

Queensland Government's comments on the Australian Government's Digital Economy discussion paper

1. What does success look like - Measuring the digital economy and its impacts?

From an overall perspective, participation in the Digital Economy cannot be measured in an absolute sense and the form of participation will continue to evolve over time.

The success of the Digital Economy could be assessed in terms of the proportional contribution of all sectors of Australia's economy to the Gross Domestic Product. Ideally, the Digital Economy should also be measured in terms of a digital content/service trade deficit or surplus. The targeted efforts in the proposed 'Future Directions' statement should be aiming to achieve trade surpluses in dollar and content terms.

Short term milestones to the success of the Digital Economy could include:

- the proportion of businesses with websites that support electronic commerce
- the extent to which business transactions are made electronically. This should include transactions processed through a variety of means including web-based browsers, as well as interactive phone based systems
- the availability of broadband services to permit full participation in the Digital Economy by both households and businesses.

2. Open access to public sector information and ensuring Australia's regulatory framework enables the digital economy.

The Queensland Government recently undertook a review of the Queensland *Freedom of Information Act 1992* (<http://www.foireview.qld.gov.au/>). As a result, the Queensland Government is moving to a 'push' model where information is provided as a right to the public, unless there is a legitimate public interest in it being withheld (http://www.thepremier.qld.gov.au/library/pdf/initiatives/foi_review/Right_to_Information.pdf).

The over-riding principle will be that 'the community has a right to information held by the Government'. As part of the implementation, the Queensland Government is preparing a report on the reuse of public sector information, including consideration of the United Kingdom's 'Click Use' licence and the Queensland Government Licensing Framework (<http://www.oesr.qld.gov.au/about-our-services/policy/gilf-project.shtml>). Currently, the trial implementation of the Licensing Framework provides a set of standardised licences that will make it easier for information users to understand what they can do with public sector copyright information, whether viewing, copying or making new products.

From an internal efficiency perspective, the Queensland Government shares its information and hosts whole-of-Government content licenses on a government-wide intranet (GovNet). Examples of this content include human resource and finance directives, as well as statistical and spatial content.

On a related content based issue, the Australian 'safe harbour' scheme, based on the United States of America's regime, provides a mechanism for Internet Service Provider's as 'carriage service providers', to escape liability for copyright infringement by a content provider. For the purposes of the 'safe harbour' provisions, the definition of a 'carriage service provider' should be extended to include owners of social networking and video sharing sites, as there is inevitably an increased risk to these owners, which is not of their making.

The *Copyright Act 1968* underwent significant amendment in 2000 and 2006 in relation to the 'digital agenda' and the Free Trade Agreement between Australia and the United States of America. A number of these changes were in recognition of the needs of educational institutions, libraries and the general public with regard to the digital environment.

In 2000, the right of 'communication to the public' was introduced as an exclusive right of the copyright owner. This is proving problematic for governments, as Section 183A - 'Special arrangements for copying for services of government', has not been extended to include this right. As a result, employees must notify copyright owners and come to an agreement whenever copyright material is emailed or made available online. This is impractical. Creating exceptions to infringements is one way to address this issue (ie. changes to Section 183A). Working in the digital economy, we could also think in terms of licensing, including free open access licensing similar to the Creative Commons approach supported by the Queensland Government Licensing Framework.

It is sometimes argued that innovation results from the sharing of copyright material as much as it results from increased protection. Enduring copyright protection for death plus 70 years seems excessive and has the potential to inhibit innovation in an era of abundant copyright material and rapid distribution.

Currently, the *Copyright Act 1968* contains no general exception to infringement permitting users to upload content that contains portions of another owner's existing copyright protected work, or adaptations of such a work. This could inhibit the flow of potentially valuable derivative works to sites such as YouTube. There should be a new limited exception based on fair dealing for criticism and review or parody.

3. Developing Australia's knowledge and skills base

From a broad skills development perspective, Queensland industry is working together with government and the education sector to develop a consistent marketing approach for ICT careers, underpinned by ICT related degrees.

The rapid changes in the ICT industry will always present challenges for aligning the supply and demand of skilled ICT workers. However, a number of steps could be taken to better position the industry, government and profession to address the challenge.

The first step needs to address data quality and completeness as the 'profession' suffers from a lack of consistent classification for its occupations and skills. A range of initiatives are currently under way across the industry and government to respond to these issues. An early national push for the resolution of the current inconsistencies would enable the production of better data on which to base career, policy, program and curriculum decisions.

This accurate information would in turn permit stronger marketing messages about the opportunities available from a career in ICT and the links between school studies, tertiary courses, skills and employment.

As a major employer, the Queensland Government has progressed a range of initiatives to attract and retain skilled ICT workers. Some of these include better recognition and reward of ICT skills, broadening the base from which potential ICT workers can be attracted by clarifying the skills needed and available careers, establishing cross-Government programs for developing skills for in-demand roles that cannot be successfully filled, launching a graduate program for ICT careers, and participating in cross-sectoral initiatives to promote and market ICT careers.

The education system plays an integral role in fostering innovation, leadership and entrepreneurial culture, as well as having a pivotal role in supporting research and development, and the commercial outcomes from research. Greater emphasis on innovation and support for innovative thinkers is needed in all tiers of the education system, in particular:

- greater emphasis on leadership, entrepreneurship, problem solving, creativity, strategic thinking, risk management and commercialisation skills in secondary, tertiary and training sectors
- more effective and greater engagement between students, teachers and the curriculum across education sectors with industry and research institutions
- enhanced completion rates for higher degrees, particularly PhDs, to enhance Australia's knowledge and Research and Development base for innovation
- making postgraduate study more attractive to both domestic and international students, through methods such as increasing the value of scholarships
- greater emphasis on Science, Technology, Engineering and Maths, as well as creativity in the school system
- developing and supporting a culture of 'life long learning' in all tiers of the education and training system
- the provision of industry placements and internships especially for the tertiary sector.

The Queensland ICT industry has engaged in preliminary discussions with the Productivity Places Program with a view to determining the best way forward. This engagement may occur through ICT industry associations or via other industry groups which have a need for dedicated ICT expertise such as mining, aviation, or finance.

National efforts should be made to ensure non-ICT related qualifications contain ICT related elements which:

- support an understanding and employ the transformational aspects of ICT to change business and service delivery models
- introduce business analysis as a mechanism to enable continuous improvement and transformational change
- establish an understanding of project management, this should include stakeholder engagement, definition of the project value proposition (outcomes / benefits - the business case), quality and project controls
- explain digital communication techniques and the benefits that can be derived from online service delivery options.

4. Digital economy and the environment

The Queensland Government has taken an active interest in telecommuting and videoconferencing to improve service delivery and establishing a more balanced lifestyle, as well as environmental benefits. In 1997, it approved telecommuting arrangements for the Queensland Public Service. However, the implementation has been sporadic and the take up levels have varied across the departments.

More recently, the pressures of traffic congestion, greenhouse gas emissions, together with the recognised productivity and staff attraction and retention benefits that teleworking can provide, have prompted renewed interest in these forms of work. To support this interest, the Queensland Government Department of Public Works is currently implementing a 'Flexible Workplaces Initiative'. This initiative provides a coordinated people and ICT management approach. It is supported by a range of services to assist Queensland Government departments to more effectively investigate potential teleworking opportunities, including consideration of ICT requirements and responses to any cultural barriers to enable this form of work to be optimised for both managers and employees.

As part of the initiative, the Department of Public Works and the Environmental Protection Agency within the Queensland Government have partnered to establish a multi-agency telecentre trial located in the Ipswich Courthouse. The trial has been operational since June 2008 and is allowing participating Brisbane central business district based employees living near Ipswich to significantly reduce their commuting time by working from an alternative office for one or two days per week.

In addition, the Queensland Government makes extensive use of videoconferencing facilities for service delivery and professional development. As an example of this, as of June 2008, Statewide Telehealth Services had 507 separate videoconferencing sites under its management. These were predominantly located in public health facilities, including hospitals, community health centres, Indigenous medical services and the offices of the Royal Flying Doctor Service.

During the 2007-2008 financial year, these facilities were used to carry out 13,000 videoconferences for patient consultation and diagnosis, and peer supervision. There were more than 4,000 separate videoconferences between three or more sites for the purposes of training, education, workshops and meetings. Use of these facilities culminated in more than 41,500 hours used by clinicians and support staff in the delivery of health education seminars and professional development.

5. Digital confidence

From a Queensland Government industry development perspective, collaborative efforts are needed to facilitate innovation across Queensland's businesses and supply chains, including those in regional and remote locations. These activities would be best directed at:

- supply chains and connector businesses that then provoke change in companies they deal with
- small to medium enterprises which, to date, have not invested in innovative processes, equipment, design or people, and could include expenditure on skills, marketing, access to research, or other activities which are aimed at convincing businesses.

The growing digital economy represents an opportunity to strengthen and advance regional development. For example, some centres are struggling to cope with rapid population and economic growth whereas others have stagnated. In particular, it is important we jointly pursue the two objectives of:

- building better businesses and tomorrow's jobs, including in regional and remote economies
- enhancing regional economies and locations.

Actions under the Digital Economy Future Directions initiative need to match the programs in the Commonwealth's Innovation Review.

A reliable authoritative source needs to be established to assist small business and consumers with their online privacy and safety concerns. Efforts by this source would also include regular education programs containing the latest technologies and views, as well as the provision of an honest broker to facilitate e-commerce supply chain solutions between partners.