

**Australian Film Commission (AFC),  
Australia Council for the Arts  
and  
Australia Film, Television and Radio School (AFTRS),**

**Joint submission to the House of Representatives  
Standing Committee on Science and Innovation  
Committee's Inquiry into pathways to technological  
innovation**

**May 2005**

## 1. INTRODUCTION

This is a joint submission to the House of Representatives Standing Committee on Science and Innovation by the Australian Film Commission (AFC), Australia Council for the Arts (Australia Council), and Australian Film and Television and Radio School (AFTRS). The three agencies are Statutory Authorities under the portfolio of Communications, Information Technology and the Arts (DCITA).

Senior representatives from these agencies are available to offer verbal evidence and elaborate on this submission at the Committee's public hearing in Sydney.

**The AFC** is an Australian Government agency, operating as part of the Commonwealth Film Program to ensure the creation, availability and preservation of Australian screen content. The AFC enriches Australia's national identity by fostering an internationally competitive audiovisual production industry, making Australia's audiovisual content and culture available to all, and developing and preserving a national collection of sound and moving image. As the major collector and analyst of data about the industry, the AFC leads opinion, outlook and policy about the audiovisual industries and screen content in Australia.

**The Australia Council** is the Australian Government's arts funding and advisory body supporting the creation and presentation of Australian artists and organisations' work across all sectors of the arts. It directly supports young, emerging and established artists, as well as new and established organisations by providing over 1700 grants each year to artists and arts organisations across the country in the fields of Aboriginal and Torres Strait Islander arts, community cultural development, dance, literature, music, new media arts, theatre and visual arts/craft. Australia's major performing arts companies are supported through funding partnerships with the Australia Council and the state governments. In addition, the Australia Council supports strategies to develop new audiences for the arts, as well as new markets both here and internationally. The Council also conducts arts research and policy development, and regularly advises governments and industry on issues affecting Australian artists.

**The AFTRS** is the national centre of excellence in professional education and training for the Australian film, broadcast and digital media production industries. AFTRS courses are world renowned for their collaborative cross-discipline models, teaching and mentoring by skilled industry practitioners, high-level practical production and industry links. The School has produced many of this nation's most successful screen industry professionals who have become a source of pride and national identity.

The Australia Council for the Arts, AFC and the AFTRS are Australian Government agencies that play a pivotal role in the world of film, digital content and new media arts. These agencies undertake and support

groundbreaking applied research in digital content production that has major benefits for the adoption of new digital applications across industry.

The digital content industries can be seen as the nexus, where art, science and technology combine. The application of new media technology within the creative industries, and the services sector more generally, translates directly into the competitive advantage and innovation capability of these sectors.

This joint submission details a number of the successful initiatives arising out of government investment in the key areas of digital content and new media. This submission illustrates the contribution and potential of the Creative Industries generally and the Australia Council, AFC and AFTRS specifically, in innovation and commercialisation.

By outlining broad initiatives and case studies of cross-agency and industry-agency collaboration, this submission presents the case for including and involving the creative industries in national programs that aim to stimulate innovation.

The AFC, Australia Council and AFTRS collaborated in the production of a DVD, entitled 'Innovation and Ambition', designed as input to the Prime Minister's Backing Australia's Ability initiative in May 2004. The DVD illustrates specific case studies relevant to the House of Representatives' (HoR's) present Inquiry – a copy will be forwarded with this submission.

By focussing only on science, engineering and IT, Backing Australia's Ability II overlooked the inter-related nature of cultural endeavours, technological innovation, and Australia's economic future. Recently there has been a greater recognition of the critical role of the creative industries as the engine room of the 'knowledge economy'.

The message of this submission is straightforward: technological innovation and the pathways to commercialisation can only be achieved in today's global economy through engagement of the creative industries and adequate, targeted resourcing of the government cultural agencies which are dedicated to the development of these industries.

## **2. SCOPE AND ROLE OF THE CREATIVE INDUSTRIES**

The Creative Industries are defined as those industries that have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation. Creative Industries are knowledge and skills intensive and include the new media and digital content industries, film, television, music, design, publishing, computer games, advertising, architecture and the arts.

Much of the economic contribution of these industries derives from the generation and exploitation of intellectual property.<sup>1</sup>

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<sup>1</sup> UK Creative Industries Task Force, 1998

The creative industries are widely recognised as the engine rooms of the knowledge economies. Much of the growth and potential of the creative industries reflects the transformative effects of digital content and applications.

In particular, the use of digital technologies has transformed the way content is created, managed, stored and distributed, leading to significant productivity gains and revenues. Today the effects of digitisation on services delivery more generally are readily apparent, generating new markets and opportunities not only in the information, communications and entertainment sectors but also important areas like health, education and defence.<sup>2</sup>

In its Creative Industries Cluster Study<sup>3</sup>, DCITA outlined why the Creative Industries in general, and digital content in particular, must be important areas of focus within a national innovation system.

Firstly, the Creative Industries are economically important. In Australia, the Creative Industries sector is worth \$19 billion per annum, amounting to 3.3 per cent of GDP in 2000.<sup>4</sup> Comparison with the UK and US, where GDP shares are 5 per cent and 7.8 per cent respectively, shows that the potential significance of the sector in Australia is even greater.

Secondly, the Creative Industries are high growth industries. Growth in the creative industries is nearly double the rate of GDP growth in the OECD economies. This translates directly into jobs and economic growth.

Third, the economic multipliers arising from the Creative Industries are significant, being higher than for most other categories of economic activity.

Fourth, the Creative Industries and digital technology are important innovation hubs, with intermediate inputs to other industry sectors. Digital content is becoming an important enabler across the economy, and especially in the services sector. This translates directly into the competitive advantage and innovation capability of other sectors of the economy. The application of digital technologies are not restricted to the content sectors of the economy. Shifts are occurring in the wider economy where digitisation and digital content is driving innovation in processes and production.

Fifth, the Creative Industries fuel the creative capital and creative workers, which are increasingly being recognised as key drivers within national innovation systems.

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<sup>2</sup> The strategic value of digital content was identified by the Digital Content Industry Action Agenda at: [http://www.dcita.gov.au/arts/film\\_digital/digital\\_content\\_industry\\_action\\_agenda](http://www.dcita.gov.au/arts/film_digital/digital_content_industry_action_agenda)

<sup>3</sup> For more information about the Creative Industries Cluster Study go to [http://www.dcita.gov.au/ie/environment/drivers/creative\\_industries](http://www.dcita.gov.au/ie/environment/drivers/creative_industries)

<sup>4</sup> See Cutler & Company and QUT CIRAC (2003) *Research and Innovation Systems in the Production of Digital Content and Applications*, p9. This report was commissioned by the National Office for the Information Economy (NOIE) as part of the Creative Industries Cluster Study Stage 3.

Developing the Creative Industries export potential is also important to Australia's balance of trade. Australians are early adopters and avid consumers of new technology, most of it imported. While this is rewarding for individual users, it is catastrophic for Australia's long-term balance of trade unless Australia has new exports to match the rate of imports. As noted in the Cluster Study:

*A vibrant Creative Digital Industry will shift Australia from being a net importer of over \$1 billion of content in 2000/2001 to being a potential net exporter of \$1.5 billion by 2010. On the other hand if Australia fails to become a globally competitive exporter it is estimated that it will see its traditional and digital media balance of trade deficit blow out to over -\$3 billion by 2010.<sup>5</sup>*

Digital content industries create the content that drives consumer uptake of new technology; they also represent important technology enablers of other industry sectors. They are therefore of vital importance to the development of Australia's national innovation system.

### **3. ROLE OF GOVERNMENT IN SUPPORTING AND FOSTERING THE CREATIVE INDUSTRIES**

Much of the economic contribution of the digital content industries derives directly from government investment in new skills and talent, and the creation of new opportunities for risk-taking, research and development, and collaboration.

The multitude of technological innovation success stories in the film and digital content sectors is due largely to the support provided by Australia's cultural agencies along with various government regulatory regimes, and economic incentives, which help, protect and nurture ideas and content.

Without continued government intervention in these areas, Australia will fall behind in its creation of new digital content and applications. Just as economies of scale and market size favour the US in the television and film industry, it is also the case with digital content. In the UK, Europe and Canada, the production and availability of local digital content is ensured through a robust mixture of regulation, investment incentives and subsidy. A table of comparative overseas funding is at Appendix A.

In this country, limited and diminishing government funds for innovative digital media are available through the AFC, Film Australia, the Australia Council, SBS-TV and ABC-TV, as well as by State film agencies and other departments involved in regional economic development. A table of Australian government funding for Interactive and digital media is at Appendix B. Digital content in Australia, as for all locally produced screen content, relies heavily on public policy intervention and funding, as it does in most countries.

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<sup>5</sup> Higgs P & Kennedy T (2004) *From Cottages to Corporations: Building a Global Industry from Australian Creativity. Creative Industries Cluster Study vol 3*, Commonwealth of Australia, Canberra.

In this context it is interesting to look at models and interventions employed by other countries. Not because they can necessarily be transferred to the Australian environment, but rather because individually and as a whole, they illustrate the international context in which Australian digital content producers are operating and also because they are indicative of the need firstly to intervene, and secondly to ensure a diversity of funding sources from both the public and private sectors. International models for funding can be found at Attachment C.

The ability of the sector to achieve its full potential remains highly contingent on strategic decisions to be made now or in the very near future, and in particular by the Federal Government – about financing, regulation and copyright. While the impetus for growth in locally produced digital media is coming largely from the industry itself, many developer-led initiatives are being facilitated by federal and state government agencies. This facilitation and financing is fundamental to a viable future for the digital content industry.

Where Australian screen content is created and made available to Australian audiences, it is almost always as a result of public and private partnerships in one form or another. Whether it is through regulation, or direct or indirect subsidy, government always plays a crucial role in determining the conditions for business models to evolve to deliver content. In this regard Australia is no different to every other developed nation that has a public policy framework in place to make available local content to local audiences. Where Australia is different, is the absence of the creation and availability of local digital content within that policy framework.

### **3.1 The Digital Content Industry Action Agenda**

The strategic importance of the digital content industry to Australia's innovation system has been recognised by the current Government, which is taking important steps towards building a digital content industry and working in partnership with private enterprise. In 2001, the Federal Government moved towards a comprehensive Digital Content Strategy, with the objective of accelerating the production, distribution and marketing of digital content and applications domestically and internationally. Arising from this has been the Digital Content Industry Action Agenda, instituted in 2004, in response to the growth potential of the Creative Industries. The aim is to create a framework to bring together disparate but related industries in order to address common issues and build critical mass and scale.

The Access Agenda has been undertaken by a high level Strategic Industry Leaders Group (SILG) supported by four working groups examining specific topics with a unified theme of intellectual property ownership: skills and training; export; investment; research and development.

## **4. CASE-STUDIES**

Below is a series of examples of some of the successful technological innovations resulting from government investment in digital content creation

and application. These examples highlight the significant role the Australia Council, the AFC and AFTRS have played in investing in creative and technical skills and talent, and leveraging private sector funding.

#### **4.1. AFC**

As the government film agency with responsibility for ensuring the perpetuation of Australian audiovisual culture, the AFC has become inextricably involved in the production and delivery of digital content. The AFC has a long history in supporting digital content creation from its early support of CD-ROM content through to support for Internet content (StuffArt and Documentary Online Initiatives) and the Broadband Production Initiative. It is the digital content industry and its capabilities that allow communication with pictures, sounds or virtual realities to happen, innovations that are essential to Australia's future prosperity as a nation. Digital products and services drive the take-up of technologies across the economy in sectors as diverse as health, defence and training.

##### **4.1.1 The AFC Broadband Production Initiative**

The Broadband Production Initiative (BPI) was a special scheme funded by the Federal Government to facilitate the production of innovative, high technology broadband content and interactive applications. The initial Government allocation for the BPI was \$2.1 million over three years. Working closely with other funding partners, most notably ABC New Media and Digital Services, the AFC almost doubled this allocation to a total of around \$4million and funded seven projects.

The BPI<sup>6</sup> has brought about new forms of entertainment and educational content for the broadband environment, and provided opportunities for screen practitioners and digital content creators to create innovative content on new and emerging delivery platforms. Most significantly, the BPI has demonstrated the way in which creative industries serve as an impetus for technological innovation and that where synergies exist - between the needs of content providers and infrastructure/technology developers - mutually beneficial partnerships can be formed.

Telstra, who invested in *Dog and Cat News*, *Puredrop* and *UsMob* was attracted to the projects' potential to showcase Big Pond's video streaming capability. The Tasmanian Electronic Commerce Centre were able to exploit their Broadband Laboratory in Launceston, and in so doing provided infrastructure for a test bed, where the BPI projects were trialled.

##### **4.1.2 AFC Stuff-Art**

Stuff-Art<sup>7</sup> was a three-year collaborative online initiative between the AFC, ABC Online and radio station Triple J. The project was designed to generate

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<sup>6</sup> The first three completed projects are online at <http://abc.net.au/usmob/>  
<http://abc.net.au/dogandcatnews>, <http://abc.net.au/bligh/>

<sup>7</sup> The projects remain online at <http://stuff-art.abc.net.au/>

innovative and compact online entertainment. Artists, filmmakers and interactive producers were faced with the challenge of fitting an engaging and innovative digital work onto a meager 1.4MB floppy disc. The site averaged between 40,000 and 60,000 hits a week and in 1999 won the Telstra/Australian Financial Review Internet Award for best entertainment website. Over the three years, 24 Stuff-Art projects were produced.

#### **4.1.3 The AFC Documentary Online Initiative**

The AFC's Documentary Online Initiative<sup>8</sup> (1999) brought together traditional documentary filmmakers and interactive media producers to research and develop future documentary-making forms by collaborating on projects for delivery over the Internet. The projects exploited the possibilities of the Internet and challenged conventional documentary forms.

ABC Online housed the four projects that were produced. These projects included: *A Year on the Wing*, a website that presents the story as it unfolds in real time of a birds' journey with over two million wading birds as they attempt their annual migration from Siberia to Australasia and back; and *Homeless*, an experimental website telling the stories of six individuals trapped in a state of homelessness in their booming, global cities.

#### **4.1.4 australianscreen.com**

australianscreen.com is a web-based resource that will enable unprecedented access to a vast range of Australian moving image and audio material. This material will be drawn from the Australian film, television and radio industries, held in the collections of the National Film and Sound Archive, from other Archive collections such as the National Archives of Australia and the ABC, and from various other sources. The website will include digitised objects such as stills, scripts, speeches, oral histories, contextualised written material, study guides and teachers' notes made accessible online to educators and students across Australia via broadband. This project recognises that from an educational perspective, visual literacy – the critical and creative skills needed to engage with and analyse moving image content – is a key element of literacy. australianscreen.com will utilise the opportunities provided by the internet and online applications for interactivity to provide students with stimulating moving image content to enliven and expand their learning experience.

#### **4.1.5 Digital Cinema Pilot**

A digital cinema trial is being investigated involving a number of cinemas across Australia to screen Australian digitised programs via both satellite delivery and through high quality encoded digital tapes. The trial is more than just facilitating the screening of films in digital format. The aim is to explore how the AFC can exploit the advantages of digital technology to expand

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<sup>8</sup> The projects remain online at <http://abc.net.au/documentaryonline/default.htm>



access to Australia screen content and screen culture nationally. It involves researching the adoption of digital content format standards, implementation of advanced data servers, provision of connectivity and communication infrastructure and the exploration of new business and revenue models of exhibition and distribution.

## **4.2 AFTRS**

Many large-scale projects now occur simultaneously across a range of media platforms. For example, *The Matrix Reloaded* simultaneously launched a feature film, an electronic game and a DVD of associated short animation films. This has resulted in a hybridisation of forms that closes the divide between art, science and technology.

Since 1998 AFTRS has been delivering one of the very few fully integrated visual effects and animation courses and has increasingly extended the programs to include students pursuing careers across a wide range of specialisations within the media production industry. The AFTRS continues to research industry needs and apply new training strategies in these areas.

A group of 16 AFTRS graduates' films shown in Australian cinemas has generated nearly \$90 million.<sup>9</sup> Indirectly economic benefit has come through the ability of productions to help market Australia, with related benefits in tourism, business attraction and the general growth of the nation's profile global profile.

### **4.2.1 AFTRS Laboratory for Advanced Media Production (LAMP)**

The AFTRS is establishing a Laboratory for Advanced Media Production (LAMP) that aims to serve as Australia's principle incubator for digital content creation. LAMP will stimulate innovative digital content creation in partnership with industry, under the guidance of international experts. LAMP aims to create an environment of information exchange and knowledge sharing bringing direct benefits that enrich the AFTRS curriculum. Primary activities will include:

- Delivery of flexible industry-leading courses, seminars, conferences and workshops Australia wide;
- Establishing Australia's principle incubator lab for digital content creation with a mix of blue sky and immediately viable prototype projects;
- Attracting high level creative teams to AFTRS, brokering partnerships with industry, capturing expertise in learning resources;
- Dissemination of new ideas, research and resources through on-line networks and teleconferencing;

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<sup>9</sup> AFTRS Submission to the House of Representatives Standing Committee Inquiry into the Future Opportunities for Australia's Film, Animation, Special Effects And Electronic Games Industries, June 2003

- Further development of successful post graduate research program in animation, visual effects and interactive media through closer links with industry.

The initial focus of LAMP will be on interactive television in all its many forms – from broadband internet, mobile, hand-held, cable, satellite and free to air broadcast.

#### **4.2.2 National Centre for Screen Business Skills**

The AFTRS intends to develop a national centre for screen business skills. The Centre will help the industry respond to the demands of the contemporary marketplace. It will provide professionals in the screen-based content industries with a way to gain the skills, knowledge and counsel they need to solve the practical problems involved in commercialising their work and building sustainable enterprises.

The proposal has been strongly supported by funding agencies and industry professionals who have experienced first-hand the value of advanced AFTRS training that assists them to analyse their enterprise, conceive a strategy and develop a business plan.

The early focus of the Centre's activity will be those in the industry involved in creative enterprises and delivering business outcomes and increased commercialisation know how for participants.

#### **4.3 Australia Council**

New media artists are actively involved in 'practice-based research', in which interactive technologies, interfaces and materials are investigated in terms of their creative applications. Artists work both as individual practitioners and in highly collaborative professional environments to pursue practice-based research across disciplines as diverse as nanotechnology; human computer interface; software engineering; robotics; mobile/wireless computing and telephony; visual media; marine biology and acoustics. This work represents important R&D, generating new innovations, which are applied in areas as diverse as design practice, architecture, interactive media and communications, education and biology.

Much of this work depends on critical independence and is highly experimental, which the Australia Council supports as an investment in risk-taking and discovery.

##### **4.3.1 New Media Arts Board**

Since 1998 the Australia Council has played a leadership role in supporting new media artists researching across science, technology and digital media contexts through its New Media Arts Board (NMAB). The NMAB has invested over \$15m in research and development initiatives and creative risk-taking through support mechanisms which include:

- Over 500 project grants to individual new media artists and arts organisations including the national peak body the Australian Network for Art & Technology (ANAT); and
- Support for national and international residencies, strategic initiatives and industry partnerships through Australian Research Council (ARC) Linkage Grant Industry Partnerships and *Synapse* Residencies.

In 2005, as part of a broad reorganisation of the Council's structures, the NMAB will be dissolved and support for new media arts practice made available across all artform boards. A new Inter-Arts Office will also be also responsible for supporting arts/science initiatives. This shift recognises the vital role played by cutting-edge, innovative new media arts practice across all contemporary artforms.

The Australia Council's leadership and success in promoting creativity across science and technology contexts has helped foster a strong field of established and emerging artists with internationally recognised skills, knowledge and expertise in new media.

#### **4.3.2 Successful applications of new media arts practice**

##### *Symbiotica*

In 2000, artists of the Tissue Culture and Art Project of Symbiotica, University of WA became the first in this field to have their techniques, processes and artistic works reviewed in *Nature*, the highly regarded international journal of nature and science ('Science for art's sake', *Nature* 407, pp668-670). Since then, this team has traveled internationally presenting their work at diverse events ranging from art exhibitions to science fairs in the US, UK, Europe and Asia.

##### *Sonic Landscapes*

From 1999-2001 Dr Nigel Helyer participated in the NMAB's strategic *Arts and Industry Partnerships* scheme, which included a residency and collaboration with Lake Technology on a project called *Sonic Landscapes*. *Sonic Landscapes* employed a 3D immersive sound-scape, accurately positioned by cartographic software, upon a physical terrain. The technology used in the *Sonic Landscapes* user interface is capable of operating with a 2cm positional accuracy when employing differential GPS (Global Satellite Positioning) and with a one degree accuracy for rotational head orientation, which, when combined with Lake's headphone delivers a virtual speaker array offering the user a highly realistic immersive audio environment. The collaboration with Lake Technology contributed to the development of commercially exploitable intellectual property in digital and audio technology.

Dr. Helyer continues to research the development of mobile hand-held, location-aware devices for augmented and virtual reality systems through a project called *AudioNomad*, currently underway at the Human Computer Interface Lab, School of Computer Science & Engineering, University of NSW. This is supported by the Australia Council through an ARC Linkage Grant Industry Partnerships. Commercial applications for the technology developed through *AudioNomad* could include hand-held audio devices that assist vision-impaired users to navigate complex urban environments and marine safety systems able to generate audio warnings from an analysis of a ship's geo-spatial position.

### *Mobile Journeys*

The addition of increased bandwidth and coverage of third generation mobile networks offers an opportunity to exploit the creative and economic potential for distributed arts and media via these devices. Through *Mobile Journeys* the Australia Council has supported development of a consortium of organisations interested in exploring the creative applications of mobile devices and possible public or non-commercial distribution models for wireless-based content.

The first stage of *Mobile Journeys* reached over 300 people directly through the provision of a set of master classes for artists, community workshops and professional forum days that enabled arts practitioners to meet with international experts, industry professionals and funding bodies in order to better understand the models and modes by which they could bring their work to market and thus to a wider audience. It has engaged some of Australia's brightest minds with the creative potential of mobile devices and provided a forum for practitioners, already forming ideas, to meet and exchange with others with similar interests or relevant expertise.

A second stage of *Mobile Journeys* recently funded by the NMAB will shift the focus to content development and exhibition combined with a series of linked industry forums.

## **4.4 Cross-agency collaboration**

### **4.4.1 Enterprise Australia and Enterprise Tasman**

Enterprise Australia and Enterprise Tasman constitute examples of cross-agency collaboration towards the development of sustainable businesses.

The initiative combined the expertise and support of AFTRS and the AFC with interstate film bodies NSW Film and Television Office, Film Victoria, ScreenWest, the Pacific Film and Television Commission and the South Australian Film Corporation.

A series of intensive, advanced workshops were held for producers in the film, television and new media industry. These groundbreaking workshops were designed to promote the development of sustainable business models for the screen content industry, based on multi-platform production.

Participants accumulated and used skills to develop new business strategies for their companies, tested and revised their ideas with colleagues and experts, and produced a strategy document articulating future directions. All participants were high-level screen content producers across all media and the workshops resulted in a number of new joint ventures among existing companies.

#### **4.5 Other Case Studies in Innovation**

In addition to the case-studies provided by the targeted programs outlined above, it is worth considering the way in which government cultural agencies have contributed to the individual paths of creative industry professionals

##### **4.5.1 Constant innovation and evolution: Animation Works**

Australia's film and television producers have an enthusiasm for change and innovation as new styles and forms of entertainment spin off at breakneck speed.

Colin South and John Tatoulis met 23 years ago, while working for SBS Television news, when they opened production company Media World in Melbourne. It was a struggle and survival would have been unlikely without local content regulations that supported Australian production, and without the available cultural subsidies.

The live-action feature *The Silver Brumby* (starring singer Amiel and actor Russell Crowe) was a turning point. The pair further exploited the popular brand with 39 episodes of animation.

Animation Works was formed and became one of the biggest employers of animation artists in Australia.

Following *The Silver Brumby* Animation Works produced *The New Adventures of Ocean Girl* and, more recently, two series of John Callahan's controversial *QUADS!*, a co-production between Australia and Canadian company Nelvana.

*QUADS!* was the world's first broadcast TV series to use flash software which was developed for the Internet. Through the use of new technology, *QUADS!* allowed animators in Melbourne and Toronto and Perth to work together in virtual studios in cyberspace.

*QUADS!* taught digital techniques to 45 Australians who were previously 'pencil and paper' animators. A total of 90 per cent of them have now either started their own business, or gone into other new media arenas using this new knowledge.

Five of them formed Squarei, which was recently commissioned by Ambience Entertainment to make nine one-minute 2D animations for mobile phones to drive sales and interest in Hutchison's new 3G mobile phone technology.

Animation Works is now in production of its next 26-part animated series *Dogstar*. Once again, producing the show completely in Australia and using Internet technology across animation studios in Perth and Melbourne, but also producing it in high definition. *Dogstar* has already been presold to the Nine Network, Disney Channel, BBC, France and Germany.

Colin South is just one of many skilled film and television practitioners, working to an ethos of innovation and change in an environment that benefits from public strategies and support – and gives back jobs, new businesses and export earnings.

#### **4.5.2 Cross-platform delivery opens new export markets: Felicity Venning**

Digital technologies offer a proliferation of new delivery platforms and mechanisms for mass distribution for entertainment, communication, education and training. Creators who are able to think and work across platforms are well positioned to reach global audiences.

Felicity Venning has tailored her work across a range of delivery platforms in order to open new export markets. She graduated from the AFTRS in 1981 and is now a specialist in online learning, using her storytelling and filmmaking skills to complement traditional ways of learning.

A recent project was *Brave City* for the Victorian Government, a virtual learning environment for kids that have 'fallen through the cracks' of the education system, that won a major US prize for e-learning and innovation.

Felicity is currently head of a team making online training modules to teach McDonalds staff in the US and Australia the fundamentals of customer service. The finished product is likely to be translated into other languages and used around the world, positioning Australia as a key exporter of learning materials.

#### **4.5.3 Film as a pathway to innovation and commercialisation: Baz Luhrmann**

While it is possible to highlight the career paths of many high profile creative industry practitioners as an illustration of the path to commercial success, one famous example is that of Baz Luhrmann. Baz Luhrmann trained in acting at the federally-funded school of NIDA and first connected with audiences through subsidised theatre and opera. Baz and his collaborators have created outstanding films such as: *Strictly Ballroom*, *Romeo and Juliet*, and *Moulin Rouge*. *Moulin Rouge* alone grossed nearly \$175 million worldwide.

Luhrmann found his filmmaking feet with the help of Government agencies such as the AFC and Film Finance Corporation. His Sydney-based company Bazmark is one of many examples of successful filmmaking that has had significant commercial success, developed and promoted other talented Australians involved in the film process, and given Australia a sophisticated and unique image internationally.

## 5. CONCLUSIONS

The AFC/AFTRS/Australia Council are in the practice of developing expertise of content creators, facilitating partnerships with technological, scientific, and investment community.

The experience of the three agencies has shown that technological innovation is often driven by creative industries (especially by content creators requiring technological solutions). Innovation does not occur in a vacuum – it arises from a synergy of science, technology and culture.

The Australian government's cultural agencies are well placed to facilitate research and development, skills and training, and professional development and partnerships, which are all precursors to technological innovation.

This submission and the examples provided herein are a snapshot of government funding and public/private collaborations in the Digital Content Industry. This snapshot illustrates a sector that is forging joint ventures between federal funding agencies, public and private broadcasters, state agencies and the private sector. It shows experienced creative industry practitioners developing content specifically for new delivery platforms, as well as working collaboratively with games developers. It portrays an emergent industry with a high level of co-operation between stakeholders.

Nevertheless, the scale of investment in innovation in and through digital content appears significantly underweight relative to the funding of other industries. Given the growing economic importance of the creative industries, increased investment in innovation through digital content initiatives is key to capturing future national benefits<sup>10</sup>.

The following lists the key issues that are emerging from industry:

### *Investment*

- extension of the 12.5% refundable tax offset to the digital industry, and specifically for visual effects packages and games;
- extension of 10BA to include digital product;
- a specific purpose Innovation Fund for Digital Content;
- investment concessions for R&D and review of definitions as they apply to the sector;

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<sup>10</sup> Cutler, p59

- enhance Commonwealth seed investment in Content projects and IP through existing agencies (AFC, Australia Council & AFTRS).

### *Skills and Training*

- greater flexibility of business in working with education and training sector;
- fast tracking of Accreditation process in high demand disciplines
- access to training in business skills and enterprises development (AFTRS, Enterprise)
- career long access to craft and technical training
- increased industry involvement in skill training
- review of new apprentice scheme and how it may be used in the Digital Sector

### *R&D, Intellectual Property*

- establishment of a Coordination body to review activity in the Digital Sector and coordinate standards work;
- review of R&D definitions to include Digital Content;
- free up Commonwealth IP for use within the sector for domestic use in education and industry.

### *Export and other issues*

- expansion of data collection across the domestic and international sector;
- review of EMDG or specific export initiatives that take into account the ongoing nature of market development for the Sector;
- look at the need for a Digital Sector Marketing group to carry the message internationally similar to AusFilm. (Consensus under review.)
- media Convergence and supporting policy on cross platform activities
- amendments to Copyright Act, Fair Use, Support for Creative Commons Licensing, to facilitate convergence challenges, both domestic and global.

This submission has highlighted a range of issues that link digital content with the promotion of technological innovation:

- Australia has an extraordinarily talented pool of digital content producers who are already forming effective partnerships and producing work of world standard;
- Private partnerships in this high-risk sector require on-going government incentives and promotion;



- In comparison to other developed countries, government funds to support innovative digital content are scarce;
- Australia is lagging behind in the ownership and exploitation of our intellectual property in digital content. Looking overseas, there are valuable models of public and private partnerships for financing digital content that could be adapted to the Australian context;
- Federal cultural agencies, such as AFC, Australia Council and AFTRS, make successful use of their limited resources to foster technological innovation.
- To keep apace, a serious funding commitment is required from government to support innovation in the digital content industry;
- The AFC, AFTRS and Australia Council are the three key Federal Agencies to lead the development of innovation in the Creative Industries.

## Appendix A

### Comparative Table of International Digital Funding, Source: Korda Database

Country	Body	Program	Budget £	Budget \$AUD
Germany	Filmbüro NW e.V	Support for Innovative Multimedia Projects	NA	
Germany	Hessische Filmförderung	Hesse script prize	NA	
Germany	Kulturelle Filmförderung Sachsen-Anhalt	Support for Production	NA	
Germany	Kulturelle Filmförderung Schleswig-Holstein e.V	Support for project development	9,500	16,492
Germany	Medien- und Filmgesellschaft Baden-Württemberg GmbH	Digital Content	523,369	908,583
Germany	Medien- und Filmgesellschaft Baden-Württemberg GmbH	Support for film-related productions with interactive content	NA	
Germany	Mitteldeutsche Medienförderung GmbH	State Funding	500,000	867,989
Germany	Mitteldeutsche Medienförderung GmbH	Production funding	11,508,405	19,978,336
UK	North West Vision	Production projects/development	NA	
UK	Screen South	Open fund	NA	
UK	Arts Council of Northern Ireland	National Lottery Fund	NA	
UK	EM Media	Development awards	NA	
UK	Screen West Midlands	Regional Investment Lottery Fund	NA	
UK	Screen West Midlands	The Screen Fund - development loans	NA	
UK	Screen West Midlands	The Screen Fund - production investments	NA	
UK	Screen Yorkshire	Production and development	NA	
UK	Scottish Screen	National Lottery Fund Company Development Funding	93,443	162,220
Ireland	Irish Film Board	Irish Flash	NA	
France	Centre national de la cinématographie	Support for Research and Development	5,200,000	9,027,347
France	Centre national de la cinématographie	Support for Multimedia Publishing	5,000,000	8,680,141
France	Agence Culturelle d'Alsace	Support for Innovative Projects	12,957	20,579
France	Centre régional de ressources audiovisuelles de la région Nord-Pas de Calais	Support for Script Writing and Development	115,091	182,790
France	Conseil régional de Poitou-Charentes	Support for the Production of CD ROM's and Internet Sites in the Region	NA	
France	Conseil régional de Poitou-Charentes	Support for the Production of Educational Games	NA	
France	Conseil régional Midi-Pyrénées	Support for Production by Local Producers and Co-producers	NA	
France	Conseil régional Midi-Pyrénées	Support for the Development of New Media	NA	
Spain	Ibermedia	Support for Development of Iberoamerican Film and Television Projects	168,539	292,588
Spain	Consellería de Cultura, Comunicación Social e Turismo, Xunta de Galicia	Subsidies to support marketing of productions in Galician	180,000	312,476
Spain	Consellería de Cultura, Comunicación Social e Turismo, Xunta de Galicia	Support for Audiovisual Production	75,125	130,415
Spain	Consellería de Cultura, Comunicación Social e Turismo, Xunta de Galicia	Support for Audiovisual Production by New Directors	75,125	130,415
Spain	Consellería de Cultura, Comunicación Social e Turismo, Xunta de Galicia	Support for script development for work by new directors	75,125	130,415
Spain	Consellería de Cultura, Comunicación Social e Turismo, Xunta de Galicia	Support for Development of Audiovisual Projects	463,369	801,644
Netherlands	Dutch Film Fund	New Media	97,767	169,721
Netherlands	Rotterdam Film Fund	Support for development	NA	

## Appendix B

### Australian Government Funding for Interactive Media (\$M) 1990/91 to 2002/03

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03
<b>Federal Agencies</b>													
<i>AFC</i>													
Interactive Project Development		0.03	0.09	0.19	0.34	0.36	0.33	0.16	0.18	0.05	0.05	0.19	0.42
Interactive Professional Development (production)	0.13	0.09	0.11	0.57	0.47	1.13	0.52	0.57	0.50	0.35	0.09	0.52	0.06
Interactive Media (Other) <sup>(1)</sup>	0.09	0.00	0.00	0.00	0.16	0.41	0.40	0.39	0.50	0.19	0.27	0.21	0.37
National Digital Access Initiative											0.02		
Professional development - IM production <b>(02/03 only)</b>													0.03
<b>TOTAL</b>	<b>0.22</b>	<b>0.12</b>	<b>0.20</b>	<b>0.76</b>	<b>0.97</b>	<b>1.90</b>	<b>1.25</b>	<b>1.12</b>	<b>1.18</b>	<b>0.59</b>	<b>0.43</b>	<b>0.92</b>	<b>0.88</b>
<i>AFTRS</i>													
Interactive Media (Other)				0.21	1.24								
<b>TOTAL</b>				<b>0.21</b>	<b>1.24</b>								
<i>Film Australia</i> <sup>(2)</sup>													
Interactive Media Development													0.06
Interactive Media Production													0.21
Interactive Media (Other)						0.34		0.14	0.35	0.15	0.15	0.12	
<b>TOTAL</b>						<b>0.34</b>		<b>0.14</b>	<b>0.35</b>	<b>0.15</b>	<b>0.15</b>	<b>0.12</b>	<b>0.27</b>
<i>AUSTRALIA COUNCIL</i>													
Digital Media Program							2.25	2.83	2.23	2.74	2.43	2.61	
New Media Arts													2.56
<b>TOTAL</b>							<b>2.25</b>	<b>2.83</b>	<b>2.23</b>	<b>2.74</b>	<b>2.43</b>	<b>2.61</b>	<b>2.56</b>
New Media Arts Fund established in April 1996													
<b>TOTAL FEDERAL AGENCIES</b>	<b>0.22</b>	<b>0.12</b>	<b>0.20</b>	<b>0.97</b>	<b>2.21</b>	<b>2.24</b>	<b>3.50</b>	<b>4.09</b>	<b>3.76</b>	<b>3.48</b>	<b>3.01</b>	<b>3.65</b>	<b>3.71</b>
<b>State Agencies</b>													
<i>NSWFTO</i>													
<i>From annual reports:</i>													
New media production							0.01						
New media professional development								0.09					0.09
Dig FX traineeships									0.18	0.18	0.10	0.06	0.13
New media screen culture									0.03	0.07	0.04	0.07	0.03
New media									0.17	0.16	0.10	0.01	
<b>TOTAL</b>							<b>0.01</b>	<b>0.09</b>	<b>0.38</b>	<b>0.40</b>	<b>0.23</b>	<b>0.14</b>	<b>0.25</b>
Digital Media Fund was established (as the Multimedia 21 Fund) in 1994/95 and operated as an independent business unit of Cinemedia from 1997/98 to 1999/00													

<b>Digital Media Fund</b>													
Project Development (Adult)						0.38	1.50	2.12	1.15	0.27			
Project Development (Children)						0.07							
Screen Culture								0.28	0.48	0.28			
Interactive Media (Other)						0.28		0.28	0.48	0.28			
Other								1.55	0.05	1.00			
<b>TOTAL</b>						<b>0.73</b>	<b>1.50</b>	<b>4.23</b>	<b>2.16</b>	<b>1.83</b>			
Cinemedia was disbanded in November 2001 with two separate entities created - Film Victoria (for film, tv and interactive) and Australian Centre of the Moving Image (cultural organisation)													
<b>Film Victoria</b>													
Interactive Media Project Development										0.82	0.98	0.52	
Interactive Media Production										0.41		0.66	
Interactive Media (Other)										0.22	0.3	0.23	
<b>TOTAL</b>										<b>1.45</b>	<b>1.28</b>	<b>1.41</b>	
<b>SAFC</b>													
Interactive Media Project Development (Adults)												0.06	
Interactive Media Project Development (Children)										0.01		0.05	
Interactive Media Production											0.2		
Professional development - IM production (02/03 only)												0.23	
<b>TOTAL</b>										<b>0.01</b>	<b>0.20</b>	<b>0.34</b>	
<b>Screenwest</b>													
Interactive Media Project Development						0.01				0.01			
Interactive Media Production										0.02			
Professional development - IM production (02/03 only)												0.13	
<b>TOTAL</b>						<b>0.01</b>				<b>0.03</b>		<b>0.13</b>	
<b>Arts Tasmania (3)</b>													
Interactive Project Development							0.01					0.01	
Interactive Media (Other)								0.02	0.04	0.01			
<b>TOTAL</b>							<b>0.01</b>	<b>0.02</b>	<b>0.04</b>	<b>0.01</b>		<b>0.01</b>	
<b>Screen Tasmania</b>													
Interactive Media Production										0.08			
<b>TOTAL</b>										<b>0.08</b>			
<b>Arts Queensland</b>													
Digital media Program										0.04		0.23	
<b>TOTAL</b>										<b>0.04</b>		<b>0.23</b>	
<b>TOTAL STATE AGENCIES</b>													
						<b>0.74</b>	<b>1.52</b>	<b>4.33</b>	<b>2.58</b>	<b>2.27</b>	<b>1.76</b>	<b>1.62</b>	<b>2.37</b>
<b>TOTAL</b>													
	<b>0.22</b>	<b>0.12</b>	<b>0.20</b>	<b>0.97</b>	<b>2.21</b>	<b>2.98</b>	<b>5.02</b>	<b>8.42</b>	<b>6.34</b>	<b>5.75</b>	<b>4.77</b>	<b>5.27</b>	<b>6.07</b>
Still to be checked: AIMIA, Australian Multimedia Enterprise (pre 1998); Arts Victoria; NIDA/AFTRS interactive drama; ABC & SBS contributions to Cinemedia records													
(1) Expenditure not allocated to development or production, includes interactive media marketing and screen culture													
(2) Includes National Interest Program activities only, 2001/02 figure to be confirmed.													
(3) In 2001/02 production funding for interactive media was less than \$1,000													

## **Strategies in other countries that may be of instruction to Australia**

### **1. New media funding - Canada**

Canada is considered among the world's best new media producers and is close in population size to Australia (20 million here and 32.5 million there).

There are two major funds for new media in Canada: The Bell Fund - a private fund for projects with both new media and broadcasting elements; and the Canada New Media Fund operated by Telefilm Canada, the main national government agency.

In addition, several provinces offer tax incentives to Canadian companies for their labour expenditure. Other forms of assistance indirectly support new media: R&D tax credits, assistance to small businesses and business development assistance.

By themselves, the two national new media funds account for A\$17.2million, *three times* more than the total spent by all government agencies in Australia. Most interesting about the Canadian model is not the bottom-line figures, although these are impressive, but where the money comes from.

The secret of the Canadian model is in fact *regulation*. The Broadcasting Act governing the Canadian industry established that in return for licences to broadcast and distribute programming in the Canadian market, 'each element of the broadcasting system shall contribute to the creation and the presentation of Canadian programming'.

There are two main sources behind Canadian financing:

Firstly, on change of ownership of a television broadcaster, the buyer is required to create a benefit package worth ten per cent of the value of the transaction and propose how the money will be contributed to the industry.

Secondly, to serve the objectives of the Broadcasting Act, all cable and satellite companies must contribute five per cent of their gross revenue to the content industry – known as the Broadcasting Distribution Undertaking or BDU Contributions.

The companies can split the five per cent – generally four per cent goes to the Canadian Television Fund, the largest Canadian Fund, while one per cent is allocated by the companies to a private fund of their choice. This has given birth to 20 different private funds in Canada. Those funds have developed their own mandates and niches (children programming, documentaries, new media) adapted to the parent company's priorities. The funds have to be independently administered and invest in 'priority programming' – which excludes news, sports and current events.

#### ***The Bell Fund***

The Bell Fund administers the 5% revenue (BDU) contribution of Bell Express Vu. Its mandate is to advance the Canadian broadcasting system by encouraging the creation of Canadian digital media and promote partnerships and sustainable models in the broadcast and new media sectors. It has funded 340 projects over seven years.

### ***The Canada New Media Fund***

The Canadian New Media Fund is a public fund operated by Telefilm Canada, a cultural investor in Film, TV and new media. Its mandate is to support the creation of high-quality cultural content for the Canadian public.

### ***Business models have emerged***

Some of the business models used by Canadian producers to finance their projects, in order to extend the money from the two funds, include:

sponsorship – where for example, a travel agency provided 25 per cent of the financing of a travel documentary series;  
exploitation of the rights on other platforms – where website projects are coupled with the sales revenues of a book, magazine or DVD;  
partnerships – where projects were developed in partnership with non-profit organizations, enabling access to other funds; equity investment; and  
licence fees from broadcasters.

### ***Economic transfer models***

Aside from a strong reliance on regulation, economic transfer mechanisms, in which funds are partly or mainly financed by mandatory or voluntary contributions of industry players, are also used extensively in Europe.

Contributions are provided through levies on cinema tickets, the revenues of video-publishers/retailers, cable operators or broadcasters; or a mandatory investment by broadcasters in production.

### ***Other international models***

Europe and particularly Germany has mechanisms based on voluntary agreements – either between broadcasters and a fund – or between the broadcaster and the producer themselves.

In addition to tax credits for innovative companies, France operates a Multimedia Edition Fund funded through levies. It allocates around AUD\$5 million to support high quality content adapted to broadband internet, ADSL, cable, interactive TV, VOD, and mobile telephony.

There is also forthcoming a Production Aid Fund of AUD\$51 million, which will be co-funded by private investors, in order to co-produce six major international productions each year.

Many other countries have set up specific programs to support new media, which are mostly run by the national film agencies. In Germany regional funds, largely made up of voluntary contributions by the broadcasters, support companies active in production, development and distribution of new media.

In Portugal, the Institute of the Cinema Audiovisual and Multimedia, supports the design and production of film and multimedia work. Funds are also available for the adaptation of Portuguese film and audiovisual works on DVD and distribution of works.

Finland supports production of multimedia and media art projects, as does the Netherlands. Ireland has a targeted program to support new talent working in digital format.

## **2. Research Collaboration – UK**

### **The UK**

#### **AHRC**

In April 2005 the Arts and Humanities Research Board was replaced by the Arts and Humanities Research Council (AHRC). The AHRC provides approximately £80 million each year to support research and post graduate study in the arts and humanities. It is located within the Office of Science and Technology and operates on a UK-wide basis. The establishment of AHRC in April underlines the importance of high-quality research in the arts and humanities for the cultural, creative and economic life of the nation.

#### **NESTA**

In 1998 the UK established the National Endowment for Science Technology and the Arts (NESTA). NESTA was set up by Act of Parliament in 1998. It was given a core endowment of £200 million [raised in 2003 to £250 million] from the National Lottery and charged with using the income from it to support innovation and creativity in the UK. As well as supporting innovative individuals through Awards and Fellowships, NESTA acts as a catalyst, advocating for the economic and cultural value of innovation, through partnerships, collaboration and information sharing.

NESTA awardees work across a wide array of creative endeavours, from music to micro-biology, performance art to artificial intelligence. Areas funded to date include close to 500 awards across the areas of Learning, Fellowship and Invention and Innovation. The awards assist individuals to explore new ideas, develop new products and services, or experiment with new ways of nurturing creativity in science, technology and the arts. NESTA also recently launched a new Creative Pioneer programme which aims to help graduates from the creative industries to develop entrepreneurial skills.

NESTA can be distinguished from other investors in the following ways:

Early investing with no expectation of short-term financial success;

Broad criteria for investment based not only on perceived commercial potential but also social and cultural value

Supports include financial support as well as mentoring to marketing expertise.

In Australia there are no specific research agencies dedicated primarily to the digital content industries or the broader creative industries. Existing government research agencies currently focus primarily on science and technology.

#### **Creative London**

Creative London is a new initiative that champions and supports London's creative industries. Through the LDA and private and public partners, Creative London works to increase employment and prosperity, and provide opportunities for Londoners to participate in one of the

leading centres of the global creative economy. In particular, Creative London has four main objectives:

- \* Ensure the continued growth and development of London's creative industries
- \* Maximise their contribution to London's economy
- \* To enhance the regenerative capacity of London through the increased engagements of its citizens in the arts and other cultural activities
- \* To make sure that London's diverse communities benefit from, and contribute to, this expansion

Creative London follows from the work of the Mayor's Commission on the Creative Industries. This was a six month inquiry into London's creative industries, exploring how they can be better supported, and how their contribution to London's economy can be maximised. The Mayor and the LDA have identified the creative industries as a priority sector for London, worth £21 billion to the London economy and employing more than 500,000 people.

The creative industries in London employ over half a million people, generate over £20 billion in turnover and display one of the fastest growth rates of job creation in any sector. They are essential to the success of the modern economy and London has strength in depth across the board, from architecture to crafts and from pop music to software.

Some statistics:

- \* Second biggest sector in London (after financial and business services)
- \* £21 billion annual turnover
- \* London's fastest growing sector
- \* 1 in 5 new jobs are in the Creative Industries
- \* Predicted to grow at twice the average rate for the economy

Creative London is being led by the London Development Agency, the Mayor's agency for business and jobs. The LDA invests more than £300 million a year to support the growth of new and existing businesses, the creation of new jobs, and the development of new communities. It works to promote and grow London's strengths as the world's leading financial centre, its most vibrant cultural centre, an outstanding centre for higher education and research and the busiest global transport hub. The LDA is working with a number of other partners on all Creative London initiatives.