Building a Creative Innovation Economy

Opportunities for the Australian and New Zealand creative sectors in the digital environment

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Cultural Ministers Council

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Creative Innovation Economy Roundtable

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This report recognises the ongoing work of the creative sector and aims to increase awareness of the key issues, opportunities, shared priorities and potential future directions for the sector in the ever expanding online, mobile and broadcast digital environment. It is a high-level summary of issues intended to inform the planning of programs and activities across jurisdictions.

Over the last year the Roundtable working group has gathered and analysed a large amount of information from all jurisdictions on programs, strategies, key issues and priorities that aim to strengthen the prospects for the creative sector in the digital environment.

In addition, forums in every capital city with administrators from the subsidised cultural sector, as well as artists, officials and professionals from government, peak bodies, funding agencies and commercial creative industries, have contributed to a better understanding of the creative sectors' technical capability in the digital environment.

It is hoped that this report will stimulate further discussion and encourage the pursuit of practical measures for building a stronger creative innovation economy in every jurisdiction across Australia and New Zealand.

This report was published by the Cultural Ministers Council Creative Economy Roundtable in February 2008. Visit www.cmc.gov.au for more information.

Contents

Executive summary

This report provides a high-level discussion of the issues, opportunities, potential future directions and key shared priorities for the Australian and New Zealand creative sectors in the online, mobile and broadcast digital environment. It documents achievements to date and aims to raise awareness about potential future directions for the creative sector in the digital environment.

While many government agencies and private businesses have adapted to new technologies, the challenges and opportunities presented by the digital environment do not appear to have been taken up so readily across the creative sector. This is partly because the high capacity digital infrastructure needed by the sector is not yet widely available, but also because the understanding of and training in new technologies is lacking in many creative organisations and enterprises.

At the same time, governments and businesses are increasingly aware of the important role of creativity and the creative industries as drivers for innovation and economic growth in the digital environment. This report found that in all jurisdictions:

- the creative sector is a significant stakeholder in the broader economy
- the creative sector and the innovation economy are being actively developed by governments and businesses, and
- government strategies in this context have been, or are currently being, developed to reflect the changing nature of the sector.

Many achievements in the digital environment have been identified by the Roundtable working group through the report scoping process, indicating that the Australian and New Zealand creative sectors are excelling in the creation of innovative content, services and business practices. These achievements champion creativity, provide new cultural experiences, increase audience reach and relevance, generate new income streams, enable collaboration and partnerships, assist organisations to meet their goals and reinforce the significance of the arts and creativity to the community and the creative innovation economy.

Opportunities for the creative sector in the digital environment are enormous and can be defined as creative, cultural and commercial in nature, having the potential to be realised in short, medium and longer term time frames. Timing will depend on the increased access—for creative producers, customers and audiences alike—to digital infrastructures, as well as the sector's technical capability.

The report has identified a range of priorities for enabling the creative sector to take full advantage of opportunities in the digital environment. It notes that there is some variation in priorities according to the particular needs of each jurisdiction. In keeping with the broad scope and high-level approach of the Roundtable, the report identifies the following key priorities that are shared across all jurisdictions:

- increased access to digital infrastructures—especially broadband—for producers and users of creative and cultural digital content and services
- simpler copyright provisions and a more wholistic approach to intellectual property management throughout the sector, which will maximise the sector's ability to exploit digital content across a range of existing and emerging digital platforms

- business skills training, particularly for small creative enterprises, where the creative talent of the enterprise is also likely to be the business manager
- a strategic approach to brokering partnerships between the creative sector and the education sector to facilitate greater collaboration across the sectors and improve market research and consultation, and
- programs and funding models that increase the commercial potential of creative enterprises and organisations, according to geography, demography and the characteristics of the local creative sector.

This report aims to raise awareness about the many exciting challenges and opportunities which the digital environment has to offer the creative sector. It also demonstrates that the digital environment has a growing need for creative digital content in order to be viable into the future.

It is hoped that the public release of this report will stimulate discussion and enable Cultural Ministers to pursue a range of practical measures in their jurisdictions—building on the achievements to date—to strengthen the prospects for the creative sector in the digital environment and continue the further development and growth of the creative innovation economy.

Introduction

Our world is increasingly being experienced and understood through the filters of the digital environment. Digital literacy, virtual experiences and our technical capabilities continue to transform all aspects of our lives and the ways we do business. Governments and businesses are also more aware of the important role of creativity and the creative industries as drivers for innovation and economic growth in the broader economy.

The creative sector

For the purposes of this report and in order to maximise potential benefit and input, a broadly inclusive definition of the creative sector has been adopted. It includes the subsidised cultural sector, plus commercial creative industries—that is, organisations, businesses and individual artists. By encapsulating the vast range of activities and practices within this sector—be they cultural, creative, or commercial—we create an opportunity to address the issues that are common to all those working within the creative innovation economy.

While some jurisdictions already have clear definitions of creative industries, for some 'what are the creative industries?' is itself a key issue. The Centre of Excellence for Creative Industries and Innovation (CCI) proposes that Australian creative industries are comprised of the following six industry segments:

1. Music and Performing Arts
2. Film, Television and Radio
3. Advertising and Marketing
4. Software Development and Interactive Content
5. Writing, Publishing and Print Media, and
6. Architecture, Design and Visual Arts.[1]

Cultural sector organisations (such as libraries, archives, galleries, museums and peak arts organisations as defined through the Australian and New Zealand Standard Industrial Classification) are included in the scope of both the CCI's and this report's definitions, to ensure that their roles as repositories and facilitators of creative activity are recognised.

Findings from the CCI's Creative Industries National Mapping Project indicate that the Australian creative workforce totalled almost 487 000 people in 2006, the salaries and wages of whom were almost $28 billion, representing 7 per cent of the earnings of the total Australian workforce that year.[2] This workforce included people working in the creative industries, plus people working in creative occupations 'embedded' in other, non-creative industries. Around 36 per cent of the creative workforce was employed in the Software Development and Interactive Content industry segment.

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[1] Peter Higgs, Stuart Cunningham and Janet Pagan. *Australia's Creative Economy: Basic Evidence on Size, Growth, Income and Employment* (Brisbane: Australian Research Council Centre of Excellence for Creative Industries and Innovation, 2007): 7-9. This study was undertaken as a partnership between the former Australian Government Department of Communications, Information Technology and the Arts, the Australian Film Commission and the Centre of Excellence for Creative Industries and Innovation at the Queensland University of Technology.

[2] Peter Higgs, Stuart Cunningham and Janet Pagan. *Australia's Creative Economy Information Sheet: The Creative Workforce grows to 486,715 people in 2006* (Brisbane: Australian Research Council Centre of Excellence for Creative Industries and Innovation, 2008).

The next two largest industry segments were Architecture, Design and Visual Arts (24 per cent of creative workforce) and Writing, Publishing and Print Media (15 per cent).[3] New South Wales was the state with the highest share of the Australian creative workforce (38.3 per cent). The Australian jurisdiction with the highest proportion of creative industry workers (9 per cent) within its total workforce[4], as well as the highest proportion of creative businesses within its total number of businesses was the Australian Capital Territory. Creative businesses are 6.6 per cent of all Australian businesses.[5]

The digital environment

In its broadest definition, the digital environment includes all online, mobile and broadcast mediums as well as offline passive and interactive digital devices and platforms. The development of digital technologies over the last two decades has been explosive and has pervaded all levels of society and the economy.

Trends in the digital environment point toward a paradigm shift in the way we learn, create and engage with global communities. Digital literacy, user-created digital content and online social networks are all in the ascendance. In Australia, mobile telephone subscriptions numbered 20 million at the end of 2006[6] and internet subscriptions had reached 6.43 million by the end of March 2007.[7]

Audiences are creating demands for greater online interactivity with the creative sector, giving rise to the increased significance of an online presence through which organisational, commercial and personal goals can be realised. The development of Australian and New Zealand content in this environment is both a challenge and an incredible opportunity for the creative sector.

The creative innovation economy

The CCI study defines the creative economy as 'the human activities related with the production, distribution, exchange and consumption of creative goods and services'.[8] While it should be acknowledged that this definition is broad and has been developed using experimental methodology, nevertheless it provides a valuable insight into the role of creativity in the process of innovation across a range of inter-related sectors of the economy.

Linking together the creativity of individuals from within the traditional cultural sector, the creative industries and non-cultural industries is the innovative leap that frames the creative innovation economy. Creativity is the distinguishing characteristic that is intrinsic to the creative sector and is embedded in non-cultural industries. It is a significant driver for growth throughout the broader economy.

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[3] Peter Higgs, Stuart Cunningham and Janet Pagan. *Australia's Creative Economy Information Sheet: Overview of Employment in the Creative Segments in 2006* (Brisbane: Australian Research Council Centre of Excellence for Creative Industries and Innovation, 2008).

[4] Higgs, Cunningham and Pagan. *Australia's Creative Economy Information Sheet: The Creative Workforce grows to 486,715 people in 2006*, as cited above.

[5] Peter Higgs, Stuart Cunningham, Janet Pagan, *Australia's Creative Economy Information Sheet: Creative Businesses are 6.6% of all Australian Businesses* (Brisbane: Australian Research Council Centre of Excellence for Creative Industries and Innovation, 2007).

[6] Invest Australia *The Australian Wireless Industry* (http://www.investaustralia.gov.au/index.cfm?id=9A0C9842-D0B7-180C-16403701E984FDFB).

[7] Australian Bureau of Statistics. *Internet activity, Australia, March 2007.* (Available at www.abs.gov.au).

[8] Definition proposed in Higgs, Cunningham, Pagan *Australia's Creative Economy,* as cited above:41.

Parts of the creative economy have shown significant growth over recent years, such as the Australian interactive games industry which directly employs 1600 people and generates revenues of approximately $110 million per annum, around 90 per cent of which are through exports.[9] Among the Australian media and entertainment industries, the interactive games industry is expected to grow at a rate second only to internet services in the next three years.[10]

Participants in the Roundtable working group have provided extensive background material, outlining the achievements of the creative sector in the digital environment within their jurisdictions and the policies and programs they have in place to assist further growth of the creative innovation economy.

These achievements indicate that the Australian and New Zealand creative sectors are working toward the creation of innovative services and products, as well as improving the efficiency of creative business practices.

The sector's achievements also champion creativity, provide new cultural experiences, increase audience reach, generate new income streams, enable collaboration and partnerships, assist organisations and artists meet their goals and reinforce the significance of the arts and creativity to the wider community and the creative innovation economy. A comprehensive list of the policies, programs and sector data identified by jurisdictions is provided at Appendix 1.

What follows is an overview of the opportunities, potential future directions and key shared priorities for the creative sector in the digital environment. While many of the key issues identified by the Roundtable working group overlap, for ease of discussion they are presented in this report in the following five chapters:

- Improving access to culture in the digital environment
- Increasing production of creative digital content
- Developing the skills of artists and executives
- Strengthening creative sector partnerships, and
- Commercialising the creative innovation economy.

[9] Report prepared for the Game Developers' Association of Australia by Insight Economics. *Australian electronic game industry profile.* (Melbourne, 2006):3,7.
[10] PricewaterhouseCoopers. *Australian entertainment and media outlook.* (Sydney, 2006):44.

Improving access to culture in the digital environment

Cultural material has a high intrinsic value within the creative economy and access to digital cultural material is fundamental to enabling innovation within the creative sector. The potential for cultural services and products to be delivered in and via the digital environment is vast and it will continue to be exploited by the creative sector through new technical infrastructures and coordinated approaches to the provision of services.

Access to cultural material and experiences
For many jurisdictions, access to cultural material is the critical issue for innovation in the digital environment, as it is a key rationale for arts and cultural services. All jurisdictions note the importance of improving online and digital access to cultural material and experiences for a broad audience, including people in remote areas, those with disability, the elderly, those not in the labour force, as well as people who use languages other than English. There are a variety of programs in place to improve access to cultural material, including iPortal (providing central access to the catalogues of Northern Territory libraries) and australianscreen online (by the Australian Film Commission, providing access to Australia's screen heritage).

Opportunities are being pursued for cultural and creative material to be delivered in new ways and for the development of new cultural material, such as interactive digital content. Digital collections are noted as significant sites of cultural sector activity. They have the potential to revolutionise service delivery across the sector and facilitate the delivery of cultural content into key markets. As Victoria notes, the digitisation of cultural objects is no longer seen as an end in itself, but rather is seen as a means to create interactive and multimedia products that engage audiences in more innovative and accessible ways. The additional levels of complexity in these processes require new skills, technologies and high capacity communication infrastructures.

The Roundtable working group notes the work of the Collections Council of Australia (CCA), which held a national summit in August 2006 with the aim of developing a national policy and strategy for the development and maintenance of digital collections. The resulting document, *Australian Framework and Action Plan for Digital Heritage Collections,* was released for comment in July 2007.

Future directions

Expand access to cultural material and experiences
The continued expansion of collections digitisation activity in Australia is being pursued through the Collections Council of Australia's *Framework and Action Plan for Digital Heritage Collections*. The creative sector plays a central role in producing cultural digital content for local and international audiences.

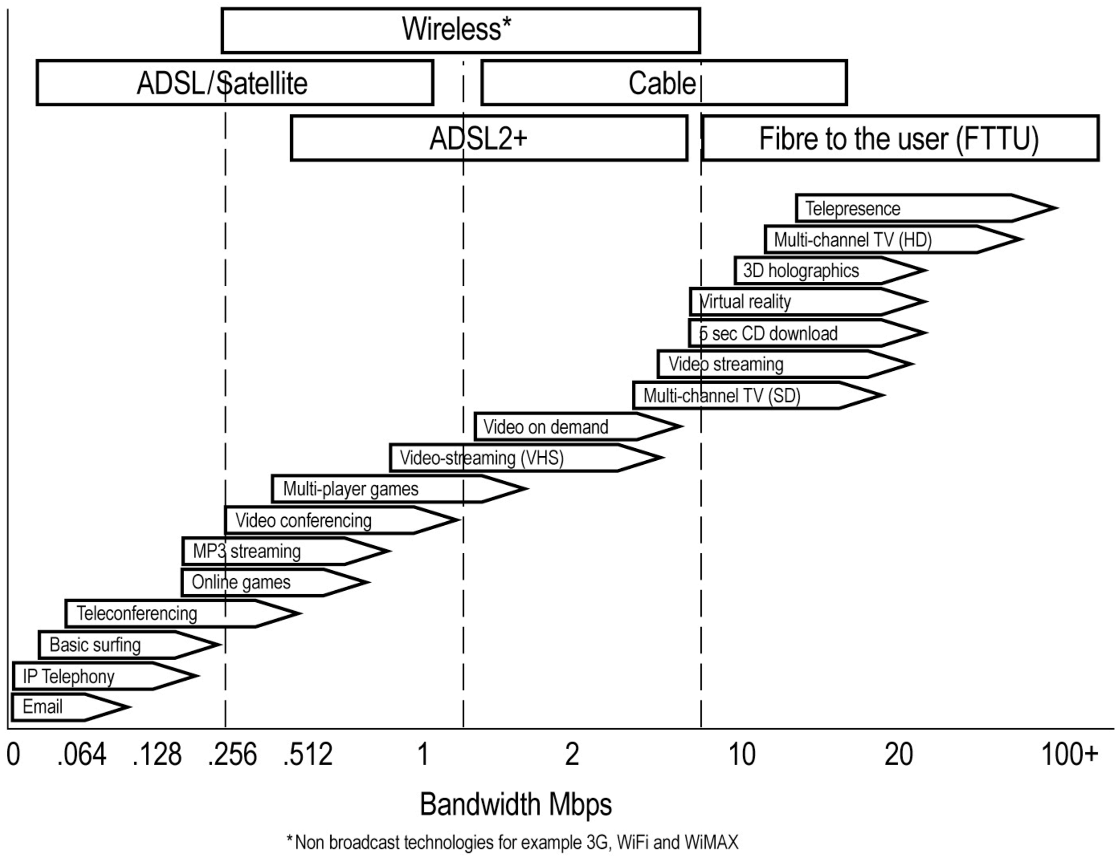
Broadband, mobile and broadcast infrastructures
All Australian jurisdictions, via the Online and Communications Council, are involved with broadband, mobile and broadcast infrastructure implementation and recognise the need for ongoing development of Australia's communications infrastructures.

Queensland makes the observation that Australia's current broadband infrastructure is below the standard of many other countries, putting Australian companies at a competitive disadvantage. The Northern Territory comments that current infrastructures provide city locations with improved access to remote locations, but remote access to cultural material generated in the cities is not as readily available. The Roundtable notes that there is enormous difficulty in developing infrastructures in geographically larger jurisdictions with smaller populations—the Northern Territory having the smallest, most dispersed and least economical infrastructure market.

All jurisdictions support the development of effective communications infrastructures in order for the creative sector to make the most of opportunities in the digital environment. In particular, the Northern Territory, Western Australia, Tasmania, South Australia and Queensland explicitly raise broadband infrastructure as a key factor in shaping the future potential of the creative sector.

Findings from the former Australian Government Department of Communications, Information Technology and the Arts (DCITA) technical capability study confirm that many stakeholders in the creative sector consider the provision of more affordable broadband infrastructure is very important. New South Wales notes that improved infrastructures will encourage the production of digital content from material held within cultural collections, increasing access to this material for the wider community.

The diagram below highlights the bandwidth needed for a range of online activities.[11]



[11] Source: KPMG (Updated June 2006) used with permission.

Business-to-business transactions in the digital environment can require higher bandwidth than business-to-consumer transactions, to enable fast, reliable, high volume data exchange.

South Australia and Victoria have a range of broadband development programs and initiatives which aim to enhance the functionality of existing broadband infrastructures for businesses. For example, Cinenet (based in South Australia) links screen production businesses and artists in Australia with partners in north America and Europe via optical fibre networks capable of up to 10 gigabits per second (Gbps) data transfer rates. This bandwidth allows Australian producers to compete globally in the provision of creative digital content to the screen industry. The Kiwi Advanced Research and Education Network (KAREN), a high bandwidth network to facilitate better eResearch, and the Victorian Cultural Network, linking major cultural institutions in Melbourne with pilot linkages to institutions in regional Victoria, are further examples of high speed, high capacity networks enabling better sharing of information across the sector.

The Australian Government has made a commitment to establish the National Broadband Network, connecting 98 per cent of the Australian population to broadband services with a minimum speed of 12 megabits per second. The Network will be implemented in partnership with the private sector over a five year period.[12]

Future directions

Improve the creative sector's ability to leverage off broadband, mobile and broadcast infrastructures

There are many opportunities for the creative sector to use new digital infrastructures to maximise their audience reach. The Victorian Cultural Network and the Kiwi Advanced Research and Education Network are examples of high speed broadband networks where communication and collaboration between the involved organisations has been improved—and are initiatives which could be taken up in other jurisdictions.

Consolidating government strategies for the creative industries

For all jurisdictions, the administration of creative industry programs crosses over several departments and/or agencies. Coordination strategies vary according to policy frameworks; some are project driven, while others filter down through a whole-of-government approach. New Zealand has a group of 'digital ministers' with coordination support from a permanent Secretariat. South Australia has convened an interdepartmental Creative Industries Steering Committee to implement strategy and coordinate policy and programs.

All jurisdictions recognise that coordination of policy and programs within and across jurisdictions is important, in order to maximise the benefits of those programs. The Roundtable agrees that better coordination will assist in addressing the access and infrastructure needs of the creative sector.

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[12] Media Release by the Australian Labor Party. *Building Australia's Prosperity – Federal Labor's New National Broadband Network,* 21 March 2007.

Future directions

Coordinate government policies and programs for the creative industries to maximise effectiveness
An agreed definition and classification of creative industries across jurisdictions would greatly assist better coordination of research and resource allocation for the sector. Forums such as South Australia's interdepartmental 'Creative Industries Steering Committee' provide a model for facilitating better coordination of government programs across portfolios and agencies.

Key shared priority for increasing access to culture in the digital environment

Increased access to broadband, mobile and broadcast infrastructures is a vital prerequisite for the creative sector's future engagement with the digital environment, particularly in jurisdictions with small and dispersed populations. The need for increased access to digital infrastructures, especially broadband, for producers and users of creative digital content and services is the most significant shared priority across all jurisdictions.

Increasing production of creative digital content

The creative sector has a unique capacity to address and satisfy the demands of diversity in the community by producing digital content that reaches across art forms and fields of knowledge. Opportunities may be found in the wealth of existing cultural content which could be re-released on a multitude of delivery platforms and distribution channels. This extension of cultural production presents new commercial opportunities for niche and emerging markets—the so-called 'long tail'. In addition, through innovation and digital delivery, the creative sector also has the potential to create new digital products and services for a global audience.

Cultural identity

The digital environment, regardless of platform or device, is a global and pervasive medium. It is important, as with film and television, that consumers have the choice of experiencing their national stories in the digital environment. With entry level costs dramatically lower than film or television, one of the great opportunities afforded by supporting production in the creative sector is to encourage a national voice in the Australian, New Zealand and global digital environments.

This was noted by all jurisdictions as an issue that current policies and programs are working to support. Jurisdiction reports highlight a diversity of achievements by the creative sector in the digital environment and further opportunities were noted, particularly in education and exports. It is important that cultural identity is seen as a priority for senior decision makers who deal with creativity and innovation policies and programs, to ensure that Australia and New Zealand's presence is maintained and strengthened in the digital environment.

The cultural impact of the creative sector can be measured in two ways. The first of these is in terms of the level of accessibility of different types of digital content. Queensland points out that they are somewhat limited in their ability to articulate the cultural or social impact of their programs, as many of the government agencies report to government only on their economic impact. The development of new measures for quantifying the impact of digital content for Australian and New Zealand audiences would assist in this process. Queensland also recognises its role in preparing communities for new forms of participation in the digital environment—a significant activity given the rapid pace of change of new digital technology.

The second measure of the cultural impact of creative sector innovations is understood to be the extent to which the innovations inform the programs and policies of government decision makers. Jurisdictions are supportive of government measures to keep the creative sector very much on the agenda across portfolios. Continued investment across the community in how the creative arts and creativity are taught, nurtured and fostered is seen as a way to facilitate greater innovation in the creative sector, in much the same way as the teaching of literacy and numeracy is regarded.

In general terms, production is recognised as a key issue for the creative sector, however the solutions to improving production, aside from those mentioned above, are also closely linked to improved skills, better market research and innovative funding and financing models. These issues are addressed in the following three chapters of this report.

Future directions

Affirm cultural identity in the digital environment and measure the impact of Australian and New Zealand digital content
Programs that support the production of local creative digital content will increase awareness of local cultural activity on the world stage. Cultural identity is an increasingly important priority for Australia and New Zealand in the digital environment, where creative content is largely dominated by material produced in the United States. The application of new research approaches and methodologies is required to measure the impact of local cultural production on audiences and the sector.

Structured support for the production of creative content
In many jurisdictions there are established programs supporting production through the film and television industry agencies. Similarly, jurisdictions are targeting support to niche areas such as design and contemporary music, within the arts, cultural collections and performance sectors.

Victoria notes that there is strong demand from audiences and markets for engaging multimedia and interactive digital products and services. It is anticipated that as more people take up broadband access to the internet—capable of transferring larger quantities of content more quickly—this demand will continue to grow through the creation of larger markets for interactive digital content.[13] Opportunities for the creative sector lie increasingly with creating value-added products and services rather than static digital objects and as mentioned previously, digitising images of objects in cultural collections is now being seen as a way of creating these new products.

New approaches to funding and financing partnership arrangements that encourage sharing of resources and the appropriate allocation of resources are recognised as ways to grow creative digital content production and assist small businesses and individual artists to become competitive in the creative economy. In this sense, arrangements that facilitate ongoing production can be beneficial to both producers and investors.

Future directions

Encourage structured support for the provision of creative content
Structured industry support—either direct government funding, private sector support or industry partnerships—should be available wherever possible to artists and organisations involved in the whole range of activities across the entire creative sector, regardless of artform, to build skills and coordinate production within the sector.

[13] PricewaterhouseCoopers, as cited above:12.

Rights management training
The commercial exploitation of intellectual property is regarded by many as a defining characteristic of creative industries. It is therefore not surprising that all jurisdictions recognise rights management as an important issue with wide implications for the ability of the creative sector to make copyright material available across various platforms. This is especially true if the long tail of production is to be fully exploited. Jurisdictions point to a strong need for organisations and artists to improve their understanding of the Commonwealth's Copyright Amendment Act 2006. Many of the provisions in the Act relate to the use of copyright material in technologically and culturally innovative ways and are particularly relevant to the activities of the creative sector.

New South Wales notes that rights management is particularly difficult for organisations and artists and that in some cases, it holds back online access of digitised cultural material. DCITA's 2007 technical capability study stated that the 'rationalisation of copyright agencies and additional training in understanding and applying the myriad of copyright and associated laws and obligations would do much to alleviate this barrier.'[14] The Roundtable working group encourages the Australian Government to continue addressing intellectual property (IP) issues and the development of new rights management processes and models by the sector, in consultation with the states and territories.

By way of addressing the rights management issue, Queensland, Victoria and the Cultural Ministers Council (CMC) have developed 'tool kits' specifically designed for practitioners and administrators to help them understand and implement intellectual property rights management activities.

The Roundtable working group agreed that the rights management training of creative sector practitioners and administrators is a priority and might be achieved by scaling up existing tool kits to a resource that could be utilised by artists and organisations in various industries across the creative sector.

Future directions

Simplify copyright legislation and management processes
A simplified, flexible copyright regime would alleviate some of the difficulties faced by artists and organisations in the creative sector in their engagement in the digital environment.

Support intellectual property management training for artists and creative sector organisations
The creative sector needs a greater awareness of and training in intellectual property rights management in the digital environment. Adapting the IP toolkits developed by some jurisdictions to a wider range of sector needs and promoting them more broadly would provide organisations and artists with a clearer process for managing intellectual property.

[14] Report prepared for the former Department of Communications, Information Technology and the Arts by International Conservation Services. *The Australian and New Zealand cultural and creative sectors' technical capability in the digital environment* (unpublished, 2007):28.

Key shared priority for increasing production of digital content

A streamlined approach to intellectual property management, which maximises the ability of the sector to exploit its digital content across a range of existing and emerging digital platforms is a major shared priority for the creative sector. The production of Australian and New Zealand digital content and services could be accelerated through simpler copyright provisions and a more wholistic approach to rights management. Converging and new digital technologies present increasing challenges for the creative sector to stay engaged with the digital environment. This means flexible and integrated intellectual property processes are essential for the growth of creative digital content production in the expanding digital marketplace.

Developing skills for artists and executives

Technical and business skills training is a vital ingredient in the creative sector's engagement with the innovation economy, however the nature of the digital environment is such that technical training programs can quickly become obsolete. Training for practitioners and administrators in remote areas is also particularly difficult. Increasingly, the creative sector is pursuing opportunities for training within relevant workplaces, in order to capitalise on industry knowledge and practices.

DCITA's 2007 technical capability study revealed that the three improvements most sought after by those in the creative sector were: improved staff skills and training; more appropriate hardware and software; and better understanding of the technology.[15]

Technology training for creative sector administrators and artists
Specialised skills training in information technology systems and digital devices is vital for the continued engagement of the creative sector in the digital environment. Most jurisdictions have skills programs in place and see this as a priority. Nevertheless, it is also noted by the Roundtable working group that the cost of technology training can make it unfeasible for smaller organisations and individual artists. Support for the provision of training to these members of the sector is encouraged by the Roundtable working group.

Given the rapid pace of change in the digital environment and the lead time needed to develop full diploma courses, innovative ways to deliver new skills training quickly and effectively are being sought. New South Wales has implemented a program of short Vocational Education and Training (VET) courses that count toward the Higher School Certificate, as well as accreditation towards a full diploma.

Developing the technical skills of practitioners is also supported through agencies in several jurisdictions, with programs such as Film Victoria's Digital Media Internships, where individuals develop their digital media skills in key production companies under the supervision of skilled personnel.

Future directions

Improve technology training for administrators and artists
Developing technology training models which can quickly adapt to changes in the digital environment is a strong shared priority for the creative sector. Vocational Education and Training programs in secondary schools across jurisdictions and mentorship programs such as Western Australia's Contemporary Music Mentorship and Skills Development program provide flexible and industry-relevant training for the creative workforce.

Training opportunities for Indigenous people
Indigenous skills development is a key issue, particularly for the Northern Territory where 28 per cent of the population is Indigenous, with 70 per cent living in remote and very remote communities.

[15] International Conservation Services, as cited above:2.

Arts and cultural activities play a particularly important role in small, isolated communities that do not have the infrastructure to support many industries. In this context, digital technologies have great potential to help overcome some of the problems of isolation.

Tertiary courses in digital content and the creative industries are currently being run out of the Batchelor Institute of Indigenous Tertiary Education and the Charles Darwin University. In addition, Backing Indigenous Ability is an Australian Government program that addresses the complex geographic, demographic and social factors that have affected the demand for telecommunications services and their commercial sustainability in remote areas.

Future directions

Encourage training opportunities for Indigenous people
Indigenous Australians living in remote areas have a particularly pressing need for greater access to training. Further consolidation of skills through mentoring programs has the potential to increase the ability of Indigenous Australians to operate sustainable creative enterprises in the digital environment.

Business skills training for executives, administrators and artists
In all jurisdictions, significant activity is underway to improve business skills across the creative sector, as business skills shortage is seen as a major barrier to the creative sector's increased exploitation of the opportunities offered by the digital environment. The integration of information and communication technology (ICT) throughout organisational business practices—including better customer relationship management, and the allocation of sufficient resources to this task—is a process that has the potential to enable further exploitation of the digital environment.[16] Business skills training, and in particular a greater understanding among senior managers and executives of the full impact of new and emerging technologies in the digital environment, are recognised across all jurisdictions as being of great importance in building the creative innovation economy.

A recent paper from the CCI[17] found that creative industries' share of GDP is significantly greater than that of large companies in other industries (4.5–6 per cent compared to 3.7 per cent) and that well over one third of all young 'super rich' come from the creative industries. The author's explanation for this impressive success rate is that some young people in the creative industries have the ability to combine their individual creativity with well developed business skills. The importance of this combination cannot be overstated.

This finding is confirmed in the 2007 *Australian Digital Content Industry Investment Report* to the former DCITA which stresses the need for entrepreneurs in the digital environment to develop business skills so they can establish strong management frameworks, assess levels of commercial risk and attract investment support for their businesses. [18]

[16] International Conservation Services, as cited above:28-9.
[17] Jason Potts. 'How Creative are the Super-Rich?' (2006) *Agenda* 13 (4): 339-350.
[18] Report prepared for the former Department of Communications, Information Technology and the Arts by Creative Economy. *Australian Digital Content Industry Investment* (unpublished, 2007).

The Mobile Entertainment Growth Alliance (mEga|SA) is a South Australian skills development initiative that is building the state's local mobile content and applications industry by creating cross-discipline project teams to reflect the work environment required for innovation. Launched in 2006, it is a collaborative group comprised of industry, education and government bodies. The main mEga|SA project is an Incubator Program which supports recent university and TAFE graduates, creative professionals and business people to learn about starting up a company in the mobile content and applications industry. mEga|SA education partners are exploring methods of accreditation from various institutions for participants of mEga|SA. Due to its success, mEga|SA will soon be expanding to become an Australia-wide program.

The Australian Film, Television and Radio School's Laboratory of Advanced Media Production (LAMP) is another example of an innovative approach to training. The program enables the conception and development of multimedia content and services in a live-in setting, facilitating collaboration between project teams and mentors. The four stage process equips participants with the tools they need to create compelling interactive content that meets the needs of their audiences and marketplaces. LAMP offers participants a healthy mix of creativity, business awareness, technical skills and audience awareness.

Some jurisdictions note that traditional training across the creative sector in many cases contributes to skilled creative people finding employment in creative occupations outside the sector. Mentoring and networking opportunities for local content developers, enabling them to work with national and international peers, sales agents and distributors, may help to retain skilled workers within the creative sector.

Future directions

Improve practical business training for administrators and artists
Programs focusing on small enterprises and new technologies that bring together artists and digital technology industry representatives in a collaborative forum have the potential to effectively bridge the skills gap within the creative sector.

Increase eBusiness awareness for executives
A greater awareness of eBusiness opportunities, technologies and practices among executives would assist the sector's ability to integrate business systems in the digital environment. There is a need for training and advice specifically for executives so that they can lead eBusiness activities in their organisations.

Key shared priority for developing skills for artists and executives
Business skills training is a strong shared priority for the creative sector across all jurisdictions. It is a particular priority for small creative enterprises, where the creative talent of the enterprise is also likely to be the business manager. The digital environment offers the creative sector a host of opportunities for participation with new technologies, audiences and markets, however the sector's ability to engage with them is often hampered by a lack of appropriate business skills.

Strengthening creative sector partnerships

The creative sector is building a wide range of partnerships to enhance its ability to produce innovative goods and services, particularly in the digital environment. Partnerships cultivate an inclusive approach to innovation, whereby specialised skill sets, business models and resources are able to be utilised and shared in new ways.

Collaboration across the creative sector

All jurisdictions in the study provided information about a variety of partnerships. In New South Wales for example, there is a partnership between ArtsNSW and the State Department of Commerce to develop creative industries. Victoria is looking at a partnership between the Victorian Cultural Network (VCN) and the national CMC-funded Collections Australia Network (CAN) as a means of improving visibility of Victorian cultural material on the Internet. In Western Australia, ScreenWest is pursuing the economic development of the state's screen and digital content industries by facilitating connections locally, nationally and internationally.

Across the board, partnerships are seen as significant mechanisms for fostering innovation within the creative sector. Inter-agency collaboration is also recognised as a way in which information and experiences about successful partnerships can be shared across jurisdictions.

Partnerships are being forged in all jurisdictions, whether they are creative-creative, creative-educational, creative-ICT industry or creative-industry-economic development. Building more and better partnerships is seen as both necessary and desirable, between creative organisations within jurisdictions, across jurisdictions and particularly between the creative sector and other sectors such as education and the digital infrastructure industries.

Future directions

Improve collaboration across the creative sector

Inter-agency collaboration is seen as a way to share information and experiences about successful partnerships across jurisdictions. Agencies can also act as brokers, such as ScreenWest (Western Australia) which pursues the economic development of the state's screen and digital content industries, by facilitating connections locally, nationally and internationally.

Connections with the education sector and eLearning

All jurisdictions recognise the importance of schools as market opportunities for cultural products and services in the digital environment. Victoria notes that increased use of ICT in schools presents a challenge to the creative sector to ensure provision of Australian content for Australian audiences. Some Victorian schools have been sourcing educational digital content from the BBC, as equivalent material is apparently not available from Australian sources. This highlights the demand for quality, domestically produced educational material.

Many jurisdictions note the value of initiatives that are being delivered at a project or agency level, rather than via broader networks.

The interconnection of networks across Australia and the delivery of innovative Australian digital content through networks and platforms such as The Learning Federation (Australian Government), the Australian Academic Research Network (AARNET) or the Australian Education Digital Network (AEDN), has potential to provide significant opportunities for growth and for the creation of strategic links between the creative and education sectors. The Roundtable working group agrees that providing multimedia and interactive cultural content for schools is a key opportunity with sustainable long term potential.

Future directions

Establish stronger connections with the education sector
There is strong agreement across jurisdictions that providing multimedia and interactive cultural content for schools is a key priority with sustainable long term potential for the creative sector. Engagement with the education sector through government and peak body eLearning initiatives has the potential to significantly increase the production of cultural digital content by the creative sector.

Community participation and user-created content
The creative sector must engage with the community to ensure ongoing support and survival in a global environment where there is increasing competition for consumers' disposable time and dollars from an ever-expanding choice of leisure services and products. In this sense, user-created content on social media web services such as YouTube and MySpace can be seen as competition for cultural audiences' attention.

For some in the creative sector, the current boom in user-created content is being harnessed as a way of engaging the community. A broader awareness of the opportunities offered through social media offers potential for the creative sector to engage new audiences and partner with them to improve the accessibility of creative digital content.

Many Australian jurisdictions have strategies that focus on identity and community, with a strong emphasis on telling Australian stories in the global digital environment. In this context, user-created content could be seen to pose a challenge to the creative sector, particularly to traditional cultural institutions. Entry costs to basic websites make them widely accessible, enabling users to post information which may not be accurate or verifiable. For cultural institutions, this raises the issue of the authenticity of user-created cultural content. Ensuring the validity of cultural material requires a level of academic rigour as well as specific technical input to provide quality meta-data and other verification technologies. Nevertheless, there is strong support for jurisdictions to continue to invest in programs that produce engaging Australian content in collaboration with communities, gaining leverage from the opportunities presented by social media and user-created content.

Future directions

Promote greater awareness of user-led social media phenomena
Fostering greater engagement with social media through a better understanding of its development and capabilities is a priority shared by all jurisdictions. A broader awareness of the opportunities offered through social media offers potential for the creative sector to engage new audiences and partner with them to improve the accessibility of creative digital content.

Researching for growth and development
A key to growth within the rapidly evolving digital environment will be found with understanding changing patterns of production and consumption. Research to this end is ongoing in most jurisdictions, particularly in the areas of market research and value-adding business models.

The impact of new technologies on creative processes and businesses is also an area of interest to the creative sector.

Many jurisdictions recognise the value of the creative industries mapping research being carried out at the national level by the CCI, as well as state projects in Western Australia, South Australia, the Northern Territory and Tasmania. An agreed definition of the creative industries is seen as important to facilitate coordination and the sharing of research findings across jurisdictions.

Future directions

Researching for sector development
There is a need for more research to help develop the sector and understand its role in the digital environment. An agreed definition of the creative industries across jurisdictions would greatly improve the sector's ability to coordinate and share research findings.

Representation of the creative sector to government
Most jurisdictions comment on the need for better representation of the sector to government. This issue is more critical in the states with smaller populations, where ICT and digital content industries have a low critical mass and are threatened by brain drain to the more populous states, where clustering makes the industries more viable. South Australia has raised this issue as a particular concern in its jurisdiction. The presence of a viable ICT sector in any one jurisdiction has a direct impact on the ability of that jurisdiction's creative sector to develop new technology products and services. If the ICT sector is very small, the transfer of the necessary new technology skills into the creative sector is going to be more difficult to achieve. The loss of a viable ICT and digital content industry in any one jurisdiction has a negative impact on that jurisdiction's creative sector's ability to exploit digital opportunities.

By way of addressing this issue, most jurisdictions have developed business cluster programs, where leading industry producers can work with new, smaller, innovative and emerging producers to enhance their productive capacity and promote their potential for export. Clustering partnerships have good potential for application to the creative sector and can assist in creating traction for projects that might otherwise struggle to get momentum. In turn, business clusters facilitate a more coordinated and cohesive voice to government on issues relevant to industry.

Victoria suggests that a priority for addressing the issue of industry representation to government is for creative sector artists, businesses and organisations to forge initiatives with infrastructure industries including broadcasters and ICT businesses. This approach is being adopted by a number of jurisdictions.

Future directions

Improve representation of the creative sector to governments
There is a real need for the creative sector to improve its representation to governments so that the sector's development needs are more visible to policy makers. Partnerships with the ICT sector and business clustering are an important way to achieve this visibility. Partnerships are also seen to increase the viability of creative enterprises as well as the visibility of the sector to government as they create a critical mass of sector activity.

Key shared priority for strengthening partnerships in the creative sector
A strategic approach to brokering partnerships, particularly between the creative sector and the education sector, would facilitate greater collaboration across the sectors and improve market research and consultation. Partnerships within and beyond the creative sector offer opportunities for collaboration between community members and artists as well as government and industry sectors. The education sector is seen by the creative sector as a key target market for creative digital content and services. It is anticipated that locally produced cultural and creative digital content will find increased audiences through technologically capable schools, universities and TAFE institutes.

Commercialising the creative innovation economy

The digital environment offers the creative sector a unique platform from which to launch a vast number of cultural and commercial services and products. Agency collections and individual creativity are virtually limitless sources of potential digital content. Harnessing the potential of cultural assets presents the creative sector with new commercialisation challenges, as well as exciting opportunities to explore new financing models that are viable and provide fair reward to creators. Innovative financing models have the potential to release the creative services and products born of agency collections and individual creativity to a wider national and international audience through the unique platforms of the digital environment.

Economic impact of innovation emanating from the creative sector
All jurisdictions recognise the impact of creativity throughout the broader economy and see a lead role for cultural institutions in providing content that can be supplied through innovative forms of delivery. Through innovation and enterprise offices, all jurisdictions have programs in place to assist start-ups, networking and incubators for innovative ventures in the creative sector. All jurisdictions also recognise that when the driver of creativity is combined with sound business skills, many enterprises can be transformed into creative industries with a hard-edged commercial purpose. When creativity, combined with sound business skills, is embedded in other industries to produce new content - such as simulation applications for education, construction, health and transport - there is quantum leap in commercialisation across the creative innovation economy.

Research undertaken by the CCI has gone some way in developing an experimental methodology for quantifying the creative economy. CCI's analysis of the creative economy focuses on the values of both the creative workforce and creative businesses across the whole economy, using the latest available Australian census data. Findings show that during 2006, salaries and wages of people in the Australian creative workforce were almost $28 billion, representing 7 per cent of the earnings of the total workforce. At that time, the creative workforce (in terms of number of people employed) represented 5.4 per cent of the total Australian workforce.[19] At present, there is difficulty in assessing the total economic value of the creative sector's commercial activities, due to inconsistent classification of the sector and a lack of consensus over research methodology. New methods of reporting the sector's economic impact will enable greater opportunities for market research, growth and coordination across jurisdictions.

Future directions

Recognise and champion the central role of creativity, the cultural sector and the creative industries as drivers of innovation and growth in the broader economy
Mapping the economic impact of creative talent and the creative sector is a key shared priority for all jurisdictions. Activities that assist in quantifying the contribution of the creative sector to the broader economy are vital for future policy and program implementation.

[19] Higgs, Cunningham, Pagan *Australia's Creative Economy Information Sheet: The Creative Workforce grows to 486,715 people in 2006*, as cited above.

New financing models and industry development strategies

Commercial activity is widely recognised as a component of various creative sector operations, however enabling artists and organisations to make the transition from subsidised funding models to more sustainable commercial models is a critical issue for all jurisdictions. Many note that cultural sector programs deliver on needs at different levels: community, sectoral and commercial. Finding workable, sustainable commercialisation models that can maximise the potential of cultural sector programs across all these levels is a challenge faced by many in the sector.

Both Queensland and South Australia suggest a move towards greater support for creative sector *businesses* rather than individual *projects*, to encourage greater impact of creative products through the support of the ongoing production capabilities of businesses. South Australia in particular encourages further assistance to start-up creative ventures as a foundation for innovation.

The development of new ideas and new companies should be encouraged, with an understanding that in order to generate sufficient successful companies, some start-ups will inevitably fail.

Queensland points out that currently much of the revenue flow from digital content production stops with the digital service provider or aggregator, rather than returning to the creator of the content. There is a need for a commercially driven, Australian-based content aggregator for the mobile market to support greater distribution of Australian creative content. Innovative business models—specific to the platform and content to which they will be applied—may assist in ensuring the sustainability of the creative talent from which new products or services emerge.

South Australia believes it is useful to develop creative sector finance models and business plans utilising the frameworks adopted by other industry sectors. These models and plans look at economic growth, industry growth rates, multipliers, skills, markets, export strategies, commercial investment, IP, digital rights management and infrastructure. South Australia's experience shows that the development of these conceptual frameworks is persuasive when working with those outside the creative sector. This idea is supported in a 2007 Australian Government report assessing ways to assist investment in the digital content industry. Gaps between producers and investors need to be bridged by: fostering a common language between the two; encouraging networks that allow for better sharing of information; and, training producers to present themselves to investors foremost as viable *businesses* when pursuing funding for specific projects or products. [20]

Enterprise assistance for companies, businesses and the public sector is available through various Australian Government departments and agencies, such as the Department of Innovation, Industry, Science and Research, and the Department of Foreign Affairs and Trade (AusTrade). Many state and territory governments have similar business development assistance programs. Typically, this type of assistance is available to science or technology-based enterprises, not creative enterprises.

[20] Creative Economy, as cited above.

Future directions

Explore new funding and financing models and industry development strategies for the creative sector
For the creative economy to flourish, creative enterprises need to become more aware of the funding opportunities available in this field. Funding guidelines for industry development programs need to be revised to allow creative enterprises to apply on an equal basis where appropriate. All jurisdictions agree that the development of sustainable funding models is a key future direction for the sector and that solutions will require tailoring to particular situations depending on geography, demography and developments in the digital environment.

Market research
It is acknowledged by all jurisdictions that the digital environment is not a homogenous one, so tailored solutions to marketing and market research are better developed at various points in the value chain.

Greater access to international markets to enable sales and distribution deals for film, television and digital media content is one priority identified by Victoria. This may include industry access to markets and publishers of electronic games. Victoria also notes the potential growth of offline audiences for digital products and services not available on the internet—for example, in libraries, collecting agencies, the defence industry and health facilities—as an opportunity for content providers.

The Australian Capital Territory comments that while it is accepted that cultural material has a high intrinsic value, quantifying the value of digitised cultural material to the creative economy would provide greater opportunities for the sector.

Market research is considered to be a key component to success in the innovation economy; not only to identify markets for products and services, but also to identify products and services for niche, emerging and growing markets.

New South Wales is working on a project with a major consulting organisation to identify commercialisation opportunities for its cultural institutions where there is a convergence between cultural, creative and technology industries. The opportunities being sought are those where the convergence of these industries inspires innovative practices.

The rise of the social media phenomenon and its associated user-led demands for new services and products poses new challenges and opportunities for the creative sector. There are enormous opportunities to engage new audiences, however a key challenge is to do this and at the same time provide fair reward for creative talent and ensure the accessibility of cultural material to the Australian community. A greater awareness of social media by the creative sector will allow artists and organisations to work through the challenges and opportunities this new phenomenon provides.

Future directions

Produce research on national and international markets to match products and services with demand
An awareness of the new audiences, communities and markets created by the digital environment is a key priority for the creative sector. To ensure commercial success, creative enterprise must be tailored to meet known market demand. There is also a need to identify commercialisation opportunities between cultural industries, creative industries and technology industries.

Key shared priority for commercialising the creative innovation economy
Increasing the commercial potential of creative enterprises and organisations is a key shared priority for developing a sustainable creative sector. In some jurisdictions, the provision of a greater level of ongoing government funding for digital activities in subsidised cultural organisations is seen as a way to enable the long-term integration of technologies into organisations' processes. In other jurisdictions, the allocation of start-up funding to creative enterprises is seen to offer the most potential for fostering a commercially sustainable creative sector. Solutions to commercialising the creative innovation economy will vary across jurisdictions according to geography, demography and the characteristics of the local creative sector.

Conclusions

Opportunities for the creative sector in the digital environment are enormous and they can be defined as creative, cultural and commercial in nature. They have the potential to be realised in the short, medium and longer term, depending on the sector's level of technical capability and its capacity to leverage off improved online, mobile and broadcast infrastructures.

Technical capability is on the active agenda of all jurisdictions' cultural and creative agencies and in most cultural and creative organisations throughout Australia and New Zealand. All jurisdictions have well developed policies and many organisations have new technology strategies. Opportunities would be increased with a greater focus and extension of strategic thinking and planning in many organisations. The potential to improve program delivery, audience reach and business efficiency is widely understood, and could be significantly improved if more senior managers and executives had a better understanding of the full impact of new and emerging technologies in the digital environment.

Improving access to culture in the digital environment
Expanding the access that audiences, consumers and producers have to cultural material and experiences—including digital collections and interactive digital cultural content via the internet and other platforms—is a key shared priority across the creative sector. Improving the sector's ability to leverage off infrastructures including broadband (cable and wireless), mobile and broadcast (commercial and community broadcasters) is also a priority for the sector, so that the broader innovation economy can flourish.

In turn, creativity can be seen as a key driver for technical innovation. As the technical capability of the sector increases, innovations in digital content production and delivery devices have the potential to promote the expansion of existing infrastructures. The coordination of creative industries policy and programs will assist the sector to target these activities, so they have the greatest impact on digital infrastructures and the innovation economy as a whole.

Increasing production of creative digital content
The production of quality creative digital content for education and other markets—involving new media, new platforms and the re-purposing of existing analogue material—is an increasingly expensive process which requires new methods of financing. Innovative funding and financing models that make provision for structured support from large telecommunications companies and fair returns to the creators of services and content, have the potential to facilitate greater levels of production in the creative sector, particularly for distribution via mobile and broadcast platforms.

Distribution is seen to be a key area for innovation that will continue to offer new opportunities for the creative sector. Improving methods for measuring the impact of locally produced cultural and creative digital content on Australian and global communities is seen as a priority among jurisdictions. As distribution channels change and diversify and overseas content becomes more widely available, the need to accurately assess the social value of local content will become more pressing.

Copyright regulations and clearance processes that recognise the unique challenges of protecting and exploiting intellectual property rights in the digital environment will greatly reduce the time and cost taken to obtain clearances. Such regulations and processes will also alleviate concerns across the sector about what is considered fair use of cultural and creative material.

The Roundtable working group encourages a flexible copyright regime that can cope with ongoing change in the digital environment and continue to respond to user needs.

Developing skills for artists and executives

Enhancing the creative sector's ability to increase production and achieve operational efficiencies through increased technical capability is essential to ensure the largest possible range of opportunities in the digital environment are realised. The sector is well aware of this need and already many training courses are in place, or in development, to train artists and administrators to respond to a rapidly changing technical environment. Short courses addressing specific technical skill sets are an effective option that could potentially be adopted more broadly as a priority for the sector.

Skills development in the full integration of digital technologies into an organisation's operating processes is a leading priority for executives and administrators. Whether or not they operate for profit, organisations and artists can gain many operating efficiencies and capitalise on new opportunities in the digital environment by increasing their technical capability and eBusiness processes.

Enabling all Australians and New Zealanders to participate in the digital environment is a key priority for the creative sector. In the digital environment, it is possible to overcome the tyranny of distance through effective communications infrastructures and corresponding levels of technical capability. To this end, there is a particular need to increase training opportunities for Indigenous Australian artists and administrators, in order to realise the full potential of the creative sector in remote and very remote locations.

Strengthening creative sector partnerships

Collaboration across the creative sector through the sharing of skills and resources is seen as essential to improving technical capability and increasing the production of creative services and products. Collaboration should be fostered at all levels: within organisations; within the creative sector; between the creative sector and other sectors (particularly education and ICT); across portfolios and agencies within governments; and, between governments in different jurisdictions.

User-led developments and social media in the digital environment have contributed to a transformation of traditional knowledge bases, creative practices, business models and industries. The increasing importance of social media and user-created content presents new challenges and new opportunities for collaboration. If current trends in this area continue, it will be crucial for the sector to build trusting and inclusive relationships within online communities of content producers and consumers.

There is a significant opportunity for Australian and New Zealand digital content producers to meet the demand for cultural and creative content in the digital environment, especially for the education market. An increase in structured collaborations between the creative and education sectors would appear to satisfy the needs of both supply and demand in this instance. The coordination and development of partnerships across the cultural, creative and commercial activities of the sector has the potential to facilitate more effective exchanges of information and research to help grow the creative innovation economy.

Commercialising the creative innovation economy
The creative inputs to the countless services and products of the creative sector have many origins and they all have an impact on the creative and national economy. An important shared priority for the creative sector is to increase the commercial impact of innovative content and services originating in the sector by adding value via other industries throughout the national economy. Measuring this impact is also vital. As the CCI Creative Industries National Mapping Project has demonstrated, it is not easy to draw a neat boundary around the creative sector and to ascribe it with an exact economic value, let alone measure the impact of creative activity as it gains value through other sectors.

Assisting producers in the creative sector to 'pick the winners' among new trends, services and products in the digital environment is a shared priority across the sector that could be supported by timely and appropriate market research. Due to rapid changes in technology and the whims of user-led markets, the uncertainty of where markets are heading is seen as a barrier to investment by producers and third-party investors in higher risk activities. Market research that points toward viable commercial opportunities will allow timely investment in activities that capitalise on the potential of the digital environment.

In order to provide increased support to creative industries—particularly in regional and remote areas—the eligibility criteria of existing research and industry development programs should include creative enterprises, allowing them to compete equally for financial assistance. This has the potential to encourage the establishment of a range of innovative and viable financing models for enterprises in the creative industries.

Building a creative innovation economy
Considerable activity is already underway across all jurisdictions to assist the development of the creative sector. The many achievements to date indicate that the Australian and New Zealand creative sectors are excelling in the creation of innovative content, services and business practices. These achievements champion creativity, provide new cultural experiences, increase audience reach and relevance, generate new income streams, enable collaboration and partnerships and reinforce the significance of the arts and creativity to the community and the creative innovation economy.

Nevertheless, the challenges and opportunities presented by the digital environment have not been taken up across all areas of the creative sector. This is partly because the high capacity digital infrastructure needed by the sector is not yet widely available, and also because the understanding of, and training in, new technologies is lacking in many creative organisations and enterprises. Cultural, creative and commercial opportunities for the sector are numerous, but the speed at which they will be taken up depends on the access creative producers, customers and audiences have to digital infrastructures, as well as the sector's level of technical capability.

Improved coordination of activities and approaches within the creative sector will help governments in all jurisdictions to develop creative innovation economy policy that recognises and champions the central role of creativity, the cultural sector and the creative industries in the growth of the broader economy. It is hoped that this report will raise awareness of potential future directions for the creative sector in the digital environment and that it will enable cultural ministers to pursue a range of practical measures in their jurisdictions—building on achievements to date—to strengthen the prospects for the creative sector and to continue the further development and growth of the creative innovation economy.

Acronyms list

AARNET—Australia's Academic and Research NETwork
ABS—Australian Bureau of Statistics
AEDN—Australian Education Digital Network
AIDC—Australian International Documentary Conference
ARC—Australian Research Council
BBC—British Broadcasting Corporation
CAN—Collections Australia Network
CCA—Collections Council of Australia
CCI—ARC Centre for Excellence for Creative Industries and Innovation
CMC—Cultural Ministers Council
DBCDE—Department of Broadband, Communications and the Digital Economy*
DCITA—Department of Communications, Information Technology and the Arts*
DEWHA—Department of the Environment, Water, Heritage and the Arts*
GDP—Gross Domestic Product
ICT—Information and Communication Technology
IP—Intellectual property
IT—Information technology
KAREN—Kiwi Advanced Research and Education Network
LAMP—Laboratory of Advance Media Production
MAPP—Market Access and Partnership Program
MCEETYA—Ministerial Council on Education, Employment, Training and Youth Affairs
mEga|SA—Mobile Entertainment Growth Alliance
OCC—Online and Communications Council
OPAL—Online Public Access in Libraries
SAFC—South Australian Film Corporation
TAFE—Tertiary and Further Education
VCN—The Victorian Cultural Network
VET—Vocational Education and Training

* A number of Australian Government departments were restructured following the 24 November 2007 election. The Department of Communications, Information Technology and the Arts was abolished. The arts function was transferred to the new Department of the Environment, Water, Heritage and the Arts. Communications functions transferred to the new Department of Broadband, Communications and the Digital Economy. Information technology functions transferred to the new Department of Innovation, Industry, Science and Research.