skill base exceeds critical mass in every component that differentiates of the Australian Creative Industry. As a rule of thumb, we will be successful when the net outcome of our efforts to scale the Australian Creative Industry makes it a destination for the world's leading and aspiring talents, not a source.

While all of the Creative Industry leaders consulted for this project agreed that talent entering the market is of good quality, all claimed that there is:

- an insufficient high-end talent that can drive the projects and IP development necessary to grow their business to a greater scale
- an insufficient job-ready graduates and mid-tier skilled people from the education and vocational institutions
- a fraction of the volume of skilled people entering the industry needed to sustain growth
- a lack of entrepreneurial skill and experience to seed new and innovative businesses to address demand emerging in different sectors and geographies.

Our consultations also indicated that COVID-19 has accelerated the proliferation of freelance business models for sourcing of skills at various points in the creative value chain.

The consequential question is how to encourage this to Australia's advantage given the attractiveness of the Australian lifestyle more generally to people with creative talents without over fragmenting the workforce.

While the benefits of attracting high-end talent into Australian businesses and academia can have large multiplier effects, there is still a strong desire to self-develop these higher end skills within the Australian supply chain. There are unquestioned scale effects and IP generation benefits that arise from using levers to make the Australian Creative Industry an attractive destination for the world's leading talents using the innate desirability of Australia's lifestyle.

- How can we scale up and speed up the types of postgraduate programs that can accelerate the value of Australian talent cost effectively, as well as supporting industry to influence training at the undergraduate level?
- How can digital clusters be facilitated to build the success of these skills programs?
- What are the short-term initiatives we can take that will immediately unlock challenges in this area

Stepping Stones to Success

Issue 3: Encourage Crossover of Creative Sectors

The Creative Industry is increasingly able to bring the most magical elements of artistic expression into our physical experiences using advanced technologies.

Globally, this area of investment is becoming a means of drawing audiences to specific locations as a part of other aligned or adjacent business sectors like retail, food and beverage. There is also increasing use of immersive experiences in creative sectors like museums, sports venues, and performing arts.

Success in achieving scale both domestically, and as an export industry, will require crossover and removal of hurdles to connectivity between various sectors and industries. It will also mean attracting of entrepreneurs to the opportunities and innovation necessary for business to thrive in this exciting area.

Even the rapid growth of e-sports and immersive tourism experiences can be a focus of such crossover initiatives with a potential Australian flavour. While some Australian companies are at the forefront of the innovation to enable such crossovers, there is still a lack of market pull locally, with more opportunities existing offshore.

This latter point highlights the earlier observed challenge in skill development that the silos of our traditional industrial focus in government and industry are constraining our ability to invest and address growth opportunities for creative sectors.

Finding levers that encourage crossover between sectors can also help unlock silos that constrain or limit initiatives for other issues discussed in this paper. There are some exciting examples that we can draw on, for example, the Australian Centre for the Moving Image in Melbourne and the Urban Arts Project (UAP) project in Brisbane. However, there are still considerable challenges, including:

- a low number of immersive experience projects launched by Australia's tourism destinations during the COVID-19 period
- efficient use of government infrastructure investment to foster increased collaboration between Creative Industry and other institutions
- increased funding by all levels of government for crossover projects in festivals and place-based cultural features or events.

There is considerable opportunity to accelerate the ability of Australian companies and creative talents to benefit and drive crossover projects, including in regional areas. Support for digital place-making i.e. styled art and cultural events in each state and major city that emphasise 'creative crossovers' could be considered, with an increased focus on education/industry collaborations in building and supporting local talent pipelines.

- What tangible initiatives will facilitate more crossover programs being initiated at all levels of government and business to accelerate Australia's growth in this sector?
- How do we better institutionalise the fusion of STEM, HASS, and Work Integrated Learning into our academic structures?
- What will make successful crossover projects positively impact on export opportunities and attract global economic value?

Stepping Stones to Success

Issue 4: Invest in digital clusters

There have been successful state and territory-led digitally focused communities. These clusters are seen as an excellent launching pad for expanding digital services that can underpin growth in the Creative Industry. By increasing investment in digital clusters across Australia via schemes or partnerships, the objective would be to develop creative skill centres. This leads to a broader base for growth of Australia's market share of the industry by increasing the pool of skilled labour operating from areas that can sustain lower churn and better lifestyles. To achieve this, we need investment to ensure:

- better alignment between where the Creative Industry workforce is educated, trained, and want to live. This must be combined with more processing, storage, and security ('edge cloud') infrastructure and bandwidth provided. Their proximity to clusters can enable development of interactive skills and content, particularly in regional areas.
 - An example of such infrastructure support is NBN Co's Business Fibre Zones (BFZs), which supports businesses of all sizes and in locations across Australia by reducing the significant variation that has existed in the cost of business broadband services in regional and rural areas compared to Central Business District (CBD) zones. Eligible businesses within any of BFZs that order an enterprise ethernet service will receive their chosen speed tier and service based on the same CBD-equivalent wholesale charge that is applied to a company based in a CBD Zone.
- improving the capacity and capability of facilities in these clusters will encourage spillover benefits into other industries while supporting integration into the global supply chain for the Creative Industry. Our perspective is that the supply side of the market will meet the needs of the demand side opportunities once these digital clusters are identified.

In this way, Australia's regional centres can also develop and grow, adding to the nation's skilled labour pool through an efficient and distributed workforce.

Today, the Australian Creative Industry is overly concentrated in capital cities, with about one third of the entire workforce located in Sydney alone.³ This presents a huge opportunity to expand the total workforce serving Australia's Creative Industry by incentivising the rollout of clusters which harmonise the domains of technology and creative with entrepreneurial drive. Examples of this exist throughout the world, such as SoHo in London, Manhattan Beach in LA, and Emeryville in Oakland.

Additional Creative Industry benefits could be delivered through the extension of fixed wireless technologies to remote areas (many of which currently rely on satellite). Better collaboration in these areas could support culturally significant opportunities for creative expression.

We note that all states and territories have plans in place for deploying digital infrastructure and services in regional areas according to their own local priorities. It is our proposal, however, that we also need to focus on the top-down selection of selected regional clusters where the greatest possible impact on growth outcomes can be achieved. The criteria for selecting these clusters for focus are worthy of further discussion. How you invest to accelerate the growth of the clusters is a topic for ongoing discussion.

³ As identified by the QUT Fact Sheet on Creative Economy Employment, in 2016 about 38 per cent of Creative Industry employment in Australia was in NSW. This analysis also showed that NSW, Victoria and ACT had a higher proportion of their workforce in the Creative industry than the national average.

Case Studies

Rising Sun Pictures

About the company

Rising Sun Pictures (RSP) is a 26 year old visual effects company, with clients predominantly based in the US, and work filmed in the US, Canada or UK. As staying connected is critical, addressing the barrier of distance has driven them to innovate, with telework being a major part of their business model. 'Functional from a distance' is their goal. RSP states that to innovate around problems and distance is part of being Australian.

Communications Infrastructure and other essentials

RSP built their own network and tools to support early adoption of digital communications. This progressively enabled them to work better with clients by moving them from a distant and not well-connected system to very enmeshed and connected one.

RSP found that developing and accessing talent, particularly, in regions, requires a reliable platform. For interactivity, each user needs minimum broadband speeds of 100Mbps with less than 40ms latency, as well as experience or a certain level of digital skills.

Addressing barriers to growth

For RSP, the crossover of skill base has had proven benefits. For example, the Illuminate Adelaide festival invited people from different disciplines to work together, expanding personal horizons, networking and creativity. The festival was a success and created opportunities for people from cross disciplines to work together as a talent development exercise. New artists need continued mentorship and support to build skills and the ability to work autonomously. Creating education hubs for quality training, particularly in regions, would increase digital literacy and interactivity.

RSP suggests that Australia needs to address challenges in innovation and entrepreneurship when trying to develop an attractive market. While Australia is already building a labour force for the sector, there is a need to focus on developing a mobile talent supply and a supportive ecosystem. RSP is concerned that the talent and skill base is being eroded due to COVID-19 imposed immigration restrictions.

RSP believes that the 'desire for content has momentarily overcome the desire for security'. It is time to supplement fee for service and build pipelines of content IP as there needs to be a pathway to revenue stream that is not directly related or dependent on labour. RSP are interested in the next form of entertainment, such as virtual and immersive worlds like immersive gaming.



Case Studies

VANDAL

About the company

VANDAL is a new-media production company that specialises in creative production using emerging technology. VANDAL bridges the gap between art, advertising, entertainment, digital media, content and culture. Since commencement in 1984, VANDAL has been a leader in Australia's ever changing media landscape. Over the course of 35 years VANDAL (previously known as Frame, Set and Match) has been a key player in Australia's film and TV landscape, having done post-production work on a vast amount of Australian and international feature films, short films, documentaries, music videos, and thousands of television commercials. VANDAL's work sits at the intersection of traditional media and new media. It includes beautifully crafted executions for entertainment platforms, commercials, interactive installations, projection mapping, virtual reality, augmented reality, digital placemaking, virtual environments and digital experiences.

Communications Infrastructure and other essentials

As a leader in digital media and digital placemaking, VANDAL found that investing in people, creative development, emerging media platforms and pursuing emerging digital technology trends have been beneficial in growing the business and offering new digital media solutions to clients. For example, VANDAL is working with the retail sector to create digital experiences to encourage shopper interaction during periods when physical restrictions are in place. Additionally, regional Australia being more affordable to live in and commute from, can become a hub for developing new talent. Wireless connectivity and good internet (such as the availability of 5G and/or cable) to transfer large files and digital assets over networks at a faster and more secure manner than current metropolitan areas would be required.

Addressing barriers to growth

VANDAL believes Australian companies can both respond to a brief and provide services, or create a product that can generate income, such as a movie or a new media asset. Creating a "product" can be used to re-invest in people, ideas, grants, briefs, and creative callouts to allow for showcasing. In addition, investment, particularly in people, who will build IP (which can be creative, content or technical platforms, for example virtual production) is needed, both to protect IP and the people themselves. To support the retention of talent and avoid the talent pool searching for opportunity and development overseas, there should be a focus on nurturing talent, protecting patents and practical visa systems to encourage and support the attraction and retention of overseas talent. International and multicultural aspects are key to building Australia's talent base, together with growth and investment in digital entrepreneurs and key individuals, who can foster and train the next generation of digital entrepreneurs. Education has a big part to play in creative entrepreneurship. Creative entrepreneurs can conceptualise projects, bring talent together, recognise opportunities and steer Australia towards becoming a leader in digital entrepreneurship.



Case Studies

Animal Logic

About the company

Animal Logic is an independent Australian digital screen content studio, producing award-winning animation and visual effects for over 30 years. With studios in Sydney and Vancouver, and production companies, Animal Logic Entertainment and Truant Pictures, in Sydney and Los Angeles, Animal Logic continues to forge new partnerships and collaborations with leading studios and filmmakers to develop and produce stories that resonate with a global audience.

Animal Logic has a long history of world-leading innovation. It is committed to technical and creative excellence and to creating a collaborative storytelling culture, surprising and delighting audiences worldwide. Animal Logic is currently in production on Paramount Pictures/Animal Logic Entertainment's *The Shrinking of the Treehorns*, Netflix's *The Magician's Elephant*, and Warner Bros' *DC League of Super-Pets* and *Toto*. Credits include *Peter Rabbit 1 and 2*, *The LEGO Movies 1 and 2*, *The LEGO Batman*, *Walking with Dinosaurs 3D*, *Legend of the Guardians*, and *Happy Feet*.



Communications Infrastructure and other essentials

In response to the challenges presented by COVID-19, Animal Logic accelerated the strategy to enable its workforce to work effectively from remote locations. To do so, it has made substantial investments in infrastructure and operational capability to empower staff to work from home and remotely with a high degree of efficiency while meeting necessary levels of security. It has been critical for the company to pivot to provide the flexibility of 'work from anywhere' to attract and retain skilled crew, meet its production needs, and maintain a competitive edge globally. It seems that this will be an ongoing requirement as the world adopts long term operational changes coming out of the pandemic. Animal Logic suggests that developing infrastructure and incentives to support greater accessibility to access high-speed, affordable internet and increased bandwidth in family homes and regional areas would help with the increased need for workplace flexibility and improve workforce capacity through regional education and employment opportunities.

Addressing barriers to growth

Animal Logic maintains that staff retention can be difficult as short term contracts are common. Animal Logic believes that industry and education partnerships are key to finding and retaining people that are a good fit for the needs of the business. Animal Logic has a training program that provides exposure to industry for real world experience, and suggest that a focus on exposure or co-op programs through universities is key in providing exposure to the industry and experience to start, as a low risk investment for companies. For example, if a company was to link with a university to provide a project to be incorporated as part of students coursework, with mentorship and leadership from a lead professor, and the potential for the company to assign any emerging leaders as mentorship – they can engage students in work to gain industry exposure and experience. In an incentive-driven industry, Animal Logic suggest looking both internally and what can be done at that level, as well as focusing on partnering with larger companies on a larger level, as it can be difficult to compete on a salary basis with global companies.

Case Studies

Mighty Kingdom

About the company

Mighty Kingdom is a ten year old Australian business. Over that time, it has grown from six to 140 employees due to the increasing demand for its content for online games. It has partners in Australia, Europe, the US and Israel, with opportunities for growth in Asia.

Mighty Kingdom has a niche in developing games for children, youths and women. They have considerable insight into this audience and have been able to find ways to incentivise their products, as well as leverage the female market by developing IP which appeals to these demographics, seeking to monetise using products such as Shopkins and narrative driven games which appeal to its target audience. Due to their games growing popularity, Mighty Kingdom are now being approached from Australian content and production companies who want to partner with them. In the past, partnership was mostly with global content companies. As the business models and industry dynamics for games are not widely understood in Australia compared to adjacent industries such as film, Mighty Kingdom has worked to educate clients regarding the use of games, and considers it to be fastest growing internet business in the world with rapidly changing platforms.

Communications Infrastructure and other essentials

Mighty Kingdom has moved offsite since the first COVID-19 lockdown and has found that younger staff in particular are able to interact easily and collaborate creatively and effectively online. They have started to employ staff from regional Australia, with 20 staff based outside of Adelaide, including from Tasmania, regional Victoria, New South Wales, and far north Queensland.

Often, Mighty Kingdom's partners are from the film industry with a requirement to abide by MPA certification and security frameworks. As a result, Mighty Kingdom has moved to a standalone space to develop games since these frameworks mean that they are unable to work in a shared space. While fast connectivity is essential, particularly with challenges regarding games streaming, there is also an opportunity for the creative industries in Australia to partner with Australian telcos to deliver products using the low latency that 5G provides. Mighty Kingdom also notes that cybersecurity is costly and suggests there could be scope for Government assistance in this space.

Addressing barriers to growth

Mighty Kingdom have incorporated machine learning into the development of game engines to make them suitable for particular games, to increase the productivity of processes, and allow for a larger focus on content development. For instance, by having an innovative approach to developing a narrative engine which takes programming out of developing content for mobile games.

Mighty Kingdom is also pivoting their model from work for hire and flat fee to revenue share, to share development costs and developing their own IP, and are partnering with publishers to share marketing costs and to encourage a two to three year investment.



Case Studies

Interactive Games and Entertainment Association

About the company

IGEA (Interactive Games & Entertainment Association) is the peak industry association representing the voice of Australian and New Zealand companies in the video games industry. IGEA supports the business and public policy interests of the video games industry, through advocacy, research, and education programs.

IGEA advocates on behalf of members, who range from one-person studio startups to larger multinational developers, publishers, platform holders and digital storefronts. IGEA's role is to help members and the wider industry to more effectively create, distribute, and sell interactive games, entertainment content and related hardware.

Communications Infrastructure and other essentials

To effectively support this work, reliable, low latency internet connectivity and fast internet speeds are critical to suit Australia's need to share large packets of data.

Additionally, studio spaces for community to collaborate and grow are beneficial. For example, Sledgehammer Games found office space in Melbourne and grew quickly. Also, companies such as Gameloft in Brisbane are doubling their size. Similarly, IGEA owns The Arcade in South Melbourne, Australia's first not-for-profit collaborative workspace created for game developers and companies using game design and technologies.

With recent government support incentives announced at both Commonwealth and State levels, the industry is expected to expand significantly and will include more game development studios and technology related platforms.

Addressing barriers to growth

IGEA states that in Australia, large studios are mostly headquartered in capital cities, however this is not the case overseas. IGEA are currently talking to Government regarding regional hubs/studios to focus on growth and opportunity in this space.

There is less private sector investment due, in part, to geographical isolation, making it difficult for smaller developers to have access to finances. The majority of Australian companies are funding their own storytelling and IP to build franchises, as well as working for overseas clients. Therefore, IGEA believes that there is a need to facilitate meetings between local developers and publishers, and provide funding opportunities to create and retain projects that are lost to overseas countries with a stronger investment environment and competitive Government support.



Case Studies

Greatest Of All Time Interactive

About the company

Greatest Of All Time interactive (GOATi) is a ten year old company focused on solutions for future game delivery, such as business models for e-sports, global games delivery, and content creation. GOATi is building its own technology platforms rather than using Unity and Unreal, and has interest from other businesses regarding its skills.

Communications Infrastructure and other essentials

GOATi finds broadband connectivity to be good at work and at home, which means that largely, geography is not a limiting factor for them. In the early stages of employment, GOATi finds it beneficial for staff to be in office for a day or two in a week, since they need more collaboration and support.

GOATi is trying to keep its company in Australia, and so are generating revenue to invest in itself. Australian investors handle lower risk profile, and invest in what's already in the industry. GOATi finds that US investors invest into the next thing, and in US companies. Some Australian companies are looking for US investment, but could use GOATi's approach of re-investing from its content IP.

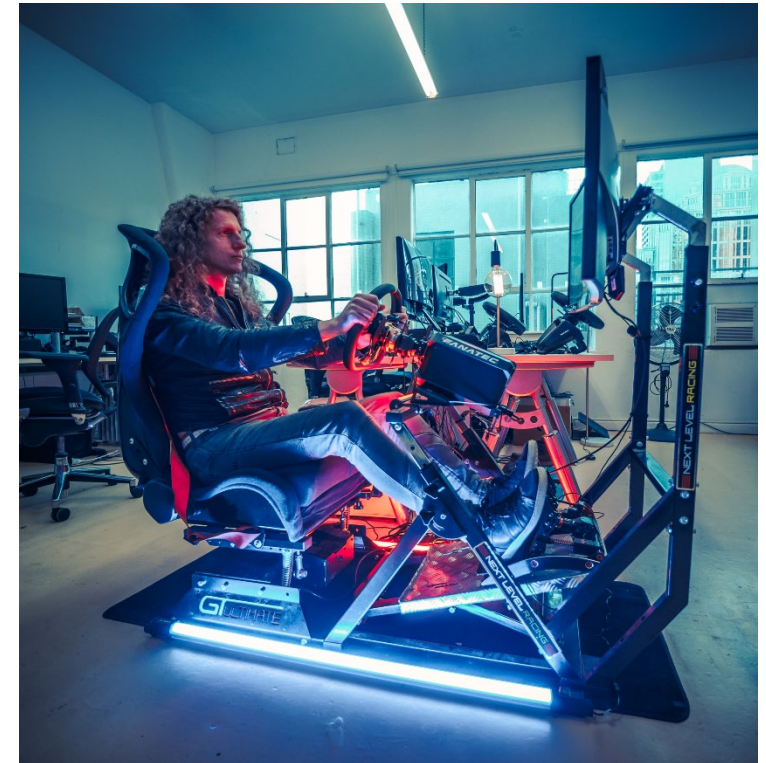
Addressing barriers to growth

GOATi maintains that an emerging technology program can help to bring talent back to Australia. Australia needs an emergent technology fund or an incubator/accelerator program which crosses over with media/entertainment technology. This can help to fund building of platforms such as the next Google and Netflix for Australia. There is an opportunity for the creative industries in Australia to export games, have an e-sports industry, and build platforms for developing technology, for example, by using block chain technology.

GOATi suggests that, "With a stronger focus on supporting Australian technology and IP, rather than our citizens and businesses developing foreign owned IP or selling our IP to foreign owners, we would build a more sustainable and profitable sector and give our Government the opportunity to access tax revenues from Australian owned 'Big tech'. This is absolutely possible and achievable."

GOATi finds that there is a brain drain due to opportunities overseas. The problem is top down problem rather than bottom up. Junior staff need to be trained for at least three years before they gain the necessary skills. More senior staff are needed to take on a few juniors and upskill them.

GOATi believes that Australia has a lot of game development schools, with the approach being to train students to work for other companies. The games sector acquires about 2000 graduates each year, but only 2 per cent of them can be hired. Australia could align its approach with that of overseas countries by educating students with tools to go out and develop their own businesses.



Case Studies

Fika Entertainment

About the company

Fika Entertainment is a virtual production services, solutions, and software company, with the ability to automate animation and visual effects production process via realtime production. Their clients include those who want to generate rapid and cost effective content for longform, shortform and digital content experiences, such as apps, games, AR and VR. More than 80 per cent of interest in Fika is generated overseas, from Europe, US, and the UK. The company and its propriety software solution, the Alchemy Pipeline™ was commercially spun out by Deakin Motion Lab at Deakin University. Fika has created brand awareness and produced content for entertainment and non-entertainment products, such as health and education products. Examples of Fika's production work include developing training tools for Dementia Australia, and developing post cancer rehabilitation app for young adults with the Peter MacCallum Cancer Foundation.⁴

Communications Infrastructure and other essentials

Fika found that internet connectivity and the quality of information technology are paramount to Australian businesses. Connectivity was essential to Fika its establishment in Queensland, with partners and key staff based all over Australia and various overseas clients. Real-time connectivity and developing solutions that deliver rapid content has helped Fika to be globally competitive, including working on *Scream Street* with the BBC, connecting with people in both the UK and in Canada. Fika suggests that better infrastructure is needed so that connectivity is easy, reliable and consistent. Lack of good infrastructure leads to inefficiencies like long buffering times, slow upload and download speeds, and it is unclear whether this is due to Australian connectivity or overseas connectivity.

Addressing barriers to growth

Fika states that specific technical skills are in short supply in Australia. Fika uses talent from Canada and Spain for some jobs, including rigging work for face and body builds. Also, industry needs to better utilise existing tools, such as shooting with LED panels, which can require a lot of post processing. Fika runs on virtual servers, which is costly. Subsidies that can help Australian businesses make products available in virtual space will make them more competitive. Fika found that cybersecurity requirements like TPN and MPAA compliance is a costly barrier for Australian businesses when partnering with various companies, such as Disney. Removal of this barrier provides added value when marketing to overseas clients.



⁴ Fika Entertainment, <https://www.fikaent.com/our-work-brands>. Deakin University, <https://www.deakin.edu.au/research/impact-stories/fika-entertainment-a-research-commercialisation-success-story>.

Case Studies

Queensland University of Technology

About the company

Queensland University of Technology (QUT) was the first university in the world to adopt the 'creative industries' brand in 2000. It was also the first university to lead Cooperative Research Centre and Australian Research Council (ARC) projects in design, and creative industries. Currently, QUT is leading an ARC funded study with a focus on regional creative hotspots. QUT has also collaborated with the Urban Arts Project on the Advanced Manufacturing Robotics Hub, which has impacts beyond the creative industries. QUT's creative industries alumni have established and led innovative firms across the performing arts, design and communications sectors, including Like a Photon Creative, Dead Puppets Society, Arkose Labs, Bigfish.tv, Josephmark, Little Red Company, Oitch Studios.

Communications Infrastructure and other essentials

QUT relies on high-speed internet connectivity across all of its campuses and distributed sites, and has a significant investment in its "digital campus". Through the COVID-19 pandemic, QUT has continued to deliver education programs online to students in Australia and around the world. Synchronous online classes using platforms like Zoom require high speed connectivity, and this makes a notable difference to the quality of student experiences of online learning.

Education programs in the Creative Industries prepare graduates to work across a range of sectors transformed by new technologies and ubiquitous high speed internet access. Creative Industries alumni who were able to "move online" through COVID-19 developed new opportunities, expanded their reach, and built new audiences.

Addressing barriers to growth

QUT has identified a range of priorities to support the development and growth of their community, including entrepreneurship and creativity, which means support to be provided to all students and staff to explore their creativity, identify opportunities, and engage in entrepreneurial actions that create value for others. This builds on the university's 'real world' heritage and ensures deep and close connections between academia and industry. QUT's Learning Potential Fund provides critical finances through scholarships and bursaries to students at a critical time. The Budding Entrepreneur Scholarships support student entrepreneurs in their pursuit of entrepreneurial action while they study any degree at the university.

QUT believe that as university education models have always been based on an undergraduate "once-only" style, there is a need to partner with industry and allow for online modules and short courses rather than focusing on traditional post-graduate courses (which have been in decline). QUT recognises that changing models for education, such as micro-credentials, online programs, and pathways from non-award to award programs, provide opportunities to develop a more agile curriculum which meet the needs of industry and lifelong learners across a whole career.

